HITACHI

SERVICE MANUAL

NTSC | **DP23/DP23G/DP24**

PA | **No. 0162**

51UWX20B	DP23
57UWX20B	DP23
51GWX20B	DP23G
57GWX20B	DP23G
43FWX20B	DP24

R/C: CLU-4321UG

This addendum gives differences between DP23/DP23G/DP24 and the DP27/DP27D chassis models. For any other information, see the DP27/DP27D chassis Service Manual PA No. 0160 issued in MAY 2002.

CAUTION: Before servicing this chassis, it is important that the service technician read the "Safety Precautions" and "Servicing Precautions" in Service Manual PA No. 0160.

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PROJECTION COLOR TELEVISION

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT

JUNE 2002 **HHEA-MANUFACTURING DIVISION**

Version 0162.07

IMPORTANT SAFETY INSTRUCTIONS
USE ISOLATION TRANSFORMER WHEN SERVICING

Components having special safety characteristics are identified by a ⚠ on the schematics and on the parts list in this service manual and its supplements and bulletins. Before servicing this chassis, it is important that the service technician read and follow the “Important Safety Instructions” in this Service Manual.

For continued X-Radiation protection, replace picture tube with original type or Hitachi approved equivalent type.

This Service Manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health and Safety Code, Section 25249.5).

When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with solder. Also, when soldering do not inhale any smoke or fumes produced.

This television receiver provides display of television closed captioning in accordance with section 15.119 of the FCC rules.

FEDERAL COMMUNICATIONS COMMISSION NOTICE

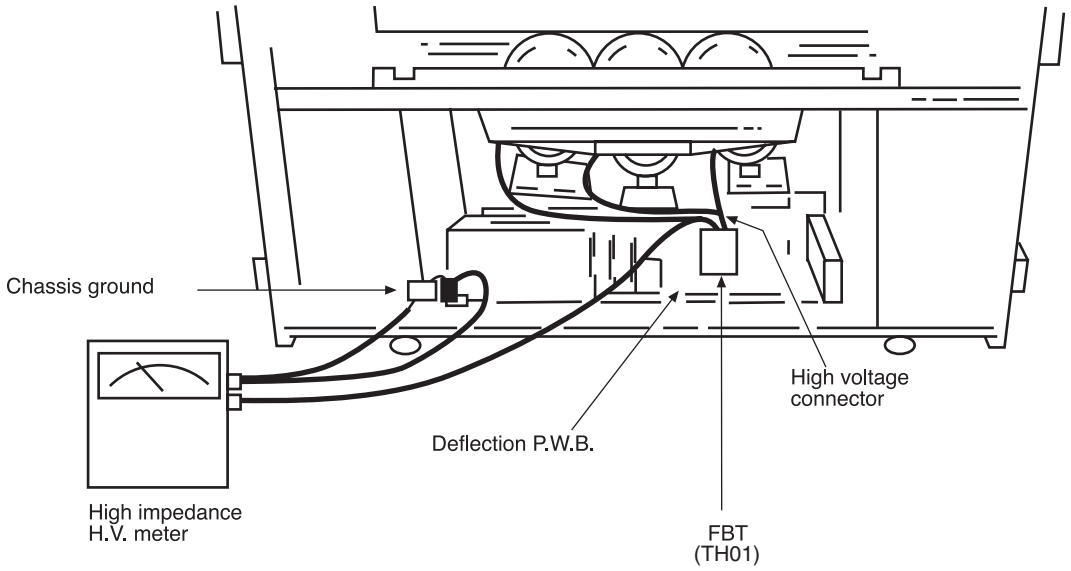
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

TECHNICAL CAUTIONS

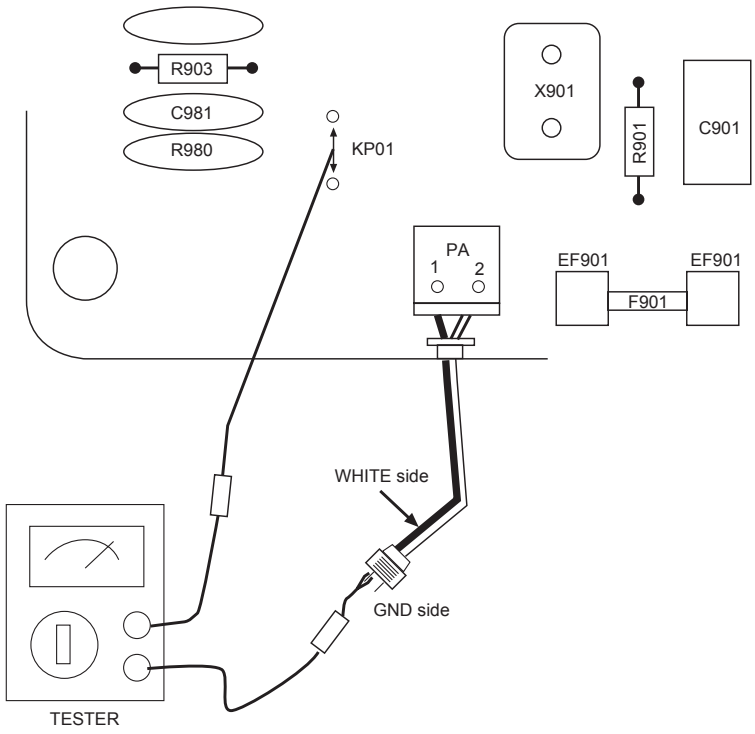
High Voltage limiter circuit operation check.

1. Turn off TV and connect jig as shown in Figure 2. Adjust jig fully counter-clockwise for minimum resistance.
2. Set the AC input to 120V AC and turn on TV.
3. Confirm test pattern on CRT is a usable picture, then slowly adjust jig until the picture disappears and TV shuts down.
4. When the limiter circuit is operating properly, High Voltage will be less than 30.5 kV at 1.4mA when TV shuts down.
5. Turn off set immediately after checking circuit operation.
6. Unplug set for one minute to reset shutdown circuit. Remove jig and voltmeter.



AC CORD POLARITY

This check is based on the UL standard. Use the jigs specified by the production technology section. The GND side (wider blade) of the AC power cord should be connected to K9Y1



SPECIFICATIONS

Models: 51UWX20B 51GWX20B
57UWX20B 57GWX20B
43FWX20B

Cathode-Ray Tube:

51/57UWX20B	R=P16LXL00RFA(U)
51/57GWX20B	G=P16LXL00HHA(U)
	B=P16LXL00BMB(U)
43FWX20B	R=P16LXS00RFA(U)
	G=P16LXS00HHA(U)
	B=P16LXS00MBM(U)

Power Input: 120 volts AC, 60 Hz

Power Consumption:
- Stand-By Power
  51/57UWX20 . . . . . .0.96W
  43FWX20B/51/57GWX20B 0.96W
- Power Consumption (operating)
  51/57UWX20 . . . . . .188W
  43FWX20B/51/57GWX20B 203W
- Power Consumption (maximum)
  51/57UWX20 . . . . . .227W
  43FWX20B/51/57GWX20B 248W

Antenna Impedance: 75 Ohm Unbalanced
VHF / UHF / CATV

Receiving Channel:

BAND	CH
VHF	2~13
UHF	14~69
EXT. Mid	(A-5)~(A-1), 4+
CATV Mid.	A~I
CATV Super	J~W
CATV Hyper	(W+1)~(W+28)
CATV Ultra	(W+29)~(W+84)

Intermediate Frequency: Picture I-F Carrier 45.75 MHz
Sound I-F Carrier 41.25 MHz
Color Sub Carrier 42.17 MHz

Video Input: 1 Volt p-p, 75 Ohm

Video Output: 1 Volt p-p, 75 ohm

Audio Input: 470 mVrms, 47 k Ohm

Stereo Audio Output: 470 mVrms, 1 k Ohm

Audio Output Power:
Front: 12 watts per channel at 10% distortion,
8 ohm Impedance. Max output – 24 watts.

Anode Voltage:
DP23/DP23G/DP24 30.2±0.3kv (1.20±0.2mA)

Brightness:	**51”**	**57”**	**43”**
(white screen)	220cd/m^2	180cd/m^2	300cd/m^2

Speakers: 2 Woofers - 5 inch (12 cm) round

Dimension:

	43”	51”	57”
Height (in.)	38 31/32	50 1/8	54 3/16
Width (in.)	41 7/32	44 1/2	54 1/64
Depth (in.)	20 5/8	25 1/32	25 1/32
Weight (lbs.)	153	238	265

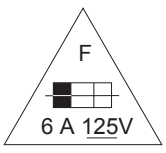
Circuit Board Assemblies:

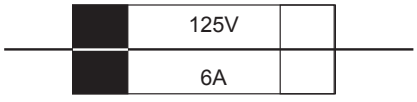
C.P.T. (B) P.W.B.	IR P.W.B.
C.P.T. (G) P.W.B.	IR Sub P.W.B.
C.P.T. (R) P.W.B.	Terminal P.W.B.
Power Supply P.W.B.	Signal P.W.B.
Control P.W.B.	Def/Convergence P.W.B.
Sensor Distribution P.W.B.	

CIRCUIT PROTECTION

CAUTION: Below is an EXAMPLE only. See Replacement Parts List for details. The following symbol near the fuse indicates fast operation fuse (to be replaced). Fuse ratings appear within the symbol.

Example:

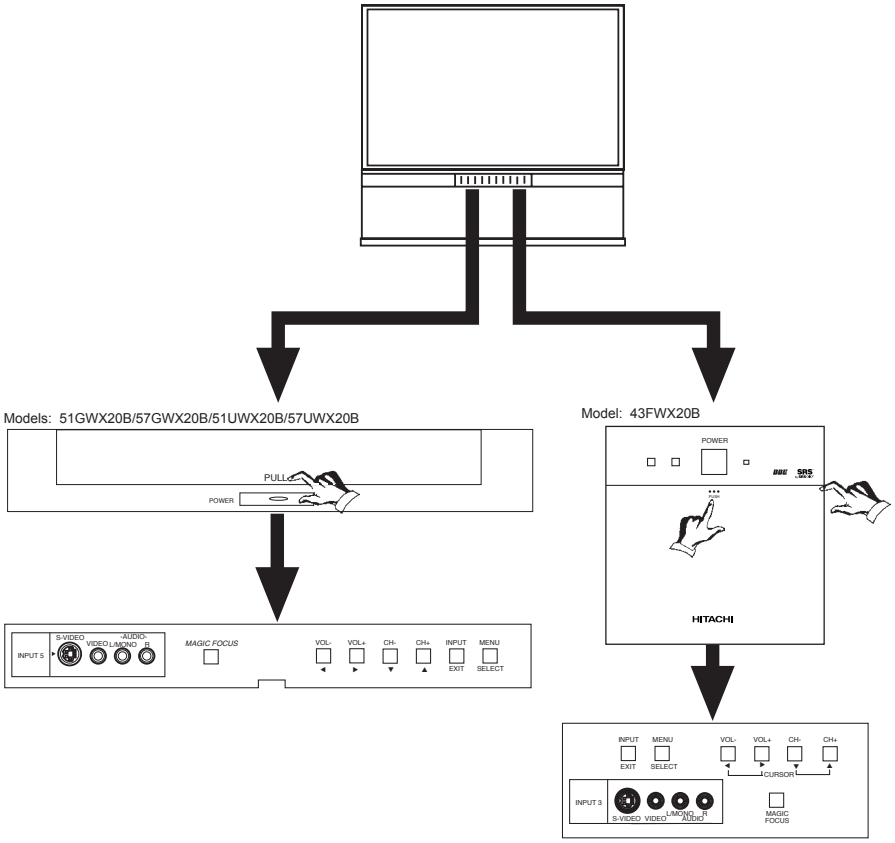




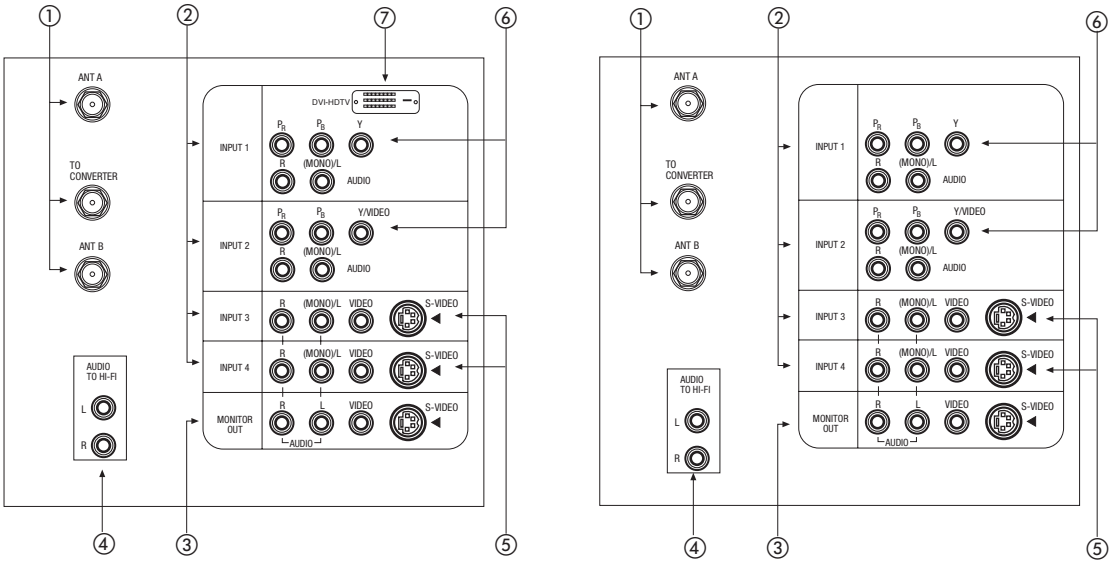
“RISK OF FIRE - REPLACE FUSE AS MARKED”

The rating of fuse F901 is 6A - 125V.
Replace with the same type fuse for continued protection against fire.

GENERAL INFORMATION



FRONT CONTROL PANEL



REAR PANEL JACKS

① **Antenna Input/Output**

② **Audio/Video Inputs 1, 2, 3 and 4**

③ **MONITOR OUT**

④ **AUDIO TO HI-FI Output**

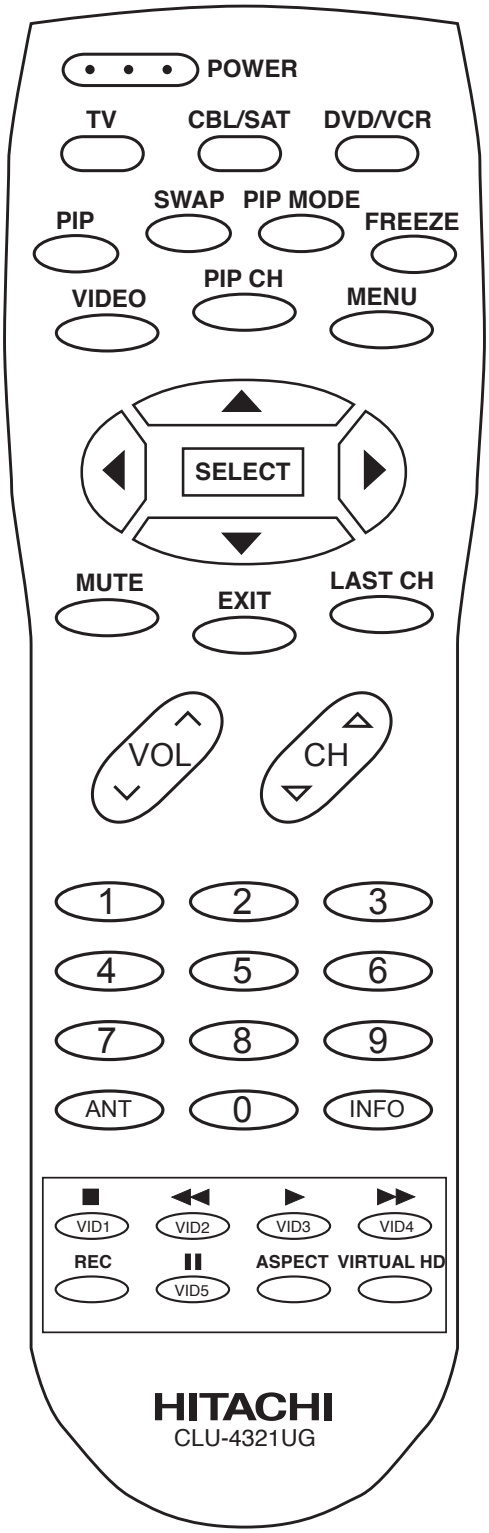
⑤ **S-VIDEO Inputs 3 and 4**

⑥ **Component Input Y-P_BP_R**

⑦ **DVI-HDTV Input (Input 1)**

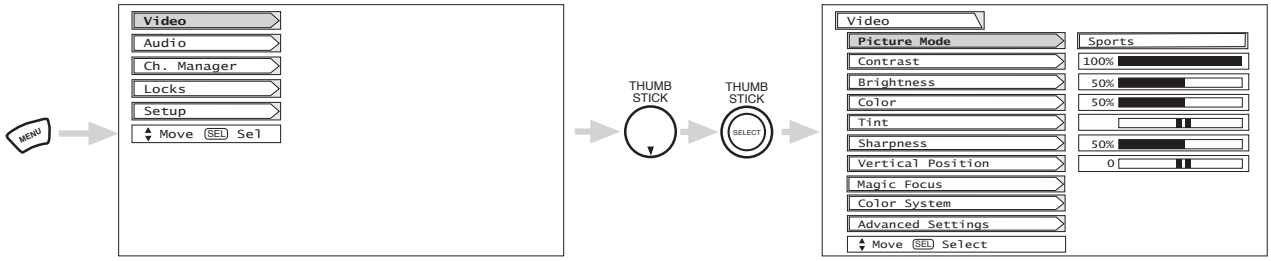
(UWX and GWX Models Only)

REMOTE CONTROL



CUSTOMIZED PICTURE AND SOUND ADJUSTMENTS

Video Select VIDEO to adjust picture settings and improve picture quality.



Use the THUMB STICK ▲ or ▼ to highlight the function to be adjusted.
Press the THUMB STICK ◄ or ► to adjust the function. Press down on THUMB STICK to select the function settings.
Press MENU to return to main menu or select PICTURE MODE to return to previous menu.
Press EXIT to quit menu.

Contrast Use this function to change the contrast between black and white levels in the picture. This adjustment will only affect the picture when ADVANCED SETTINGS DIMMER is OFF.

Brightness Use this function to adjust overall picture brightness.

Color Use this function to adjust the level of color in the picture.

Tint Use this function to adjust flesh tones so they appear natural.

Sharpness Use this function to adjust the amount of fine detail in the picture.

Vertical Position This function allows you to select when aspect style is either 4:3 EXPANDED/ZOOM1/ZOOM2. Vertical position can be changed with this mode. Adjustable range is -10 (video center is toward bottom of screen) to +10 (video center is toward top of screen).

NOTES:
1. If CONTRAST is selected, you are adjusting CONTRAST. The additional menu items BRIGHTNESS, COLOR, TINT, and SHARPNESS can be selected and adjusted in the same manner.
2. It may be necessary to adjust TINT to obtain optimum picture quality when using the COMPONENT VIDEO Y-P_BP_R input jacks.
3. If you are using the COMPONENT VIDEO input jacks (Y-P_BP_R) and notice that the TINT and COLOR are abnormal, check to make sure that VIDEO- Color System is set properly.

CUSTOMIZED PICTURE AND SOUND ADJUSTMENTS

Magic Focus

Auto Digital Convergence Adjustment
Please turn ON your television for at least 20 minutes before using this feature.

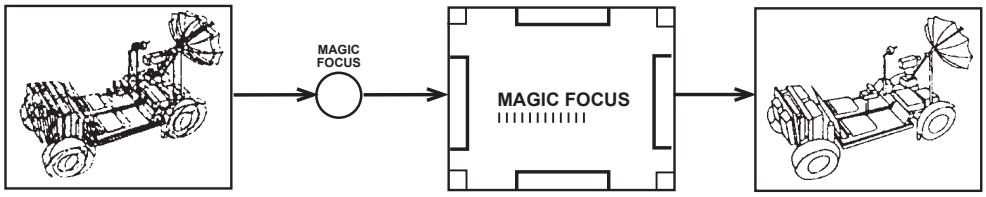
The Magic Focus button will not work when Adjustment Mode is set to Manual (see page 9).

Your HITACHI Projection TV has three color projection tubes: one for red, one for green, one for blue. When mixed together in the proper proportion, the output of these three color tubes can produce any color. To produce these colors, however, the beams must be precisely aligned over each other so that the colors can be mixed. The process of aligning these picture beams is called “convergence”.

Over a period of time, the picture tubes can drift out of alignment due to normal bumps and vibrations or moving the TV. If you move your TV, or if, after a time, you notice color rings or halos around objects in the picture, you may want to converge (align) the colors.

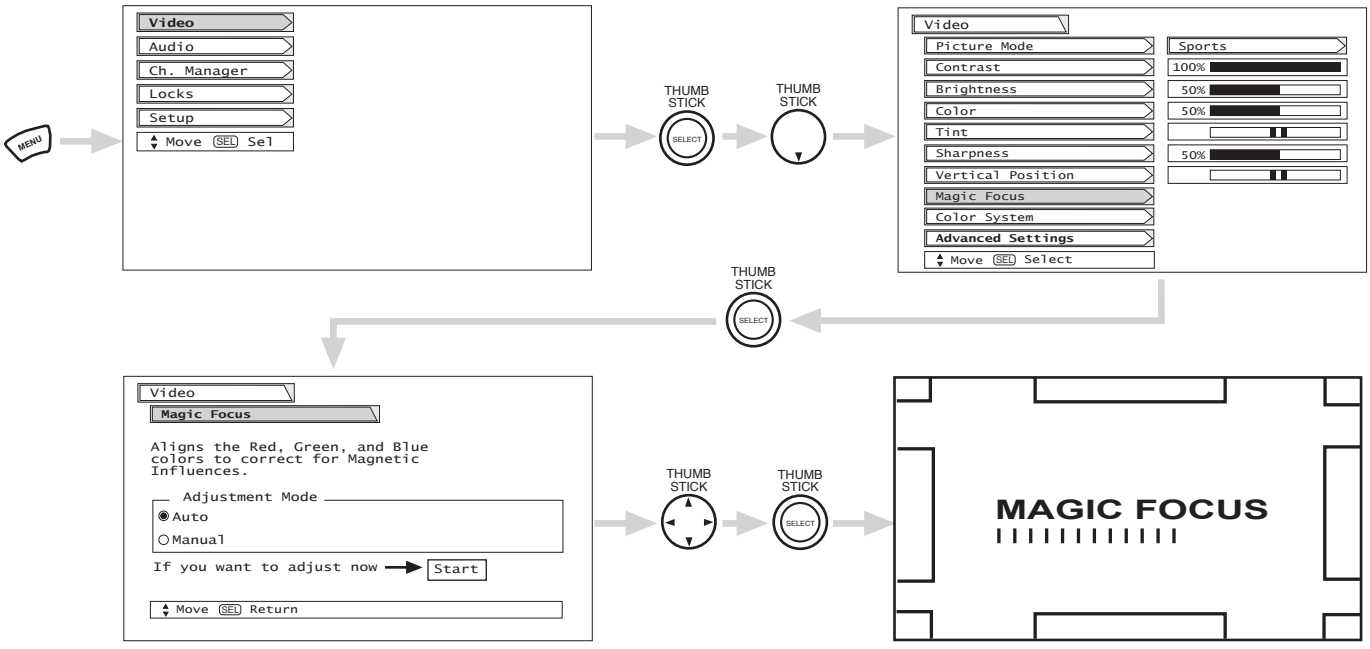
Properly converged, the lines appear white, which is actually a combination of the outputs of the three color tubes. The output of the green tube is stationary. The outputs of the red and blue tubes can be adjusted. When properly aligned, the outputs of all three tubes should be directly over each other to produce the white lines.

To simplify convergence, HITACHI incorporates a function called MAGIC FOCUS located on the front control panel, which allows the TV to self-adjust. Press this MAGIC FOCUS button and the convergence self adjustment will start and this process will take approximately 20 seconds. If this button is pressed during this process, no change in picture quality will occur. After this 20 second self-adjust period, picture quality will be optimum. (Do not move the TV during self-adjust.)



NOTES: Only a momentary press of the MAGIC FOCUS button is necessary to start AUTO DIGITAL CONVERGENCE. At any time during this convergence correction process, you may press the MAGIC FOCUS button to exit the MAGIC FOCUS mode. However, the convergence correction process needs to be completed to SAVE the new corrected convergence data.

You may also select Magic Focus from the VIDEO menu.



CUSTOMIZED PICTURE AND SOUND ADJUSTMENTS

Manual Convergence Adjustment Mode

NOTES: 1. Please turn ON your television for at least 20 minutes before using this feature.
2. Auto Adjustment Mode is recommended. If convergence is still not acceptable, use the Manual Adjustment Mode. DO NOT press MAGIC FOCUS or use Auto Adjustment Mode after using Manual Adjustment Mode.

Using the Remote Control, select VIDEO-MAGIC FOCUS-MANUAL ADJUSTMENT MODE-START to access convergence crosshatch pattern. The adjustment point is indicated by the Adjustment Point Cursor.

To Move Adjustment Point

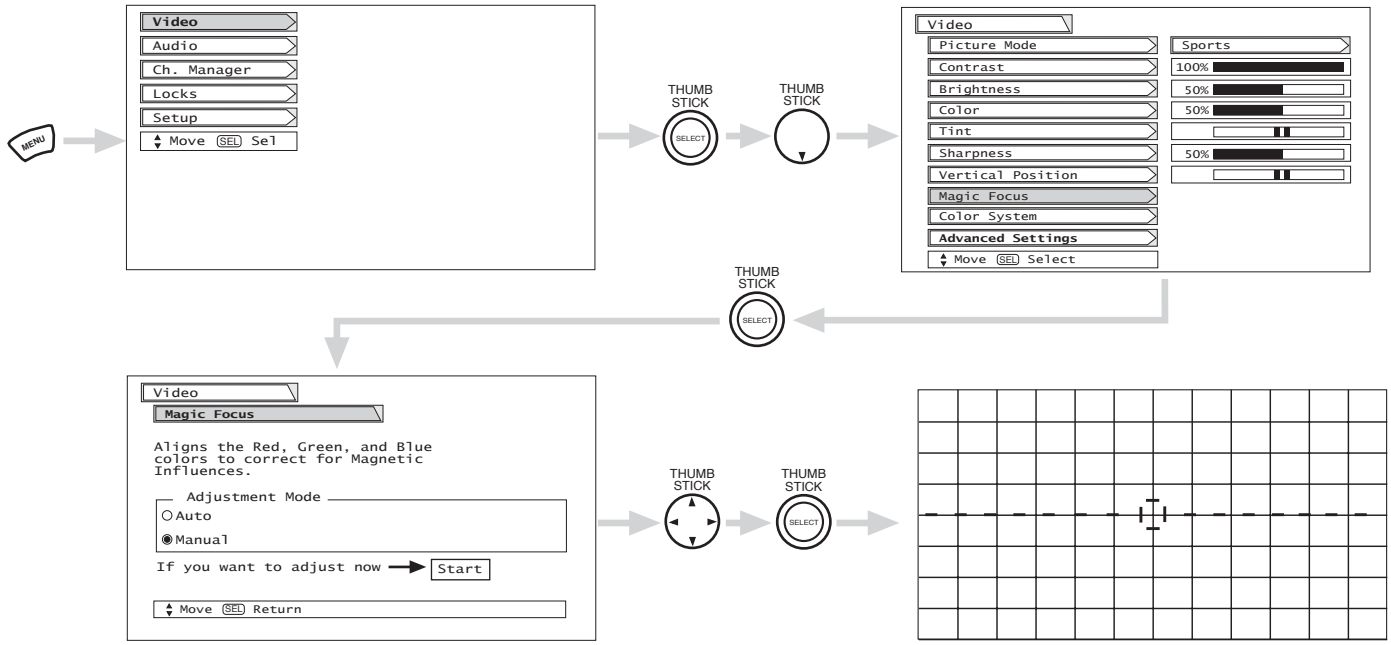
To move adjustment point, the Adjustment Cursor must be WHITE. Use the THUMB STICK to move the Adjustment Cursor. Another way to move the Adjustment Point Cursor is to press the followiing buttons: [2] up, [4] left, [5] down, [6] right. If you use the number buttons while the adjustment point is WHITE, it will change to RED.

To Change the Color of Adjustment Point

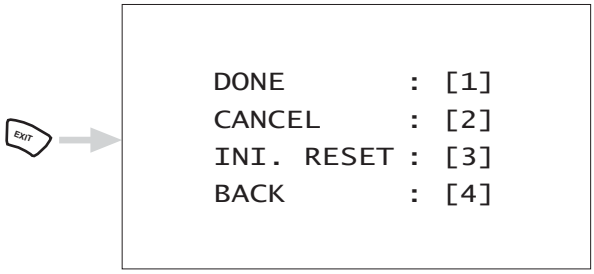
Press the SELECT button repeatedly (WHITE-RED-BLUE-WHITE...). Green color is fixed and cannot be adjusted.

To Adjust the Convergence

Move the Adjustment Cursor to the point to be adjusted. Use the THUMB STICK to match the RED and BLUE colors to GREEN (reference color). Properly aligned, all three colors should appear white.



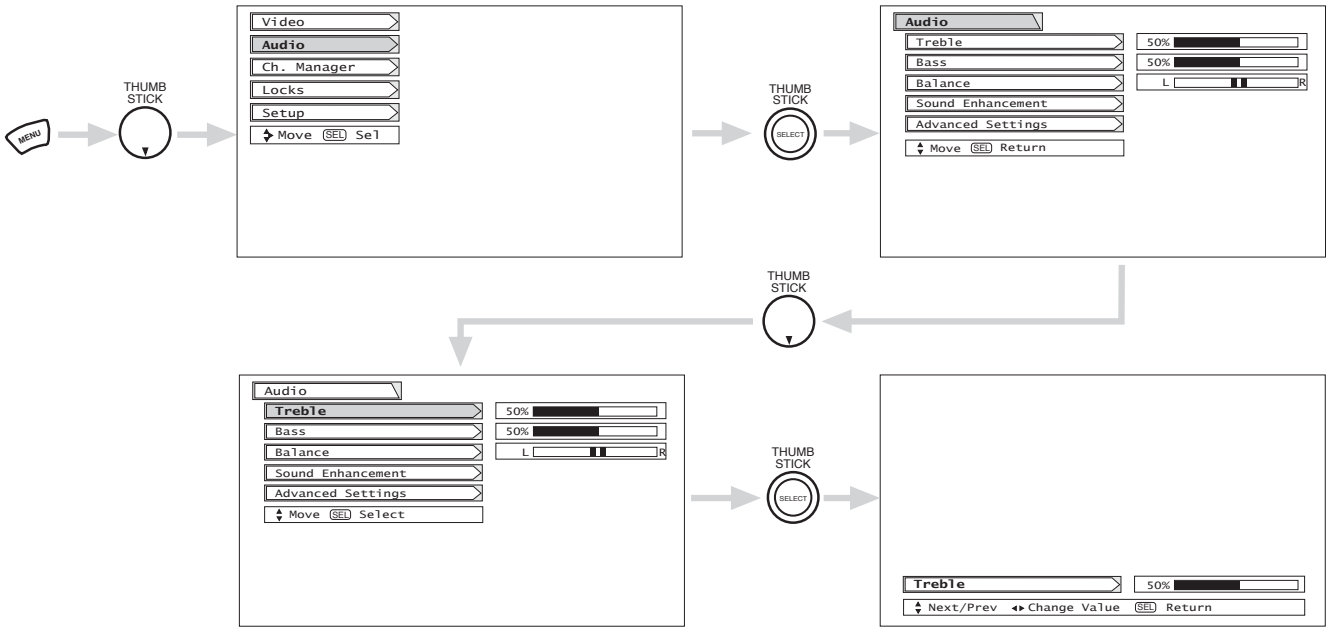
If convergence is acceptable after Manual Convergence adjustment, press EXIT button to access menu mode.



Press the [1] button on the remote control to SAVE adjusted data and return to main picture.
Press the [2] button on the remote control to CANCEL adjusted data and return to main picture.
Press the [3] button on the remote control to recall the factory pre-set convergence data.
Press the [4] button on the remote control to return to the manual convergence adjustment mode (crosshatch pattern).
Press the [9] button on the remote control to read the SAVED data.

CUSTOMIZED PICTURE AND SOUND ADJUSTMENTS

Audio Select AUDIO to adjust the TV to your preference and to improve the sound quality.



Use THUMB STICK to highlight functions.
Press down on THUMB STICK to select the function setting.
Press THUMB STICK ◄ or ► to adjust the function.
Press EXIT to quit MENU, or select Audio to return to the main menu.

NOTE: If TREBLE is selected you are adjusting treble. The additional menu items Bass and Balance can be selected and adjusted in the same manner.

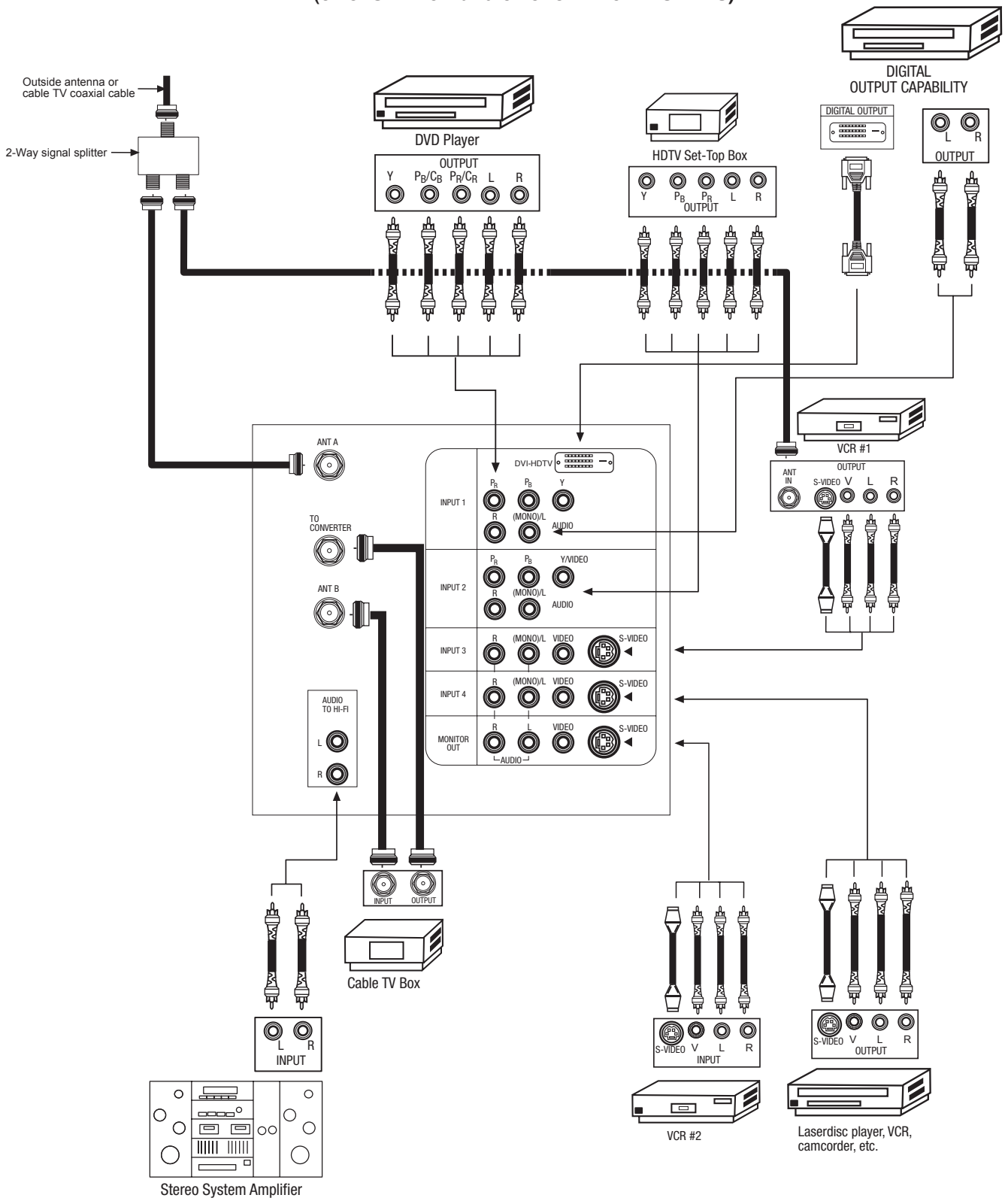
Treble This function controls the high frequency audio to all speakers.

Bass This function controls the low frequency audio to all speakers.

Balance This function will control the left to right balance of the TV internal speakers and the AUDIO TO HI-FI output.

REAR PANEL CONNECTIONS

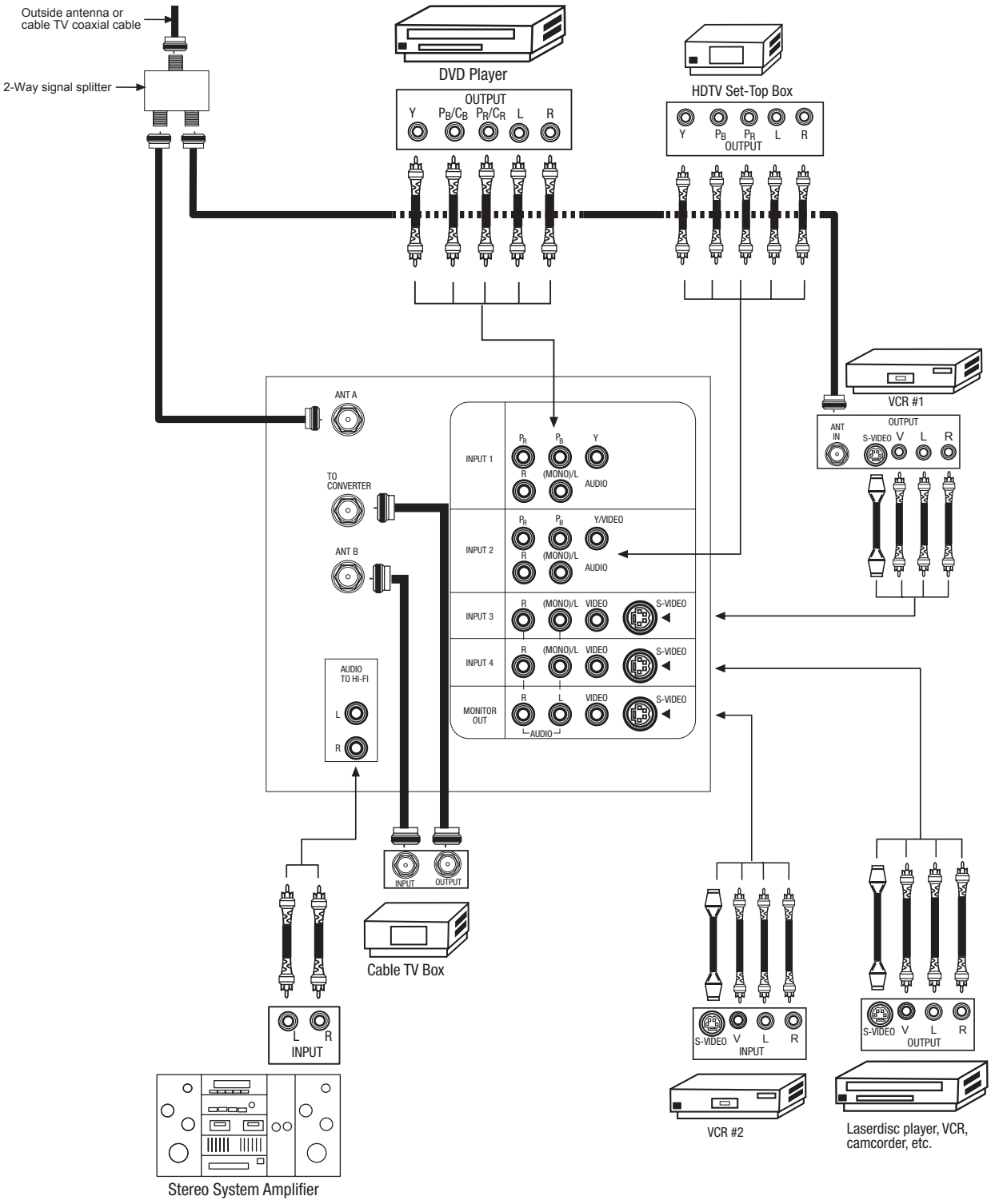
TYPICAL FULL-FEATURE SETUP
(51/57UWX20B and 51/57GWX20B MODELS)



NOTE:
1. Connect only 1 component to each input jack.
2. Follow connections that pertain to your personal entertainment system.
3. Standard video signal (Composite Video) can be input to all video inputs (Video1~Video5).

REAR PANEL CONNECTIONS

TYPICAL FULL-FEATURE SETUP
(43FWX20B)

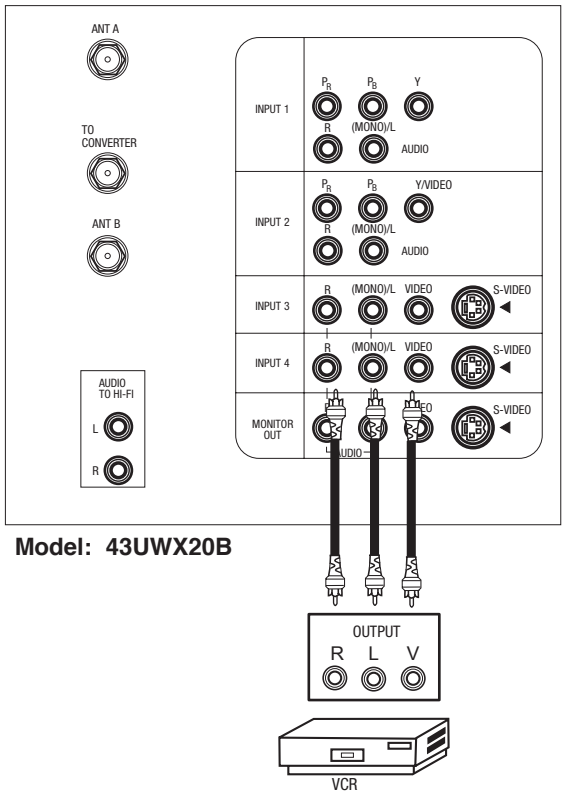


NOTE:
1. Connect only 1 component to each input jack.
2. Follow connections that pertain to your personal entertainment system.
3. Standard video signal (Composite Video) can be input to all video inputs (Video1~Video5).

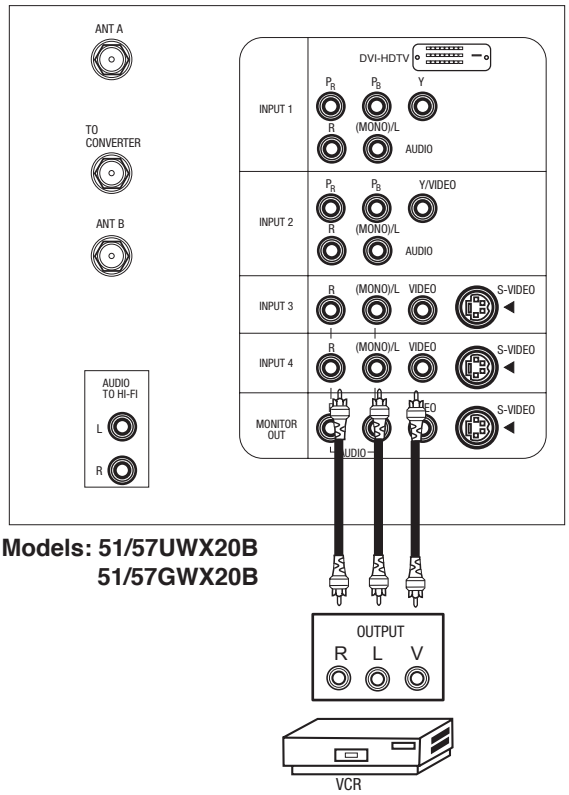
CONNECTING EXTERNAL VIDEO SOURCES

CONNECTING A STEREO SOURCE TO INPUT2~INPUT5

1. Connect the cable from the VIDEO OUT of the VCR or the laserdisc player to the INPUT (VIDEO) jack, as shown on the TV set below.
2. Connect the cable from the AUDIO OUT R of the VCR or the laserdisc player to the INPUT (AUDIO/R) jack.
3. Connect the cable from the AUDIO OUT L of the VCR or the laserdisc player to the INPUT (AUDIO/L) jack.
4. Press the VID2~VID5 button to view the program from the VCR or laserdisc player. The VIDEO label disappears automatically after approximately four seconds.
5. Press the ANT button to return to the previous channel.



Model: 43UWX20B



Models: 51/57UWX20B
51/57GWX20B

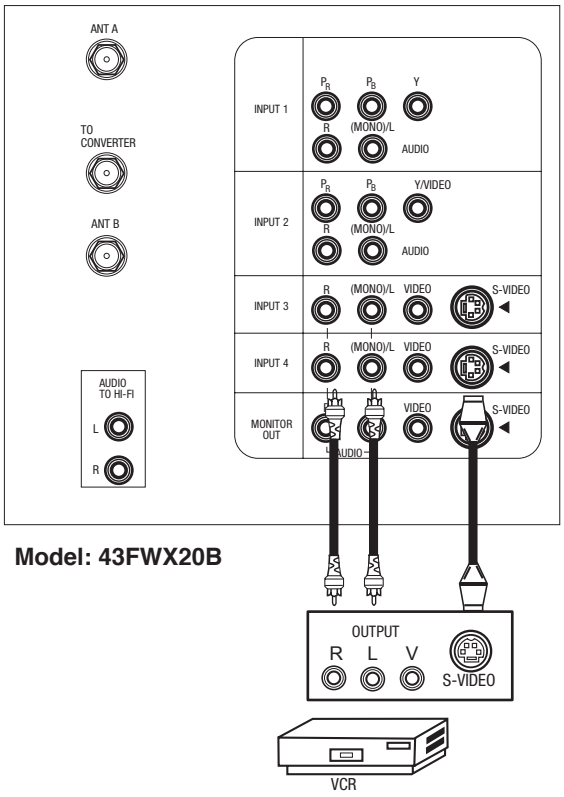
NOTES:

1. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.
2. A single VCR can be used for VCR #1 and VCR #2, but note that a VCR cannot record its own video or line output. (INPUT: 3 in example on page 11 or 12) Refer to your VCR operating guide for more information on line input-output connections.

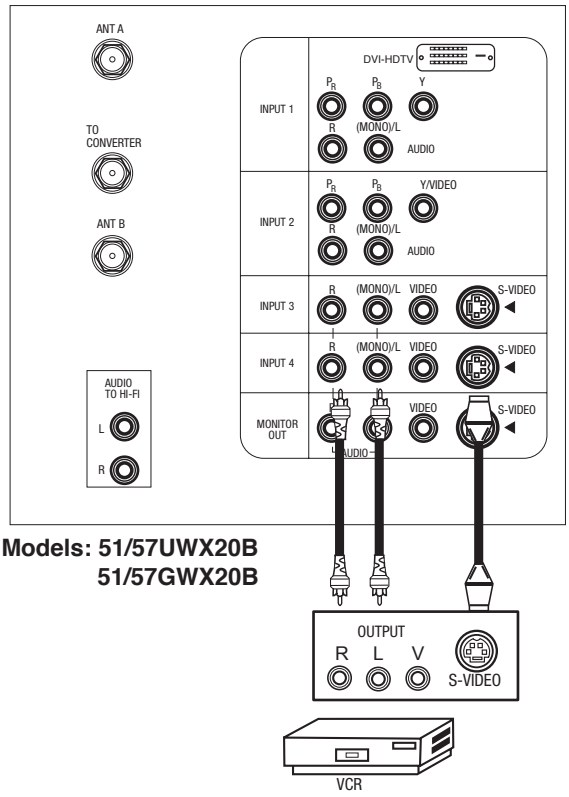
CONNECTING EXTERNAL VIDEO SOURCES

CONNECTING AN S-VIDEO SOURCE TO INPUT 3, 4 AND 5

1. Connect the cable from the S-VIDEO OUT of the VCR or the laserdisc player to the INPUT (S-VIDEO) jack, as shown on the TV set below.
2. Connect the cable from the AUDIO OUT R of the VCR or the laserdisc player to the INPUT (AUDIO/R) jack.
3. Connect the cable from the AUDIO OUT L of the VCR or the laserdisc player to the INPUT (AUDIO/L) jack.
4. Press the VID3~VID5 button to view the program from the VCR or laserdisc player. The VIDEO label disappears automatically after approximately four seconds.
5. Press the ANT button to return to the previous channel.



Model: 43FWX20B



Models: 51/57UWX20B
51/57GWX20B

NOTES:

1. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.
2. A single VCR can be used for VCR #1 and VCR #2, but note that a VCR cannot record its own video or line output. (INPUT: 3 in example on page 11 or 12) Refer to your VCR operating guide for more information on line input-output connections.

CONNECTING EXTERNAL VIDEO SOURCES

DP23/23G/24

CONNECTING A COMPONENT SOURCE WITH DVI-HDTV CAPABILITY TO INPUT 1.

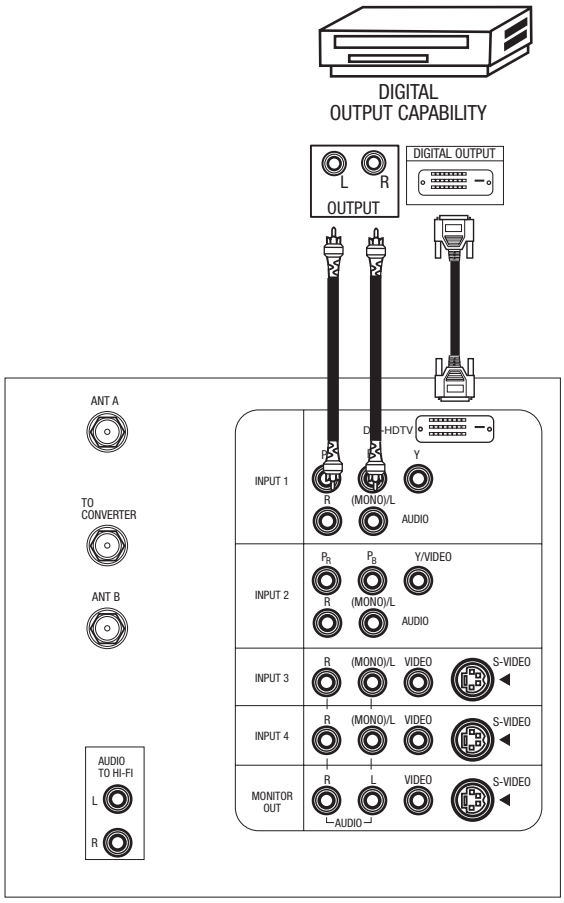
1. Connect the DVI connection cable from the output of the HDTV set top box or DVD player to the DVI-HDTV input as shown on the TV set at right.

2. Connect the cable from the AUDIO OUT R of the HDTV set top box or DVD player to the INPUT (AUDIO/R) jack.

3. Connect the cable from the AUDIO OUT L of the HDTV set top box or DVD player to the INPUT (AUDIO/L) jack.

4. Press the VID1 button to view the program from theHDTV set top box or DVD player. The VIDEO label disappears automatically after approximately four seconds.

5. Press ANT button to return to the previous channel.



Models: 51/57UWX20B
51/57GWX20B

CONNECTING EXTERNAL VIDEO SOURCES

CONNECTING A COMPONENT SOURCE TO INPUT 1 OR 2: Y-P_BP_R.

1. Connect the cable from the Y OUT of the Laserdisc/DVD player or HDTV set top box to the INPUT (Y) jack, as shown on the TV set at right.

2. Connect the cable from the C_B/P_B OUT or B-Y OUT of the Laserdisc/DVD player or HDTV set top box to the INPUT ($P_{B)}$ jack.

3. Connect the cable from the C_R/P_R OUT or R-Y OUT of the Laserdisc/DVD player or HDTV set top box to the INPUT (P_R) jack.

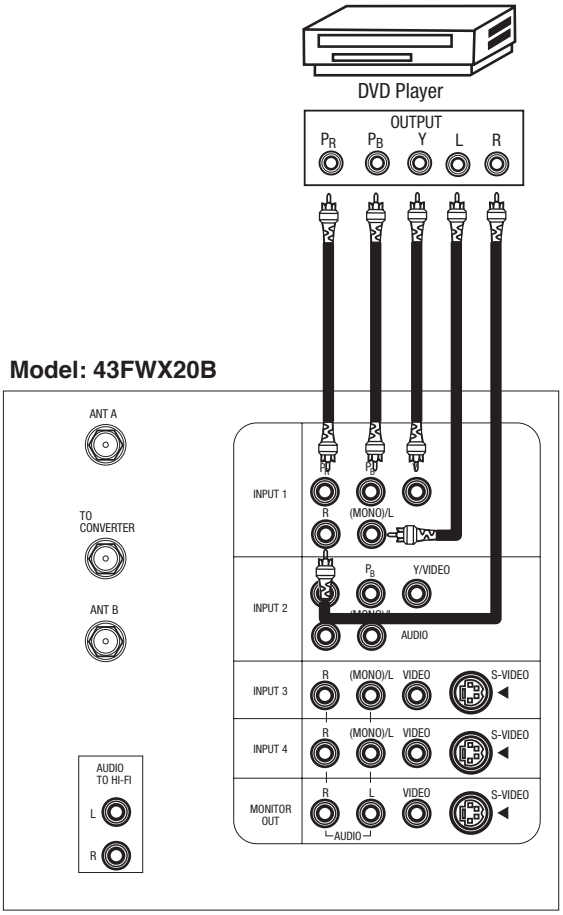
4. Connect the cable from the AUDIO OUT R of the Laserdisc/DVD player or HDTV set top box to the INPUT (AUDIO/R) jack.

5. Connect the cable from the AUDIO OUT L of the Laserdisc/DVD player or HDTV set top box to the INPUT (AUDIO/L) jack.

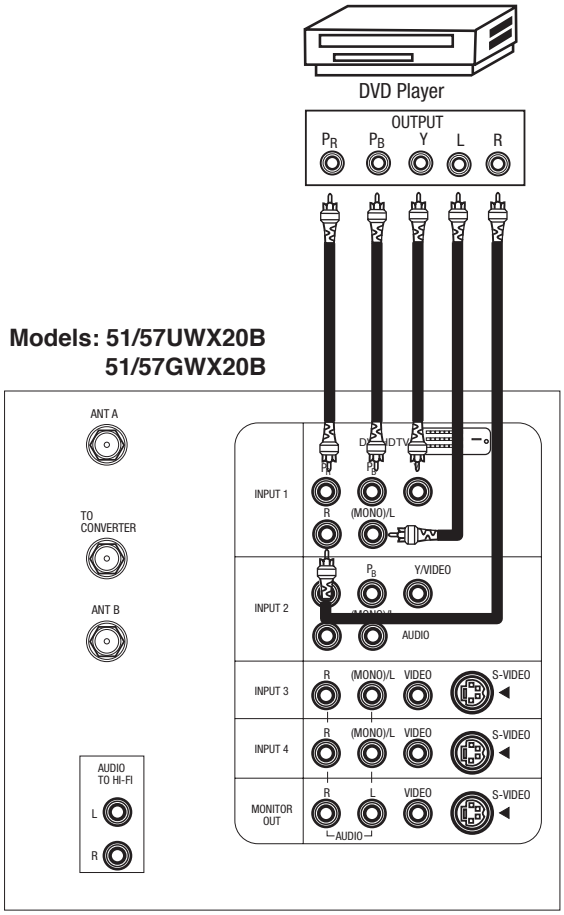
6. Press the VID1~VID2 button, to view the program from the Laserdisc/DVD player or HDTV set top box. The VIDEO label disappears automatically after approximately four seconds.

7. Press the ANT button to return to the previous channel.

Model: 43FWX20B



Models: 51/57UWX20B
51/57GWX20B



NOTE: Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.

SERVICE ADJUSTMENTS

TO GO TO A SECTION, CLICK ON ITS HEADING BELOW

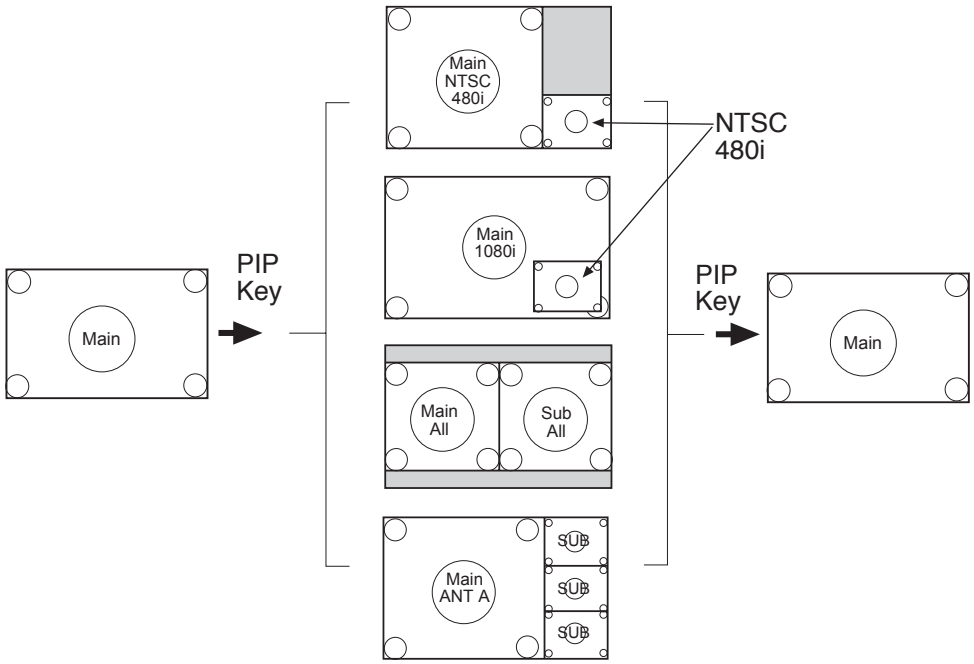
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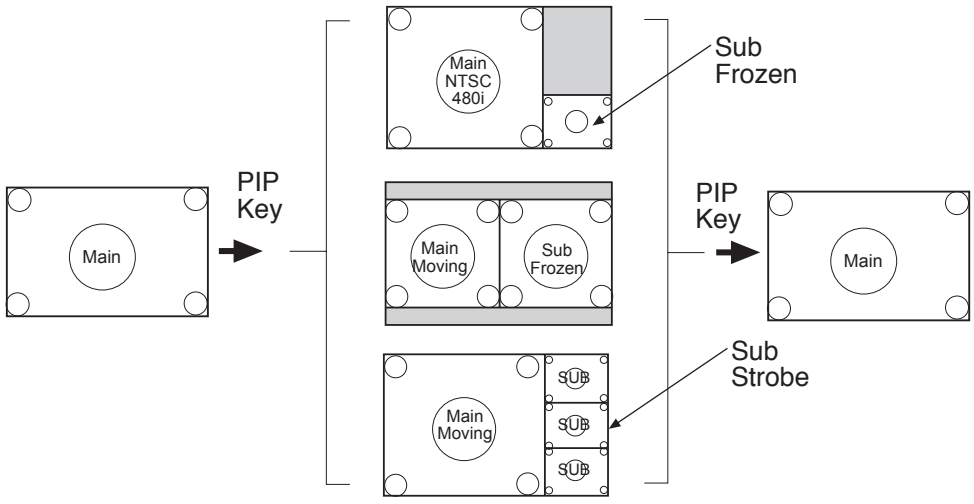
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Control PWB (DP24) 35

***IMPORTANT**
For many of the above adjustments, it is necessary to have an HDTV (1080i or 720P) signal generator, SDTV (480P) signal generator, as well as the usual NTSC (480i) signal generator.
Hitachi recognizes that few companies offer HDTV or SDTV signal generators and that the cost of these generators is sometimes prohibitive. For this reason, we suggest the use of a set-top-box for HDTV and SDTV adjustments. Usually, there is a switch on the set-top-box which enables it to output HDTV (1080i or 720P) or SDTV (480P) signals even with no input. In this case, the sync is automatically detected by the TV (at the Y-P_BP_R Inputs on the rear panel).

PIP Key Operation
FWX/GWX/UWX Model

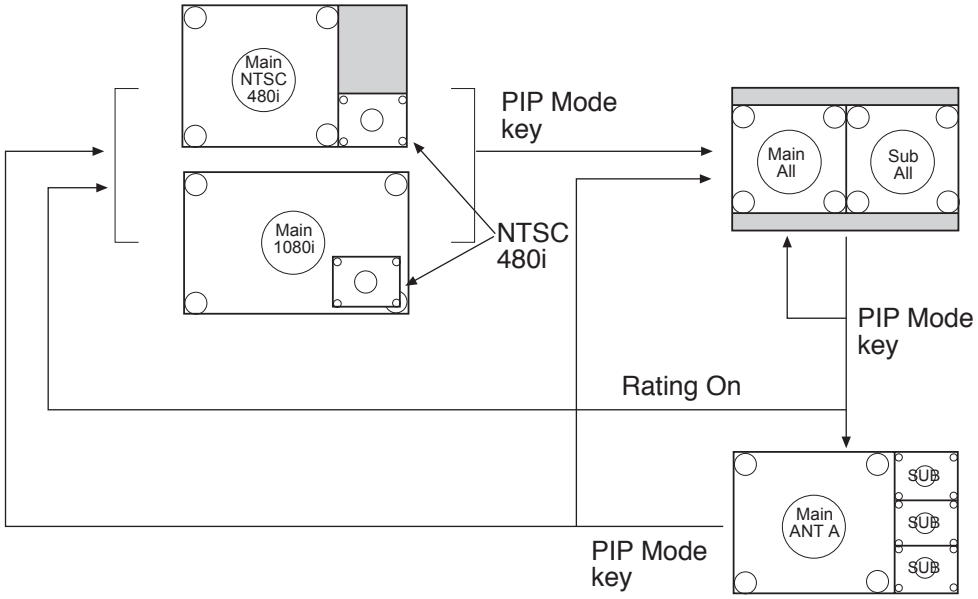


FREEZE Key Operation
FWX/GWX/UWX Model

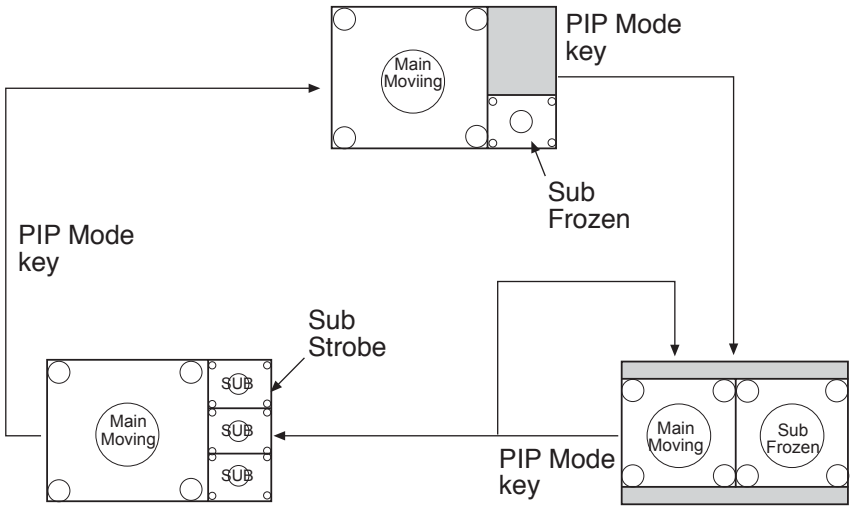


BACK TO ADJUSTMENTS

PIP Key Operation
FWX/GWX/UWX Model
PIP ON Mode



FREEZE Key Operation
FWX/GWX/UWX Model
FREEZE Mode



BACK TO ADJUSTMENTS

2. FINAL ASSEMBLY ADJUSTMENT

2.1 Cut Off Adjustment

Adjustment Preparation:
1. Allow 20 minutes pre-heat run.
2. Set video conditions to factory presets.

Adjustment Procedure:
1. Access the I2C Adjustment Mode
1.1 On the front panel, press and hold the INPUT button, then press the POWER button; release both after hearing HV startup.
2. Select SERVICE from adjustment menu by pressing the ▶ button on the remote. This will collapse the vertical deflection.
3. Turn all screen (G2) controls to the full counter-clockwise position.
4. Bring up each screen G2 control, one at a time, until that color is just barely visible. (Also, adjust the focus control for each color to obtain optimum focus.)
5. After all colors are finished, press the ◀ button on the remote to un-collapse the vertical, and return to normal.

NOTE: Never power off the TV while in the Service position of the I2C Adjustment Mode (vertical collapsed) as CRT damage may result.

2.2 DCU Phase Data Setting

Adjustment preparation

(1) Cut off adjustment should be finished.
(2) Set video conditions to factory preset.

Adjustment procedure

(1) Receive any NTSC signal.
(2) Push "SERVICE ONLY" SW on DEF./CONV. PWB. (Enter to DCU ADJ. mode).
(3) Push VID2 KEY IN [CBL/SAT] on R/C. (Green cross hatch is displayed).
Then push EXIT key on R/C. (Character pattern is displayed. This is the PHASE setting mode).
(4) Set PH-H phase data as shown below by using 4 and 6 key on R/C.
(5) Set PH-V phase data as shown below by using 2 and 5 key on R/C.
(6) Set CR-H phase data as shown below by using THUMB STICK ◀ and ▶ key on R/C.
(7) Set CR-V phase data as shown below by using THUMB STICK▲ and ▼ key on R/C.
(8) Push VID2 KEY IN [CBL/SAT] on R/C to exit from the PHASE mode.
(9) Push PIP MODE key 2 times on R/C to write the phase data to memory.
(10) When Green dots are displayed, push MUTE key to return to DCU ADJ. mode.
(11) Push "SERVICE ONLY" SW to return to RF or VIDEO mode.

PHASE MODE

PH-H :CD
PH-V: 04
CR-H: 35
CR-V: 0A

2.3 Raster position adjustment

Adjustment preparation

(1) The set can face east or west.
(2) Input the single cross test signal.
(3) Set video conditions to factory preset.
(4) The static focus should have been coarse adjusted.
(5) The digital convergence RAM should be cleared (uncorrected state). With the TV set off, press and hold the service switch located on the DEF./CONV. PWB and then press the power button.
(6) Start adjustment 20 minutes or more after TV is turned on.

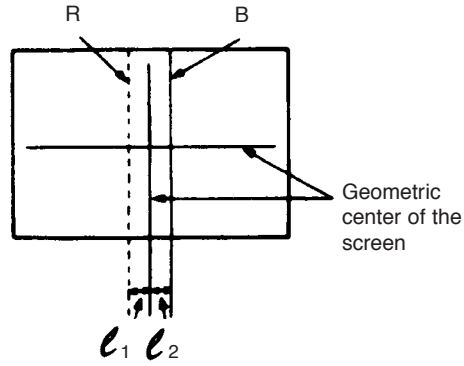
Adjustment procedure

(1) Turn the centering magnets for red, green, and blue to satisfy the condition below. The red and blue horizontal lines should match with green.

	ℓ_1 (RED)	ℓ_2 (BLUE)
43"	25	30
51"	20	35
57"	20	35

Tolerance: ± 2mm

Units = millimeters
25.4mm = 1in.



(2) Upon completion of adjustment, fix centering magnets with white paint.

NOTES: (1) If internal cross-hatch does not appear after clearing RAM data, press service switch again.
(2) To restore old RAM data, turn TV off and on.

CH 7

BACK TO ADJUSTMENTS

2.4 Vertical size adjustment

Adjustment preparation

(1) The set can face east or west.
(2) Set video conditions to factory preset.
(3) Convergence should not be corrected.
(4) Start adjustment 20 minutes or more after TV is turned on.

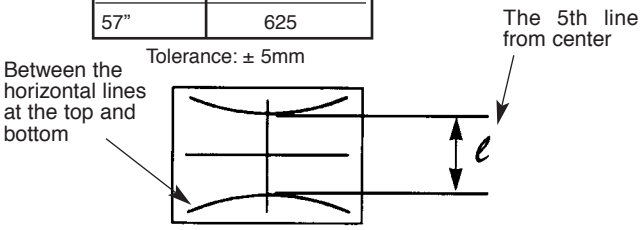
Adjustment procedure

(1) Receive any NTSC signal.
(2) Press the SERVICE ONLY SW on DEF./CONV. PWB and POWER to display DCU uncorrected convergence data.
(3) Locate the vertical size VR (R607) on DEFLECTION PWB. Adjust the vertical size according to the following table.

ℓ =	NORMAL MODE
43”	460
51”	560
57”	625

Tolerance: ± 5mm

Units = millimeters
25.4mm = 1in.



Notes:(1) If internal cross-hatch does not appear after clearing RAM data, press service switch again (on DEF./CONV. PWB).
(2) To restore old RAM data, turn TV off and on.
(3) V-Size is only done in NORMAL mode (NTSC).

2.5 Horizontal size adjustment

Adjustment preparation

(1) The set can face east or west.
(2) Set video conditions to factory preset.
(3) The STATIC FOCUS adjustment should have been coarse adjusted.
(4) Convergence should not be corrected.
(5) Start adjustment 20 minutes or more after TV is turned on.

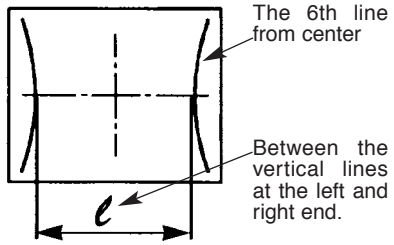
Adjustment procedure

(1) Receive any NTSC signal.
(2) Press the SERVICE ONLY SW on DEF./CONV. PWB and POWER to display DCU uncorrected converge data.
(3) Locate the horizontal size VR (R711 on POWER/DEF PWB). Adjust horizontal size to the table below.

ℓ =	NORMAL MODE
43”	870
51”	1020
57”	1140

Tolerance: ± 5mm

Units = millimeters
25.4mm = 1in.



Notes: (1) Once Normal mode Horizontal size adj. is done. To restore old RAM data, turn TV off and on.
(2) After adjustment, press SERVICE ONLY switch to exit DCU crosshatch.
(3) H. SIZE adjustment is only done in NORMAL MODE (NTSC).

2.6 LENS FOCUS ADJUSTMENT

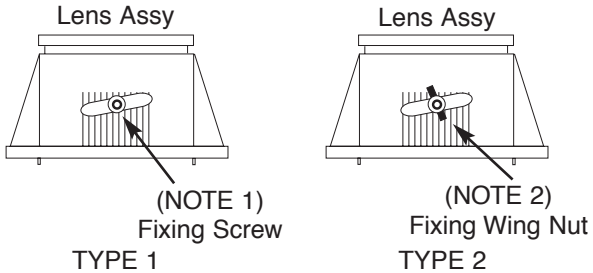
Adjustment preparation

(1) The orientation of PTV set is arbitrary, west, east, north and south.
(2) Centering DY inclination should have been adjusted.
(3) Static focus adjustment should have been coarse adjusted.
(4) Drive VR location adjustment should have been completed. (Red : 12 O’clock, Green : 1~2 O’clock).
(5) Receive the cross-hatch pattern signal.
(6) Refer to setup below.
CONTRAST : HALF of full scale.
BRIGHTNESS : minimum

Adjustment procedure

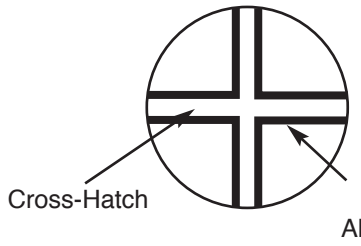
(1) Loosen the fixing screw or wing nut on the lens cylinder so that the lens cylinder can be turned. (Be careful not to loosen too much). After completing steps (4), (5), (6) below, tighten the fixing screws or wing nuts for each lens with a torque of 1.18N.m (12Kgf cm) ~ 1.67N.m (17Kgf cm).

(Be careful the lens cylinder does not turn after having tightened the screw or wing nuts. If it is tightened too much, lens may tilt or screw may break.)



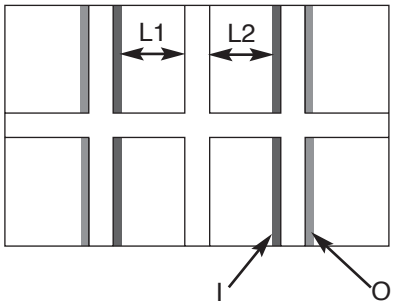
(2) Apply covers to each color of R, G and B lenses. And project a single color on the screen and adjust in sequence. (The adjustment order of G, R and B is only an example.)
(3) If the lens adjustment knob is turned clockwise viewed from the front, the color Aberration change as follows.

BACK TO ADJUSTMENTS



	Change of Color Aberration	
	Short focus	Long focus
RED LENS	Orange	Scarlet
GREEN LENS	Blue	Red
BLUE LENS	Purple	Green

(4) In case of G lens. Set to the point where the chromatic aberration switches from blue to red. If the chromatic aberration appearing all over the screen is not the same, observe the vertical bright line and adjust lens focus as specified in table below. When the red chromatic aberration appearing at both sides of the bright line is not equal, observe the side with larger chromatic aberration when adjusting.

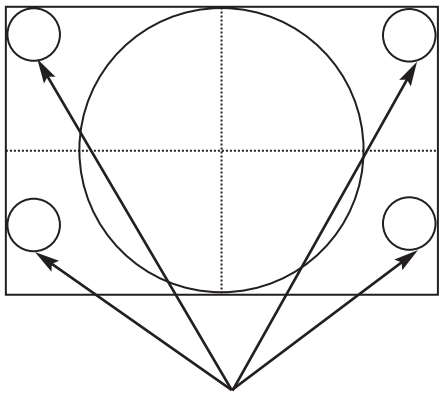


OPTICAL FOCUSING ADJUSTMENT GREEN

CHASSIS		DP24	DP23/DP23G	
SCREEN SIZE		43"	51"	57"
L1 and L2 (PITCHES from CENTER)		3.0	1.0	1.0
COLOR ABERRATION	BETWEEN L1&L2	*	*	*
	I	* 3.0mm MAX	* 2.0mm MAX	* 3.0mm MAX
	O	* 3.0mm MAX	** 3.5mm MAX	* 3.0mm MAX

(NOTE) * Slightly reddish or no color
** Slightly bluish or no color

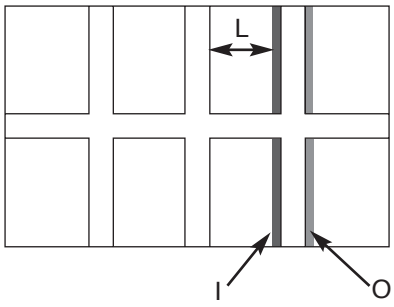
Change the signal to the circle pattern and fine adjust. Observe the corner part of the screen, especially observe number in the small circle when adjusting. If the focus performance at the screen center exceeds the lower limit, it is acceptable.



Small circle of circle pattern

NOTES: 1. Since the G light is very important for picture quality and performance, pay special attention in its adjustment.
2. Be careful not to touch the lens with your fingers when adjusting.

(5) In case of R lens. Set the position where the chromatic aberration changes from red to crimson. As shown below, observe the vertical bright line and adjust lens focus where the crimson or red chromatic aberration slightly appears inside, and crimson or red outside (reference value : 1~3mm) at the point specified in table below. Change the signal and fine-adjust the same way as the G lens.



NOTE: Setting the center between Red and crimson is optimum.

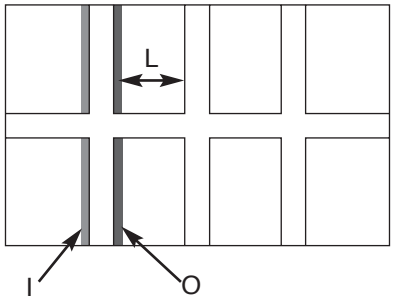
OPTICAL FOCUSING ADJUSTMENT RED

CHASSIS		DP24	DP23/DP23G	
SCREEN SIZE		43"	51"	57"
L1 and L2 (PITCHES from CENTER)		3.0	3.0	3.0
COLOR ABERRATION	BETWEEN L1&L2	*	*	*
	I	* 3.5mm MAX	* 2.0mm MAX	* 3.0mm MAX
	O	** 3.5mm MAX	** 2.0mm MAX	* 3.0mm MAX

(NOTE) * Slightly reddish or no color
** Slightly crimson or no color

(6) In case of B lens. Set the position where the chromatic aberration changes from purple to green. As shown below, observe the vertical bright line and adjust lens focus where the purple or green chromatic aberration slightly appears inside and purple or green outside (reference value : 1~3mm) at the point specified in table below. Change the signal and fine-adjust in the same way as the G lens.

BACK TO ADJUSTMENTS



NOTE: Setting to the center between purple and crimson is optimum.

OPTICAL FOCUSING ADJUSTMENT BLUE

CHASSIS		DP24	DP23/DP23G	
SCREEN SIZE		43"	51"	57"
L1 and L2 (PITCHES from CENTER)		3.0	3.0	3.0
COLOR ABERRATION	BETWEEN L1&L2	*	*	*
	I	* 3.5mm MAX	* 2.0mm MAX	* 3.0mm MAX
	O	* 3.5mm MAX	** 2.0mm MAX	* 3.0mm MAX

(NOTE) * Slightly reddish or no color
** Slightly greenish or no color

(7) After all colors have been adjusted, display all colors with the cross-hatch pattern signal and check the focus performance.
(8) Then, select the circle pattern signal and check the focus performance of each color and all colors together.
(9) If the focus performance is not acceptable re-adjust step (1) to (6).

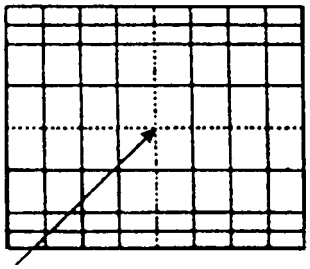
2.7 Digital convergence adjustment

Note: 1. If replacing a PRT, DY, etc. perform auto-digital convergence first. (Press front panel MAGIC FOCUS switch.) This can eliminate the need for a complete digital convergence alignment.

2. To enter digital convergence adjustment mode without removing the front speaker grill, please do the following:

1) Press "Magic Focus" button on the front panel.
2) While "Magic Focus" is running, press Magic Focus button again to "Stop".
3) Press INFO button after "STOP" OSD appears on the screen to enter digital convergence mode.
4) Proceed with convergence adjustment and save the data.
5) Do MAGIC FOCUS sensor initialization.
6) To exit, press POWER button on the front panel.

Adjustment preparation
(1) Receive an RF or video signal.
(2) Set controls to factory preset.
(3) Install jig screen on the set.
(4) Note the center of the video pattern displayed. This is necessary to match dotted lines (adjustment point viewed) and actual point that is adjusted and displayed by the video signal.
(5) Press the service only switch (on DEF./CONV. PWB). The pattern displayed is now the digital convergence mode.
(6) When performing a complete digital convergence adjustment CLEAR DATA in RAM. (With the TV set off, press and hold the service switch located on the DEF./CONV. P.W.B. and then press the POWER button).



Adjustment Point

BACK TO ADJUSTMENTS

2.7.1 MAGIC FOCUS Character Set-Up

This instruction should be applied when a new DCU is being replaced.

Adjustment Preparation

(1) Receive NTSC RF or video signal.
(2) With Power off, PRESS and HOLD the SERVICE ONLY button on DEF./CONV. PWB, then press the Power On/Off, when picture appears release SERVICE ONLY switch. (Internal crosshatch is displayed without conv. correction data.)
(3) Press the SWAP button 2 times for ROM READ operation. Picture will appear with convergence correction data.

Adjustment Procedure

(1) Press FREEZE key on R/C. (One additional line appears near the top and near the bottom.)
(2) Press PIPCH key, then ADJ. PARAMETER mode is displayed as following.

```
ADJ. PARAMETER
ADJ. DISP.:    77
DEMO WAIT:   2F
INT. START:    03
V. SQUEEZE:  F0
```

(3) Press THUMBSTICK ◀ or ▶ to change the ADJ. DISP. data.
(4) Press THUMBSTICK ▼ to access DCU Parameter. Change the data as shown on Table 1 - DCU Parameter Data.
(5) Press PIP MODE key 2 times to write changed data into EEPROM. (First press ADJ. PARAMETER/ROM WRITE? is displayed for alarm. 2nd press, writes data into EEPROM. Green dots appear after completion of operation.)
(6) Press MUTE key 3 times to exit from ADJ. PARAMETER mode.

TABLE 1. - DCU PARAMETER

	DP23/DP23G	DP24
Parameter	Normal	Normal
ADJ. DISP	77	77
DEMO WAIT	2F	2F
INT. START	03	03
V. SQUEEZE	F0	F0
INT STEP 1	02	02
INT STEP 2	06	06
INT BAR	28	25
INT DELAY	01	01
MGF STEP 1	00	00
MGF STEP 2	06	06
MGF BAR	1B	1B
MGF DELAY	01	01
SEL. STAT.	00	00
LINE WID	1F	1F
ADD LINE	09	09
SENSOR CK	00	00
PORT 0	07	07
PORT 1	06	06
PORT 2	05	05
PORT 3	04	04
PORT 4	03	03
PORT 5	02	02
PORT 6	01	01
PORT 7	00	00
AD LEVEL	03	03
CENT. BAL	00	01
E. DISPLAY	00	00
ADJ. TIMS	60	60
AD LEVEL	05	05
AD NOISE	0A	0A
PHASE MOT	60	60
H. BLK-RV	00	00
H. BLK-GV	01	01
H. BLK-BV	00	00
H. BLK-H	00	00
PON DELAY	0C	0C
IR-CODE	00	00
INITIAL 50	9E	9E
MGF 50	96	96
CENTER 50	FE	FE
STAT 50	FE	FE
DYNA 50	9F	9F

2.7.2 MAGIC FOCUS Pattern Set-Up

NOTE: (1) This instruction should be applied when a new DCU is being replaced.
(2) This instruction shows how to set up the pattern position for MAGIC FOCUS.

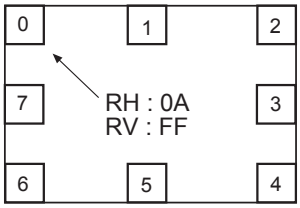
Adjustment Procedure

(1) Receive NTSC RF or video signal.
(2) With Power off, PRESS and HOLD the SERVICE ONLY button on DEF./CONV. PWB, then press the Power On/Off, when picture appears release SERVICE ONLY button. (Internal crosshatch is displayed without conv. correction data.)

BACK TO ADJUSTMENTS

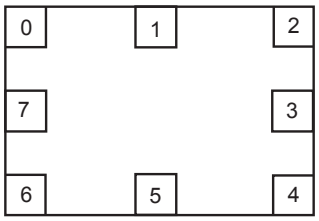
Adjustment Procedure

(1) Press FREEZE key on R/C. (One addtional line appears near the top and near the bottom.)
(2) Press VID2 key in [CBL/SAT] on R/C, then MAGIC FOCUS PATTERN mode is displayed as follows:



(3) Use [6] key on remote control to rotate the arrow. Arrow indicates each sensor position. (Upper left corner, middle top, upper right corner, right middle, in this order).
(4) Use the keys to switch color of pattern.
INFO : Green pattern
0 : Red pattern
ANT : Blue pattern
(5) Press THUMBSTICK ◀ or ▶ to change the data value to the horizontal direction. Press THUMBSTICK ▲ or ▼ to change the data value to the vertical direction.
(6) Set the data as shown below:

Pattern Position



Normal Mode (DP23/DP23G)

	0	1	2	3	4	5	6	7
RH	04	02	FC	FE	FC	02	02	02
RV	03	00	07	01	FB	01	FE	01
GH	04	00	FE	00	FE	00	02	02
GV	04	00	06	01	FC	01	FE	01
BH	06	FE	FC	00	FE	FE	04	02
BV	06	00	04	01	FE	01	FB	01

Normal Mode (DP24)

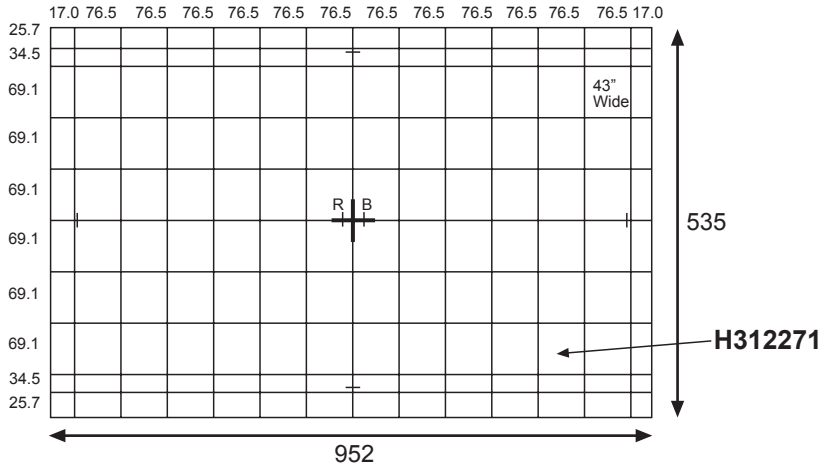
	0	1	2	3	4	5	6	7
RH	04	02	FE	00	FE	02	04	02
RV	03	01	06	01	FC	01	FF	01
GH	04	00	FE	00	FE	00	02	02
GV	04	01	05	01	FD	01	FD	01
BH	04	FE	FE	02	00	FE	04	02
BV	06	01	04	01	FF	01	FD	01

(7) Press PIP MODE key 2 times to write the changed data in EEPROM. (First press, ADJ. PATTERN/ROM WRITE ? 2nd press, writes data into EEPROM. Green dots appear after completion of operation.)
(8) Press MUTE key to exit from PATTERN mode.

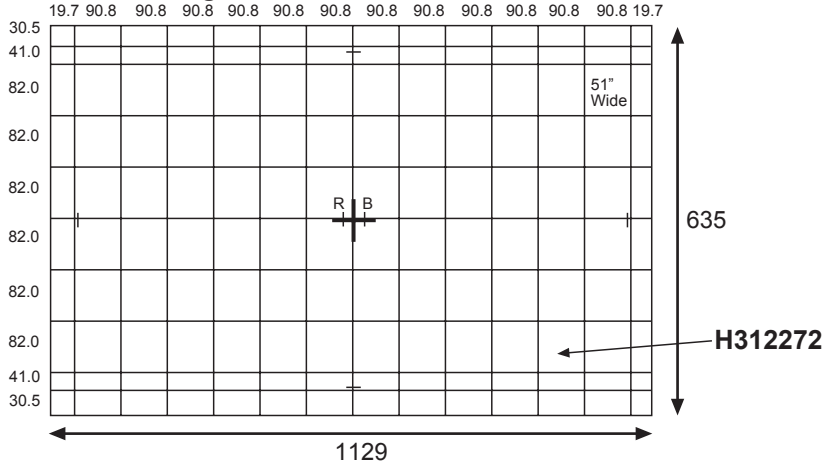
BACK TO ADJUSTMENTS

2.7.3 Convergence Jig Screen Specifications

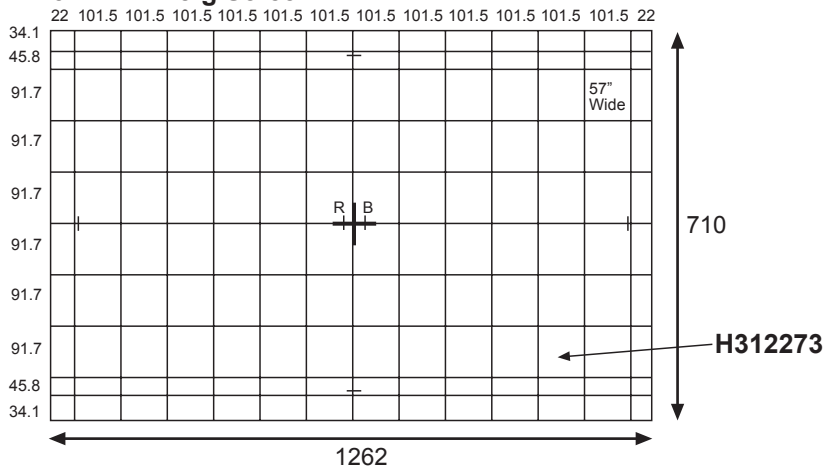
43FWX20B (Part Number H312271)



51UWX20B/51GWX20B (Part Number H312272)
51" DP2X Jig Screen



57UWX20B/57GWX20B (Part Number H312273)
57" DP2X Jig Screen



BACK TO ADJUSTMENTS

Note: If only minor adjustments to convergence are needed, the jig screen is not necessary. Use digital data stored in memory and one color as a reference (red, green, or blue). DO NOT CLEAR DATA and WRITE to ROM memory.

2.7.4 Raster position adjustment

Adjustment preparation

(1) Position adjustment - This will move an entire color. Use this adjustment to match colors at the center of the screen. (Active video center from external signal and physical screen center should now match from phase adjustment).
(2) Use the buttons below to switch color to adjust.
"INFO" - Green
"0" - Red
"ANT" - Blue

Adjustment procedure

(1) Press the FREEZE button. Extra horizontal lines appear to confirm raster position mode.
(2) Use the thumb stick to adjust position.
(3) Press FREEZE again to exit raster position mode.

Notes: (1) Other functions cannot be accessed when in raster position adjustment mode. Press FREEZE and confirm extra horizontal lines disappear to exit raster position mode.
(2) Press MENU to remove colors displayed.

2.7.5 Convergence point adjustment

Adjustment preparation

(1) Select color to adjust.
"INFO" - Green
"0" - Red
"ANT" - Blue
(2) Use 4, 6, 2, and 5 to move the cursor position (dotted lines).
(3) Use thumb stick to move the convergence point.
(4) Three adjustment modes are available:
1. (3x3) Press "INFO" 5 times (only works when DCU is in uncorrected state)
2. (7x5) Press "0" 5 times
3. (13x9) Press "ANT" 5 times

For touch-up, only the (13x9) mode is necessary. This will adjust every cross-hatch intersection point on the screen.

For complete adjustment, start with (3x3) mode. This will adjust center point and eight edge points only, but will greatly reduce adjustment time. Then use (7x5) mode, and finally (13x9) mode to finish convergence.

If "S" distortion appears between cross-hatch lines repeat (7x5) mode to change calculation process while adjusting to remove distortion, then return to (13x9) mode to finish touch-up convergence.

Adjustment procedure

(1) Receive any NTSC signal.
(2) Start adjustment at the center of the screen.
(3) Continue adjustment at next closest position.
(4) Adjust center area first, ending with edge sections.
(5) Press INFO button to perform calculation operation. This process will take about 1 second and no picture will be seen at this time.
(6) After interpolation, check convergence again and repeat (1)-(5) if necessary.
(7) When convergence is acceptable, press PIP MODE to write data to ROM memory. ROM WRITE? is displayed to alarm system that ROM will be overwritten with new data. Press the PIP MODE button again to write displayed data to ROM.
(8) DATA WRITE TO ROM will take approximately 4 seconds and no picture will be displayed.
(9) Green dots will be displayed when operation is completed.
(10) Press MUTE to return to convergence pattern, then confirm again convergence is acceptable.
(11) Press PIP MODE (ROM WRITE) mode, then press PIP CH to initialize sensor data positions.

Notes: (1) Display only green for easier adjustment and match to jig screen. Press "MENU", THEN PRESS "INFO".
(2) Perform interpolation and data write to ROM after green adjustment. Once green has been confirmed to match jig screen, the jig screen can be removed. Do not readjust the green color after jig screen has been removed. This is now your reference color.
(3) Display green and red only and match red to green.
(4) Display all colors and match blue to green and red. Touch-up red color if necessary.
(5) Existing DATA in ROM can be read by pressing the SWAP button 2 times. This data can be used after replacing a component (CRT, DY, etc.) Where complete convergence adjustment is not necessary, be careful not to overwrite this data. DO NOT write cleared RAM data into ROM or a complete convergence adjustment will be necessary. Remember to try MAGIC FOCUS before starting convergence adjustment to minimize adjustment time.
(6) To confirm and fine tune the convergence at the edge of the screen, press the PIP CH button on the remote control while in the digital convergence adjustment mode (DCAM) for additional lines at the edge of the screen. Fine tune the edge convergence as necessary. To exit, press PIP CH again.

BACK TO ADJUSTMENTS

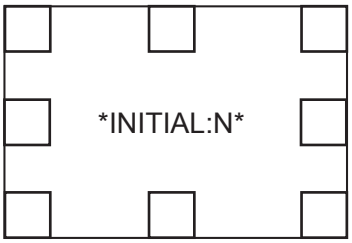
2.7.6 Magic Focus Initialize

Adjustment Preparation

(1) Receive any NTSC signal.
(2) Digital convergence adjustment should have been completed.
(3) Set is in DCU adjustment mode.

Adjustment Procedure

(1) Press “PIP MODE” and then “PIP CH” to initialize Magic Focus. The initialize operation starts and several windows appear during this operation. It takes about 30 seconds or less.
(2) When green dots appear, initialize operation is finished.
(3) Turn power OFF on TV set.



Initialization Operation

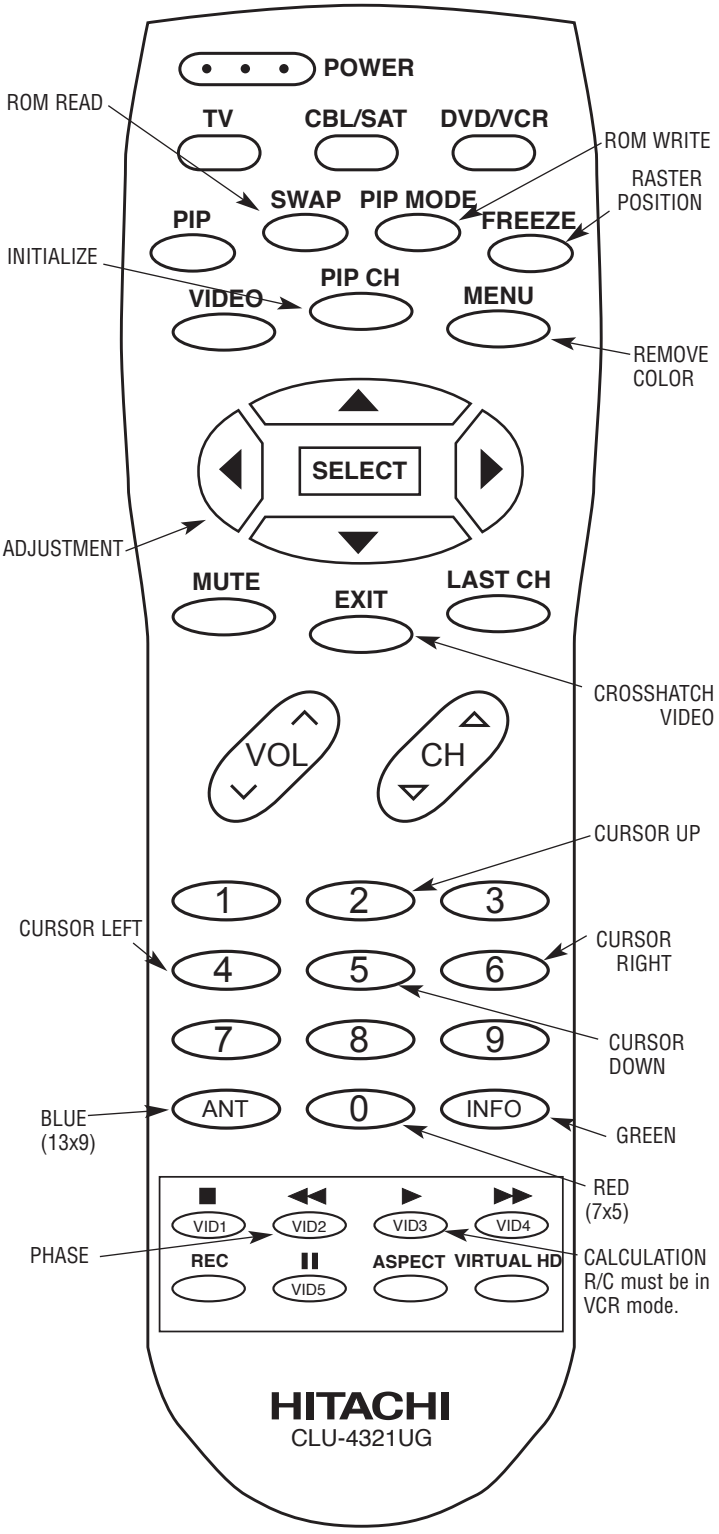
REMARKS

Another way to start the initialize operation:

(1) Press “SERVICE ONLY” Sw. on DEF./CONV. PWB to set DCU adj. mode.
(2) Press [PIP MODE] key on R/C. Then “ROM WRITE?” is displayed for alarm. Next, press [PIP CH] key on R/C to start initialization. When green dots appear, initalization operation is finished.

NOTE: If there is an error message, red dots or an error code, refer to page 57, CONVERGENCE ERRORS.

Digital Convergence Remote Control



BACK TO ADJUSTMENTS

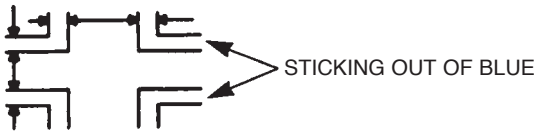
2.8 Blue defocus adjustment

Adjustment Preparation

(1) Optical and electrical focus adjustment should have been completed.
(2) The convergence adjustment should have been completed.
(3) Set Video conditions to factory preset.
(4) Input the cross-hatch signal.

Adjustment procedure

(1) Turn the B Focus VR (Focus Pack) fully clockwise.
(2) Adjust sticking out level of blue to specification shown in table below, by turning the (B) FOCUS VR counter clockwise.



UNEVENNESS SPECIFICATION: ±1cd/m^2

Defocus sticking out specification

Screen Size	Blue sticking out
43”	1.0mm
51”	1.0mm
57”	1.0mm

Condition: User controls are set to the initial set positions (for shipment)

Measuring point-Screen center.

2.9 White balance adjustment

(1) Screen adjustment
(2) High light white balance.
(3) Low light white balance.

I^{2}C data for High light white balance

Green : G DRIVE (HIGH) 3F (initial data)(Adjustable)
Red : R DRIVE (HIGH) 3F (initial data)(Adjustable)
Blue : on FOCUS PACK UFPK

I^{2}C data for Low light white balance

Green : G CUT OFF (HIGH) 7F (initial) (Fixed data)
Red : R CUT OFF (HIGH) 7F (initial) (Adj. data)
Blue : B CUT OFF (HIGH) 7F (initial) (Adj. data)

Adjustment Preparation

(1) Adjustment should start 20 min. or more after the TV power is turned ON.
(2) CUT OFF ADJ. should be finished.
(3) VIDEO control : Contrast is MAX., Others are center.
(4) Color temp. : HIGH
(5) Signal:
* Hight Light white Balance Adj.
White raster 0.715Vpp (w/o sync., termination incidence : 75ohm.) 100IRE
* Low Light white balance ADJ.
White raster 0.180Vpp (w/o sync., termination incidence : 75ohm.) 25 IRE (The brightness equal to 20cd/m^2 at screen center on 53” 4:3 model)
(6) BLUE defocus ADJ. should be finished.
(7) The vertical incident illumination on the screen should be 20 Lux. or less.
(8) Picture Format is 16:9 Standard Mode.
(9) Sub Brightness adjustment should be finished.
(10) Go into I^{2}C service mode.

Table 1: White Balance Adjustment Signal

Screen Size		43”	51”	57”
High light	[IRE]		100	
	[Vpp]		0.715	
Low light	[IRE]	15.0	17.5	20.0
	[Vpp]	0.105	0.123	0.140

Table 1 shows amplitude of White raster (without sync, termination impedence: 75ohm).

Adjustment Procedure

A. High Light W/B adjustment

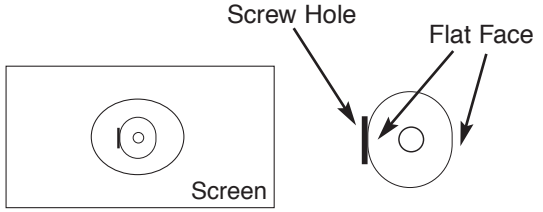
(1) Receive signal for High Light white balance ADJ.
(2) Adjust white balance to 10800K-7 MPCD (x=0.278±0.004; y=0.280±0.004) at center of screen, using R DRV/ G DRV with remote control.

B. Low Light W/B adjustment

(1) Receive signal for Low Light white balance ADJ.
(2) Adjust white balance to 21000K-25 MPCD (x =0.260±0.010, y=0.245±0.010) at center of screen, using R CUT OFF/G CUT OFF/B CUT OFF with remote control. Do not touch screen VRs.
(3) Take Green color as a reference color, then adjust Low Light W/B by increasing other two colors CUT OFF data. Do not change GREEN CUT OFF data. CA-100 Probe should be set to a direction as shown below.

Repeat A & B two or three times, until no adjustment is needed (white balance tracking-GOOD). If W/B tracking is not good, set all data (Both DRV and CUT OFF) to inital data, and change reference color to different color.

Note: If Low Light adj. spec cannot be followed, apply previous adj. spec. (adjust by eye.)



Set probe to above direction. (Screw hole side should be on the left side)

Top view of CA-100 Probe

BACK TO ADJUSTMENTS

Adjustment preparation

(1) Start adjustment after the power is turned on for 20 minutes or more.
(2) The vertical incident illumination on the screen should be 20 lux or less. (Room should be dark).
(3) Set the video settings (CONTRAST: max, others: center) to standard condition.
(4) The blue defocus and cut off adjustments should be completed.
(5) For low light white balance adjustment, input a white raster signal level of 0.180 Vp-p (Video input level).
(6) For high light white balance adjustment, input a white raster signal level of 0.715Vp-p (Video input level).
(7) Confirm R and G Drive (cool) data is 3F.
(8) Set Video Advanced Settings-Color Temperature to HIGH.

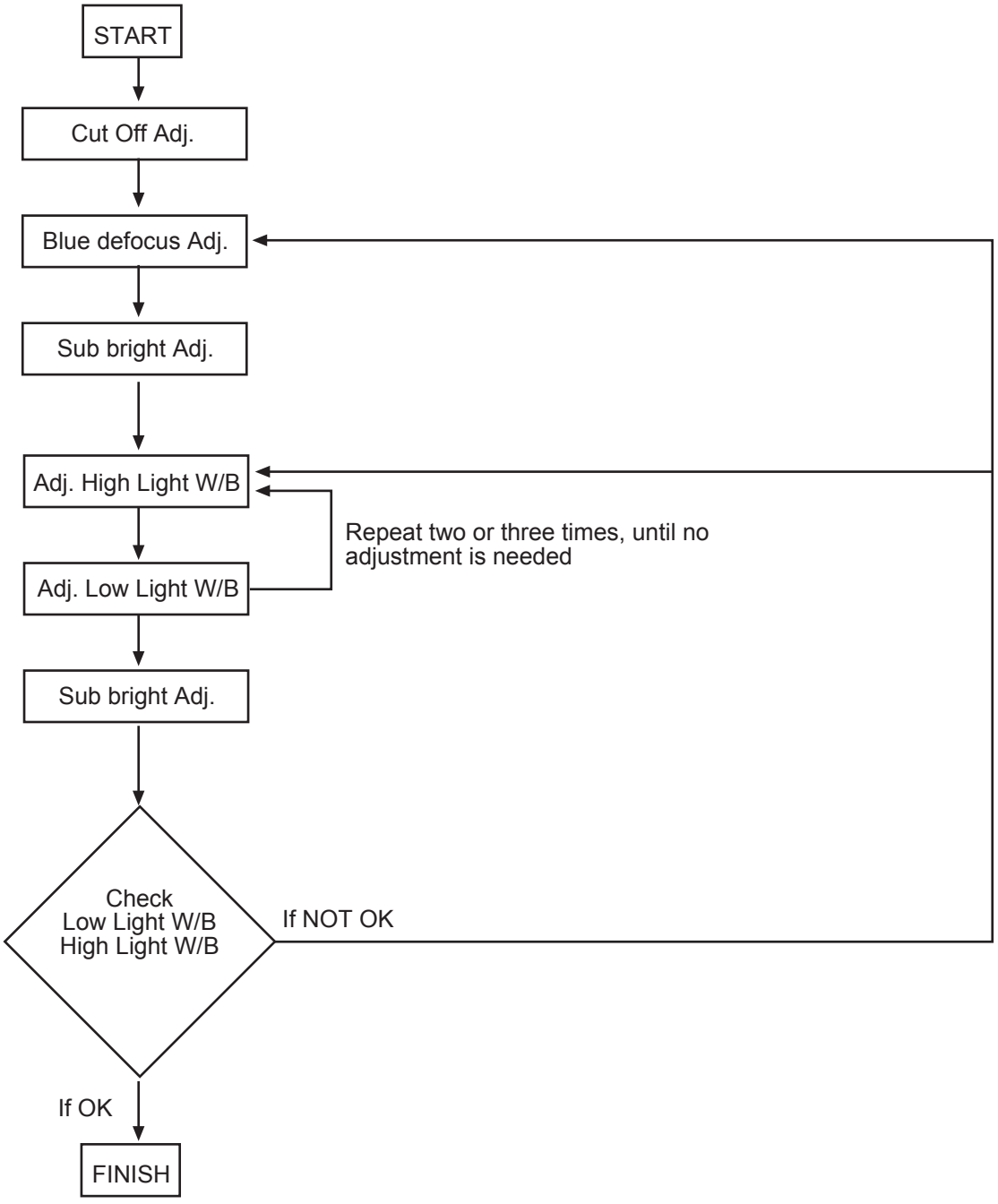
Adjustment procedure

(1) Select the input signal for high brightness (Video level = 0.715Vpp).
(2) Adjust the high brightness white balance by changing I^2C menu (R and B DRV HIGH mode only).
(3) Select the signal for low brightness (Video level = 0.105Vpp; 0.123 Vpp; 0.140Vpp)
(4) Adjust the low brightness white balance.
(5) Check that high brightness white balance is still obtained. If it is not, return to step (2).

White balance =	10800° K -7 MPCD
Color coordinate =	x …… 0.278±0.004
	y …… 0.280±0.004
Normal:	7200˚K
Warm:	6500˚K

BACK TO ADJUSTMENTS

WHITE BALANCE ADJUSTMENT FLOW CHART



BACK TO ADJUSTMENTS

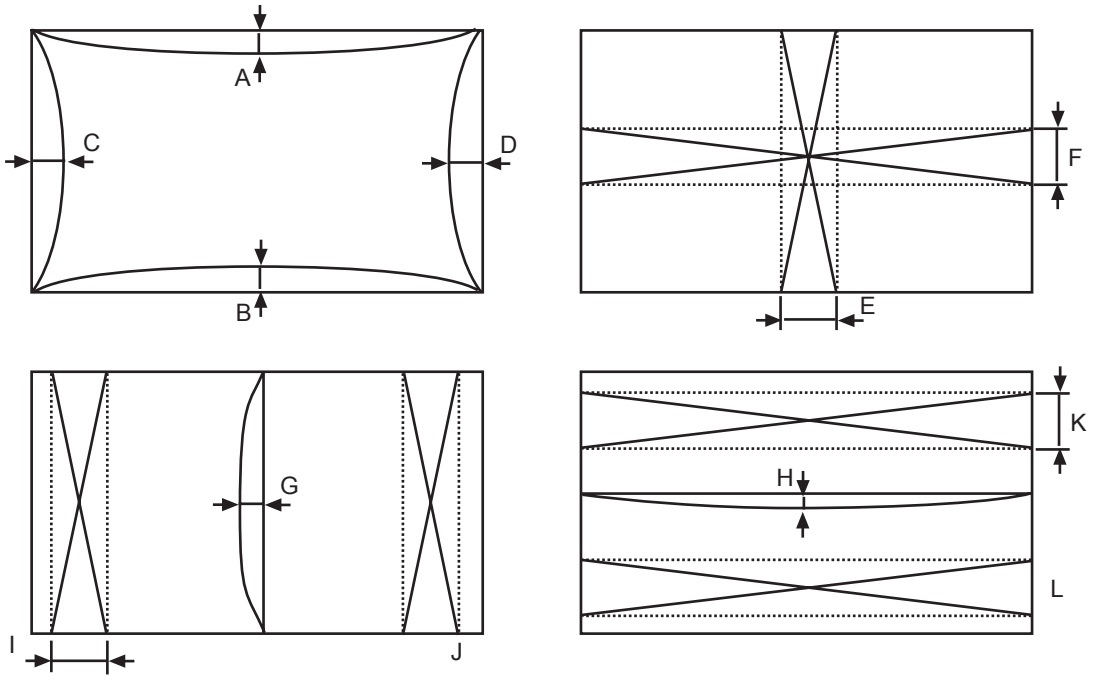
2.10 Raster distortion check

Checking condition

(1) Digital convergence adjustment should have been completed.
(2) Receive the cross-hatch signal (internal signal of the set is acceptable).
(3) Brightness/Contrast --- standard condition
Contrast : max
Other controls : center position
(4) Check the raster distortion specification: Value shown in the table below or less.
A ~ D
I ~ L ---Measure the winding of the outside line.

(unit: mm)

Item		Symbol	43”	51”	57”
Top/Bottom pincushion distortion		A,B	±5	±6	±6
Right/Left pincushion distortion		C,D	±4	±4	±4
Center line tilt	Vertical line	E	5	6	6
	Horizontal line	F	5	6	6
Center line winding	Vertical line	G	±3	±3	±4
	Horizontal line	H	±3	±3	±4
Trapezoidal distortion	Vertical line	I,J	4	5	5
Skew distortion	Horizontal line	K,L	5	6	6

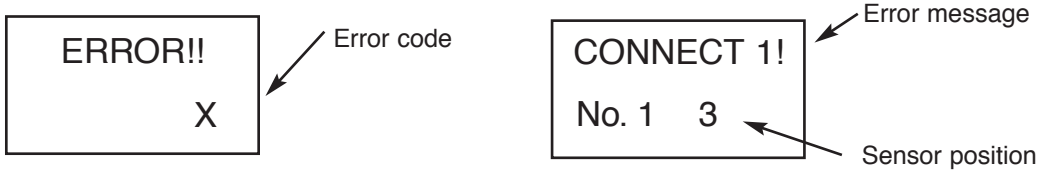


BACK TO ADJUSTMENTS

5. Convergence Errors.

If an error message or code appears while performing MAGIC FOCUS or initialize (PIP MODE, PIP CH in DCU service mode) follow this confirmation and repair method.

1. Turn on power and receive any signal.
2. Press service switch on DEF./CONV. board.
3. Press “SWAP” then “PIP CH” on remote control.
4. Error code will be displayed in bottom right corner of screen. If there is no error, an “INITIAL OK” message will appear on screen.



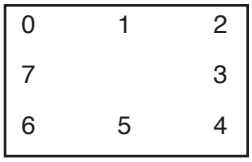
5. Follow repair table for errors.

DCU REPAIR TABLE

Error Code	Error Display Code	Countermeasure	Application	
			Initialize	Magic Focus
1	VF Error	Replace DCU	X	X
2 *2	Connect 1	1. Darken Outside Light 2. Placing of sensor 3. Is pattern hitting sensor 4. Check connection and solder bridge of sensor 5. Replace sensor 6. Replace sensor P.W.B. 7. Sensor Connector check 8. Replace DCU 9. Adjustment check (H/V size, centering)	X	—
3*2	A/D Level	Same as Error Code 2	X	X
4	Over Flow	1. Check the placement of sensor 2. Adjustment check (H/V size, centering) 3. Conv. amp. gain check *1 (check resistor values only)	X	X
5	Convergence	Same as Error Code 4	X	X
7	Operation	Same as Error Code 4	—	X
9	Connect 2	Same as Error Code 2	X	X
10	Noise	Input strong field signal Check the wiring of connector between sensor and DCU	X	X
11	Sync	Input strong field signal Check the wiring of connetor between sensor and DCU	X	X

*1 -- RK 42, 46, 50, 54, 58, 62 check these resistors.

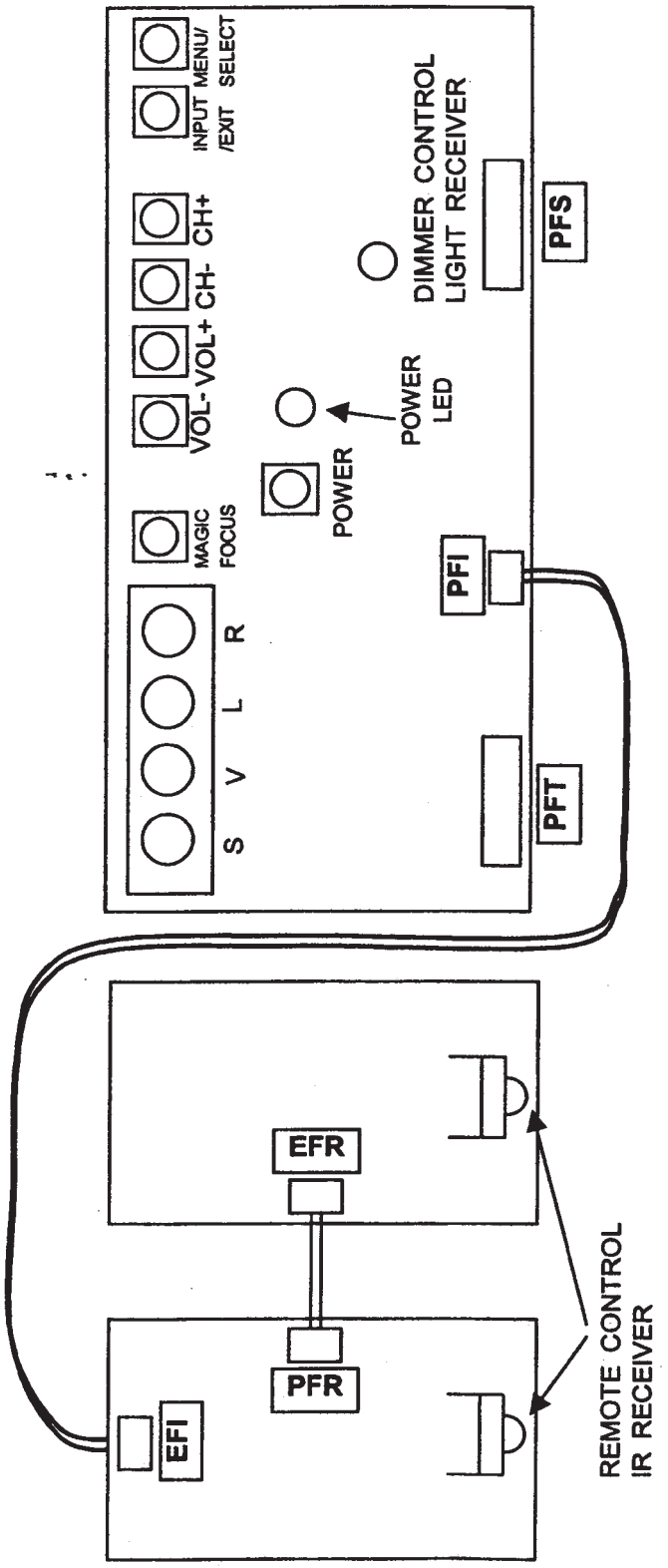
*2 Sensor Position



(View from front side)

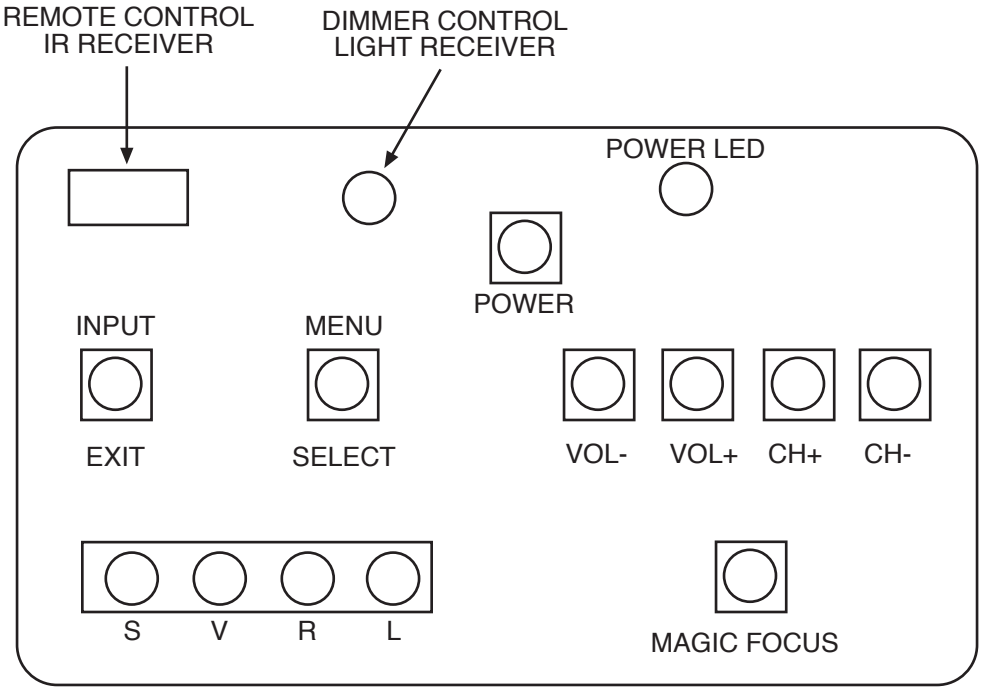
BACK TO ADJUSTMENTS

CONTROL P.W.B. DP23/DP23G



BACK TO ADJUSTMENTS

CONTROL P.W.B. DP24



BACK TO ADJUSTMENTS

DC VOLTAGE TABLES

Signal 1 of 3

Symbol	Pin No.	V(DC)	Pin No.	V(DC)	Pin No.	V(DC)	Pin No.	V(DC)
I001	1	0.2	26	0.0	51	3.6	76	2.8
	2	1.5	27	0.0	52	3.2	77	0.0
	3	0.4	28	5.0	53	3.2	78	3.2
	4	0.4	29	4.9	54	0.2	79	3.3
	5	0.0	30	4.9	55	2.9	80	0.0
	6	0.0	31	4.8	56	3.2	81	3.2
	7	1.6	32	0.1	57	0.0	82	3.2
	8	0.0	33	0.1	58	3.2	83	3.4
	9	0.0	34	0.1	59	1.5	84	0.0
	10	0.0	35	0.0	60	1.5	85	3.2
	11	0.0	36	0.0	61	3.2	86	3.2
	12	3.2	37	0.1	62	3.0	87	0.0
	13	1.6	38	0.0	63	0.0	88	0.0
	14	0.0	39	0.0	64	3.5	89	0.0
	15	1.6	40	0.0	65	0.0	90	0.0
	16	3.2	41	0.0	66	0.0	91	2.5
	17	0.0	42	0.0	67	0.0	92	1.9
	18	3.2	43	0.0	68	0.0	93	0.2
	19	0.0	44	3.2	69	0.0	94	3.7
	20	0.0	45	3.3	70	0.0	95	0.2
	21	0.0	46	0.1	71	0.0	96	1.5
	22	0.0	47	0.0	72	0.0	97	2.0
	23	3.0	48	0.0	73	3.2	98	0.0
	24	0.0	49	0.0	74	3.2	99	5.0
	25	0.0	50	0.0	75	3.2	100	2.0

Symbol	Pin No.	V(DC)
I002	1	0.0
	2	0.0
	3	0.0
	4	3.2
	5	0.0

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
I003	1	0.0	5	4.9
	2	0.0	6	4.9
	3	0.0	7	0.0
	4	0.0	8	5.0

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
I005	1	4.4	9	9.4
	2	5.9	10	9.4
	3	5.4	11	0.0
	4	5.4	12	5.4
	5	5.9	13	4.4
	6	0.0	14	5.4
	7	0.0	15	4.4
	8	0.0	16	9.4

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
I007	1	0.2	11	5.0
	2	4.8	12	0.0
	3	0.0	13	0.0
	4	0.2	14	4.5
	5	0.0	15	0.0
	6	0.0	16	5.0
	7	0.0	17	0.0
	8	3.2	18	4.9
	9	3.2	19	0.0
	10	0.0	20	5.0

DC VOLTAGE TABLES

Signal 1 of 3 (Cont.)

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
PFH1	1	0.0	6	0.4
	2	0.2	7	0.2
	3	0.0	8	0.0
	4	0.0	9	3.2
	5	3.2	10	0.0

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
PFH2	1	0.0	2	0.0

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
PRST	1	3.2	2	3.0

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
PJIG	1	5.1	5	5.0
	2	4.9	6	4.9
	3	4.8	7	3.2
	4	0.0	--	

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
PFS	1	9.4	6	3.3
	2	0.0	7	3.2
	3	5.0	8	3.3
	4	2.0	9	3.2
	5	0.0	--	

Q001	B	0.4
	C	1.5
	E	0.2
Q004	B	0.1
	C	3.1
	E	0.0
Q005	B	6.1
	C	0.6
	E	6.0
Q006	B	5.5
	C	0.0
	E	6.1
Q007	B	5.2
	C	9.4
	E	5.5
Q008	B	3.9
	C	0.0
	E	4.5
Q009	B	0.0
	C	3.3
	E	0.0
Q010	B	0.0
	C	9.4
	E	0.0
Q012	B	0.7
	C	0.0
	E	0.0
Q013	B	5.2
	C	9.4
	E	5.5
Q014	B	4.0
	C	0.0
	E	4.7
Q015	B	3.4
	C	5.1
	E	2.7

Q016	B	2.9
	C	0.0
	E	3.5
Q017	B	3.5
	C	5.7
	E	2.9
Q018	B	4.4
	C	9.4
	E	3.8
Q019	B	5.5
	C	9.4
	E	4.8
Q020	B	2.7
	C	0.0
	E	3.4
Q022	B	0.6
	C	0.1
	E	0.0
Q023	B	0.0
	C	3.5
	E	0.0
Q024	B	1.4
	C	0.0
	E	0.0
Q025	B	0.7
	C	0.0
	E	0.0
Q026	B	0.0
	C	4.7
	E	0.0
Q033	B	0.6
	C	1.6
	E	0.2

DC VOLTAGE TABLES

Signal 2 of 3

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
IP51	1	3.3	5	0.0
	2	2.6	6	0.0
	3	3.3	7	1.8
	4	2.3	8	1.8

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
U301	1	2.2	15	0.6
	2	5.2	16	2.7
	3	0.0	17	2.2
	4	4.9	18	2.2
	5	4.8	19	1.9
	6	0.0	20	0.0
	7	5.0	21	0.7
	8	0.0	22	0.1
	9	33.9	23	0.1
	10	0.0	24	0.0
	11	0.0	25	0.0
	12	0.0	26	4.2
	13	9.3	27	4.2
	14	0.6	--	

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
PFC1 (U303)	1	5.2	12	4.5
	2	0.0	13	5.0
	3	4.2	14	0.2
	4	4.0	15	4.0
	5	3.8	16	0.0
	6	0.0	17	4.8
	7	0.2	18	4.6
	8	4.0	19	4.5
	9	0.0	20	0.0
	10	4.9	21	3.3
	11	4.8	22	3.3

Q301	B	0.7
	C	0.0
	E	0.0
Q302	B	0.7
	C	0.0
	E	0.0
Q303	B	0.1
	C	3.4
	E	0.0
Q304	B	0.6
	C	0.0
	E	0.0
Q305	B	0.0
	C	0.0
	E	0.0

Symbol	Pin No.	V(DC)
IP52	1	1.9
	2	3.3
	3	0.0
	4	5.8
	5	2.5

Symbol	Pin No.	V(DC)
IP53	1	0.0
	2	5.1
	3	5.7

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
U302	1	2.2	15	0.0
	2	5.8	16	1.4
	3	5.0	17	2.2
	4	4.9	18	2.2
	5	4.9	19	1.9
	6	0.0	20	0.0
	7	5.0	21	0.0
	8	0.0	22	N/C
	9	33.7	23	N/C
	10	0.0	24	N/C
	11	0.0	25	N/C
	12	0.0	26	N/C
	13	9.3	27	N/C
	14	3.0	--	

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
PFC2 (U303)	1	1.8	12	0.6
	2	1.8	13	0.0
	3	0.0	14	0.0
	4	0.0	15	0.0
	5	1.0	16	1.6
	6	3.2	17	0.0
	7	3.1	18	1.8
	8	0.2	19	0.0
	9	0.0	20	1.8
	10	0.0	21	5.0
	11	0.2	22	5.0

DC VOLTAGE TABLES

Signal 3 of 3

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
I401	1	0.0	29	2.1
	2	5.3	30	4.9
	3	5.3	31	4.9
	4	5.1	32	0.0
	5	5.1	33	4.0
	6	0.0	34	4.0
	7	0.8	35	4.0
	8	5.1	36	0.5
	9	5.1	37	4.0
	10	5.1	38	4.0
	11	6.2	39	4.0
	12	7.7	40	9.1
	13	0.0	41	2.7
	14	2.1	42	2.8
	15	3.2	43	2.5
	16	3.0	44	0.0
	17	1.5	45	9.1
	18	0.2	46	5.0
	19	9.1	47	5.0
	20	0.0	48	5.1
	21	5.5	49	0.0
	22	2.8	50	0.0
	23	2.5	51	0.0
	24	1.0	52	0.0
	25	0.0	53	5.8
	26	0.9	54	4.4
	27	5.0	55	9.1
	28	0.5	56	5.5

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
IA03	1	1.5	7	16.2
	2	0.0	8	5.1
	3	0.0	9	34.7
	4	2.8	10	0.0
	5	1.5	11	4.4
	6	11.7	12	45.9

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
PSC	1	5.1	7	3.5
	2	3.5	8	0.0
	3	2.5	9	3.5
	4	0.0	10	0.0
	5	3.2	11	0.0
	6	0.0	12	9.3

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
I402	1	1.2	9	0.5
	2	1.0	10	0.5
	3	1.2	11	0.5
	4	1.0	12	3.0
	5	1.0	13	4.0
	6	0.0	14	0.0
	7	0.0	15	0.8
	8	0.0	16	9.1

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
IA01	1	4.7	16	9.3
	2	4.7	17	0.0
	3	4.7	18	4.9
	4	4.7	19	3.7
	5	4.7	20	4.0
	6	4.7	21	0.0
	7	4.7	22	4.7
	8	4.7	23	4.7
	9	1.0	24	4.7
	10	4.7	25	0.0
	11	1.8	26	0.0
	12	1.8	27	0.0
	13	4.8	28	4.7
	14	4.9	29	4.7
	15	0.0	30	4.7

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
IA02	1	0.0	13	0.0
	2	4.7	14	0.0
	3	4.7	15	4.7
	4	4.7	16	4.7
	5	4.7	17	4.7
	6	4.7	18	4.7
	7	4.7	19	0.0
	8	4.7	20	4.7
	9	4.7	21	4.7
	10	9.3	22	4.7
	11	0.0	23	4.7
	12	4.6	24	4.7

DC VOLTAGE TABLES

Signal 3 of 3 (Cont.)

Q401	B	1.8
	C	0.0
	E	2.4
Q402	B	1.8
	C	0.0
	E	2.4
Q403	B	1.6
	C	0.0
	E	2.3
Q404	B	6.8
	C	9.1
	E	6.1
Q405	B	6.8
	C	9.1
	E	6.2
Q406	B	6.9
	C	9.1
	E	6.3
Q407	B	0.2
	C	9.2
	E	0.4
Q408	B	9.1
	C	0.9
	E	9.2
Q409	B	0.9
	C	9.2
	E	0.9
Q410	B	0.9
	C	0.0
	E	1.5
Q411	B	0.2
	C	9.2
	E	1.1
Q412	B	1.1
	C	9.2
	E	0.5
Q413	B	7.3
	C	0.0
	E	6.7
Q414	B	0.0
	C	9.1
	E	0.0
Q415	B	0.0
	C	9.1
	E	0.0
Q417	B	0.1
	C	0.0
	E	0.8
Q418	B	0.1
	C	0.0
	E	0.7
Q419	B	0.1
	C	0.0
	E	0.8

Q420	B	0.0
	C	0.0
	E	0.6
Q421	B	0.0
	C	0.0
	E	0.7
Q422	B	0.0
	C	0.0
	E	0.7
Q426	B	8.4
	C	4.5
	E	9.1
Q428	B	2.6
	C	0.0
	E	6.2
Q429	B	7.4
	C	3.2
	E	8.0
Q431	B	4.5
	C	0.0
	E	5.2
Q433	B	2.8
	C	0.0
	E	3.5
Q434	B	7.4
	C	3.5
	E	8.0
Q438	B	2.8
	C	0.0
	E	3.5
Q439	B	7.4
	C	3.5
	E	8.0
Q440	B	-0.3
	C	9.3
	E	0.0
Q441	B	9.1
	C	0.2
	E	9.2
Q442	B	0.1
	C	9.0
	E	0.0
Q443	B	8.6
	C	0.0
	E	8.5
Q444	B	1.2
	C	9.2
	E	8.6
Q445	B	2.7
	C	0.1
	E	2.7
Q446	B	2.0
	C	3.7
	E	1.4

Q447	B	3.9
	C	9.1
	E	3.7
Q448	B	4.3
	C	7.7
	E	3.7
Q450	B	1.6
	C	8.4
	E	1.0
QA03	B	2.2
	C	8.6
	E	1.6
QA04	B	2.2
	C	8.6
	E	1.6
QA05	B	8.6
	C	5.7
	E	9.3
QA06	B	8.6
	C	0.0
	E	9.1
QA07	B	0.0
	C	0.0
	E	0.0
QA08	B	0.0
	C	0.0
	E	0.0
QA09	B	0.1
	C	0.0
	E	0.0
QA10	B	0.1
	C	0.0
	E	0.0
QA11	B	0.0
	C	4.4
	E	0.0
QA12	B	0.0
	C	14.8
	E	0.0

DC VOLTAGE TABLES

Terminal

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
IV01	1	0.0	9	5.0
	2	2.2	10	3.6
	3	2.8	11	1.8
	4	2.4	12	3.8
	5	1.3	13	3.4
	6	0.0	14	2.2
	7	0.0	15	2.3
	8	-5.0	16	0.0

Symbol	Pin No.	V(DC)	Pin No.	V(DC)	Pin No.	V(DC)	Pin No.	V(DC)
IW01	1	0.0	26	0.0	51	0.0	76	3.0
	2	0.0	27	0.0	52	2.4	77	0.0
	3	0.0	28	0.0	53	2.4	78	0.0
	4	0.0	29	0.0	54	0.0	79	0.0
	5	0.0	30	0.0	55	0.0	80	0.0
	6	0.0	31	2.4	56	0.0	81	0.0
	7	0.0	32	2.4	57	3.3	82	1.1
	8	0.0	33	0.0	58	0.0	83	1.5
	9	0.0	34	0.0	59	4.9	84	1.4
	10	0.0	35	0.0	60	4.8	85	1.1
	11	3.3	36	0.0	61	0.1	86	0.0
	12	3.3	37	0.0	62	0.1	87	0.0
	13	0.0	38	3.3	63	0.0	88	-1.0
	14	0.0	39	0.0	64	2.4	89	1.6
	15	0.0	40	0.0	65	0.0	90	0.8
	16	0.0	41	0.0	66	0.0	91	1.3
	17	0.0	42	0.0	67	0.0	92	2.4
	18	0.0	43	0.0	68	0.0	93	2.4
	19	0.0	44	0.0	69	0.0	94	0.0
	20	0.0	45	2.4	70	0.0	95	0.0
	21	0.0	46	2.4	71	0.0	96	1.1
	22	0.0	47	1.1	72	0.0	97	0.0
	23	0.0	48	1.2	73	0.0	98	0.0
	24	0.0	49	0.0	74	0.0	99	0.0
	25	0.0	50	1.5	75	0.0	100	-2.5

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
IZ01	1	9.2	16	2.5
	2	2.4	17	4.7
	3	4.3	18	0.0
	4	2.6	19	2.5
	5	0.0	20	0.0
	6	2.0	21	4.0
	7	0.0	22	3.8
	8	5.0	23	3.9
	9	6.5	24	4.1
	10	5.3	25	5.0
	11	0.0	26	3.0
	12	9.2	27	0.0
	13	4.8	28	2.3
	14	4.9	29	2.3
	15	0.2	30	2.0

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
IZ02	1	9.2	16	2.5
	2	2.5	17	4.7
	3	4.3	18	0.0
	4	2.5	19	2.5
	5	0.0	20	0.0
	6	2.0	21	4.1
	7	0.0	22	3.8
	8	5.1	23	3.9
	9	6.5	24	4.1
	10	5.3	25	0.0
	11	0.0	26	0.0
	12	0.0	27	0.0
	13	4.8	28	2.3
	14	4.9	29	2.3
	15	0.2	30	2.0

DC VOLTAGE TABLES

Terminal (Cont.)

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
IX01	1	4.1	33	5.0
	2	4.6	34	4.9
	3	4.1	35	0.0
	4	4.6	36	3.5
	5	4.6	37	4.6
	6	0.2	38	4.6
	7	0.1	39	3.9
	8	4.1	40	4.6
	9	4.6	41	4.7
	10	4.1	42	9.2
	11	4.6	43	4.6
	12	4.6	44	4.5
	13	0.2	45	4.6
	14	5.1	46	3.9
	15	4.1	47	4.6
	16	4.6	48	0.0
	17	4.1	49	5.2
	18	4.6	50	4.6
	19	4.6	51	4.6
	20	0.1	52	4.6
	21	5.1	53	4.8
	22	4.1	54	4.5
	23	4.6	55	3.9
	24	4.1	56	4.6
	25	4.6	57	0.0
	26	4.6	58	4.5
	27	0.1	59	4.6
	28	5.1	60	4.5
	29	4.6	61	4.6
	30	4.1	62	4.6
	31	4.6	63	4.6
	32	0.0	64	4.6

Symbol	Pin No.	V(DC)	Pin No.	V(DC)
IX02	1	1.3	33	0.0
	2	1.1	34	5.3
	3	1.3	35	0.0
	4	9.1	36	5.3
	5	9.1	37	0.0
	6	0.0	38	5.3
	7	5.0	39	9.1
	8	0.0	40	4.5
	9	5.0	41	0.0
	10	5.0	42	4.4
	11	1.3	43	0.0
	12	1.1	44	4.5
	13	1.8	45	9.1
	14	9.1	46	4.4
	15	5.3	47	0.0
	16	0.0	48	4.4
	17	5.0	49	0.0
	18	0.0	50	4.4
	19	5.0	51	9.1
	20	5.0	52	9.1
	21	1.2	53	5.3
	22	1.1	54	0.0
	23	1.2	55	5.0
	24	0.0	56	0.0
	25	0.0	57	5.0
	26	4.8	58	9.2
	27	4.9	59	5.3
	28	5.1	60	0.0
	29	0.0	61	5.0
	30	4.3	62	0.0
	31	4.4	63	5.0
	32	5.0	64	5.1

QV01	B	4.2
	C	9.3
	E	3.4
QV02	B	3.8
	C	8.6
	E	3.1
QV03	B	8.6
	C	7.7
	E	9.3
QV04	B	7.7
	C	9.3
	E	7.1
QV05	B	3.9
	C	9.3
	E	3.3

QV06	B	2.9
	C	8.6
	E	2.3
QV07	B	8.7
	C	6.0
	E	9.3
QV08	B	6.0
	C	9.3
	E	5.3
QV09	B	7.0
	C	9.4
	E	6.4
QV10	B	2.5
	C	0.0
	E	3.1

DC VOLTAGE TABLES

Terminal (Cont.)

QW01	B	4.9
	C	9.3
	E	4.2
QW02	B	1.8
	C	0.0
	E	2.4
QW03	B	2.3
	C	9.3
	E	2.3
QW04	B	2.3
	C	0.0
	E	3.0
QW05	B	2.3
	C	0.0
	E	3.0
QW06	B	2.3
	C	3.2
	E	2.1
QW07	B	3.2
	C	0.1
	E	3.3
QW08	B	0.1
	C	3.0
	E	0.0
QW09	B	1.4
	C	0.0
	E	2.1
QW10	B	1.9
	C	8.7
	E	1.3
QW11	G	8.7
	C	2.9
	E	9.3
QW12	B	2.9
	C	9.3
	E	2.3
QW14	B	1.9
	C	8.7
	E	1.3
QW15	B	8.7
	C	6.6
	E	9.3
QW16	B	1.6
	C	0.0
	E	2.2

QX03	B	4.6
	C	9.2
	E	4.0
QX04	B	3.9
	C	9.2
	E	3.3
QX05	B	4.6
	C	9.2
	E	3.9
QX09	B	2.6
	C	0.0
	E	3.2
QX10	B	1.1
	C	5.1
	E	0.6
QX11	B	0.6
	C	2.9
	E	0.0
QX12	B	4.5
	C	9.2
	E	3.9
QX13	B	4.5
	C	9.2
	E	3.9
QX23	B	1.8
	C	0.0
	E	2.5
QX24	B	1.8
	C	0.0
	E	2.5
QX25	B	1.9
	C	0.0
	E	2.5

QZ01	B	4.1
	C	0.0
	E	4.8
QZ02	B	3.9
	C	0.0
	E	4.6
QZ03	B	3.8
	C	0.0
	E	4.5
QZ04	B	6.6
	C	9.2
	E	5.9
QZ05	B	4.0
	C	9.2
	E	3.4
QZ06	B	0.1
	C	9.2
	E	0.1
QZ07	B	0.7
	C	0.0
	E	0.0
QZ08	B	3.8
	C	0.0
	E	4.4
QZ09	B	3.9
	C	0.0
	E	4.6
QZ10	B	4.1
	C	0.0
	E	4.7
QZ14	G	4.7
	C	5.0
	E	4.0
QZ15	B	0.2
	C	5.0
	E	0.2
QZ18	B	0.2
	C	5.0
	E	0.2

DC VOLTAGE TABLES

Power Supply

Symbol	Pin No.	V(DC)
I901	1	143.6
	2	0.1
	3	19.5
	4	0.1
	5	0.0
	6	3.1
	7	1.3

Symbol	Pin No.	V(DC)
I902	1	4.0
	2	2.1
	3	167.5
	4	17.6
	5	2.0

Symbol	Pin No.	V(DC)
I903	1	7.5
	2	9.6
	3	1.9
	4	5.1

Symbol	Pin No.	V(DC)
I904	1	0.0
	2	5.0
	3	0.1
	4	2.7

Symbol	Pin No.	V(DC)
I905	1	5.7
	2	4.9
	3	0.1
	4	19.5

Symbol	Pin No.	V(DC)
I906	1	12.0
	2	10.9
	3	5.3
	4	17.4

Symbol	Pin No.	V(DC)
I907	1	116.2
	2	10.9
	3	0.0

Symbol	Pin No.	V(DC)
I908	1	7.7
	2	6.4
	3	0.0
	4	2.1

Symbol	Pin No.	V(DC)
I909	1	0.0
	2	5.1
	3	6.0

Symbol	Pin No.	V(DC)
I910	1	0.0
	2	4.7
	3	9.4
	4	9.0
	5	10.4

Symbol	Pin No.	V(DC)
I911	1	0.0
	2	4.7
	3	9.6
	4	9.2
	5	10.4

Q901	B	19.5
	C	0.1
	E	19.5
Q902	B	0.1
	C	19.5
	E	0.1
Q903	B	0.0
	C	4.7
	E	0.0
Q904	B	4.7
	C	0.0
	E	4.7
Q905	B	116.1
	C	0.2
	E	116.5
Q906	B	6.1
	C	0.0
	E	6.1
Q907	B	0.7
	C	0.0
	E	0.0
Q908	B	4.6
	C	5.1
	E	3.9
Q910	B	0.0
	C	4.9
	E	0.0
Q911	B	4.6
	C	0.0
	E	0.0
Q912	B	5.2
	C	5.1
	E	4.7

DC VOLTAGE TABLES

Deflection

Symbol	Pin No.	V(DC)
I601	1	15.4
	2	27.1
	3	4.9
	4	6.7
	5	4.5
	6	0.0
	7	3.0
	8	3.9
	9	4.5
	10	27.5
	11	0.8

Symbol	Pin No.	V(DC)
I701	1	1.8
	2	0.9
	3	1.1
	4	0.0
	5	1.0
	6	1.0
	7	0.9
	8	1.8

Symbol	Pin No.	V(DC)
IH01	1	1.3
	2	2.2
	3	0.1
	4	0.5
	5	0.3
	6	0.0
	7	0.0
	8	0.0
	9	1.0
	10	1.0
	11	1.0
	12	1.0
	13	0.6
	14	0.4
	15	1.0
	16	0.0

Q603	B	0.0
	C	0.1
	E	0.0
Q604	B	5.2
	C	0.3
	E	5.2
Q701	B	92.4
	C	116.1
	E	91.5
Q703	B	0.6
	C	17.2
	E	0.4
Q706	B	0.6
	C	9.6
	E	1.2
Q709	B	0.4
	C	12.7
	E	0.0
Q710	B	-0.1
	C	0.0
	E	0.2
Q777	B	0.0
	C	89.4
	E	0.0
QF01	B	1.7
	C	110.7
	E	1.6
QH01	S	0.3
	D	246.1
	G	1.6
QH02	B	0.1
	C	0.3
	E	0.0
QH03	B	0.1
	C	14.7
	E	0.0

QN01	B	0.0
	C	0.0
	E	0.0
QN02	B	**9.0**
	C	0.0
	E	**9.0**
QN03	B	0.1
	C	**9.0**
	E	0.0
QN04	B	0.2
	C	**9.0**
	E	0.1
QN05	B	0.0
	C	1.7
	E	0.0
QN06	B	0.0
	C	0.0
	E	0.0

CH 4

DC VOLTAGE TABLES

Convergence

Symbol	Pin No.	V(DC)
IK01	1	7.6
	2	0.0
	3	5.0

Symbol	Pin No.	V(DC)
IK02	1	4.7
	2	0.0
	3	5.0

Symbol	Pin No.	V(DC)
IK04	1	0.0
	2	0.0
	3	-30.4
	4	-31.6
	5	31.8
	6	0.2
	7	0.2
	8	27.9
	9	0.3
	10	-27.8
	11	-0.1
	12	-27.9
	13	-0.1
	14	-0.1
	15	0.1
	16	-0.1
	17	-27.9
	18	0.1

Symbol	Pin No.	V(DC)
IK05	1	0.0
	2	0.0
	3	-26.7
	4	-28.0
	5	27.7
	6	0.3
	7	0.3
	8	-28.0
	9	0.3
	10	27.7
	11	0.2
	12	-28.0
	13	0.2
	14	0.1
	15	0.0
	16	0.0
	17	-28.0
	18	0.0

Symbol	Pin No.	V(DC)
PBS	1	5.1
	2	0.2
	3	0.2
	4	0.3
	5	0.2
	6	0.5
	7	0.9
	8	0.0
	9	0.2
	10	0.0
	11	2.5
	12	0.0
	13	0.0
	14	0.0
	15	0.0
	16	0.0
	17	0.3
	18	0.0
	19	0.0
	20	0.4
	21	5.0
	22	0.0

Symbol	Pin No.	V(DC)
PDG	1	0.0
	2	5.2
	3	0.0
	4	5.0
	5	0.4
	6	0.0
	7	5.0
	8	5.0
	9	0.0
	10	0.0
	11	0.0
	12	0.0
	13	5.1
	14	0.6
	15	0.0
	16	0.2
	17	0.0
	18	5.0
	19	0.0
	20	0.0
	21	0.0
	22	0.0

QK01	B	-6.9
	C	-5.2
	E	-7.5
QK02	B	0.0
	C	0.0
	E	0.6
QK03	B	0.0
	C	-6.3
	E	0.6
QK06	B	0.0
	C	5.0
	E	0.0
QK07	B	0.0
	C	5.0
	E	0.0
QK08	B	0.0
	C	5.0
	E	0.0

DC VOLTAGE TABLES

Sensor

Symbol	Pin No.	V(DC)
PDS1	1	5.0
	2	0.0
	3	0.0
	4	0.2
	5	0.3
	6	0.3
	7	0.3
	8	0.6
	9	0.9
	10	1.2
	11	0.2
	12	0.2

Symbol	Pin No.	V(DC)
PS1	1	0.0
	2	5.0
	3	3.7
	4	0.0
	5	5.0
	6	5.1
	7	0.0
	8	5.0
	9	5.0

Symbol	Pin No.	V(DC)
PS2	1	0.0
	2	5.0
	3	5.1
	4	0.0
	5	5.0
	6	5.0
	7	0.0
	8	5.0
	9	5.1
	10	0.0

Symbol	Pin No.	V(DC)
PS3	1	0.0
	2	5.0
	3	4.8
	4	0.0
	5	5.0
	6	5.0

QL10	B	4.7
	C	0.2
	E	3.6
QL11	B	4.7
	C	1.2
	E	5.1
QL12	B	4.7
	C	0.9
	E	5.0
QL13	B	4.7
	C	0.6
	E	5.0
QL14	B	4.7
	C	0.3
	E	5.0
QL15	B	4.7
	C	0.3
	E	5.1
QL16	B	4.7
	C	0.3
	E	4.9
QL17	B	4.7
	C	0.2
	E	5.0

DC VOLTAGE TABLES

CPT/VM

Q801	B	3.2
	C	8.5
	E	2.7
Q802	B	8.6
	C	9.2
	E	0.0
Q803	B	9.1
	C	180.7
	E	8.6
Q804	B	180.6
	C	1.0
	E	181.9
Q805	B	182.0
	C	221.9
	E	181.8
Q812	B	1.6
	C	1.0
	E	0.9
Q851	B	3.4
	C	8.4
	E	2.9
Q852	B	8.6
	C	9.2
	E	8.4
Q853	B	9.1
	C	0.1
	E	8.6
Q854	B	166.8
	C	1.1
	E	167.6
Q855	B	164.7
	C	221.8
	E	164.9
Q862	B	1.8
	C	1.1
	E	1.1
Q8A1	B	3.4
	C	2.9
	E	8.4
Q8A2	B	8.6
	C	0.0
	E	8.4
Q8A3	B	9.1
	C	166.6
	E	8.6
Q8A4	B	165.8
	C	1.1
	E	164.4
Q8A5	B	171.2
	C	221.8
	E	166.0
Q8A6	B	3.1
	C	0.0
	E	2.9

Q8A7	B	3.8
	C	9.2
	E	3.1
Q8C1	B	0.0
	C	9.8
	E	0.0
Q8C2	B	1.7
	C	1.1
	E	1.0
QE01	B	5.1
	C	9.2
	E	4.5
QE02	B	4.5
	C	9.2
	E	3.8
QE03	B	3.1
	C	0.0
	E	3.7
QE06	B	196.0
	C	0.1
	E	196.5
QE07	B	3.7
	C	100.2
	E	3.2
QE08	B	221.5
	C	0.0
	E	221.9
QE09	B	0.0
	C	2.5
	E	0.0
QE51	G	5.1
	C	9.2
	E	4.5
QE52	B	4.5
	C	9.2
	E	3.8
QE53	B	3.0
	C	0.0
	E	3.7
QE56	B	195.9
	C	99.5
	E	196.2
QE57	B	3.7
	C	99.6
	E	3.2

QEA1	B	5.1
	C	9.2
	E	4.5
QEA2	B	4.5
	C	9.2
	E	3.8
QEA3	B	3.1
	C	0.0
	E	3.7
QEA6	B	195.6
	C	100.1
	E	196.2
QEA7	B	3.7
	C	99.7
	E	0.0
QEA8	B	199.2
	C	3.5
	E	199.5

Symbol	Pin No.	V(DC)
EGB1	1	9.8
	2	3.5
	3	0.0
	4	3.2
	5	0.0
	6	9.2
	7	0.0
	8	2.5
	9	5.1

Symbol	Pin No.	V(DC)
ERG1	1	9.8
	2	3.2
	3	0.0
	4	9.2
	5	0.0
	6	2.5
	7	5.1

Symbol	Pin No.	V(DC)
ERG2	1	221.9
	2	199.7
	3	0.1
	4	0.0
	5	6.2

DC VOLTAGE TABLES

CPT/VM (Cont.)

Symbol	Pin No.	V(DC)
P801	1	0.0
	2	0.0
	3	0.0

Symbol	Pin No.	V(DC)
P8A1	1	0.0
	2	0.0
	3	0.0

Symbol	Pin No.	V(DC)
EGR1	1	9.8
	2	3.2
	3	0.0
	4	9.2
	5	0.0
	6	2.5
	7	5.1

Symbol	Pin No.	V(DC)
PDC1	1	221.9
	2	0.1
	3	0.0
	4	0.0
	5	6.2

Symbol	Pin No.	V(DC)
PSC	1	5.1
	2	3.5
	3	2.5
	4	0.0
	5	3.1
	6	0.0
	7	3.4
	8	0.0
	9	3.3
	10	0.0
	11	0.0
	12	9.2

Symbol	Pin No.	V(DC)
PVMB	1	99.8
	2	99.7
	3	0.0
	4	0.0

Symbol	Pin No.	V(DC)
PVMG	1	100.1
	2	99.9
	3	0.0
	4	0.0

Symbol	Pin No.	V(DC)
PVMR	1	99.9
	2	99.8
	3	0.0
	4	0.0

DC VOLTAGE TABLES

Control

Symbol	Pin No.	V(DC)
PFI	1	0.0
	2	5.0
	3	0.0

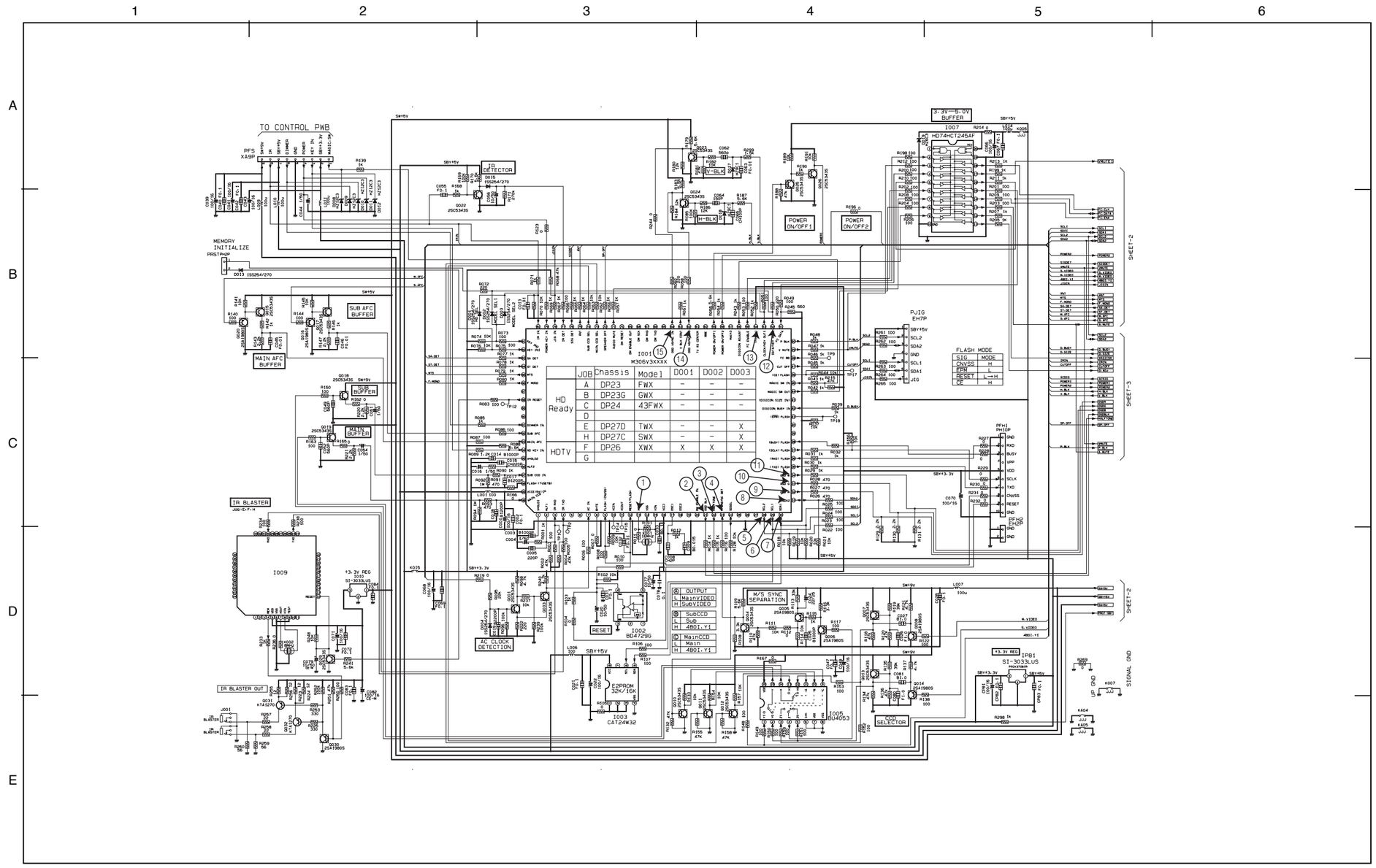
Symbol	Pin No.	V(DC)
PFS	1	3.2
	2	3.3
	3	3.2
	4	3.3
	5	0.0
	6	1.4
	7	5.0
	8	0.0
	9	9.4

Symbol	Pin No.	V(DC)
PFT	1	9.3
	2	0.0
	3	0.0
	4	2.0
	5	2.1
	6	0.0
	7	0.0
	8	0.0
	9	0.0
	10	0.0
	11	5.0

QM01	B	0.7
	C	0.1
	E	0.0
QM02	1	9.4
	2	2.2
	--	
QM03	B	1.8
	C	0.6
	E	2.3
QM04	B	2.9
	C	9.2
	E	2.2
QM05	B	0.1
	C	5.0
	E	0.0

PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

BASIC CIRCUIT DIAGRAM



	JOB	Chassis	Model	D001	D002	D003
HD Ready	A	DP23	FWX	–	–	–
	B	DP23G	GWX	–	–	–
	C	DP24	43FWX	–	–	–
	D					
	E	DP27D	TWX	–	–	X
	H	DP27C	SWX	–	–	X
HDTV	F	DP26	XWX	X	X	X
	G					

	OUTPUT
L	MainVIDEO
H	SubVIDEO

	SubCCD
L	Sub
H	480I.YI

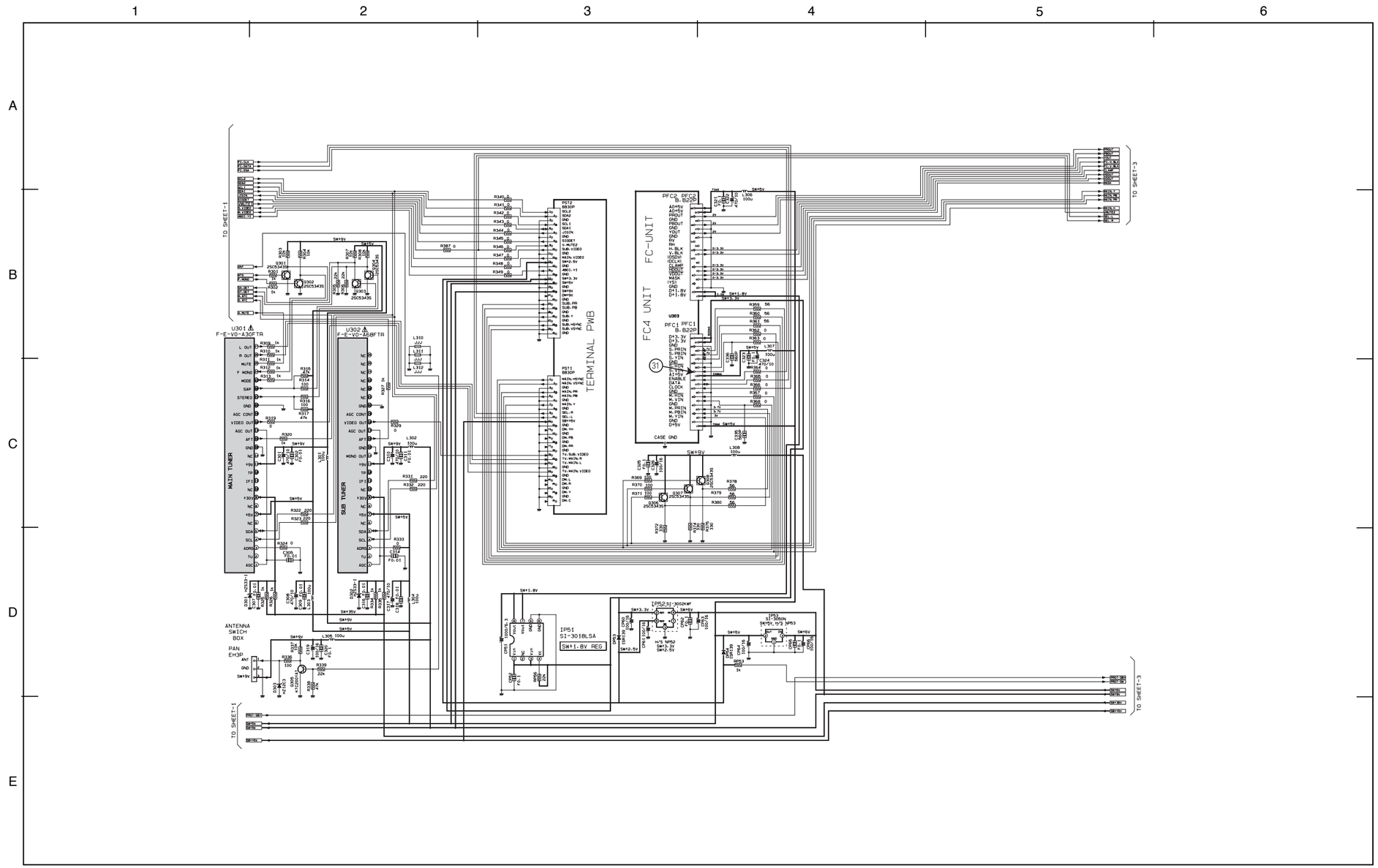
	MainCCD
L	Main
H	480I.YI

- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

SIGNAL 1 of 3

PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

BASIC CIRCUIT DIAGRAM

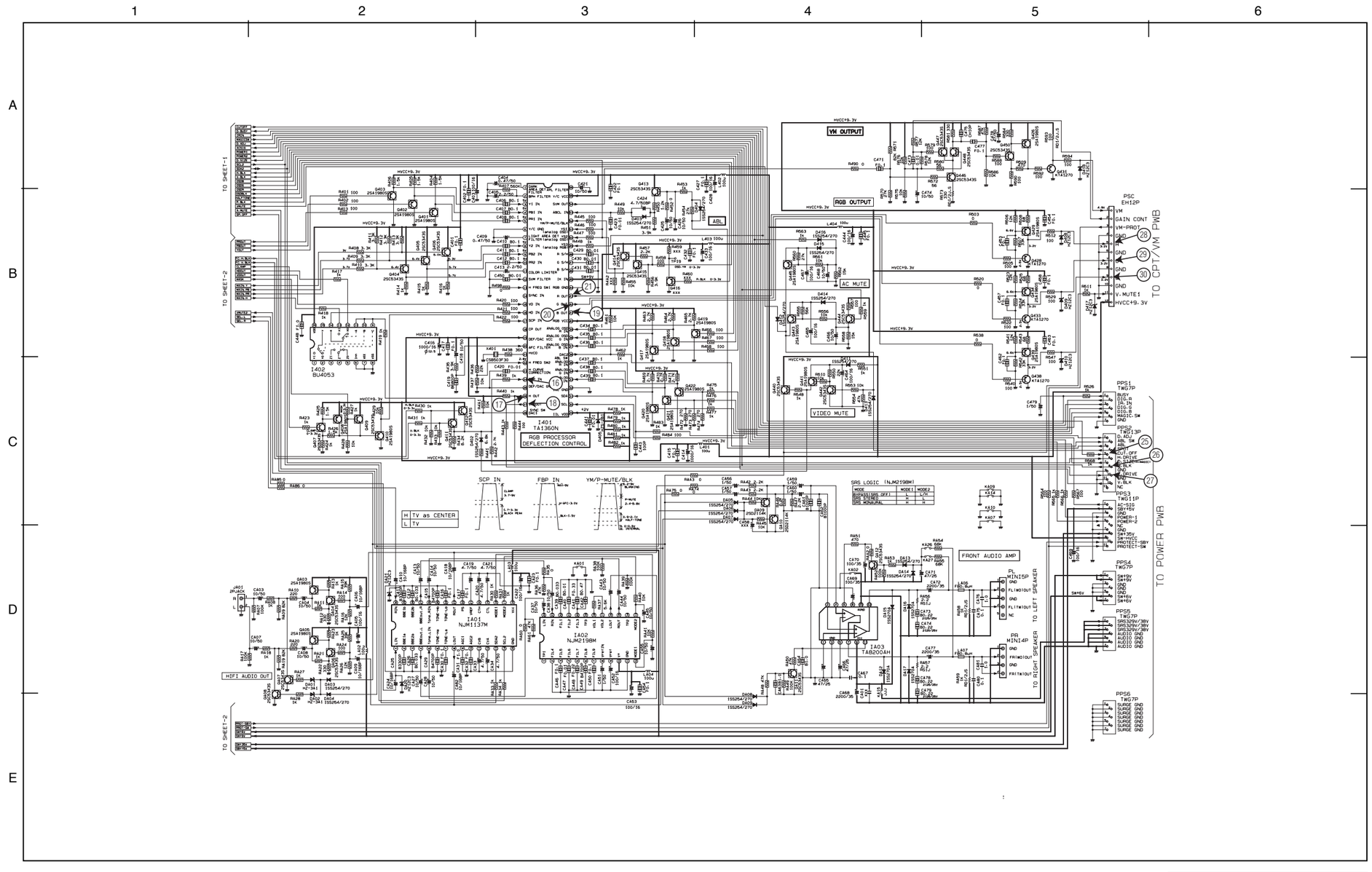


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

SIGNAL 2 of 3

PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

BASIC CIRCUIT DIAGRAM

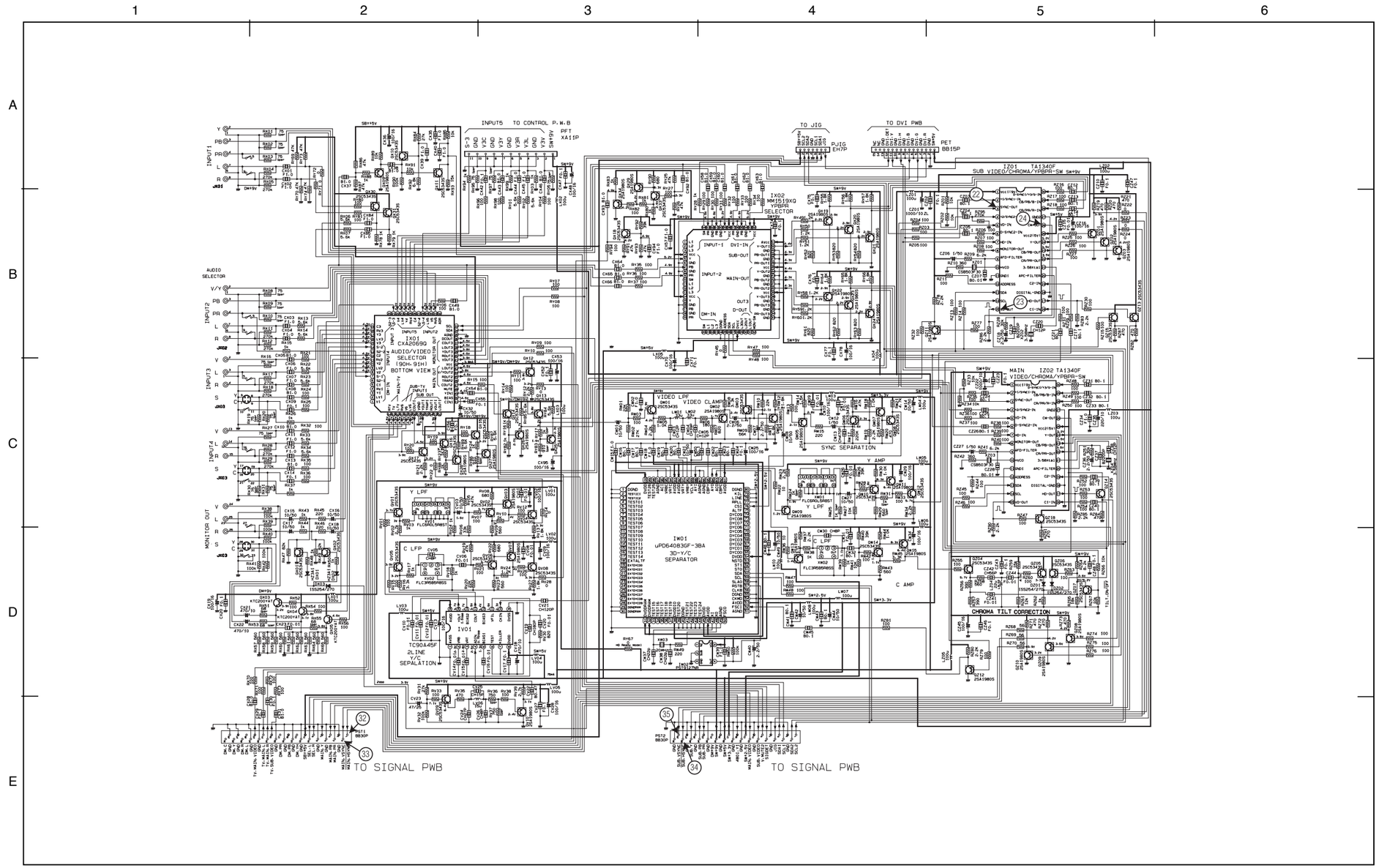


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

SIGNAL 3 of 3

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BASIC CIRCUIT DIAGRAM

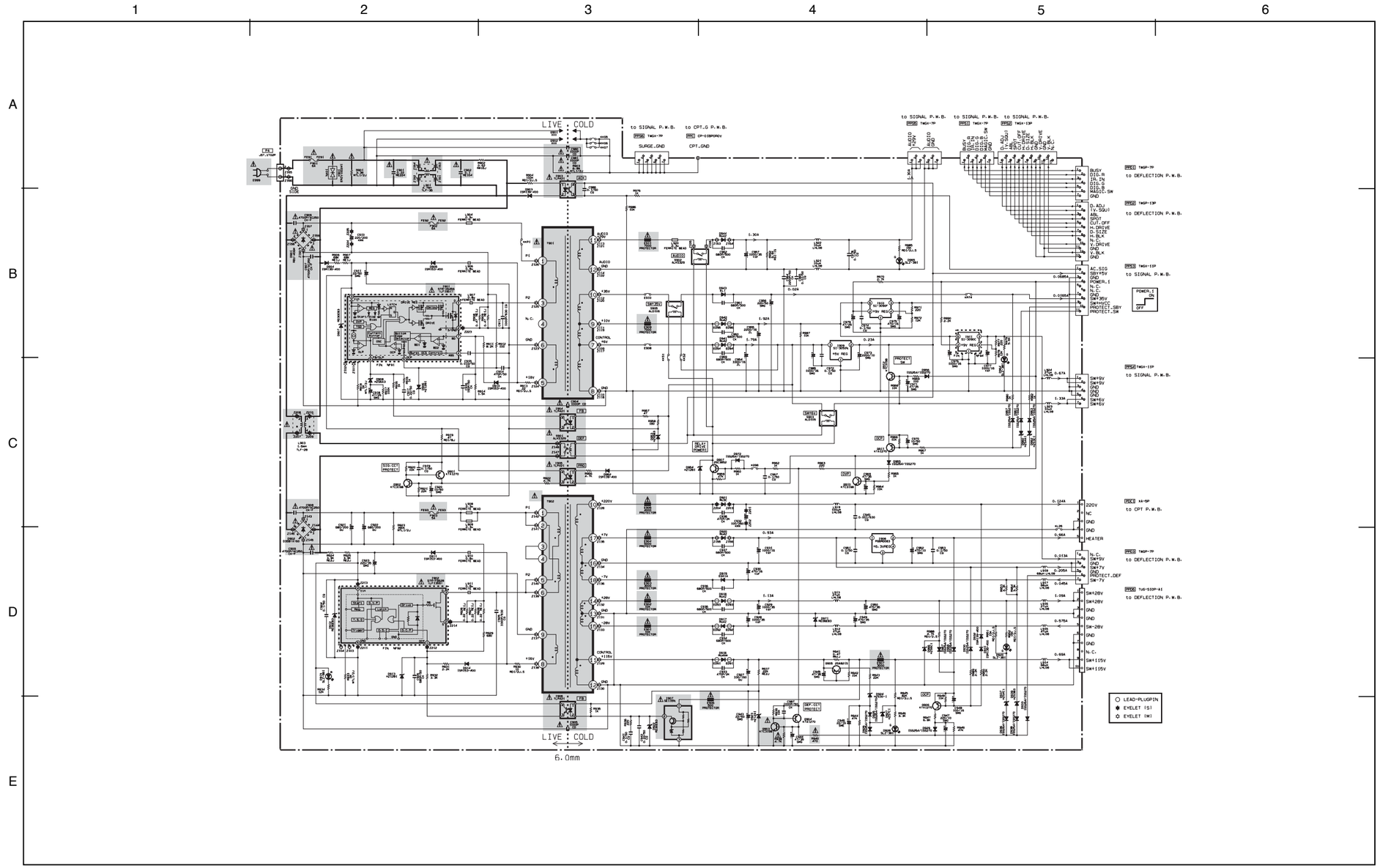


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

TERMINAL

PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

BASIC CIRCUIT DIAGRAM

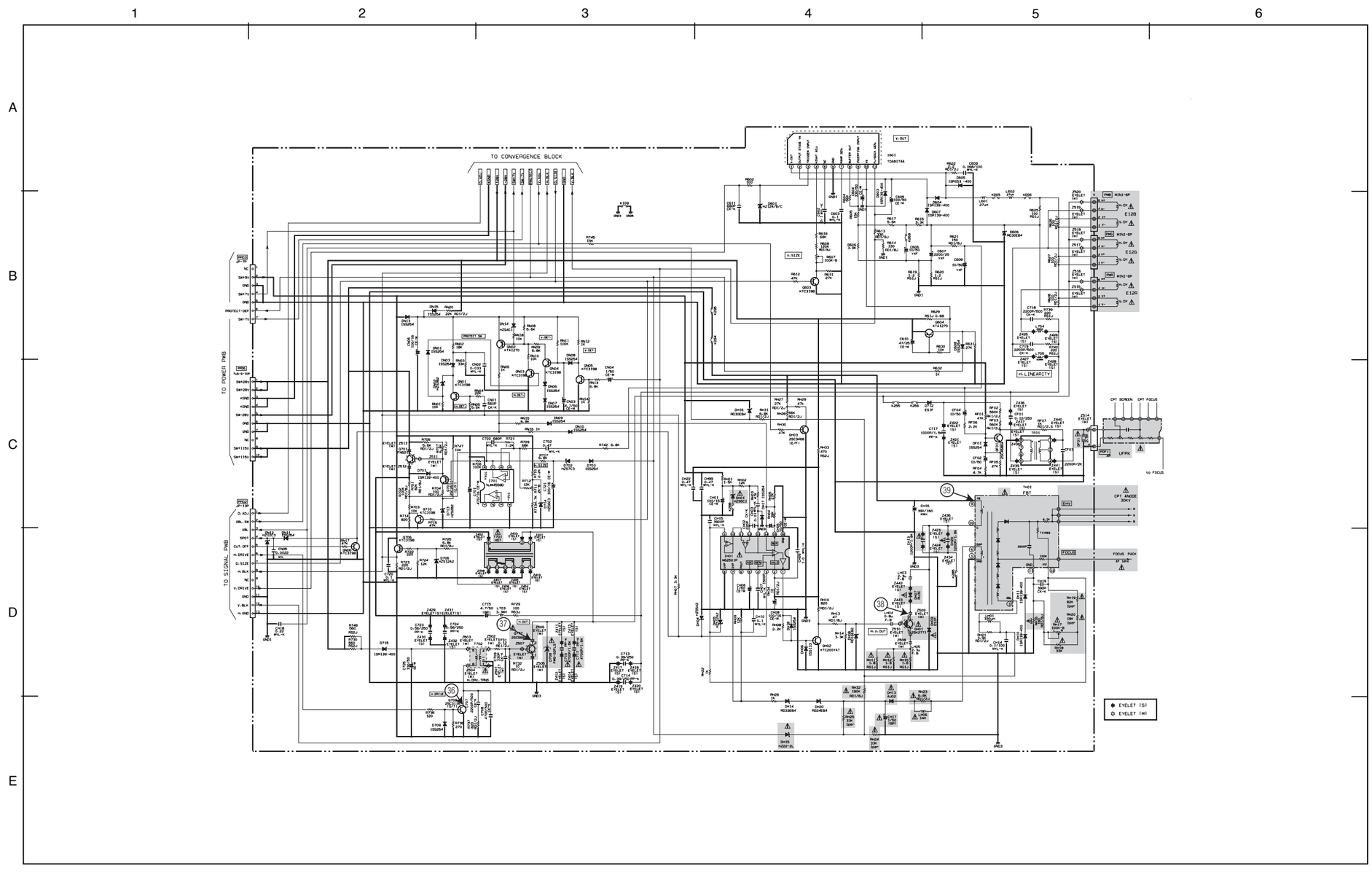


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

POWER SUPPLY

PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

BASIC CIRCUIT DIAGRAM

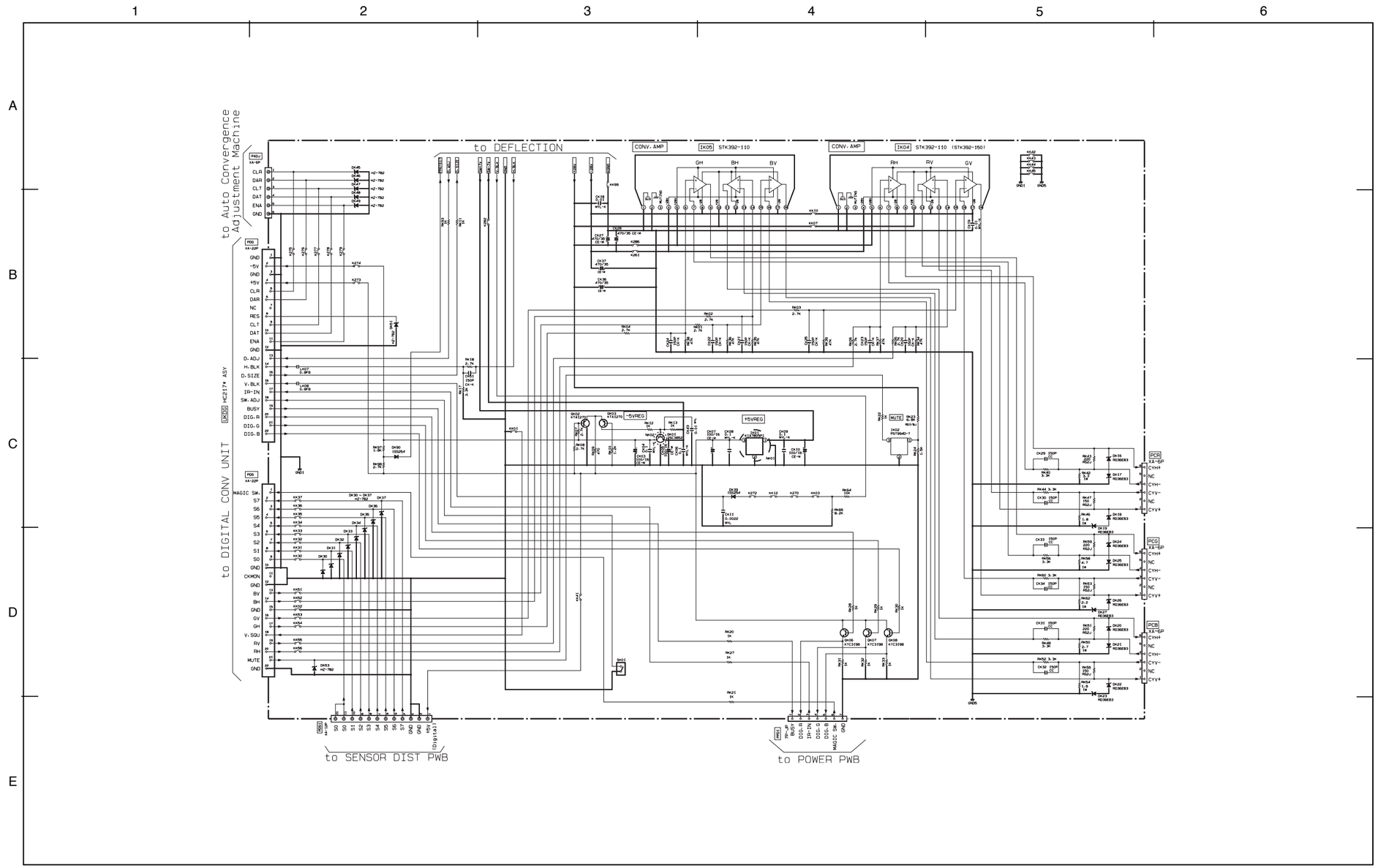


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

DEFLECTION

PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

BASIC CIRCUIT DIAGRAM

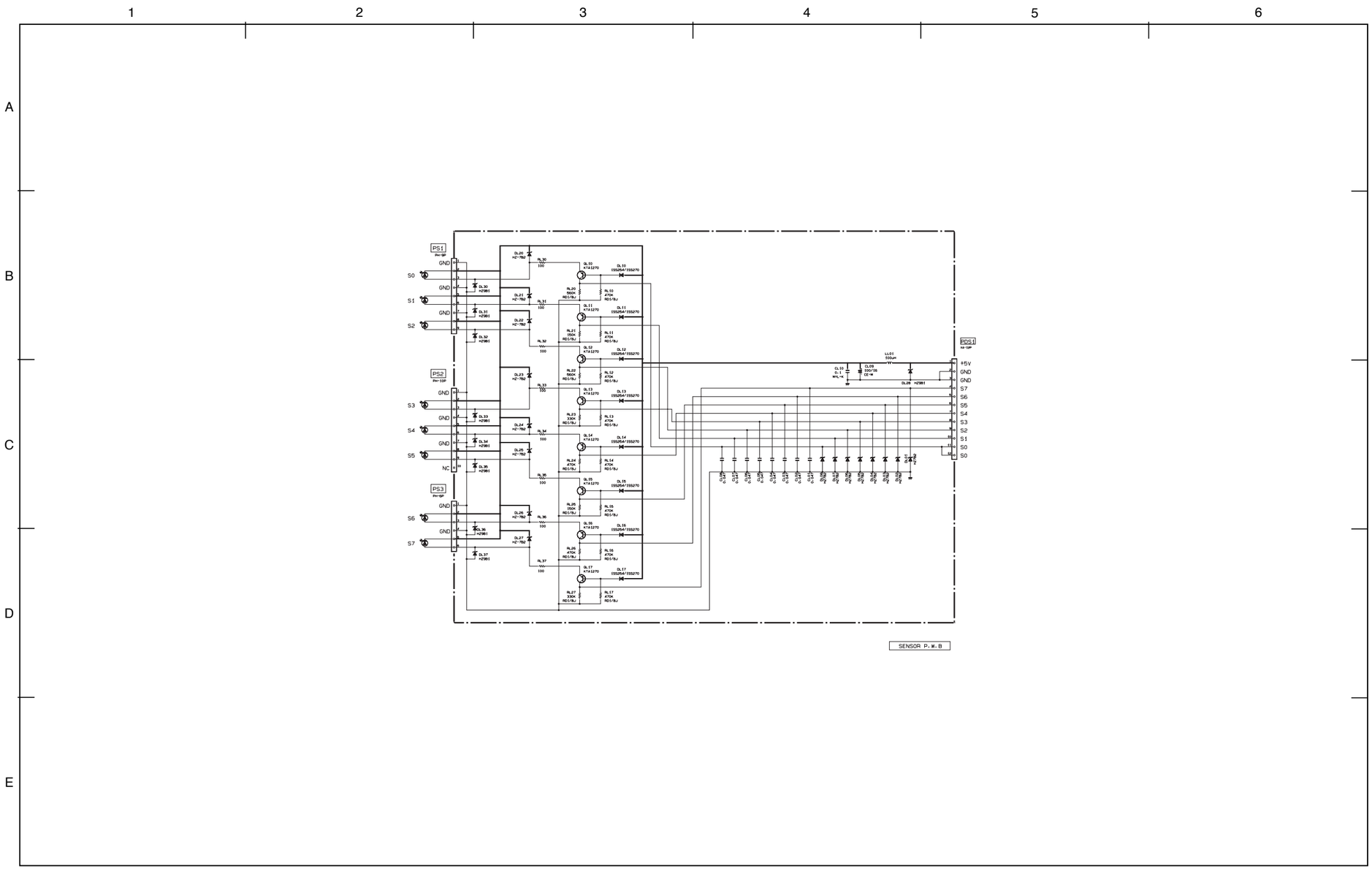


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

CONVERGENCE

PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

BASIC CIRCUIT DIAGRAM

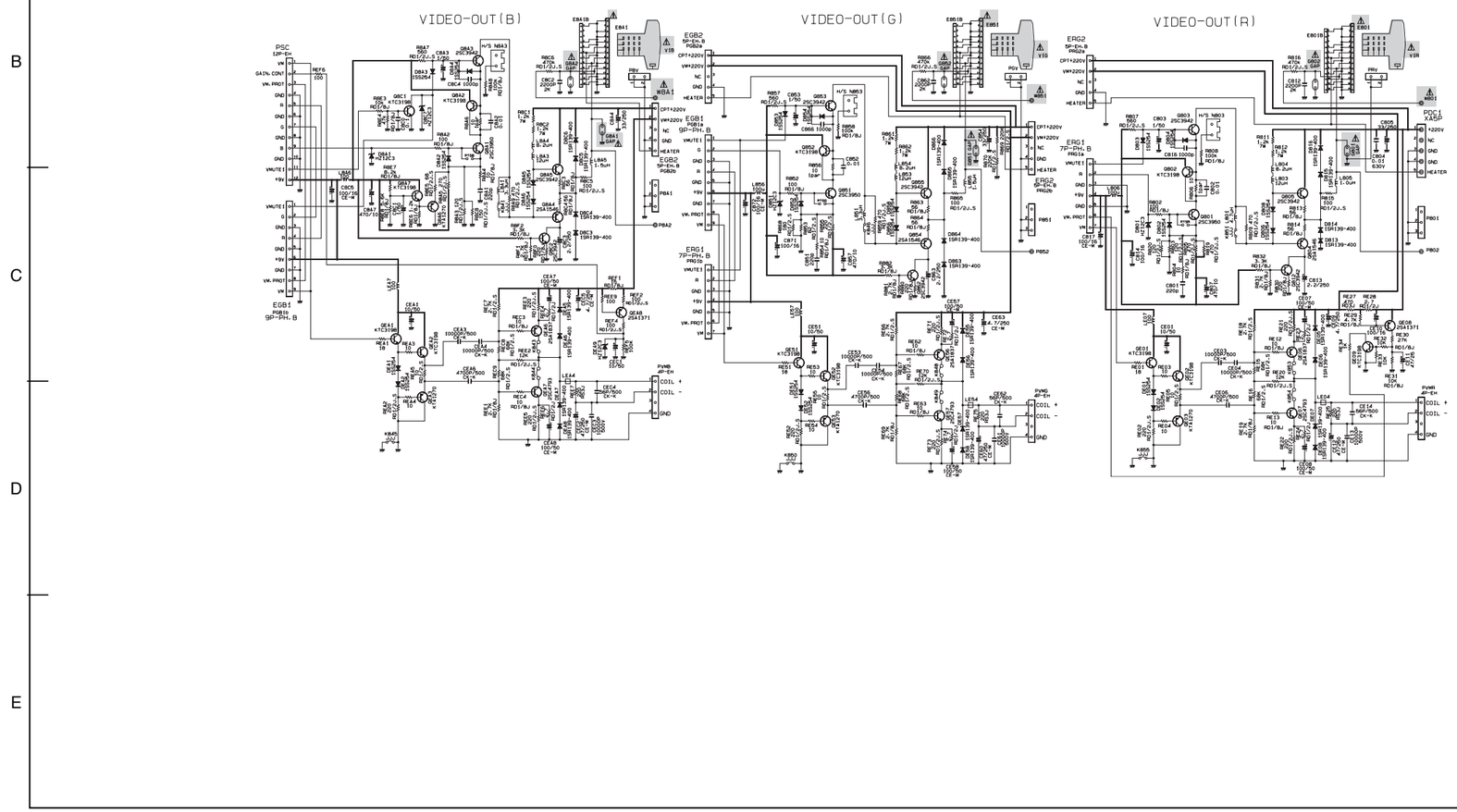


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

SENSOR

PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

BASIC CIRCUIT DIAGRAM

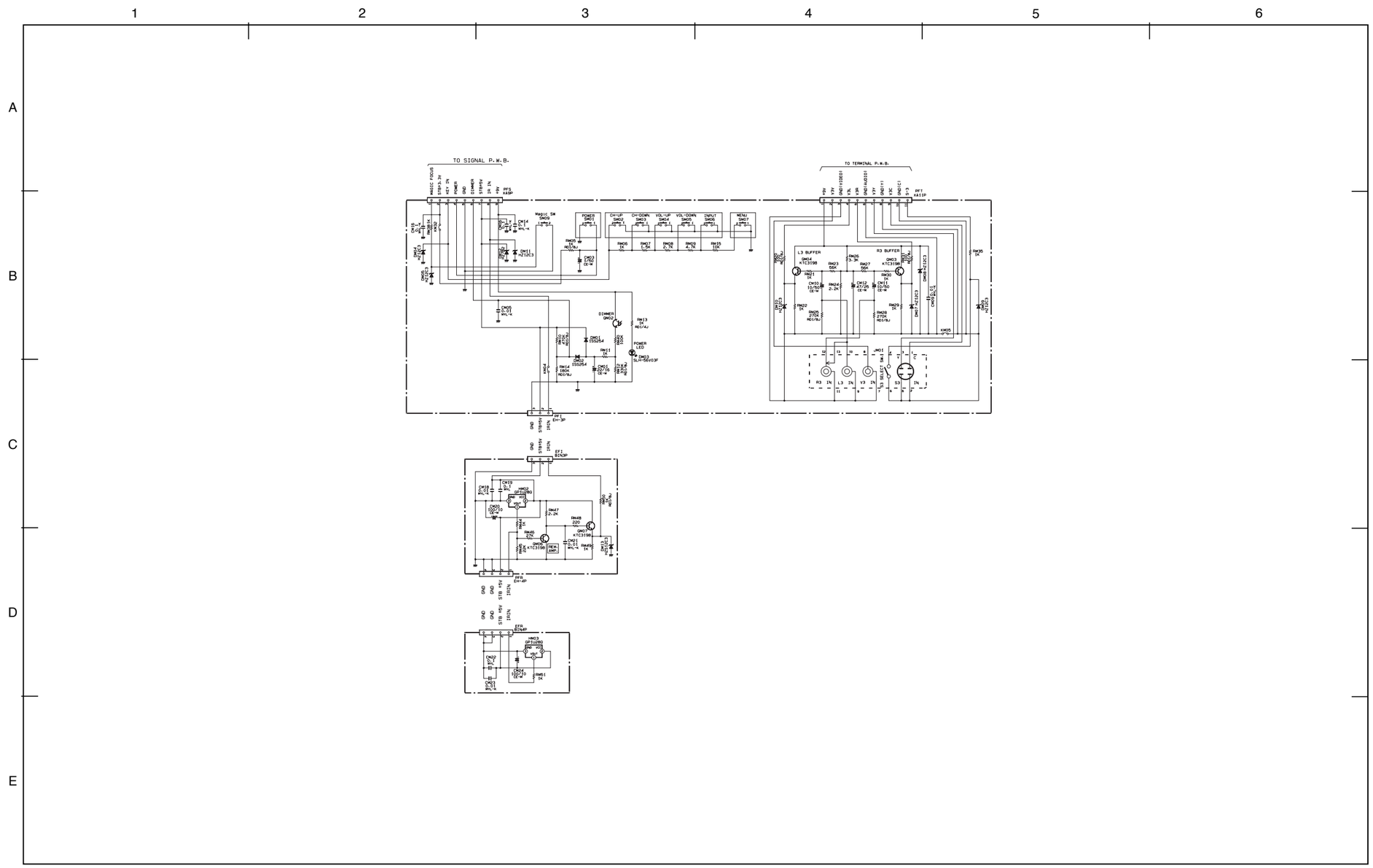


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

CPT/VM

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BASIC CIRCUIT DIAGRAM

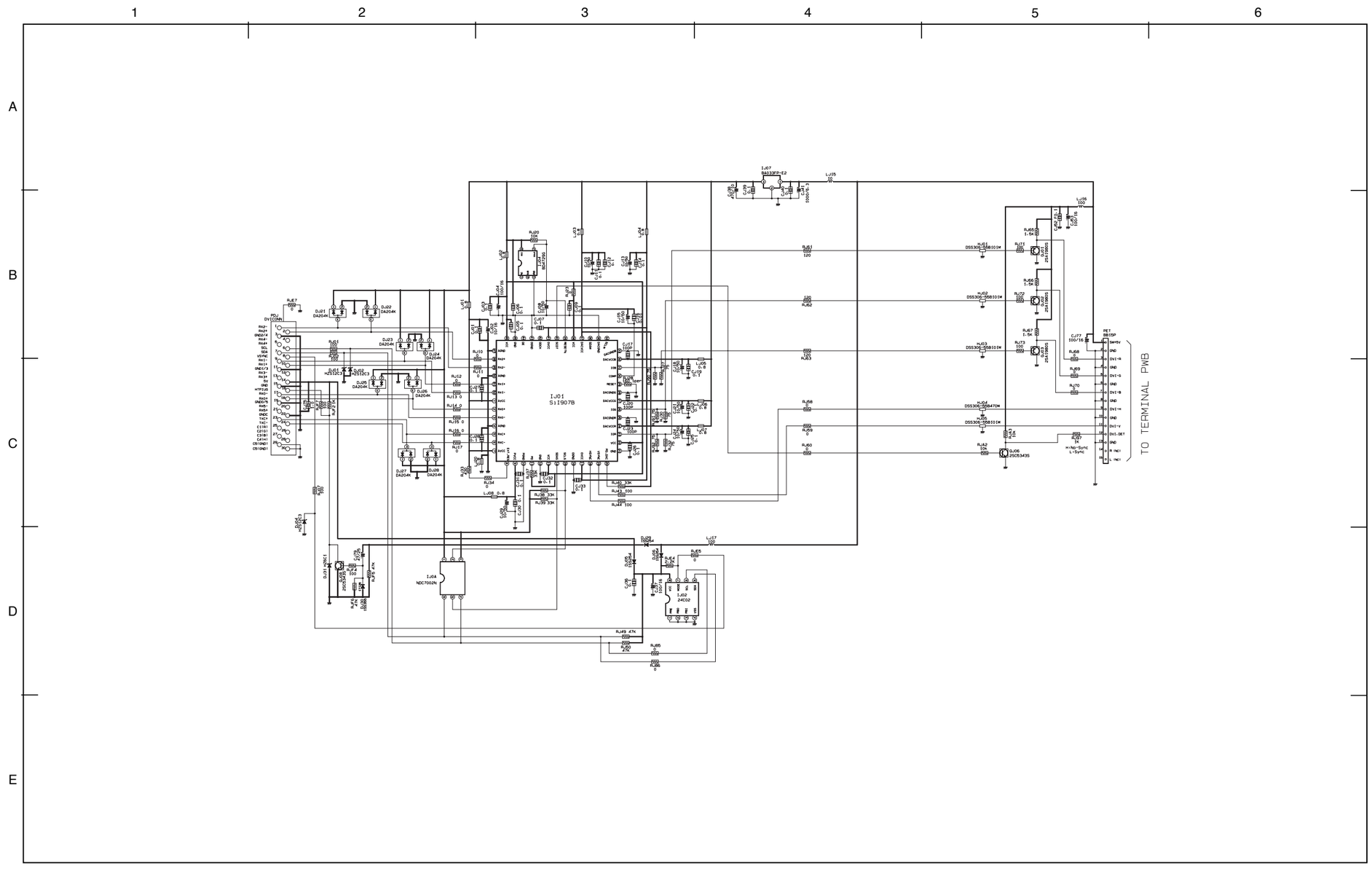


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

CONTROL

PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

BASIC CIRCUIT DIAGRAM

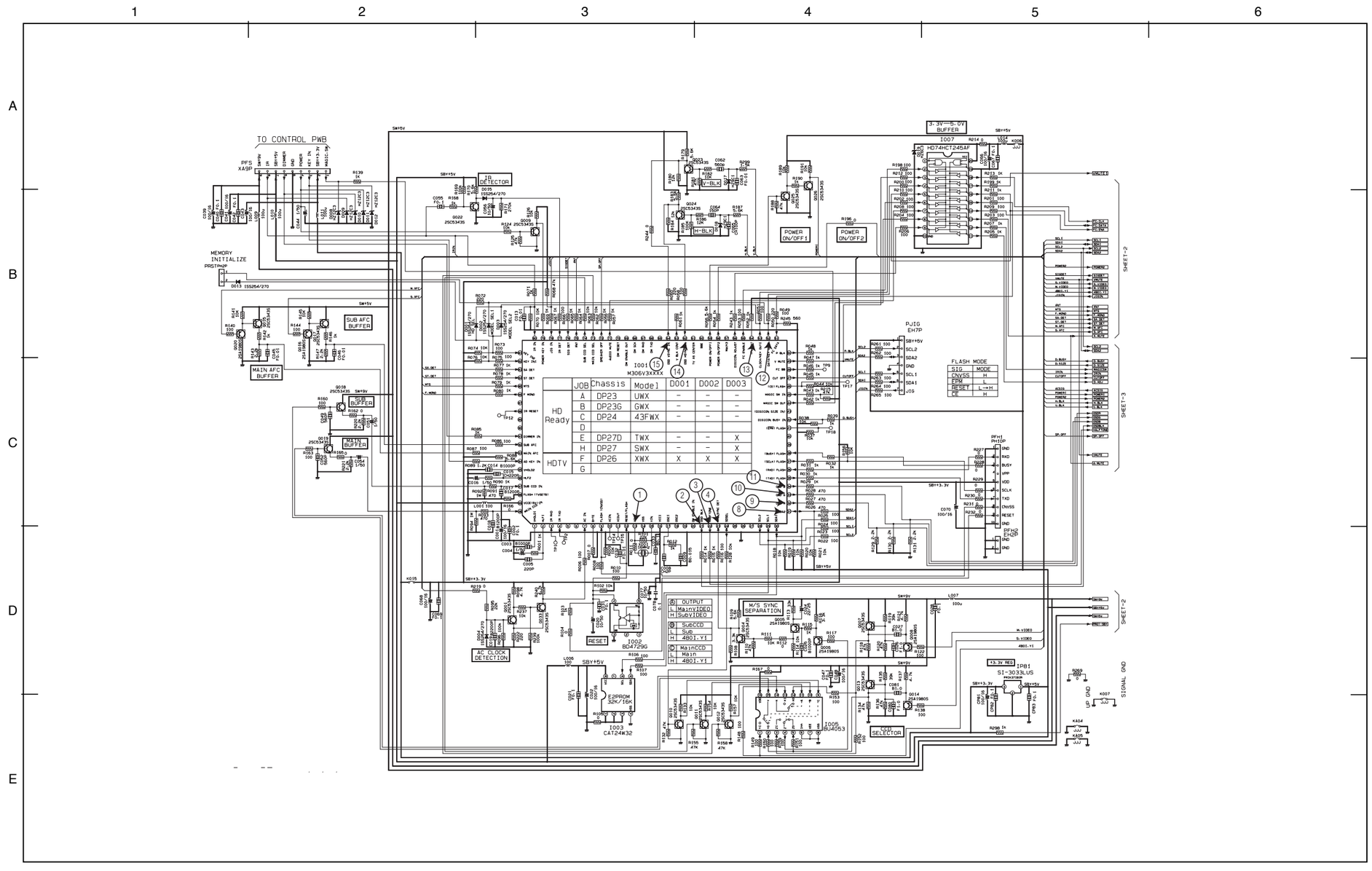


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

DVI

PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

BASIC CIRCUIT DIAGRAM

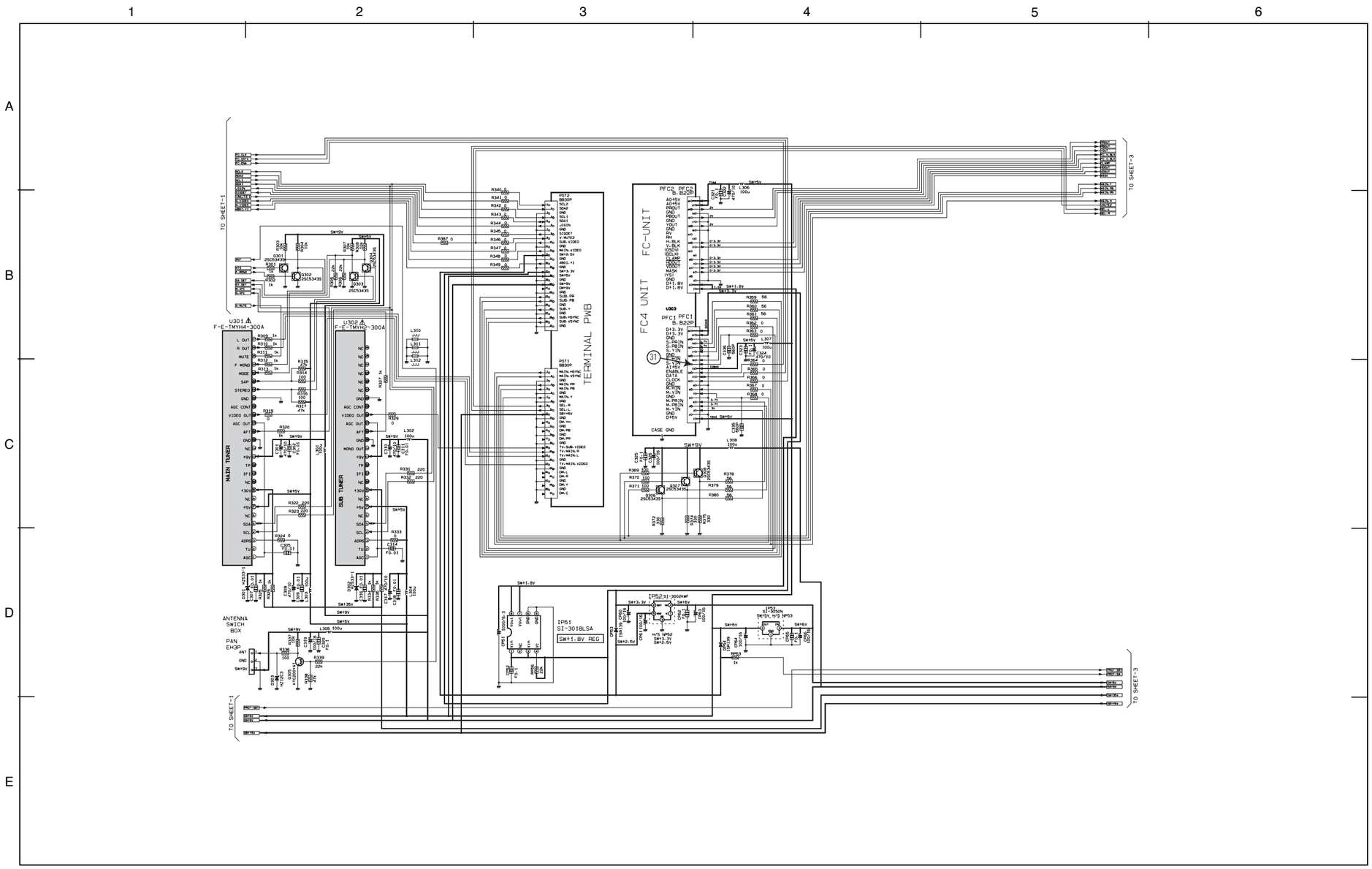


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

Signal 1 of 3

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BASIC CIRCUIT DIAGRAM

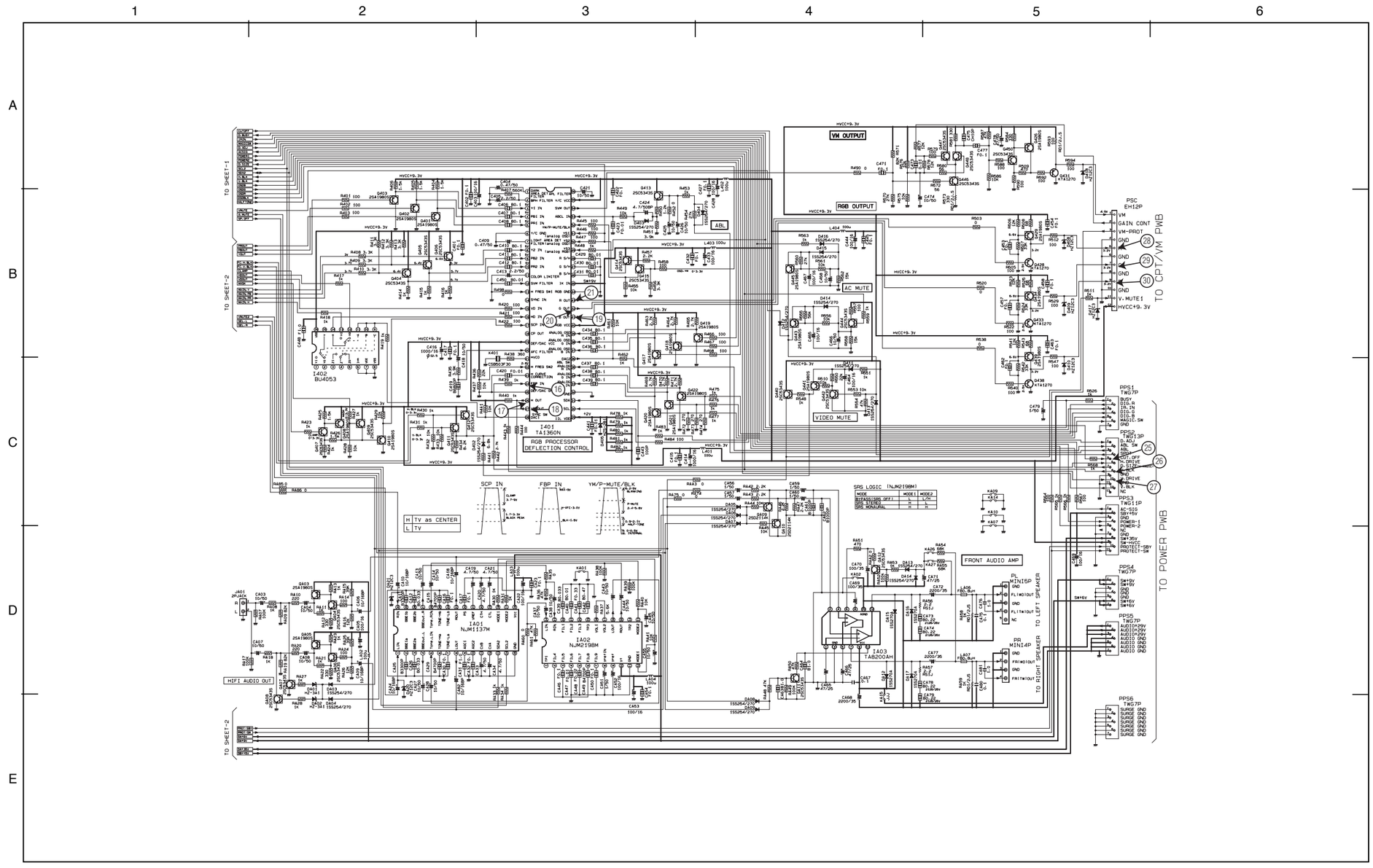


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

Signal 2 of 3

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BASIC CIRCUIT DIAGRAM



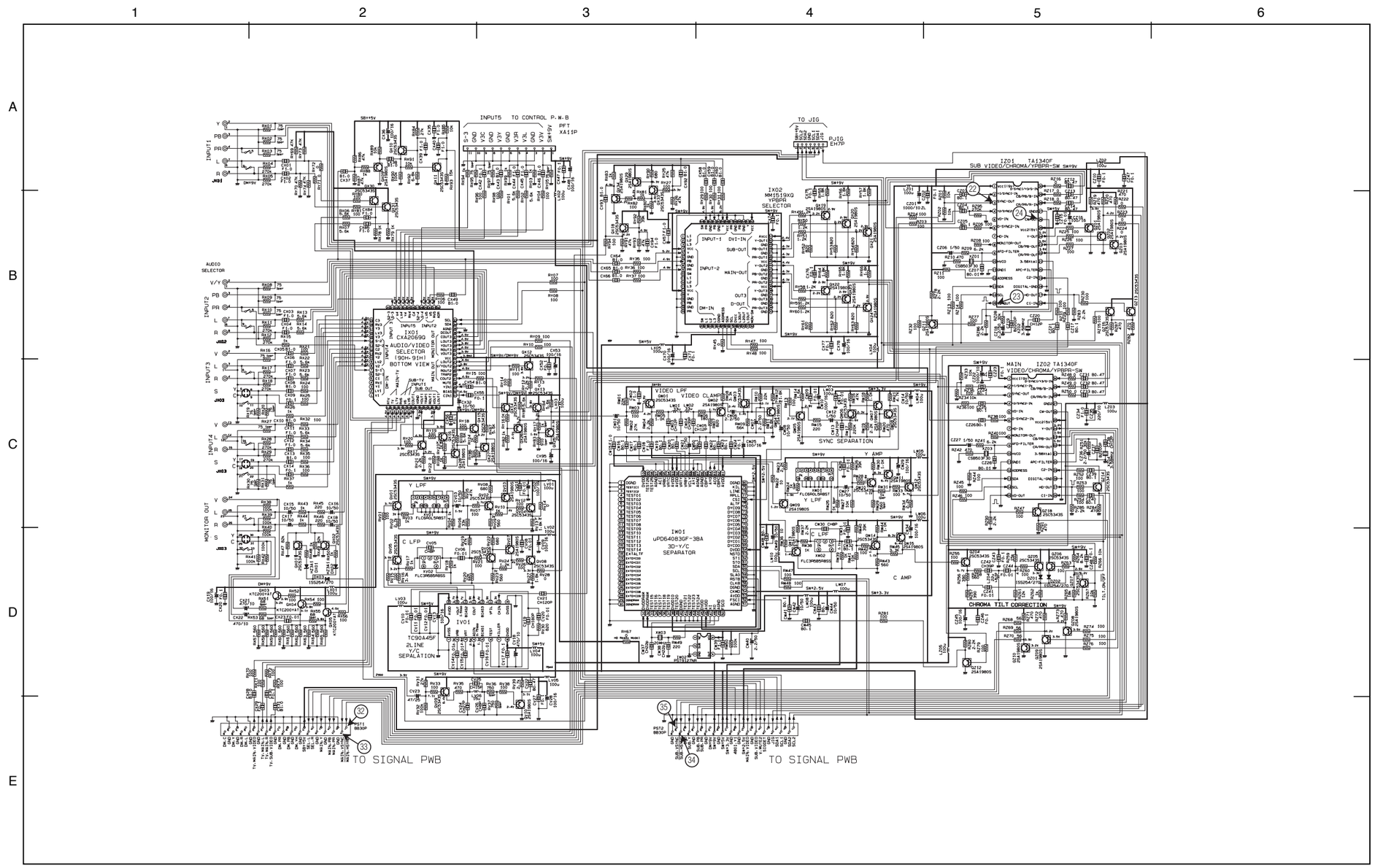
- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

Signal 3 of 3

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BASIC CIRCUIT DIAGRAM

DP24
Terminal

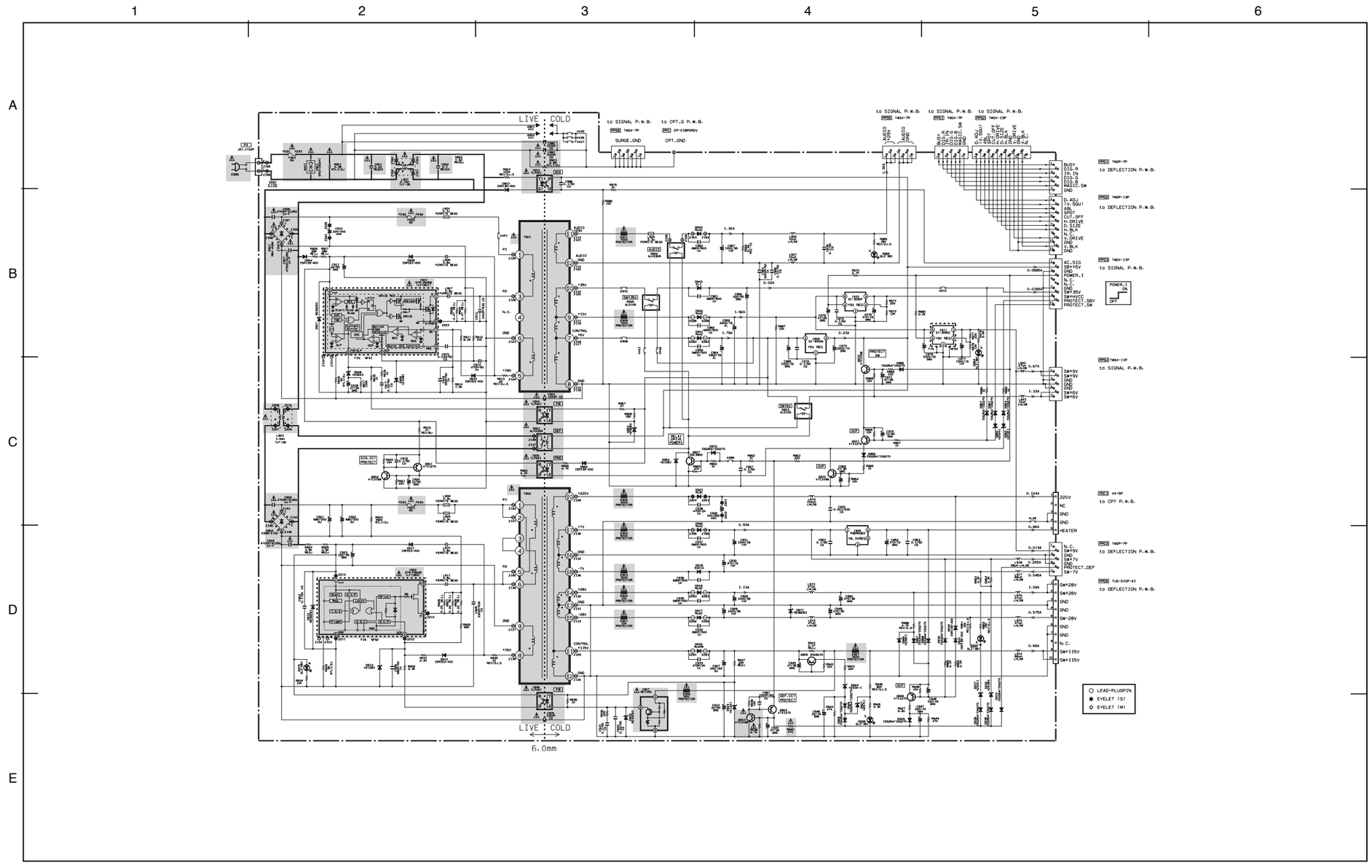


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

Terminal

PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

BASIC CIRCUIT DIAGRAM

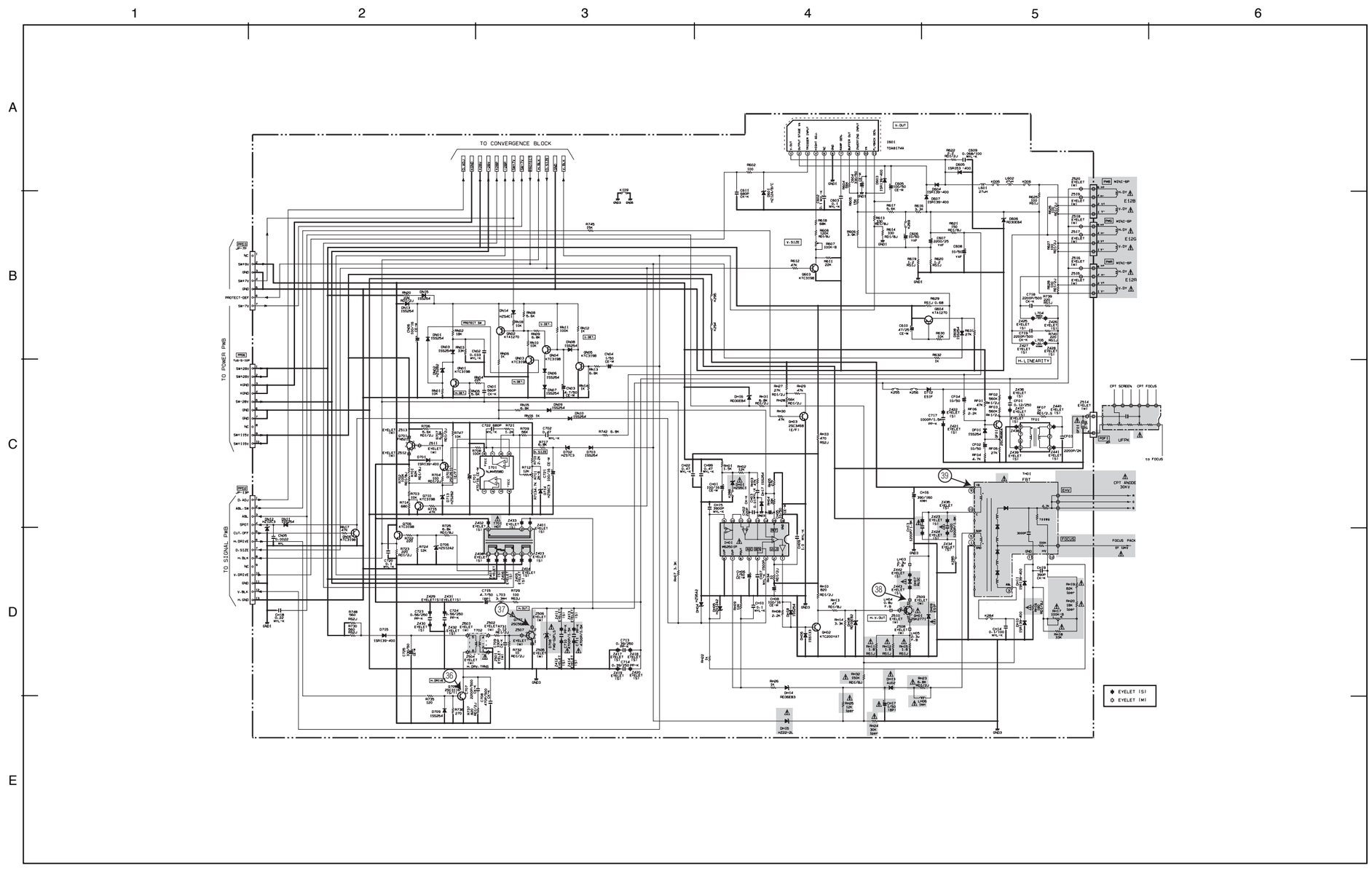


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

Power Supply

PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

BASIC CIRCUIT DIAGRAM

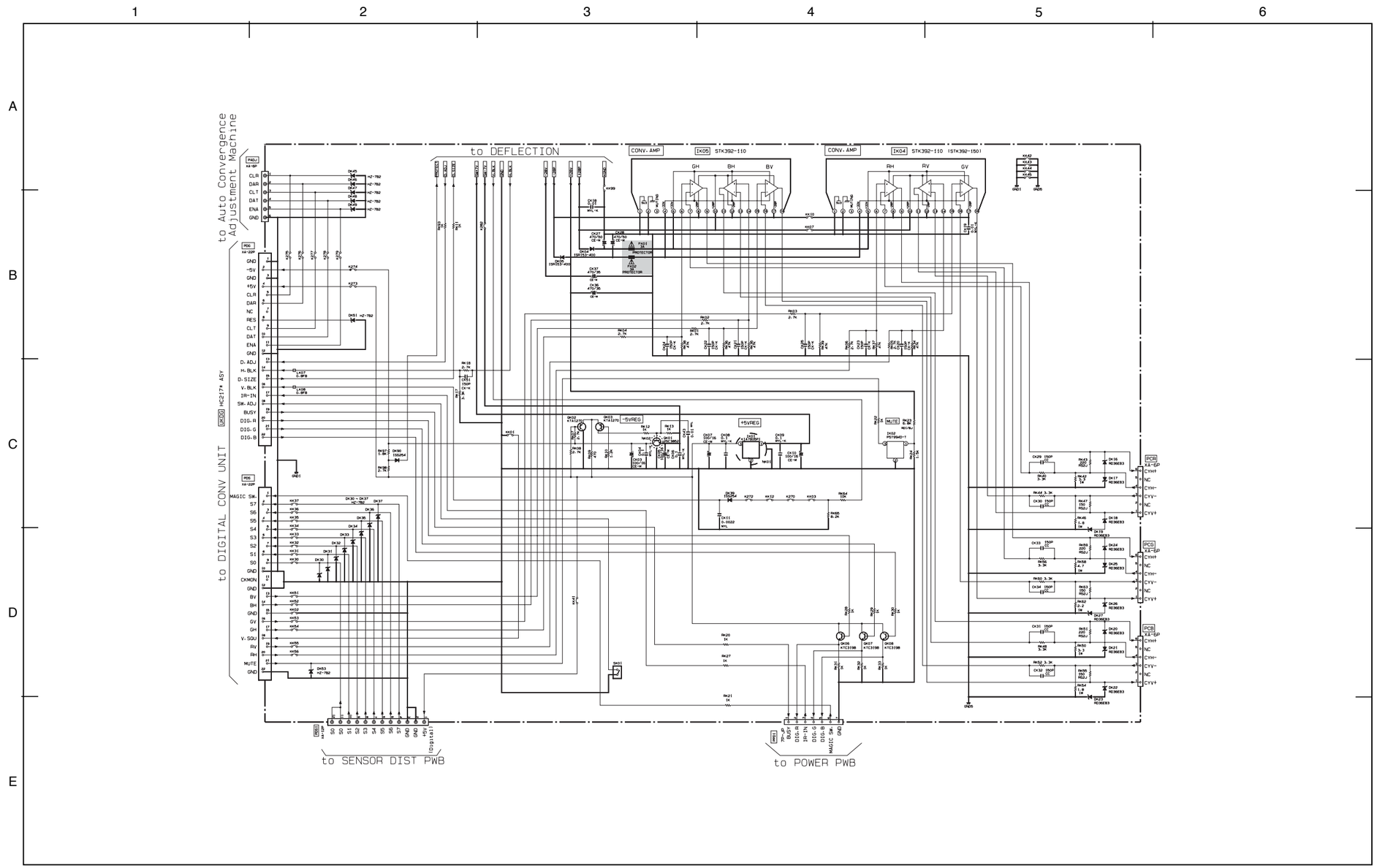


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

Deflection

PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

BASIC CIRCUIT DIAGRAM

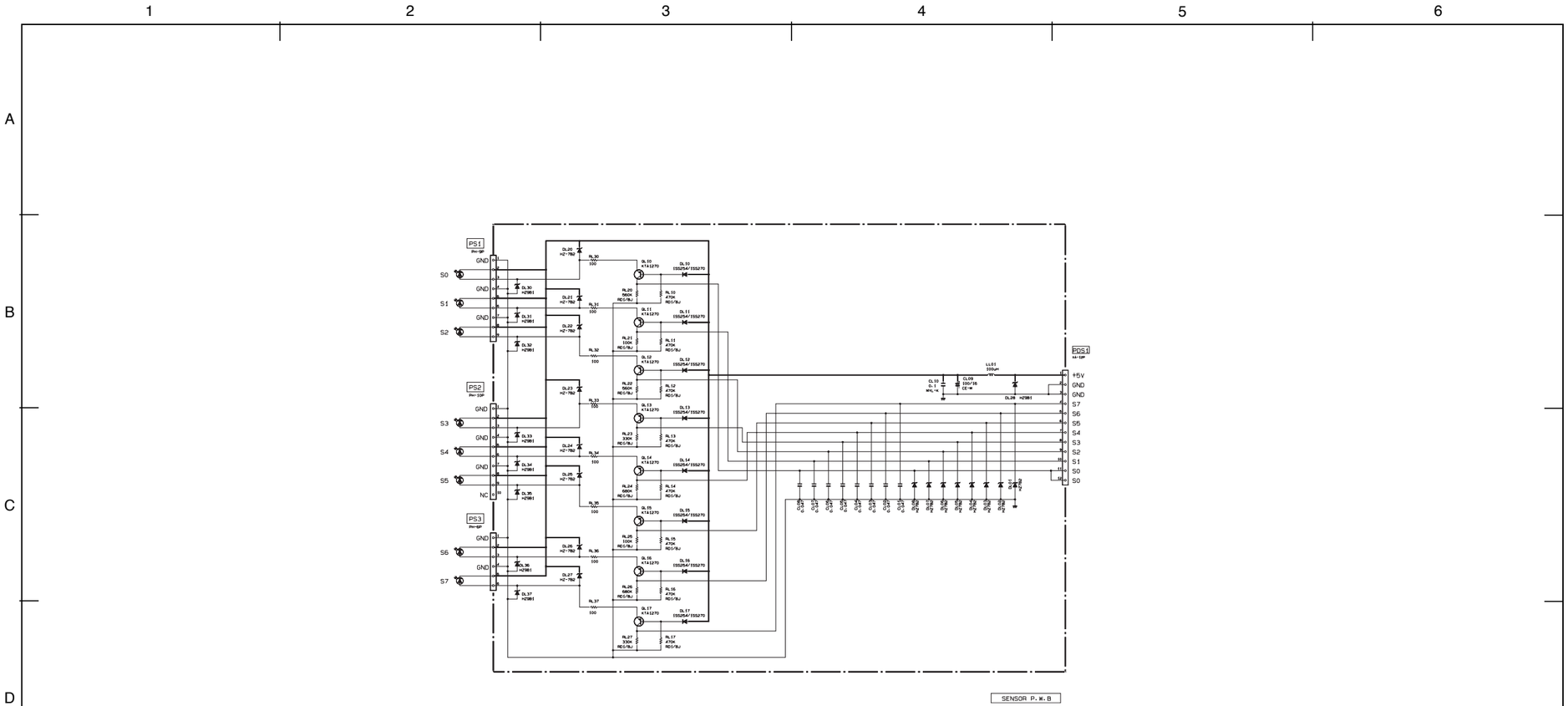


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

Convergence

PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

BASIC CIRCUIT DIAGRAM

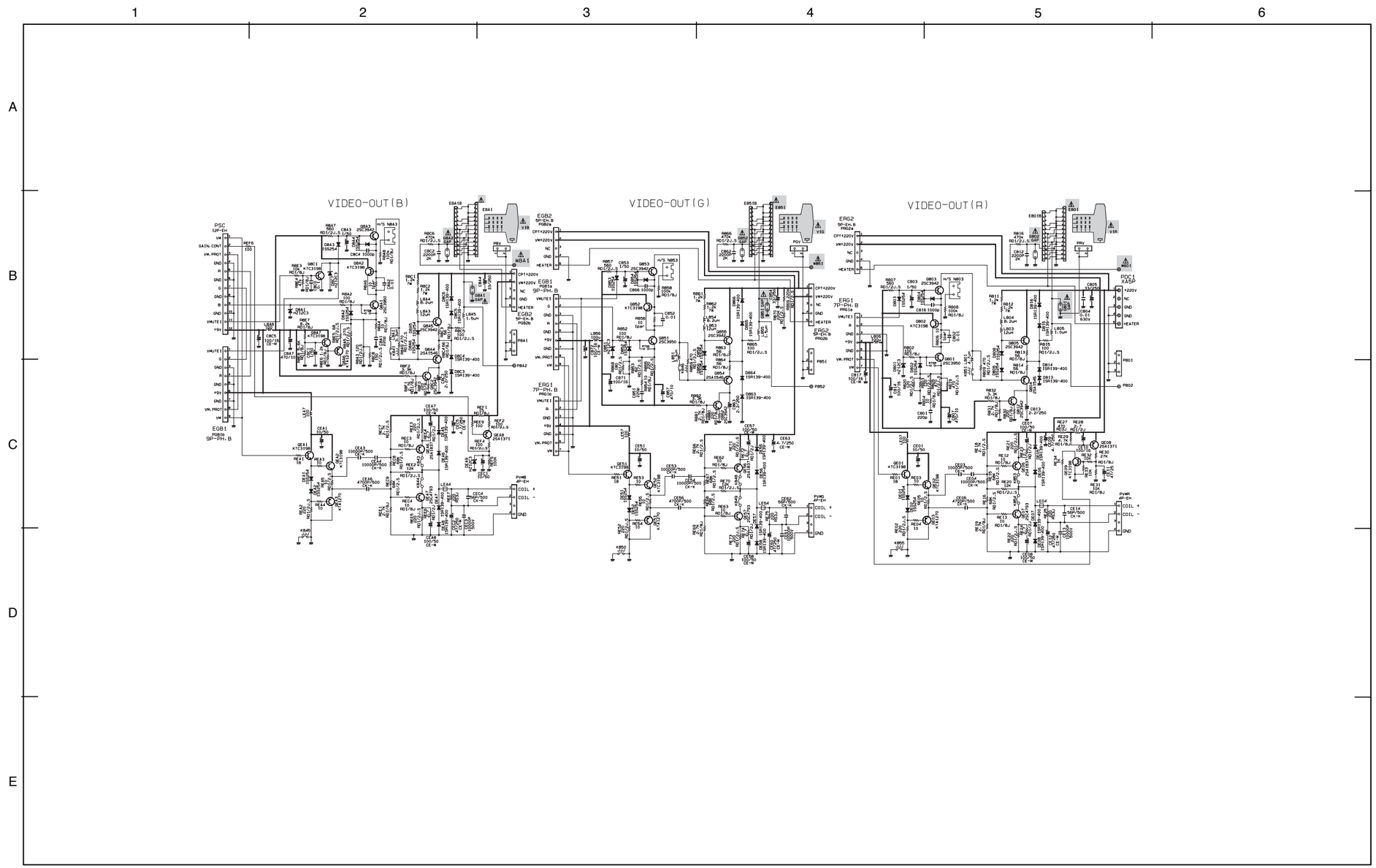


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

Sensor

PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

BASIC CIRCUIT DIAGRAM

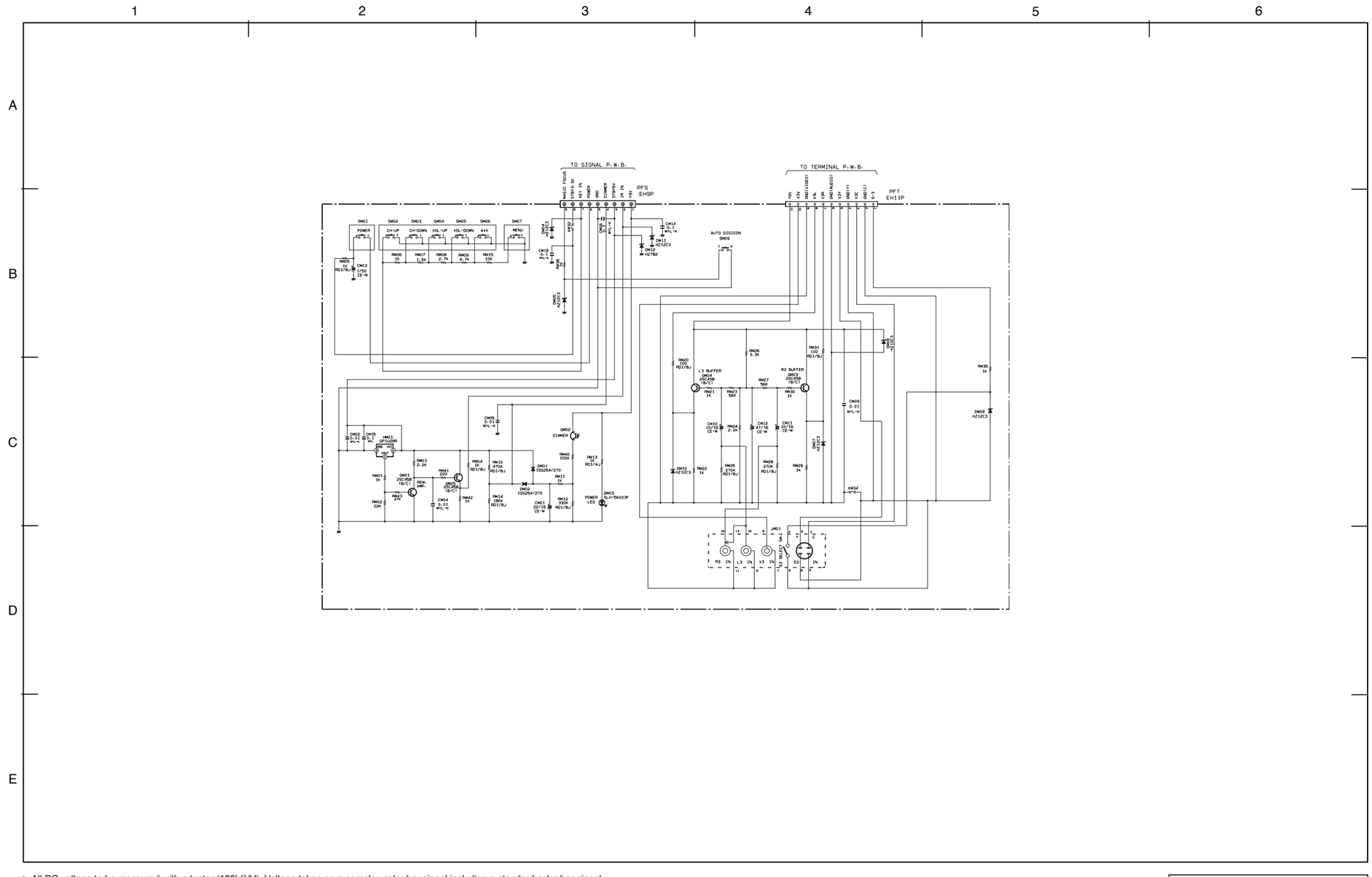


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

CPT/VM

PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

BASIC CIRCUIT DIAGRAM

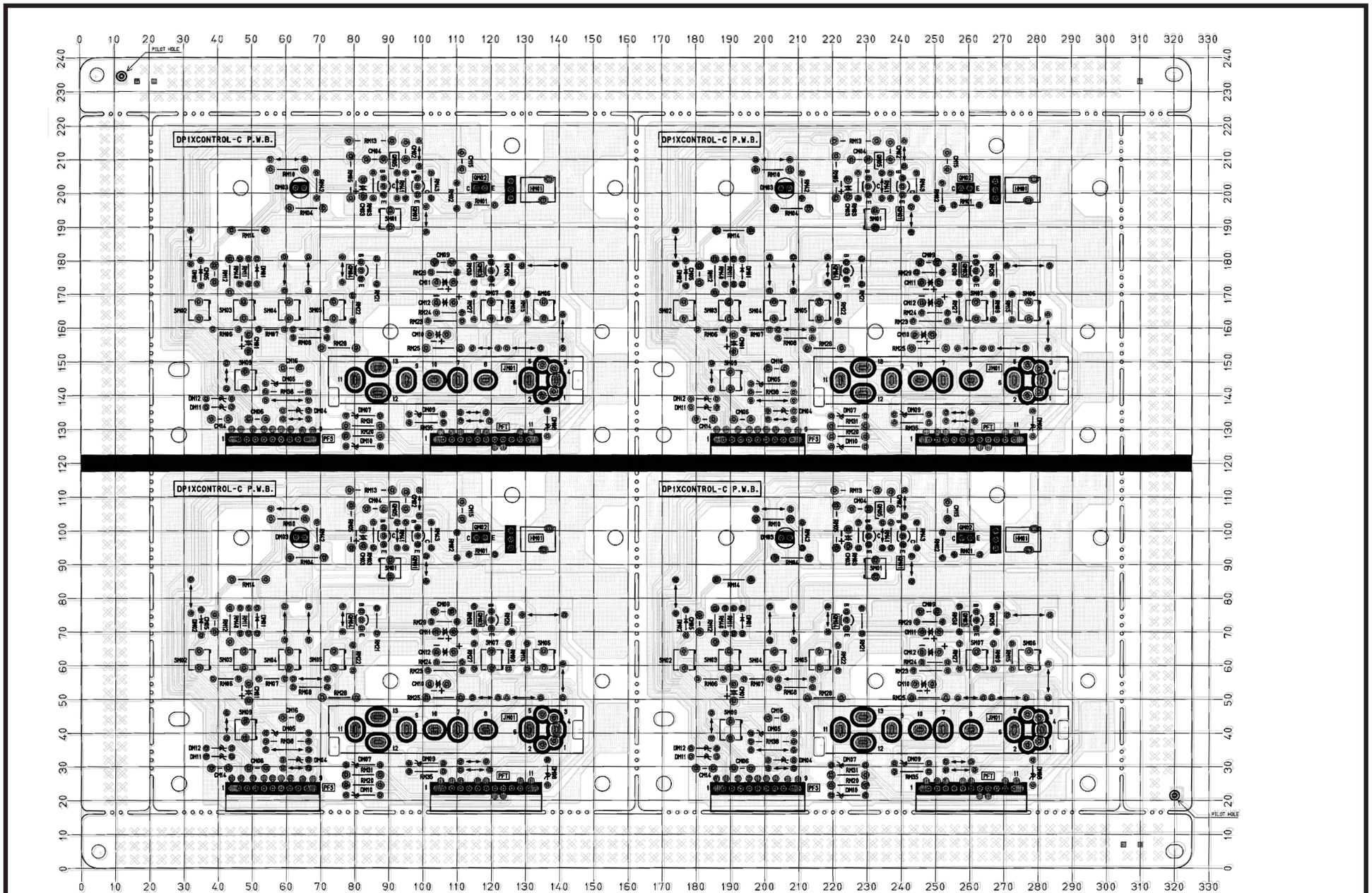


- All DC voltage to be measured with a tester (100kΩ/V). Voltage taken on a complex color bar signal including a standard color bar signal.
- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

Control

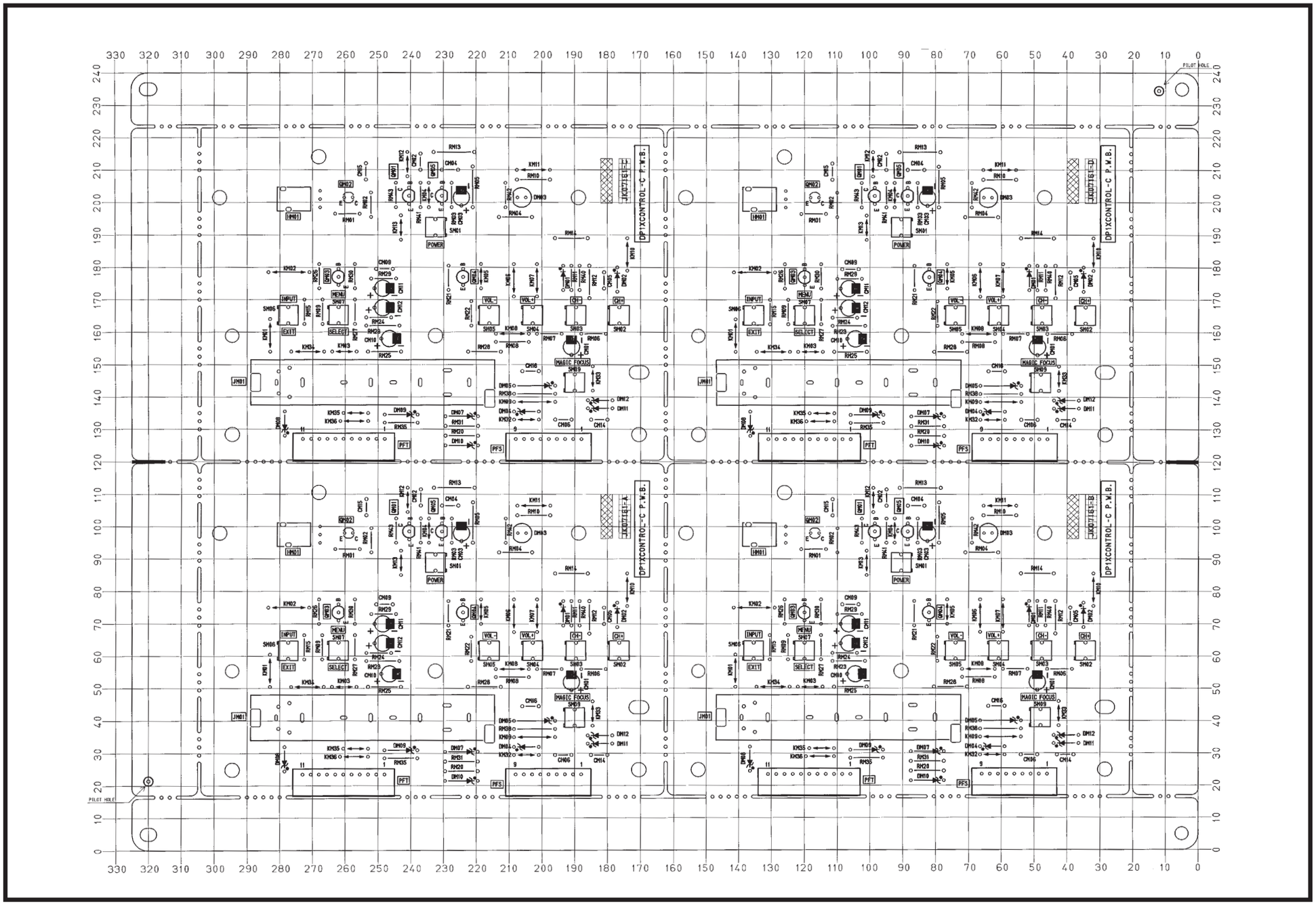
PRINTED CIRCUIT BOARD

Control P.W.B. - Pattern Side

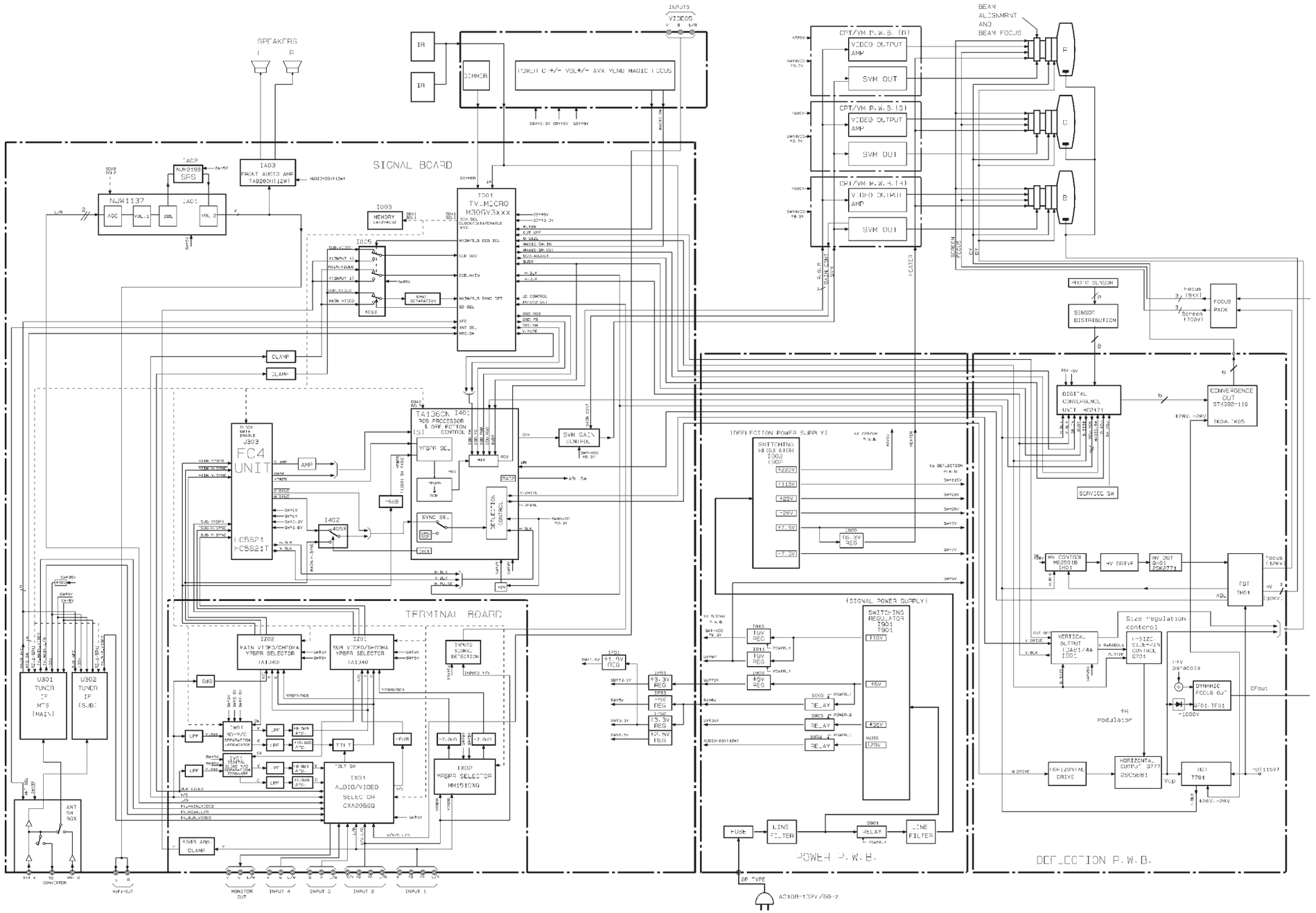


PRINTED CIRCUIT BOARD

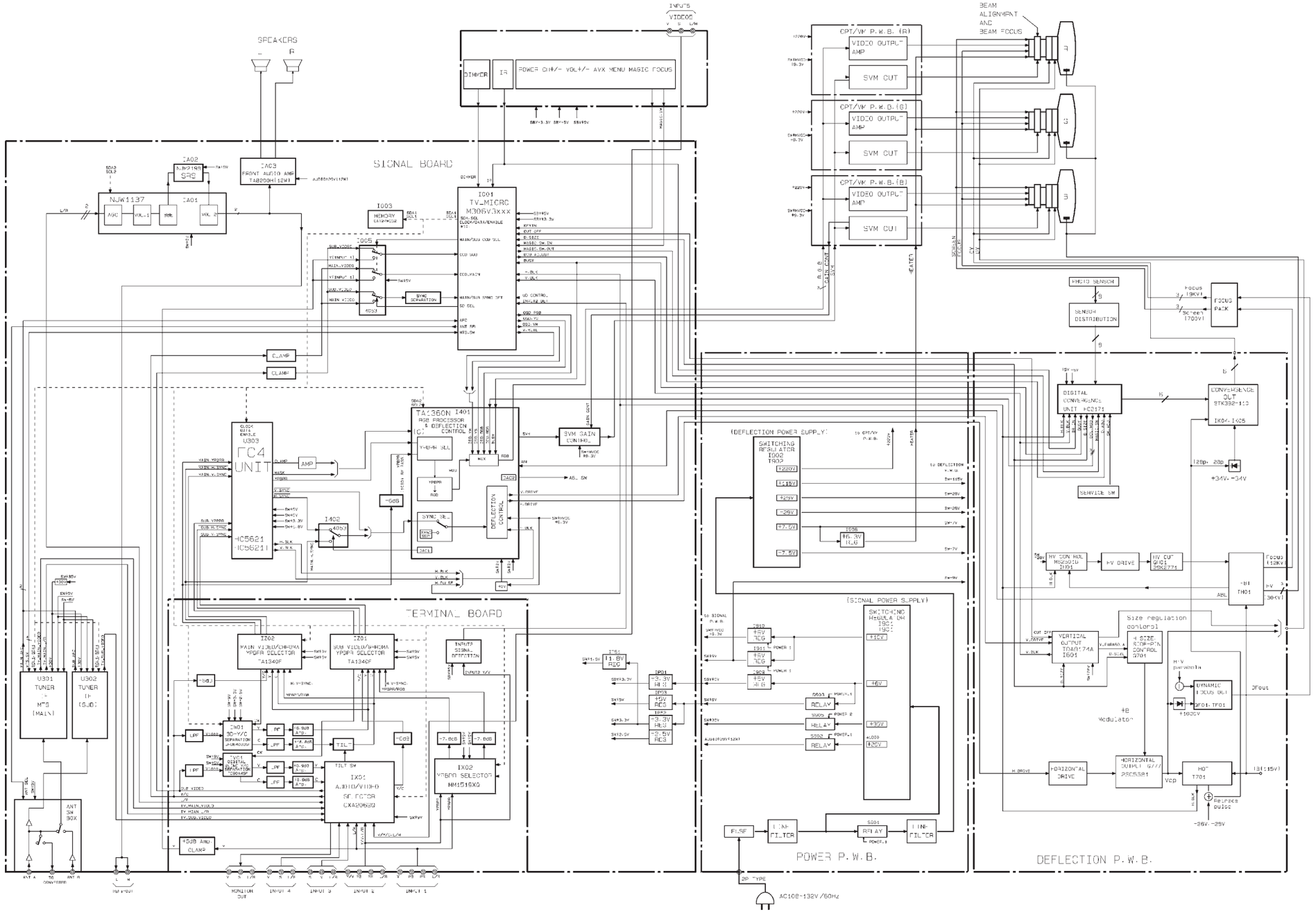
Control P.W.B. - Part Side



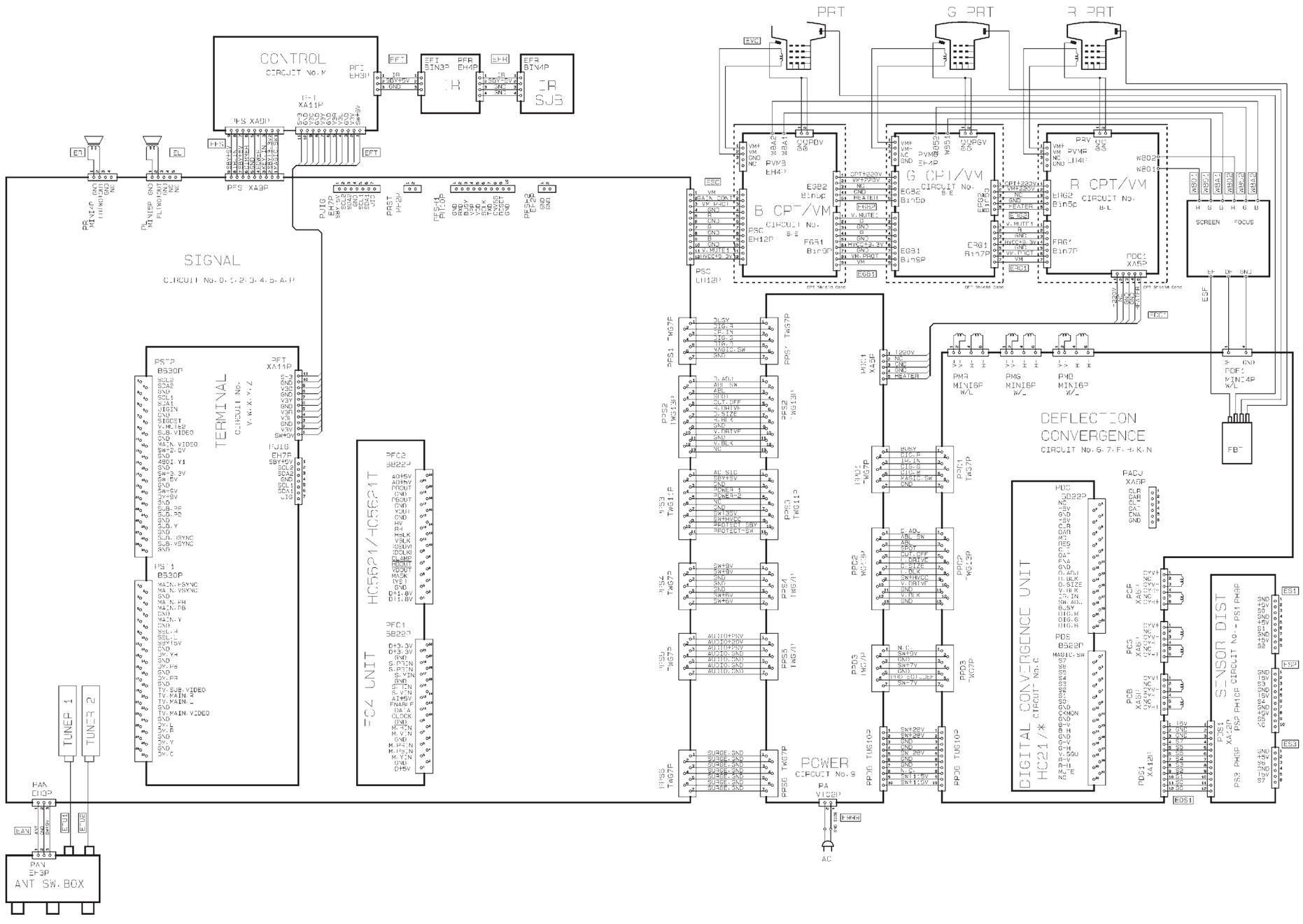
BLOCK DIAGRAM DP23/DP23G



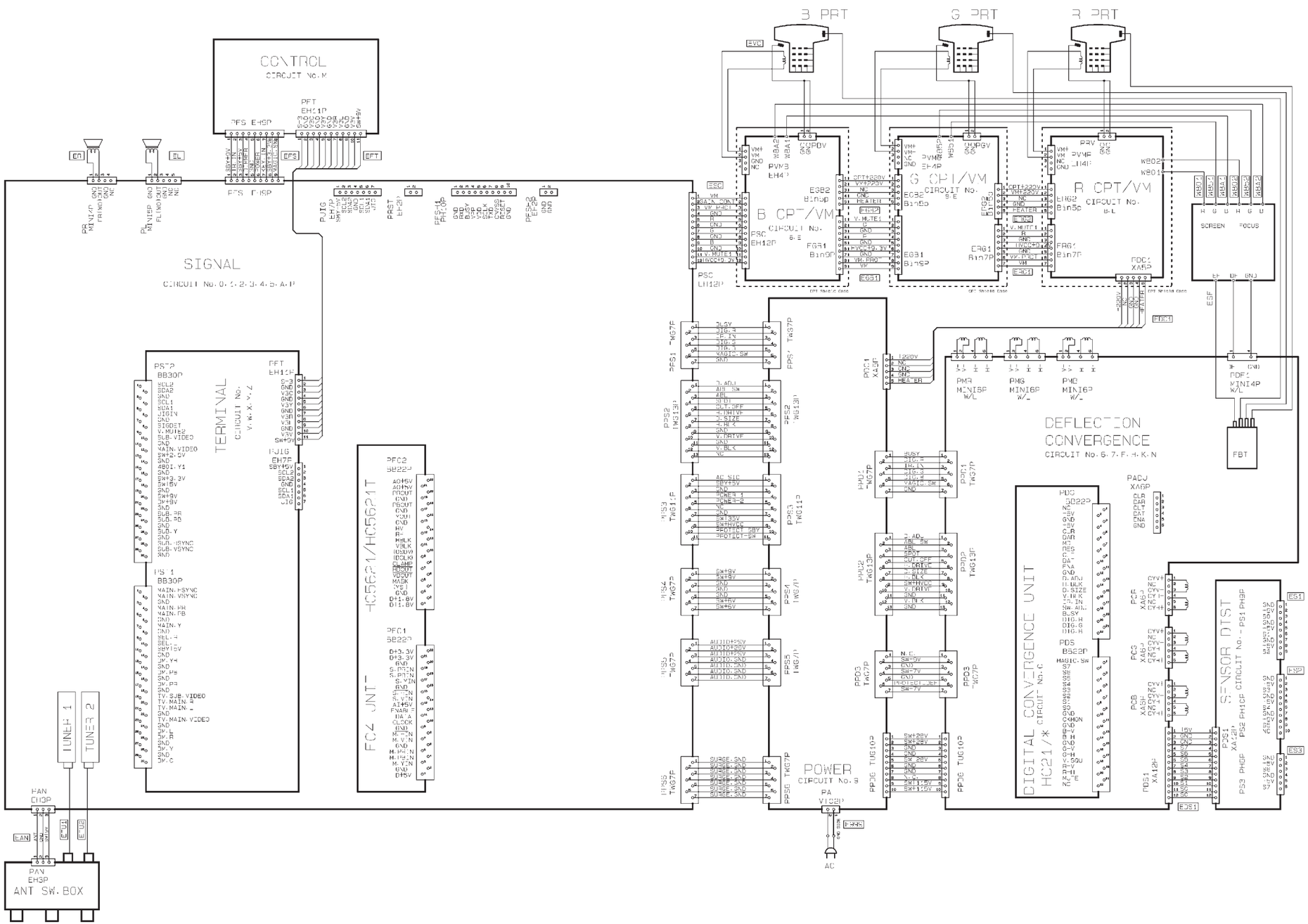
BLOCK DIAGRAM DP24



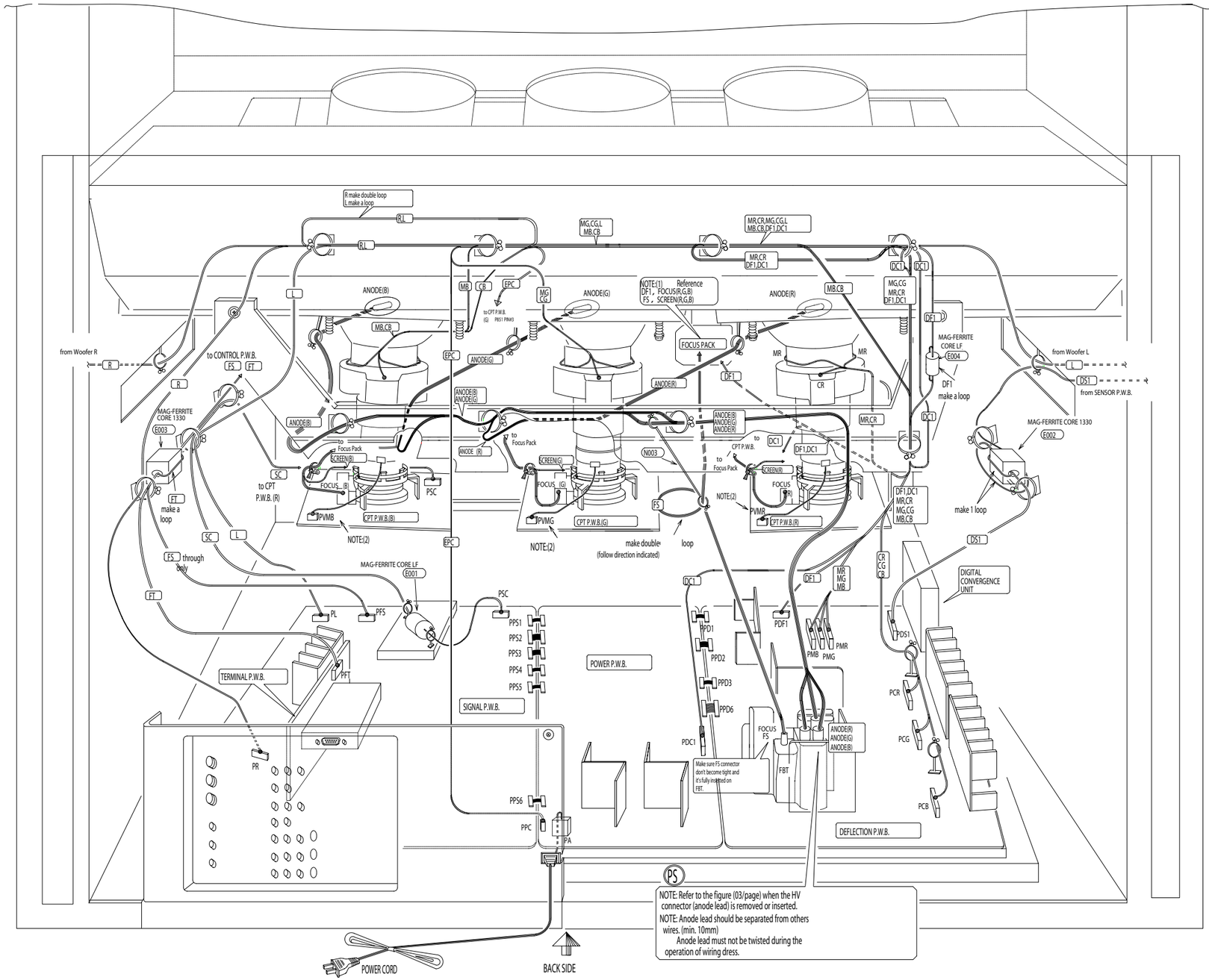
WIRING DIAGRAM DP23/DP23G



WIRING DIAGRAM DP24

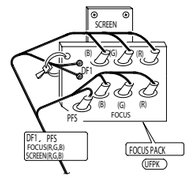


DP23/DP23G FINAL WIRING DRAWING



NOTE:(1)

Refer to the figure below about assembly of FOCUS PACK leads.

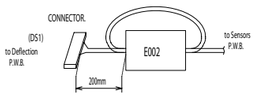


NOTE:(2)

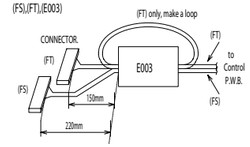
Connector "VMR","VMG" and "VMB" should be connected before CPT P.W.B is inserted to PRT.

NOTE:(3) PREPARATION JOB.

(DS1),(E002)



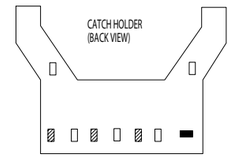
(FS),(FT),(E003)



NOTE:(4)

Adjust the slack of a speaker line by the speaker side.

NOTE:(5)

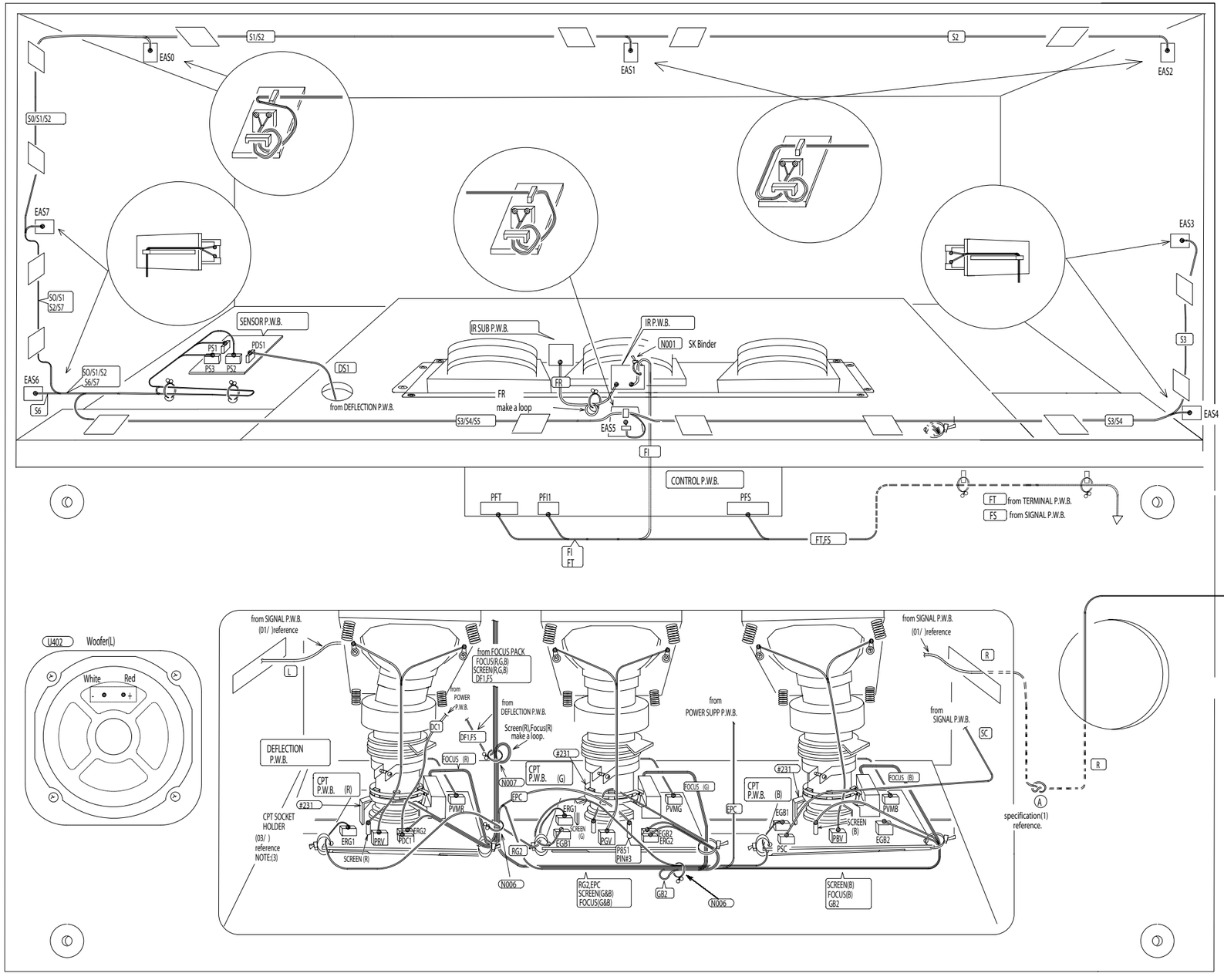


▨ MARK SHOULD BE APPLY A LEAD CLAMP(N008)
(LEAD CLAMP PARTS No.3875511).

■ MARK SHOULD BE APPLY A LEAD CLAMP(N009)
(LEAD CLAMP PARTS No.3813121).

THIS DRAWING APPLIES TO
51/57UWX20B & 51/57GWX20B.
(DP23/23G CHASS.)

DP23/DP23G FINAL WIRING DRAWING



THIS DRAWING APPLIES TO
51/57UWX20B & 51/57GWX20B.
(DP23/23G CHASS.)

DP23/DP23G FINAL WIRING DRAWING

CAUTIONS WHEN CONNECTING/DIS CONNECTING THE HV CONNECTOR

During Removal

1. Roll out silicon cover from FBT's contact area slowly.
2. While turning the connector about 90 degrees following the arrow (0 position). push the connector slightly towards the case. (Fig.A)

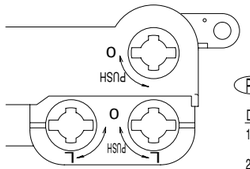


Fig. A

3. Remove the connector slowly by pulling it away from the case.

PS Process

During Insertion

1. Please refer to direction for insertion as shown in Fig.B (L position) Insert connector till "CLICK" sound is heard.
2. Make sure the connector is pressed right in, so that it has a good contact with the spring.

3. Confirm the contact by pulling the connector slightly. (Don't pull hard because it may damage the connector.)
4. Cover the high voltage output by carefully pushing silicon cover on to it. (Don't turn the connector.)

(REMARK)

1. Make sure the silicon cover is covered the high voltage output.

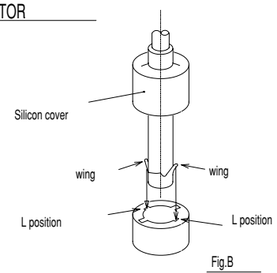
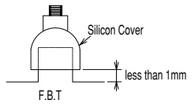
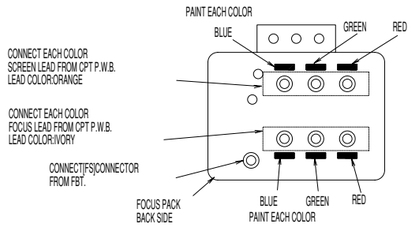
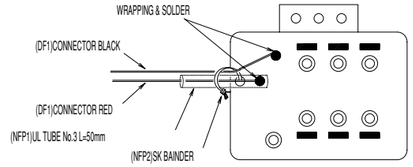


Fig.B



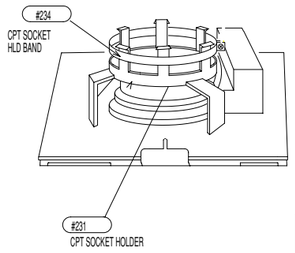
(UFPK) FOCUS PACK ASY.



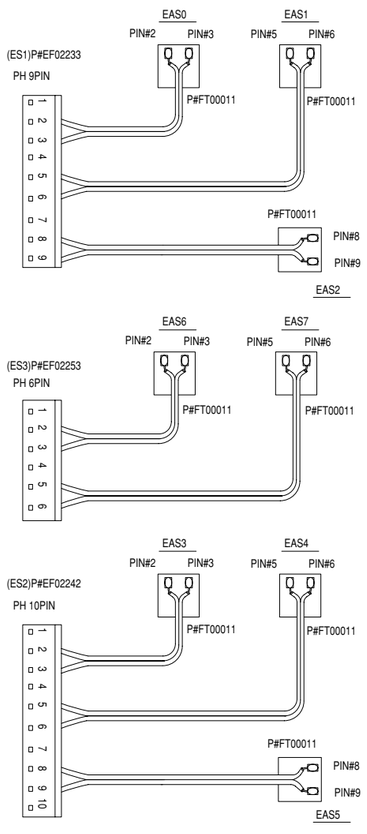


NOTE(3) CPT SOCKET HOLDER ASSEMBLY (R.G.B)

CPT SOCKET HOLDER ASSEMBLY SHOULD BE FOLLOWED BELOW DIAG.



CONNECTOR AND SENSOR ASY.



AUTO SET UP SENSOR(EASO~EAS7)ASY.

1. CAUSES OF THE DAMAGE ON CHARACTERISTICS

Mainly 2 possibilities can be considered as major causes of failure in charactenstics of amorphous silicon solar cell. One possibility is mechanical stress against thin film and the another is electrostatic damage on thin film.

Damage of thin film caused by mechanical stress is the phenomenon like as following example. Certain sharp edged tool makes a scratch at the place where resin is coated on the cell backside. Because of this scratch, created in the thin film, then affect open circuit voltage(Voc) of cell in the rnd. Please refer to the page X/Y in which possible mechanical damage to the thin film is described by illustration.

On the other hand, electrostatic damage to the thin film is the phenomenon that static electricity generated by some friction between trays made of inconductive material affects of cell and cause the decrease in open circuit voltage.

2. CAUTION IN HANDLING

There is a possibility that the resin on cell backside can be scratched by certain sharp edged tool. Please pay necessary attention on this point during handling. Also, in order to prevent electrostatic damage to the thin film caused by friction of trays made of inconductive material please make sure to use to only kyocera's trays made of conductive material until start assembling amorphous silicon solar cell.

Please make sure using surgical finger caps or tweezers while handling cells. Do not touch the cells with naked fingers!

3. DROPPED CELL

When a cell is dropped to somewhere, please check open circuit voltage by using voltage tester under FL200Lux and check whether Voc is over 0.5V or not. If Voc is less than 0.5V, please do not use such cell as there is a high possibility that the thin film is damaged at the time of drop.

a pin-hole can be

4. WIRING METHOD FOR SOLDERING TYPE TERMINALS

A. TOOLS

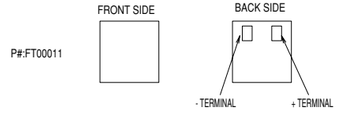
1) Soldering iron : Small tip type(EX.11.5W pen type)
2) Transformer : As long as voltage is adjustable in the range of 70 to 100V. it would be sufficient. If there is a voltage adjustable fuction in the soldering iron. transformer is unnecessary.
3) Wire type solder:Less flux type solder is neceesary.

B. WIRING

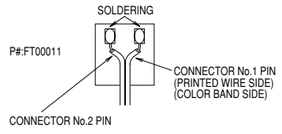
1) Set the voltage of trasformer in the range of 70 to 100V and wait 10 minutes. After 10 minutes from this setting, start soldering work. (Temperture of soldering iron tip should be 230 C. Find out appropriate voltage in the range of 70 to 100V which can realize maximum productivity in soldering work.)
2) Put the exposed part of lead wire onto soldering foundation and connect lead wire with the terminal by melting soldering foundation with soldering iron. (Soldering duration should be within 2 seconds.)
3) When lead wire can not be soldered well, apply soldering iron tip again for 1 second, then repeat this work several times until lead wire is well connected with the terminal. Do not apply soldering longer than 2 seconds.
4) Clean up stain and solder from the soldering iron tip every 3 to 5 times of soldering work.

5. ASSEMBLY OF SILICON SENSOR

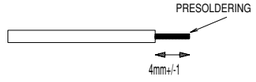
1) SENSOR POLARITY



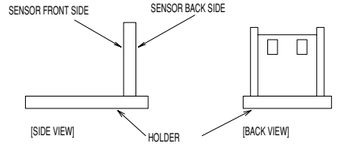
2) SOLDERING SENSOR & WIRE



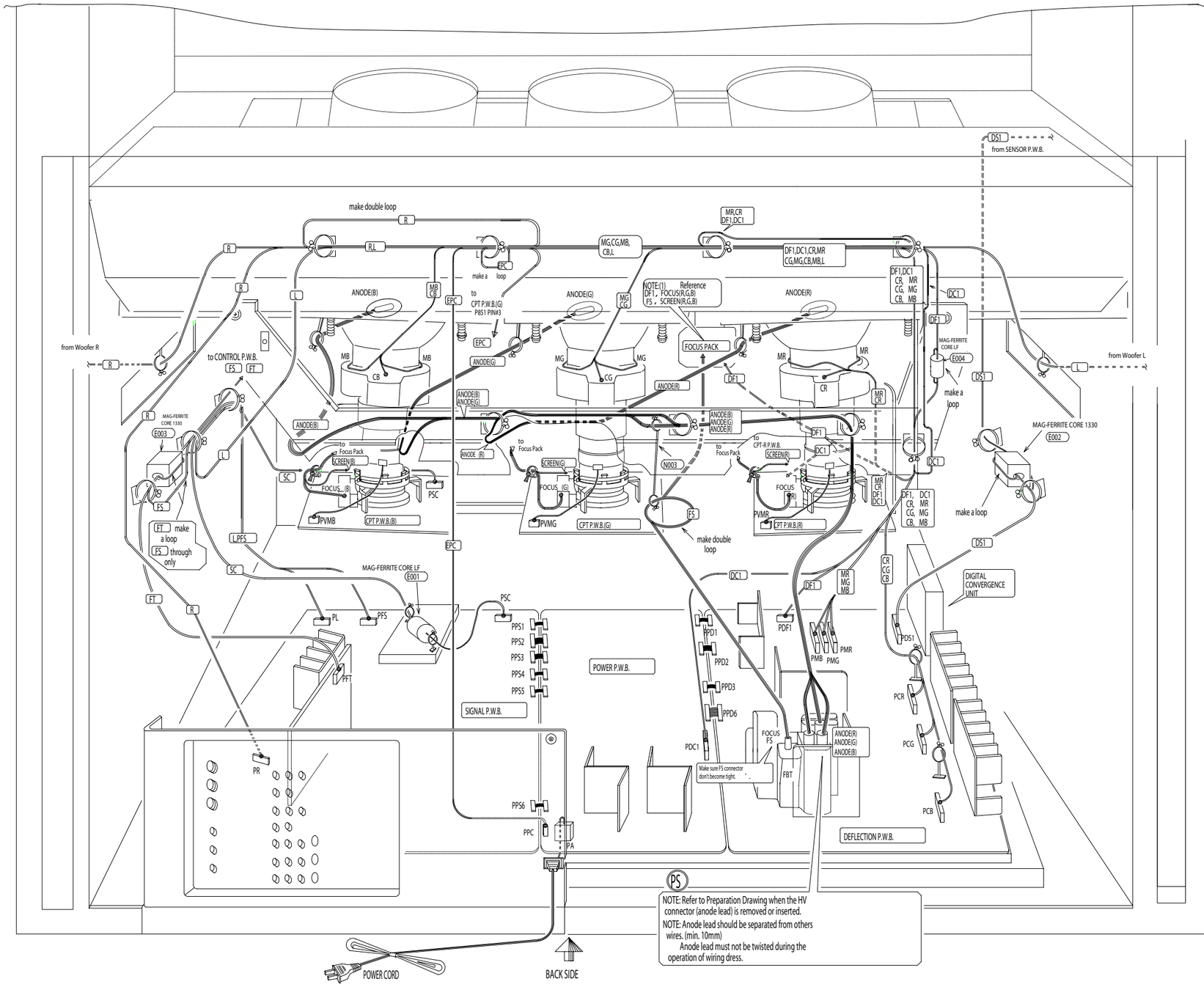
3) WIRE STRIP SPECIFICATION



4) SENSOR INSERT DIRECTION TO HOLDER

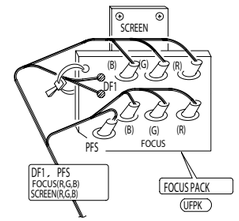


DP24 FINAL WIRING DRAWING



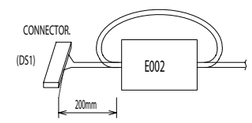
NOTE:(1)

Refer to the figure below about the assembly if FOCUS PACK leads.

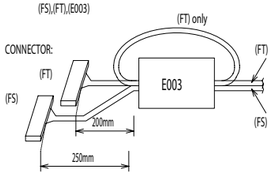


PREPARATION JOB.

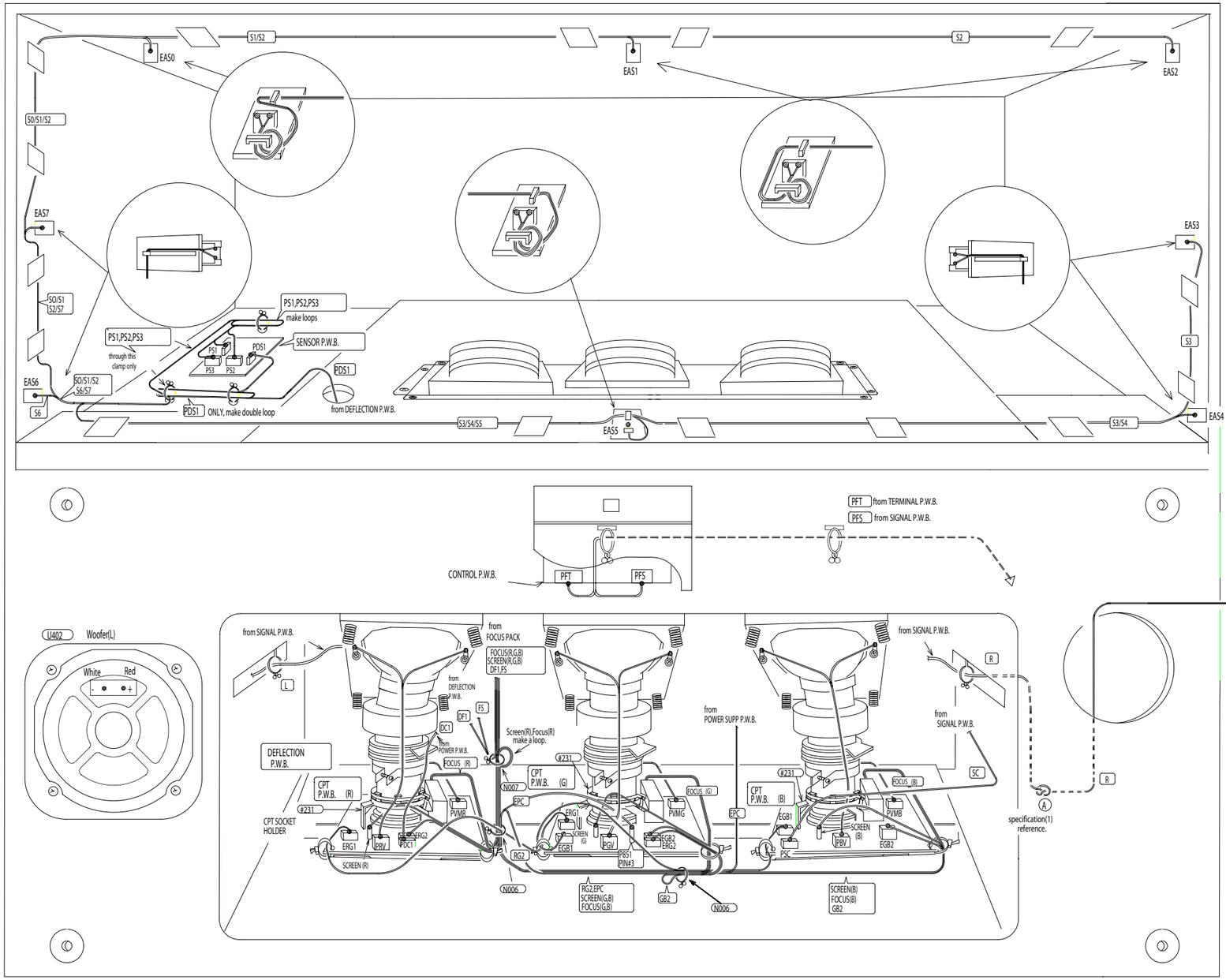
(DS1),(E002)



(FS),(FT),(E003)



DP24 FINAL WIRING DRAWING



DP24 FINAL WIRING DRAWING

CAUTIONS WHEN CONNECTING/DIS CONNECTING THE HV CONNECTOR

During Removal

1. Roll out silicon cover from FBT's contact area slowly.
2. While turning the connector about 90 degrees following the arrow (0 position). push the connector slightly towards the case. (Fig.A)

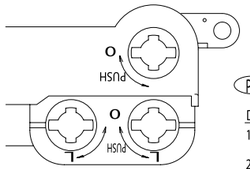


Fig. A

3. Remove the connector slowly by pulling it away from the case.

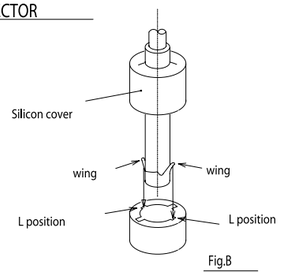


Fig.B

PS process

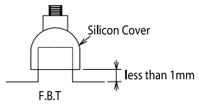
During Insertion

1. Please refer to direction for insertion as shown in Fig.B (L position) Insert connector till "CLICK" sound is heard.
2. Make sure the connector is pressed right in, so that it has a good contact with the spring.

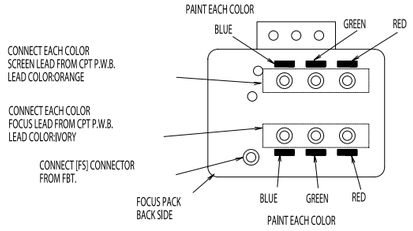
3. Confirm the contact by pulling the connector slightly. (Don't pull hard because it may damage the connector.)
4. Cover the high voltage output by carefully pushing silicon cover on to it. (Don't turn the connector.)

(REMARK)

1. Make sure the silicon cover is covered the high voltage output.

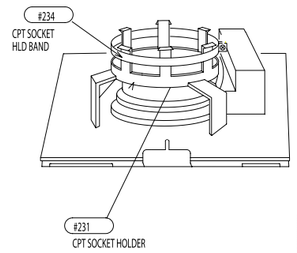


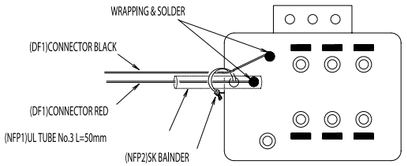
(UFPK) FOCUS PACK ASY.



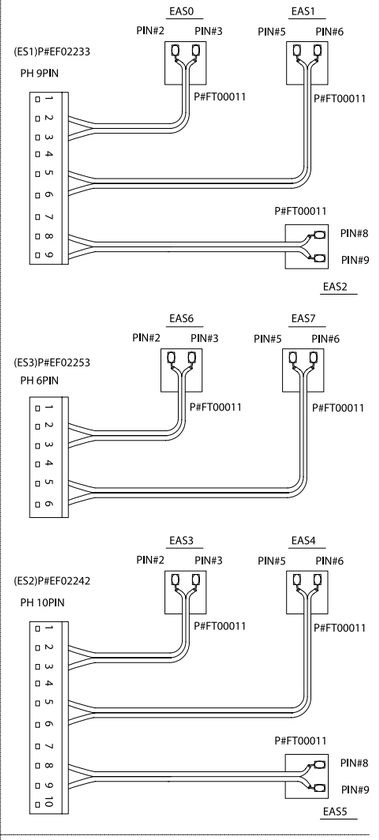
NOTE:(2) CPT SOCKET HOLDER ASSEMBLY.(R,G,B)

CPT SOCKET HOLDER ASSEMBLY SHOULD BE FOLLOWED BELOW DIAG.





CONNECTOR AND SENSOR ASY.



AUTO SET UP SENSOR(ESEO~ESE7)ASY.

1. CAUSES OF THE DAMAGE ON CHARACTERISTICS

Mainly 2 possibilities can be considered as major causes of failure in charactenstics of amorphous silicon solar cell.
One possibility is mechanical stress against thin film and the another is electrostatic damage on thin film.

Damage of thin film caused by mechanical stress is the phenomenon like as following example. Certain sharp edged tool makes a scratch at the place where resin is coated on the cell backside. Because of this scratch, created in the thin film, then affect open circuit voltage(Voc) of cell in the rnd. Please refer to the page X/Y in which possible mechanical damage to the thin film is described by illustration.

On the other hand, electrostatic damage to the thin film is the phenomenon that static electricity generated by some friction between trays made of inconductive material affects of cell and cause the decrease in open circuit voltage.

2. CAUTION IN HANDLING

There is a possibility that the resin on cell backside can be scratched by certain sharp edged tool. Please pay necessary attention on this point during handling. Also, in order to prevent electrostatic damage to the thin film caused by friction of trays made of inconductive material please make sure to use to only kyocera's trays made of conductive material until start assembling amorphous silicon solar cell.

Please make sure using surgical finger caps or tweezers while handling cells. Do not touch the cells with naked fingers!

3. DROPPED CELL

When a cell is dropped to somewhere, please check open circuit voltage by using voltage tester under FL200Lux and check whether Voc is over 0.5V or not. If Voc is less than 0.5V, please do not use such cell as there is a high possibility that the thin film is damaged at the time of drop.

a pin-hole can be

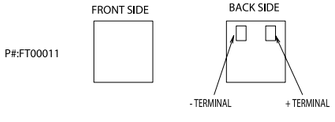
4. WIRING METHOD FOR SOLDERING TYPE TERMINALS

A. TOOLS
1) Soldering iron : Small tip type(EX.11.5W pen type)
2) Transformer : As long as voltage is adjustable in the range of 70 to 100V. it would be sufficient.
If there is a voltage adjustable fuction in the soldering iron. transformer is unnecessary.
3) Wire type solder:Less flux type solder is neceesary.

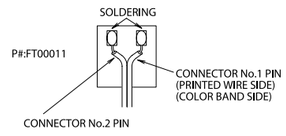
B. WIRING
1) Set the voltage of trasformer in the range of 70 to 100V and wait 10 minutes. After 10 minutes from this setting, start solderning work.
(Temperture of soldering iron tip should be 230∞C. Find out appropriate voltage in the range of 70 to 100V which can realize maximum productivity in soldering work.)
2) Put the exposed part of lead wire onto soldering foundation and connect lead wire with the terminal by melting soldering foundation with soldering iron.
(Soldering duration should be within 2 seconds.)
3) When lead wire can not be soldered well, apply soldering iron tip again for 1 second, then repeat this work several times until lead wire is well connected with the terminal. Do not apply soldering longer than 2 seconds.
4) Clean up stain and solder from the soldering iron tip every 3 to 5 times of soldering work.

5. ASSEMBLY OF SILICON SENSOR

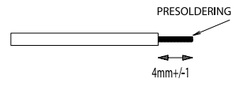
1) SENSOR POLARITY



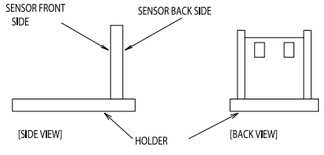
2) SOLDERING SENSOR & WIRE



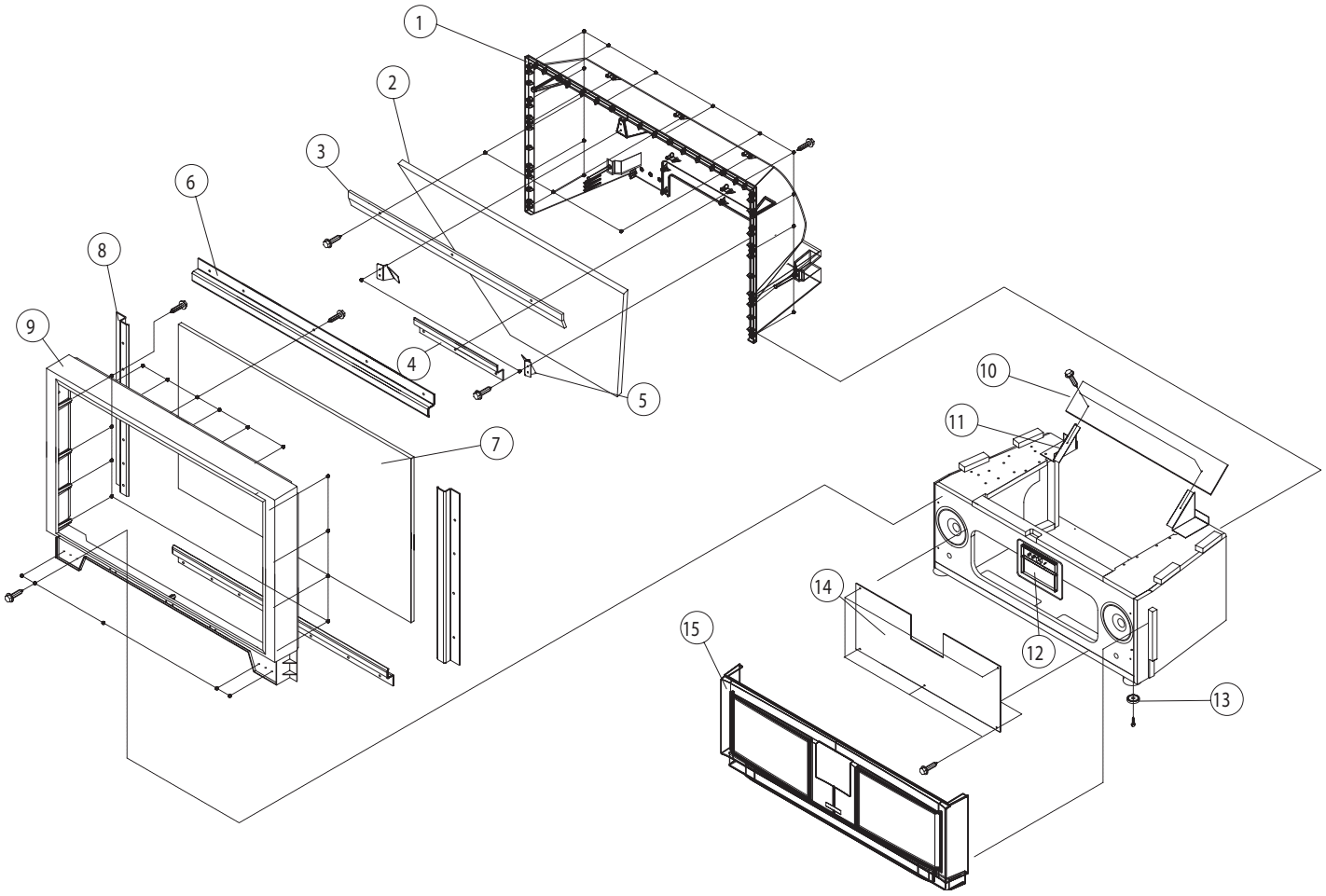
3) WIRE STRIP SPECIFICATION



4) SENSOR INSERT DIRECTION TO HOLDER

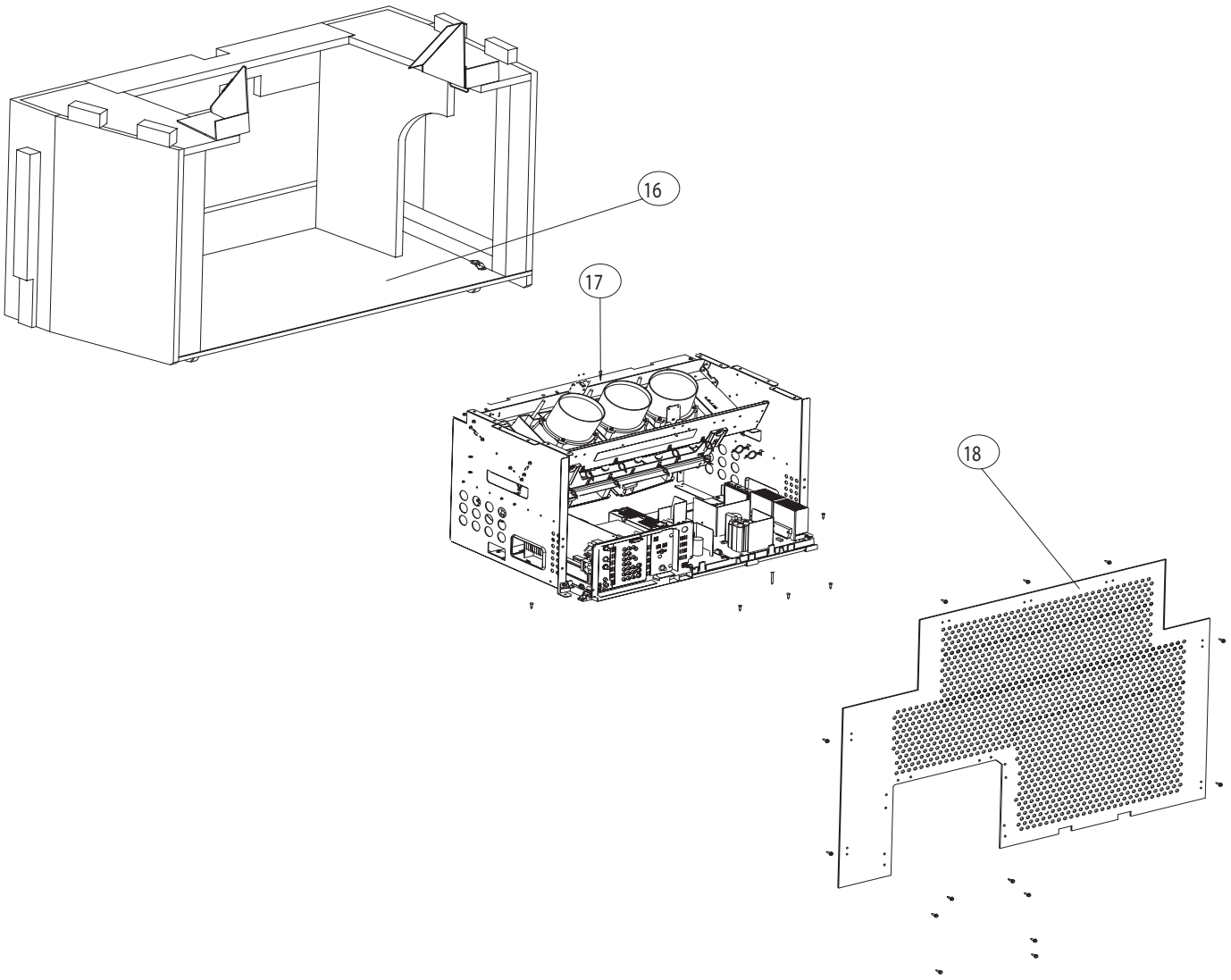


EXPLODED VIEW
43FWX 1



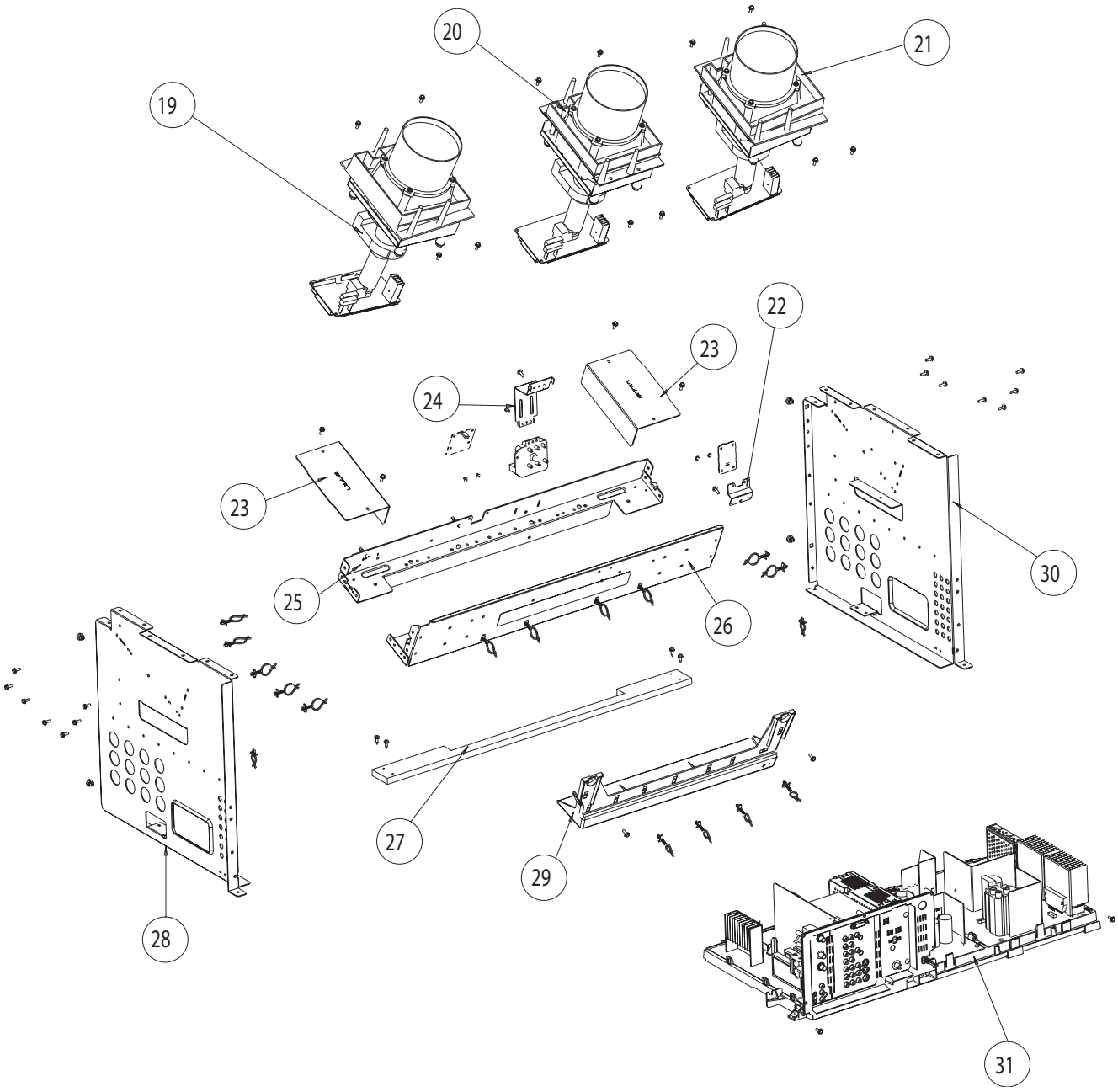
NOTES: Some parts may appear different than those shown in the exploded view. When ordering, refer to the replacement parts list for the correct part number. The circled numbers correspond to the parts list shown on page 90.

EXPLODED VIEW
43FWX 2



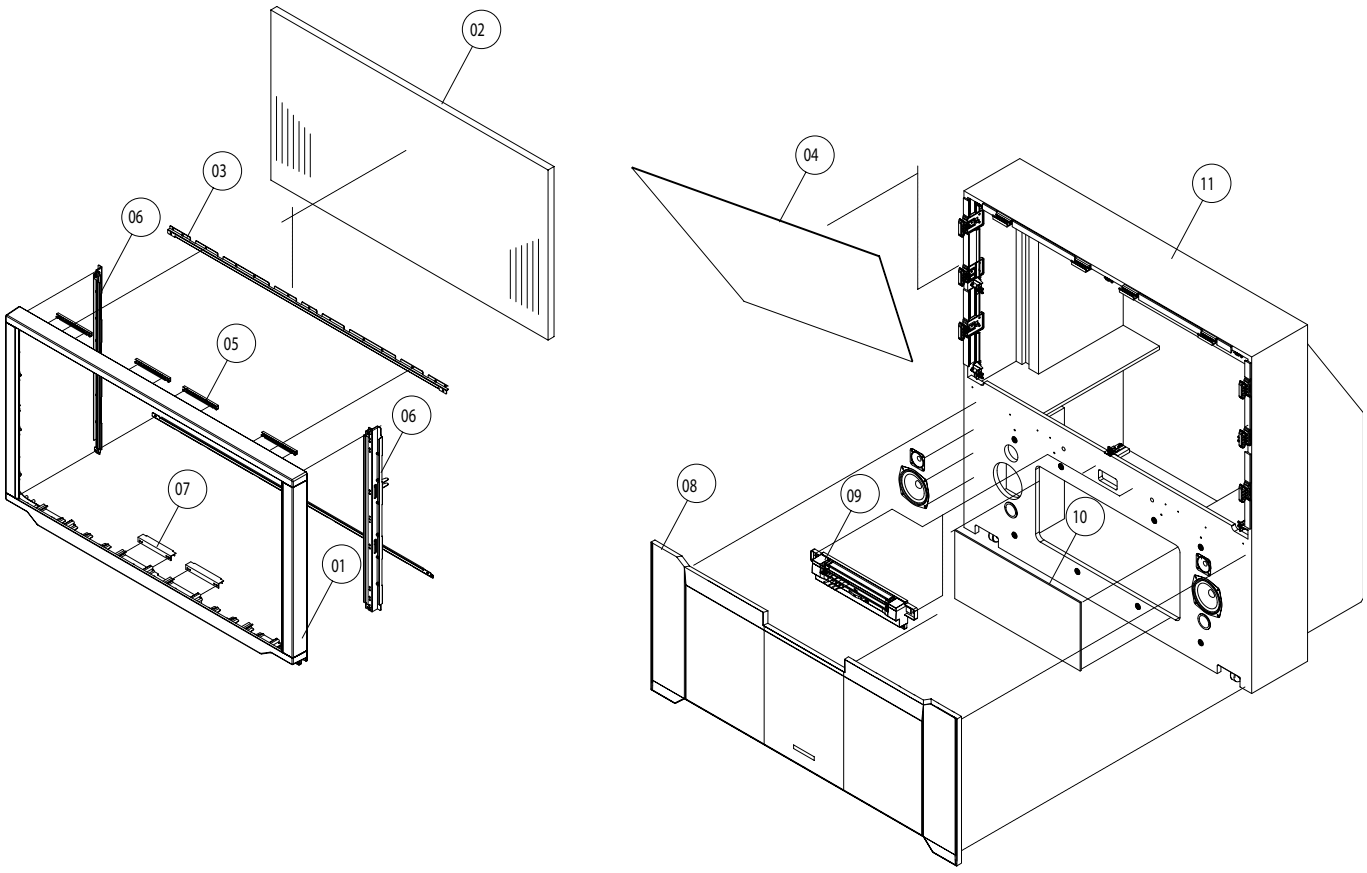
NOTES: Some parts may appear different than those shown in the exploded view. When ordering, refer to the replacement parts list for the correct part number. The circled numbers correspond to the parts list shown on page 90.

EXPLODED VIEW
43FWX 3



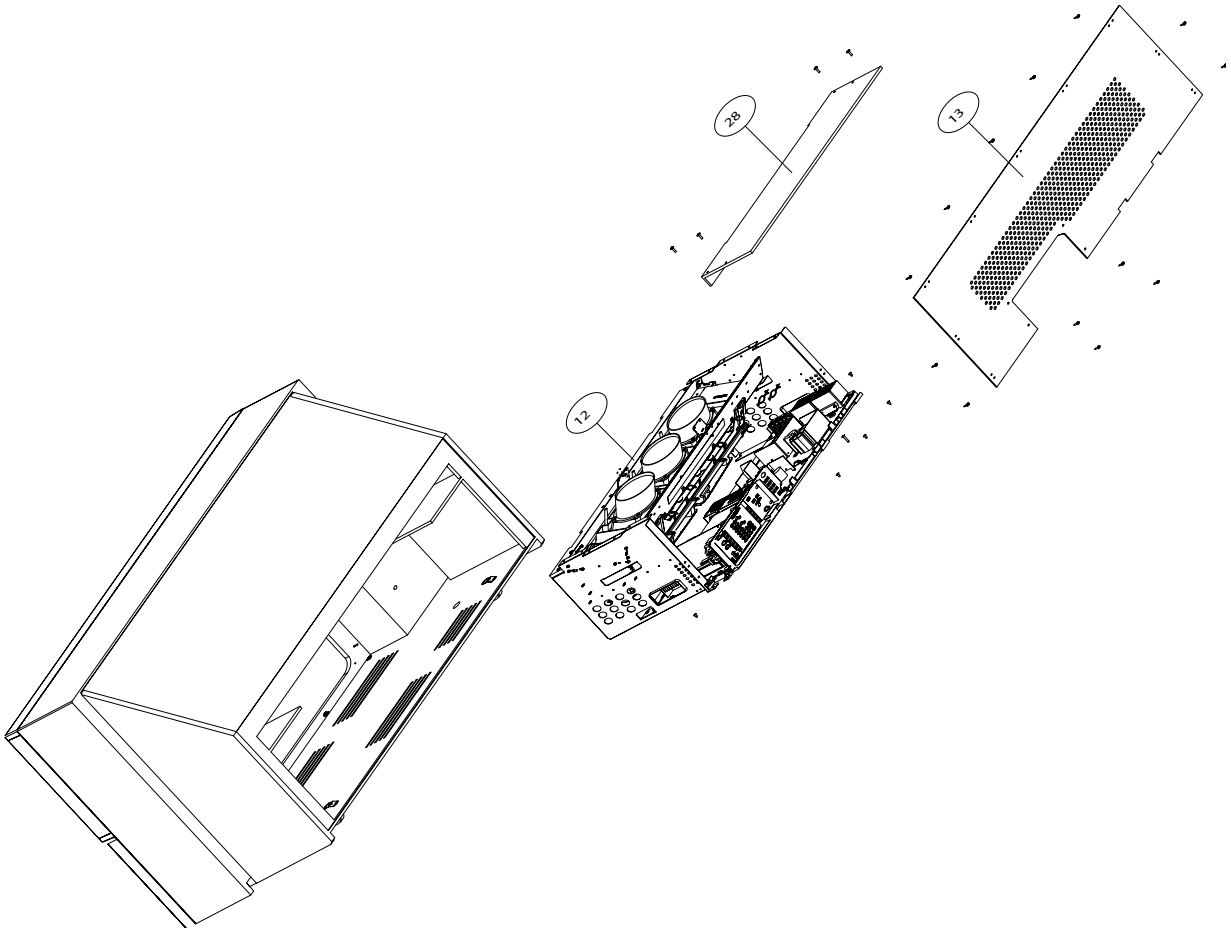
NOTES: Some parts may appear different than those shown in the exploded view. When ordering, refer to the replacement parts list for the correct part number. The circled numbers correspond to the parts list shown on page 90.

EXPLODED VIEW
51/57UWX/51/57GWX 1



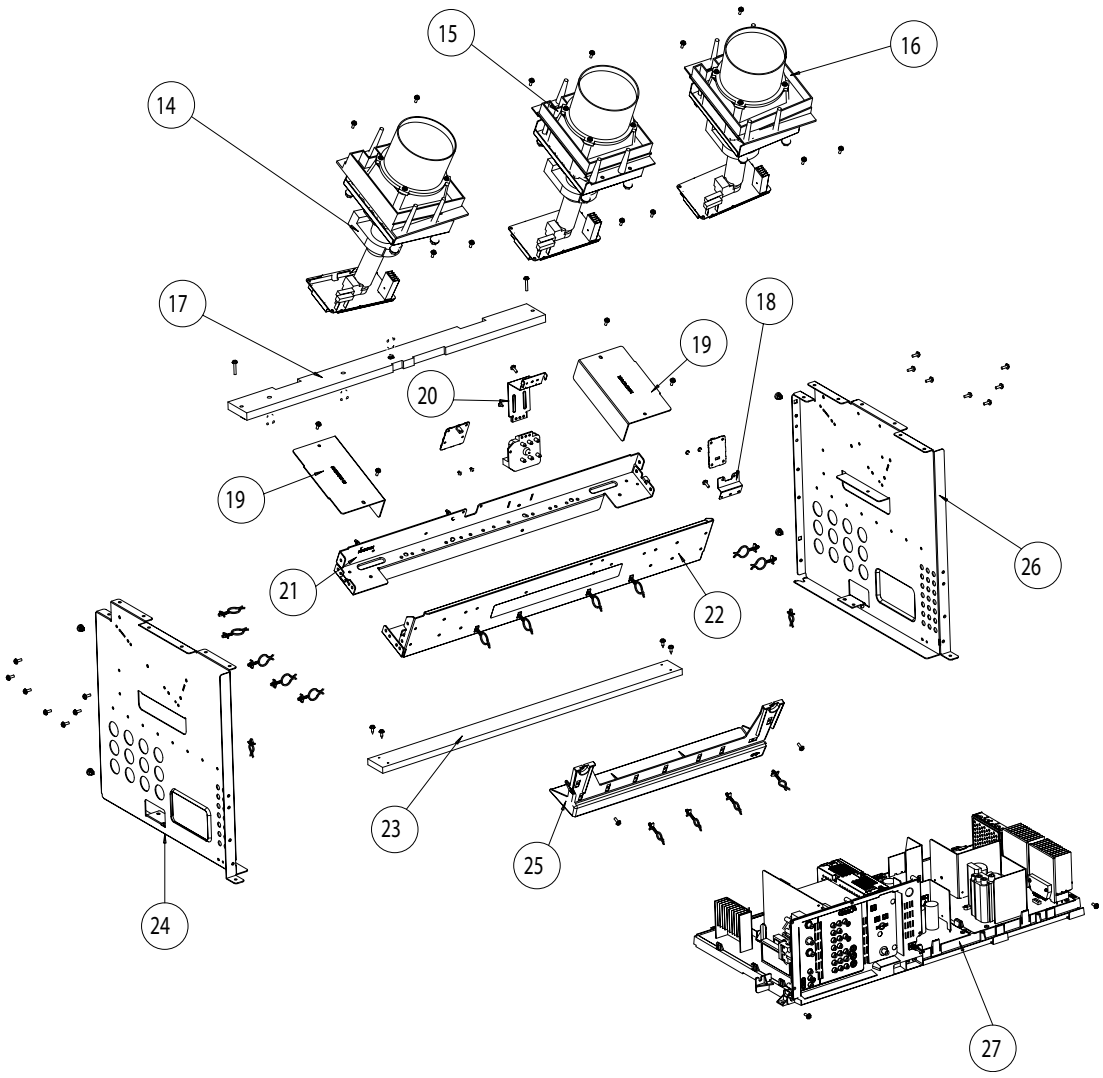
NOTES: Some parts may appear different than those shown in the exploded view. When ordering, refer to the replacement parts list for the correct part number. The circled numbers correspond to the parts list shown on pages 92, 93 and 94.

EXPLODED VIEW
51/57UWX/51/57GWX 2



NOTES: Some parts may appear different than those shown in the exploded view. When ordering, refer to the replacement parts list for the correct part number. The circled numbers correspond to the parts list shown on pages 92, 93 and 94.

EXPLODED VIEW
51/57UWX/51/57GWX 3



NOTES: Some parts may appear different than those shown in the exploded view. When ordering, refer to the replacement parts list for the correct part number. The circled numbers correspond to the parts list shown on pages 92, 93 and 94.

43FWX EXPLODED VIEW PARTS LIST

Model	43FWX20B		
No	Part No	Description	Qty
1	QD21383	43" WIDE BACK COVER	1
2	KS02029	'02 43" WIDE MIRROR GLASS	1
3	NA53251	43W UPPER MIRROR HOLDER	1
4	NA53261	43W LOWER MIRROR HOLDER	1
5	NA52043	43 CENTRAL METAL MIRROR	1
6	NJ05503	43" SCREEN AND WIRE RETAINER (H 16X9)	2
7	KR02541	DP2X SCREEN ASSY 43W	1
8	NJ05504	43" SCREEN AND WIRE RETAINER (V 16X9)	2
9	QD21421	43" WIDE FRAME A PS UL94HB	1
10	33010465	BARRIER BOARD 43FWX	1
11	NA58801/2	COVER FIX METAL R/L	1
12	UE20003	DP24 CONTROL PANEL ASSY	1
	PH30852	CONTROL PANEL ASSY (43UWX20B)	1
	PH09751	CONTROL DOOR 43"	1
13	QJ00673	FOOT LC52-SV1	4
14	55020084	FRONT BOARD 43FWX	1
15	PH30662	SPEAKER GRILLE ASSY	1
16	QD34371	43UWX20B CABINET ASSY	1
17	UE20421	DP24 CORE BLOCK ASSY	1
18	H512308	LOWER REAR BOARD	1
19	UE20311	CPD-LXS LC BLOCK ASSY (RED)	1
20	UE20312	CPD-LXS LC BLOCK ASSY (GREEN)	1
21	UE20313	CPD-LXS LC BLOCK ASSY (BLUE)	1
22	NA57181	IR PWB FIX MTL DP2X	1
23	NA57573	LC METAL 2002-43 SIDE	2
24	NA57471	DP24 FOCUS FIX MTL	1
25	NA57221	LC METAL 2002-43 FRONT	1
26	NA56991	LC METAL 2002-25 REAR	1
27	NM00942	CHASSIS SUPPORT 2002-43	1
28	NA57231	SIDE METAL 2002-43 R	1
29	NJ06581	DRIPPING HOLDER DP2X	1
30	NA57232	SIDE METAL 2002-43 L	1
31	UE09963	DP24 CHASSIS ASY	1

51UWX EXPLODED VIEW PARTS LIST

Model		51UWX20B	
No	Part No	Description	Qty
01	QD34242	SCREEN FRAME 51FWX20B	1
02	KR02542	51UWX SCREEN ASSY	1
03	NA56291	SCREEN TOP METAL 51	2
04	KS04087	'02 51W MIRROR GLASS	1
05	NA56321	SCREEN TOP SUPP.MTL	4
06	NA56311	SCREEN SIDE METAL 51	2
07	NA56302	SCREEN LOW METAL 51UW	2
08	PH31761	51FWX SP GRILLE ASSY	1
09	UE20001	DP23 CONTROL PANEL ASSY	1
	PH31521	CONTROL PANEL 2002 51" & 57"	1
	PH31533	CONTROL DOOR 51" & 57"	1
10	55010267	FRONT BOARD 2002 UWX	1
11	QD34361	51FWX20B CABINET ASSY	1
12	UE20431	51UWX CORE BLOCK ASSY	1
13	H512307	LOWER REAR BOARD	1
14	UE20791	SCB-LXL LC BLOCK ASSY (RED)	1
15	UE20792	SCB-LXL LC BLOCK ASSY (GREEN)	1
16	UE20793	SCB-LXL LC BLOCK ASSY (BLUE)	1
17	31210039	FRONT COVER	1
18	NA57181	IR PWB FIX MTL DP2X	1
19	NA57571	LC METAL 2002-51 SIDE	2
20	NA57191	DP2X FOCUS FIX MTL	1
21	NA56981	LC METAL 2002-25 FRONT	1
22	NA56991	LC METAL 2002-25 REAR	1
23	NM00941	CHASSIS SUPPORT 2002	1
24	NA56971	SIDE METAL 2002-25 R	1
25	NJ06581	DRIPPING HOLDER DP2X	1
26	NA56972	SIDE METAL 2002-25 L	1
27	UE09961	DP23 CHASSIS ASY	1
28	33020091	BARRIER BOARD ASSY	1

51GWX EXPLODED VIEW PARTS LIST

Model		51GWX20B	
No	Part No	Description	Qty
01	QD34241	SCREN FRAME 51SWX20B	1
02	KR02543	51GWX SCREEN ASSY	1
03	NA56291	SCREEN TOP METAL 51	2
04	KS04087	'02 51W MIRROR GLASS	1
05	NA56321	SCREEN TOP SUPP.MTL	4
06	NA56311	SCREEN SIDE METAL 51	2
07	NA56332	SCREEN LOW SUPPORT METAL	2
08	PH31771	51GWX SP GRILLE ASSY	1
09	UE20002	DP23G CONTROL PANEL ASSY	1
	PH31521	CONTROL PANEL 2002 51" & 57"	1
	PH31533	CONTROL DOOR 51" & 57"	1
10	55010267	FRONT BOARD 2002	1
11	QD34362	51GWX22B CABINET ASSY	1
12	UE20432	51GWX CORE BLOCK ASSY	1
13	H512307	LOWER REAR BOARD	1
14	UE20791	SCB-LXL LC BLOCK ASSY (RED)	1
15	UE20792	SCB-LXL LC BLOCK ASSY (GREEN)	1
16	UE20793	SCB-LXL LC BLOCK ASSY (BLUE)	1
17	31210039	FRONT COVER	1
18	NA57181	IR PWB FIX MTL DP2X	1
19	NA57571	LC METAL 2002-51 SIDE	2
20	NA57191	DP2X FOCUS FIX MTL	1
21	NA56981	LC METAL 2002-25 FRONT	1
22	NA56991	LC METAL 2002-25 REAR	1
23	NM00941	CHASSIS SUPPORT 2002	1
24	NA56971	SIDE METAL 2002-25 R	1
25	NJ06581	DRIPPING HOLDER DP2X	1
26	NA56972	SIDE METAL 2002-25 L	1
27	UE09962	DP23G CHASSIS ASY	1
28	33020091	BARRIER BOARD ASSY	1

57UWX EXPLODED VIEW PARTS LIST

Model		57UWX20B	
No	Part No	Description	Qty
01	QD34352	SCREEN FRAME 57FWX20B	1
02	KR02544	DP2X SCREEN ASSY 57UWX	1
03	NA56292	SCREEN TOP/LOW METAL 57	2
04	KS04085	'02 57W" MIRROR GLASS	1
05	NA56321	SCREEN TOP SUPP.MTL	4
06	NA56312	SCREEN SIDE METAL 57	2
07	NA56332	SCREEN LOW SUPPORT METAL	2
08	PH31762	SCREEN LOW SUPPORT METAL	2
09	UE20001	DP23 CONTROL PANEL ASSY	1
	PH31521	CONTROL PANEL 2002 51" & 57"	1
	PH31533	CONTROL DOOR 51" & 57"	1
10	55010267	FRONT BOARD	1
11	QD34541	57FWX20B CABINET ASSY	1
12	UE20431	57UWX20B CORE BLOCK ASSY	1
13	H512307	LOWER REAR BOARD	1
14	UE20794	SCC-LXL LC BLOCK ASSY (RED)	1
15	UE20795	SCC-LXL LC BLOCK ASSY (GREEN)	1
16	UE20796	SCC-LXL LC BLOCK ASSY (BLUE)	1
17	31210039	FRONT COVER	1
18	NA57181	IR PWB FIX MTL DP2X	1
19	NA57572	LC METAL 2002-57 SIDE	2
20	NA57191	DP2X FOCUS FIX MTL	1
21	NA56981	LC METAL 2002-25 FRONT	1
22	NA56991	LC METAL 2002-25 REAR	1
23	NM00941	CHASSIS SUPPORT 2002	1
24	NA56971	SIDE METAL 2002-25 R	1
25	NJ06581	DRIPPING HOLDER DP2X	1
26	NA56972	SIDE METAL 2002-25 L	1
27	UE09962	DP23 CHASSIS ASY	1
28	33020091	BARRIER BOARD ASSY	1

57GWX EXPLODED VIEW PARTS LIST

Model		57GWX20B	
No	Part No	Description	Qty
01	QD34353	SCREEN FRAME 57SWX20B	1
02	KR02545	DP2X SCREEN ASSY 57TWX	1
03	NA56292	SCREEN TOP/LOW METAL 57	2
04	KS04085	'02 57W" MIRROR GLASS	1
05	NA56321	SCREEN TOP SUPP.MTL	4
06	NA56312	SCREEN SIDE METAL 57	2
07	NA56332	SCREEN LOW SUPPORT METAL	2
08	PH31772	57GWX SP GRILLE ASSY	1
09	UE20002	DP23G CONTROL PANEL ASSY	1
	PH31521	CONTROL PANEL 2002 51" & 57"	1
	PH31533	CONTROL DOOR 51" & 57"	1
10	55010267	FRONT BOARD 2002	1
11	QD34542	57GWX20B CABINET ASSY	1
12	UE20434	57GWX20B CORE BLOCK ASSY	1
13	H512307	LOWER REAR BOARD	1
14	UE20794	SCC-LXL LC BLOCK ASSY (RED)	1
15	UE20795	SCC-LXL LC BLOCK ASSY (GREEN)	1
16	UE20796	SCC-LXL LC BLOCK ASSY (BLUE)	1
17	31210039	FRONT COVER	1
18	NA57181	IR PWB FIX MTL DP2X	1
19	NA57572	LC METAL 2002-57 SIDE	2
20	NA57191	DP2X FOCUS FIX MTL	1
21	NA56981	LC METAL 2002-25 FRONT	1
22	NA56991	LC METAL 2002-25 REAR	1
23	NM00941	CHASSIS SUPPORT 2002	1
24	NA56971	SIDE METAL 2002-25 R	1
25	NJ06581	DRIPPING HOLDER DP2X	1
26	NA56972	SIDE METAL 2002-25 L	1
27	UE09962	DP23G CHASSIS ASY	1
28	33020091	BARRIER BOARD ASSY 2002	1

QUICK REFERENCE PARTS LIST

NO.	CIRC.#	PART NO.	DESCRIPTION	FUNCTION	PWB asy	SG	DP23	DP23G	DP24
1	I001	CK37372U	M306V3MG-XXXFP	TV u-com (MASK)	Signal	DA	X	X	X
2	I002	CK37051R	BD4729G-TR	RESET IC	Signal	DA	X	X	X
3	I003	CK35894R	CAT24WC32J1	E2PROM	Signal	DB	X	X	X
4	I005	CK31992R	BU4053BCF-E2	CCD SELECTOR	Signal	DB	X	X	X
5	I007	CK09541R	HD74HCT245T	BUFFER	Signal	DA	X	X	X
6	I401	CP08191U	TA1360N	RGB PROCESSOR	Signal		X	X	X
7	I402	CK31992R	BU4053BCF-E2	VIDEO SELECTOR	Signal	DA	X	X	X
8	IA01	CK36491R	NJW1137M-TE1	AUDIO PROCESSOR w/ BBE	Signal	DA	X	X	X
9	IA02	CK35451R	NJM2198M	SRS 3D AUDIO PROCESSOR	Signal	DB	X	X	X
10	IA03	2004751	ICL-TA8200AH	AUDIO AMPLIFIER 12W	Signal		X	X	X
11	IP51	CK37191R	SI-3018LSA-TL	DM +1.8V REGULATOR	Signal	DA	X	X	X
12	IP52	CP08121R	SI-3002KWF	SW +3.3/2.5V REGULATOR	Signal		X	X	X
13	IP53	CP06081	SI-3050N	SW +5V REGULATOR	Signal		X	X	X
14	IP81	CK37184R	SI-3033LUS	SBY +3.3V REGULATOR	Signal	DA	X	X	X
15	IV01	CK07631R	TC90A45F	DIG. 2 LINE Y/C SEPARATOR	Terminal	DA	X	X	X
16	IW01	CK36951U	UPD64083GF-3BA	DIG. 3D Y/C SEPARATOR	Terminal	DA	X	X	X
17	IW02	CK06097R	PST9127NR	RESET FOR IW01	Terminal	DA	X	X	X
18	IX01	CK30941U	CXA2069Q	A/V SELECTOR	Terminal	DB	X	X	X
19	IX02	CK34811U	MM1519XQ	YPBPR SELECTOR	Terminal	DA	X	X	X
20	IZ01	CK36961R	TA1340F	SUB Y/C YPBPR SELECTOR	Terminal	DA	X	X	X
21	IZ02	CK36961R	TA1340F	MAIN Y/C YPBPR SELECTOR	Terminal	DA	X	X	X
22	I601	CP06891	TDA8174A	VERTICAL DEF OUT	Deflection		X	X	X
23	I701	2362606	NJM4558D	GAIN AMP (SIDE PIN CORR.)	Deflection		X	X	X
24	IH01	CP07091	M62501P	HV CONTROLLER	Deflection		X	X	X
25	IK01	CP02422	KIA7805PI	+5V REGULATOR	Deflection		X	X	X
26	IK02	CP05011R	PST994D-T	DCU MUTE (RESET)	Deflection	C	X	X	X
27	IK04	CZ00431	STK392-110	CONV. AMPLIFIER	Deflection		X	X	X
28	IK05	CZ00431	STK392-110	CONV. AMPLIFIER	Deflection		X	X	X
29	I901	CP08101U	STR-X6456(LF1901)	SWITCHING REGULTAOR	Power		X	X	X
30	I902	CZ01082	STR-F6628(LF1359)	SWITCHING REGULATOR	Power		X	X	X
31	I903	CP07851	TLP421	OPT. ISOLATOR	Power		X	X	X
32	I904	CP07851	TLP421	OPT. ISOLATOR	Power		X	X	X
33	I905	CP07851	TLP421	OPT. ISOLATOR	Power		X	X	X
34	I906	CP07851	TLP421	OPT. ISOLATOR	Power		X	X	X
35	I907	2381343	SE115N	+B REGULATOR	Power		X	X	X
36	I908	CP05141	PQ6RD083	+6.3V REGULATOR	Power		X	X	X
37	I909	CP06081	SI-3050N	+5V REGULATOR	Power		X	X	X
38	I910	CP05163F	SI-3090F	+9V REGULATOR	Power		X	X	X
39	I911	CP06543F	SI-3090C	+9V REGULATOR	Power		X	X	X
40	EANT	HP00771	UNX ANT SW	ANT. SWITCH BOX	Main Chass		X	X	X
41	HM01	CZ00833	GP1U281R	IR RECEIVER	Control				X
42	HM02	CZ00641	GP1U281Q	IR RECEIVER	IR		X	X	
43	HM03	CZ00641	GP1U281Q	IR RECEIVER	IR		X	X	
44	U301	HC00492	F-E-V0-A30FTR	MAIN TUNER	Signal		X	X	
45	U301	HC00522	F-E-TMYH4X300A	MAIN TUNER	Signal				X
46	U302	HC00502	F-E-V0-A68FTR	SUB TUNER	Signal		X	X	
47	U302	HC00532	F-E-TMYH2X300A	SUB TUNER	Signal				X
48	U303	CS00621	HC5621-ASY	FLEX CONTROLLER UNIT FC4	Signal		X	X	
49	U303	CS00641	HC5621T ASY	FLEX CONTROLLER UNIT FC4	Signal				X
50	UKDG	CS00591	HC2171-ASY	DIG. CONV. UNIT	Deflection				X
51	UKDG	CS00651	(HC2171)	DIG. CONV. UNIT	Deflection		X	X	

CH 2

REPLACEMENT PARTS LIST

PRODUCT SERVICE NOTE: Components marked with a ⚠ have special characteristics important to safety. Before replacing any of these components, read carefully, the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

ABBREVIATIONS

Capacitors:
- AL: Aluminum Electrolytic
- CD: Ceramic Disc
- EL: Electrolitic
- PF: Polyester Film
- PP: Polypropylene
- PL: Plastic
- TA: Tantalum
- PR: Paper
- TM: Trimmer
- MC: Mylar

Resistors:
- CF: Carbon Film
- CC: Carbon Composition
- MF: Metal Oxide
- VR: Variable Resistor
- WW: Wire Wound
- FR: Fuse Resistor
- MG: Metal Grazed

Semiconductors:
- TR: Transistor
- DI: Diode
- ZD: Zener Diode
- VA: Varistor
- TH: Termistor
- IC: Integrated Circuit

SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24	SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
		CAPACITORS				C070	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
C001	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	C077	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0
C002	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C078	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0
C003	0893208R	CAP 1608CHIP 1000PFKB 50V TAPE	0	0	0	C080	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0
C004	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0	C081	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
C005	0893131R	CAP 1608CHIP 220PFJCH 50V TAPE	0	0	0	C301	0800352R	CAP.-ELECTRO.470UF 10V	0	0	0
C008	0893104R	CAP 1608CHIP 2PFCCK 50V TAPE	0	0	0	C302	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0
C009	0893182R	CERAMIC cap.(15000PF 16V)	0	0	0	C305	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0
C013	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	C307	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0
C014	0893208R	CAP 1608CHIP 1000PFKB 50V TAPE	0	0	0	C308	0800352R	CAP.-ELECTRO.470UF 10V	0	0	0
C015	0893131R	CAP 1608CHIP 220PFJCH 50V TAPE	0	0	0	C309	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0
C016	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0	C310	0800352R	CAP.-ELECTRO.470UF 10V	0	0	0
C017	0893209R	CAP 1608CHIP 1200PFKB 50V TAPE	0	0	0	C311	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0
C018	0893209R	CAP 1608CHIP 1200PFKB 50V TAPE	0	0	0	C314	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0
C019	0893213R	CAP1608CHIP 2200PFKB 50V TAPE	0	0	0	C316	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0
C020	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	C317	0800352R	CAP.-ELECTRO.470UF 10V	0	0	0
C021	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C318	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0
C022	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	C319	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
C024	0800303R	CAP.-ELECTRO. 22UF-M 50V	0	0	0	C320	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
C025	0893208R	CAP 1608CHIP 1000PFKB 50V TAPE	0	0	0	C321	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
C026	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0	C322	0800352R	CAP.-ELECTRO.470UF 10V	0	0	0
C027	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0	C323	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
C028	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C324	0800352R	CAP.-ELECTRO.470UF 10V	0	0	0
C031	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C325	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
C032	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	C326	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
C033	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	C327	0893119R	CAP 1608CHIP 33PFJCH 50V TAPE	0	0	0
C039	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	C335	0893205R	CAP 1608CHIP 560PFKB 50V TAPE	0	0	0
C040	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C336	0893205R	CAP 1608CHIP 560PFKB 50V TAPE	0	0	0
C041	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	C401	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
C042	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C402	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
C043	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	C403	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
C044	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0	C404	0800277R	CAP.-ELECTORO. 0.47UF-M 50V	0	0	0
C045	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	C405	0800282R	CAP.-ELECTORO. 2.2UF-M(SMG) 50V	0	0	0
C046	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	C406	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0
C047	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C407	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0
C048	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	C408	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0
C049	0893205R	CAP 1608CHIP 560PFKB 50V TAPE	0	0	0	C409	0800277R	CAP.-ELECTORO. 0.47UF-M 50V	0	0	0
C051	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0	C410	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0
C052	0893205R	CAP 1608CHIP 560PFKB 50V TAPE	0	0	0	C411	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0
C054	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0	C412	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0
C055	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C413	0800282R	CAP.-ELECTORO. 2.2UF-M(SMG) 50V	0	0	0
C056	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	C414	0800361N	CAP.-ELECTRO 1000UF 16V	0	0	0
C062	0893205R	CAP 1608CHIP 560PFKB 50V TAPE	0	0	0	C415	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
C063	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	C416	0800361N	CAP.-ELECTRO 1000UF 16V	0	0	0
C064	0893128R	CAP 1608CHIP 150PFJCH 50V TAPE	0	0	0	C417	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
C065	0893126R	CAP 1608CHIP 100PFJCH 50V TAPE	0	0	0	C418	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0
C066	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	C419	0893219R	CAP 1608CHIP 6800PFKB 50V TAPE	0	0	0
C067	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C420	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0
C068	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	C421	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0
C069	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C422	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0

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SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24	SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
C423	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	C805	AL00031R	CAP.-ELECTORO. 33UF-M 250V	0	0	0
C424	0284634R	CAP.-ELECTRO 4.7UF-SME(BP) 50V	0	0	0	C807	0800352R	CAP.-ELECTRO.470UF 10V	0	0	0
C425	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	C812	AJ00559F	CC-222K202YBDF10	0	0	0
C426	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	C813	AL00025R	CAP.ALMI 2.2UF250V	0	0	0
C427	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C814	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
C428	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	C816	0890087R	CAP.-CERAMIC 1000PF-K 50V	0	0	0
C429	0893222R	CAP 1608CHIP10000PFKB 50V TAPE	0	0	0	C817	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
C430	0893222R	CAP 1608CHIP10000PFKB 50V TAPE	0	0	0	C851	0890078R	CAP.-CERAMIC 220PF-K 50V	0	0	0
C431	0893222R	CAP 1608CHIP10000PFKB 50V TAPE	0	0	0	C852	0880044R	CAP.-POLYESTER 0.01UF-KEB 50V	0	0	0
C432	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C853	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0
C433	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	C854	AL00031R	CAP.-ELECTORO. 33UF-M 250V	0	0	0
C434	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	C857	0800352R	CAP.-ELECTRO.470UF 10V	0	0	0
C435	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	C862	AJ00559F	CC-222K202YBDF10	0	0	0
C436	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	C863	AL00025R	CAP.ALMI 2.2UF250V	0	0	0
C437	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	C866	0890087R	CAP.-CERAMIC 1000PF-K 50V	0	0	0
C438	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	C871	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
C439	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	C872	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
C441	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	C8A1	0890078R	CAP.-CERAMIC 220PF-K 50V	0	0	0
C443	0893126R	CAP 1608CHIP 100PFJCH 50V TAPE	0	0	0	C8A2	0880044R	CAP.-POLYESTER 0.01UF-KEB 50V	0	0	0
C444	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	C8A3	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0
C445	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C8A4	AL00031R	CAP.-ELECTORO. 33UF-M 250V	0	0	0
C448	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0	C8A7	0800352R	CAP.-ELECTRO.470UF 10V	0	0	0
C450	0893222R	CAP 1608CHIP10000PFKB 50V TAPE	0	0	0	C8C0	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0
C453	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C8C1	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0
C454	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C8C2	AJ00559F	CC-222K202YBDF10	0	0	0
C457	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C8C3	AL00025R	CAP.ALMI 2.2UF250V	0	0	0
C458	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C8C4	0890087R	CAP.-CERAMIC 1000PF-K 50V	0	0	0
C462	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C8C5	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
C463	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	⚠ C901	AN01445S	ACROSS CAPA 0.22UF 250V RE224	0	0	0
C464	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	⚠ C902	AN01301F	METALLIZ POLYESTER FILM cap.(0.1UF250V)	0	0	0
C465	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	⚠ C904	AJ00182F	CAP. CERAMIC CD85-E2GA102MYNS	0	0	0
C466	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	⚠ C905	AJ00182F	CAP. CERAMIC CD85-E2GA102MYNS	0	0	0
C467	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	C906	AJ00195F	CAP. CERAMIC CK45-F2EA472ZYNN	0	0	0
C468	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	⚠ C907	AJ00195F	CAP. CERAMIC CK45-F2EA472ZYNN	0	0	0
C469	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	⚠ C908	AJ00195F	CAP. CERAMIC CK45-F2EA472ZYNN	0	0	0
C471	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	⚠ C909	AJ00195F	CAP. CERAMIC CK45-F2EA472ZYNN	0	0	0
C473	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	C910	AL02313S	CE-221M201EWS KMX	0	0	0
C474	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	C911	0800303R	CAP.-ELECTRO. 22UF-M 50V	0	0	0
C475	0893113R	CAP 1608CHIP 10PFCCH 50V TAPE	0	0	0	C913	0299610F	CAP.-POLYPRO.FILM 0.001UF 630V	0	0	0
C477	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	C914	0890083R	CAP.-CERAMIC 470PF-K 50V	0	0	0
C478	0800321R	CAP.-ELECTRO. 47UF-M 50V	0	0	0	C915	0880051R	CAP.-POLYESTER 0.033UF-KEB 50V	0	0	0
C479	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0	C916	0890076R	CAP.CERAMIC 150PF-K 50V	0	0	0
C602	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0	C917	0880198R	CAP.-PLOY. 0.22UF-J 50V	0	0	0
C603	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0	C918	0800318R	CAP.-ELECTRO. 47UF-M 25V	0	0	0
C604	0800347N	CAP.-ELECTRO. 330UF-M(SMG) 50V	0	0	0	C919	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0
C605	0800329R	CAP.-ELECTRO. 100UF-M(SMG) 50V	0	0	0	C920	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0
C606	AL01162R	CAP.ELECTRO 10UF-M(YXF)50V	0	0	0	C921	AL01679	ALUMINIUM ELEC.200V 680UF GU22*45	0	0	0
C607	AL01143S	CAP.ELECTROLYTIC 2200UF-M(YXF)25V	0	0	0	C922	AL01679	ALUMINIUM ELEC.200V 680UF GU22*45	0	0	0
C608	AL01162R	CAP.ELECTRO 10UF-M(YXF)50V	0	0	0	C923	0800337R	CAP.-ELECTRO 220UF 35V (SMG TY PE)	0	0	0
C609	0279692R	CAP.-POLYESTER 0.068UF 100V	0	0	0	C924	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0
C610	0800318R	CAP.-ELECTRO. 47UF-M 25V	0	0	0	C925	0299616F	cap.-polyprop. FILM 0.0033UF-J 630V	0	0	0
C611	0890085R	CAP.-CERAMIC 680PF-K 50V	0	0	0	C926	0890085R	CAP.-CERAMIC 680PF-K 50V	0	0	0
C701	0800353R	CAP.-ELECTRO.470UF-M 16V	0	0	0	C927	AL01663	ALUMINIUM ELEC. 160V 330UF	0	0	0
C702	0880203R	CAP.-POLYESTER 0.47UF-J 50V	0	0	0	C928	AL01153S	CAP.ELECTR. 1000UF-M 35V	0	0	0
C707	0244505R	CAP-CERAMIC 0.0022UF-K 500V	0	0	0	C929	AL01153S	CAP.ELECTR. 1000UF-M 35V	0	0	0
C708	0243509R	CAP.-CERAMIC 470PF-K 500V	0	0	0	C930	AL01128R	CAP.ELECTR.470UF-M(YXF)16V	0	0	0
C709	0890081R	CAP.-CERAMIC 330PF 50V	0	0	0	C931	AL01129S	CAP.ELECTROLYTIC 1000UF-M(YXF)16V	0	0	0
⚠ C710	AN01648F	4700PF 1500V METALLIZ polyprop. FILM CAPA	0	0	0	C932	AL02323	CE-101M251EW(KMX)D16	0	0	0
⚠ C711	AN01648F	4700PF 1500V METALLIZ polyprop. FILM CAPA	0	0	0	C933	0244202R	CAP. CERAMIC DE0907R471K2K	0	0	0
C713	AN01176F	cap. 0.39UF 250V METALLIZ polyprop.	0	0	0	C934	0243511R	CAP.-CERAMIC 680PF-K 500V TAPE	0	0	0
C714	AN01176F	cap. 0.39UF 250V METALLIZ polyprop.	0	0	0	C935	0243511R	CAP.-CERAMIC 680PF-K 500V TAPE	0	0	0
C715	0284634R	CAP.-ELECTRO 4.7UF-SME(BP) 50V	0	0	0	C936	0243511R	CAP.-CERAMIC 680PF-K 500V TAPE	0	0	0
C717	AN01631F	1000PF1500VMETALLIZ polyprop. FILM CAPA	0	0	0	C937	0243511R	CAP.-CERAMIC 680PF-K 500V TAPE	0	0	0
C718	0244505R	CAP-CERAMIC 0.0022UF-K 500V	0	0	0	C938	0244202R	CAP. CERAMIC DE0907R471K2K	0	0	0
C719	0244505R	CAP-CERAMIC 0.0022UF-K 500V	0	0	0	C940	0299610F	CAP.-POLYPRO.FILM 0.001UF 630V	0	0	0
C720	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0	C941	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0
C721	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	C942	0880198R	CAP.-PLOY. 0.22UF-J 50V	0	0	0
C722	0890085R	CAP.-CERAMIC 680PF-K 50V	0	0	0	C943	0800303R	CAP.-ELECTRO. 22UF-M 50V	0	0	0
C723	AN01181F	cap. 0.56UF 250V METALLIZ polyprop.	0	0	0	C944	0800319R	CAP.-ELECTRO. 47UF-M 35V	0	0	0
C724	AN01181F	cap. 0.56UF 250V METALLIZ polyprop.	0	0	0	C945	0800319R	CAP.-ELECTRO. 47UF-M 35V	0	0	0
C725	0800347N	CAP.-ELECTRO. 330UF-M(SMG) 50V	0	0	0	C946	0284647R	CAP.-ELECTRO.22UF-SME(BP) 16V	0	0	0
C801	0890078R	CAP.-CERAMIC 220PF-K 50V	0	0	0	C947	0800334R	CAP.-ELECTRO. 220UF 10V	0	0	0
C802	0880044R	CAP.-POLYESTER 0.01UF-KEB 50V	0	0	0	C948	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
C803	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0	C949	0800355N	CAP.ELECTRO. 470UF-M 35V	0	0	0
C804	0299622F	cap.-polyprop. FILM 0.01UF-J 630V	0	0	0	C950	0800355N	CAP.ELECTRO. 470UF-M 35V	0	0	0

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SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24	SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
C951	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0	CA50	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
C952	0800352R	CAP.-ELECTRO.470UF 10V	0	0	0	CA51	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0
C953	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0	CA52	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
C954	AL01852F	3300UF 16V ALUMINIUM ELECTROLYTIC cap.	0	0	0	CA53	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
C955	AL01851R	2200UF 16V ALUMINIUM ELECTROLYTIC cap.	0	0	0	CA54	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
C956	0800338R	CAP.ELECTRO.220UF-M 50V(SMG)	0	0	0	CA55	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0
C957	AL01153S	CAP.ELECTR. 1000UF-M 35V	0	0	0	CA56	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0
C959	0243511R	CAP.-CERAMIC 680PF-K 500V TAPE	0	0	0	CA57	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0
C960	0243511R	CAP.-CERAMIC 680PF-K 500V TAPE	0	0	0	CA59	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0
C961	0243511R	CAP.-CERAMIC 680PF-K 500V TAPE	0	0	0	CA60	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0
C962	0243511R	CAP.-CERAMIC 680PF-K 500V TAPE	0	0	0	CA61	0893208R	CAP 1608CHIP 1000PFKB 50V TAPE	0	0	0
C964	0244105R	CAP.-CERAMIC 2200PF-K 50V TAPE	0	0	0	CA62	0893208R	CAP 1608CHIP 1000PFKB 50V TAPE	0	0	0
C965	0880044R	CAP.-POLYESTER 0.01UF-KEB 50V	0	0	0	CA63	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
C967	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0	CA64	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
C969	0800319R	CAP.-ELECTRO. 47UF-M 35V	0	0	0	CA65	0800318R	CAP.-ELECTRO. 47UF-M 25V	0	0	0
C970	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CA66	0800318R	CAP.-ELECTRO. 47UF-M 25V	0	0	0
C971	0800319R	CAP.-ELECTRO. 47UF-M 35V	0	0	0	CA67	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0
C972	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0	CA68	0284824F	CAP.-ELECTRO. 2200UF 35V	0	0	0
C973	0800366N	CAP.-ELECTORO. 2200UF-10V SMG	0	0	0	CA69	0800328R	CAP. ELECTRO. 100UF-M 35V	0	0	0
C974	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0	CA70	0800328R	CAP. ELECTRO. 100UF-M 35V	0	0	0
C975	0800353R	CAP.-ELECTRO.470UF-M 16V	0	0	0	CA71	0800318R	CAP.-ELECTRO. 47UF-M 25V	0	0	0
C976	0800361N	CAP.-ELECTRO 1000UF 16V	0	0	0	CA72	0284824F	CAP.-ELECTRO. 2200UF 35V	0	0	0
C977	AL01129S	CAP.ELECTROLYTIC 1000UF-M(YXF)16V	0	0	0	CA73	AA00981R	CERAMIC cap.(0.22UF 25V-B)	0	0	0
C978	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0	CA74	AA00981R	CERAMIC cap.(0.22UF 25V-B)	0	0	0
C979	0800318R	CAP.-ELECTRO. 47UF-M 25V	0	0	0	CA75	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0
⚠ C980	AJ00182F	CAP. CERAMIC CD85-E2GA102MYNS	0	0	0	CA77	0284824F	CAP.-ELECTRO. 2200UF 35V	0	0	0
⚠ C981	AJ00182F	CAP. CERAMIC CD85-E2GA102MYNS	0	0	0	CA78	AA00981R	CERAMIC cap.(0.22UF 25V-B)	0	0	0
C985	0800361N	CAP.-ELECTRO 1000UF 16V	0	0	0	CA79	AA00981R	CERAMIC cap.(0.22UF 25V-B)	0	0	0
C986	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0	CA80	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0
C987	0890087R	CAP.-CERAMIC 1000PF-K 50V	0	0	0	CA82	0284638R	CAP.-ELECTRO. 10UF-SME(BP) 16V	0	0	0
CA03	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CE01	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0
CA04	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CE03	0244541F	cap.-CERAMIC 0.01MF-K B 500V	0	0	0
CA05	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	CE04	0244541F	cap.-CERAMIC 0.01MF-K B 500V	0	0	0
CA06	0284638R	CAP.-ELECTRO. 10UF-SME(BP) 16V	0	0	0	CE06	0244509R	CAP.-CERAMIC 4700PF-KB B 500V	0	0	0
CA07	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CE07	0800329R	CAP.-ELECTRO. 100UF-M(SMG) 50V	0	0	0
CA08	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CE08	0800329R	CAP.-ELECTRO. 100UF-M(SMG) 50V	0	0	0
CA09	0284638R	CAP.-ELECTRO. 10UF-SME(BP) 16V	0	0	0	CE09	AL00027R	CAP.-ELECTORO. 4.7UF-M 250V	0	0	0
CA10	0284638R	CAP.-ELECTRO. 10UF-SME(BP) 16V	0	0	0	CE10	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CA11	0893215R	CAP 1608CHIP 3300PFKB 50V TAPE	0	0	0	CE11	0800318R	CAP.-ELECTRO. 47UF-M 25V	0	0	0
CA12	0893186R	CERAMIC cap.(33000PF 16V)	0	0	0	CE12	AL00032R	CAP.-ELECTORO. 47UF-M 250V	0	0	0
CA13	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CE13	0244541F	cap.-CERAMIC 0.01MF-K B 500V	0	0	0
CA14	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CE14	0246836R	CAP.CERAMIC 18PF 500V TAPE	0	0	0
CA15	0893217R	CAP 1608CHIP 4700PFKB 50V TAPE	0	0	0	CE51	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0
CA16	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	CE53	0244541F	cap.-CERAMIC 0.01MF-K B 500V	0	0	0
CA17	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	CE54	0244541F	cap.-CERAMIC 0.01MF-K B 500V	0	0	0
CA18	0284638R	CAP.-ELECTRO. 10UF-SME(BP) 16V	0	0	0	CE56	0244509R	CAP.-CERAMIC 4700PF-KB B 500V	0	0	0
CA19	0800288R	CAP.-ELECTRO. 4.7UF-M(SMG) 50V	0	0	0	CE57	0800329R	CAP.-ELECTRO. 100UF-M(SMG) 50V	0	0	0
CA20	0800288R	CAP.-ELECTRO. 4.7UF-M(SMG) 50V	0	0	0	CE58	0800329R	CAP.-ELECTRO. 100UF-M(SMG) 50V	0	0	0
CA21	0800288R	CAP.-ELECTRO. 4.7UF-M(SMG) 50V	0	0	0	CE60	AL00032R	CAP.-ELECTORO. 47UF-M 250V	0	0	0
CA22	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	CE61	0244541F	cap.-CERAMIC 0.01MF-K B 500V	0	0	0
CA23	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	CE62	0246836R	CAP.CERAMIC 18PF 500V TAPE	0	0	0
CA24	0284638R	CAP.-ELECTRO. 10UF-SME(BP) 16V	0	0	0	CE63	AL00027R	CAP.-ELECTORO. 4.7UF-M 250V	0	0	0
CA25	0893215R	CAP 1608CHIP 3300PFKB 50V TAPE	0	0	0	CEA1	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0
CA26	0893186R	CERAMIC cap.(33000PF 16V)	0	0	0	CEA3	0244541F	cap.-CERAMIC 0.01MF-K B 500V	0	0	0
CA27	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CEA4	0244541F	cap.-CERAMIC 0.01MF-K B 500V	0	0	0
CA28	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CEA6	0244509R	CAP.-CERAMIC 4700PF-KB B 500V	0	0	0
CA29	0893217R	CAP 1608CHIP 4700PFKB 50V TAPE	0	0	0	CEA7	0800329R	CAP.-ELECTRO. 100UF-M(SMG) 50V	0	0	0
CA30	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	CEA8	0800329R	CAP.-ELECTRO. 100UF-M(SMG) 50V	0	0	0
CA31	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0	CEC1	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0
CA32	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	CEC2	AL00032R	CAP.-ELECTORO. 47UF-M 250V	0	0	0
CA33	0800288R	CAP.-ELECTRO. 4.7UF-M(SMG) 50V	0	0	0	CEC3	0244541F	cap.-CERAMIC 0.01MF-K B 500V	0	0	0
CA34	0800288R	CAP.-ELECTRO. 4.7UF-M(SMG) 50V	0	0	0	CEC4	0246836R	CAP.CERAMIC 18PF 500V TAPE	0	0	0
CA37	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CEC5	AL00027R	CAP.-ELECTORO. 4.7UF-M 250V	0	0	0
CA38	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CF01	AN01163F	cap. 0.12UF 250V METALLIZ polyprop.	0	0	0
CA39	0893186R	CERAMIC cap.(33000PF 16V)	0	0	0	CF02	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0
CA40	0893222R	CAP 1608CHIP10000PFKB 50V TAPE	0	0	0	CF03	AJ00138R	CAP.CERAMIC CK45-R3DD222K-VR	0	0	0
CA41	0893248R	CAP.CHIP-CERAMIC 330000PF 16V TAPE	0	0	0	CF04	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0
CA42	AA01121R	CERAMIC cap.(0.47UF 10V)	0	0	0	CH01	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CA43	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CH02	0890078R	CAP.-CERAMIC 220PF-K 50V	0	0	0
CA44	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CH03	0880044R	CAP.-POLYESTER 0.01UF-KEB 50V	0	0	0
CA45	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CH05	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0
CA46	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	CH06	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0
CA47	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	CH07	0880033R	CAP.-POLYESTER 0.0015UF-KEB50V	0	0	0
CA48	0893227R	CERAMIC cap.(220000PF 16V)	0	0	0	CH08	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CA49	0893217R	CAP 1608CHIP 4700PFKB 50V TAPE	0	0	0	CH09	0880207R	CAP.-POLYESTER 1.0UF-J 50V	0	0	0

PRODUCT SERVICE NOTE: Components marked with a ⚠ have special characteristics important to safety. Before replacing any of these components, read carefully, the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24	SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
CH10	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0	CK28	0800356N	CAP.-ELECTRO. 470UF-M 50V			0
⚠ CH13	AN01113F	1200PF 1800V METALLIZ PP FILM CAPA	0	0	0	CK29	0890024M	CAP.-CERAMIC 150PF-K B 50V CYLINDORICAL	0	0	0
CH14	0279693R	CAP.-POLYESTER FLM 0.1UF	0	0	0	CK30	0890024M	CAP.-CERAMIC 150PF-K B 50V CYLINDORICAL	0	0	0
CH15	0880038R	CAP.-POLYESTER 0.0039UF-KEB50V	0	0	0	CK31	0890024M	CAP.-CERAMIC 150PF-K B 50V CYLINDORICAL	0	0	0
CH16	AL01724	CAP.ALUMI.160V 390UF KMH(M)	0	0	0	CK32	0890024M	CAP.-CERAMIC 150PF-K B 50V CYLINDORICAL	0	0	0
⚠ CH17	0284623R	CAP.-ELECTRO. 1UF-SME(BP) 50V	0	0	0	CK33	0890024M	CAP.-CERAMIC 150PF-K B 50V CYLINDORICAL	0	0	0
CH18	0880198R	CAP.-PLOY. 0.22UF-J 50V	0	0	0	CK34	0890024M	CAP.-CERAMIC 150PF-K B 50V CYLINDORICAL	0	0	0
CH19	0890082R	CAP.-CERAMIC 390PF-K 50V	0	0	0	CK36	0800355N	CAP.ELECTRO. 470UF-M 35V	0	0	0
⚠ CH20	AN01113F	1200PF 1800V METALLIZ PP FILM CAPA	0	0	0	CK37	0800355N	CAP.ELECTRO. 470UF-M 35V	0	0	0
CH22	0880203R	CAP.-POLYESTER 0.47UF-J 50V	0	0	0	CK43	0880044R	CAP.-POLYESTER 0.01UF-KEB 50V	0	0	0
CH99	0880203R	CAP.-POLYESTER 0.47UF-J 50V	0	0	0	CK51	0890076R	CAP.CERAMIC 150PF-K 50V	0	0	0
CJ01	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CL01	0880053R	CAP.-POLYESTER 0.047UF-KEB 50V	0	0	0
CJ02	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0		CL02	0880053R	CAP.-POLYESTER 0.047UF-KEB 50V	0	0	0
CJ03	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CL03	0880053R	CAP.-POLYESTER 0.047UF-KEB 50V	0	0	0
CJ04	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0		CL04	0880053R	CAP.-POLYESTER 0.047UF-KEB 50V	0	0	0
CJ05	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CL05	0880053R	CAP.-POLYESTER 0.047UF-KEB 50V	0	0	0
CJ06	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CL06	0880053R	CAP.-POLYESTER 0.047UF-KEB 50V	0	0	0
CJ07	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CL07	0880053R	CAP.-POLYESTER 0.047UF-KEB 50V	0	0	0
CJ08	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0		CL08	0880053R	CAP.-POLYESTER 0.047UF-KEB 50V	0	0	0
CJ09	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CL09	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CJ10	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0		CL10	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0
CJ11	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CM01	0800303R	CAP.-ELECTRO. 22UF-M 50V	0	0	
CJ12	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CM01	0800303R	CAP.-ELECTRO. 22UF-M 50V			0
CJ13	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0		CM02	0880044R	CAP.-POLYESTER 0.01UF-KEB 50V			0
CJ14	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CM03	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	
CJ15	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0		CM03	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V			0
CJ16	0893222R	CAP 1608CHIP10000PFKB 50V TAPE	0	0		CM04	0880044R	CAP.-POLYESTER 0.01UF-KEB 50V			0
CJ17	0893126R	CAP 1608CHIP 100PFJCH 50V TAPE	0	0		CM05	0880044R	CAP.-POLYESTER 0.01UF-KEB 50V	0	0	
CJ18	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0		CM05	0880044R	CAP.-POLYESTER 0.01UF-KEB 50V			0
CJ19	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CM06	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	
CJ20	0893126R	CAP 1608CHIP 100PFJCH 50V TAPE	0	0		CM06	0880194R	CAP.-POLYESTER 0.1UF-J 50V			0
CJ21	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0		CM09	0880044R	CAP.-POLYESTER 0.01UF-KEB 50V	0	0	
CJ22	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CM09	0880044R	CAP.-POLYESTER 0.01UF-KEB 50V			0
CJ23	0893126R	CAP 1608CHIP 100PFJCH 50V TAPE	0	0		CM10	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	
CJ24	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0		CM10	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V			0
CJ25	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CM11	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	
CJ26	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CM11	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V			0
CJ27	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CM12	0800318R	CAP.-ELECTRO. 47UF-M 25V	0	0	
CJ28	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CM12	0800318R	CAP.-ELECTRO. 47UF-M 25V			0
CJ29	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0		CM14	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	
CJ30	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CM14	0880194R	CAP.-POLYESTER 0.1UF-J 50V			0
CJ31	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CM15	0880194R	CAP.-POLYESTER 0.1UF-J 50V			0
CJ32	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CM16	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	
CJ33	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CM16	0880194R	CAP.-POLYESTER 0.1UF-J 50V			0
CJ36	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CM18	0880044R	CAP.-POLYESTER 0.01UF-KEB 50V	0	0	
CJ37	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0		CM19	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	
CJ38	0800352R	CAP.-ELECTRO.470UF 10V	0	0		CM20	0800325R	CAP.-ELECTRO. 100UF-M 10V	0	0	
CJ39	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CM21	0880044R	CAP.-POLYESTER 0.01UF-KEB 50V	0	0	
CJ40	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CM22	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	
CJ41	0800358R	CAP.-ELECTRO. 1000UF-M 6.3V	0	0		CM23	0880044R	CAP.-POLYESTER 0.01UF-KEB 50V	0	0	
CJ52	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0		CM24	0800325R	CAP.-ELECTRO. 100UF-M 10V	0	0	
CJ53	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0		CN01	0890084R	CAP.-CERAMIC 560PF-K 50V	0	0	0
CJ75	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0		CN02	0880051R	CAP.-POLYESTER 0.033UF-KEB 50V	0	0	0
CJ77	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0		CN03	0800288R	CAP.-ELECTRO. 4.7UF-M(SMG) 50V	0	0	0
CJ79	0800318R	CAP.-ELECTRO. 47UF-M 25V	0	0		CN04	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0
CK03	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	CN05	0880035R	CAP.-POLY 2200PF-50V	0	0	0
CK04	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0	CN06	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CK05	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	CP51	0800358R	CAP.-ELECTRO. 1000UF-M 6.3V	0	0	0
CK06	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0	CP52	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CK07	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	CP60	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CK08	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0	CP61	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CK09	0880194R	CAP.-POLYESTER 0.1UF-J 50V	0	0	0	CP62	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CK10	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	CP63	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CK11	0880035R	CAP.-POLY 2200PF-50V	0	0	0	CP64	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CK18	0880044R	CAP.-POLYESTER 0.01UF-KEB 50V	0	0	0	CP65	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CK19	0880044R	CAP.-POLYESTER 0.01UF-KEB 50V	0	0	0	CP66	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CK20	0890076R	CAP.CERAMIC 150PF-K 50V	0	0	0	CP81	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CK21	0890076R	CAP.CERAMIC 150PF-K 50V	0	0	0	CP82	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CK22	0890076R	CAP.CERAMIC 150PF-K 50V	0	0	0	CP83	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CK23	0890076R	CAP.CERAMIC 150PF-K 50V	0	0	0	CV01	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0
CK24	0890076R	CAP.CERAMIC 150PF-K 50V	0	0	0	CV02	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CK25	0890076R	CAP.CERAMIC 150PF-K 50V	0	0	0	CV03	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0
CK27	0800355N	CAP.ELECTRO. 470UF-M 35V	0	0		CV05	0893111R	CAP 1608CHIP 8PFCCH 50V TAPE	0	0	0
CK27	0800356N	CAP.-ELECTRO. 470UF-M 50V			0	CV06	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0
CK28	0800355N	CAP.ELECTRO. 470UF-M 35V	0	0		CV08	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0

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SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24	SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
CV09	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	CX10	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
CV10	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	CX11	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0
CV11	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	CX12	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0
CV12	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	CX13	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
CV13	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	CX14	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CV14	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	CX15	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0
CV15	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	CX16	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0
CV16	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	CX17	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0
CV17	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	CX18	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0
CV18	0800352R	CAP.-ELECTRO.470UF 10V	0	0	0	CX19	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CV19	0893129R	CAP 1608CHIP 180PFJCH 50V TAPE	0	0	0	CX20	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CV20	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	CX21	0800352R	CAP.-ELECTRO.470UF 10V	0	0	0
CV21	0893127R	CAP 1608CHIP 120PFJCH 50V TAPE	0	0	0	CX22	0800352R	CAP.-ELECTRO.470UF 10V	0	0	0
CV22	AA01121R	CERAMIC cap.(0.47UF 10V)	0	0	0	CX23	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0
CV23	0800318R	CAP.-ELECTRO. 47UF-M 25V	0	0	0	CX28	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
CV24	0893118R	CAP 1608CHIP 27PFJCH 50V TAPE	0	0	0	CX29	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CV25	0893115R	CAP 1608CHIP 15PFJCH 50V TAPE	0	0	0	CX30	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CV26	0893111R	CAP 1608CHIP 8PFCCH 50V TAPE	0	0	0	CX31	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
CV27	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	CX32	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0
CV28	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	CX35	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0
CW01	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CX36	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CW02	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0	CX37	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
CW03	0893114R	CAP 1608CHIP 12PFJCH 50V TAPE	0	0	0	CX38	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
CW04	0893121R	CAP 1608CHIP 39PFJCH 50V TAPE	0	0	0	CX39	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0
CW05	0893114R	CAP 1608CHIP 12PFJCH 50V TAPE	0	0	0	CX40	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0
CW06	0800282R	CAP.-ELECTORO. 2.2UF-M(SMG) 50V	0	0	0	CX42	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CW07	0800282R	CAP.-ELECTORO. 2.2UF-M(SMG) 50V	0	0	0	CX43	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
CW08	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CX44	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0
CW09	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	CX45	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0
CW10	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	CX46	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
CW11	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	CX47	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CW12	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0	CX48	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CW13	0893135R	CAP 1608CHIP 470PFJCH 50V TAPE	0	0	0	CX49	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
CW14	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CX52	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CW15	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0	CX53	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CW16	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	CX54	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
CW17	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	CX55	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CW18	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0	CX56	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CW19	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	CX57	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0
CW20	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	CX58	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
CW21	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CX59	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
CW22	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	CX60	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
CW23	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	CX61	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	
CW24	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	CX62	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	
CW25	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	CX63	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	
CW26	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	CX64	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
CW27	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CX65	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
CW29	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	CX66	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
CW30	0893111R	CAP 1608CHIP 8PFCCH 50V TAPE	0	0	0	CX70	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CW31	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0	CX71	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CW32	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	CX74	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CW34	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0	CX75	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CW37	0893117R	CAP 1608CHIP 22PFJCH 50V TAPE	0	0	0	CX76	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CW38	0893117R	CAP 1608CHIP 22PFJCH 50V TAPE	0	0	0	CX77	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CW39	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0	CX78	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CW40	0800282R	CAP.-ELECTORO. 2.2UF-M(SMG) 50V	0	0	0	CX84	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0
CW41	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	CX85	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0
CW42	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CX92	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
CW43	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	CX93	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0
CW44	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CX94	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0
CW45	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	CX95	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CW46	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	CZ01	AL01842R	1000UF 10V ALUM. ELECTROLYTIC cap.	0	0	0
CW47	0893134R	CAP 1608CHIP 390PFJCH 50V TAPE	0	0	0	CZ02	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CW48	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	CZ03	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0
CW49	0800294R	CAP.-ELECTRO. 10UF-M(SMG) 50V	0	0	0	CZ04	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0
CW50	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0	CZ05	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0
CX01	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0	CZ06	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0
CX02	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0	CZ07	0893222R	CAP 1608CHIP10000PFKB 50V TAPE	0	0	0
CX03	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0	CZ10	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CX04	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0	CZ12	AA01121R	CERAMIC cap.(0.47UF 10V)	0	0	0
CX05	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0	CZ13	AA01121R	CERAMIC cap.(0.47UF 10V)	0	0	0
CX06	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0	CZ14	AA01121R	CERAMIC cap.(0.47UF 10V)	0	0	0
CX07	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0	CZ15	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0
CX08	AA01111R	CERAMIC cap.(1.0UF 6.3V)	0	0	0	CZ16	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CX09	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0	CZ17	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0

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SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
CZ18	0800282R	CAP.-ELECTORO. 2.2UF-M(SMG) 50V	0	0	0
CZ19	0893213R	CAP1608CHIP 2200PFKB 50V TAPE	0	0	0
CZ20	0893114R	CAP 1608CHIP 12PFJCH 50V TAPE	0	0	0
CZ21	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0
CZ22	AL01842R	1000UF 10V alum. ELECTROLYTIC cap.	0	0	0
CZ23	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CZ24	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0
CZ25	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0
CZ26	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0
CZ27	0800279R	CAP.-ELECTORO. 1.0UF-M(SMG) 50V	0	0	0
CZ28	0893222R	CAP 1608CHIP10000PFKB 50V TAPE	0	0	0
CZ31	AA01121R	CERAMIC cap.(0.47UF 10V)	0	0	0
CZ32	AA01121R	CERAMIC cap.(0.47UF 10V)	0	0	0
CZ33	AA01121R	CERAMIC cap.(0.47UF 10V)	0	0	0
CZ34	AA01101R	CERAMIC cap.(1UF 10V-F)	0	0	0
CZ35	0800334R	CAP.-ELECTRO. 220UF 10V	0	0	0
CZ36	0800282R	CAP.-ELECTORO. 2.2UF-M(SMG) 50V	0	0	0
CZ37	0893213R	CAP1608CHIP 2200PFKB 50V TAPE	0	0	0
CZ38	0893114R	CAP 1608CHIP 12PFJCH 50V TAPE	0	0	0
CZ39	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0
CZ40	0893179R	CAP.CHIP-CERAMIC 100000PF 16V TAPE	0	0	0
CZ41	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0
CZ42	0893121R	CAP 1608CHIP 39PFJCH 50V TAPE			0
CZ42	0893123R	CAP 1608CHIP 56PFJCH 50V TAPE	0	0	
CZ43	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CZ44	0893239R	CAP 1608CHIP 10000PFZF 50V TAPE	0	0	0
CZ45	0800326R	CAP.-ELECTRO. 100UF-M 16V	0	0	0
CZ46	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CZ47	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
CZ48	0893232R	CAP 1608CHIP 100000PFZF25V TAPE	0	0	0
		DIODES			
D004	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D008	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
D009	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
D010	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
D011	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
D012	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
D013	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D015	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D017	2331827M	ZENER DIODE HZ-9 TAPE (C1) SI 500MW 9.3V	0	0	0
D018	2331827M	ZENER DIODE HZ-9 TAPE (C1) SI 500MW 9.3V	0	0	0
D019	2331809M	ZENER DIODE HZ-6 TAPE (C3) SI 500MW	0	0	0
D301	2339971M	ZENER HZS33-1 TA	0	0	0
D302	2339971M	ZENER HZS33-1 TA	0	0	0
D303	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
D402	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D403	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D404	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D405	2339801M	ZENER HZS-2 TAPE (B1) SI 400MW 2.0V	0	0	0
D408	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
D409	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
D410	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
D411	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D412	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D413	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D414	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D415	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D416	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D417	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
D418	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
D601	2331154M	ZENER HZ-12 (A1-3 B1-3.TA) SI 200MA 14.3V	0	0	0
D603	CH02001M	DIODE1SR139-400	0	0	0
D604	CH02001M	DIODE1SR139-400	0	0	0
D605	CH02011M	DIODE1SR153-400	0	0	0
D606	2334305M	ZENER RD30E (B4 T2/TP/TA) SI 5MA 30.51V	0	0	0
D607	CH02001M	DIODE1SR139-400	0	0	0
D608	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D701	CH02001M	DIODE1SR139-400	0	0	0
D702	2339859M	ZENER HZS7C3 TA	0	0	0
D703	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D706	2339882M	ZENER DIODE HZS-12(A2) TAPE	0	0	0
⚠ D708	CH02161	DIODE FMQ-G2FLS (1500V)	0	0	0
D709	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D712	CH00041M	DIODE ES1FV1 (1500V)	0	0	0
D713	2339802M	ZENER DIODE HZS2B2 TAPE	0	0	0
D714	2339849M	ZENER HZS6C3 TA	0	0	0
D715	CH02001M	DIODE1SR139-400	0	0	0
D801	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
D802	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D803	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D804	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D806	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D808	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D813	CH02001M	DIODE1SR139-400	0	0	0
D814	CH02001M	DIODE1SR139-400	0	0	0
D815	CH02001M	DIODE1SR139-400	0	0	0
D816	CH02001M	DIODE1SR139-400	0	0	0
D851	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
D852	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D853	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D854	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D856	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D858	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D863	CH02001M	DIODE1SR139-400	0	0	0
D864	CH02001M	DIODE1SR139-400	0	0	0
D865	CH02001M	DIODE1SR139-400	0	0	0
D866	CH02001M	DIODE1SR139-400	0	0	0
D8A1	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
D8A2	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D8A3	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D8A4	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D8A5	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D8A6	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D8C3	CH02001M	DIODE1SR139-400	0	0	0
D8C4	CH02001M	DIODE1SR139-400	0	0	0
D8C5	CH02001M	DIODE1SR139-400	0	0	0
D8C6	CH02001M	DIODE1SR139-400	0	0	0
D8C7	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
⚠ D901	2338313	DIODE RBV-406M (60V) SI 0.1USEC	0	0	0
⚠ D902	2342061	DIODE D3SB(A)60.	0	0	0
D903	CH02001M	DIODE1SR139-400	0	0	0
D904	CH02001M	DIODE1SR139-400	0	0	0
D905	CH02011M	DIODE1SR153-400	0	0	0
D906	2331844M	ZENER HZ12-B1	0	0	0
D907	2334304M	ZENER RD30E (B3 T2/TP/TA) SI 5MA 30.51V	0	0	0
D908	2339843M	ZENER HZS-6 A3 (SI 200MA)	0	0	0
D910	CH02011M	DIODE1SR153-400	0	0	0
D911	CH02011M	DIODE1SR153-400	0	0	0
D912	2334324M	ZENER DIODE RD36E TAPE (B3) SI 500MW 36V	0	0	0
D913	2331844M	ZENER HZ12-B1	0	0	0
D914	CH02011M	DIODE1SR153-400	0	0	0
D915	CH00183R	LIGHT EMITTING DIODE (SLZ-981C-06-T1)	0	0	0
D916	CH01061F	DIODE RU4AM(600V)	0	0	0
D917	2337951S	DIODE RU4Z(LF015-302)	0	0	0
D918	2337951S	DIODE RU4Z(LF015-302)	0	0	0
D919	2338532M	DIODE EG01A (V1)	0	0	0
D920	2337951S	DIODE RU4Z(LF015-302)	0	0	0
D921	2359314G	DIODE RU-3C P12.5	0	0	0
D922	2334304M	ZENER RD30E (B3 T2/TP/TA) SI 5MA 30.51V	0	0	0
D923	2339881M	ZENER HZS12A1 TA	0	0	0
D924	2339961M	ZENER HZS30-1 TA	0	0	0
D925	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D926	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D927	2339857M	ZENER HZS7C1 SI	0	0	0
D928	CH00182R	LIGHT EMITTING DIODE (SLZ-381C-06-T1)	0	0	0
D929	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D930	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D931	CH02001M	DIODE1SR139-400	0	0	0
D932	CH02001M	DIODE1SR139-400	0	0	0
D933	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D936	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D937	2339827M	ZENER HZS4C1 TA	0	0	0
D938	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D939	2339816M	ZENER HZS3B3 TAPE	0	0	0
D940	CH00182R	LIGHT EMITTING DIODE (SLZ-381C-06-T1)	0	0	0
D941	2337951S	DIODE RU4Z(LF015-302)	0	0	0
D942	2337951S	DIODE RU4Z(LF015-302)	0	0	0
D943	CH01091M	DIODE EL1 (350V)	0	0	0
D944	2337951S	DIODE RU4Z(LF015-302)	0	0	0

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SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
D952	CH02001M	DIODE 1SR139-400	0	0	0
D953	2339836M	ZENER HZS-5 B3	0	0	0
D954	2331844M	ZENER HZ12-B1	0	0	0
D955	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D956	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D957	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D960	2339821M	ZENER HZS4A1 TA	0	0	0
D961	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D962	2339817M	ZENER HZS3C1 TA	0	0	0
D963	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D964	CH00182R	LIGHT EMITTING DIODE (SLZ-381C-06-T1)	0	0	0
D965	CH00182R	LIGHT EMITTING DIODE (SLZ-381C-06-T1)	0	0	0
D966	2339847M	ZENER HZS6C1 TA	0	0	0
D967	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D968	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
D971	2334324M	ZENER DIODE RD36E TAPE (B3) SI 500MW 36V	0	0	0
D972	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DA01	2331771M	ZENER HZ-3A1 TAPE	0	0	0
DA02	2331771M	ZENER HZ-3A1 TAPE	0	0	0
DA03	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DA04	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DA05	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DA06	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DA07	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DA08	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DA09	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DA12	2337341M	DIODE 1SS270A (TP)	0	0	0
DA13	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DA14	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DA15	2337341M	DIODE 1SS270A (TP)	0	0	0
DA16	2337341M	DIODE 1SS270A (TP)	0	0	0
DA17	2337341M	DIODE 1SS270A (TP)	0	0	0
DA20	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
DA21	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
DE01	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DE02	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DE05	CH02001M	DIODE 1SR139-400	0	0	0
DE06	CH02001M	DIODE 1SR139-400	0	0	0
DE07	CH02001M	DIODE 1SR139-400	0	0	0
DE08	CH02001M	DIODE 1SR139-400	0	0	0
DE51	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DE52	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DE55	CH02001M	DIODE 1SR139-400	0	0	0
DE56	CH02001M	DIODE 1SR139-400	0	0	0
DE57	CH02001M	DIODE 1SR139-400	0	0	0
DE58	CH02001M	DIODE 1SR139-400	0	0	0
DEA1	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DEA2	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DEA5	CH02001M	DIODE 1SR139-400	0	0	0
DEA6	CH02001M	DIODE 1SR139-400	0	0	0
DEA7	CH02001M	DIODE 1SR139-400	0	0	0
DEA8	CH02001M	DIODE 1SR139-400	0	0	0
DEA9	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
DF01	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
⚠ DH01	2339837M	ZENER HZS-5C1 TAPE	0	0	0
DH04	2339832M	ZENER HZS5A2 TA	0	0	0
DH05	2339882M	ZENER DIODE HZS-12(A2) TAPE	0	0	0
DH06	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
⚠ DH07	2359312S	DIODE RU3C LF-C4 (1000V 1.5A)	0	0	0
DH08	2334243M	ZENER RD16E (B2 T2/TP/TA) SI 10MA 16.51V	0	0	0
⚠ DH09	CH00041M	DIODE ES1FV1 (1500V)	0	0	0
DH10	CH02001M	DIODE 1SR139-400	0	0	0
DH11	CH02001M	DIODE 1SR139-400	0	0	0
⚠ DH13	CH00031M	DIODE AU02V1(280V)	0	0	0
DH14	2334315M	ZENER DIODE RD33E TAPE (B4)	0	0	
DH14	2334324M	ZENER DIODE RD36E TAPE (B3) SI 500MW 36V			0
⚠ DH15	2335042M	ZENER HZ-22 (2L TP) SI 200MA 400MW	0	0	0
DH16	2334305M	ZENER RD30E (B4 T2/TP/TA) SI 5MA 30.51V	0	0	0
DH17	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DH18	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DH20	2334285M	ZENER RD24EB4 TA	0	0	
DJ01	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	
DJ02	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	
DJ04	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	
DJ05	2344041M	DIODE 1SS254TA/1SS270TA	0	0	
DJ06	2344041M	DIODE 1SS254TA/1SS270TA	0	0	
DJ21	CC10721R	DIODE CHIP DA204K-TPTX	0	0	
DJ22	CC10721R	DIODE CHIP DA204K-TPTX	0	0	
DJ23	CC10721R	DIODE CHIP DA204K-TPTX	0	0	
DJ24	CC10721R	DIODE CHIP DA204K-TPTX	0	0	
DJ25	CC10721R	DIODE CHIP DA204K-TPTX	0	0	
DJ26	CC10721R	DIODE CHIP DA204K-TPTX	0	0	
DJ27	CC10721R	DIODE CHIP DA204K-TPTX	0	0	
DJ28	CC10721R	DIODE CHIP DA204K-TPTX	0	0	
DJ29	2344041M	DIODE 1SS254TA/1SS270TA	0	0	
DJ30	CC00003R	DIODE.CHIP 1SS355	0	0	
DJ31	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	
DK04	CH02011M	DIODE 1SR153-400			0
DK05	CH02011M	DIODE 1SR153-400			0
DK16	2334324M	ZENER DIODE RD36E TAPE (B3) SI 500MW 36V	0	0	0
DK17	2334324M	ZENER DIODE RD36E TAPE (B3) SI 500MW 36V	0	0	0
DK18	2334324M	ZENER DIODE RD36E TAPE (B3) SI 500MW 36V	0	0	0
DK19	2334324M	ZENER DIODE RD36E TAPE (B3) SI 500MW 36V	0	0	0
DK20	2334324M	ZENER DIODE RD36E TAPE (B3) SI 500MW 36V	0	0	0
DK21	2334324M	ZENER DIODE RD36E TAPE (B3) SI 500MW 36V	0	0	0
DK22	2334324M	ZENER DIODE RD36E TAPE (B3) SI 500MW 36V	0	0	0
DK23	2334324M	ZENER DIODE RD36E TAPE (B3) SI 500MW 36V	0	0	0
DK24	2334324M	ZENER DIODE RD36E TAPE (B3) SI 500MW 36V	0	0	0
DK25	2334324M	ZENER DIODE RD36E TAPE (B3) SI 500MW 36V	0	0	0
DK26	2334324M	ZENER DIODE RD36E TAPE (B3) SI 500MW 36V	0	0	0
DK27	2334324M	ZENER DIODE RD36E TAPE (B3) SI 500MW 36V	0	0	0
DK30	2331815M	ZENER HZ7-B2	0	0	0
DK31	2331815M	ZENER HZ7-B2	0	0	0
DK32	2331815M	ZENER HZ7-B2	0	0	0
DK33	2331815M	ZENER HZ7-B2	0	0	0
DK34	2331815M	ZENER HZ7-B2	0	0	0
DK35	2331815M	ZENER HZ7-B2	0	0	0
DK36	2331815M	ZENER HZ7-B2	0	0	0
DK37	2331815M	ZENER HZ7-B2	0	0	0
DK39	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DK45	2331815M	ZENER HZ7-B2	0	0	0
DK46	2331815M	ZENER HZ7-B2	0	0	0
DK47	2331815M	ZENER HZ7-B2	0	0	0
DK48	2331815M	ZENER HZ7-B2	0	0	0
DK49	2331815M	ZENER HZ7-B2	0	0	0
DK51	2331815M	ZENER HZ7-B2	0	0	0
DK53	2331815M	ZENER HZ7-B2	0	0	0
DK90	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DL01	2331815M	ZENER HZ7-B2	0	0	0
DL02	2331815M	ZENER HZ7-B2	0	0	0
DL03	2331815M	ZENER HZ7-B2	0	0	0
DL04	2331815M	ZENER HZ7-B2	0	0	0
DL05	2331815M	ZENER HZ7-B2	0	0	0
DL06	2331815M	ZENER HZ7-B2	0	0	0
DL07	2331815M	ZENER HZ7-B2	0	0	0
DL08	2331815M	ZENER HZ7-B2	0	0	0
DL10	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DL11	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DL12	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DL13	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DL14	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DL15	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DL16	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DL17	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DL20	2331815M	ZENER HZ7-B2	0	0	0
DL21	2331815M	ZENER HZ7-B2	0	0	0
DL22	2331815M	ZENER HZ7-B2	0	0	0
DL23	2331815M	ZENER HZ7-B2	0	0	0
DL24	2331815M	ZENER HZ7-B2	0	0	0
DL25	2331815M	ZENER HZ7-B2	0	0	0
DL26	2331815M	ZENER HZ7-B2	0	0	0
DL27	2331815M	ZENER HZ7-B2	0	0	0
DL28	2331824M	ZENER HZ9B1 TA	0	0	0
DL30	2331824M	ZENER HZ9B1 TA	0	0	0
DL31	2331824M	ZENER HZ9B1 TA	0	0	0
DL32	2331824M	ZENER HZ9B1 TA	0	0	0
DL33	2331824M	ZENER HZ9B1 TA	0	0	0
DL34	2331824M	ZENER HZ9B1 TA	0	0	0
DL35	2331824M	ZENER HZ9B1 TA	0	0	0
DL36	2331824M	ZENER HZ9B1 TA	0	0	0

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SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
DL37	2331824M	ZENER HZ9B1 TA	0	0	0
DM01	2344041M	DIODE 1SS254TA/1SS270TA	0	0	
DM01	2344041M	DIODE 1SS254TA/1SS270TA			0
DM02	2344041M	DIODE 1SS254TA/1SS270TA	0	0	
DM02	2344041M	DIODE 1SS254TA/1SS270TA			0
DM03	2483392	LIGHT EMITTING DIODE (SLR-37)	0	0	
DM03	CH00231	LED SLH-56VC3F			0
DM04	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	
DM04	2331849M	ZENER HZ12C3 (TA) SI 500MW			0
DM05	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	
DM05	2331849M	ZENER HZ12C3 (TA) SI 500MW			0
DM07	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	
DM07	2331849M	ZENER HZ12C3 (TA) SI 500MW			0
DM08	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	
DM08	2331849M	ZENER HZ12C3 (TA) SI 500MW			0
DM09	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	
DM09	2331849M	ZENER HZ12C3 (TA) SI 500MW			0
DM10	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	
DM10	2331849M	ZENER HZ12C3 (TA) SI 500MW			0
DM11	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	
DM11	2331849M	ZENER HZ12C3 (TA) SI 500MW			0
DM12	2331815M	ZENER HZ7-B2	0	0	
DM12	2331815M	ZENER HZ7-B2			0
DM13	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	
DN01	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DN02	2339802M	ZENER DIODE HZS2B2 TAPE	0	0	0
DN03	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DN06	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DN07	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DN08	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DN09	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DN10	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DN11	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DN12	2331849M	ZENER HZ12C3 (TA) SI 500MW	0	0	0
DN13	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DN14	2339827M	ZENER HZS4C1 TA	0	0	0
DN15	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DP53	CH02001M	DIODE 1SR139-400	0	0	0
DP54	CH02001M	DIODE 1SR139-400	0	0	0
DX01	2331771M	ZENER HZ-3A1 TAPE	0	0	0
DX02	2331771M	ZENER HZ-3A1 TAPE	0	0	0
DX03	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DZ01	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
DZ02	2344041M	DIODE 1SS254TA/1SS270TA	0	0	0
		FUSES, PROTECTORS			
⚠ E901	AZ00421M	PROTECTOR 491010T52	0	0	0
⚠ E902	AZ00421M	PROTECTOR 491010T52	0	0	0
⚠ E903	AZ00106M	PROTECTOR CRXT491003	0	0	0
⚠ E904	AZ00108M	PROTECTOR(CRXT491005)	0	0	0
⚠ E905	AZ00107M	PROTECTOR CRXT491004	0	0	0
⚠ E906	AZ00101M	PROTECTOR(CRXT491.500)	0	0	0
⚠ E907	AZ00106M	PROTECTOR CRXT491003	0	0	0
⚠ E909	AZ00109M	PROTECTOR CRXT491007	0	0	0
⚠ E911	AZ00109M	PROTECTOR CRXT491007	0	0	0
⚠ F901	FN00374	FUSE 51MS 060 L 125V 6A	0	0	0
⚠ F902	FN00373	FUSE 51MS 050 L 125V 5A	0	0	0
⚠ F903	FN00373	FUSE 51MS 050 L 125V 5A	0	0	0
⚠ FK01	AZ00106M	PROTECTOR CRXT491003			0
⚠ FK02	AZ00106M	PROTECTOR CRXT491003			0
		SPARK GAPS			
⚠ G801	CJ00071R	SPARK GAP 1.5KV	0	0	0
⚠ G802	CJ00071R	SPARK GAP 1.5KV	0	0	0
⚠ G851	CJ00071R	SPARK GAP 1.5KV	0	0	0
⚠ G852	CJ00071R	SPARK GAP 1.5KV	0	0	0
⚠ G8A1	CJ00071R	SPARK GAP 1.5KV	0	0	0
⚠ G8A2	CJ00071R	SPARK GAP 1.5KV	0	0	0
⚠ GF01	CJ00072R	SPARK GAP 2.5KV	0	0	0
⚠ QF02	CJ00072R	SPARK GAP 2.5KV	0	0	0
⚠ QF03	CJ00072R	SPARK GAP 2.5KV	0	0	0
		COMPOUND COMPONENTS			
EANT	HP00771	ANT SW	0	0	0
HM01	CZ00833	R/C REC.GP1U281R			0
HM02	CZ00641	GP1U281Q	0	0	

SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
HM03	CZ00641	GP1U281Q	0	0	
⚠ U301	HC00492	F/E V0-A30FTR	0	0	
⚠ U301	HC00522	F/E TMYH4X300A			0
⚠ U302	HC00502	F/E V0-A68FTR	0	0	
⚠ U302	HC00532	F/E TMYH2X300A			0
U303	CS00621	CHIP BOARD UNIT (HC5621)(FC)	0	0	
U303	CS00641	CHIP BOARD UNIT (HC5621T)(FC)			0
⚠ UFPK	AZ00163	CRX F-PACK MAYLAYSIA	0	0	
⚠ UFPK	AZ00651	CRX FOCUS PACK			0
UKDG	CS00591	CHIP BOARD UNIT (HC2171)			0
UKDG	CS00651	DCU HC2171HX ASY	0	0	
		INTEGRATED CIRCUITS			
I001	CK37372U	M306V3MG-XXXFP	0	0	0
I002	CK37051R	ANALOG MONOLITHIC IC(BD4729G)	0	0	0
I003	CK35894R	IC CAT24WC32J1	0	0	0
I005	CK31992R	IC BU4053BCF	0	0	0
I007	CK09541R	IC HD74HCT245T	0	0	0
I401	CP08191U	ANALOG MONOLITHIC IC TA1360N	0	0	0
I402	CK31992R	IC BU4053BCF	0	0	0
I601	CP06891	IC TDA8174A	0	0	0
I701	2362606	IC NJM4558D	0	0	0
⚠ I901	CP08101U	MONO IC STR-X6456(LF1901)	0	0	0
⚠ I902	CZ01082	IC STR-F6628(LF1359))	0	0	0
⚠ I903	CP07851	MONO IC TLP421	0	0	0
⚠ I904	CP07851	MONO IC TLP421	0	0	0
⚠ I905	CP07851	MONO IC TLP421	0	0	0
⚠ I906	CP07851	MONO IC TLP421	0	0	0
⚠ I907	2381343	IC (SE115N)	0	0	0
I908	CP05141	ANALOG MONOLITHIC IC (PQ6RD083)	0	0	0
I909	CP06081	ANALOG MONOLITHIC IC (SI-3050N)	0	0	0
I910	CP05163F	IC SI-3090F	0	0	0
I911	CP06543F	IC REG.(SI-3090C)	0	0	0
IA01	CK36491R	IC NJW1137M	0	0	0
IA02	CK35451R	IC NJM2198M	0	0	0
IA03	2004751	IC TA8200AH	0	0	0
⚠ IH01	CP07091	IC M62501P	0	0	0
IJ01	CK35163R	IC SII907BCQ52	0	0	
IJ02	CP05273U	IC M24C02-BN6	0	0	
IJ04	CK37051R	ANALOG MONOLITHIC IC(BD4729G)	0	0	
IJ07	CZ00671R	ANALOG MONOLITHIC IC (BA033FP-E2)	0	0	
IJ0A	CA01301R	TRS.CHIP NDC7002N	0	0	
IK01	CP02411	ANALOG MONOLITHIC IC KIA7805PI	0	0	0
IK02	CP05011R	IC PST994D-T	0	0	0
IK04	CZ00431	HYBRID IC (STK392-110)			0
IK04	CZ00433	HYBRID IC (STK392-150)	0	0	
IK05	CZ00431	HYBRID IC (STK392-110)	0	0	0
IP51	CK37191R	MONO IC SI-3018LSA-TL	0	0	0
IP52	CP08121R	MONO IC SI-3002KWF	0	0	0
IP53	CP06081	ANALOG MONOLITHIC IC (SI-3050N)	0	0	0
IP81	CK37184R	MONO IC SI-3033LUS	0	0	0
IV01	CK07631R	DIGITAL MONOLITHIC IC (TC90A45F)	0	0	0
IW01	CK36951U	3D Y/C SEP IC UPD64083GF-3BA	0	0	0
IW02	CK06097R	ANALOG MONOLITHIC IC(PST9127NR)	0	0	0
IX01	CK30941U	IC CXA2069Q	0	0	0
IX02	CK34811U	IC MM1519XQ	0	0	0
IZ01	CK36961R	IC TA1340F	0	0	0
IZ02	CK36961R	IC TA1340F	0	0	0
		COILS			
L001	BH00697R	FILTER COIL 100UH	0	0	0
L006	BH00697R	FILTER COIL 100UH	0	0	0
L007	BH00697R	FILTER COIL 100UH	0	0	0
L009	BH00697R	FILTER COIL 100UH	0	0	0
L010	BH00697R	FILTER COIL 100UH	0	0	0
L011	BH00697R	FILTER COIL 100UH	0	0	0
L014	BH00697R	FILTER COIL 100UH	0	0	0
L301	2123781R	FILTER COIL 100UH(EL0607)	0	0	0
L302	2123781R	FILTER COIL 100UH(EL0607)	0	0	0
L303	2123781R	FILTER COIL 100UH(EL0607)	0	0	0
L304	2123781R	FILTER COIL 100UH(EL0607)	0	0	0
L305	2123781R	FILTER COIL 100UH(EL0607)	0	0	0
L306	BH00697R	FILTER COIL 100UH	0	0	0
L307	2123781R	FILTER COIL 100UH(EL0607)	0	0	0
L308	BH00697R	FILTER COIL 100UH	0	0	0
L309	BH00671R	COIL 1.0UH	0	0	0

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SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
L401	BH00697R	FILTER COIL 100UH	0	0	0
L402	BH00697R	FILTER COIL 100UH	0	0	0
L403	BH00697R	FILTER COIL 100UH	0	0	0
L404	BH00697R	FILTER COIL 100UH	0	0	0
L601	2125803N	FILT.COIL(LHL08 27UH)	0	0	0
L602	2125803N	FILT.COIL(LHL08 27UH)	0	0	0
L703	BH00228R	COIL 332K-1T7608A	0	0	0
L704	BZ04612	HORIZONTAL LINEARITY COIL 13UH	0	0	0
L705	BZ04611	HORIZONTAL LINEARITY COIL 6UH	0	0	0
L801	BH00679R	COIL 4.7UH	0	0	0
L803	BH00685R	COIL 12UH	0	0	0
L804	BH00683R	COIL 8.2UH(FLR50)	0	0	0
L805	BH00671R	COIL 1.0UH	0	0	0
L806	BH00697R	FILTER COIL 100UH	0	0	0
L851	BH00677R	COIL 3.3UH	0	0	0
L853	BH00685R	COIL 12UH	0	0	0
L854	BH00683R	COIL 8.2UH(FLR50)	0	0	0
L855	BH00673R	COIL 1.5UH	0	0	0
L856	BH00697R	FILTER COIL 100UH	0	0	0
L8A1	BH00677R	COIL 3.3UH	0	0	0
L8A3	BH00685R	COIL 12UH	0	0	0
L8A4	BH00683R	COIL 8.2UH(FLR50)	0	0	0
L8A5	BH00673R	COIL 1.5UH	0	0	0
L8A6	BH00697R	FILTER COIL 100UH	0	0	0
⚠ L901	BZ05201	LINE FILTER 4.7MH 4A	0	0	0
⚠ L903	BZ05191	LINE FILTER 1.5MH 4A	0	0	0
L904	BH01342M	COIL FERRITE BEADS 2.3UH	0	0	0
L906	BH01341M	COIL FERRITE BEADS 0.8UH	0	0	0
L907	BH01341M	COIL FERRITE BEADS 0.8UH	0	0	0
L908	BH01342M	COIL FERRITE BEADS 2.3UH	0	0	0
L909	BH01342M	COIL FERRITE BEADS 2.3UH	0	0	0
L910	BH01341M	COIL FERRITE BEADS 0.8UH	0	0	0
L911	BH01341M	COIL FERRITE BEADS 0.8UH	0	0	0
L912	2125806N	FILT.COIL(LHL08 47UH)	0	0	0
L913	2125803N	FILT.COIL(LHL08 27UH)	0	0	0
L914	2125808N	FILT.COIL(LHL08 68UH)	0	0	0
L915	2125806N	FILT.COIL(LHL08 47UH)	0	0	0
L916	2125803N	FILT.COIL(LHL08 27UH)	0	0	0
L917	2125808N	FILT.COIL(LHL08 68UH)	0	0	0
L918	2125808N	FILT.COIL(LHL08 68UH)	0	0	0
L919	2125811N	FILT.COIL(LHL08 100UH)	0	0	0
L920	BH01342M	COIL FERRITE BEADS 2.3UH	0	0	0
L921	2125797N	FILT.COIL(LHL08 10UH)	0	0	0
L922	2125797N	FILT.COIL(LHL08 10UH)	0	0	0
L923	2125797N	FILT.COIL(LHL08 10UH)	0	0	0
L924	2125803N	FILT.COIL(LHL08 27UH)	0	0	0
LA02	BH00697R	FILTER COIL 100UH	0	0	0
LA03	BH00697R	FILTER COIL 100UH	0	0	0
LA04	BH00697R	FILTER COIL 100UH	0	0	0
LA06	BH01341M	COIL FERRITE BEADS 0.8UH	0	0	0
LA07	BH01341M	COIL FERRITE BEADS 0.8UH	0	0	0
LE04	BH01341M	COIL FERRITE BEADS 0.8UH	0	0	0
LE07	BH00697R	FILTER COIL 100UH	0	0	0
LE54	BH01341M	COIL FERRITE BEADS 0.8UH	0	0	0
LE57	BH00697R	FILTER COIL 100UH	0	0	0
LEA4	BH01341M	COIL FERRITE BEADS 0.8UH	0	0	0
LEA7	BH00697R	FILTER COIL 100UH	0	0	0
LH01	2125817N	FILT.COIL(LHL08 330UH)	0	0	
LH03	BH01342M	COIL FERRITE BEADS 2.3UH	0	0	0
LH04	BH01341M	COIL FERRITE BEADS 0.8UH	0	0	0
⚠ LH05	BH01342M	COIL FERRITE BEADS 2.3UH	0	0	0
LH06	2125824N	FILT.COIL(LHL08 1000UH)	0	0	0
LJ01	BM00289R	FILTER BLM18BD471SN1D	0	0	
LJ02	BM00289R	FILTER BLM18BD471SN1D	0	0	
LJ03	BM00289R	FILTER BLM18BD471SN1D	0	0	
LJ04	BM00289R	FILTER BLM18BD471SN1D	0	0	
LJ05	BM00289R	FILTER BLM18BD471SN1D	0	0	
LJ06	BM00289R	FILTER BLM18BD471SN1D	0	0	
LJ07	BM00289R	FILTER BLM18BD471SN1D	0	0	
LJ08	BM00289R	FILTER BLM18BD471SN1D	0	0	
LJ15	BH00684R	COIL 10UH	0	0	
LJ16	BH00697R	FILTER COIL 100UH	0	0	
LJ17	BH00697R	FILTER COIL 100UH	0	0	
LJ20	BM00289R	FILTER BLM18BD471SN1D	0	0	
LK07	BH01341M	COIL FERRITE BEADS 0.8UH	0	0	0
LK08	BH01341M	COIL FERRITE BEADS 0.8UH	0	0	0
LL01	2125811N	FILT.COIL(LHL08 100UH)	0	0	0
LV01	BH00697R	FILTER COIL 100UH	0	0	0
LV02	BH00697R	FILTER COIL 100UH	0	0	0
LV03	BH00697R	FILTER COIL 100UH	0	0	0
LV04	BH00697R	FILTER COIL 100UH	0	0	0
LV05	BH00697R	FILTER COIL 100UH	0	0	0
LV06	BH00686R	COIL 15UH	0	0	0
LW01	BH00691R	COIL 33UH	0	0	0
LW02	BH00691R	COIL 33UH	0	0	0
LW03	BH00697R	FILTER COIL 100UH	0	0	0
LW04	BH00697R	FILTER COIL 100UH	0	0	0
LW05	BH00697R	FILTER COIL 100UH	0	0	0
LW06	BH00697R	FILTER COIL 100UH	0	0	0
LW07	BH00697R	FILTER COIL 100UH	0	0	0
LW08	BH00697R	FILTER COIL 100UH	0	0	0
LW09	BH00679R	COIL 4.7UH	0	0	0
LW10	BH00697R	FILTER COIL 100UH	0	0	0
LX01	BH00697R	FILTER COIL 100UH	0	0	0
LX02	BH00697R	FILTER COIL 100UH	0	0	0
LX03	BH00697R	FILTER COIL 100UH	0	0	0
LX04	BH00697R	FILTER COIL 100UH	0	0	0
LX05	BH00697R	FILTER COIL 100UH	0	0	0
LZ01	BH00697R	FILTER COIL 100UH	0	0	0
LZ02	BH00697R	FILTER COIL 100UH	0	0	0
LZ03	BH00697R	FILTER COIL 100UH	0	0	0
LZ04	2123107M	LAL02 AXIAL COIL 22UH-K	0	0	0
LZ05	BH00697R	FILTER COIL 100UH	0	0	0
		TRANSISTORS			
Q001	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q004	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q005	CA01261R	TRS.CHIP 2SA1980S	0	0	0
Q006	CA01261R	TRS.CHIP 2SA1980S	0	0	0
Q007	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q008	CA01261R	TRS.CHIP 2SA1980S	0	0	0
Q009	CA01271R	TRS.CHIP 2SC5343S			0
Q010	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q011	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q012	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q013	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q014	CA01261R	TRS.CHIP 2SA1980S	0	0	0
Q015	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q016	CA01261R	TRS.CHIP 2SA1980S	0	0	0
Q017	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q018	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q019	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q020	CA01261R	TRS.CHIP 2SA1980S	0	0	0
Q022	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q023	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q024	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q025	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q026	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q033	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q301	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q302	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q303	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q304	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q305	CF02781R	TRS. KTC200YAT	0	0	0
Q306	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q307	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q308	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q309	CA01261R	TRS.CHIP 2SA1980S	0	0	0
Q401	CA01261R	TRS.CHIP 2SA1980S	0	0	0
Q402	CA01261R	TRS.CHIP 2SA1980S	0	0	0
Q403	CA01261R	TRS.CHIP 2SA1980S	0	0	0
Q404	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q405	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q406	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q407	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q408	CA01261R	TRS.CHIP 2SA1980S	0	0	0
Q409	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q410	CA01261R	TRS.CHIP 2SA1980S	0	0	0
Q411	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q412	CA01271R	TRS.CHIP 2SC5343S	0	0	0

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SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24	SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
Q413	CA01271R	TRS.CHIP 2SC5343S	0	0	0	QA12	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q414	CA01271R	TRS.CHIP 2SC5343S	0	0	0	QE01	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0
Q415	CA01271R	TRS.CHIP 2SC5343S	0	0	0	QE02	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0
Q417	CA01261R	TRS.CHIP 2SA1980S	0	0	0	QE03	CF02771R	TRS. KTA1270	0	0	0
Q418	CA01261R	TRS.CHIP 2SA1980S	0	0	0	QE06	2315381	TRS. 2SA1837	0	0	0
Q419	CA01261R	TRS.CHIP 2SA1980S	0	0	0	QE07	2315391	TRS. 2SC4793	0	0	0
Q420	CA01261R	TRS.CHIP 2SA1980S	0	0	0	QE08	2326821R	TRANSISTOR 2SA1371 (E/F)	0	0	0
Q421	CA01261R	TRS.CHIP 2SA1980S	0	0	0	QE09	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0
Q422	CA01261R	TRS.CHIP 2SA1980S	0	0	0	QE51	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0
Q426	CA01261R	TRS.CHIP 2SA1980S	0	0	0	QE52	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0
Q428	CF02771R	TRS. KTA1270	0	0	0	QE53	CF02771R	TRS. KTA1270	0	0	0
Q429	CA01261R	TRS.CHIP 2SA1980S	0	0	0	QE56	2315381	TRS. 2SA1837	0	0	0
Q431	CF02771R	TRS. KTA1270	0	0	0	QE57	2315391	TRS. 2SC4793	0	0	0
Q433	CF02771R	TRS. KTA1270	0	0	0	QEA1	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0
Q434	CA01261R	TRS.CHIP 2SA1980S	0	0	0	QEA2	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0
Q438	CF02771R	TRS. KTA1270	0	0	0	QEA3	CF02771R	TRS. KTA1270	0	0	0
Q439	CA01261R	TRS.CHIP 2SA1980S	0	0	0	QEA6	2315381	TRS. 2SA1837	0	0	0
Q440	CA01271R	TRS.CHIP 2SC5343S	0	0	0	QEA7	2315391	TRS. 2SC4793	0	0	0
Q441	CA01261R	TRS.CHIP 2SA1980S	0	0	0	QEA8	2326821R	TRANSISTOR 2SA1371 (E/F)	0	0	0
Q442	CA01271R	TRS.CHIP 2SC5343S	0	0	0	QF01	CF00821F	TRS. 2SC4686A 1200V	0	0	0
Q443	CA01261R	TRS.CHIP 2SA1980S	0	0	0	⚠ QH01	CF01583F	TRS.2SK2771-01R-F168R	0	0	0
Q444	CA01271R	TRS.CHIP 2SC5343S	0	0	0	QH02	CF02781R	TRS. KTC200YAT	0	0	0
Q445	CA01261R	TRS.CHIP 2SA1980S	0	0	0	QH03	2326811R	TRANSISTOR 2SC3468 (E/F)	0	0	0
Q446	CA01271R	TRS.CHIP 2SC5343S	0	0	0	QJ01	CA01261R	TRS.CHIP 2SA1980S	0	0	
Q447	CA01271R	TRS.CHIP 2SC5343S	0	0	0	QJ02	CA01261R	TRS.CHIP 2SA1980S	0	0	
Q448	CA01271R	TRS.CHIP 2SC5343S	0	0	0	QJ03	CA01261R	TRS.CHIP 2SA1980S	0	0	
Q450	CA01271R	TRS.CHIP 2SC5343S	0	0	0	QJ06	CA01271R	TRS.CHIP 2SC5343S	0	0	
Q603	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0	QJ08	CA01271R	TRS.CHIP 2SC5343S	0	0	
Q604	CF02771R	TRS. KTA1270	0	0	0	QK01	2312171	TRS. 2SC3852	0	0	0
Q701	2328102	TRS.FN-521	0	0	0	QK02	CF02771R	TRS. KTA1270	0	0	0
Q703	2324321M	TRANSISTOR 2SC2610-05	0	0	0	QK03	CF02771R	TRS. KTA1270	0	0	0
Q706	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0	QK06	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0
Q709	2326216	TRS. 2SC3116 (S/T)	0	0	0	QK07	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0
Q710	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0	QK08	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0
⚠ Q777	CF02731F	TRS. 2SC5681	0	0	0	QL10	CF02771R	TRS. KTA1270	0	0	0
Q801	2327471F	TRS.2SC3950 (HIT D/E)	0	0	0	QL11	CF02771R	TRS. KTA1270	0	0	0
Q802	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0	QL12	CF02771R	TRS. KTA1270	0	0	0
Q803	2312372F	TRS-2SC3942	0	0	0	QL13	CF02771R	TRS. KTA1270	0	0	0
Q804	2312773F	TRS-2SA1546(2)M/L	0	0	0	QL14	CF02771R	TRS. KTA1270	0	0	0
Q805	2312372F	TRS-2SC3942	0	0	0	QL15	CF02771R	TRS. KTA1270	0	0	0
Q812	2312372F	TRS-2SC3942	0	0	0	QL16	CF02771R	TRS. KTA1270	0	0	0
Q851	2327471F	TRS.2SC3950 (HIT D/E)	0	0	0	QL17	CF02771R	TRS. KTA1270	0	0	0
Q852	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0	QM01	CF01421R	TRS. KTC3198 (GR) TAPE			0
Q853	2312372F	TRS-2SC3942	0	0	0	QM02	2312992	PHOTO TRS. RPT-38PT3F (M)	0	0	
Q854	2312773F	TRS-2SA1546(2)M/L	0	0	0	QM02	2312992	PHOTO TRS. RPT-38PT3F (M)			0
Q855	2312372F	TRS-2SC3942	0	0	0	QM03	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	
Q862	2312372F	TRS-2SC3942	0	0	0	QM03	CF01421R	TRS. KTC3198 (GR) TAPE			0
Q8A1	2327471F	TRS.2SC3950 (HIT D/E)	0	0	0	QM04	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	
Q8A2	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0	QM04	CF01421R	TRS. KTC3198 (GR) TAPE			0
Q8A3	2312372F	TRS-2SC3942	0	0	0	QM05	CF01421R	TRS. KTC3198 (GR) TAPE			0
Q8A4	2312773F	TRS-2SA1546(2)M/L	0	0	0	QM06	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	
Q8A5	2312372F	TRS-2SC3942	0	0	0	QM07	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	
Q8A6	CF02771R	TRS. KTA1270	0	0	0	QN01	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0
Q8A7	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0	QN02	CF02771R	TRS. KTA1270	0	0	0
Q8C1	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0	QN03	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0
Q8C2	2312372F	TRS-2SC3942	0	0	0	QN04	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0
Q901	CF02771R	TRS. KTA1270	0	0	0	QN05	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0
Q902	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0	QN06	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0
Q903	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0	QV01	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q904	CF02771R	TRS. KTA1270	0	0	0	QV02	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q905	CF02281R	TRS. 2SA821S	0	0	0	QV03	CA01261R	TRS.CHIP 2SA1980S	0	0	0
Q906	CF02771R	TRS. KTA1270	0	0	0	QV04	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q907	2312171	TRS. 2SC3852	0	0	0	QV05	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q910	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0	QV06	CA01271R	TRS.CHIP 2SC5343S	0	0	0
Q911	CF02771R	TRS. KTA1270	0	0	0	QV07	CA01261R	TRS.CHIP 2SA1980S	0	0	0
Q912	CF01421R	TRS. KTC3198 (GR) TAPE	0	0	0	QV08	CA01271R	TRS.CHIP 2SC5343S	0	0	0
QA03	CA01261R	TRS.CHIP 2SA1980S	0	0	0	QV09	CA01271R	TRS.CHIP 2SC5343S	0	0	0
QA04	CA01271R	TRS.CHIP 2SC5343S	0	0	0	QV10	CA01261R	TRS.CHIP 2SA1980S	0	0	0
QA05	CA01261R	TRS.CHIP 2SA1980S	0	0	0	QW01	CA01271R	TRS.CHIP 2SC5343S	0	0	0
QA06	CA01271R	TRS.CHIP 2SC5343S	0	0	0	QW02	CA01261R	TRS.CHIP 2SA1980S	0	0	0
QA07	CA01271R	TRS.CHIP 2SC5343S	0	0	0	QW03	CA01271R	TRS.CHIP 2SC5343S	0	0	0
QA08	CA01271R	TRS.CHIP 2SC5343S	0	0	0	QW04	CA01261R	TRS.CHIP 2SA1980S	0	0	0
QA09	CA00461R	TRS.CHIP 2SD2114K 20V TAPE	0	0	0	QW05	CA01261R	TRS.CHIP 2SA1980S	0	0	0
QA10	CA00461R	TRS.CHIP 2SD2114K 20V TAPE	0	0	0	QW06	CA01271R	TRS.CHIP 2SC5343S	0	0	0
QA11	CA01271R	TRS.CHIP 2SC5343S	0	0	0	QW07	CA01261R	TRS.CHIP 2SA1980S	0	0	0

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SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24	SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
QW08	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R026	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
QW09	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R027	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
QW10	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R028	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
QW11	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R029	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QW12	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R030	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QW13	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R031	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QW14	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R032	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QW15	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R037	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
QW16	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R038	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
QX01	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R039	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QX02	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R042	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QX03	CF02781R	TRS. KTC200YAT	0	0	0	R043	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QX04	CF02781R	TRS. KTC200YAT	0	0	0	R044	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
QX05	CF02781R	TRS. KTC200YAT	0	0	0	R045	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QX09	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R046	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QX10	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R047	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QX11	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R048	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QX12	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R049	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
QX13	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R050	0790028R	RES.CHIP 1/16W 220 OHM	0	0	0
QX14	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R051	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
QX15	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R052	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QX16	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R053	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
QX17	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R054	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QX18	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R055	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0
QX19	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R056	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QX20	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R057	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QX21	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R058	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
QX22	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R060	0790028R	RES.CHIP 1/16W 220 OHM	0	0	0
QX23	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R061	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QX24	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R062	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
QX25	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R063	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
QX26	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R064	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QX27	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R065	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QX28	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R066	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
QX29	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R067	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QX30	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R068	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0
QX31	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R069	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QX33	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R070	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
QX34	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R071	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QZ01	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R072	0790028R	RES.CHIP 1/16W 220 OHM	0	0	0
QZ02	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R073	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
QZ03	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R074	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
QZ04	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R075	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
QZ05	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R076	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
QZ06	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R077	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QZ07	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R078	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QZ08	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R079	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QZ09	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R080	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QZ10	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R085	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
QZ11	CA01261R	TRS.CHIP 2SA1980S	0	0	0	R086	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
QZ13	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R087	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
QZ14	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R088	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0
QZ15	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R089	0790038R	RES.CHIP 1/16W 1.2K OHM	0	0	0
QZ18	CA01271R	TRS.CHIP 2SC5343S	0	0	0	R090	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
						R091	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
		RESISTORS				R092	0790077R	RES.CHIP 1/16W 1.0M OHM	0	0	0
R001	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R093	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
R006	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R094	0790077R	RES.CHIP 1/16W 1.0M OHM	0	0	0
R007	0790001R	CHIP RESISTOR RECJUMPER-1-16C16T1608	0	0	0	R095	0790055R	RES.CHIP 1/16W 22K OHM	0	0	0
R008	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R096	0790064R	RES.CHIP 1/16W 100K OHM	0	0	0
R009	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R098	0790046R	RES.CHIP 1/16W 4.7K OHM	0	0	0
R010	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R101	0790055R	RES.CHIP 1/16W 22K OHM	0	0	0
R011	0790001R	CHIP RESISTOR RECJUMPER-1-16C16T1608	0	0	0	R102	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R012	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R103	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R014	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R104	0790001R	CHIP RESISTOR RECJUMPER-1-16C16T1608	0	0	0
R015	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R105	0790001R	CHIP RESISTOR RECJUMPER-1-16C16T1608	0	0	0
R016	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R106	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R018	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R107	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R019	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R108	0790044R	RES.CHIP 1/16W 3.3K OHM	0	0	0
R020	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R109	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0
R021	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R110	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0
R022	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R111	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R023	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R112	0790001R	CHIP RESISTOR RECJUMPER-1-16C16T1608	0	0	0
R024	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R113	0790057R	RES.CHIP 1/16W 33K OHM	0	0	0
R025	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R114	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0

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SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24	SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
R145	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R263	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R146	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R264	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R147	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0	R265	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R148	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R269	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R149	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R298	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R150	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R299	0790039R	RES.CHIP 1/16W 1.5K OHM	0	0	0
R151	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R301	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R152	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R302	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R153	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R303	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R154	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R304	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R155	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0	R305	0790055R	RES.CHIP 1/16W 22K OHM	0	0	0
R156	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R306	0790055R	RES.CHIP 1/16W 22K OHM	0	0	0
R157	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R307	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R158	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0	R308	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R159	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R309	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R160	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R310	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R162	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	R311	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R163	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R312	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R165	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	R313	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R166	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	R314	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R167	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	R315	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0
R168	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R316	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R169	0790064R	RES.CHIP 1/16W 100K OHM	0	0	0	R317	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0
R170	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0	R319	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R171	0790069R	RES.CHIP 1/16W 270K OHM	0	0	0	R320	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R179	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0	R322	0790028R	RES.CHIP 1/16W 220 OHM	0	0	0
R180	0790052R	RES.CHIP 1/16W 12K OHM	0	0	0	R323	0790028R	RES.CHIP 1/16W 220 OHM	0	0	0
R181	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0	R324	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R182	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R325	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R183	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0	R326	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R184	0790052R	RES.CHIP 1/16W 12K OHM	0	0	0	R327	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R185	0790064R	RES.CHIP 1/16W 100K OHM	0	0	0	R329	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R186	0790052R	RES.CHIP 1/16W 12K OHM	0	0	0	R331	0790028R	RES.CHIP 1/16W 220 OHM	0	0	0
R187	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0	R332	0790028R	RES.CHIP 1/16W 220 OHM	0	0	0
R188	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0	R333	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R189	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R334	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R190	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R335	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R191	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R336	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R196	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	R337	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R198	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R338	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0
R199	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R339	0790055R	RES.CHIP 1/16W 22K OHM	0	0	0
R200	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R340	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R201	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R341	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R202	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R342	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R203	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R343	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R204	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R344	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R205	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R345	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R206	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R346	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R207	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R347	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R208	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R348	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R209	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R349	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R210	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R359	0790021R	RES.CHIP 1/16W 56 OHM	0	0	0
R211	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R360	0790021R	RES.CHIP 1/16W 56 OHM	0	0	0
R212	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R361	0790021R	RES.CHIP 1/16W 56 OHM	0	0	0
R213	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R362	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R214	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	R363	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R215	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0	R364	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R219	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	R365	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R220	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0	R366	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R221	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0	R367	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R222	0790028R	RES.CHIP 1/16W 220 OHM	0	0	0	R368	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R227	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	R369	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R228	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	R370	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R229	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	R371	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R230	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	R372	0790031R	RES.CHIP 1/16W 330 OHM	0	0	0
R231	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	R373	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R232	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	R374	0790031R	RES.CHIP 1/16W 330 OHM	0	0	0
R237	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R375	0790031R	RES.CHIP 1/16W 330 OHM	0	0	0
R239	0790064R	RES.CHIP 1/16W 100K OHM	0	0	0	R376	0790034R	RES.CHIP 1/16W 560 OHM	0	0	0
R240	0790046R	RES.CHIP 1/16W 4.7K OHM	0	0	0	R377	0790021R	RES.CHIP 1/16W 56 OHM	0	0	0
R243	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R378	0790021R	RES.CHIP 1/16W 56 OHM	0	0	0
R244	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	R379	0790021R	RES.CHIP 1/16W 56 OHM	0	0	0
R245	0790034R	RES.CHIP 1/16W 560 OHM	0	0	0	R387	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R261	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R401	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R262	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R402	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0

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SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24	SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
R403	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R480	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R404	0790039R	RES.CHIP 1/16W 1.5K OHM	0	0	0	R481	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R405	0790039R	RES.CHIP 1/16W 1.5K OHM	0	0	0	R482	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R406	0790039R	RES.CHIP 1/16W 1.5K OHM	0	0	0	R483	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R407	0790074R	RES.CHIP 1/16W 560K OHM	0	0	0	R484	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R408	0790044R	RES.CHIP 1/16W 3.3K OHM	0	0	0	R490	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R409	0790044R	RES.CHIP 1/16W 3.3K OHM	0	0	0	R498	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R410	0790044R	RES.CHIP 1/16W 3.3K OHM	0	0	0	R4A1	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R411	0790044R	RES.CHIP 1/16W 3.3K OHM	0	0	0	R503	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R412	0790044R	RES.CHIP 1/16W 3.3K OHM	0	0	0	R505	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R413	0790044R	RES.CHIP 1/16W 3.3K OHM	0	0	0	R506	0790052R	RES.CHIP 1/16W 12K OHM	0	0	0
R414	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R507	0790057R	RES.CHIP 1/16W 33K OHM	0	0	0
R415	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R508	0790022R	RES.CHIP 1/16W 68 OHM	0	0	0
R416	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R509	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
R417	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R510	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R418	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R511	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R419	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R512	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R420	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R520	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R421	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R522	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R422	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R523	0790052R	RES.CHIP 1/16W 12K OHM	0	0	0
R423	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R524	0790057R	RES.CHIP 1/16W 33K OHM	0	0	0
R424	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R525	0790022R	RES.CHIP 1/16W 68 OHM	0	0	0
R425	0790039R	RES.CHIP 1/16W 1.5K OHM	0	0	0	R526	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R426	0790039R	RES.CHIP 1/16W 1.5K OHM	0	0	0	R529	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R427	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R538	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R428	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R540	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R429	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R541	0790052R	RES.CHIP 1/16W 12K OHM	0	0	0
R430	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R542	0790057R	RES.CHIP 1/16W 33K OHM	0	0	0
R431	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R543	0790022R	RES.CHIP 1/16W 68 OHM	0	0	0
R432	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R547	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R433	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R548	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R434	0790049R	RES.CHIP 1/16W 8.2K OHM	0	0	0	R550	0790055R	RES.CHIP 1/16W 22K OHM	0	0	0
R435	0790045R	RES.CHIP 1/16W 3.9K OHM	0	0	0	R551	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R436	0790055R	RES.CHIP 1/16W 22K OHM	0	0	0	R553	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R437	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R554	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0
R438	0196056R	RES.-1608CHIP 1/16W 360-J TAPE	0	0	0	R555	0790061R	RES.CHIP 1/16W 56K OHM	0	0	0
R439	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R556	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R440	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R557	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R441	0790048R	RES.CHIP 1/16W 6.8K OHM	0	0	0	R558	0790053R	RES.CHIP 1/16W 15K OHM	0	0	0
R442	0790043R	RES.CHIP 1/16W 2.7K OHM	0	0	0	R559	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R443	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R560	0790056R	RES.CHIP 1/16W 27K OHM	0	0	0
R444	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R561	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R445	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R562	0790053R	RES.CHIP 1/16W 15K OHM	0	0	0
R446	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R563	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R447	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R564	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R448	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R565	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R449	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R566	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R450	0790038R	RES.CHIP 1/16W 1.2K OHM	0	0	0	R567	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R451	0790045R	RES.CHIP 1/16W 3.9K OHM	0	0	0	R568	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R452	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	R570	0790056R	RES.CHIP 1/16W 27K OHM	0	0	0
R453	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R571	0790063R	RES.CHIP 1/16W 82K OHM	0	0	0
R454	0790056R	RES.CHIP 1/16W 27K OHM	0	0	0	R572	0790021R	RES.CHIP 1/16W 56 OHM	0	0	0
R455	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R573	AT03864M	330OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R456	0790044R	RES.CHIP 1/16W 3.3K OHM	0	0	0	R575	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R457	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0	R576	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R458	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R577	0790052R	RES.CHIP 1/16W 12K OHM	0	0	0
R461	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	R578	0790052R	RES.CHIP 1/16W 12K OHM	0	0	0
R462	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R579	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R463	0790043R	RES.CHIP 1/16W 2.7K OHM	0	0	0	R580	0790021R	RES.CHIP 1/16W 56 OHM	0	0	0
R464	0790043R	RES.CHIP 1/16W 2.7K OHM	0	0	0	R581	0790031R	RES.CHIP 1/16W 330 OHM	0	0	0
R465	0790043R	RES.CHIP 1/16W 2.7K OHM	0	0	0	R584	0790031R	RES.CHIP 1/16W 330 OHM	0	0	0
R466	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R586	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R467	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R587	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0
R468	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	R588	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R469	0790043R	RES.CHIP 1/16W 2.7K OHM	0	0	0	R590	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R470	0790043R	RES.CHIP 1/16W 2.7K OHM	0	0	0	R592	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R471	0790043R	RES.CHIP 1/16W 2.7K OHM	0	0	0	R593	AT03857M	100OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R472	0790029R	RES.CHIP 1/16W 270 OHM	0	0	0	R594	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
R473	0790029R	RES.CHIP 1/16W 270 OHM	0	0	0	R602	0700027M	RES.-CARBON FLM 1/16W 100-JB	0	0	0
R474	0790029R	RES.CHIP 1/16W 270 OHM	0	0	0	R604	0700064M	RES.-CARBON FLM 1/16W 56K-JB	0	0	0
R475	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R605	0700056M	RES.-CARBON FLM 1/16W 15K-JB	0	0	0
R476	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R606	0700048M	RES.-CARBON FLM 1/16W 3.9K-JB	0	0	0
R477	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R607	AW00131	TRIMMERresis.	0	0	0
R478	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R608	0100115M	RES.-CARBON FLM 1/8W 120K-JB	0	0	0
R479	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	R611	0700058M	RES.-CARBON FLM 1/16W 22K-JB			0

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SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24	SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
R611	0700059M	RES.-CARBON FLM 1/16W 27K-JB	0	0		R853	AT03856M	82.0OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R612	0700063M	RES.-CARBON FLM 1/16W 47K-JB	0	0	0	R854	0100017M	RES.-CARBON FLM 1/8W 10-JB	0	0	0
R613	0100053M	RES.-CARBON FLM 1/8W 330-JB	0	0	0	R855	AT03862M	220OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R614	0100053M	RES.-CARBON FLM 1/8W 330-JB	0	0	0	R856	0119559M	RES.-MTL FLM 1/8W 10-FB	0	0	0
R616	0700047M	RES.-CARBON FLM 1/16W 3.3K-JB	0	0	0	R857	AT03867M	560OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R617	0700051M	RES.-CARBON FLM 1/16W 5.6K-JB	0	0	0	R858	0100113M	RES.-CARBON FLM 1/8W 100K-JB	0	0	0
R618	0700065M	RES.-CARBON FLM 1/16W 68K-JB	0	0		R859	AT03866M	470OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R618	0700066M	RES.-CARBON FLM 1/16W 82K-JB			0	R861	AT04381	METAL OXIDE resis. (1.2KOHM 7W)	0	0	0
R619	AT03191S	METAL OX. 1.2OHM 1W	0	0	0	R862	AT04381	METAL OXIDE resis. (1.2KOHM 7W)	0	0	0
R620	AT03191S	METAL OX. 1.2OHM 1W	0	0	0	R863	0100035M	RES.-CARBON FLM 1/8W 56-JB	0	0	0
R621	0100045M	RES.-CARBON FLM 1/8W 150-JB	0	0	0	R864	0100035M	RES.-CARBON FLM 1/8W 56-JB	0	0	0
R622	0188095M	RES.-CARBON FLM 1/2W 2.2-J	0	0	0	R865	AT03857M	100OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R625	AT03242S	METAL OX. 100OHM 1W	0	0	0	R866	AT03906M	470KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R626	AT03857M	100OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	R868	AT03861M	180OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R627	AT03857M	100OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	R869	AT03902M	220KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R628	AT03857M	100OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	R870	AT03902M	220KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R629	AT03184S	METAL OX. 0.68OHM 1W	0	0	0	R880	0100049M	RES.-CARBON FLM 1/8W 220-JB	0	0	0
R630	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	0	R881	0100075M	RES.-CARBON FLM 1/8W 2.7K-JB	0	0	0
R631	0700059M	RES.-CARBON FLM 1/16W 27K-JB	0	0	0	R882	0100077M	RES.-CARBON FLM 1/8W 3.3K-JB	0	0	0
R632	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0	R8A2	0100041M	RES.-CARBON FLM 1/8W 100-JB	0	0	0
R701	0100111M	RES.-CARBON FLM 1/8W 82K-JB	0	0	0	R8A3	AT03858M	120OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R702	0100113M	RES.-CARBON FLM 1/8W 100K-JB	0	0	0	R8A4	0100017M	RES.-CARBON FLM 1/8W 10-JB	0	0	0
R703	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	0	R8A5	AT03863M	270OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R704	AT03857M	100OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	R8A6	0119559M	RES.-MTL FLM 1/8W 10-FB	0	0	0
R706	AT03881M	5.6KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0	R8A7	AT03867M	560OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R707	AT03882M	6.8KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0	R8A8	0100113M	RES.-CARBON FLM 1/8W 100K-JB	0	0	0
R708	0700067M	RES.-CARBON FLM 1/16W 100K-JB	0	0	0	R8A9	AT03866M	470OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R709	0700064M	RES.-CARBON FLM 1/16W 56K-JB			0	R8C1	AT04381	METAL OXIDE resis. (1.2KOHM 7W)	0	0	0
R709	0700065M	RES.-CARBON FLM 1/16W 68K-JB	0	0		R8C2	AT04381	METAL OXIDE resis. (1.2KOHM 7W)	0	0	0
R710	0700045M	RES.-CARBON FLM 1/16W 2.2K-JB	0	0	0	R8C3	0100035M	RES.-CARBON FLM 1/8W 56-JB	0	0	0
R711	AW00123	TRIMMER resis.	0	0	0	R8C4	0100035M	RES.-CARBON FLM 1/8W 56-JB	0	0	0
R712	0700055M	RES.-CARBON FLM 1/16W 12K-JB	0	0	0	R8C5	AT03857M	100OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R713	0700049M	RES.-CARBON FLM 1/16W 4.7K-JB	0	0	0	R8C6	AT03906M	470KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R714	0700038M	RES.-CARBON FLM 1/16W 680-JB			0	R8C8	AT03859M	150OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R714	0700039M	RES.-CARBON FLM 1/16W 820-JB	0	0		R8E3	0100089M	RES.-CARBON FLM 1/8W 10K-JB	0	0	0
R715	0700063M	RES.-CARBON FLM 1/16W 47K-JB	0	0	0	R8E4	0100105M	RES.-CARBON FLM 1/8W 47K-JB	0	0	0
R717	0700052M	RES.-CARBON FLM 1/16W 6.8K-JB	0	0	0	R8E5	AT03855M	68.0OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R721	0700042M	RES.-CARBON FLM 1/16W 1.2K-JB	0	0	0	R8E6	0100067M	RES.-CARBON FLM 1/8W 1.2K-JB	0	0	0
R722	0700032M	RES.-CARBON FLM 1/16W 220-JB	0	0	0	R8E7	0100087M	RES.-CARBON FLM 1/8W 8.2K-JB	0	0	0
R723	AT03862M	220OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	R8E8	0100083M	RES.-CARBON FLM 1/8W 5.6K-JB	0	0	0
R724	0700055M	RES.-CARBON FLM 1/16W 12K-JB	0	0	0	R8F0	0100049M	RES.-CARBON FLM 1/8W 220-JB	0	0	0
R725	0100085M	RES.-CARBON FLM 1/8W 6.8K-JB	0	0	0	R8F1	0100075M	RES.-CARBON FLM 1/8W 2.7K-JB	0	0	0
R729	AT03562S	METAL OX. 100OHM 3W	0	0	0	R8F2	0100077M	RES.-CARBON FLM 1/8W 3.3K-JB	0	0	0
R730	AT03422S	METAL OX. 560OHM 2W	0	0	0	⚠ R901	AT03672M	RES.MTL GRAZD FLM 1/2W 3.3M	0	0	0
R731	AT01532S	METAL FILM resis.(0.12OHM 1/2W)	0	0	0	R902	AT04371	W/WRE-R62K15W AKANE	0	0	0
R732	AT03844M	10.0OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	⚠ R903	AT03676M	RES.MTL GRAZD FLM 1/2W 6.8M	0	0	0
R735	0700028M	RES.-CARBON FLM 1/16W 120-JB	0	0	0	R904	AT03897M	100KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R736	0700033M	RES.-CARBON FLM 1/16W 270-JB	0	0	0	R906	AT03317S	METAL OX. 68K OHM 1W	0	0	0
R737	AT03869M	820OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	R907	AT03317S	METAL OX. 68K OHM 1W	0	0	0
R739	AT03251S	METAL OX. 220OHM 1W	0	0	0	R908	AT03179S	METAL OX. 0.47OHM 1W	0	0	0
R740	AT03251S	METAL OX. 220OHM 1W	0	0	0	R909	AT03179S	METAL OX. 0.47OHM 1W	0	0	0
R742	0700052M	RES.-CARBON FLM 1/16W 6.8K-JB	0	0	0	R911	0700053M	RES.-CARBON FLM 1/16W 8.2K-JB	0	0	0
R745	0700056M	RES.-CARBON FLM 1/16W 15K-JB	0	0	0	R912	0700027M	RES.-CARBON FLM 1/16W 100-JB	0	0	0
R747	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	0	R913	AT03848M	22.0OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R748	AT03422S	METAL OX. 560OHM 2W	0	0	0	R914	0700043M	RES.-CARBON FLM 1/16W 1.5K-JB	0	0	0
R802	0100041M	RES.-CARBON FLM 1/8W 100-JB	0	0	0	R915	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0
R803	AT03858M	120OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	R916	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0
R804	0100017M	RES.-CARBON FLM 1/8W 10-JB	0	0	0	R917	0700067M	RES.-CARBON FLM 1/16W 100K-JB	0	0	0
R805	AT03866M	470OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	R918	AT03665M	RES.MTL GRAZD FLM 1/2W 1M	0	0	0
R806	0119559M	RES.-MTL FLM 1/8W 10-FB	0	0	0	R919	0100033M	RES.-CARBON FLM 1/8W 47-JB	0	0	0
R807	AT03867M	560OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	R920	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	0
R808	0100113M	RES.-CARBON FLM 1/8W 100K-JB	0	0	0	R921	0700058M	RES.-CARBON FLM 1/16W 22K-JB	0	0	0
R809	AT03866M	470OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	R922	0700049M	RES.-CARBON FLM 1/16W 4.7K-JB	0	0	0
R811	AT04381	METAL OXIDE resis. (1.2KOHM 7W)	0	0	0	R923	AT04428M	ASR 12 TB 390KOHM J	0	0	0
R812	AT04381	METAL OXIDE resis. (1.2KOHM 7W)	0	0	0	R924	AT03444S	METAL OX. 3.9KOHM 2W	0	0	0
R813	0100035M	RES.-CARBON FLM 1/8W 56-JB	0	0	0	R925	AT03444S	METAL OX. 3.9KOHM 2W	0	0	0
R814	0100035M	RES.-CARBON FLM 1/8W 56-JB	0	0	0	R926	AT03171S	METAL OX. 0.22OHM 1W	0	0	0
R815	AT03857M	100OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	R927	AT03171S	METAL OX. 0.22OHM 1W	0	0	0
R816	AT03906M	470KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0	R928	AT03171S	METAL OX. 0.22OHM 1W	0	0	0
R819	AT03866M	470OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	R929	0700038M	RES.-CARBON FLM 1/16W 680-JB	0	0	0
R820	AT03858M	120OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	R930	AT03844M	10.0OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R830	0100049M	RES.-CARBON FLM 1/8W 220-JB	0	0	0	R931	0700045M	RES.-CARBON FLM 1/16W 2.2K-JB	0	0	0
R831	0100075M	RES.-CARBON FLM 1/8W 2.7K-JB	0	0	0	R932	0700047M	RES.-CARBON FLM 1/16W 3.3K-JB	0	0	0
R832	0100077M	RES.-CARBON FLM 1/8W 3.3K-JB	0	0	0	R933	AT03665M	RES.MTL GRAZD FLM 1/2W 1M	0	0	0
R852	0100041M	RES.-CARBON FLM 1/8W 100-JB	0	0	0	R934	0700055M	RES.-CARBON FLM 1/16W 12K-JB	0	0	0

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SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24	SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
R935	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0	RA35	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R936	0700032M	RES.-CARBON FLM 1/16W 220-JB	0	0	0	RA36	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0
R937	AT03464S	METAL OX. 22K OHM 2W	0	0	0	RA37	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0
R938	0700049M	RES.-CARBON FLM 1/16W 4.7K-JB	0	0	0	RA38	0790064R	RES.CHIP 1/16W 100K OHM	0	0	0
⚠ R939	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	0	RA39	0790064R	RES.CHIP 1/16W 100K OHM	0	0	0
⚠ R940	0700036M	RES.-CARBON FLM 1/16W 470-JB	0	0	0	RA40	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R941	0119695M	RES.-MTL OXIDE FLM 1W 0.47-F	0	0	0	RA41	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R942	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	0	RA42	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0
R943	0700058M	RES.-CARBON FLM 1/16W 22K-JB	0	0	0	RA43	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0
R944	0700063M	RES.-CARBON FLM 1/16W 47K-JB	0	0	0	RA44	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R945	AT03896M	82KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RA45	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
R946	0700047M	RES.-CARBON FLM 1/16W 3.3K-JB	0	0	0	RA46	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0
R947	0700052M	RES.-CARBON FLM 1/16W 6.8K-JB	0	0	0	RA47	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0
R948	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	0	RA48	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0
R949	0700063M	RES.-CARBON FLM 1/16W 47K-JB	0	0	0	RA49	0790064R	RES.CHIP 1/16W 100K OHM	0	0	0
R950	0700045M	RES.-CARBON FLM 1/16W 2.2K-JB	0	0	0	RA50	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0
R951	AT03886M	15KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RA51	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
R952	AT03886M	15KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RA52	0790064R	RES.CHIP 1/16W 100K OHM	0	0	0
R953	0700047M	RES.-CARBON FLM 1/16W 3.3K-JB	0	0	0	RA53	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
R954	0700047M	RES.-CARBON FLM 1/16W 3.3K-JB	0	0	0	RA54	0790062R	RES.CHIP 1/16W 68K OHM	0	0	0
R956	0700049M	RES.-CARBON FLM 1/16W 4.7K-JB	0	0	0	RA55	0790062R	RES.CHIP 1/16W 68K OHM	0	0	0
R957	0700023M	RES.-CARBON FLM 1/16W 47-J	0	0	0	RA56	AT03197S	METAL OX. 2.2OHM 1W	0	0	0
R958	0700031M	RES.-CARBON FLM 1/16W 180-JB	0	0	0	RA57	AT03197S	METAL OX. 2.2OHM 1W	0	0	0
R959	0700063M	RES.-CARBON FLM 1/16W 47K-JB	0	0	0	RA58	AT03871M	1KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R960	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0	RA59	AT03871M	1KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R962	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0	RA60	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R963	0700032M	RES.-CARBON FLM 1/16W 220-JB	0	0	0	RA61	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0
R964	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	0	RA74	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R965	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0	RA75	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R966	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	0	RA85	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R967	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0	RA86	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R968	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	0	RAA2	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R969	0700027M	RES.-CARBON FLM 1/16W 100-JB	0	0	0	RAA3	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
R970	0700046M	RES.-CARBON FLM 1/16W 2.7K-JB	0	0	0	RE01	0700017M	RES.-CARBON FLM 1/16W 18-J	0	0	0
R971	0700032M	RES.-CARBON FLM 1/16W 220-JB	0	0	0	RE02	AT03862M	220OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R972	0700055M	RES.-CARBON FLM 1/16W 12K-JB	0	0	0	RE03	0700014M	RES.-CARBON FLM 1/16W 10-J	0	0	0
R976	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0	RE04	0700014M	RES.-CARBON FLM 1/16W 10-J	0	0	0
R977	0700032M	RES.-CARBON FLM 1/16W 220-JB	0	0	0	RE05	AT03844M	10.0OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R978	0700055M	RES.-CARBON FLM 1/16W 12K-JB	0	0	0	RE12	0100017M	RES.-CARBON FLM 1/8W 10-JB	0	0	0
R979	0700051M	RES.-CARBON FLM 1/16W 5.6K-JB	0	0	0	RE13	0100017M	RES.-CARBON FLM 1/8W 10-JB	0	0	0
R980	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0	RE15	AT03895M	68KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R982	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0	RE16	AT03895M	68KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R985	AT03886M	15KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RE18	AT03876M	2.7KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R986	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	0	RE19	0100075M	RES.-CARBON FLM 1/8W 2.7K-JB	0	0	0
R987	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	0	RE20	AT03885M	12KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R988	AT03879M	4.7KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RE21	AT03862M	220OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R989	0700045M	RES.-CARBON FLM 1/16W 2.2K-JB	0	0	0	RE22	AT03862M	220OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
R990	0700045M	RES.-CARBON FLM 1/16W 2.2K-JB	0	0	0	RE23	0113686M	RES.-CARBON FLM 1/2W 2.7-J	0	0	0
R992	AT03288S	METAL OX. 5.6KOHM 1W	0	0	0	RE24	0113686M	RES.-CARBON FLM 1/2W 2.7-J	0	0	0
RA07	0790064R	RES.CHIP 1/16W 100K OHM	0	0	0	RE25	AT03571S	METAL OX. 220OHM 3W	0	0	0
RA08	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RE27	AT03579S	METAL OX. 470OHM 3W	0	0	0
RA09	0790063R	RES.CHIP 1/16W 82K OHM	0	0	0	RE28	0113686M	RES.-CARBON FLM 1/2W 2.7-J	0	0	0
RA10	0790028R	RES.CHIP 1/16W 220 OHM	0	0	0	RE29	0100081M	RES.-CARBON FLM 1/8W 4.7K-JB	0	0	0
RA11	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RE30	0100099M	RES.-CARBON FLM 1/8W 27K-JB	0	0	0
RA12	0790031R	RES.CHIP 1/16W 330 OHM	0	0	0	RE31	0100089M	RES.-CARBON FLM 1/8W 10K-JB	0	0	0
RA13	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RE32	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	0
RA14	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RE33	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	0
RA15	0790058R	RES.CHIP 1/16W 39K OHM	0	0	0	RE34	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0
RA16	0790052R	RES.CHIP 1/16W 12K OHM	0	0	0	RE51	0700017M	RES.-CARBON FLM 1/16W 18-J	0	0	0
RA17	0790064R	RES.CHIP 1/16W 100K OHM	0	0	0	RE52	AT03862M	220OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
RA18	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RE53	0700014M	RES.-CARBON FLM 1/16W 10-J	0	0	0
RA19	0790063R	RES.CHIP 1/16W 82K OHM	0	0	0	RE54	0700014M	RES.-CARBON FLM 1/16W 10-J	0	0	0
RA20	0790028R	RES.CHIP 1/16W 220 OHM	0	0	0	RE55	AT03844M	10.0OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
RA21	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RE62	0100017M	RES.-CARBON FLM 1/8W 10-JB	0	0	0
RA22	0790031R	RES.CHIP 1/16W 330 OHM	0	0	0	RE63	0100017M	RES.-CARBON FLM 1/8W 10-JB	0	0	0
RA23	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RE66	AT03876M	2.7KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0
RA24	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RE67	AT03895M	68KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0
RA25	0790058R	RES.CHIP 1/16W 39K OHM	0	0	0	RE68	AT03895M	68KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0
RA26	0790052R	RES.CHIP 1/16W 12K OHM	0	0	0	RE69	0100075M	RES.-CARBON FLM 1/8W 2.7K-JB	0	0	0
RA27	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RE70	AT03885M	12KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0
RA28	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RE71	AT03862M	220OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
RA30	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RE72	0113686M	RES.-CARBON FLM 1/2W 2.7-J	0	0	0
RA31	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RE73	AT03862M	220OHM 1/2W RDS50 CARBON FILM resis.	0	0	0
RA33	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RE74	0113686M	RES.-CARBON FLM 1/2W 2.7-J	0	0	0
RA34	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RE75	AT03571S	METAL OX. 220OHM 3W	0	0	0

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SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24	SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
REA1	0700017M	RES.-CARBON FLM 1/16W 18-J	0	0	0	RJ16	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	
REA2	AT03862M	220OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RJ17	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	
REA3	0700014M	RES.-CARBON FLM 1/16W 10-J	0	0	0	RJ20	0790051R	RES.CHIP 1/16W 10K OHM	0	0	
REA4	0700014M	RES.-CARBON FLM 1/16W 10-J	0	0	0	RJ23	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	
REA5	AT03844M	10.0OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RJ27	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	
REC3	0100017M	RES.-CARBON FLM 1/8W 10-JB	0	0	0	RJ28	AQ00173R	RES.CHIP 1/16W 160 OHM TAPE	0	0	
REC4	0100017M	RES.-CARBON FLM 1/8W 10-JB	0	0	0	RJ30	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	
REC7	AT03876M	2.7KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RJ32	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	
REC8	AT03895M	68KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RJ33	0196058R	RES 1608 CHIP 1/16W 430J TAPE	0	0	
REC9	AT03895M	68KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RJ34	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	
REE1	0100075M	RES.-CARBON FLM 1/8W 2.7K-JB	0	0	0	RJ37	0790057R	RES.CHIP 1/16W 33K OHM	0	0	
REE2	AT03885M	12KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RJ38	0790057R	RES.CHIP 1/16W 33K OHM	0	0	
REE3	AT03862M	220OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RJ39	0790057R	RES.CHIP 1/16W 33K OHM	0	0	
REE4	0113686M	RES.-CARBON FLM 1/2W 2.7-J	0	0	0	RJ40	0790057R	RES.CHIP 1/16W 33K OHM	0	0	
REE5	AT03862M	220OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RJ43	0790024R	RES.CHIP 1/16W 100 OHM	0	0	
REE6	0113686M	RES.-CARBON FLM 1/2W 2.7-J	0	0	0	RJ44	0790024R	RES.CHIP 1/16W 100 OHM	0	0	
REE7	AT03571S	METAL OX. 220OHM 3W	0	0	0	RJ49	0790059R	RES.CHIP 1/16W 47K OHM	0	0	
REE9	0700027M	RES.-CARBON FLM 1/16W 100-JB	0	0	0	RJ50	0790059R	RES.CHIP 1/16W 47K OHM	0	0	
REF1	0100021M	RES.-CARBON FLM 1/8W 15-JB	0	0	0	RJ58	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	
REF2	AT03857M	100OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RJ59	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	
REF4	0700027M	RES.-CARBON FLM 1/16W 100-JB	0	0	0	RJ60	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	
REF5	0700067M	RES.-CARBON FLM 1/16W 100K-JB	0	0	0	RJ61	0790025R	RES.CHIP 1/16W 120 OHM	0	0	
REF6	0700027M	RES.-CARBON FLM 1/16W 100-JB	0	0	0	RJ62	0790025R	RES.CHIP 1/16W 120 OHM	0	0	
RF01	0700063M	RES.-CARBON FLM 1/16W 47K-JB	0	0	0	RJ63	0790025R	RES.CHIP 1/16W 120 OHM	0	0	
RF02	AT04431M	ASR 12 TB 560KOHM J	0	0	0	RJ65	0790039R	RES.CHIP 1/16W 1.5K OHM	0	0	
RF03	AT04431M	ASR 12 TB 560KOHM J	0	0	0	RJ66	0790039R	RES.CHIP 1/16W 1.5K OHM	0	0	
RF04	0700049M	RES.-CARBON FLM 1/16W 4.7K-JB	0	0	0	RJ67	0790039R	RES.CHIP 1/16W 1.5K OHM	0	0	
RF05	0700059M	RES.-CARBON FLM 1/16W 27K-JB	0	0	0	RJ68	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	
RF06	0700045M	RES.-CARBON FLM 1/16W 2.2K-JB	0	0	0	RJ69	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	
RF07	AT03871M	1KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RJ70	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	
RH01	0700043M	RES.-CARBON FLM 1/16W 1.5K-JB	0	0	0	RJ71	0790024R	RES.CHIP 1/16W 100 OHM	0	0	
RH02	0700055M	RES.-CARBON FLM 1/16W 12K-JB	0	0	0	RJ72	0790024R	RES.CHIP 1/16W 100 OHM	0	0	
RH03	0700063M	RES.-CARBON FLM 1/16W 47K-JB	0	0	0	RJ73	0790024R	RES.CHIP 1/16W 100 OHM	0	0	
RH04	0700062M	RES.-CARBON FLM 1/16W 39K-JB	0	0	0	RJ85	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	
RH05	0700059M	RES.-CARBON FLM 1/16W 27K-JB	0	0	0	RJ86	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	
RH07	0700047M	RES.-CARBON FLM 1/16W 3.3K-JB	0	0	0	RJ90	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	
RH08	0700045M	RES.-CARBON FLM 1/16W 2.2K-JB	0	0	0	RJ91	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	
RH09	0700055M	RES.-CARBON FLM 1/16W 12K-JB	0	0	0	RJ92	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	
RH10	AT03869M	820OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RJ97	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	
⚠ RH11	AT03195S	METAL OX. 1.8OHM 1W	0	0	0	RJA2	0790051R	RES.CHIP 1/16W 10K OHM	0	0	
⚠ RH12	AT03195S	METAL OX. 1.8OHM 1W	0	0	0	RJA3	0790051R	RES.CHIP 1/16W 10K OHM	0	0	
RH13	0100033M	RES.-CARBON FLM 1/8W 47-JB	0	0	0	RJE4	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	
RH14	0700047M	RES.-CARBON FLM 1/16W 3.3K-JB	0	0	0	RJE5	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	
⚠ RH15	AT03195S	METAL OX. 1.8OHM 1W	0	0	0	RJE7	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	
⚠ RH16	0100047M	RES.-CARBON FLM 1/8W 180-JB	0	0	0	RJF2	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	
⚠ RH17	AW00208	TRIMMER resis. 100KOHM 1/2W	0	0	0	RJF4	0790024R	RES.CHIP 1/16W 100 OHM	0	0	
⚠ RH18	0700061M	RES.-CARBON FLM 1/16W 33K-JB	0	0	0	RJF5	0790059R	RES.CHIP 1/16W 47K OHM	0	0	
⚠ RH19	0119653M	RES.-MTL FLM 1/8W 82K-FB	0	0	0	RJF6	0790059R	RES.CHIP 1/16W 47K OHM	0	0	
⚠ RH20	0119637M	RES.-MTL FLM 1/8W 18K-FB	0	0	0	RJF7	0790024R	RES.CHIP 1/16W 100 OHM	0	0	
RH21	AT03878M	3.9KOHM 1/2W RDS50 CARBON FILM resis.	0	0		RK01	0700046M	RES.-CARBON FLM 1/16W 2.7K-JB	0	0	0
RH22	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0	RK02	0700046M	RES.-CARBON FLM 1/16W 2.7K-JB	0	0	0
⚠ RH23	AT03882M	6.8KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RK03	0700046M	RES.-CARBON FLM 1/16W 2.7K-JB	0	0	0
⚠ RH24	0119642M	RES.-MTL FLM 1/8W 30K-FB			0	RK04	0700046M	RES.-CARBON FLM 1/16W 2.7K-JB	0	0	0
⚠ RH24	0119643M	RES.-MTL FLM 1/8W 33K-FB	0	0		RK05	0700046M	RES.-CARBON FLM 1/16W 2.7K-JB	0	0	0
RH25	0119633M	RES.-MTL FLM 1/8W 12K-FB			0	RK06	0700046M	RES.-CARBON FLM 1/16W 2.7K-JB	0	0	0
RH25	0119643M	RES.-MTL FLM 1/8W 33K-FB	0	0		RK07	0700046M	RES.-CARBON FLM 1/16W 2.7K-JB	0	0	0
RH26	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0	RK08	0700046M	RES.-CARBON FLM 1/16W 2.7K-JB	0	0	0
RH27	AT03889M	27KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RK09	0700036M	RES.-CARBON FLM 1/16W 470-JB	0	0	0
RH28	AT03894M	56KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RK10	0700042M	RES.-CARBON FLM 1/16W 1.2K-JB	0	0	0
RH29	AT03895M	68KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RK11	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0
RH30	0700063M	RES.-CARBON FLM 1/16W 47K-JB	0	0	0	RK12	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0
RH31	AT03882M	6.8KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RK13	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0
⚠ RH32	0100117M	RES.-CARBON FLM 1/8W 150K-JB			0	RK17	0700047M	RES.-CARBON FLM 1/16W 3.3K-JB	0	0	0
⚠ RH32	0100119M	RES.-CARBON FLM 1/8W 180K-JB	0	0		RK18	0700046M	RES.-CARBON FLM 1/16W 2.7K-JB	0	0	0
RH33	AT03419S	METAL OX. 470 OHM 2W	0	0	0	RK20	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0
RH34	AT03844M	10.0OHM 1/2W RDS50 CARBON FILM resis.	0	0	0	RK21	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0
RJ01	0790024R	RES.CHIP 1/16W 100 OHM	0	0		RK22	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0
RJ02	0790024R	RES.CHIP 1/16W 100 OHM	0	0		RK23	0100085M	RES.-CARBON FLM 1/8W 6.8K-JB	0	0	0
RJ07	0790024R	RES.CHIP 1/16W 100 OHM	0	0		RK24	0700043M	RES.-CARBON FLM 1/16W 1.5K-JB	0	0	0
RJ10	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0		RK27	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0
RJ11	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0		RK28	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0
RJ12	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0		RK29	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0
RJ13	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0		RK30	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0
RJ14	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0		RK31	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0
RJ15	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0		RK32	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0

PRODUCT SERVICE NOTE: Components marked with a ⚠ have special characteristics important to safety. Before replacing any of these components, read carefully, the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24	SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
RK33	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0	RM10	0100129M	RES.-CARBON FLM 1/8W 470K-JB			0
RK34	0700063M	RES.-CARBON FLM 1/16W 47K-JB	0	0	0	RM10	0100129M	RES.-CARBON FLM 1/8W 470K-JB	0	0	
RK35	0700063M	RES.-CARBON FLM 1/16W 47K-JB	0	0	0	RM11	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB			0
RK36	0700063M	RES.-CARBON FLM 1/16W 47K-JB	0	0	0	RM11	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	
RK37	0700063M	RES.-CARBON FLM 1/16W 47K-JB	0	0	0	RM12	0100125M	RES.-CARBON FLM 1/8W 330K-JB			0
RK38	0700063M	RES.-CARBON FLM 1/16W 47K-JB	0	0	0	RM12	0100125M	RES.-CARBON FLM 1/8W 330K-JB	0	0	
RK39	0700063M	RES.-CARBON FLM 1/16W 47K-JB	0	0	0	RM13	AT03871M	1KOHM 1/2W RDS50 CARBON FILM resis.			0
RK40	0700047M	RES.-CARBON FLM 1/16W 3.3K-JB	0	0	0	RM13	AT03871M	1KOHM 1/2W RDS50 CARBON FILM resis.	0	0	
RK42	AT03202S	METAL OX. 3.3OHM 1W	0	0	0	RM14	0100119M	RES.-CARBON FLM 1/8W 180K-JB			0
RK43	AT03411S	METAL OX. 220OHM 2W	0	0	0	RM14	0100119M	RES.-CARBON FLM 1/8W 180K-JB	0	0	
RK44	0700047M	RES.-CARBON FLM 1/16W 3.3K-JB	0	0	0	RM15	0700054M	RES.-CARBON FLM 1/16W 10K-JB			0
RK46	AT03195S	METAL OX. 1.8OHM 1W			0	RM15	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	
RK46	AT03197S	METAL OX. 2.2OHM 1W	0	0		RM20	0100041M	RES.-CARBON FLM 1/8W 100-JB			0
RK47	AT03406S	METAL OX. 150OHM 2W	0	0	0	RM20	0100041M	RES.-CARBON FLM 1/8W 100-JB	0	0	
RK48	0700047M	RES.-CARBON FLM 1/16W 3.3K-JB	0	0	0	RM21	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB			0
RK50	AT03199S	METAL OX. 2.7OHM 1W	0	0		RM21	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	
RK50	AT03202S	METAL OX. 3.3OHM 1W			0	RM22	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB			0
RK51	AT03411S	METAL OX. 220OHM 2W	0	0	0	RM22	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	
RK52	0700047M	RES.-CARBON FLM 1/16W 3.3K-JB	0	0	0	RM23	0700064M	RES.-CARBON FLM 1/16W 56K-JB			0
RK54	AT03195S	METAL OX. 1.8OHM 1W	0	0	0	RM23	0700064M	RES.-CARBON FLM 1/16W 56K-JB	0	0	
RK55	AT03406S	METAL OX. 150OHM 2W	0	0	0	RM24	0700045M	RES.-CARBON FLM 1/16W 2.2K-JB			0
RK56	0700047M	RES.-CARBON FLM 1/16W 3.3K-JB	0	0	0	RM24	0700045M	RES.-CARBON FLM 1/16W 2.2K-JB	0	0	
RK58	AT03206S	METAL OX. 4.7OHM 1W	0	0	0	RM25	0100123M	RES.-CARBON FLM 1/8W 270K-JB			0
RK59	AT03411S	METAL OX. 220OHM 2W	0	0	0	RM25	0100123M	RES.-CARBON FLM 1/8W 270K-JB	0	0	
RK60	0700047M	RES.-CARBON FLM 1/16W 3.3K-JB	0	0	0	RM26	0700047M	RES.-CARBON FLM 1/16W 3.3K-JB			0
RK62	AT03197S	METAL OX. 2.2OHM 1W			0	RM26	0700047M	RES.-CARBON FLM 1/16W 3.3K-JB	0	0	
RK62	AT03199S	METAL OX. 2.7OHM 1W	0	0		RM27	0700064M	RES.-CARBON FLM 1/16W 56K-JB			0
RK63	AT03406S	METAL OX. 150OHM 2W	0	0	0	RM27	0700064M	RES.-CARBON FLM 1/16W 56K-JB	0	0	
RK64	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	0	RM28	0100123M	RES.-CARBON FLM 1/8W 270K-JB			0
RK65	0700053M	RES.-CARBON FLM 1/16W 8.2K-JB	0	0	0	RM28	0100123M	RES.-CARBON FLM 1/8W 270K-JB	0	0	
RK93	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0	RM29	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB			0
RK97	0700044M	RES.-CARBON FLM 1/16W 1.8K-JB	0	0	0	RM29	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	
RK98	0700046M	RES.-CARBON FLM 1/16W 2.7K-JB	0	0	0	RM30	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB			0
RL10	0100129M	RES.-CARBON FLM 1/8W 470K-JB	0	0	0	RM30	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	
RL11	0100129M	RES.-CARBON FLM 1/8W 470K-JB	0	0	0	RM31	0100041M	RES.-CARBON FLM 1/8W 100-JB			0
RL12	0100129M	RES.-CARBON FLM 1/8W 470K-JB	0	0	0	RM31	0100041M	RES.-CARBON FLM 1/8W 100-JB	0	0	
RL13	0100129M	RES.-CARBON FLM 1/8W 470K-JB	0	0	0	RM35	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB			0
RL14	0100129M	RES.-CARBON FLM 1/8W 470K-JB	0	0	0	RM35	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	
RL15	0100129M	RES.-CARBON FLM 1/8W 470K-JB	0	0	0	RM38	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB			0
RL16	0100129M	RES.-CARBON FLM 1/8W 470K-JB	0	0	0	RM38	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	
RL17	0100129M	RES.-CARBON FLM 1/8W 470K-JB	0	0	0	RM40	0700067M	RES.-CARBON FLM 1/16W 100K-JB			0
RL20	0100131M	RES.-CARBON FLM 1/8W 560K-JB	0	0	0	RM40	0700067M	RES.-CARBON FLM 1/16W 100K-JB	0	0	
RL21	0100113M	RES.-CARBON FLM 1/8W 100K-JB			0	RM41	0700032M	RES.-CARBON FLM 1/16W 220-JB			0
RL21	0100117M	RES.-CARBON FLM 1/8W 150K-JB	0	0		RM42	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB			0
RL22	0100131M	RES.-CARBON FLM 1/8W 560K-JB	0	0	0	RM43	0700059M	RES.-CARBON FLM 1/16W 27K-JB			0
RL23	0100125M	RES.-CARBON FLM 1/8W 330K-JB	0	0	0	RM44	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	
RL24	0100129M	RES.-CARBON FLM 1/8W 470K-JB	0	0		RM45	0700058M	RES.-CARBON FLM 1/16W 22K-JB	0	0	
RL24	0100133M	RES.-CARBON FLM 1/8W 680K-JB			0	RM46	0700059M	RES.-CARBON FLM 1/16W 27K-JB	0	0	
RL25	0100113M	RES.-CARBON FLM 1/8W 100K-JB			0	RM47	0700045M	RES.-CARBON FLM 1/16W 2.2K-JB	0	0	
RL25	0100117M	RES.-CARBON FLM 1/8W 150K-JB	0	0		RM48	0700032M	RES.-CARBON FLM 1/16W 220-JB	0	0	
RL26	0100129M	RES.-CARBON FLM 1/8W 470K-JB	0	0		RM49	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	
RL26	0100133M	RES.-CARBON FLM 1/8W 680K-JB			0	RM50	0100065M	RES.-CARBON FLM 1/8W 1K-JB	0	0	
RL27	0100125M	RES.-CARBON FLM 1/8W 330K-JB	0	0	0	RM51	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	
RL30	0700027M	RES.-CARBON FLM 1/16W 100-JB	0	0	0	RN01	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	0
RL31	0700027M	RES.-CARBON FLM 1/16W 100-JB	0	0	0	RN02	0700057M	RES.-CARBON FLM 1/16W 18K-JB	0	0	0
RL32	0700027M	RES.-CARBON FLM 1/16W 100-JB	0	0	0	RN03	0700061M	RES.-CARBON FLM 1/16W 33K-JB	0	0	0
RL33	0700027M	RES.-CARBON FLM 1/16W 100-JB	0	0	0	RN04	0700058M	RES.-CARBON FLM 1/16W 22K-JB	0	0	0
RL34	0700027M	RES.-CARBON FLM 1/16W 100-JB	0	0	0	RN05	0700051M	RES.-CARBON FLM 1/16W 5.6K-JB	0	0	0
RL35	0700027M	RES.-CARBON FLM 1/16W 100-JB	0	0	0	RN06	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0
RL36	0700027M	RES.-CARBON FLM 1/16W 100-JB	0	0	0	RN08	0700051M	RES.-CARBON FLM 1/16W 5.6K-JB	0	0	0
RL37	0700027M	RES.-CARBON FLM 1/16W 100-JB	0	0	0	RN09	0700052M	RES.-CARBON FLM 1/16W 6.8K-JB	0	0	0
RM01	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB			0	RN10	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	0
RM02	0700058M	RES.-CARBON FLM 1/16W 22K-JB			0	RN11	0700067M	RES.-CARBON FLM 1/16W 100K-JB	0	0	0
RM03	0700045M	RES.-CARBON FLM 1/16W 2.2K-JB			0	RN12	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0
RM04	0100065M	RES.-CARBON FLM 1/8W 1K-JB			0	RN13	0700052M	RES.-CARBON FLM 1/16W 6.8K-JB	0	0	0
RM05	0100065M	RES.-CARBON FLM 1/8W 1K-JB			0	RN14	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0
RM05	0100065M	RES.-CARBON FLM 1/8W 1K-JB	0	0		RN15	0700052M	RES.-CARBON FLM 1/16W 6.8K-JB	0	0	0
RM06	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB			0	RN16	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0	0
RM06	0700041M	RES.-CARBON FLM 1/16W 1.0K-JB	0	0		RN17	0700063M	RES.-CARBON FLM 1/16W 47K-JB	0	0	0
RM07	0700043M	RES.-CARBON FLM 1/16W 1.5K-JB			0	RN18	0700054M	RES.-CARBON FLM 1/16W 10K-JB	0	0	0
RM07	0700043M	RES.-CARBON FLM 1/16W 1.5K-JB	0	0		RN20	AT03888M	22KOHM 1/2W RDS50 CARBON FILM resis.	0	0	0
RM08	0700046M	RES.-CARBON FLM 1/16W 2.7K-JB			0	RP53	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
RM08	0700046M	RES.-CARBON FLM 1/16W 2.7K-JB	0	0		RP56	0790055R	RES.CHIP 1/16W 22K OHM	0	0	0
RM09	0700049M	RES.-CARBON FLM 1/16W 4.7K-JB			0	RV01	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RM09	0700049M	RES.-CARBON FLM 1/16W 4.7K-JB	0	0		RV02	0790043R	RES.CHIP 1/16W 2.7K OHM	0	0	0

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SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24	SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
RV03	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RW45	0790044R	RES.CHIP 1/16W 3.3K OHM	0	0	0
RV04	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RW47	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RV05	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0	RW48	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RV06	0790057R	RES.CHIP 1/16W 33K OHM	0	0	0	RW49	0790028R	RES.CHIP 1/16W 220 OHM	0	0	0
RV07	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RW50	0790064R	RES.CHIP 1/16W 100K OHM	0	0	0
RV08	0790035R	RES.CHIP 1/16W 680 OHM	0	0	0	RW51	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0
RV09	0790034R	RES.CHIP 1/16W 560 OHM	0	0	0	RW52	0790032R	RES.CHIP 1/16W 390 OHM	0	0	0
RV10	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RW53	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
RV12	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RX01	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	0
RV13	0790041R	RES.CHIP 1/16W 1.8K OHM	0	0	0	RX02	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	0
RV14	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	RX03	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	0
RV15	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RX04	0790069R	RES.CHIP 1/16W 270K OHM	0	0	0
RV16	0790044R	RES.CHIP 1/16W 3.3K OHM	0	0	0	RX05	0790069R	RES.CHIP 1/16W 270K OHM	0	0	0
RV17	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RX06	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0
RV18	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RX07	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0
RV19	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0	RX08	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	0
RV20	0790055R	RES.CHIP 1/16W 22K OHM	0	0	0	RX09	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	0
RV21	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RX10	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	0
RV22	0790035R	RES.CHIP 1/16W 680 OHM	0	0	0	RX11	0790069R	RES.CHIP 1/16W 270K OHM	0	0	0
RV23	0790034R	RES.CHIP 1/16W 560 OHM	0	0	0	RX12	0790069R	RES.CHIP 1/16W 270K OHM	0	0	0
RV24	0790038R	RES.CHIP 1/16W 1.2K OHM	0	0	0	RX13	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0
RV26	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RX14	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0
RV27	0790041R	RES.CHIP 1/16W 1.8K OHM	0	0	0	RX15	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
RV28	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	RX16	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	0
RV30	0790036R	RES.CHIP 1/16W 820 OHM	0	0	0	RX17	0790069R	RES.CHIP 1/16W 270K OHM	0	0	0
RV31	0790056R	RES.CHIP 1/16W 27K OHM	0	0	0	RX18	0790069R	RES.CHIP 1/16W 270K OHM	0	0	0
RV32	0790064R	RES.CHIP 1/16W 100K OHM	0	0	0	RX19	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	0
RV33	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RX20	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	0
RV35	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0	RX21	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RV36	0196064R	RES.-1608CHIP 1/16W 750-J TAPE	0	0	0	RX22	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0
RV37	0196064R	RES.-1608CHIP 1/16W 750-J TAPE	0	0	0	RX23	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0
RV38	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RX24	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RV39	0790043R	RES.CHIP 1/16W 2.7K OHM	0	0	0	RX25	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RW01	0790055R	RES.CHIP 1/16W 22K OHM	0	0	0	RX26	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
RW02	0790056R	RES.CHIP 1/16W 27K OHM	0	0	0	RX27	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	0
RW03	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RX28	0790069R	RES.CHIP 1/16W 270K OHM	0	0	0
RW04	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0	RX29	0790069R	RES.CHIP 1/16W 270K OHM	0	0	0
RW05	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RX30	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	0
RW06	0790027R	RES.CHIP 1/16W 180 OHM	0	0	0	RX31	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	0
RW07	0790036R	RES.CHIP 1/16W 820 OHM	0	0	0	RX32	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RW08	0790044R	RES.CHIP 1/16W 3.3K OHM	0	0	0	RX33	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0
RW09	0790061R	RES.CHIP 1/16W 56K OHM	0	0	0	RX34	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0
RW10	0790055R	RES.CHIP 1/16W 22K OHM	0	0	0	RX35	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RW11	0790048R	RES.CHIP 1/16W 6.8K OHM	0	0	0	RX36	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RW12	0790041R	RES.CHIP 1/16W 1.8K OHM	0	0	0	RX37	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
RW13	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RX38	0790064R	RES.CHIP 1/16W 100K OHM	0	0	0
RW14	0790039R	RES.CHIP 1/16W 1.5K OHM	0	0	0	RX39	0790064R	RES.CHIP 1/16W 100K OHM	0	0	0
RW15	0790028R	RES.CHIP 1/16W 220 OHM	0	0	0	RX40	0790064R	RES.CHIP 1/16W 100K OHM	0	0	0
RW16	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0	RX41	0790064R	RES.CHIP 1/16W 100K OHM	0	0	0
RW17	0790068R	RES.CHIP 1/16W 220K OHM	0	0	0	RX42	0790064R	RES.CHIP 1/16W 100K OHM	0	0	0
RW18	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RX43	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
RW19	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0	RX44	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
RW20	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0	RX45	0790028R	RES.CHIP 1/16W 220 OHM	0	0	0
RW21	0790046R	RES.CHIP 1/16W 4.7K OHM	0	0	0	RX46	0790028R	RES.CHIP 1/16W 220 OHM	0	0	0
RW22	0790011R	RES.CHIP 1/16W 10 OHM	0	0	0	RX47	0790063R	RES.CHIP 1/16W 82K OHM	0	0	0
RW23	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0	RX48	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
RW24	AQ00194R	RES.CHIP 1/16W 1.0K OHM TAPE	0	0	0	RX49	0790063R	RES.CHIP 1/16W 82K OHM	0	0	0
RW25	AQ00194R	RES.CHIP 1/16W 1.0K OHM TAPE	0	0	0	RX50	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
RW26	0790058R	RES.CHIP 1/16W 39K OHM	0	0	0	RX51	AQ00163R	RES.CHIP 1/16W 68 OHM TAPE	0	0	0
RW27	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	RX52	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RW28	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RX53	AQ00163R	RES.CHIP 1/16W 68 OHM TAPE	0	0	0
RW29	AQ00187R	RES.CHIP 1/16W 560 OHM TAPE	0	0	0	RX54	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RW30	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RX55	AQ00163R	RES.CHIP 1/16W 68 OHM TAPE	0	0	0
RW31	AQ00194R	RES.CHIP 1/16W 1.0K OHM TAPE	0	0	0	RX56	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RW33	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RX57	0790034R	RES.CHIP 1/16W 560 OHM	0	0	0
RW34	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0	RX58	0790034R	RES.CHIP 1/16W 560 OHM	0	0	0
RW36	0790011R	RES.CHIP 1/16W 10 OHM	0	0	0	RX59	0790034R	RES.CHIP 1/16W 560 OHM	0	0	0
RW37	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0	RX60	0790034R	RES.CHIP 1/16W 560 OHM	0	0	0
RW38	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RX61	0790034R	RES.CHIP 1/16W 560 OHM	0	0	0
RW39	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RX62	0790034R	RES.CHIP 1/16W 560 OHM	0	0	0
RW40	0790058R	RES.CHIP 1/16W 39K OHM	0	0	0	RX63	0790034R	RES.CHIP 1/16W 560 OHM	0	0	0
RW41	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	RX64	0790034R	RES.CHIP 1/16W 560 OHM	0	0	0
RW42	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RX65	0790034R	RES.CHIP 1/16W 560 OHM	0	0	0
RW43	0790034R	RES.CHIP 1/16W 560 OHM	0	0	0	RX70	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RW44	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RX71	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0

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SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24	SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
RX72	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RY60	0790038R	RES.CHIP 1/16W 1.2K OHM	0	0	0
RX73	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RY61	0790036R	RES.CHIP 1/16W 820 OHM	0	0	0
RX78	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RY62	0790036R	RES.CHIP 1/16W 820 OHM	0	0	0
RX79	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RY63	0790036R	RES.CHIP 1/16W 820 OHM	0	0	0
RX80	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RY64	0790041R	RES.CHIP 1/16W 1.8K OHM	0	0	0
RX81	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RY65	0790041R	RES.CHIP 1/16W 1.8K OHM	0	0	0
RX82	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RY66	0790041R	RES.CHIP 1/16W 1.8K OHM	0	0	0
RX83	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RY67	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
RX84	0790056R	RES.CHIP 1/16W 27K OHM	0	0	0	RY69	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0
RX85	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	RY70	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0
RX86	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0	RY71	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
RX87	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0	RY72	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
RX88	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RY73	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0
RX89	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	RY74	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0
RX90	0790064R	RES.CHIP 1/16W 100K OHM	0	0	0	RY80	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RX91	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0	RY81	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RX92	0790048R	RES.CHIP 1/16W 6.8K OHM	0	0	0	RY82	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
RX93	0790053R	RES.CHIP 1/16W 15K OHM	0	0	0	RY83	AQ00193R	RES.CHIP 1/16W 910 OHM TAPE	0	0	0
RX94	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RY84	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0
RX95	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	0	RY85	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0
RX96	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RY86	AQ00193R	RES.CHIP 1/16W 910 OHM TAPE	0	0	0
RX97	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	0	RY87	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0
RX98	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RY88	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
RX99	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RY89	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0
RY01	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0	RY90	0790035R	RES.CHIP 1/16W 680 OHM	0	0	0
RY02	0790047R	RES.CHIP 1/16W 5.6K OHM	0	0	0	RY91	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0
RY03	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RY92	0790058R	RES.CHIP 1/16W 39K OHM	0	0	0
RY04	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RY93	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0
RY05	AQ00164R	RES.CHIP 1/16W 75 OHM TAPE	0	0	0	RY94	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY06	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ01	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
RY07	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ02	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
RY08	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ03	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY09	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ04	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY10	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ05	0790024R	RES.CHIP 1/16W 100 OHM	0	0	
RY11	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ06	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY12	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0	RZ07	0790024R	RES.CHIP 1/16W 100 OHM	0	0	
RY13	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	RZ08	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY14	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ09	0196087R	RES.-1608CHIP 1/16W 6.2K-J TAPE	0	0	0
RY15	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ10	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
RY16	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RZ11	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY17	AQ00194R	RES.CHIP 1/16W 1.0K OHM TAPE	0	0	0	RZ13	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY18	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ14	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY19	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ15	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY20	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ16	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
RY21	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0	RZ17	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
RY22	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	RZ18	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
RY23	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0	RZ19	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
RY24	AQ00194R	RES.CHIP 1/16W 1.0K OHM TAPE	0	0	0	RZ20	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
RY25	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0	RZ21	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
RY26	0790059R	RES.CHIP 1/16W 47K OHM	0	0	0	RZ22	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
RY27	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ23	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
RY28	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0		RZ24	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
RY29	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ25	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY30	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ26	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY31	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ27	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY32	0790024R	RES.CHIP 1/16W 100 OHM	0	0		RZ28	0196104R	RES 1608 CHIP 1/16W 30KJ TAPE	0	0	0
RY33	0790024R	RES.CHIP 1/16W 100 OHM	0	0		RZ29	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY34	0790024R	RES.CHIP 1/16W 100 OHM	0	0		RZ30	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY35	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ31	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY36	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ32	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY37	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ33	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
RY45	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0	RZ34	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
RY47	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ35	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY48	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0	RZ36	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY49	0790038R	RES.CHIP 1/16W 1.2K OHM	0	0	0	RZ37	0790024R	RES.CHIP 1/16W 100 OHM	0	0	
RY50	0790038R	RES.CHIP 1/16W 1.2K OHM	0	0	0	RZ38	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY51	0790038R	RES.CHIP 1/16W 1.2K OHM	0	0	0	RZ39	0790024R	RES.CHIP 1/16W 100 OHM	0	0	
RY52	0790036R	RES.CHIP 1/16W 820 OHM	0	0	0	RZ40	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY53	0790036R	RES.CHIP 1/16W 820 OHM	0	0	0	RZ41	0196087R	RES.-1608CHIP 1/16W 6.2K-J TAPE	0	0	0
RY54	0790036R	RES.CHIP 1/16W 820 OHM	0	0	0	RZ42	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
RY55	0790041R	RES.CHIP 1/16W 1.8K OHM	0	0	0	RZ44	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY56	0790041R	RES.CHIP 1/16W 1.8K OHM	0	0	0	RZ45	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY57	0790041R	RES.CHIP 1/16W 1.8K OHM	0	0	0	RZ46	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY58	0790038R	RES.CHIP 1/16W 1.2K OHM	0	0	0	RZ47	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RY59	0790038R	RES.CHIP 1/16W 1.2K OHM	0	0	0	RZ48	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0

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SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
RZ49	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
RZ50	0790001R	CHIP resis. RECJUMPER-1-16C16T1608	0	0	0
RZ51	0196104R	RES 1608 CHIP 1/16W 30KJ TAPE	0	0	0
RZ52	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RZ53	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RZ54	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RZ55	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RZ56	0790032R	RES.CHIP 1/16W 390 OHM	0	0	0
RZ57	0790032R	RES.CHIP 1/16W 390 OHM	0	0	0
RZ58	0790034R	RES.CHIP 1/16W 560 OHM	0	0	0
RZ59	0790053R	RES.CHIP 1/16W 15K OHM	0	0	0
RZ60	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RZ61	0790052R	RES.CHIP 1/16W 12K OHM	0	0	0
RZ62	0790037R	RES.CHIP 1/16W 1.0K OHM	0	0	0
RZ63	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RZ64	0790049R	RES.CHIP 1/16W 8.2K OHM	0	0	0
RZ65	0790054R	RES.CHIP 1/16W 18K OHM	0	0	0
RZ66	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
RZ67	0790051R	RES.CHIP 1/16W 10K OHM	0	0	0
RZ68	0790021R	RES.CHIP 1/16W 56 OHM	0	0	0
RZ69	0790021R	RES.CHIP 1/16W 56 OHM	0	0	0
RZ70	0790021R	RES.CHIP 1/16W 56 OHM	0	0	0
RZ71	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
RZ72	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
RZ73	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
RZ74	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RZ75	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RZ76	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RZ77	0790024R	RES.CHIP 1/16W 100 OHM	0	0	0
RZ78	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0
RZ82	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
RZ83	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0
RZ84	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
RZ85	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0
RZ86	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0
RZ87	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
RZ90	0790042R	RES.CHIP 1/16W 2.2K OHM	0	0	0
RZ91	0790033R	RES.CHIP 1/16W 470 OHM	0	0	0
RZ95	0790069R	RES.CHIP 1/16W 270K OHM	0	0	0
		RELAYS, SWITCHES			
⚠ S901	FJ00142	MAIN POWER RELAY ALKS329	0	0	0
S902	FJ00142	AUDIO RELAY ALKS329	0	0	0
S903	FJ00301	SW 6.0 V RELAY ALD105	0	0	0
S905	FJ00302	SW 35.0 V RELAY RL-ALD106	0	0	0
SK01	FE10332R	DCAM SWICTH	0	0	0
SM01	FE10402R	PUSH SWITCH SKQNAB	0	0	
SM01	FE10402R	PUSH SWITCH SKQNAB			0
SM02	FE10402R	PUSH SWITCH SKQNAB	0	0	
SM02	FE10402R	PUSH SWITCH SKQNAB			0
SM03	FE10402R	PUSH SWITCH SKQNAB	0	0	
SM03	FE10402R	PUSH SWITCH SKQNAB			0
SM04	FE10402R	PUSH SWITCH SKQNAB	0	0	
SM04	FE10402R	PUSH SWITCH SKQNAB			0
SM05	FE10402R	PUSH SWITCH SKQNAB	0	0	
SM05	FE10402R	PUSH SWITCH SKQNAB			0
SM06	FE10402R	PUSH SWITCH SKQNAB	0	0	
SM06	FE10402R	PUSH SWITCH SKQNAB			0
SM07	FE10402R	PUSH SWITCH SKQNAB	0	0	
SM07	FE10402R	PUSH SWITCH SKQNAB			0
SM09	FE10402R	PUSH SWITCH SKQNAB	0	0	
SM09	FE10402R	PUSH SWITCH SKQNAB			0
		TRANSFORMERS			
⚠ T701	BZ03982	HORIZONTALDEFLECTION	0	0	0
⚠ T702	BZ03061	HORIZ DRIVE TRANS.-DJ81	0	0	0
⚠ T901	BT02091	STND BY SM TRANSFORMER	0	0	0
⚠ T902	BT02061	SWITCHINGTRANSFORMER	0	0	0
TF01	BT01103	DYNAMICFOCUSTRANSFORMER	0	0	0
⚠ TH01	BW02822	FLY BACK HFL1735VP-RC 43" FBT			0
⚠ TH01	BW02891	FLY BACK FBT-MSXUR3JC	0	0	
		FILTERS, CRYSTALS, OSCILLATORS			
X001	BP01311R	CSTLS16M0X	0	0	0
X401	2168771	X'TAL(TYPE CSB503F30)	0	0	0

SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
⚠ X901	AJ00832	ERZV10D241	0	0	0
XV01	BJ00631	6MHZ LOW PASS FILTER TXV-774	0	0	0
XV02	BJ00641	3.5MHZ BAND PASS FILTER TYV-38K	0	0	0
XW01	BJ00631	6MHZ LOW PASS FILTER TXV-774	0	0	0
XW02	BJ00641	3.5MHZ BAND PASS FILTER TYV-38K	0	0	0
XW03	BP01191	OSCILLATOR 20HHZ HC-49US	0	0	0
XZ01	2168771	X'TAL(TYPE CSB503F30)	0	0	0
XZ02	BP01241	OSCILLATOR 3.58 49U	0	0	0
XZ03	2168771	X'TAL(TYPE CSB503F30)	0	0	0
XZ04	BP01241	OSCILLATOR 3.58 49U	0	0	0
		SPEAKERS			
U402	GK00482	43" 12 CM SPEAKER ~L			
U402	**GK00971**	51" 12 CM SPEAKER ~L			
U402	**GK00701**	57" 12 CM SPEAKER ~L			
U404	GK00482	43" 12 CM SPEAKER ~R			
U404	**GK00971**	51" 12 CM SPEAKER ~R			
U404	**GK00701**	57" 12 CM SPEAKER ~R			
		MISCELLANEOUS			
#	KR02541	SCREEN ASSY 43UWX20B			
#	KR02542	SCREEN ASSY 51UWX20B			
#	KR02543	SCREEN ASSY 51GWX20B			
#	KR02544	SCREEN ASSY 57UWX20B			
#	KR02545	SCREEN ASSY 57GWX20B			
#	UE20311	43" RED PRT ASSY			
#	UE20312	43" GREEN PRT ASSY			
#	UE20313	43" BLUE PRT ASSY			
#	UE20791	51" RED PRT ASSY			
#	UE20792	51" GREN PRT ASSY			
#	UE20793	51" BLUE PRT ASSY			
#	UE20794	57" RED PRT ASSY			
#	UE20795	57" GREEN PRT ASSY			
#	UE20796	57" BLUE PRT ASSY			
#10	QD21383	43" MIRROR HOLDER COVER			
#010	PH31521	CONTROL PANEL 2002 51" & 57"	0	0	
#020	PH31533	CONTROL DOOR 51" & 57"	0	0	
#031	NT02152	SCREEN FRAME ASSY 43UWX20B			
#031	NT02751	SCREEN FRAME ASSY 51UWX20B			
#032	NT02752	SCREEN FRAME ASSY 51GWX20B			
#033	NT02753	SCREEN FRAME ASSY 57UWX20B			
#034	NT02754	SCREEN FRAME ASSY 57GWX20B			
#035	KS02029	43" MIRROR			
#035	KS04087	51" MIRROR			
#036	KS04085	57" MIRROR			
#120C	PH30852	CONTROL PANEL ASSY (43UWX20B)			0
#130C	PH09751	CONTROL DOOR 43"			0
#131C	PH09761	COSMETIC DOOR 43"			0
#132C	PH09772	ACRYLIC PLATE 43"			0
#417	H512299	43" LOWER REAR COVER			
#415	H512309	51" LOWER REAR COVER			
#416	H512307	57" LOWER REAR COVER			
#415	PH30662	SPEAKER GRILLE ASSY 43UWX20B			
#420	PH31761	SP GRILLE ASSY 51UWX20B			
#421	PH31771	SP GRILLE ASSY 51GWX20B			
#422	PH31762	SP GRILLE ASSY 57UWX20B			
#423	PH31772	SP GRILLE ASSY 57GWX20B			
#428	3727972	POWERCORDHANGER			
⚠ E801	EY00941	CRT-SOCKET HPS1600-016409	0	0	0
⚠ E851	EY00941	CRT-SOCKET HPS1600-016409	0	0	0
⚠ E8A1	EY00941	CRT-SOCKET HPS1600-016409	0	0	0
EAS0	FT00011	MAGIC FOCUS SENSOR (AM3011)			
EAS1	FT00011	MAGIC FOCUS SENSOR (AM3011)			
EAS2	FT00011	MAGIC FOCUS SENSOR (AM3011)			
EAS3	FT00011	MAGIC FOCUS SENSOR (AM3011)			
EAS4	FT00011	MAGIC FOCUS SENSOR (AM3011)			
EAS5	FT00011	MAGIC FOCUS SENSOR (AM3011)			
EAS6	FT00011	MAGIC FOCUS SENSOR (AM3011)			
EAS7	FT00011	MAGIC FOCUS SENSOR (AM3011)			
ED91	EY00791	PJX-LEAD-PLUGPIN	0	0	0
ED92	EY00791	PJX-LEAD-PLUGPIN	0	0	0
ED93	EY00791	PJX-LEAD-PLUGPIN	0	0	0
ED94	EY00791	PJX-LEAD-PLUGPIN	0	0	0
ED95	EY00791	PJX-LEAD-PLUGPIN	0	0	0
EL	EF05933	CO-05C-F5R0-152#345NC			
	EV00557	**AC Power Cord**	**0**	**0**	**0**

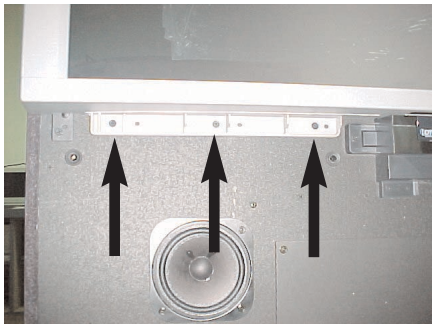
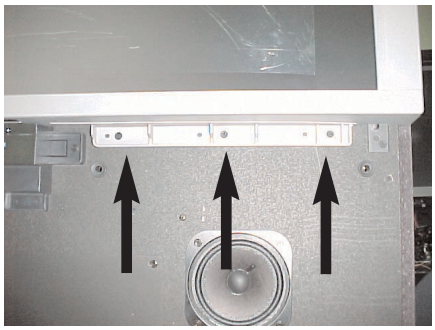
CH 6

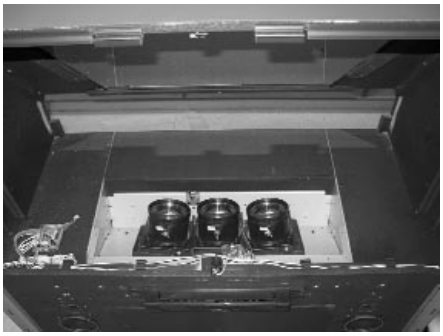
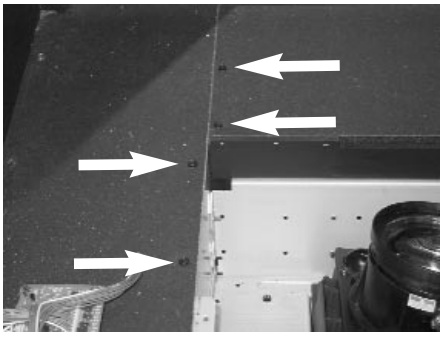
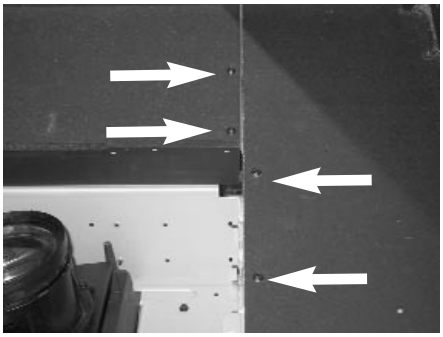
PRODUCT SERVICE NOTE: Components marked with a ⚠ have special characteristics important to safety. Before replacing any of these components, read carefully, the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

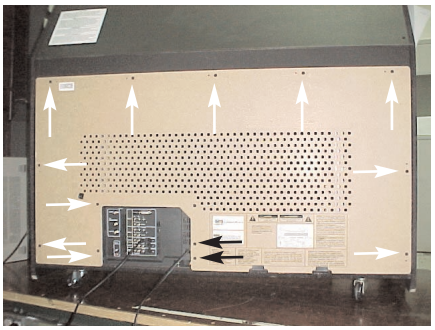
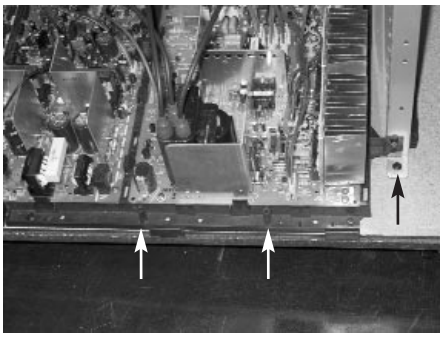
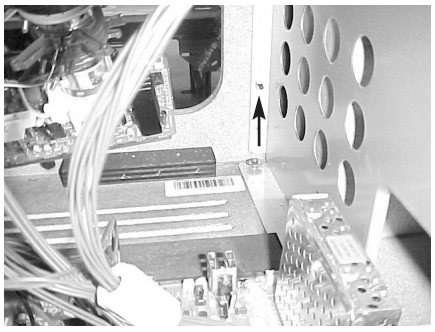
SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24	SYMBOL NO.	PART NO.	PART DESCRIPTION	DP23	DP23G	DP24
ER	EF05953	CO-04C-F5R0-152#34NC									
ES1	EF02233	CO-09C-N2R0-322 (PH)									
FE91	2721351	FUSEHOLDER	0	0	0						
FE92	2721351	FUSEHOLDER	0	0	0						
FE93	2721351	FUSEHOLDER	0	0	0						
HJ01	2791754R	CONDENSER WITH 3 TERMINAL 100PF	0	0							
HJ02	2791754R	CONDENSER WITH 3 TERMINAL 100PF	0	0							
HJ03	2791754R	CONDENSER WITH 3 TERMINAL 100PF	0	0							
HJ04	2791753R	CONDENSER WITH 3 TERMINAL 47PF	0	0							
HJ05	2791754R	CONDENSER WITH 3 TERMINAL 100PF	0	0							
PADJ	ED00385	PLUG 6P LOCK 2.5MM JST	0	0	0						
PCB	ED00385	PLUG 6P LOCK 2.5MM JST	0	0	0						
PCG	ED00385	PLUG 6P LOCK 2.5MM JST	0	0	0						
PCR	ED00385	PLUG 6P LOCK 2.5MM JST	0	0	0						
PDG	ED01782	22P PLUG PIN	0	0	0						
PDJ	ED04201U	DVI-DRECEPTACLE	0	0							
PDS	ED01782	22P PLUG PIN	0	0	0						
PET	ED03212	15P 2.5MM PITCH CONNECTOR TAC-L15X-A3	0	0							
PFC1	ED01782	22P PLUG PIN	0	0	0						
PFC2	ED01782	22P PLUG PIN	0	0	0						
PFR	2902263	PLUG PIN SUB MINI 4P	0	0							
PFS	2902248	PLUG PIN SUB MINI9P			0						
PFS	ED00388	PLUG 9P LOCK 2.5MM JST	0	0							
PJIG	2902266	PLUG PIN SUB MINI 7P	0	0	0						
⚠ PMB	ED01597U	PLUG CP-06BP5R0VU-TBL#3,5N	0	0	0						
⚠ PMG	ED01597U	PLUG CP-06BP5R0VU-TBL#3,5N	0	0	0						
⚠ PMR	ED01597U	PLUG CP-06BP5R0VU-TBL#3,5N	0	0	0						
PPD1	ED01471U	PLUG 07BP1R2HUTWGP-A1	0	0	0						
PPD1	ED01491U	7P PLUG PIN	0	0	0						
PPD2	ED01473U	PLUG 13BP1R2HUTWGP-A1	0	0	0						
PPD2	ED01493U	CONNECTOR 13BS1R2VUTWGX-A1	0	0	0						
PPD3	ED01471U	PLUG 07BP1R2HUTWGP-A1	0	0	0						
PPD3	ED01491U	7P PLUG PIN	0	0	0						
PPS1	ED01471U	PLUG 07BP1R2HUTWGP-A1	0	0	0						
PPS1	ED01491U	7P PLUG PIN	0	0	0						
PPS2	ED01473U	PLUG 13BP1R2HUTWGP-A1	0	0	0						
PPS2	ED01493U	CONNECTOR 13BS1R2VUTWGX-A1	0	0	0						
PPS3	ED01472U	PLUG 11BP1R2HUTWGP-A1	0	0	0						
PPS3	ED01492U	CONNECTOR 11BS1R2VUTWGX-A1	0	0	0						
PPS4	ED01471U	PLUG 07BP1R2HUTWGP-A1	0	0	0						
PPS4	ED01491U	7P PLUG PIN	0	0	0						
PPS5	ED01471U	PLUG 07BP1R2HUTWGP-A1	0	0	0						
PPS5	ED01491U	7P PLUG PIN	0	0	0						
PPS6	ED01471U	PLUG 07BP1R2HUTWGP-A1	0	0	0						
PPS6	ED01491U	7P PLUG PIN	0	0	0						
PS3	2959055	CONNECTOR-6P(PH)	0	0	0						
PVMB	2902263	PLUG PIN SUB MINI 4P	0	0	0						
PVMG	2902263	PLUG PIN SUB MINI 4P	0	0	0						
PVMR	2902263	PLUG PIN SUB MINI 4P	0	0	0						
W8A2	2692464	CO-01C-N0R0-821 FOCUS CABLE	0	0	0						
		OWNER ACCESSORIES									
E203	FQ00021	AA BATTERY									
E301	HL01831	REMOTE CONTROL CLU4321 UG									
N201	QR52191	INSTRUCTION BOOK (ENGLISH)									
N202	H462165	PTV WARRANTY CARD W/ C/R/C 02									
N203	H462274	WARRANTY CARD (F) 02									
N211	H463082	EASYGRAPHICGUIDE									

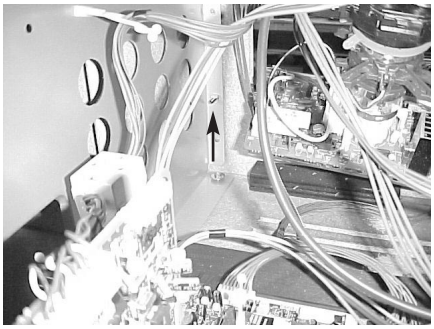
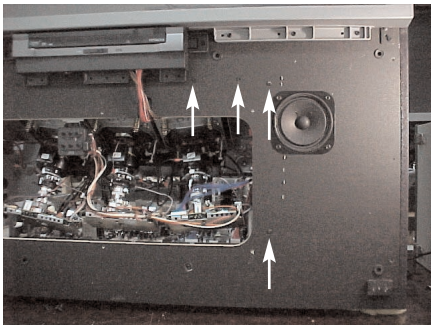
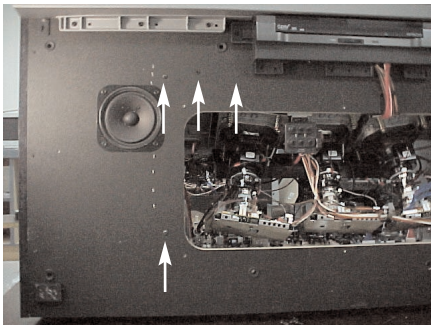
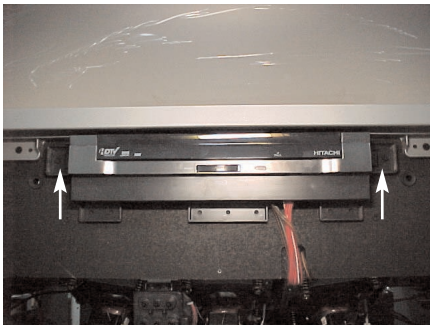
The following instructions are for models with a Light Box design. This new cabinet design will enable servicers to remove the Light Box assembly, with out the need to take a complete PTV out for service.

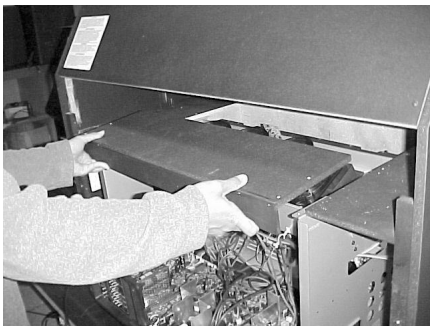
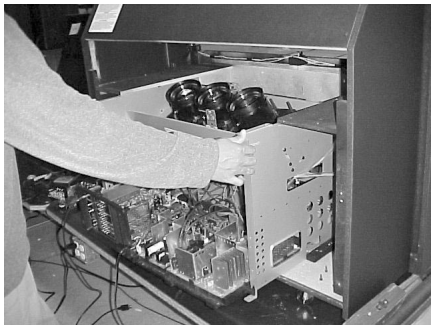
Disassembly Instructions for Screen Frame Assemblies and Light Box. MODELS: 51/57UWX20B; 51/57GWX20B

STEP	INSTRUCTIONS	IMAGE
1	Remove the Front Speaker Grille. Pull the Speaker Grille off by placing your hand behind the outside corners and pulling straight out. The bottom picture shows the TV after the Speaker Grille has been removed.	 
2	Remove the screws on the left bottom corner of the screen frame.	
3	Remove the screws on the right bottom corner of the screen frame.	

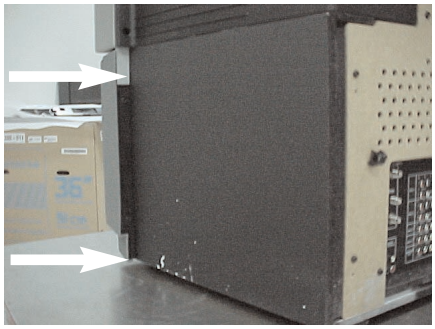
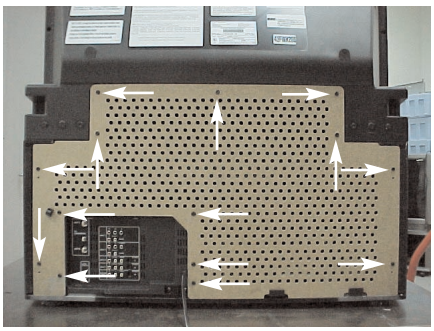
STEP	INSTRUCTIONS	IMAGE
4	Remove the screen assembly by placing your hands on corners and lifting up to unhook from the cabinet. Use additional help when necessary. Carefully store Screen Frame Assembly.	
5	After taking off the screen assembly, the cabinet light cavity will be exposed.	
6	Remove the 4 screws on the left of the CRT Lens assembly.	
7	Remove the 4 screws on the right of the CRT Lens assembly.	

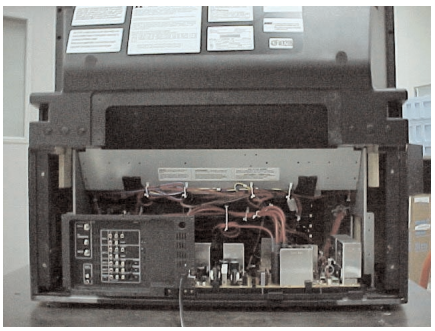
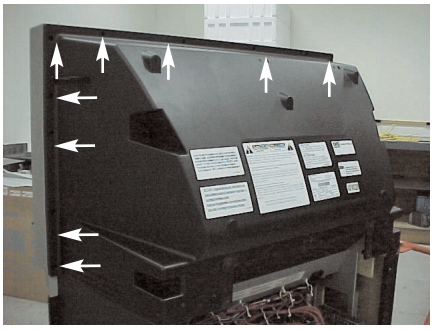
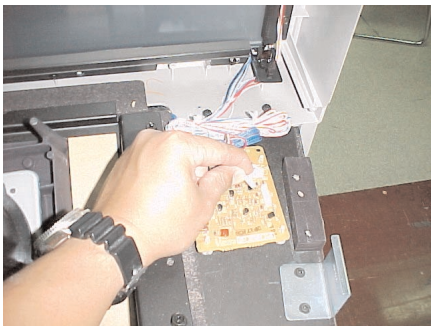
STEP	INSTRUCTIONS	IMAGE
8	Now move to the back of the PTV. The lower rear board must be remoed. Remove 14 screws to remove the lower rear board.	
9	Now, move to the chssis area on the back of the TV. Remove the 3 screws to the right of the chassis as shown.	
10	Remove one screw on the left of the chassis as shown.	
11	Remove the screw on the right corner of the light box.	

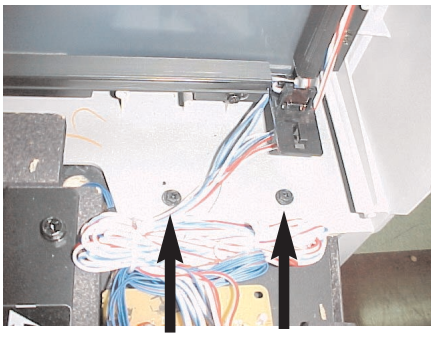
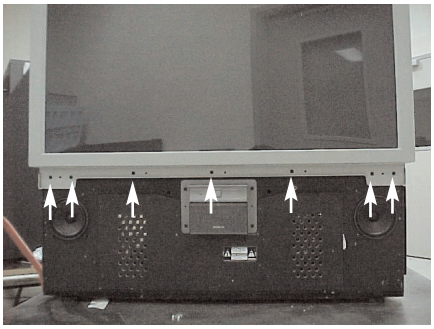
STEP	INSTRUCTIONS	IMAGE
12	Remove the screw on the left corner of the light box.	
13	Remove the screws on the front that hold the light box. The picture shows the right side.	
14	Remove the screws on the front that hold the light box. the picture shows the left side.	
15	Remove the control panel.	

STEP	INSTRUCTIONS	IMAGE
16	Remove the board on top of the light box assembly.	
17	Lift the Light box in the center and slide backwards until it is out. Use additional help if necessary. The Light Box is now ready for easy transport to a designated service and repair facility.	

Models: 43FWX20B

STEP	INSTRUCTIONS	IMAGE
1	The Front Speaker Grille needs to be removed.	
2	Remove 4 Screws located on the back sides of the Speaker Grille (2 on each side). The image on the right shows the 2 screws on the right back side of the Speaker Grille.	
3	The image on the right shows the Speaker Grille removed.	
4	The Lower Rear board needs to be removed. Remove 14 screws all around the Lower Rear Board.	

STEP	INSTRUCTIONS	IMAGE
5	Image on the right shows Lower Rear Board removed. Next to be removed is the Back Cover which is partially shown in this image.	
6	Remove the 18 screws all around the Back Cover. The image to the right shows the back of the right side of the Back Cover. Again, use extreme caution because the mirror is attached to the Back Cover.	
7	This image shows the back of the the PTV with the Back Cover and Lower Rear Board removed.	
8	Look for the Sensor Board located on the top right corner. Remove the Sensor Interface connectors.	

STEP	INSTRUCTIONS	IMAGE
9	Remove the 4 screws (2 on each corner) that partially holds the screen frame assembly. this image shows the 2 screws on the right corner near the sensor board.	
10	Locate and remove the last 7 screws on the bottom edge on the front of the Screen Frame. (2 on each corner and 3 in the center.) The image shows the bottom edge of the screen frame. Please note that these screws are the last ones that are holding the Screen Frame. Grab the Screen Frame on both corners and slide out towards you. Use additional help when necessary.	
11	This image shows the PTV after you have removed the Screen Frame assembly.	

Troubleshooting Block Diagrams

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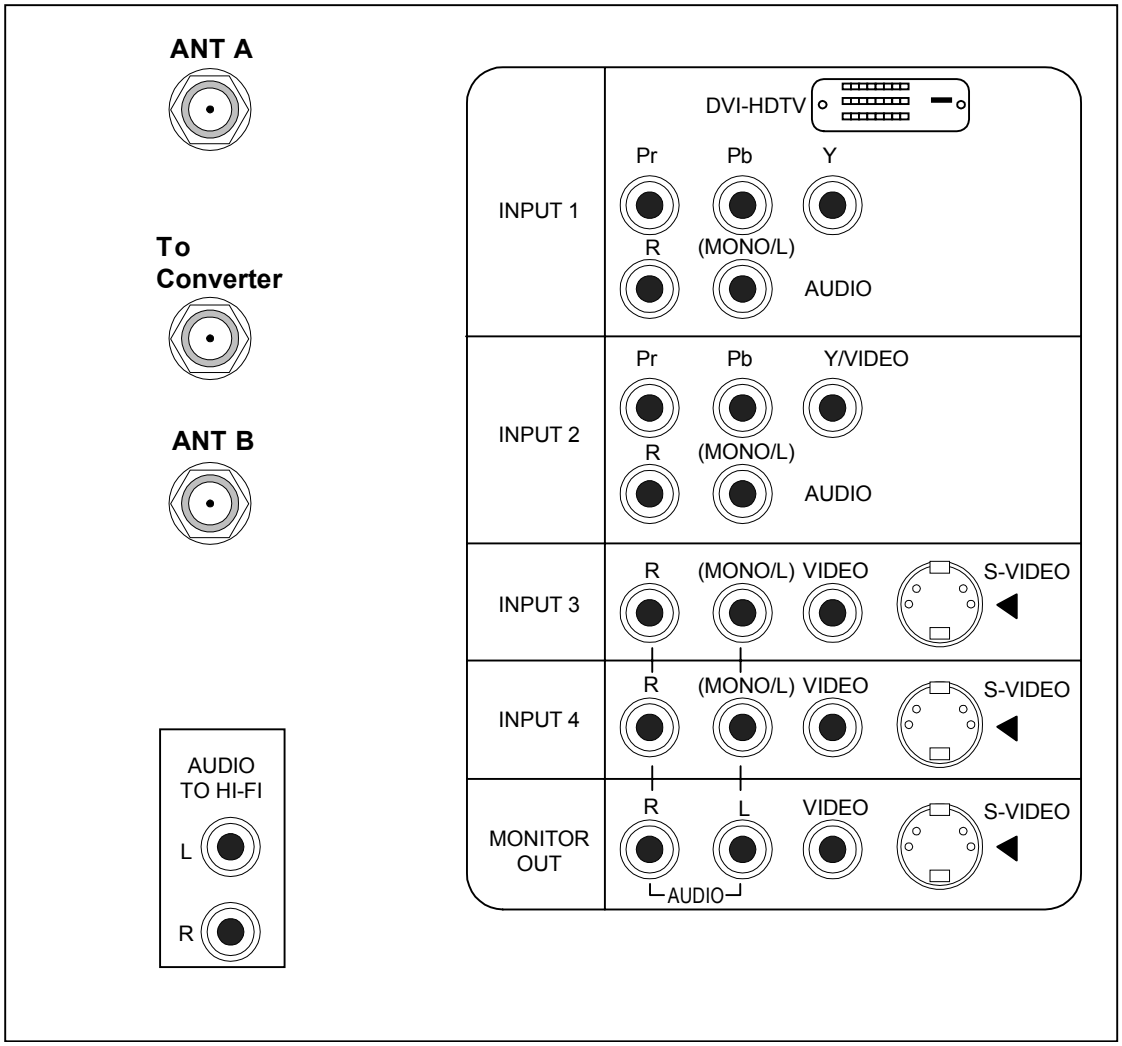
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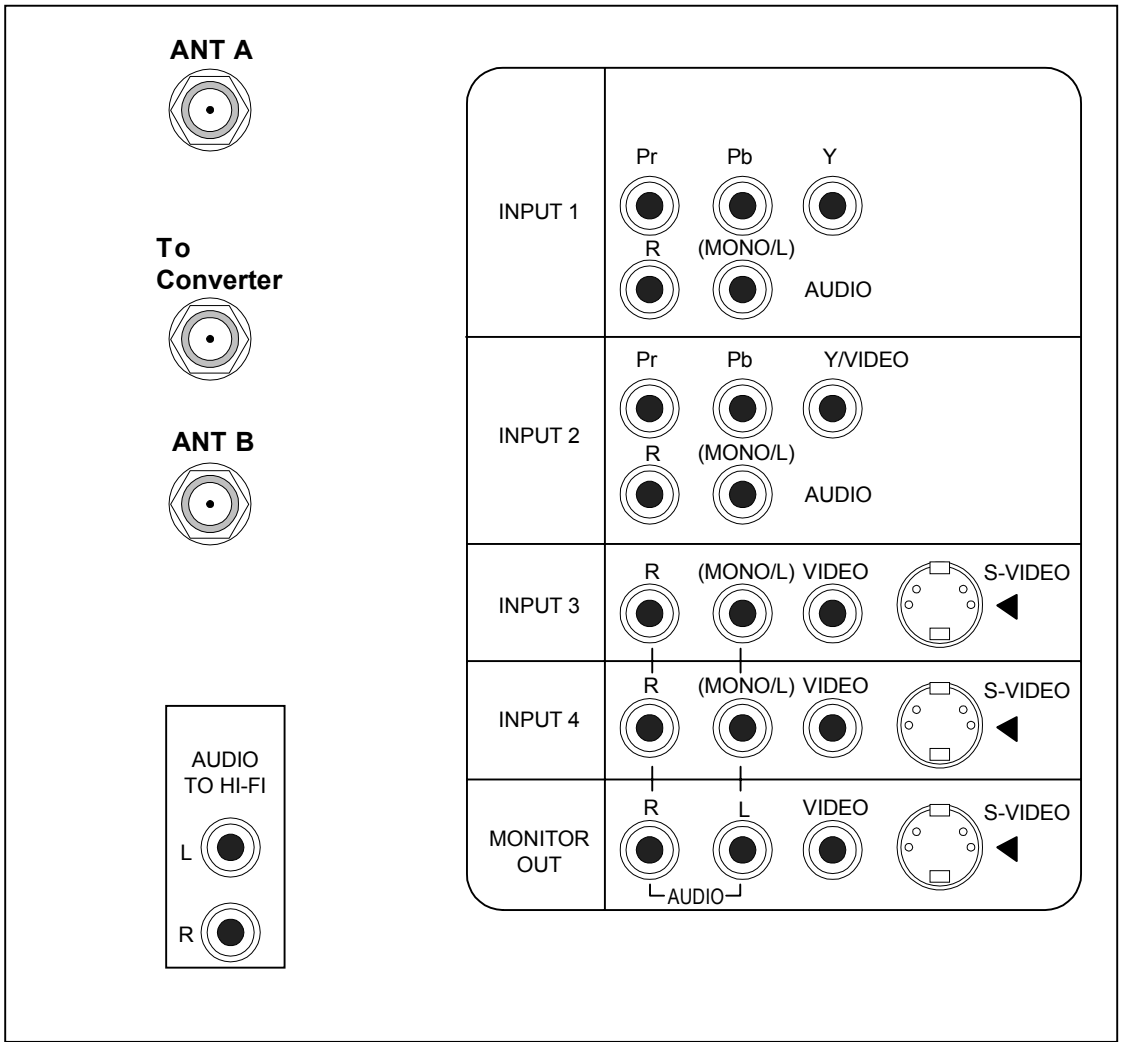
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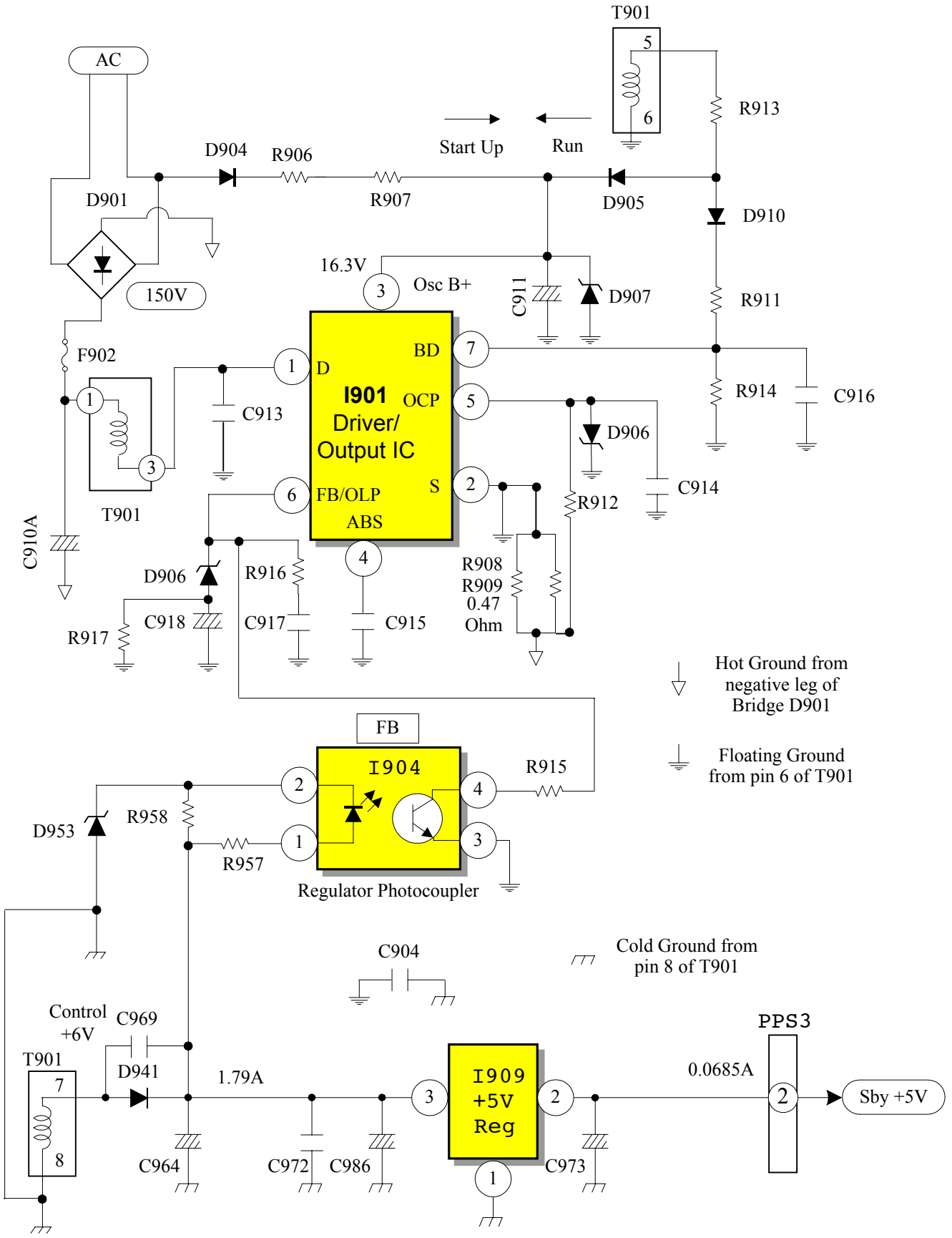
DP-23 / 23G REAR PANEL



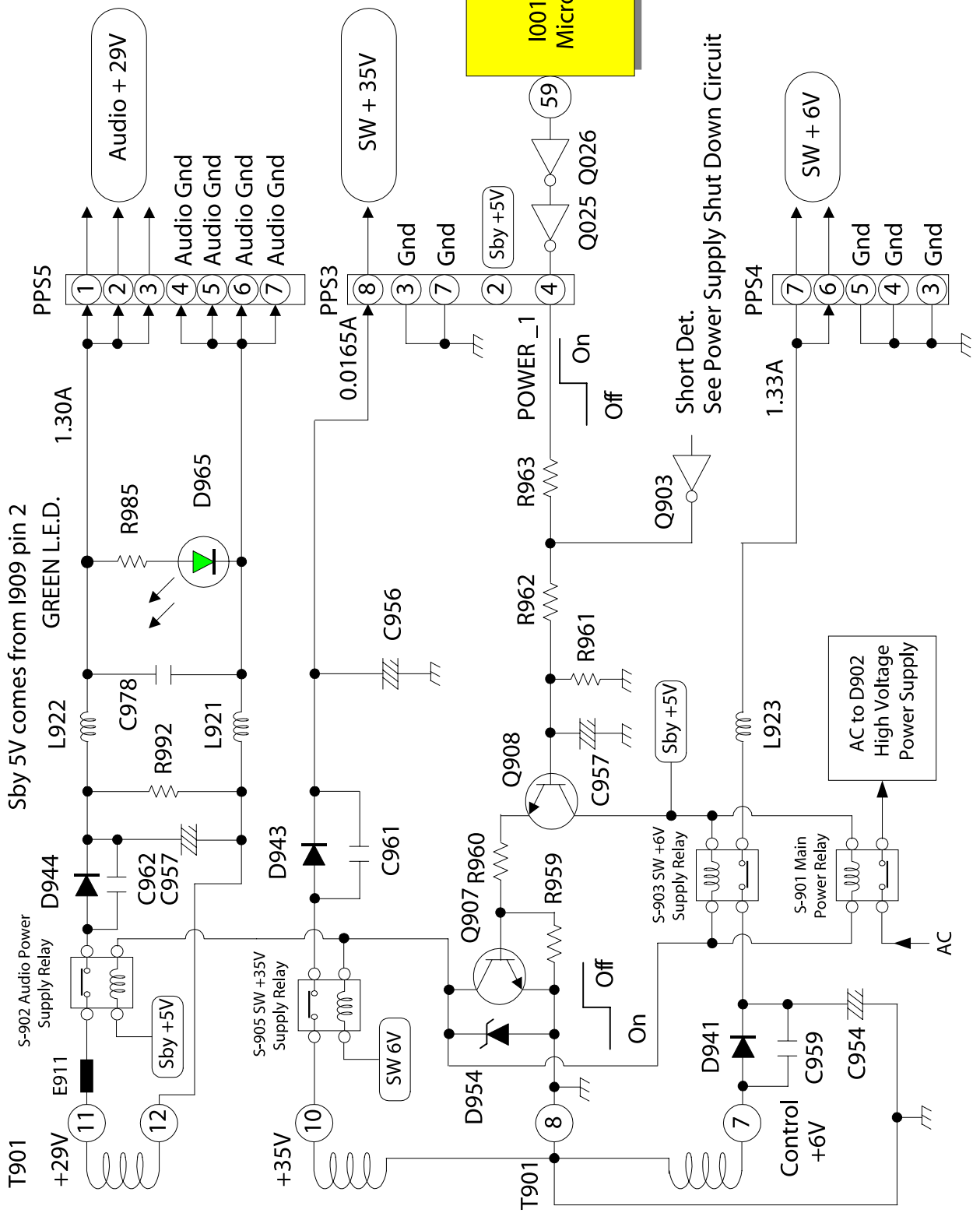
DP-24 REAR PANEL



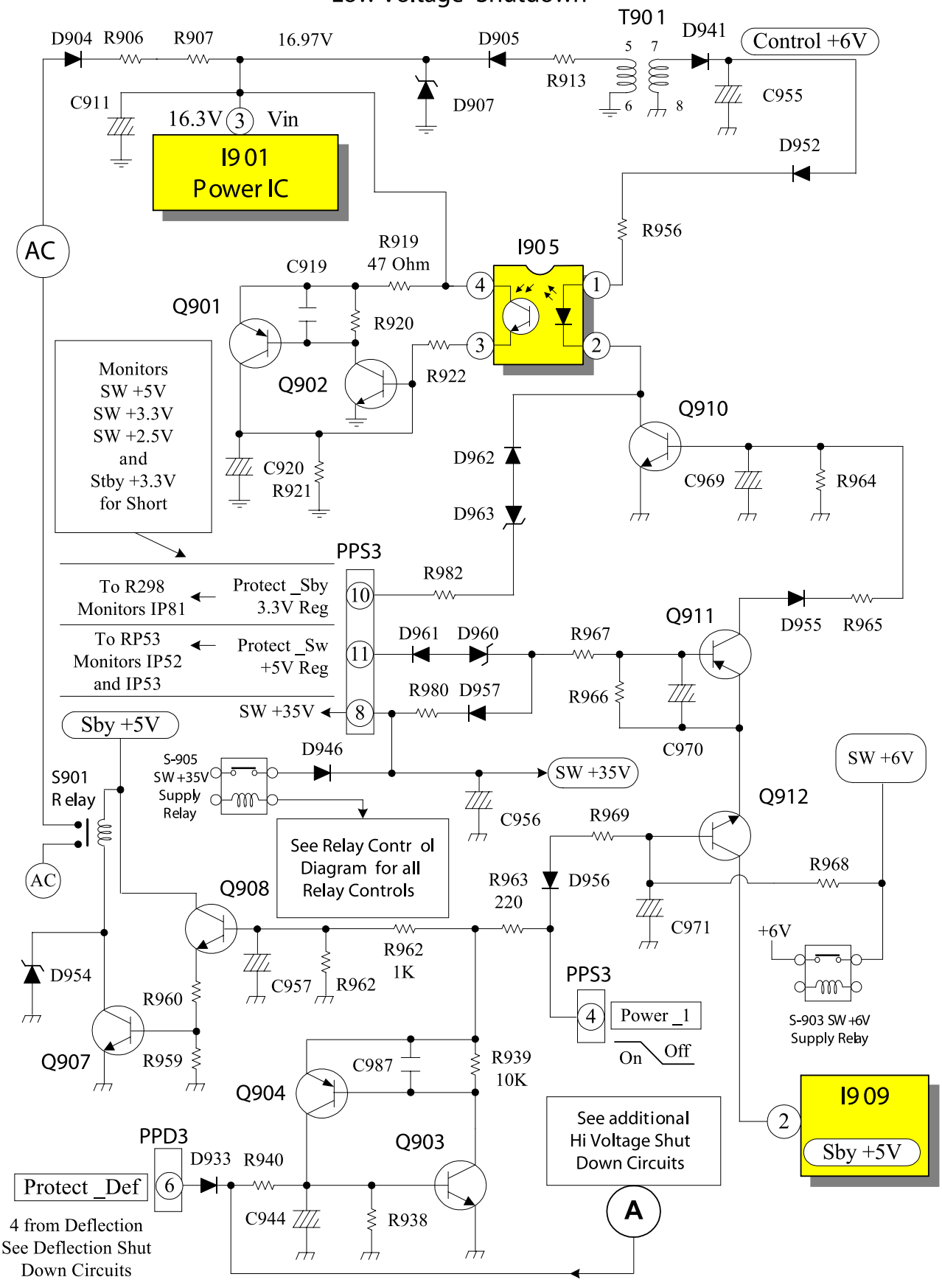
DP-23 23G 24 Chassis
+6.0 V Low Voltage Regulation



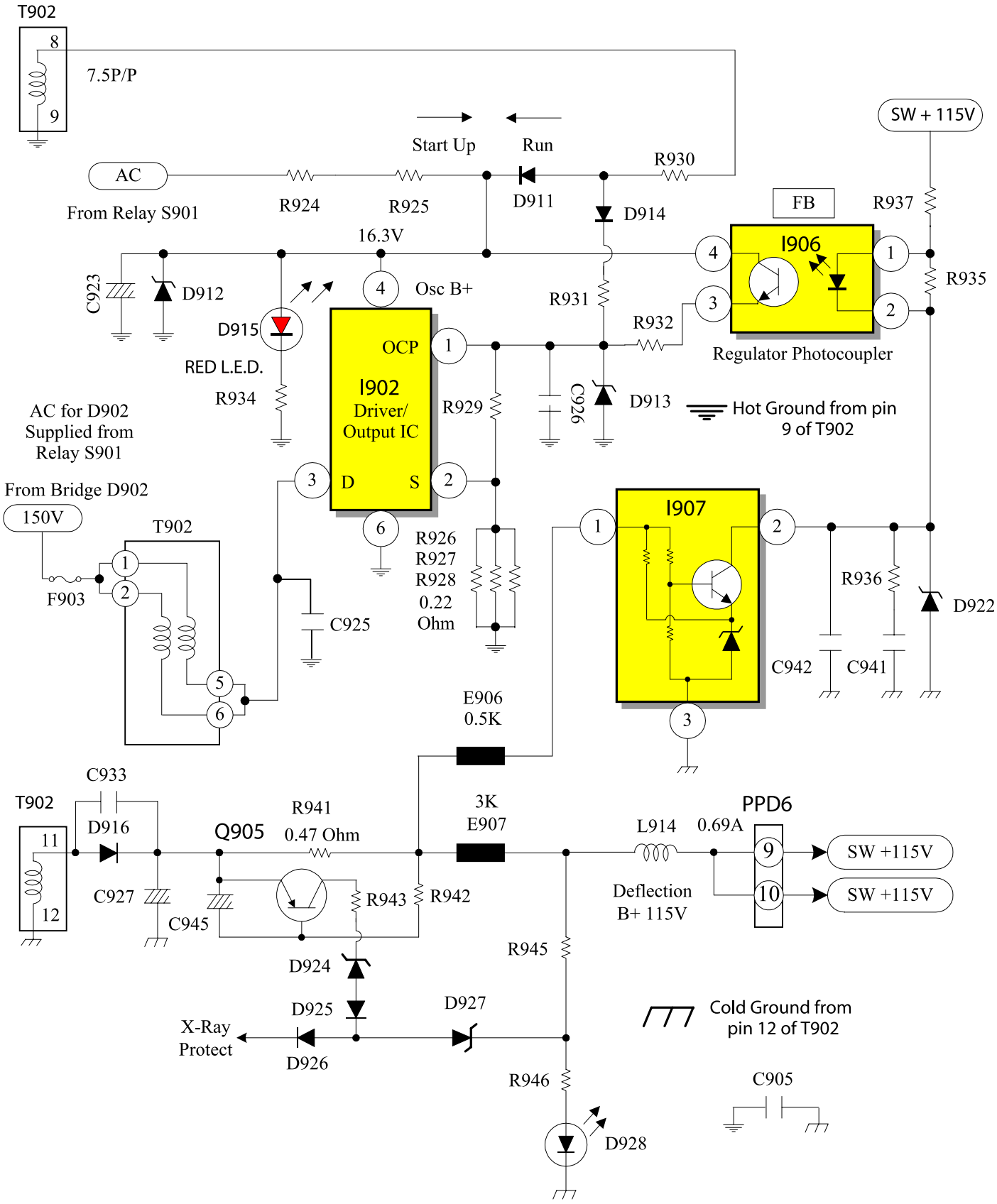
DP-23 23G 24 Chassis Power On Relay Controls



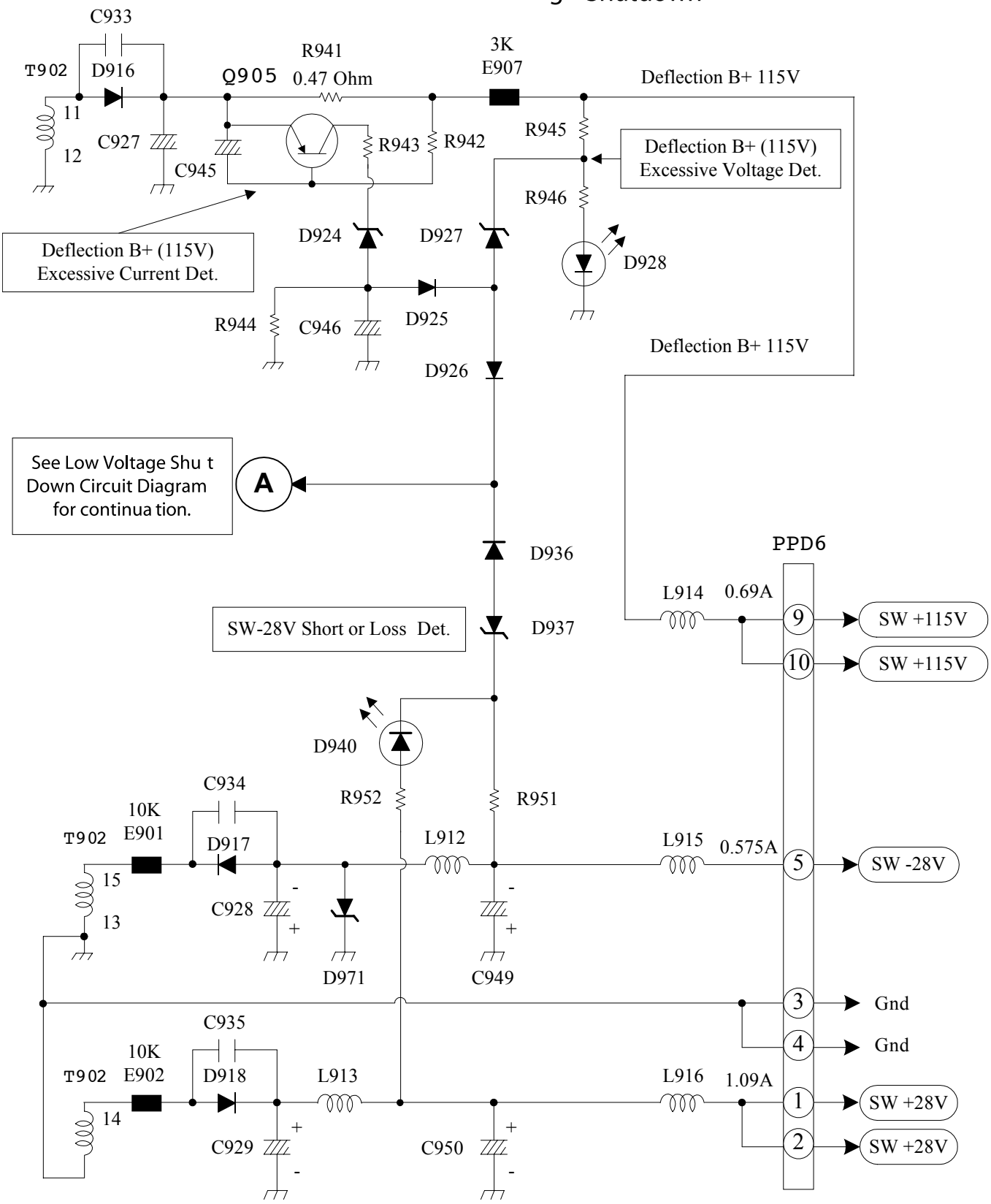
DP-23 23G 24 Chassis
Low Voltage Shutdown



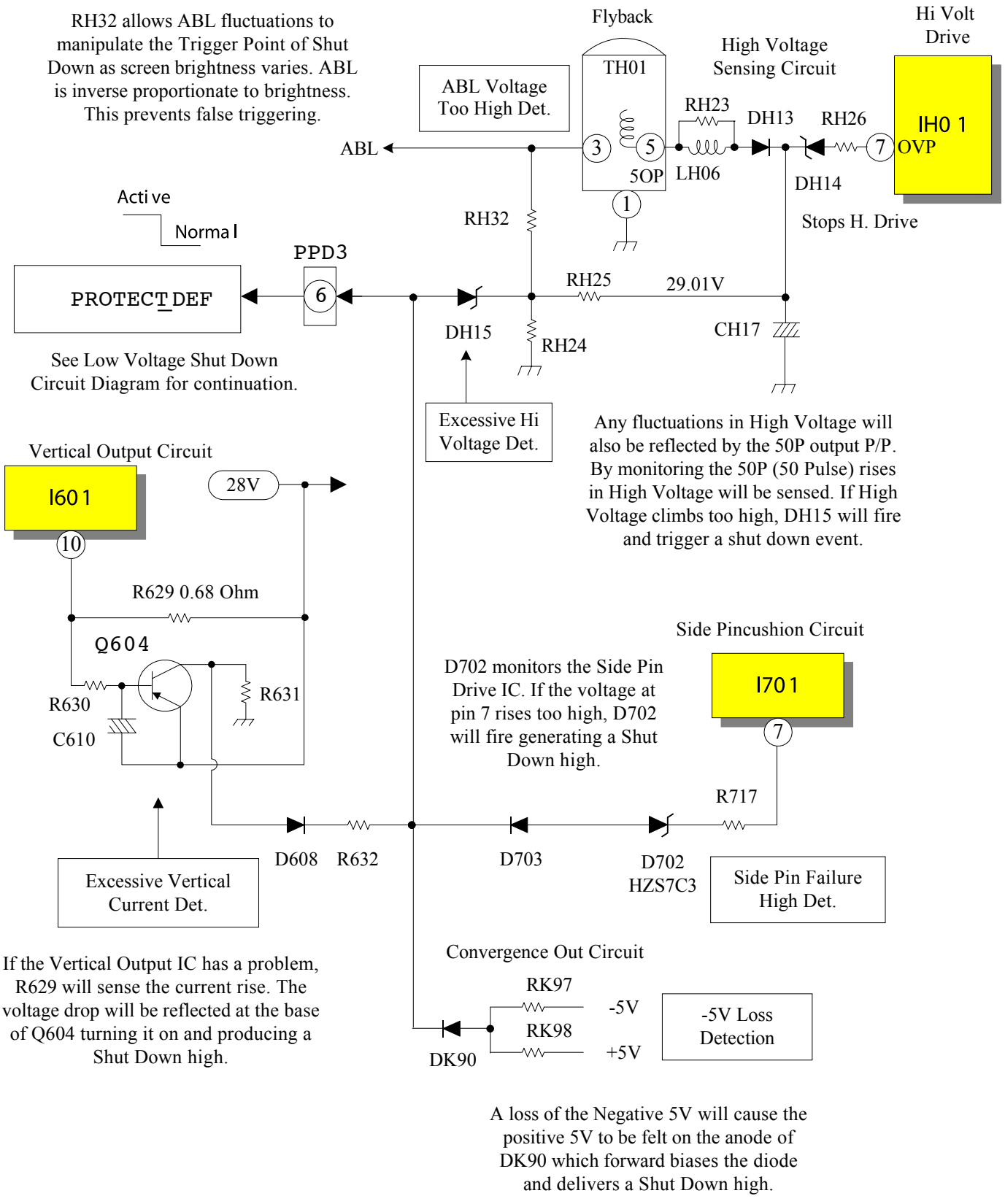
DP-23 23G 24 Chassis
Switched 115 V High Voltage Regulation



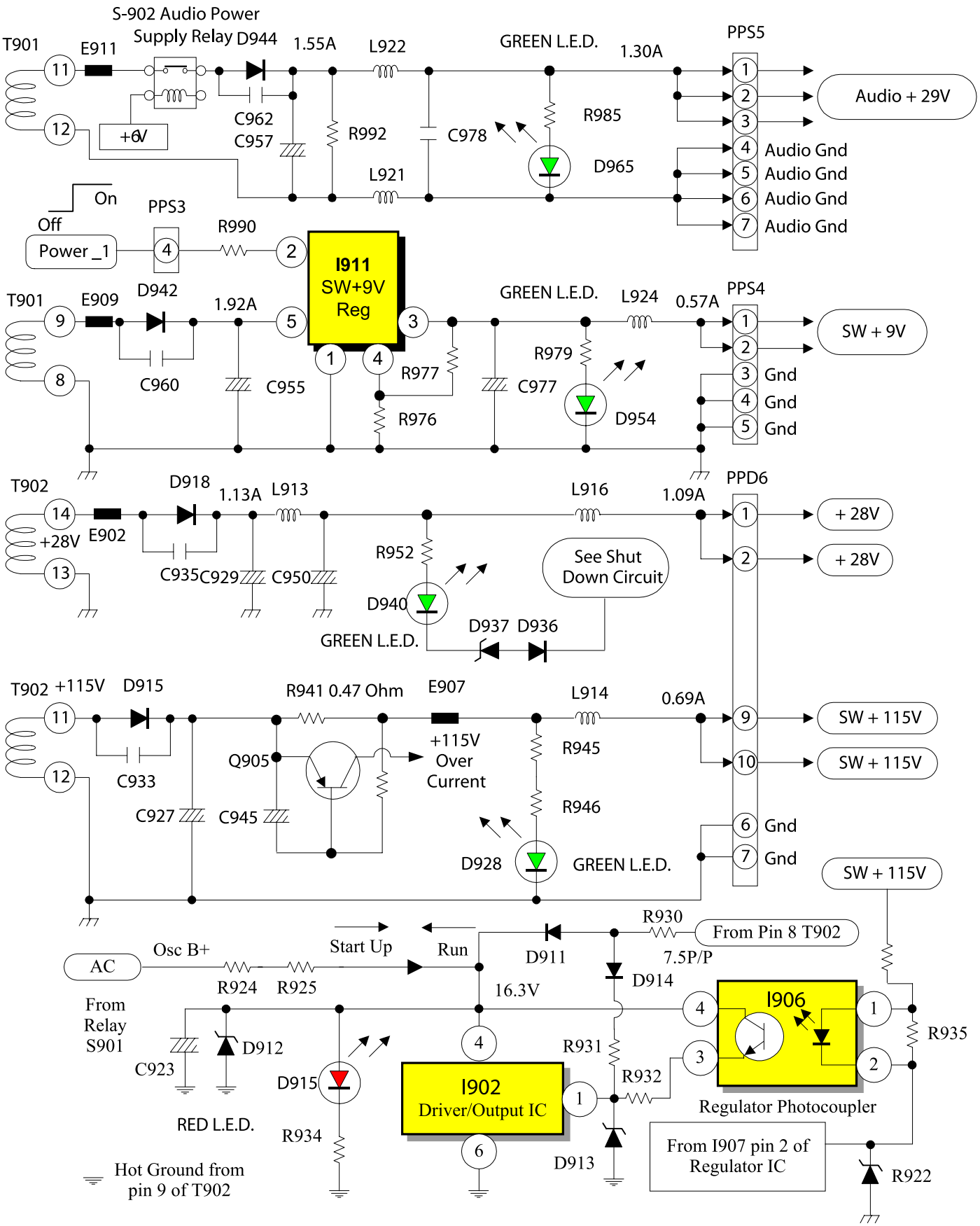
DP-23 23G 24 Chassis
Additional Hi Voltage Shutdown



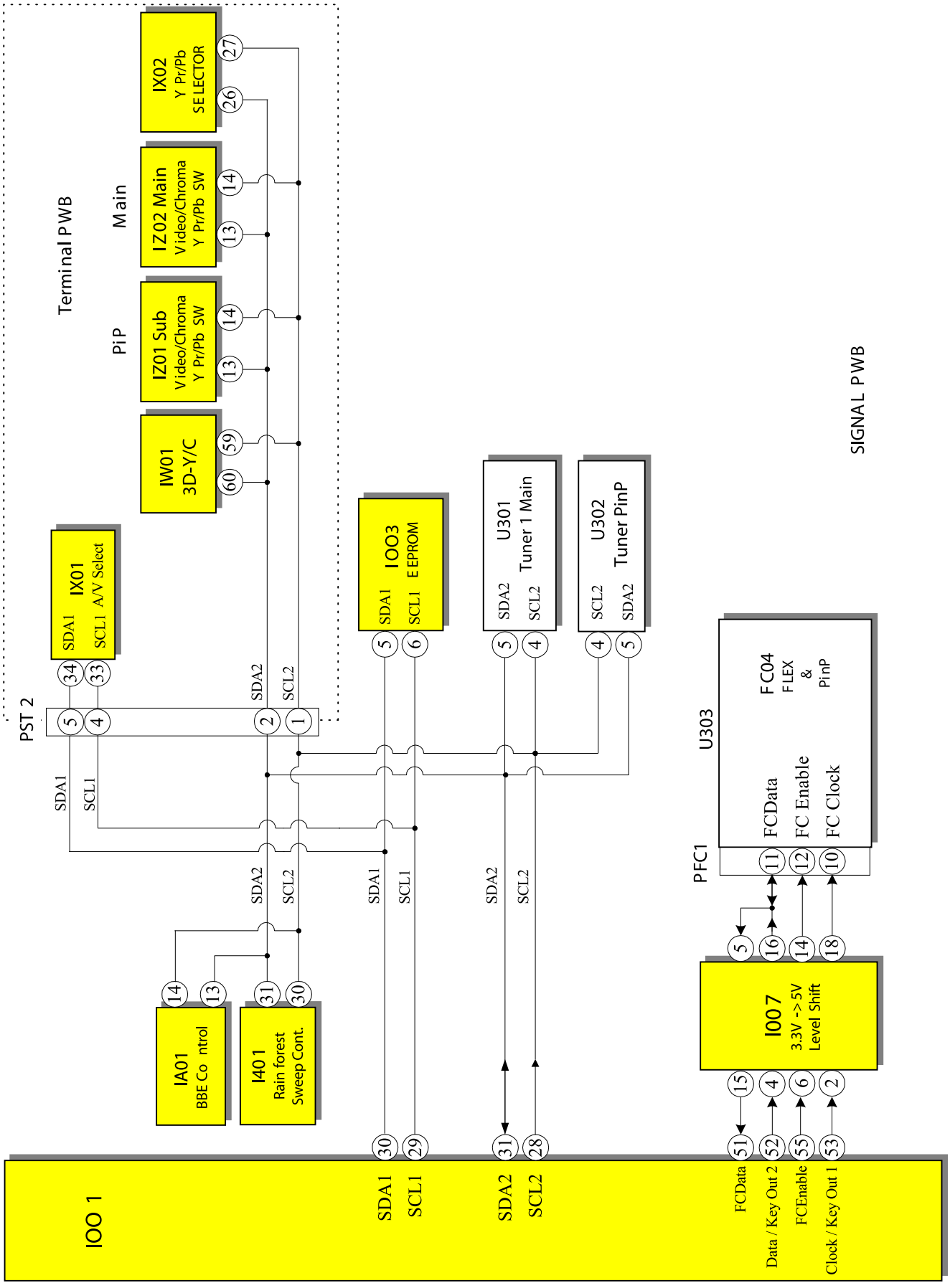
DP-23 23G 24 Chassis
Protect (Deflection) Hi Voltage Shutdown

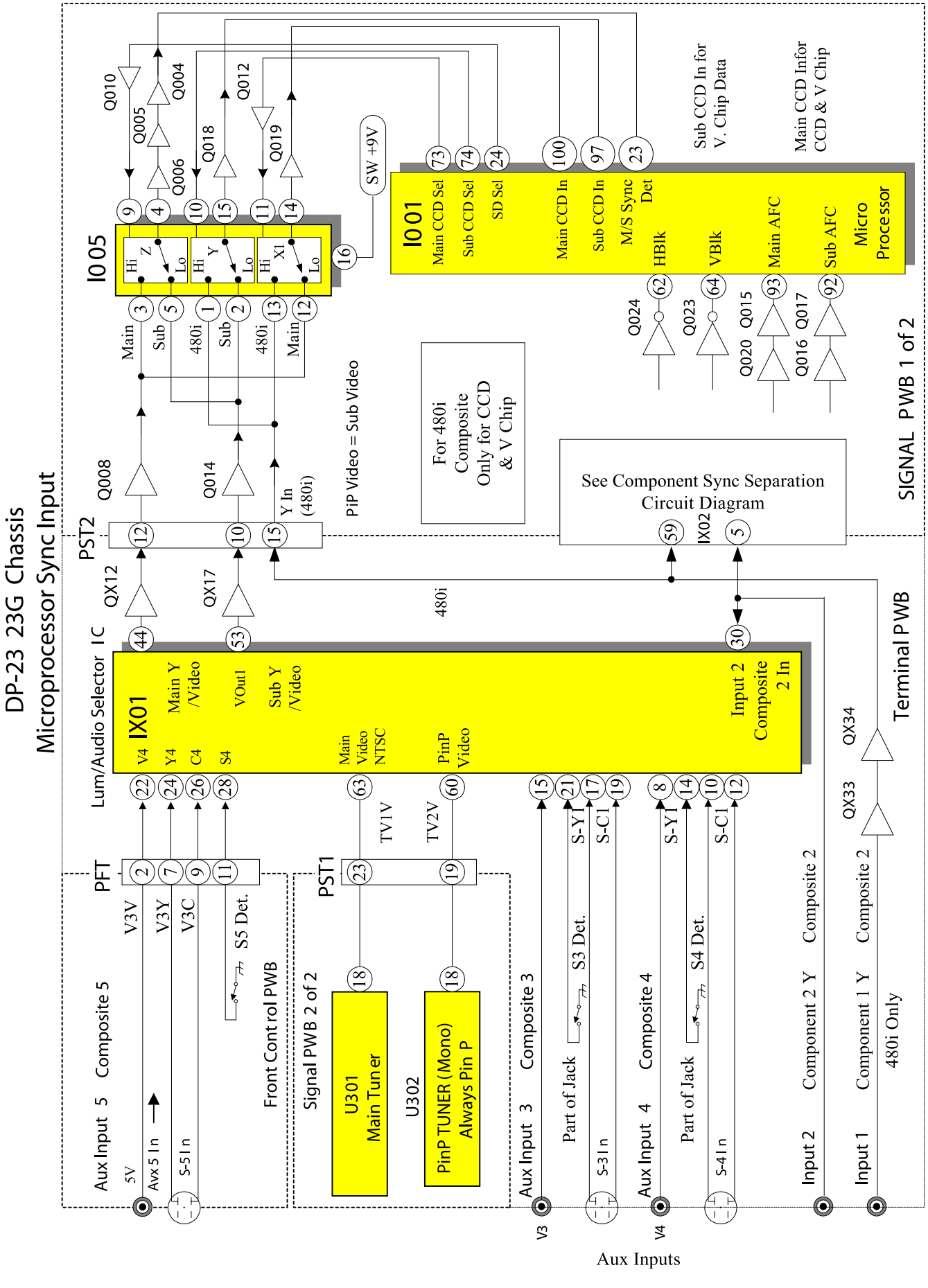


DP-23 23G 24 CHASSIS
L.E.D. (Visual Troubleshooting) Low Voltage Power Supply
(5 Total L.E.D. for visual trouble sensing , 4 Green and 1 Red)

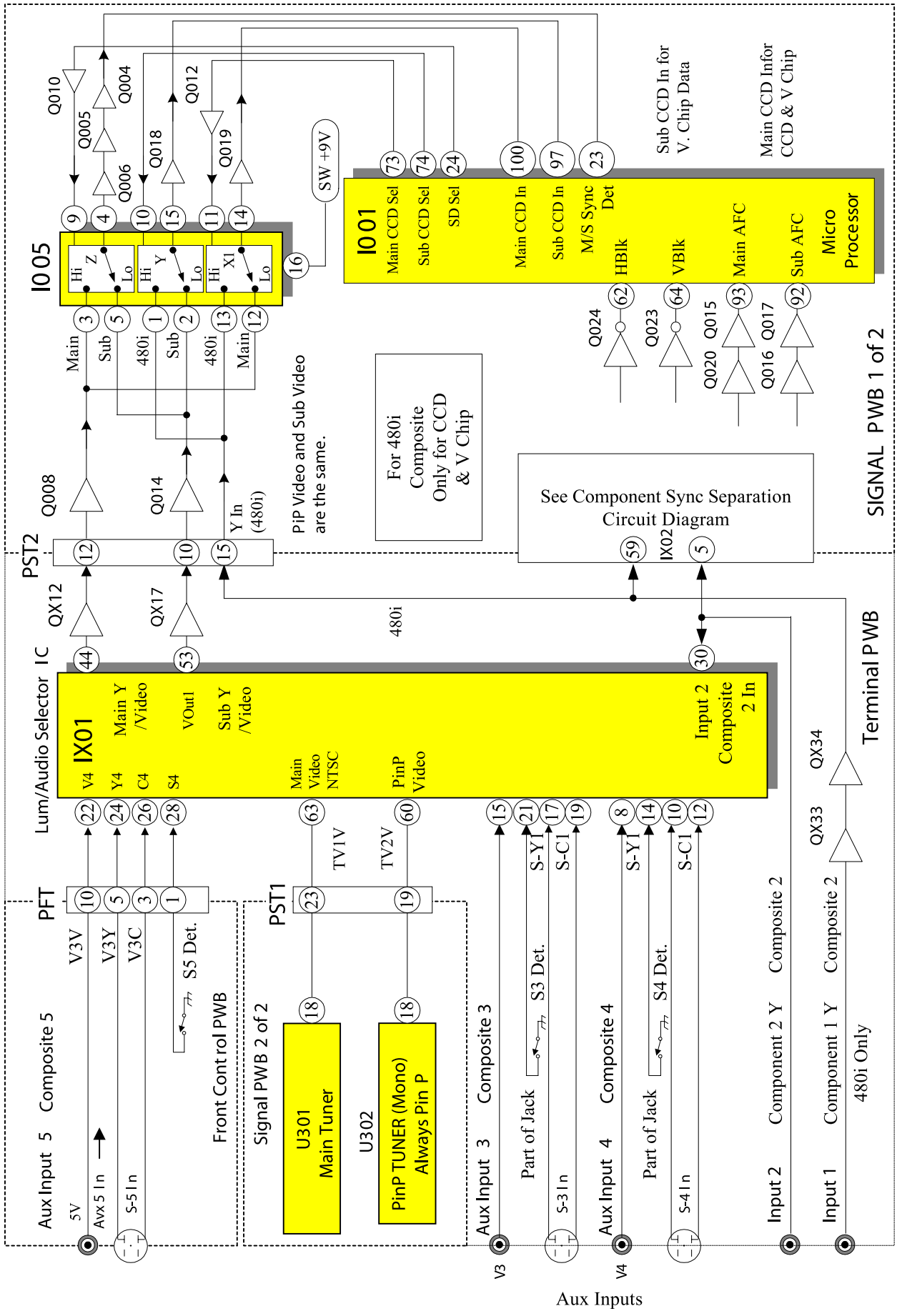


DP23 23G 24 Chassis
Microprocessor Data Communications

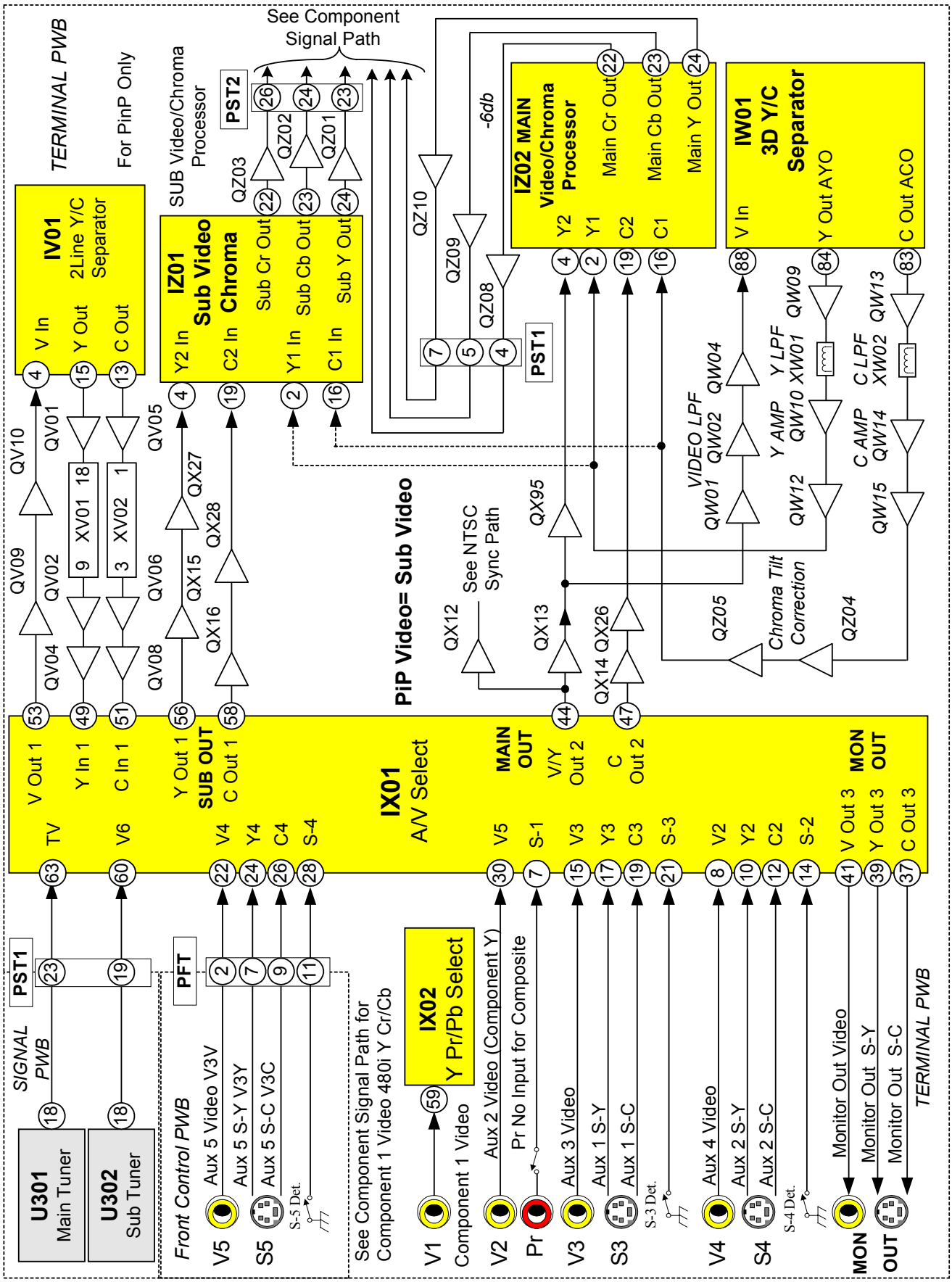



DP-23 23G Chassis
Microprocessor Sync Input
SIGNAL PWB 1 of 2
Terminal PWB
Lum/Audio Selector IC
IX01
V4
Y4
C4
S4
Main Y /Video
VOut1
Sub Y /Video
Main Video NTSC
PinP Video
Input 2 Composite 2 In
I005
I001
Main CCD Sel
Sub CCD Sel
SD Sel
Main CCD In
Sub CCD In
M/S Sync Det
HBlk
VBlk
Main AFC
Sub AFC
Micro Processor
Sub CCD In for V. Chip Data
Main CCD Infor CCD & V Chip
SW +9V
PST2
PST1
PFT
QX12
QX17
QX33
QX34
Q008
Q014
Q010
Q005
Q004
Q006
Q018
Q012
Q019
Q024
Q023
Q020
Q015
Q016
Q017
Y In (480i)
PiP Video = Sub Video
For 480i Composite Only for CCD & V Chip
See Component Sync Separation Circuit Diagram
480i
Main
Sub
480i
480i
Sub
Main
V3V
V3Y
V3C
S5 Det.
TV1V
TV2V
S-Y1
S-C1
S3 Det.
S-Y1
S-C1
S4 Det.
Aux Input 5 Composite 5
5V
Avx 5 In
S-5 In
Front Control PWB
Signal PWB 2 of 2
U301
Main Tuner
U302
PinP TUNER (Mono)
Always Pin P
Aux Input 3 Composite 3
Part of Jack
S-3 In
Aux Input 4 Composite 4
Part of Jack
S-4 In
Input 2 Component 2 Y Composite 2
Input 1 Component 1 Y Composite 2
480i Only
V3
V4
Aux Inputs

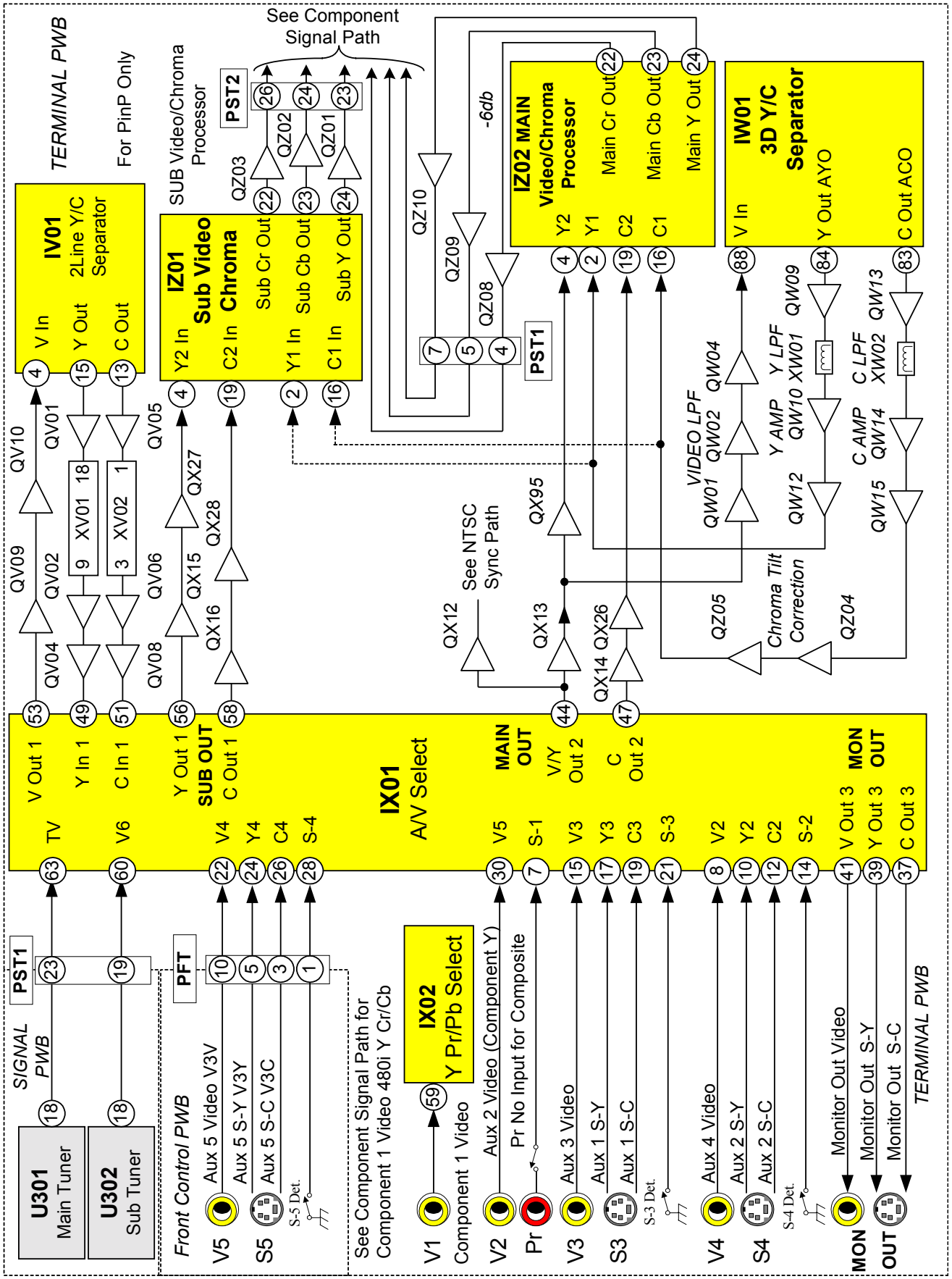
DP-24 Chassis
Microprocessor Sync Input



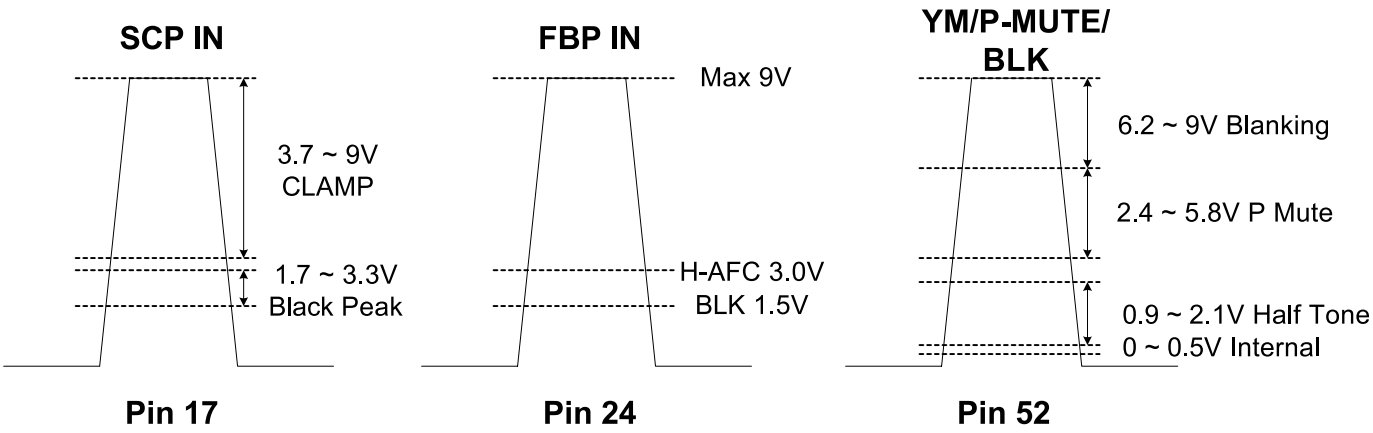
DP-23 23G Chassis
Video NTSC



DP-24 Chassis
Video NTSC



DP-23 23G 24 Chassis
Rainforest IC Pulse Information (I401)
(Video Processor IC)

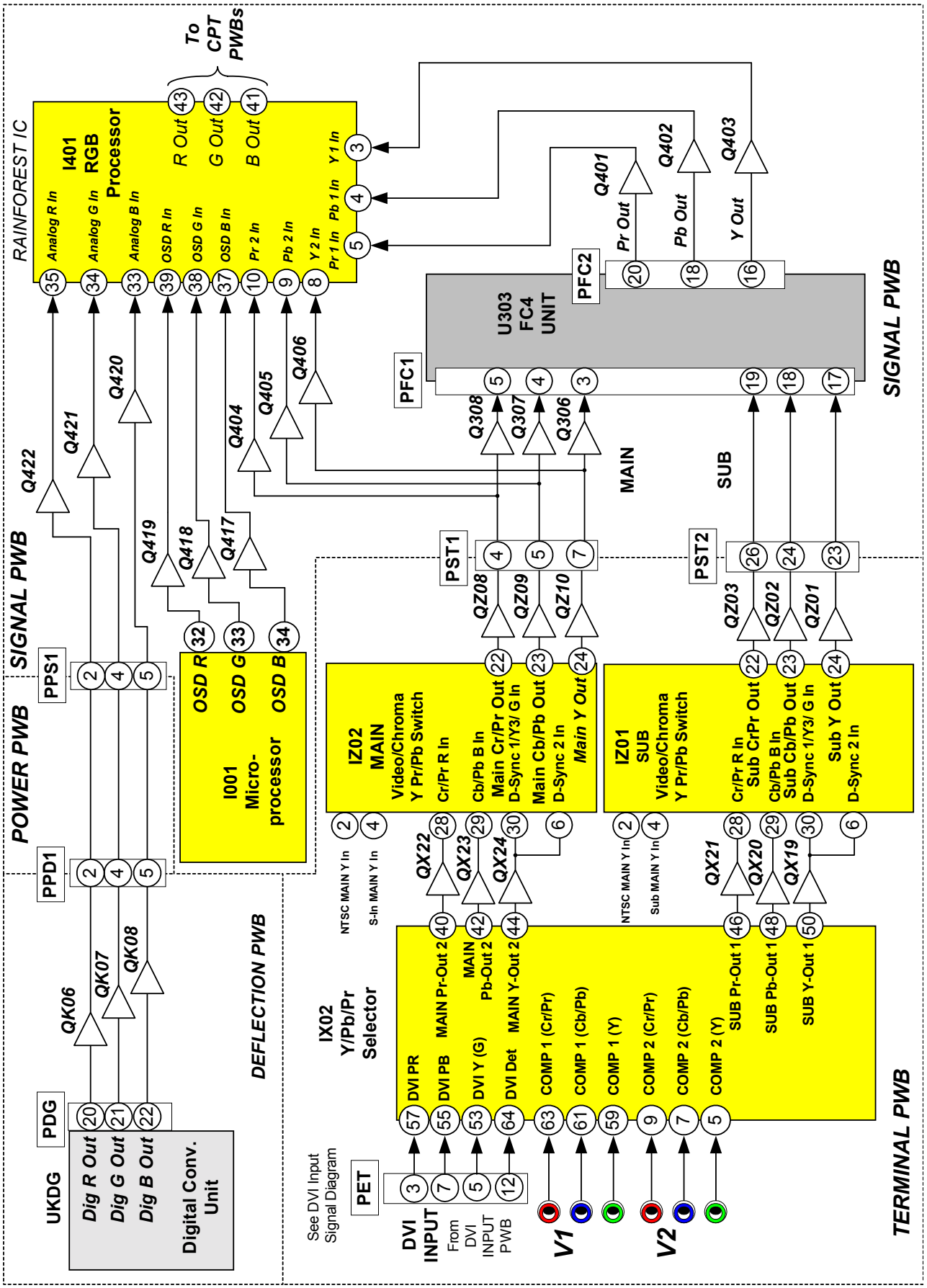


Pin 17 = SCP.
Black Peak: This input is utilized for establishing the Black Peak level used in Black Peak expansion circuit. Here the Black Peak is expanded towards Black to increase the contrast ratio.
CLAMP : The clamp pulse is utilized for DC restoration and blanking timing.

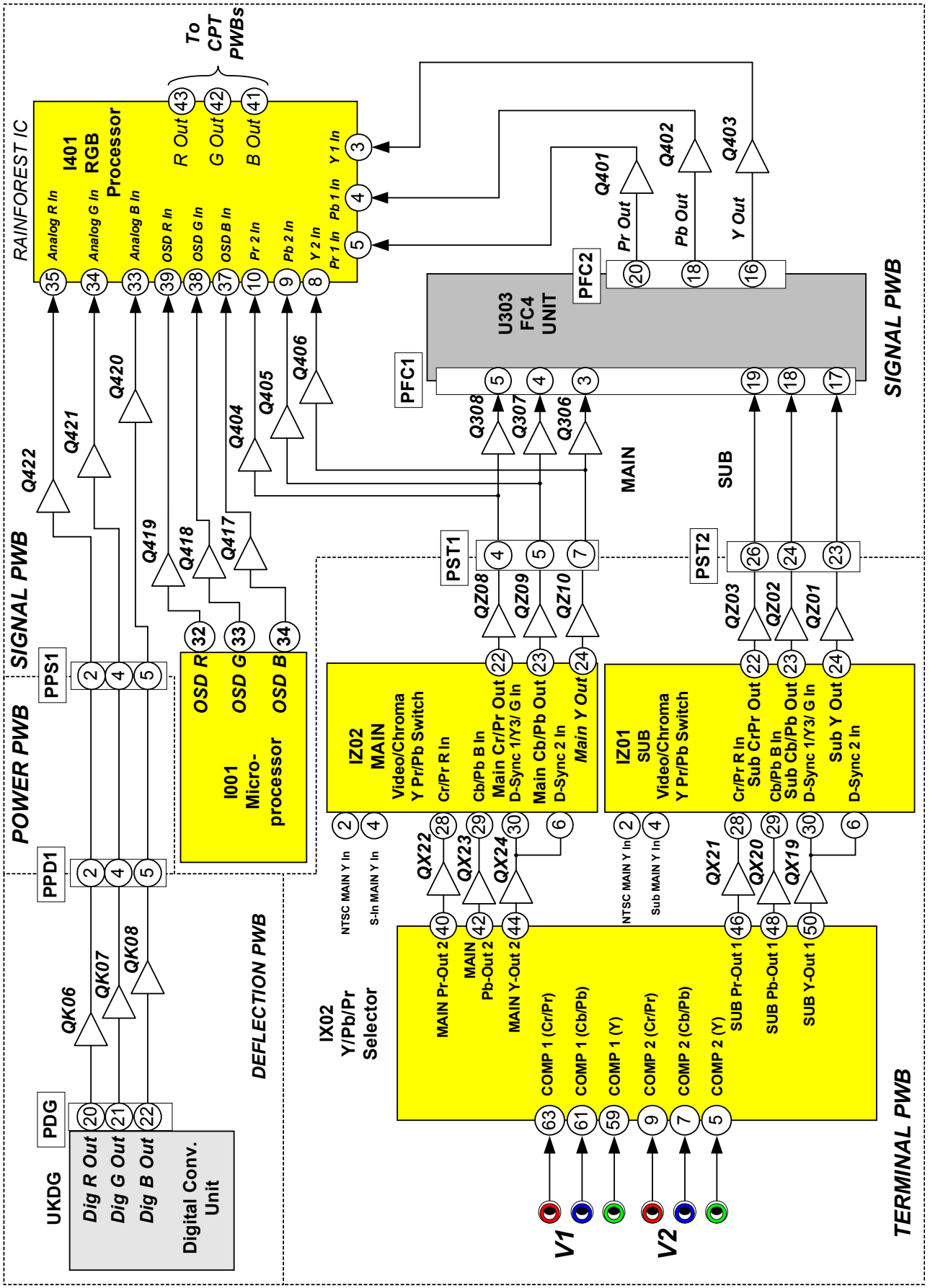
Pin 24 = FBP. Combination of the following.
Fly back pulse : 1.5V ~ 3.0V H-AFC: This input is received from the Horizontal Blanking (H. Blk) signal generated in the Deflection circuit by Q706. This signal is used as a sample pulse in the Horizontal AFC circuit, which synchronizes the Horizontal Drive signal with the incoming Video sync signal input at pin 16. In Through Mode, pin 8.
Fly back pulse: 3.0V ~ 9.0V Max: This input is received from the Flex Converter and is a combination of Horizontal and Vertical blanking signals.
H Blk from the Flex Converter Pin 12 through Q412
V Blk from the Flex Converter Pin 11 through Q411
Used within the Rainforest is for DC restoration, Pedestal level detection and Clamping signals, such as Burst Gate Pulse.

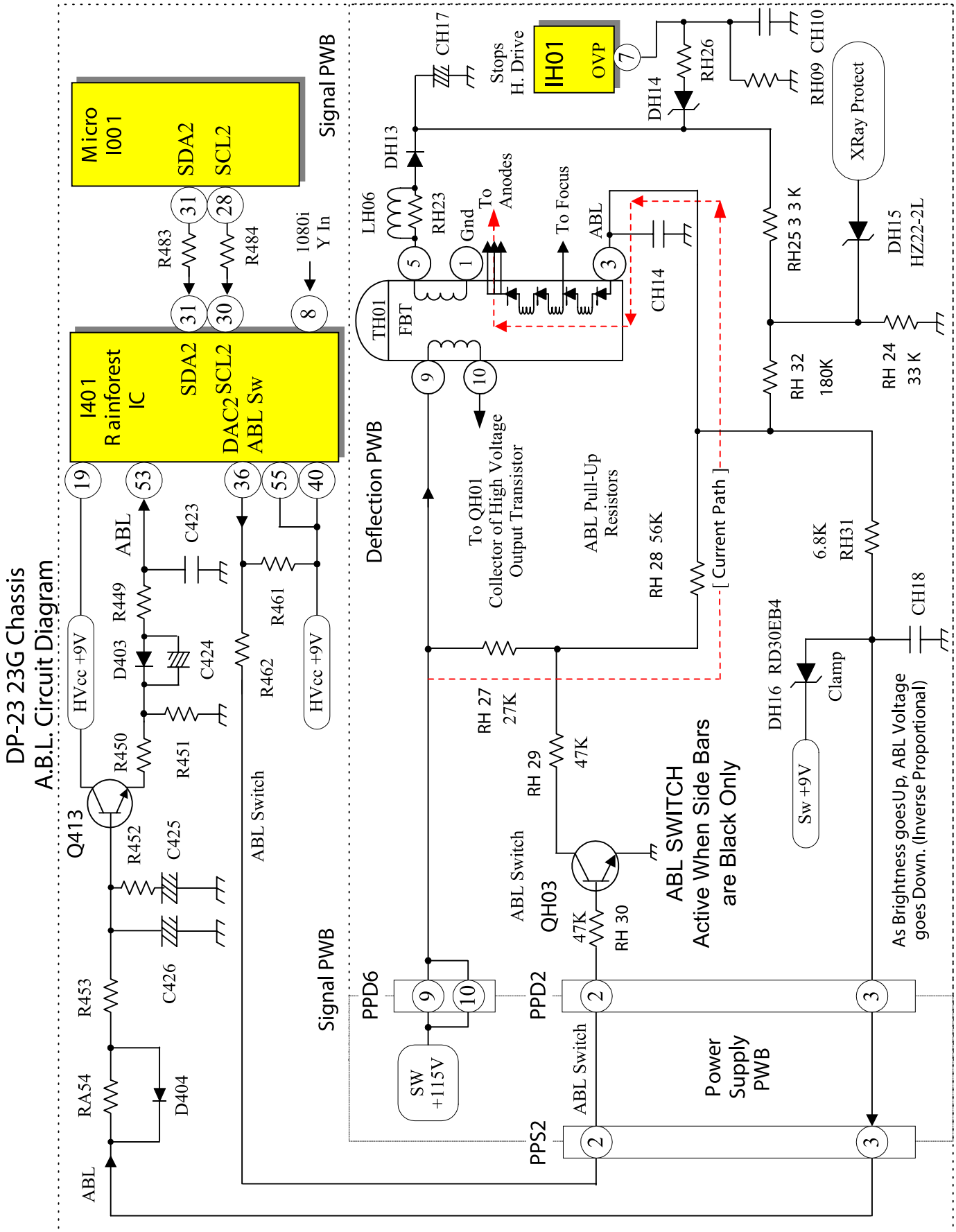
Pin 52 = YM/P-MUTE/BLK. Combination of the following.
INTERNAL: 0.0V ~ 0.5V Used internal within the Rainforest IC.
HALFTONE: 0.9V ~ 2.1V: This input is received from the Microprocessor and is used to establish the Transparency effect of OSD. This also mutes the video in exact timing with On Screen Display pulses (OSD). Half Tone from the Microprocessor Pin 22 through Q415.
P MUTE : 2.4V ~ 5.8V: Not Used.

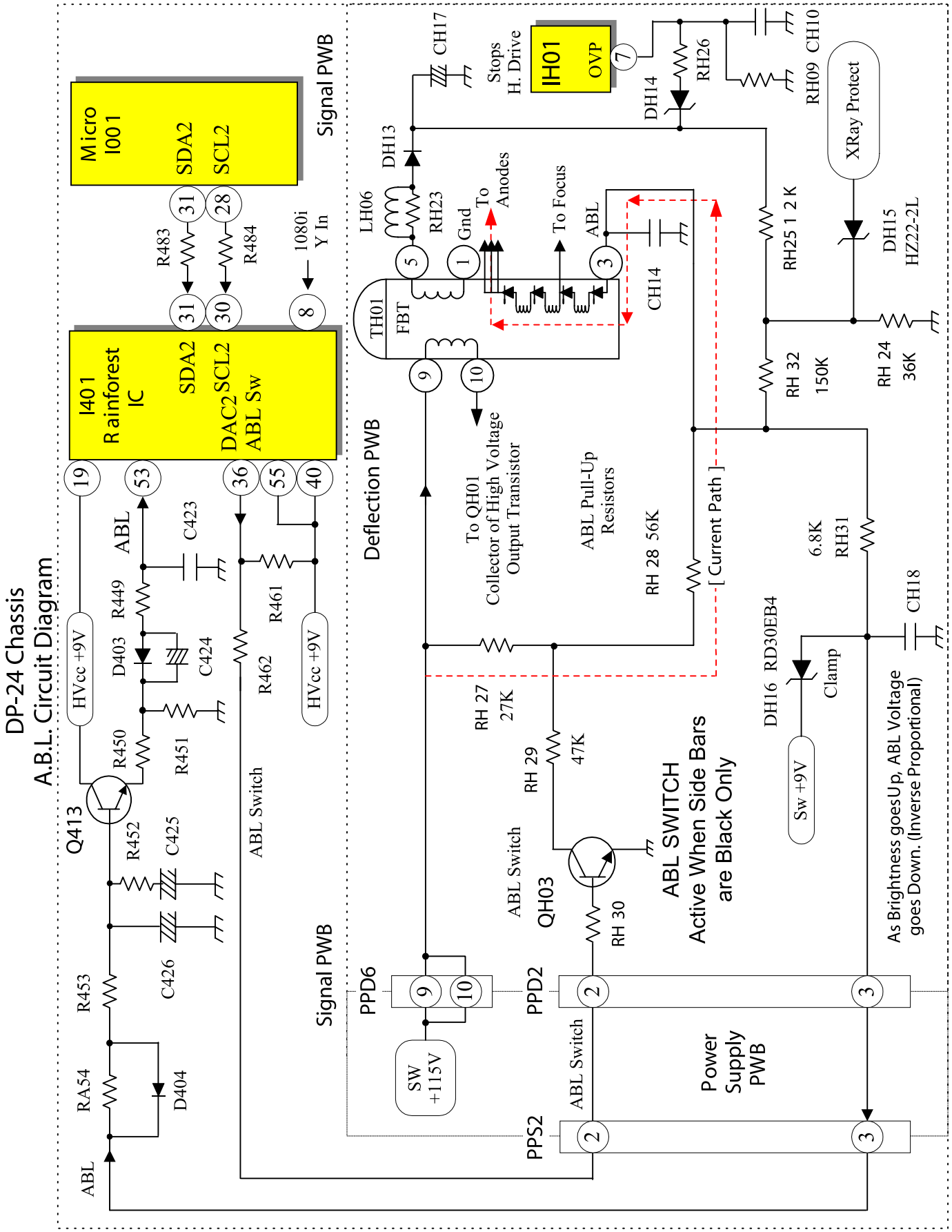
DP-23 23G Chassis
Video Component, OSD & NTSC



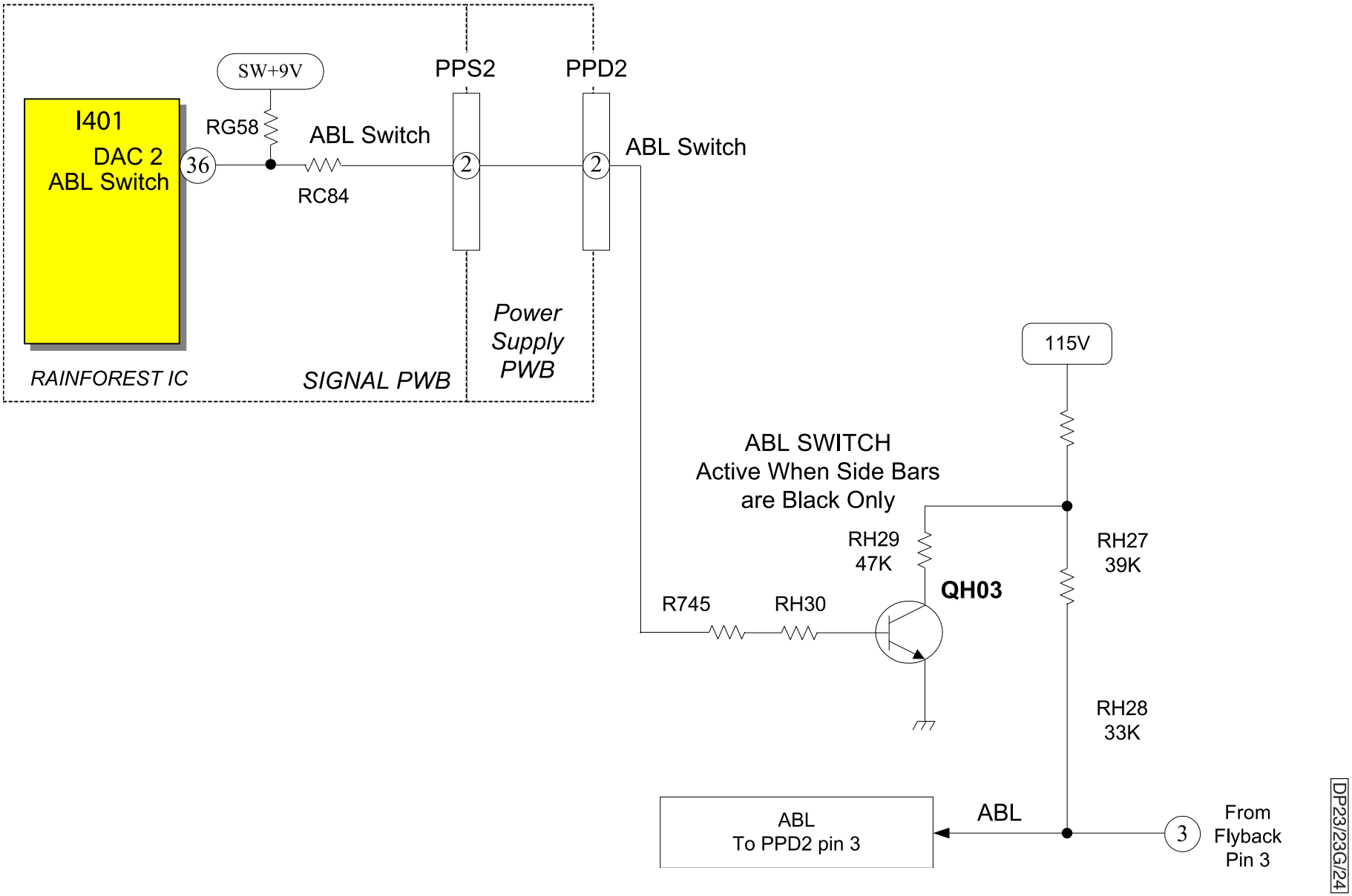
DP-24 Chassis
Video Component OSD & NTSC



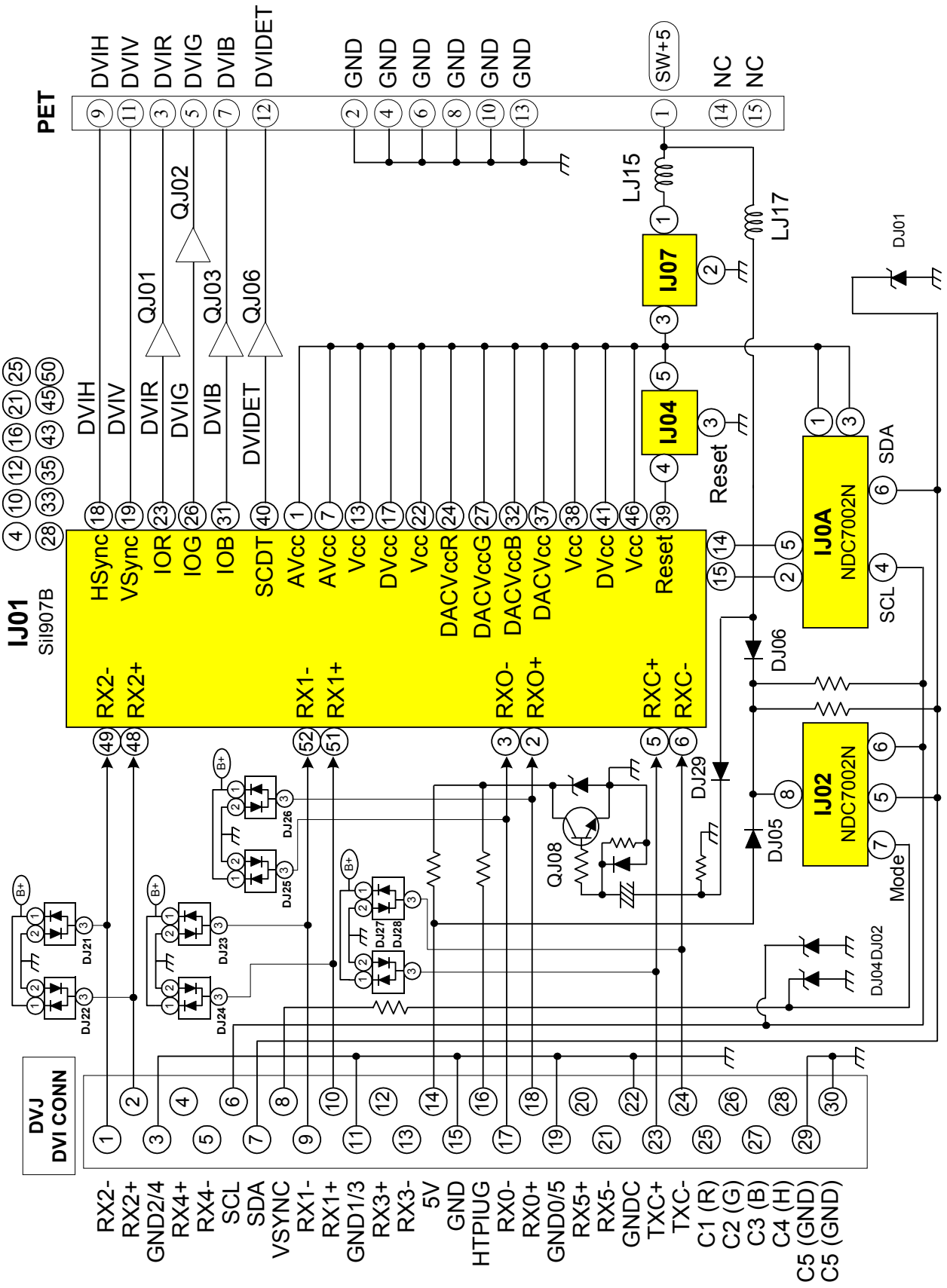

DP-23 23G Chassis
A.B.L. Circuit Diagram
Micro I001
SDA2
SCL2
Signal PWB
I401
R ainforest IC
SDA2
SCL2
DAC2
ABL Sw
R483
R484
1080i Y In
HVcc +9V
ABL
C423
D403
R449
C424
R450
R451
R452
C425
C426
R453
RA54
D404
Q413
ABL Switch
R462
R461
Deflection PWB
TH01
FBT
LH06
DH13
RH23
CH17
Stops H. Drive
IH01
OVP
DH14
RH26
RH09
CH10
XRay Protect
DH15
HZ22-2L
RH25 3 3 K
RH 24
33 K
RH 32
180K
Gnd
To Anodes
To Focus
CH14
To QH01
Collector of High Voltage
Output Transistor
ABL Pull-Up
Resistors
RH 28 56K
[Current Path]
RH 27
27K
RH 29
47K
ABL Switch
QH03
47K
RH 30
ABL SWITCH
Active When Side Bars
are Black Only
DH16 RD30EB4
Clamp
Sw +9V
6.8K
RH31
CH18
As Brightness goesUp, ABL Voltage
goes Down. (Inverse Proportional)
PPD6
PPD2
PPS2
SW
+115V
Power
Supply
PWB


DP-24 Chassis
A.B.L. Circuit Diagram
Micro I001
SDA2
SCL2
Signal PWB
R483
R484
1080i Y In
I401 Rainforest IC
SDA2
DAC2 SCL2
ABL Sw
ABL
HVcc +9V
Q413
R450
R451
R452
R453
RA54
D404
C423
C424
C425
C426
D403
R449
R461
R462
ABL Switch
Deflection PWB
PPD6
PPD2
PPS2
SW +115V
ABL Switch
QH03
RH 27 27K
RH 29 47K
RH 30
ABL SWITCH
Active When Side Bars are Black Only
To QH01 Collector of High Voltage Output Transistor
ABL Pull-Up Resistors
RH 28 56K
[Current Path]
TH01
FBT
LH06
RH23
DH13
CH17
Gnd
To Anodes
To Focus
ABL
CH14
IH01
OVP
Stops H. Drive
DH14
RH26
RH09 CH10
XRay Protect
DH15 HZ22-2L
RH25 1 2 K
RH 32 150K
RH 24 36K
6.8K RH31
DH16 RD30EB4
Clamp
Sw +9V
CH18
As Brightness goesUp, ABL Voltage goes Down. (Inverse Proportional)
Power Supply PWB

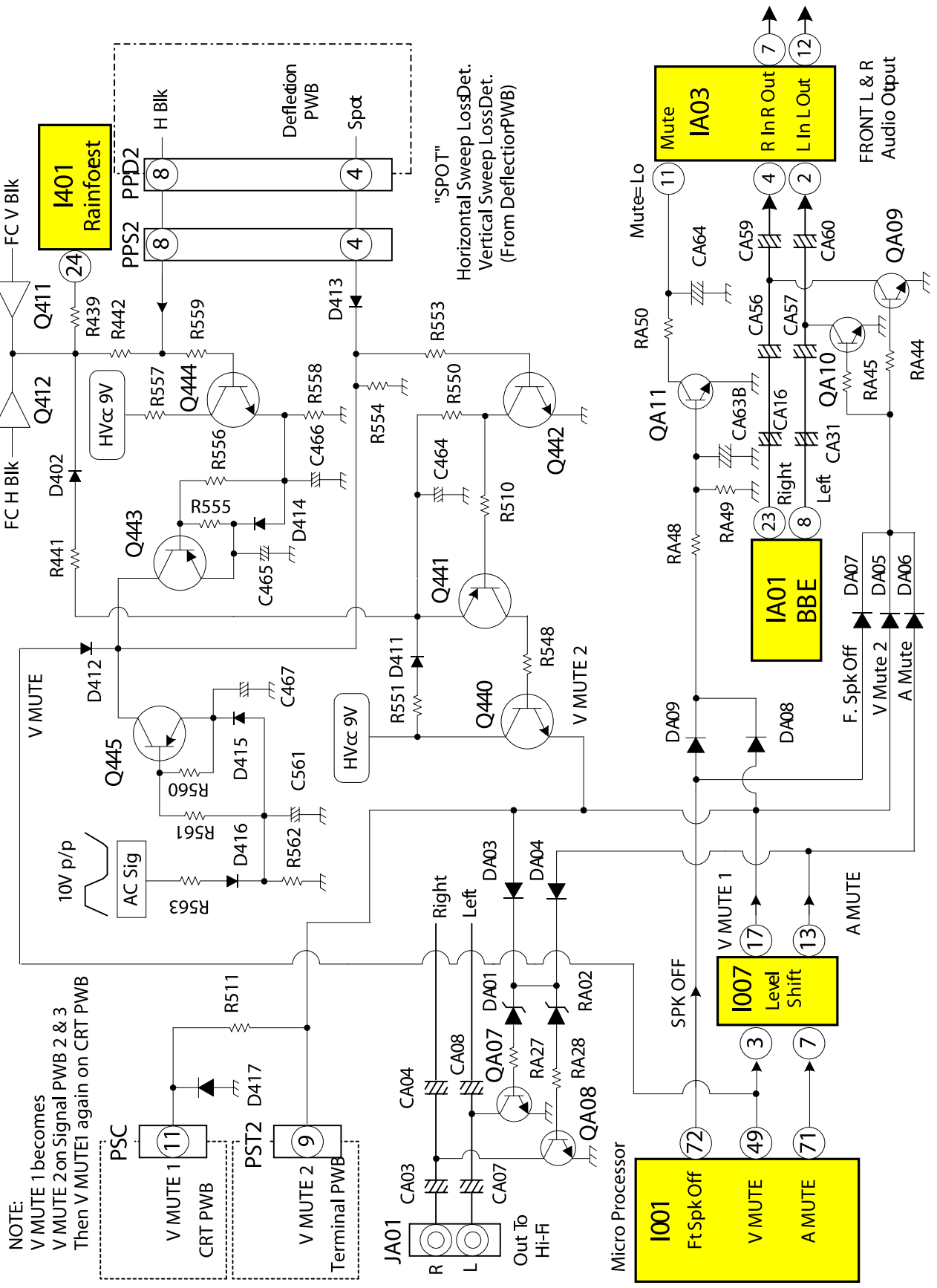
DP23 23G 24 Chassis
A.B.L. Switch (Black Side Bars Mode Only)



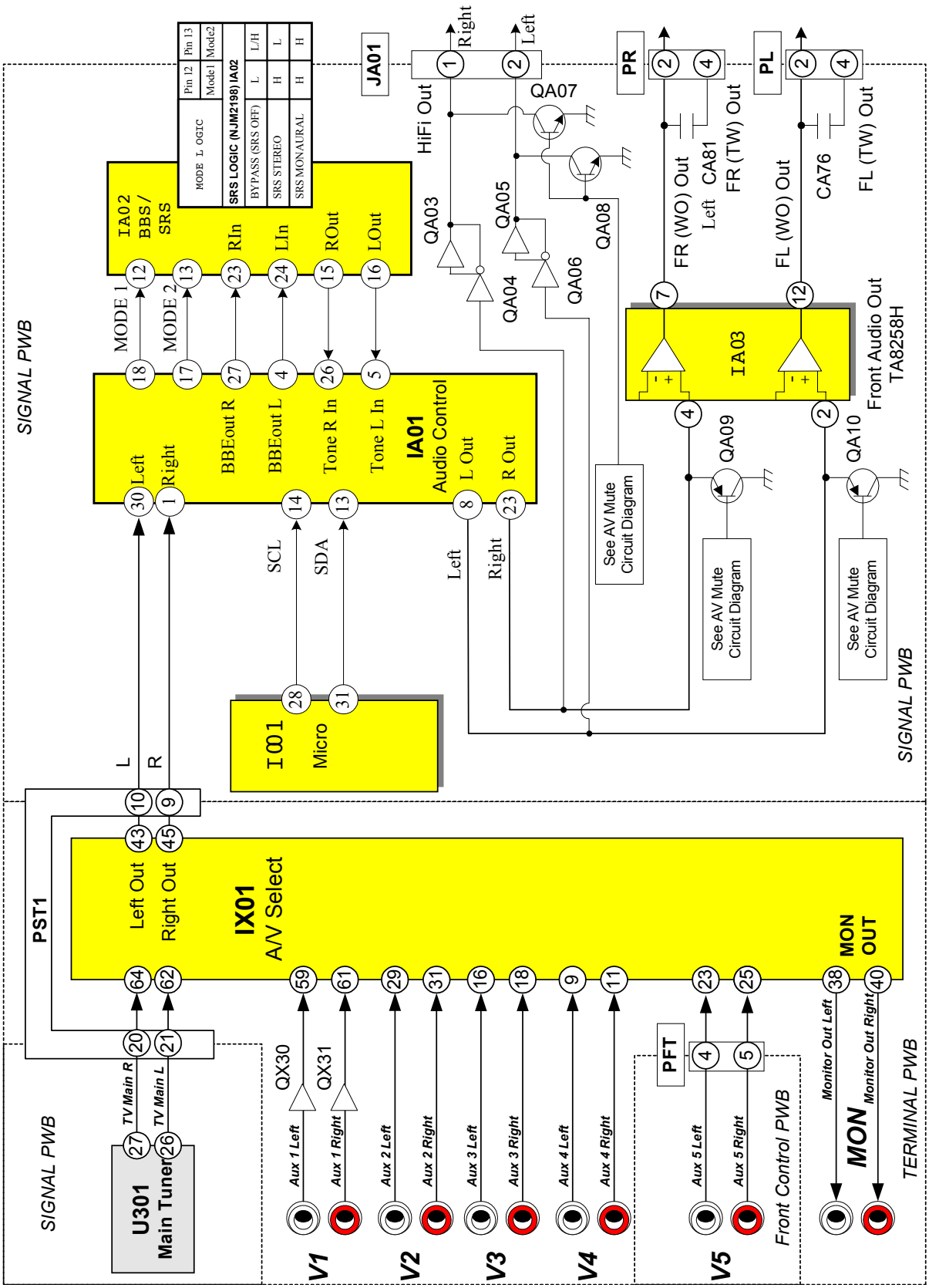
DP-23 23G Chassis
DVI Input



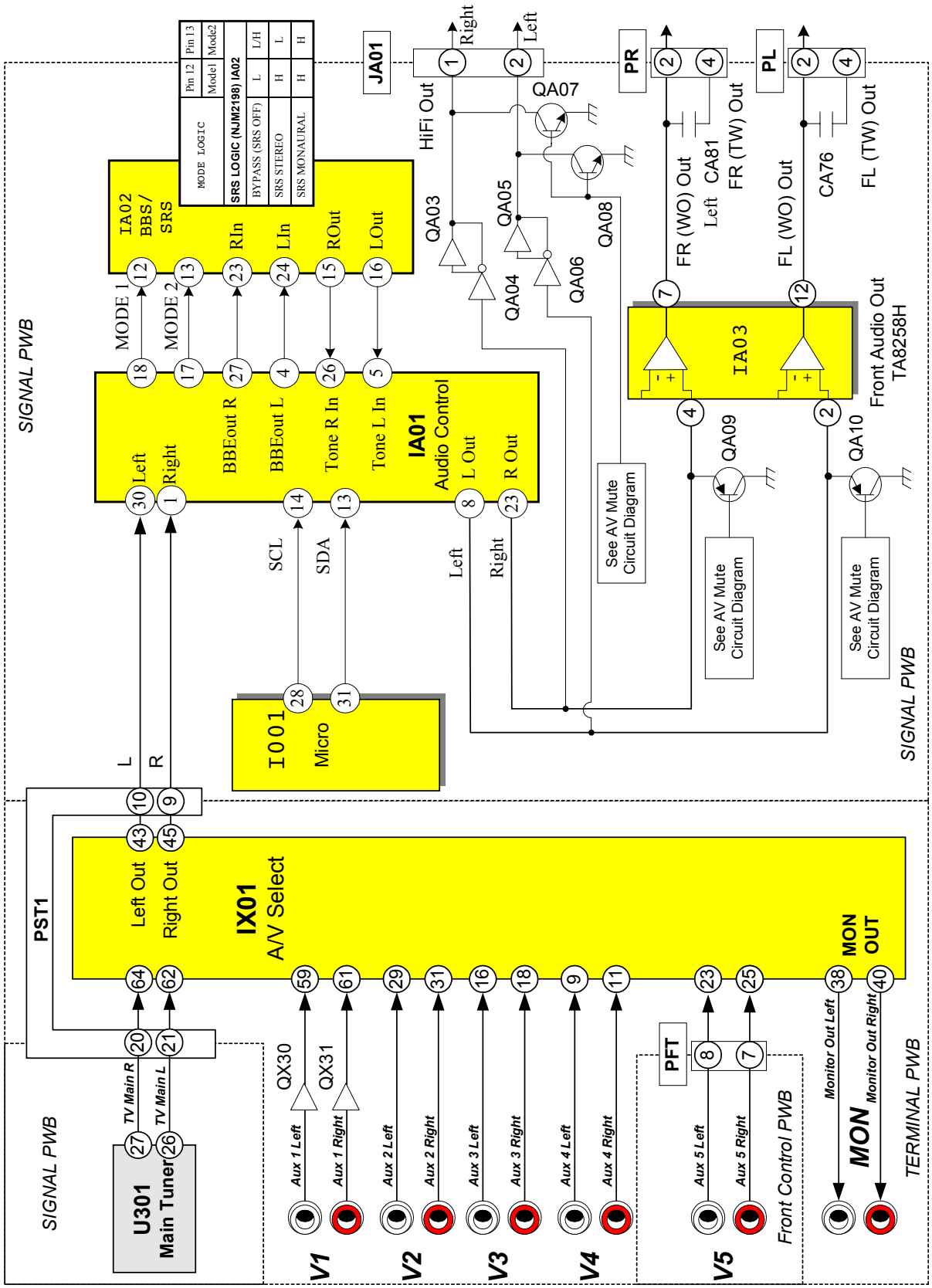
DP-23 23G 24 Chassis
Audio Video Mute
(See also Terminal Mute Circuit)

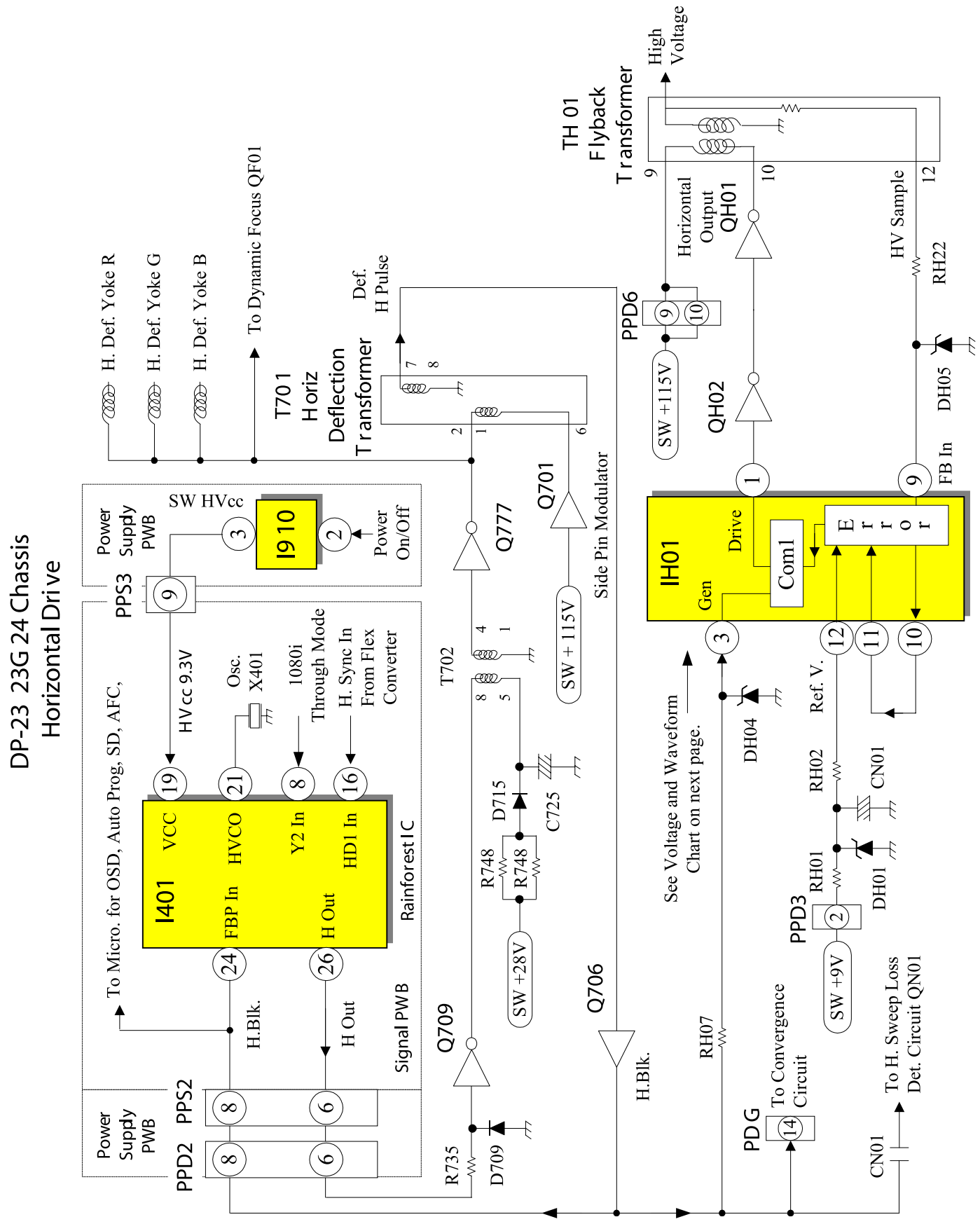


DP23 23G Chassis
Audio Main Terminal

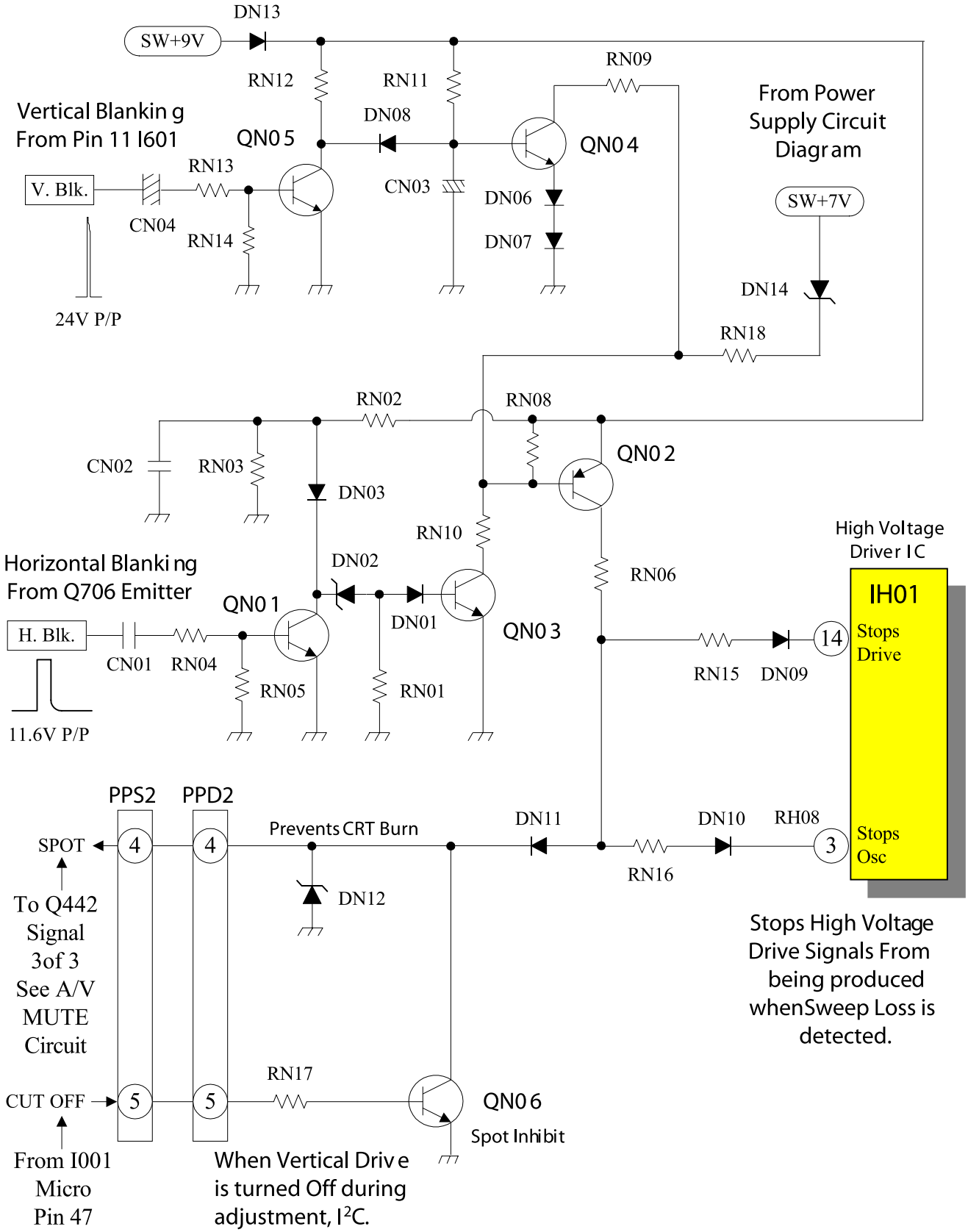


DP24 Chassis
Audio Main Terminal

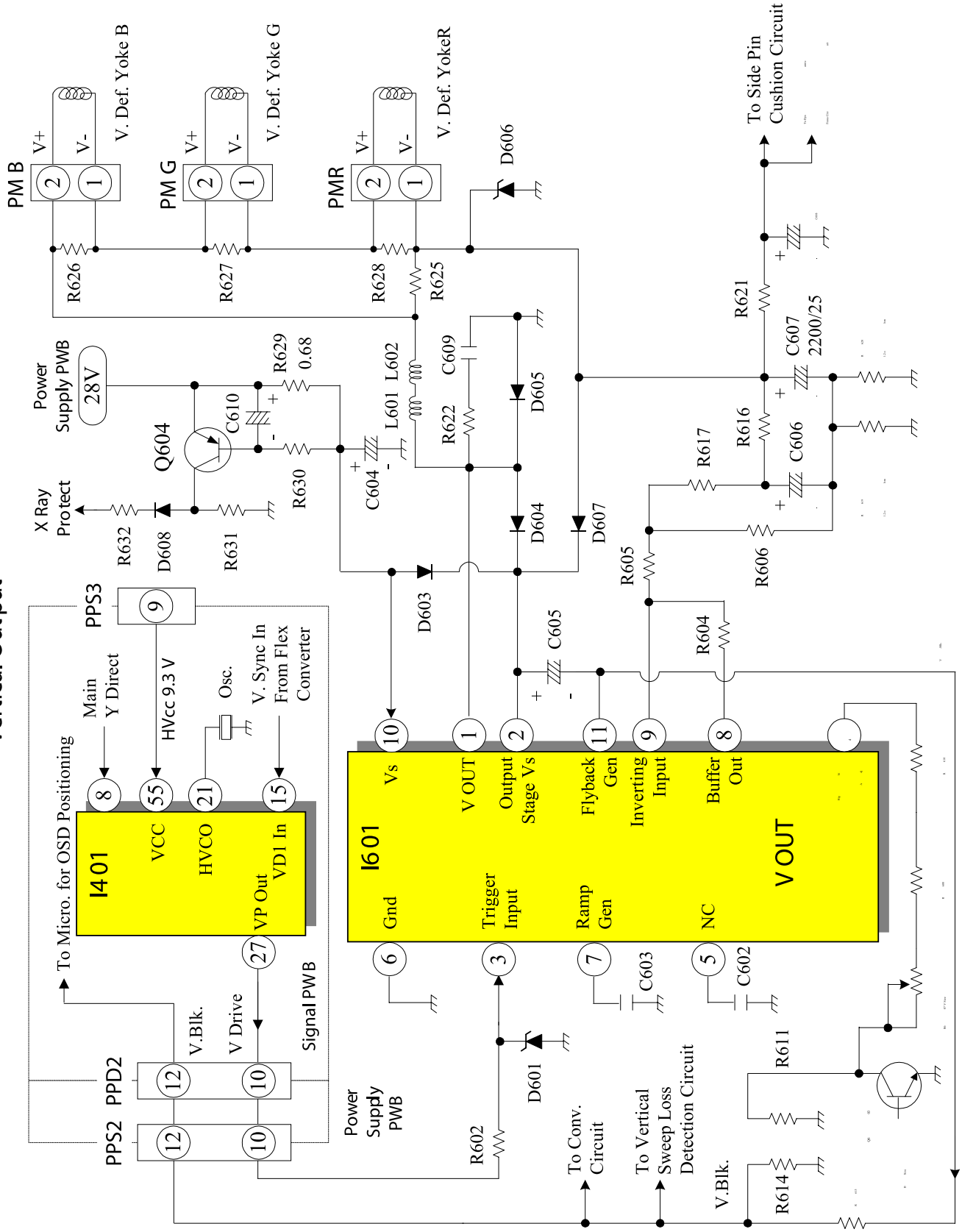


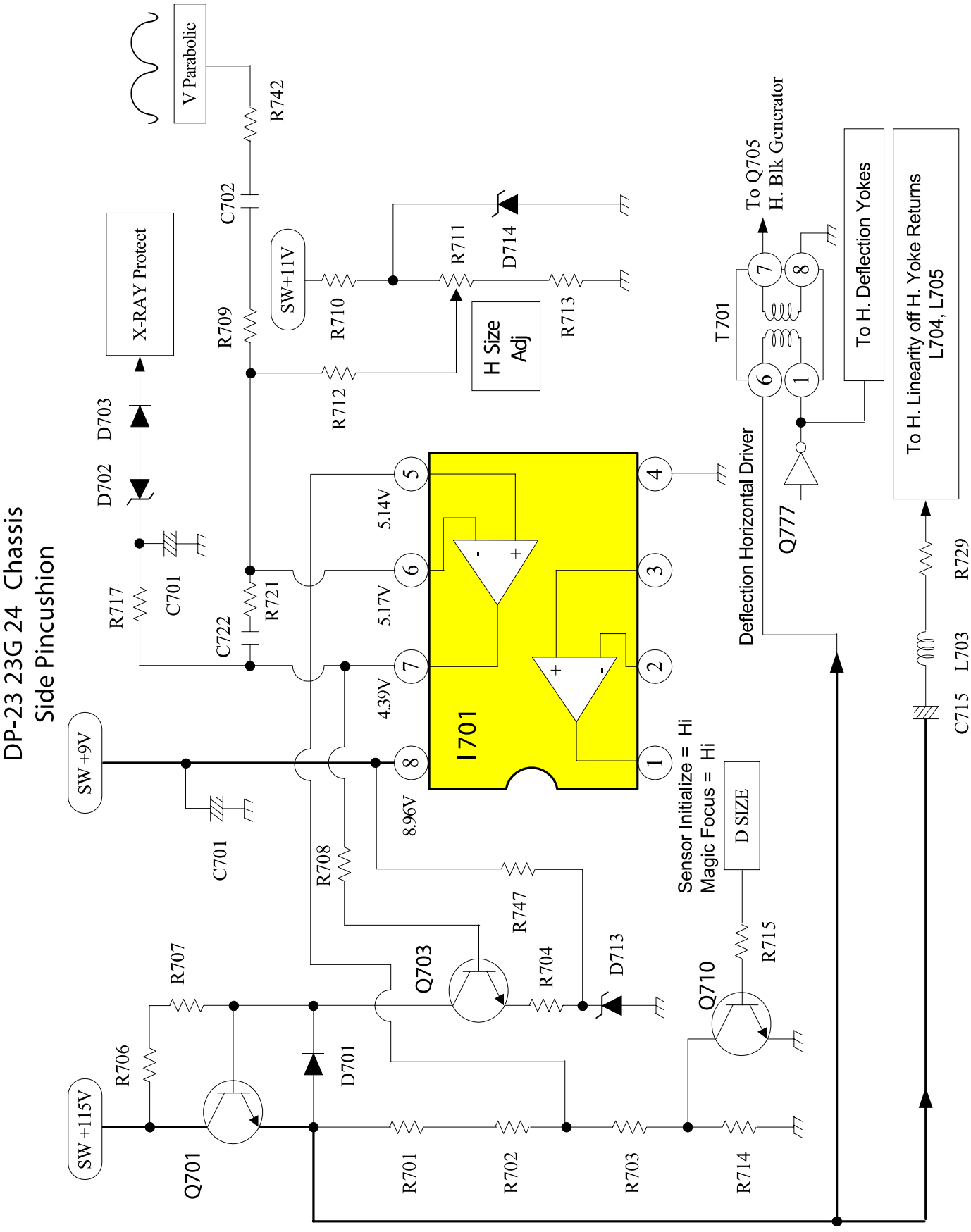

DP-23 23G 24 Chassis
Horizontal Drive
H. Def. Yoke R
H. Def. Yoke G
H. Def. Yoke B
To Dynamic Focus QF01
T701
Horiz
Deflection
Transformer
Def.
H Pulse
TH 01
Flyback
Transformer
High
Voltage
Horizontal
Output
QH01
QH02
HV Sample
RH22
DH05
FB In
PPD6
SW +115V
Power
Supply
PWB
SW HVcc
I910
Power
On/Off
PPS3
HVcc 9.3V
Osc.
X401
1080i
Through Mode
H. Sync In
From Flex
Converter
I401
VCC
HVCO
Y2 In
HD1 In
FBP In
H Out
Rainforest IC
To Micro. for OSD, Auto Prog, SD, AFC,
H.Blk.
H Out
Signal PWB
PPS2
PPD2
Q777
Q701
Side Pin Modulator
T702
SW + 115V
R748
R748
D715
C725
Q709
SW +28V
R735
D709
Q706
H.Blk.
IH01
Gen
Drive
Com1
Error
See Voltage and Waveform
Chart on next page.
DH04
Ref. V.
RH02
CN01
RH07
PPD3
RH01
DH01
SW +9V
PDG
To Convergence
Circuit
CN01
To H. Sweep Loss
Det. Circuit QN01

DP-23 23G 24 Chassis
Sweep Loss Detection

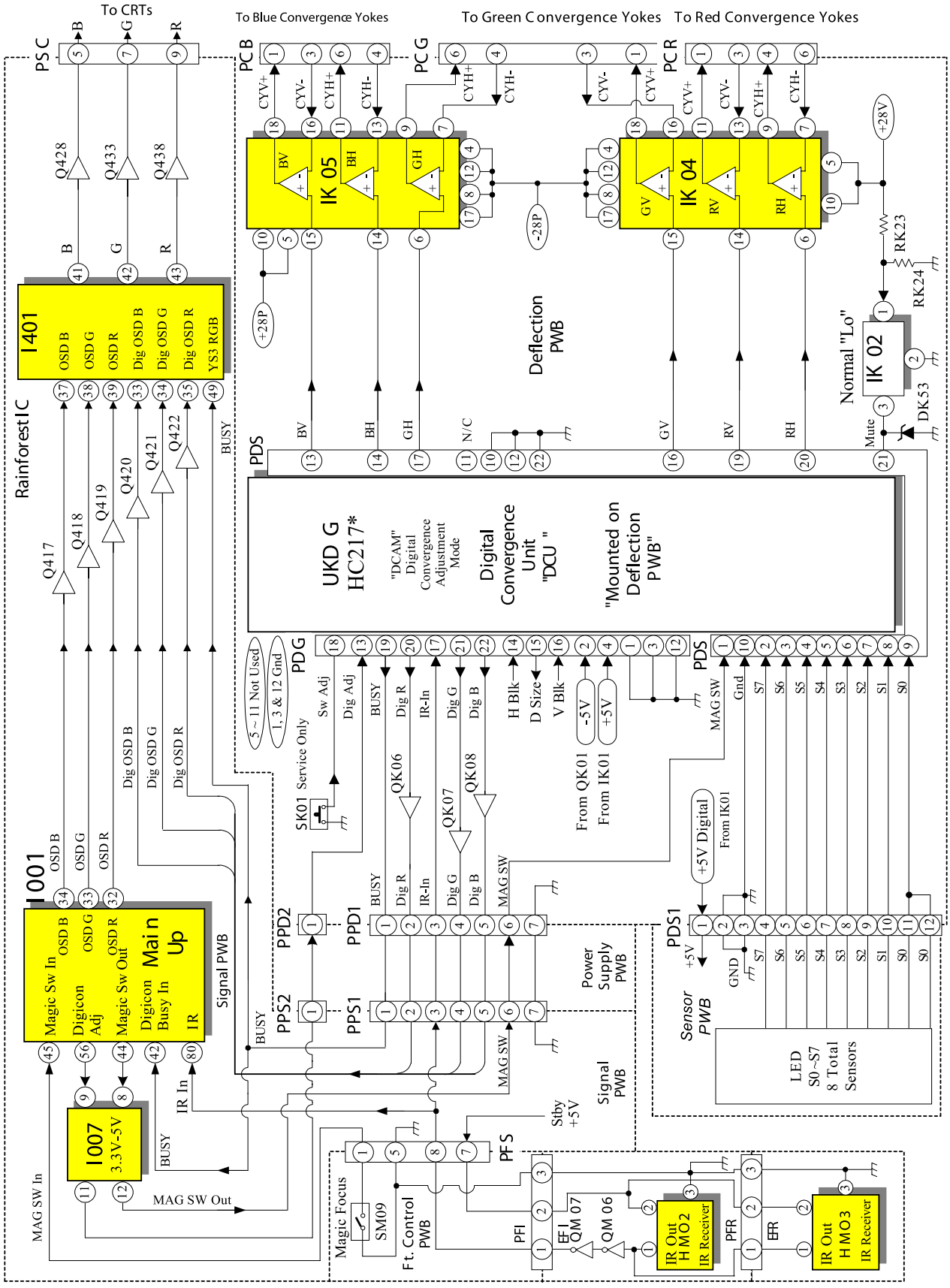


DP-23 23G 24 Chassis
Vertical Output

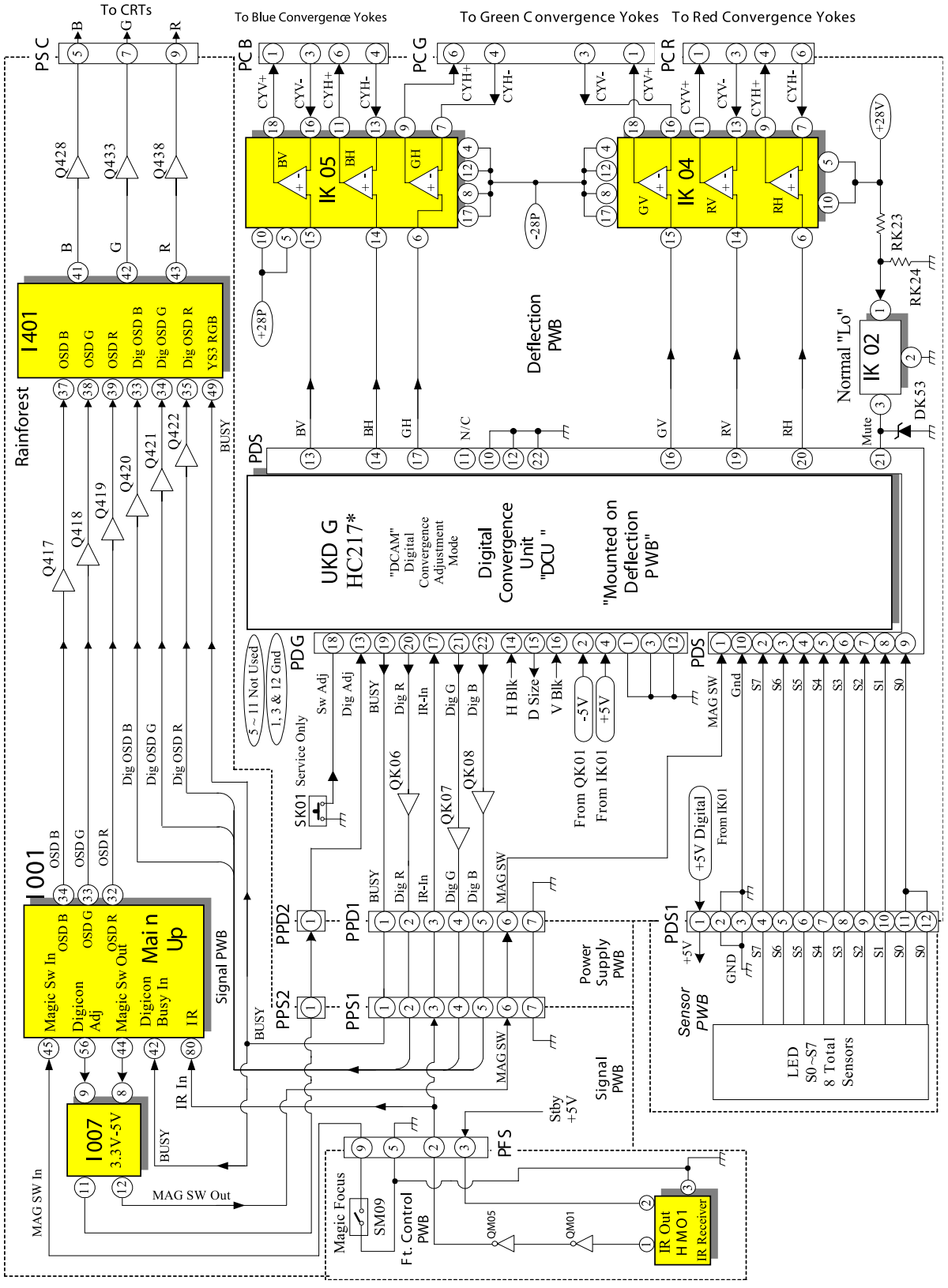



DP-23 23G 24 Chassis
Side Pincushion
V Parabolic
R742
C702
X-RAY Protect
D702
D703
R717
C701
C722
R721
R709
SW+11V
R710
R711
D714
R713
R712
H Size Adj
T 701
To Q705
H. Blk Generator
To H. Deflection Yokes
To H. Linearity off H. Yoke Returns
L704, L705
Deflection Horizontal Driver
Q777
C715
L703
R729
5.14V
5.17V
4.39V
8.96V
I 701
SW +9V
SW +115V
R706
R707
Q701
D701
Q703
R708
R747
R704
D713
Q710
R715
D SIZE
Sensor Initialize = Hi
Magic Focus = Hi
R701
R702
R703
R714

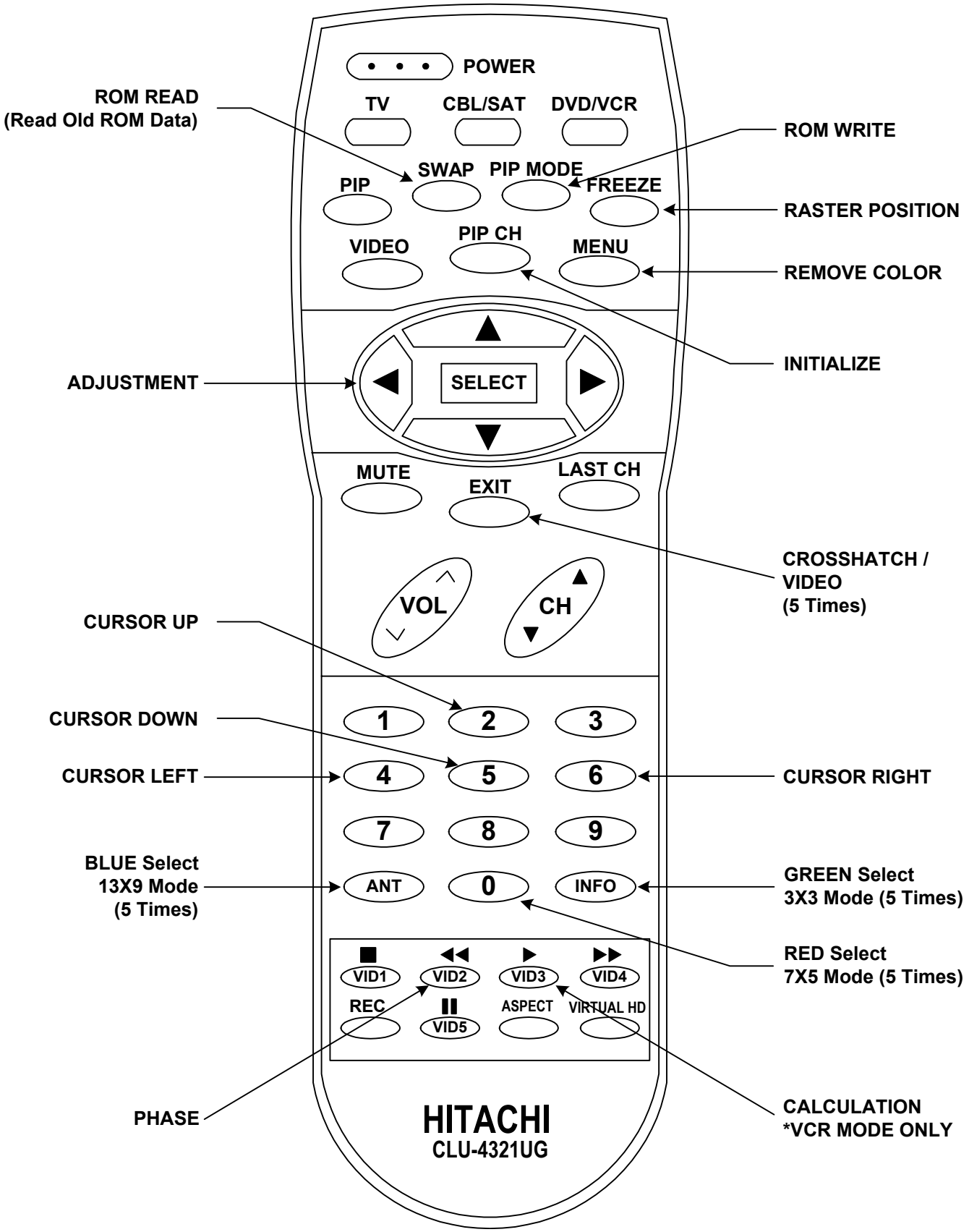
DP-23 23G Chassis
Digital Convergence Interconnection



DP-24 Chassis
Digital Convergence Interconnection



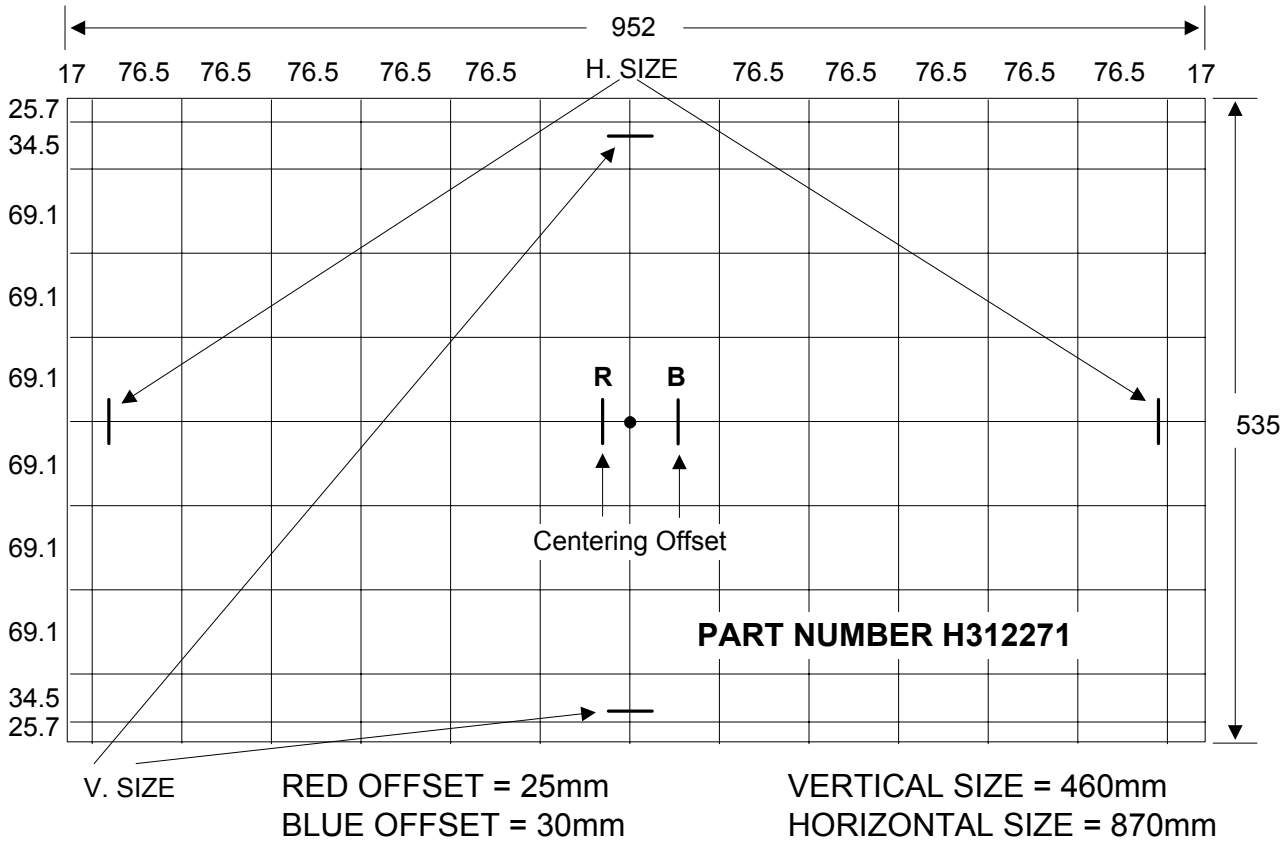
DP-23, DP-23G & DP-24 REMOTE CONTROL CLU-4321UG (p/n HL01831)



NOTE: Aspect may not be correct but dimensions are correct.

DIGITAL CONVERGENCE OVERLAY DIMENSIONS

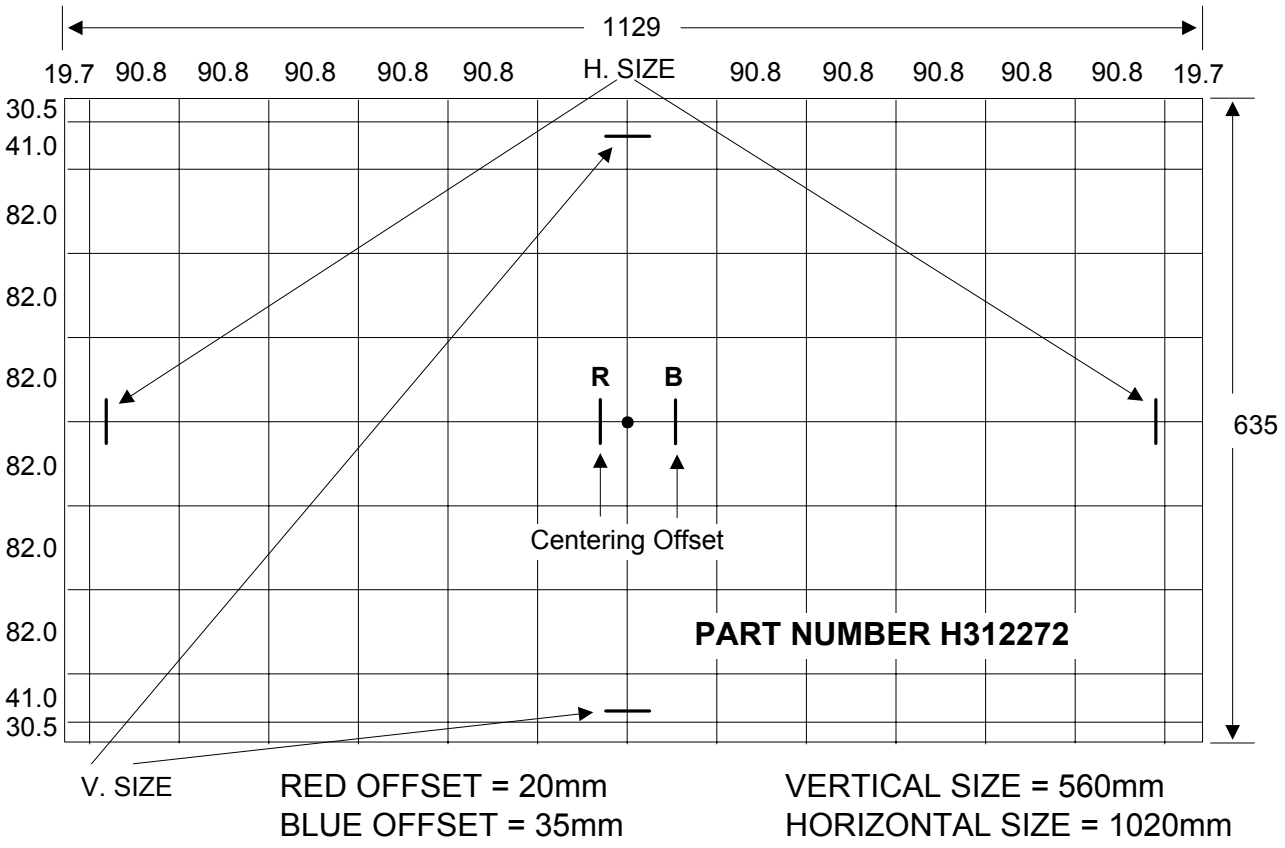
43FWX20B OVERLAY DIMENSIONS NORMAL MODE



43FWX20B DP-24 Chassis

NOTE: Aspect may not be correct but dimensions are correct.

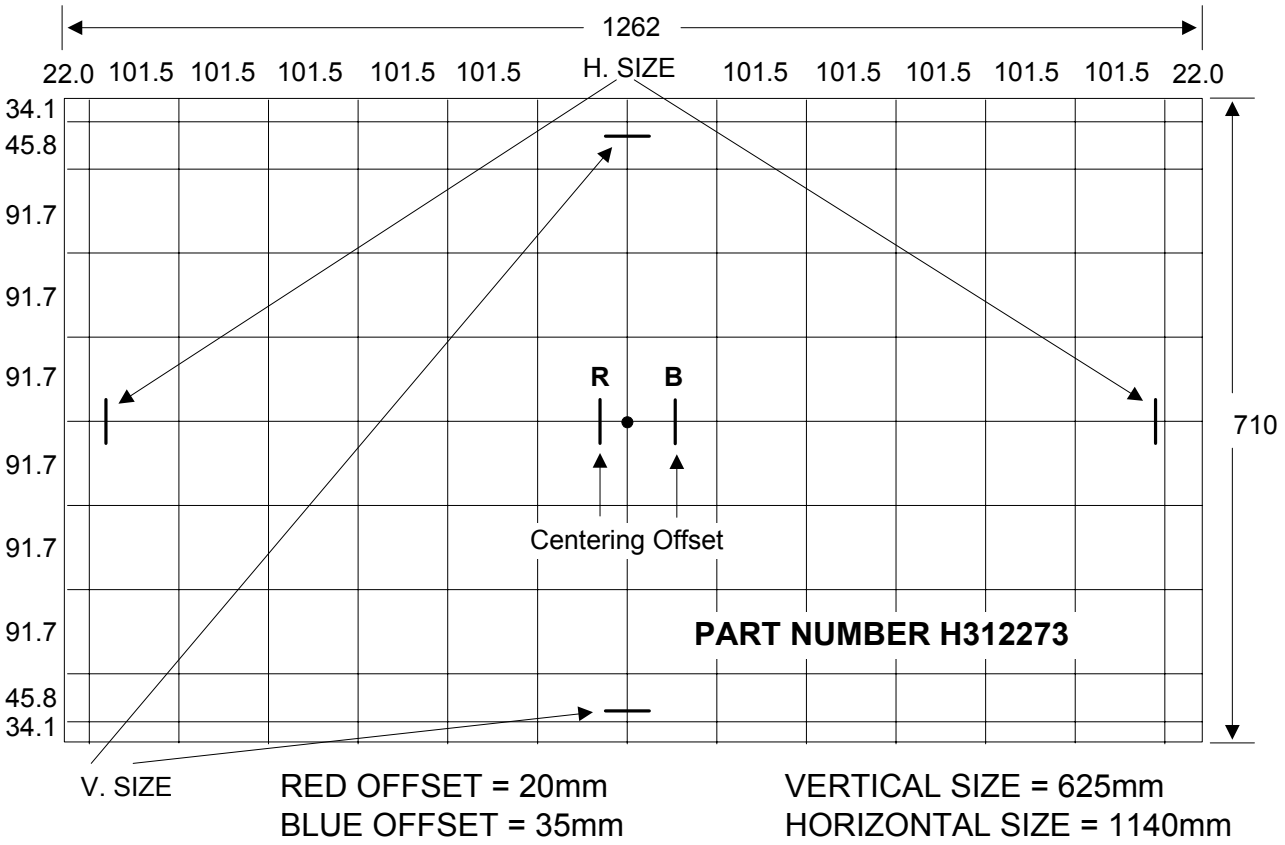
DIGITAL CONVERGENCE OVERLAY DIMENSIONS
51UWX20B, 51GWX20B
OVERLAY DIMENSIONS NORMAL MODE



51UWX20B DP-23 Chassis
51GWX20B DP-23G Chassis

NOTE: Aspect may not be correct but dimensions are correct.

DIGITAL CONVERGENCE OVERLAY DIMENSIONS
57UWX02B, 57GWX20B
OVERLAY DIMENSIONS NORMAL MODE

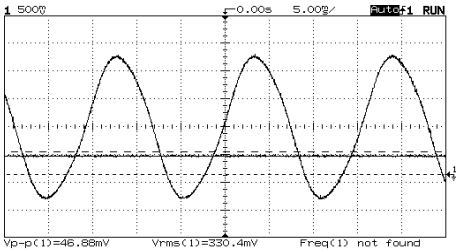


57UWX02B DP-23 Chassis
57GWX20B DP-23G Chassis

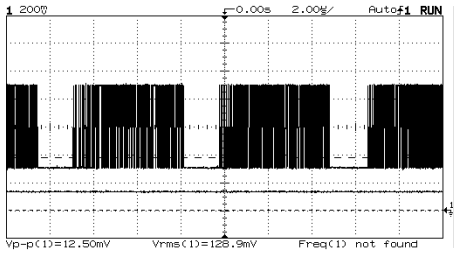
WAVEFORMS AT EACH SECTION

Numbers inside circle correspond to locations shown in the circuit diagram.

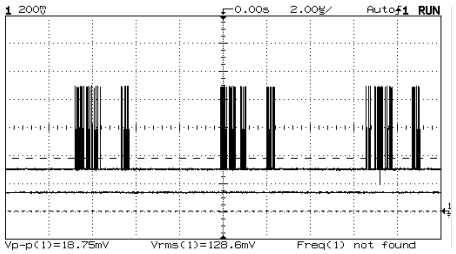
① I001 Pin 13



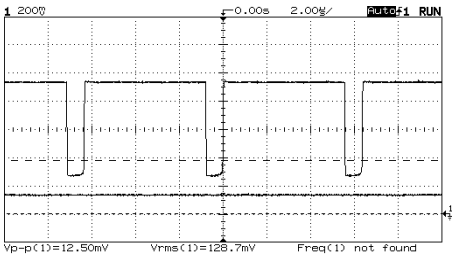
② I001 Pin 21



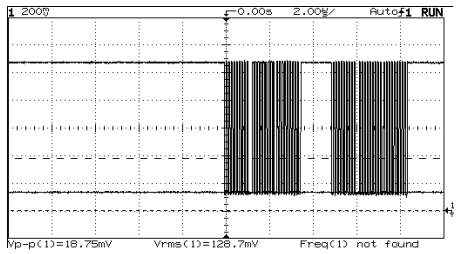
③ I001 Pin 22



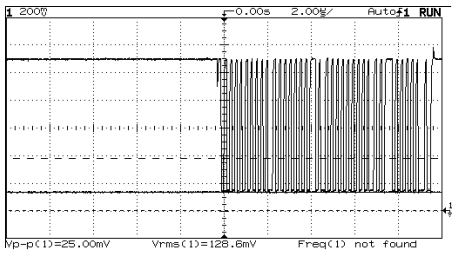
④ I001 Pin 23



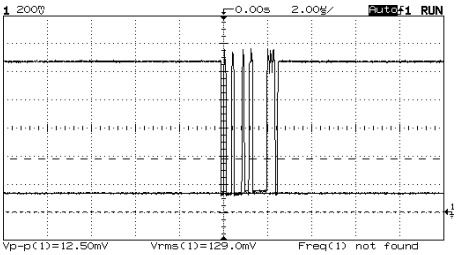
⑤ I001 Pin 28



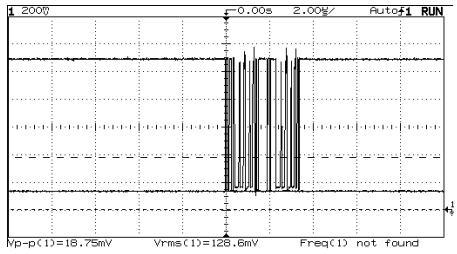
⑥ I001 Pin 29



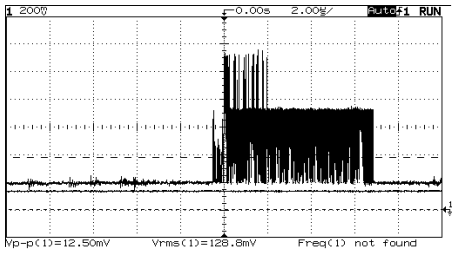
⑦ I001 Pin 30



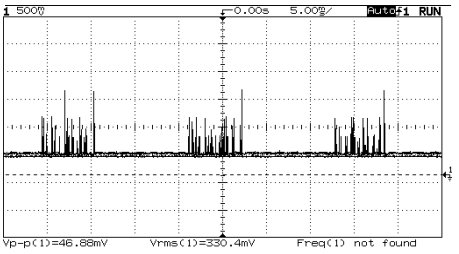
⑧ I001 Pin 31



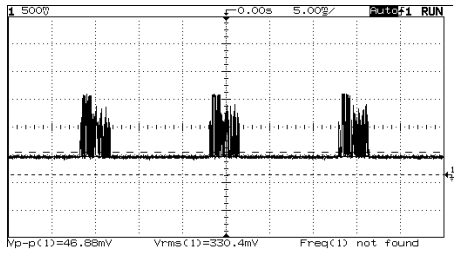
⑨ I001 Pin 32



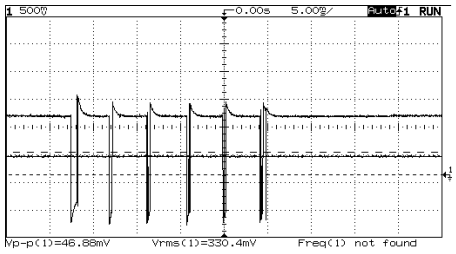
⑩ I001 Pin 33



⑪ I001 Pin 34



⑫ I001 Pin 52

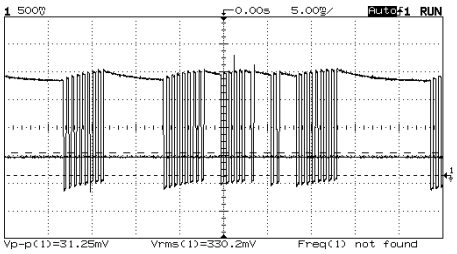


CH 1

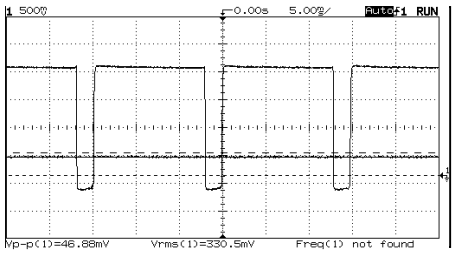
WAVEFORMS AT EACH SECTION

Numbers inside circle correspond to locations shown in the circuit diagram.

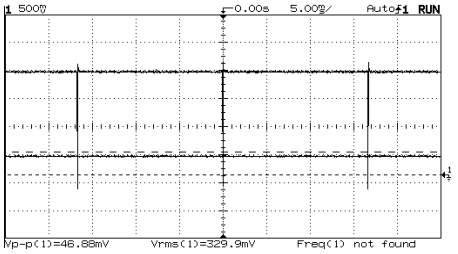
(13) I001 Pin 54



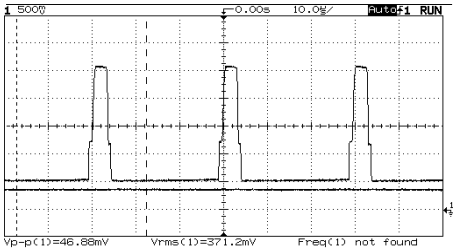
(14) I001 Pin 62



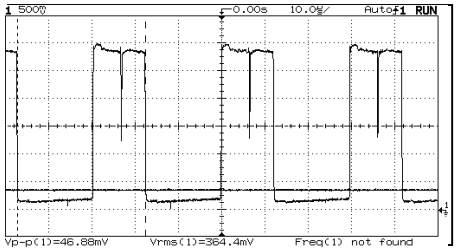
(15) I001 Pin 64



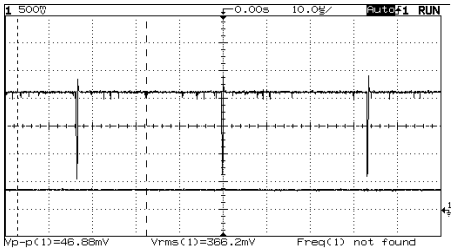
(16) I401 Pin 24



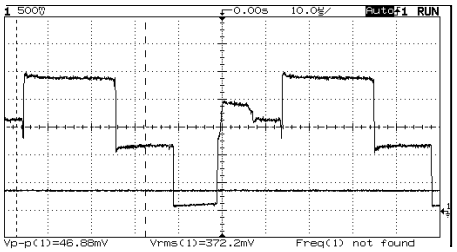
(17) I401 Pin 26



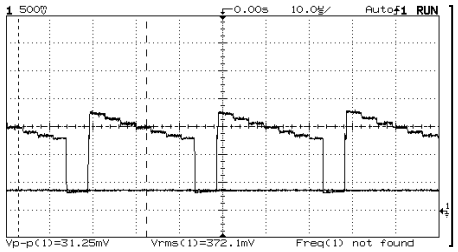
(18) I401 Pin 27



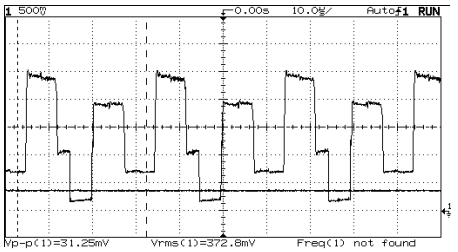
(19) I401 Pin 41



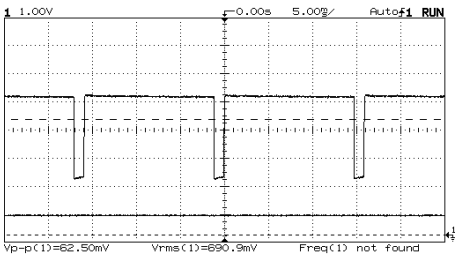
(20) I401 Pin 42



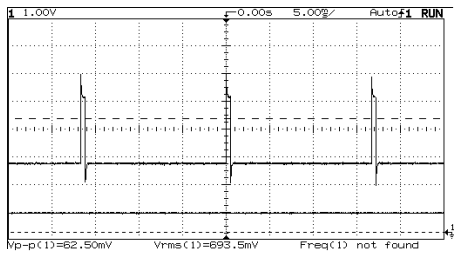
(21) I401 Pin 43



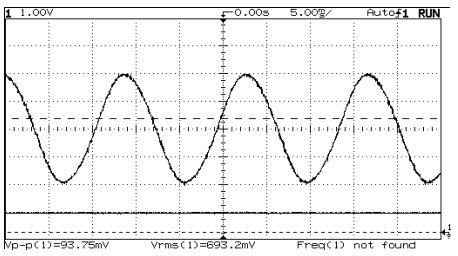
(22) IZ02 Pin 3



(23) IZ02 Pin 15



(24) IZ02 Pin 26

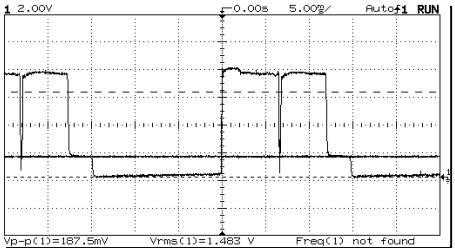


CH 1

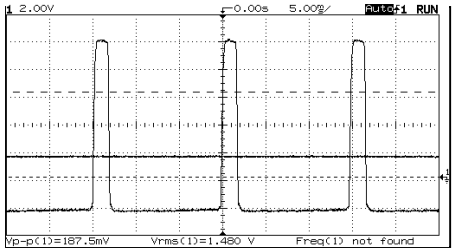
WAVEFORMS AT EACH SECTION

Numbers inside circle correspond to locations shown in the circuit diagram.

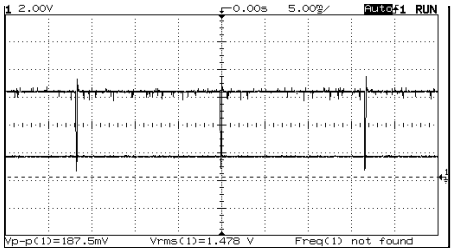
(25) PPS2 Pin 6



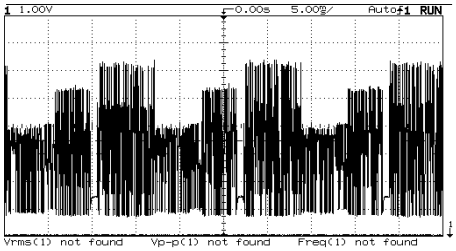
(26) PPS2 Pin 8



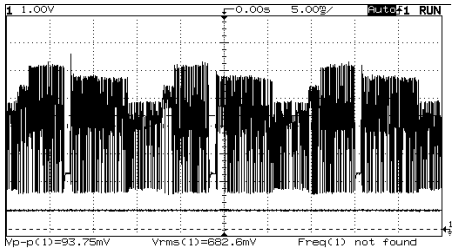
(27) PPS2 Pin 10



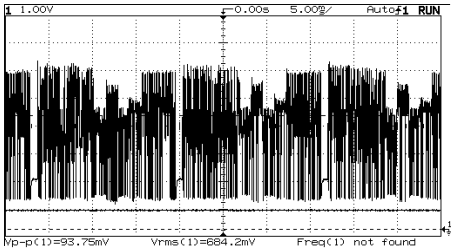
(28) PSC1 Pin 5



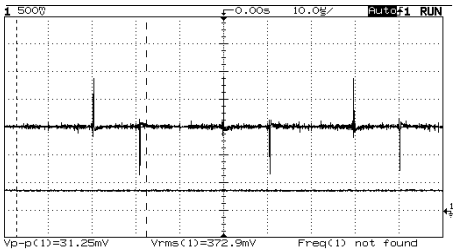
(29) PSC1 Pin 7



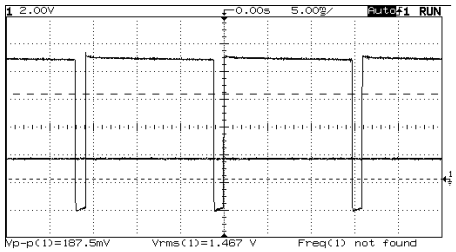
(30) PSC1 Pin 9



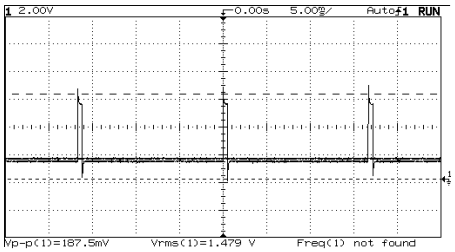
(31) PFC1 Pin 14



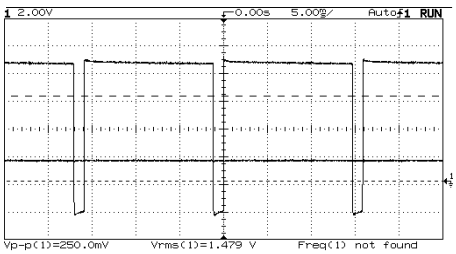
(32) PST1 Pin 1



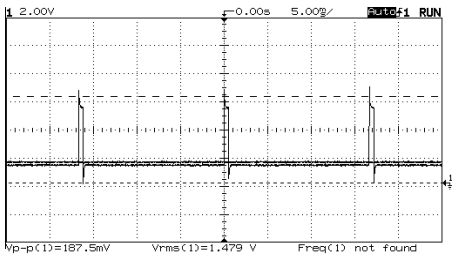
(33) PST1 Pin 2



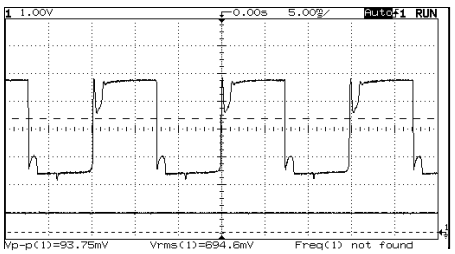
(34) PST2 Pin 28



(35) PST2 Pin 29



(36) Q709 Collector

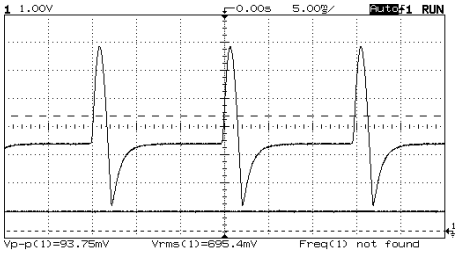


CH 1

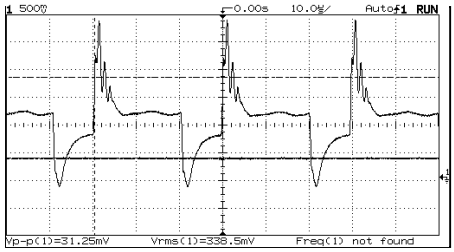
WAVEFORMS AT EACH SECTION

Numbers inside circle correspond to locations shown in the circuit diagram.

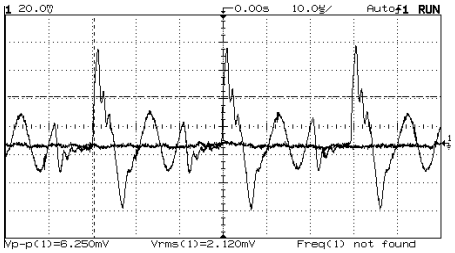
37 Q777 Collector (100% reduced)



38 QH01 Drain (100% reduced)



39 TH01 Pin 9 (100% reduced)



CH 1

51UWX20B / DP23

CS00621	FLEX CONVERTER
CS00651	DCU
JT23031	SIGNAL PWB
JT23041	TERMINAL PWB
JT23051	DEFL / CONV PWB
JT23061	POWER SUPPLY PWB
JT23071	CPT / VM PWB
JT23092	DVI PWB
KR02542	SCREEN ASSEMBLY
UE09961	DP23 CHASSIS ASY
UE20791	RED CRT
UE20792	GREEN CRT
UE20793	BLUE CRT
X480249	SENSOR PWB

57UWX20B / DP23

CS00621	FLEX CONVERTER
CS00651	DCU
JT23031	SIGNAL PWB
JT23041	TERMINAL PWB
JT23051	DEFL / CONV PWB
JT23061	POWER SUPPLY PWB
JT23071	CPT / VM PWB
KR02544	SCREEN ASSEMBLY
UE09961	DP23 CHASSIS ASY
UE20794	RED CRT
UE20795	GREEN CRT
UE20796	BLUE CRT
X480249	SENSOR PWB

51GWX20B / DP23G

CS00621	FLEX CONVERTER
CS00651	DCU
JT23032	SIGNAL PWB
JT23042	TERMINAL PWB
JT23052	DEFL / CONV PWB
JT23062	POWER PWB
JT23072	CPT / VM PWB
KR02543	SCREEN ASSEMBLY
UE09962	DP23G CHASSIS ASSY
UE20791	RED CRT
UE20792	GREEN CRT
UE20793	BLUE CRT
X480257	CONTROL PWB
X480258	IR PWB

57GWX20B / DP23G

CS00621	FLEX CONVERTER
CS00651	DCU
JT23032	SIGNAL PWB
JT23042	TERMINAL PWB
JT23052	DEFL / CONV PWB
JT23062	POWER PWB
JT23072	CPT / VM PWB
KR02545	SCREEN ASSEMBLY
UE09962	DP23G CHASSIS ASSY
UE20794	RED CRT
UE20795	GREEN CRT
UE20796	BLUE CRT
X480257	CONTROL PWB
X480258	IR PWB

43FWX20B / DP24

CS00591	DCU
CS00641	FLEX CONVERTER
JT23033	SIGNAL PWB
JT23043	TERMINAL PWB
JT23053	DEFL / CONV PWB
JT23063	POWER PWB
JT23073	CPT / VM PWB
JT23083	CONTROL PWB
KR02541	SCREEN ASSEMBLY
UE09963	DP24 CHASSIS
UE20311	RED CRT
UE20312	GREEN CRT
UE20313	BLUE CRT
X480250	SENSOR PWB

HITACHI