

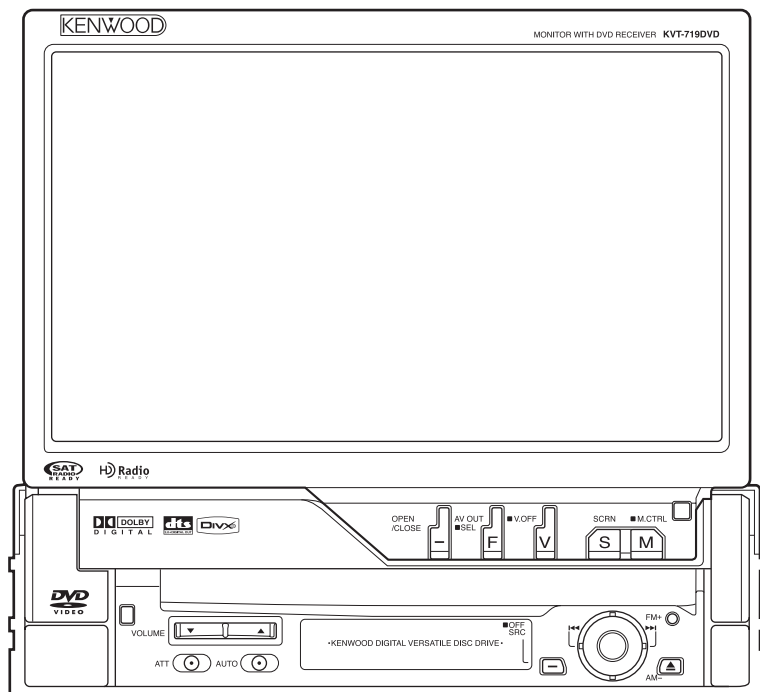
KVT-719DVD/729DVD /729DVDY/739DVD

SERVICE MANUAL

KENWOOD

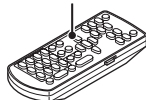
Kenwood Corporation

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B53-0507-00 (N) 552



Illustrations is KVT-719DVD

Remote controller
(A70-2082-15 : RC-DV330) M,X type
(A70-2083-15 : RC-DV340) E,K,R type

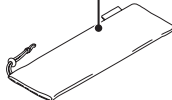


Illustrations is RC-DV340

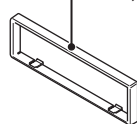
SIZE AAA BATTERY
(NOT SUPPLIED)



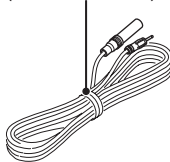
Carrying case
(W01-1661-05)



Escutcheon
(B07-3159-02)



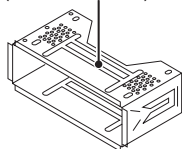
Cord with plug (6m)
(E30-6483-05)



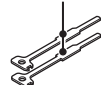
Cord with plug (6m)
(E30-6688-05)



Mounting hardware assy
(J21-9823-03)



Lever
(D10-4674-04) x2



Wire band
(J61-0620-05) x2



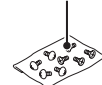
Mounting hardware
(J22-0054-14) x2



Screw set
(N99-1753-05)

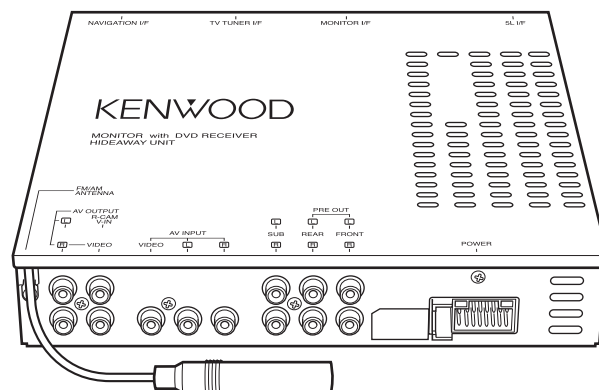


Screw set
(N99-1775-05)



TDF SPARE-PANEL

MODEL	TDF PANEL No.	TDF NAME
KVT-719DVD/729DVD /729DVDY/739DVD	Y33-2760-60	TDF-719DVD

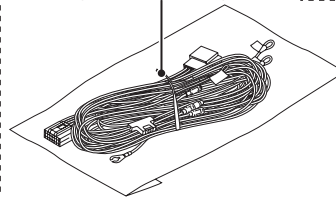


E type

Antenna adaptor
(T90-0552-05)

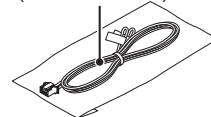


DC cord (6m)
(E30-6681-15)

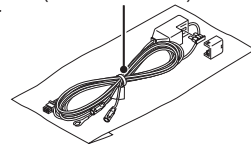


M,X type

Cord with plug (1m)
(E30-6693-05)

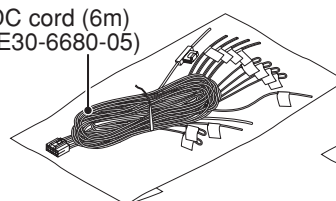


DC cord (35cm)
(E30-6676-15)

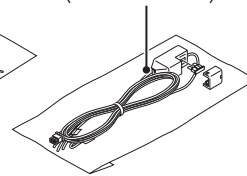


K,M,R,X type

DC cord (6m)
(E30-6680-05)



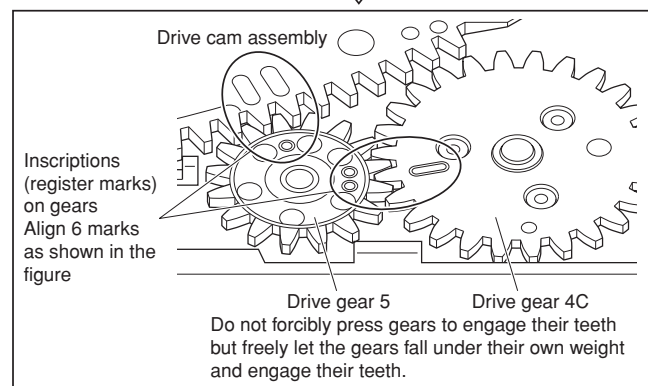
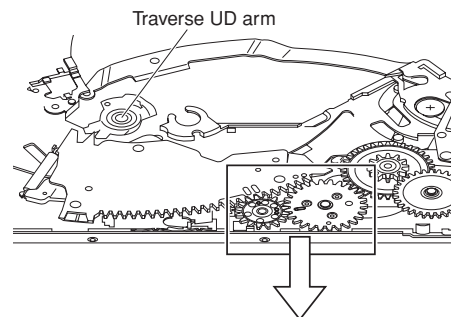
DC cord (35cm)
(E30-6675-05)



- The IC106 in the DIGITAL I/O UNIT (X88-2020-11) is not a replaceable component.
In case of defective of this IC, replace the entire unit (X88-2020-11).
- The IC5, IC21, and IC60 in the DVD unit (X37-1120-03) are not replaceable components.
In case of defective of any of these ICs, replace the DVD mechanism assembly. (The IC5 has a device key, which shall be made consistent with the S/No. of the mechanism assembly after replacement. Thus you cannot replace only the board.)

GEAR POSITION IN A DVD MECHANISM

In assembling the Traverse UD arm, Drive cam assembly, Drive gear 5 and Drive gear 4C, align register marks on these components.

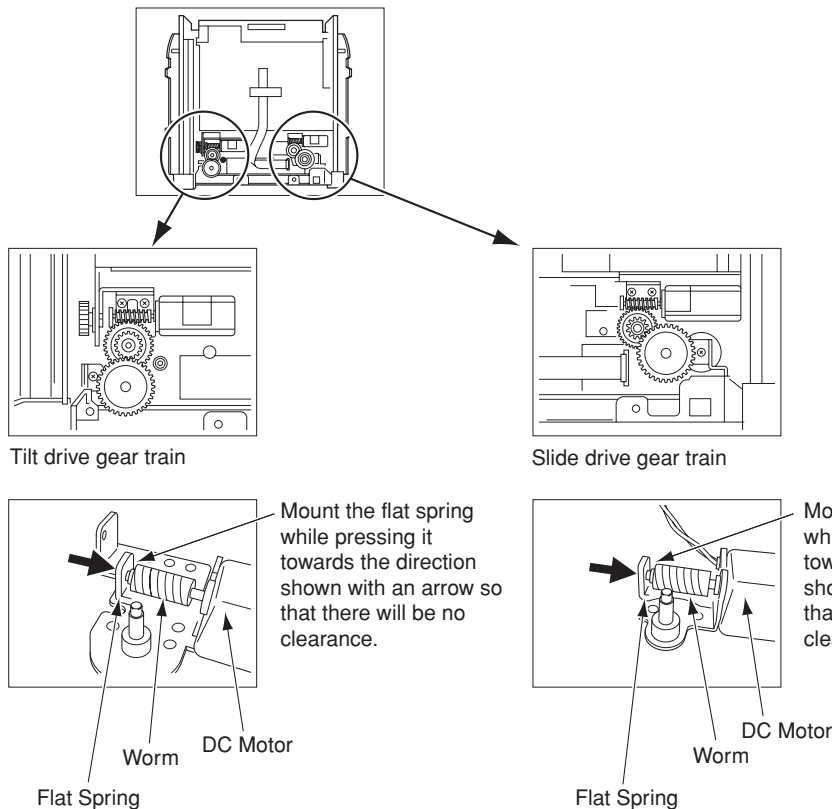


CAUTIONS IN ASSEMBLING PANEL DRIVE MECHANISM (A10-5171)

Observe the instructions described in this document when you are going to replace the parts or components that are shown in this document.

1. Replacement of motor flat spring

- When mounting the flat spring that shall be in contact with the worm gear, press the spring toward the direction shown with an arrow so that there will be no gap between the tip of the gear and the spring and then mount the spring. The gear shall be pressure-inserted into the motor.
- Note that there are two motors. Above operation of mounting the flat spring is required on both of them.

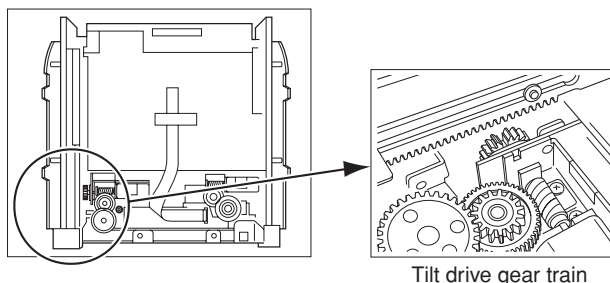


CAUTIONS IN ASSEMBLING PANEL DRIVE MECHANISM (A10-5171)

2. Phase matching among gears

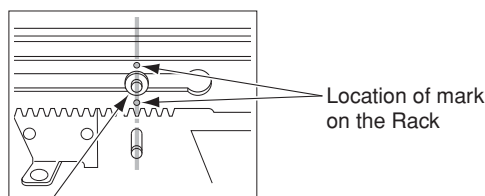
- Monitor tilt is driven under the control of the rotary sensor and the phase matching among gears and sensor is required.

The procedure for the phase matching is described in the rest of this subsection.



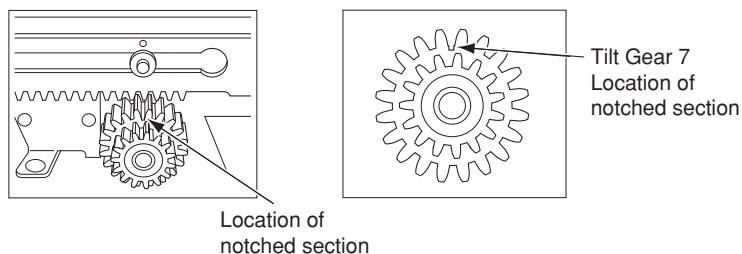
Tilt drive gear train

- Align the mark on the rack with the pin. (When the monitor is folded down at 0 degree, the rack is located at the position where the mark and pin are aligned.)

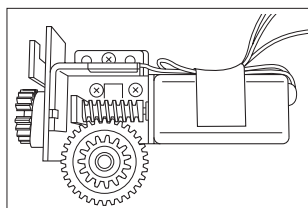


T-Rack-A Pin

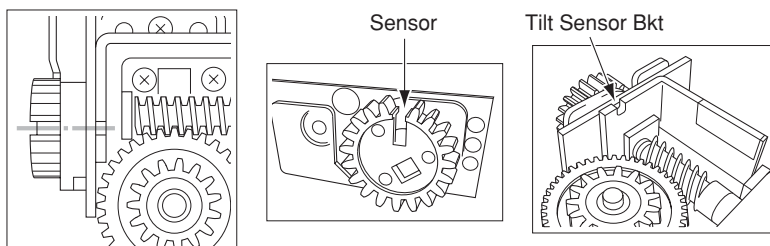
- Insert the gear while keeping aligning the rack pin with the notched section on the tilt gear 7.



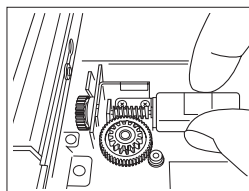
- Pre-assemble the tilt motor bracket assembly (BKT Assy).



- Align the notch on the sensor BKT with the concave section of the sensor in the Assy.



- While keeping the conditions stated in 3) and 4), insert the tilt motor BKT Assy transversally, and fix the motor.



CAUTIONS IN ASSEMBLING PANEL DRIVE MECHANISM (A10-5171)

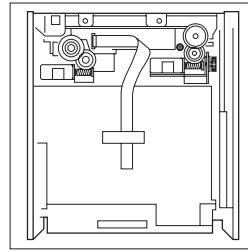
3. Insertion of slider

- This subsection describes cautions for inserting the slider (slide section inside of the unit) into the outer chassis.

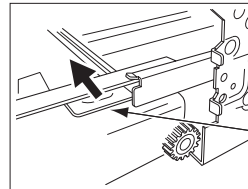
- 1) On the rail at the left side of the slider, there is a part called a stabilizer that is used to minimize play in right and left sides.

The slide is made of resin. (Note that the rail is shown at the right side of the slider in the picture.)

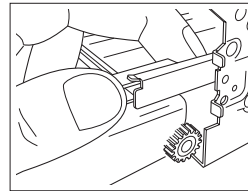
When inserting the slider, press the stabilizer towards the direction shown with a blue arrow and insert it into the groove on the rail.



(Slider -Slide section inside of the unit)

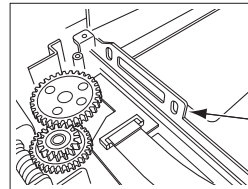


Stabilizer

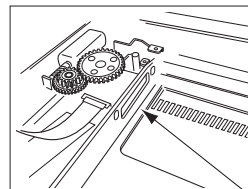


- 2) PCB holder is pushed out towards the downside of the picture due to the spring force and thus the chassis and photo reflection sheet may be get caught by the holder during the assembly.

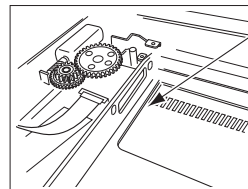
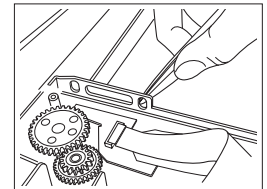
Insert the slider while slightly lifting up the holder with a pair of tweezers or any other similar device.



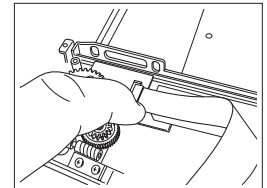
PCB Holder



Hold and lift up the holder with a pair of tweezers.



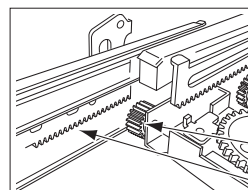
These portions tend to be get caught.



Push the opposite side of the PCB holder towards the downside of the picture and lift up the portions that may get caught.

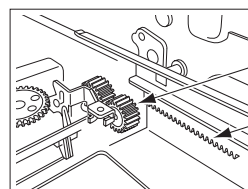
- 3) Insert the gear after confirming that the both of D shaft gears at the right and left sides of the slider are aligned with the tip of the right and left racks on the chassis.

(Otherwise the slider will be inserted sidelong.)



D shaft gear

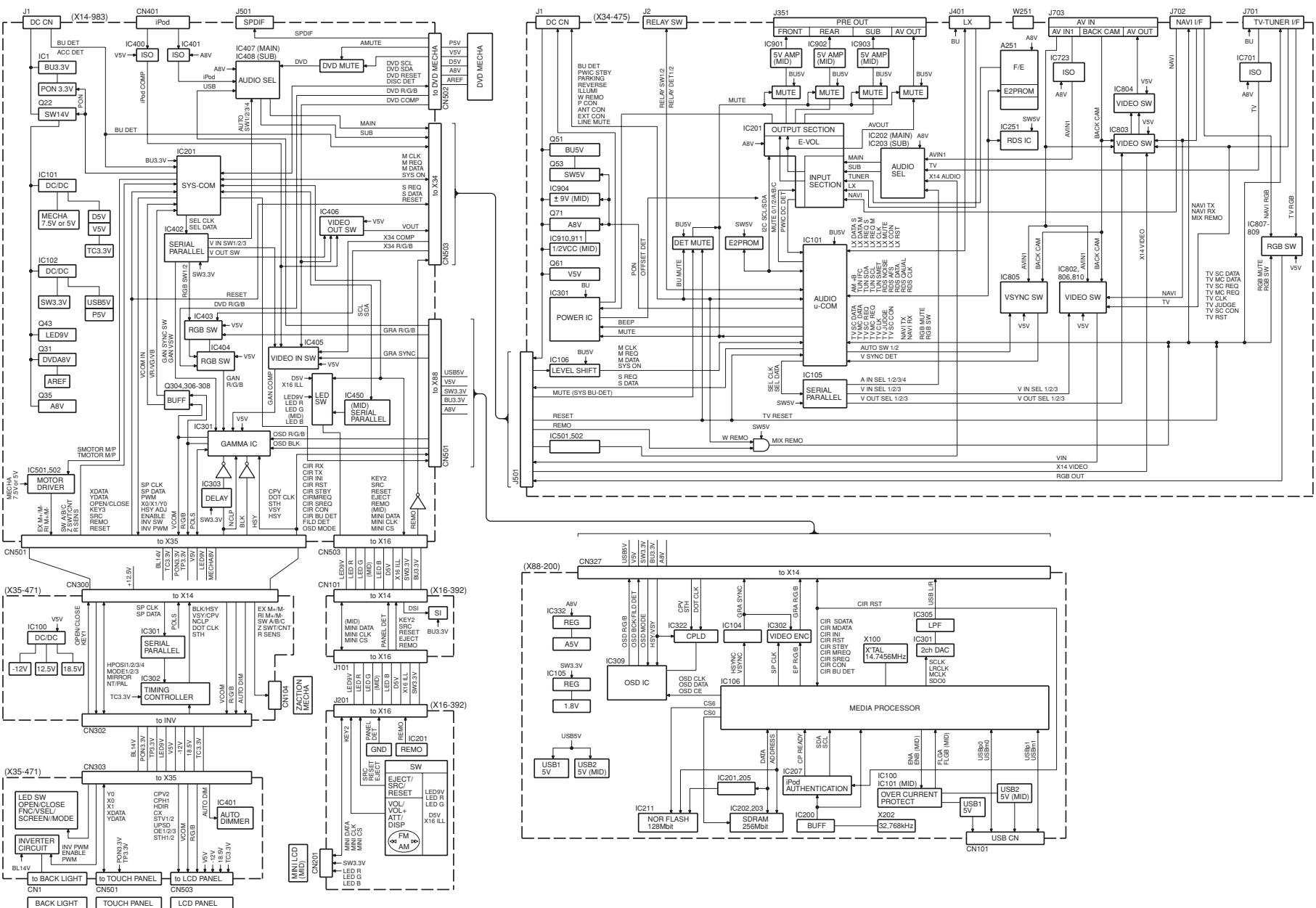
Rack gear



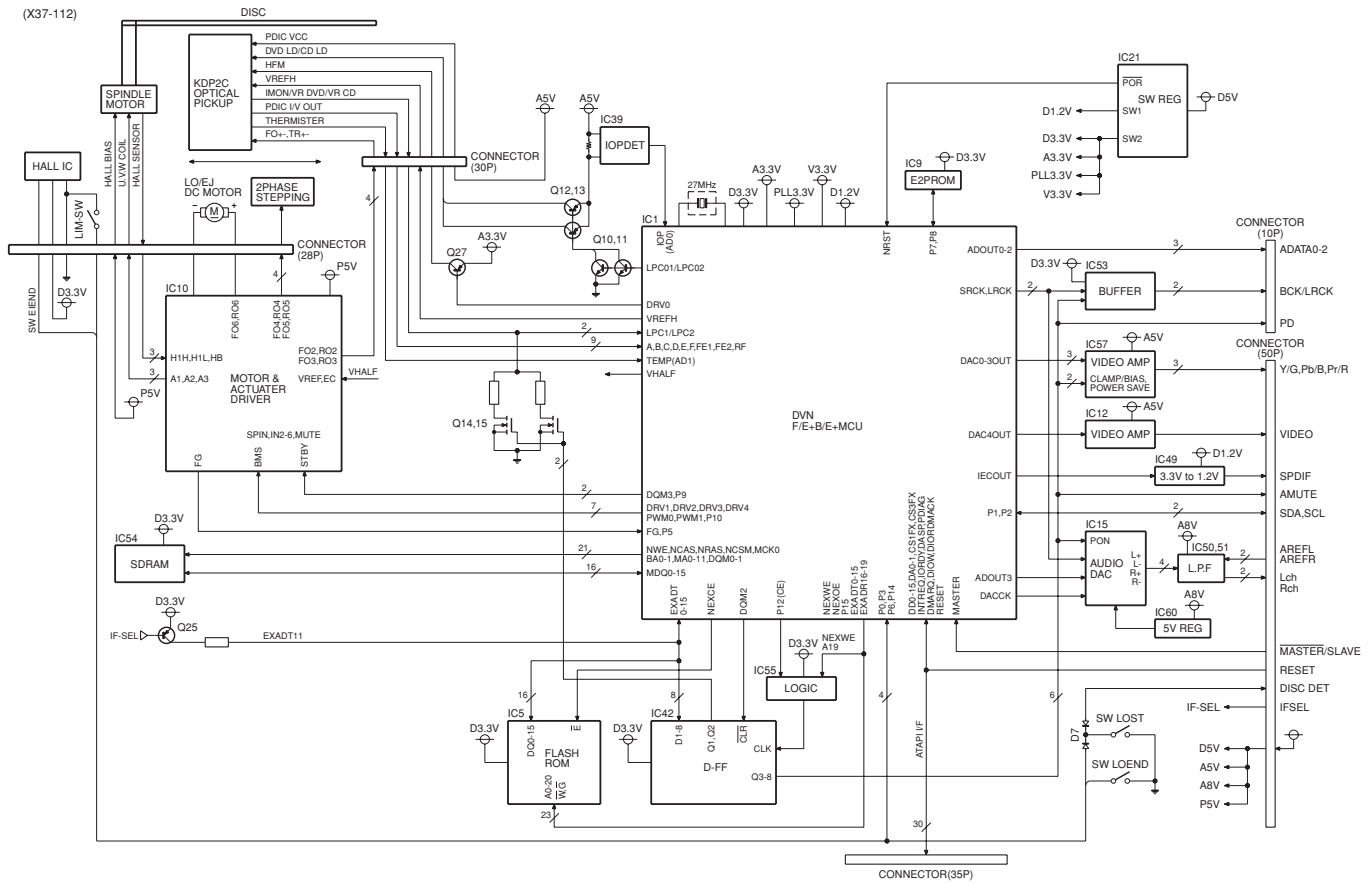
D shaft gear

Rack gear

BLOCK DIAGRAM



BLOCK DIAGRAM



COMPONENTS DESCRIPTION

● VIDEO CONTROL UNIT (X14-983x-xx)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	3.3V regulator	BU_3.3V
IC2	3.3V regulator	TC3.3V
IC10	OP AMP	AREF power supply (4V)
IC101	DC-DC control IC	DC-DC control (Mechanism 7.5V, V5V)
IC102	DC-DC control IC	DC-DC control (SW3.3V, D5V)
IC201	MPU	System μ -com
IC202	Reset IC	Reset IC
IC203	E2MROM	Save settings
IC205	AND	Inverter PWM buffer
IC301	Chroma gamma	Chroma gamma
IC302	NOT	HSY reverse buffer
IC303	Monostable multivibrator	HSYNC delay
IC304	NOT	HSYNC delay
IC400	VIDEO ISO AMP	iPod video signal
IC401	AUDIO ISO AMP	iPod audio signal
IC402	Serial/parallel conversion	Extension of μ -com port
IC403	Video switch	X34 RGB or Graphic RGB
IC404	Video switch	IC403 RGB or DVD RGB
IC405	Video switch	iPod or DVD or Graphic or X34 Composite signal
IC406	Video switch	For AVOUT (To X34)
IC407	Audio selector	MAIN
IC408	Audio selector	SUB
IC501	Motor driver	Tilt
IC502	Motor driver	Slide
IC503	NOT	Remote controller signal waveform shaping
Q1	SW	ACC_DET detection circuit
Q2~10	SW	BU_DET detection circuit
Q13	Short protection	BU power supply regulator (8.5V)
Q14	8.5V regulator	BU power supply regulator (8.5V)
Q15~17	8.5V regulator control	BU power supply regulator (8.5V)
Q19~21	SW	P-ON 14V control
Q22	SW FET	P-ON 14V ON/OFF
Q23,24	Emitter follower	Analogue power supply reference circuit
Q25,26	SW	T_P3.3V switch
Q31	8V regulator	DVD A8V regulator
Q32~34	8V regulator control	DVD A8V regulator
Q35	8V regulator	A8V regulator
Q36~38	8V regulator control	A8V regulator
Q43	9V regulator	LED9V regulator
Q44~46	9V regulator control	LED9V regulator

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition / Compatibility
Q101	SW	DC-DC output voltage switching
Q103,106 Q108,111	SW	DC-DC protection control
Q104	SW	DC-DC SW FET (5V or 8V)
Q105	SW	DC-DC SW FET (5V)
Q109	SW	DC-DC SW FET (3.3V)
Q110	SW	DC-DC SW FET (5V)
Q201	SW	μ-com reset SW
Q203	SW	KEY RESET
Q204,205	SW	LED SW (Red)
Q206,207	SW	LED SW (Green)
Q208~210	SW	TDF power supply SW
Q301	Buffer	Composite signal
Q304	Buffer	VCOM
Q305	MUTE	IC301 SYNC OUT MUTE
Q306	Buffer	RGB Signal_R
Q307	Buffer	RGB Signal_G
Q308	Buffer	RGB Signal_B
Q309	Buffer	HSY SYNC
Q401	Buffer	Graphic SYNC
Q501	MUTE	DVD MUTE (Lch)
Q502	MUTE	DVD MUTE (Rch)
Q503	SW	DVD MUTE control
Q504	Buffer	SPDIF signal
Q508	Buffer	Remote control signal

● SWITCH UNIT (X16-3920-10)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC201	Remote controller photoreceptor	Remote controller photoreceptor
Q101	For switching DSI signal	DSI signal control
Q206	For switching LED	Switch LED_Red or LED_Green

● ELECTRIC UNIT (X34-475x-xx)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC61	3 terminal regulator	V5V generation
IC71	3 terminal regulator	Audio8V and Tuner8V generation
IC101	Pin 100 μ-com	Primarily, audio board control
IC102	Voltage detection IC	μ-com reset voltage (4.2V) monitoring
IC104	Logic IC (AND)	Remote controller data switching (REMO/WREMO)
IC105	Serial and parallel conversion IC	Audio/Video selector control data output from μ-com
IC106	Logic IC (AND x 4)	5V step-up for the signal data between the unit and BOX

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC201	Electronic volume IC	Audio volume control and audio signal selection
IC202	Logic IC (multi plexer)	Audio signal selection (Main)
IC203	Logic IC (multi plexer)	Audio signal selection (Sub)
IC251	RDS decoder IC	RDS signal processing and demodulation
IC301	Power IC	Power amplifier for speaker output
IC501	Isolation amplifier IC	Audio signal GND isolation (X14 source_MAIN)
IC502	Isolation amplifier IC	Audio signal GND isolation (X14 source_SUB)
IC701	Isolation amplifier IC	Audio signal GND isolation (TV-CH)
IC702	Logic IC (AND)	NAVI remote controller data switching
IC723	Isolation amplifier IC	Audio signal GND isolation (AV-IN)
IC802	Video switch	Video signal output switching (for monitoring the unit)
IC803,804	Video switch	Video signal output switching (AV-OUT)
IC805	Video switch	Video signal detection SW
IC806	Video switch	Video signal output switching (for monitoring the unit)
IC807	Video switch	Video signal selection (R)
IC808	Video switch	Video signal selection (G)
IC809	Video switch	Video signal selection (B)
IC810	Video switch	Video signal output switching (for monitoring the unit)
Q1	Transistor	REVERSE detection circuit
Q2	Transistor	PARKING detection circuit
Q3	Transistor	ILLUMI detection circuit
Q4	Transistor	BU detection circuit
Q6	Transistor	BU detection circuit
Q7~10	Transistor	P_CON output circuit
Q11,12	Transistor	ANT_CON output circuit
Q13	Transistor	EXT_CONT output circuit
Q14,15	Transistor	RELAY control circuit
Q51	Transistor	BU5V generation
Q52~54	Transistor	BU5V circuit
Q61	Transistor	V5V generation
Q62	Transistor	V5V circuit
Q70	Transistor	P-ON circuit
Q71	Transistor	Audio8V and Tuner8V generation
Q72	Transistor	Audio8V and Tuner8V circuit
Q81~85	Transistor	RELAY control circuit
Q91~95	Transistor	RELAY control circuit
Q101,102	Transistor	RESET detection circuit
Q103	Transistor	RESET detection circuit (TV)
Q104,105	Transistor	MUTE circuit (RESET)
Q107	Transistor	MUTE circuit (DVD)
Q251,252	Transistor	On when AM (Tuner8V)

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition / Compatibility
Q351	Transistor	Pre-OutMute Mute transistor (FL)
Q352	Transistor	Pre-OutMute circuit (Front, Rear)
Q353	Transistor	Pre-OutMute Mute transistor (FR)
Q354	Transistor	Pre-OutMute Mute transistor (RL)
Q355	Transistor	Pre-OutMute Mute transistor (RR)
Q356	Transistor	Pre-OutMute Mute transistor (SUB L)
Q357	Transistor	Pre-OutMute circuit (SUB)
Q358	Transistor	Pre-OutMute Mute transistor (SUB R)
Q359	Transistor	Pre-OutMute Mute transistor (AV-OUT L)
Q360	Transistor	Pre-OutMute circuit (AV-OUT)
Q361	Transistor	Pre-OutMute Mute transistor (AV-OUT R)
Q802~808	Transistor	Synchronizing separator circuit
Q809	Transistor	TV_MUTE circuit (R)
Q810	Transistor	TV_MUTE circuit (G)
Q811	Transistor	TV_MUTE circuit (B)
Q813	Transistor	TV_MUTE circuit (R)
Q814	Transistor	TV_MUTE circuit (G)
Q815	Transistor	TV_MUTE circuit (B)

● VIDEO UNIT (X35-4710-10)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	Inverter control IC	Control and drive of the inverter circuit for the back light
IC101	DC/DC converter IC	+12.5V power supply for VCOM amplifier (Gamma IC) and -12.0V/+18.5V power supply for LCD
IC102	Mono-multi	Delay 5V power supply for DC/DC IC
IC103	NOT	Reverse
IC301	Serial/parallel conversion	Extension of μ -com port
IC302	AND	Buffer to delay V.SYNC
IC303	PLL LPF	LPF for PLL control (VT voltage control)
IC304	Timing controller IC	Control of LCD module
IC401	Dimmer sensor	Detection for auto-dimmer
Q1	Dimmer SW	Turn on or off in response to the PWM control signal to dimmer the back light
Q2,3	Inverter driver	Drive the inverter circuit
Q4	Switch	SW to change the free run frequency for inverter control IC
Q5	5V constant voltage	5V power supply for inverter control IC
Q301	VCO	For PLL oscillation
Q303	Buffer	For PLL clock
Q501	Touch panel Y1 SW	Y0 (X0) SW: On in response to Y (X) axis input and off in response to X (Y) axis input
Q502	Touch panel X1/Y0 SW	X1 SW: Turn on in response to sensing of the touch on the panel or X axis input and apply voltage
Q503	Touch panel Y1 SW	Y1 SW: Turn on in response to Y axis input and apply voltage

COMPONENTS DESCRIPTION

● DIGITAL I/O UNIT (X88-2020-11)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC100	Fixed Current Limit Power Distribution Switch	Large current distribution switch for USB1
IC104	Exclusive OR Gate	EP_SYNC (composite sync) output
IC105	Low Dropout Voltage Linear Regulator	SW3.3V → 1.8V (for EP9307IRZ)
IC106	System-On-Chip Processor	Media Processor
IC108	Inverter	E_HSYNC Buffer
IC200	Triple Inverter	Sub Clock Buffer
IC201	Octal Bus Transceiver	Flash Memory data line switching (DA0~7)
IC202,203	SDRAM 256Mbit	SDRAM for work memory
IC205	Octal Bus Transceiver	Flash Memory data line switching (DA8~15)
IC207	iPod Authentication Coprocessor	iPod Authentication
IC211	NOR Flash Memory 128Mbit	Flash Memory for program data and graphic data
IC301	Stereo DAC	Audio signal digital/analog converter
IC302	Color TV signal encoder	Graphic signal digital/analog converter
IC305	Dual OP-Amp.(LPF)	Stereo DAC Output LPF
IC309	On-Screen Display Controller	On-Screen Display analog signal output
IC316	Triple Inverter	Dot Clock(14.4MHz) Buffer
IC322	CPLD	2/3 frequency dividing and PAL thinning control (compression processing circuit)
IC332	Low Dropout Voltage Regulator	A8V → A5V(for Stereo DAC and LPF)
IC336	Triple Schmitt Inverter	VSY, HSY Buffer
IC337	Triple Schmitt Inverter	CPV, STH Buffer
Q302	General Purpose Transistor	OSD ROUT Current Amplifier
Q303	General Purpose Transistor	OSD GOUT Current Amplifier
Q304	General Purpose Transistor	OSD BOUT Current Amplifier

● DVD UNIT (X37-1120-03)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	One chip LSI for DVD player	RF signal processing / Servo processing / Decoding processing / AV decoding processing
IC5	FLASH ROM	To retain F/W for one chip LSI (Nonvolatile memory)
IC9	EEP ROM	To retain data for one chip LSI (Nonvolatile memory)
IC10	Driver IC	Fo coil / Tr coil / SP motor / SLD motor / LO-EJ motor drive
IC12	1ch video AMP	+6dB amplifier with internal composite video output filter
IC15	Audio DAC	DA converter for 2ch analogue audio output
IC21	2-output switching REG	5V → 3.3V/1.2V
IC39	OP-AMP for lop measurement	For lop measurement
IC42	Logic IC for port extension	For port extension
IC49	Low voltage logic	For S/PDIF signal amplitude conversion (3.3V → 1.2V)
IC50	OP-AMP for audio LPF	LPF for 2ch analogue audio output (Rch)
IC51	OP-AMP for audio LPF	LPF for 3ch analogue audio output (Lch)

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC54	SDRAM	To retain data for one chip LSI (Nonvolatile memory)
IC55,56	Logic IC for port extension	For port extension
IC57	3ch video amplifier	With built-in filter +6dB amplifier for component/RGB video output
IC60	Power supply for 5.0V	8V → 5V (Exclusively for audio DAC)
Q1	Transistor with internal resistor	LO_MUTE control
Q2	Transistor with internal resistor	For FG signal
Q3	Transistor with internal resistor	For BMS
Q4	Transistor with internal resistor	DRMUTE control
Q10	Front end transistor for APC	Control of CD laser diode emission
Q11	Front end transistor for APC	Control of DVD laser diode emission
Q12	Rear end transistor for APC	Control of CD laser diode emission
Q13	Rear end transistor for APC	Control of DVD laser diode emission
Q14	MOS-FET	ON/OFF control of CD laser diode
Q15	MOS-FET	ON/OFF control of DVD laser diode
Q20	MOS-FET for level shifter	Level shifter for I2C clock
Q21	MOS-FET for level shifter	Level shifter for I2C data
Q24	MOS-FET	For Iop measurement
Q25	Transistor with internal resistor	IFSEL control
Q27	Transistor with internal resistor	HFM ON/OFF control
Q28	Transistor for APC	For CD laser diode protection (Current limiter)
Q29	Transistor for APC	For DVD laser diode protection (Current limiter)

MICROCOMPUTER'S TERMINAL DESCRIPTION

● SYSTEM μ -COM: 703261YGC315A (X14: IC201)

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
1	AVREF0				
2	AVSS				
3	V_MUTE	O	For video mute		H: ON, L: OFF
4	HSY_ADJ/HSY_ADJ	O	Free run adjustment		HSY frequency control
4	HSY_ADJ/NC	O	(KOS)		
5	AVREF1				
6	DSI/SI	O	DSI control (KVT)		
6	DSI/SI	O	SI control (DDX)		
6	NC	O	(KOS)		
7	CIR_BU_DET/CIR_BU_DET	O	When BU_DET has been detected, make the core recognize the detection.		
7	CIR_BU_DET/STATUS0	O	Cope with the special only when the mechanism endurance jig (KVT).		
8	FLMD0	I	Used when writing μ -com		
9	VDD				
10	REGC				
11	VSS				
12	X1		4.953MHz		
13	X2				
14	RESET				
15	XT1		32.768kHz		
16	XT2				
17	PANEL_DET/PANEL_DET	I	Front panel mounting/dismounting detection (KVT/KOS).		H: Panel dismounted L: Panel mounted
17	PANEL_DET/NC	O	(DDX)		
18	VSY (VD)	I	V-SYNC input		
19	BU_DET	I	Backup detection		H: Reduced voltage detection
20	OSD_MODE/OSD_MODE	O	Output when the screen mode is cinema/zoom		Refer to "NTSC_PAL"
20	OSD_MODE/NC	O	(KOS)		
21	ACC_DET	I	ACC detection		H: ACC reduced voltage detection
22	γ _CS	O	Communication CS with Chroma γ -IC		
23	γ _DATA	O	Communication data with Chroma γ -IC		
24	γ _CLK	O	Communication clock with Chroma γ -IC		
25	CIR_MDATA	O	Communication with media processor		
26	CIR_SDATA	I	Communication with media processor		
27	CIR_INI	O	Media processor initial		Normally fixed to "L" and output "H" only in the case of reset recovery
28	CIR_RESET	O	Reset of media processor		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
29	CIR_STB	I	Standby of media processor		
30	CIR_MREQ	O	Request to media processor		
31	CIR_SREQ	I	Request from media processor		
32	CIR_CON	O	Permission to operate media processor		
33	EVSS				
34	EVDD				
35	SDA	I/O	Communication data with E2P		
36	SCL	O	Communication clock with E2P		
37	SIPA_CLK1/SIPA_CLK1	O	Serial/parallel IC communication clock (KVT/DDX)		
37	SIPA_CLK1/NC	O	(KOS)		
38	SIPA_DATA1/PLL_EN	O	Enable PLL_IC (KOS)		
38	SIPA_DATA1/SIPA_DATA1	O	Serial/parallel IC communication data (KVT/DDX)		
39	PGOOD	I	DC-DC_IC error detection		
40	NC	O	Cope with the special only when the mechanism endurance jig (KVT)		
40	STATUS1/SYNC_DET	I	Detection of composite signal in the monitor output (KOS)		
40	STATUS1/NC	O			
41	DISC_DET/DISC_DET	I	Detection of disc (KVT/DDX)		L: Detected (Disc is found)
41	DISC_DET/NC	O	(KOS)		
42	DVD_RESET/DVD_RESET	O	DVD mechanism resetting (KVT/DDX)		
42	DVD_RESET/MON_SYS_ON	O	Monitor μ -com ON/OFF control (KOS)		
43	DVD_SDA/DVD_SDA	I/O	Communication data with DVD mechanism (KVT/DDX)		
43	DVD_SDA/MON_S_DATA	O	Communication data with monitor μ -com (KOS)		
44	DVD_SCL/DVD_SCL	O	Communication clock with DVD mechanism (KVT/DDX)		
44	DVD_SCL/MON_M_DATA	I	Communication with monitor μ -com (KOS)		
45	INV_PWM/INV_PWM	O	Inverter frequency control (KVT/DDX)		PWM output
45	INV_PWM/MON_RESET	O	Reset of monitor μ -com (KOS)		
46	POWER_START	O	DC-DC_IC soft start		L: Start, H: Stop
47	POWER_PWM	O	Oscillation frequency control of DC-DC_IC		PWM output
48	PON	O	Power ON/OFF control		H: ON, L: OFF
49	PWM/REMO_PWM	O	Convert the touch on the screen into the remote controller code (KOS)		PWM output
49	PWM/PWM	O	LCD brightness control (KVT/DDX)		PWM output
50	HSY (HD)	I	H-SYNC input		Count H
51	MCNT/PLL_MDATA	O	Data output to PLL_IC (KOS/X88FCT special)		
51	MCNT/MCNT	O	P-MECHA power supply voltage switching (KVT)		H: 7.5V, L: 5V (KVT)
51	MCNT/MCNT	O	T-MECHA power supply voltage switching (DDX)		H: 8V, L: 5V (DDX)
52	INV_SW/PLL_CLK	O	Communication clock with PLL_IC (KOS/X88FCT special)		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
52	INV_SW/INV_SW	O	Inverter free run frequency switching (KVT/DDX)		
53	SYS_SDATA	I	Data input from AUDIO μ -com		
54	SYS_MDATA	O	Data output to AUDIO μ -com		
55	SYS_CLK	O	Communication clock with AUDIO μ -com		
56	SYS_SREQ	I	Request from AUDIO μ -com		
57	TYPE3/STATUS2	O	Cope with the special only when the mechanism endurance jig (KVT)		
57	TYPE3	O	Setup of destination	①	
58	SRC/MON_POWER	I	Monitor power ON/OFF input (KOS)		
58	SRC/SRC	I	Source key (KVT/DDX)		
59	SYS_MREQ	O	Request to AUDIO μ -com		
60	SYS_ON	O	AUDIO μ -com ON/OFF control		
61	OPEN_CLOSE/OPEN_CLOSE	I	OPEN/CLOSE key on P-MECHA (KVT)		
61	OPEN_CLOSE/OPEN_CLOSE	I	Eject key (DDX)		
61	OPEN_CLOSE/NC	O	(KOS)		
62	TYPE1	I	Setup of destination	①	
63	TYPE2	I	Setup of destination	①	
64	NTSC_PAL/NTSC_PAL	I	NTSC/PAL determination input		H: NTSC, L: PAL
65	TMOTOR_M/PLL_EN	O	Enable PLL_IC (X88FCT jig special)		
65	TMOTOR_M/TMOTOR_M	O	Panel mechanism tilt control (KVT)		
65	TMOTOR_M/TILT_M-	O	Tilt mechanism tilt control (DDX)		
65	TMOTOR_M/NC	O	(KOS)		
66	TMOTOR_P/PMOTOR_P	O	Panel mechanism tilt control (KVT)		
66	TMOTOR_P/TILT_M+	O	Tilt mechanism tilt control (DDX)		
66	TMOTOR_P/NC	O	(KOS)		
67	SMOTOR_M/SD_DET1	I	SD card detection (DDX)		
67	SMOTOR_M/SMOTOR_M	O	Panel mechanism slide control (KVT)		
67	SMOTOR_M/NC	O	(KOS)		
68	SMOTOR_P/SD_DET2	I	SD card detection (DDX)		
68	SMOTOR_P/SMOTOR_P	O	Panel mechanism slide control (KVT)		
68	SMOTOR_P/SP_ACC_DET	I	Speaker input detection → "H" when the speaker input is found (KOS)		L: Speaker input is not found
69	BVSS				
70	BVDD				
71	WRT_E2P	I	Used when writing E2P		
72	MINI_CLK/MINI_CLK	O	Mini liquid crystal control clock (Mid at KVT)		
72	MINI_CLK/RGBOUT_MUTE	O	Mute RGB output when the connected monitor is other than the special monitor (KOS)		
72	MINI_CLK/NC	O	Lo/DDX at KVT		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
73	ILL_R/ILL_R	O	Key illumi red ON/OFF (Lo at KVT)		H: ON, L: OFF
73	ILL_R/KEY_ILL	O	Key illumination ON/OFF (DDX)		H: ON, L: OFF
73	ILL_R/MINI_DATA	O	Mini liquid crystal control data (Mid at KVT)		
73	ILL_R/NC	O	KOS		
74	ILL_G/JIG_EJ	I	Can operate without tilt mechanism (DDX)		L: Normal
74	ILL_G/ILL_G	O	Key illumi green ON/OFF (Lo at KVT)		H: ON, L: OFF
74	ILL_G/MINI_CS	O	Mini liquid crystal control chip select (Mid at KVT)		
74	ILL_G/NC	O	KOS		
75	FIELD_DET/FIELD_DET	I	Determination of video signal field (KVT/DDX)		
75	FIELD_DET/SYNC_SEL	O	Switching of composite signal in the monitor output (KOS)		
76	FLMD1	I	Used when writing μ -com		
77	ENABLE/ENABLE	O	Backlight ON/OFF (KVT/DDX)		H: ON, L: OFF
77	ENABLE/REMO_SEL	O	Remote controller output switching (KOS)		H: DVD player operation with the accessory remote controller L: DVD player operation with the other controller than accessory remote controller
78	Y0/OEM_SW	O	Is the connected monitor the special (dedicated) monitor or not? (KOS)		H: Special (Dedicated) L: OEM (Default)
78	Y0/Y0	O	Touch panel control (KVT/DDX)		
79	X1/ γ _VIN_SW2	O	Chroma γ COMP/RGB input switching (KOS)		
79	X1/X1	O	Touch panel control (KVT/DDX)		
80	X0/ γ _SYNC_SW2	O	Chroma γ SYNC input switching (KOS)		
80	X0/X0	O	Touch panel control (KVT/DDX)		
81	SW_A/SW_A	I	Detection of panel mechanism (KVT)		
81	SW_A/HPOS1	O	Display "H" position adjustment (DDX)		
81	SW_A/RGB_SW3	O	RGB switching control (KOS)		
82	SW_B/SW_B	I	Detection of panel mechanism (KVT)		
82	SW_B/HPOS2	O	Display "H" position adjustment (DDX)		
82	SW_B/VIN_SW4	O	RGB switching control (KOS)		
83	SW_C/SW_C	I	Detection of panel mechanism (KVT)		
83	SW_C/HPOS3	O	Display "H" position adjustment (DDX)		
83	SW_C/VIN_SW5	O	COMP switching control (KOS)		
84	ZACT_SW/ZACT_SW	I	Detection of panel mechanism (KVT)		
84	ZACT_SW/HPOS4	O	Display "H" position adjustment (DDX)		
84	ZACT_SW/COMP_MUTE	O	COMP mute control (KOS)		H: When OEM_SW is "L" and at full graphic
85	SIPA_CLK2/SIPA_CLD2	O	Serial/parallel IC communication clock (KVT)		
85	SIPA_CLK2/MODE1	O	Screen mode switching (DDX)		
85	SIPA_CLK2/RGB_MUTE	O	RGB mute control (KOS)		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
86	SIPA_DATA2/AOUT_SW5	O	Audio out switching (KOS)		
86	SIPA_DATA2/SIPA_DATA2	O	Serial/parallel IC communication data (KVT)		
86	SIPA_DATA2/MODE2	O	Screen mode switching (DDX)		
87	LED_SW/AOUT_SW6	O	Audio out switching (KOS)		
87	LED_SW/LED_SW	O	LED goes on or off in conjunction with OPEN/CLOSE (KVT)		H: ON, L: OFF
87	LED_SW/MODE3	O	Screen mode switching (DDX)		
88	MIRROR/EJECT	I	Eject key (KVT)		
88	MIRROR/MIRROR	O	Reverse control of back monitor mirror (DDX)		
88	MIRROR/NC	O	(KOS)		
89	VCOM/VCOM	I	For γ curve automatic adjustment (KVT/DDX)		
89	VCOM/NC	O	(KOS)		
90	VR/VR	I	For γ curve and PHASE/TINT automatic adjustment (KVT/DDX) For PHASE/TINT automatic adjustment (KOS)		
91	VG/VG	I	For γ automatic adjustment (KVT/DDX) For RGB level automatic adjustment (KOS)		
92	VB/VB	I	For γ curve and PHASE/TINT automatic adjustment (KVT/DDX) For PHASE/TINT automatic adjustment (KOS)		
93	KEY1/KEY1	I	(KVT)		
93	KEY1/KEY3	I	(DDX)		
93	KEY1/NC	O	(KOS)		
94	KEY2/KEY2	I	(KVT)		
94	KEY2/NT_PAL	O	NTSC/PAL output for X35 (DDX/KOS)		NTSC: L, PAL: H
95	R_SENS/R_SENS	I	Detection of panel mechanism tilt (KVT)		
95	R_SENS/R_SENS	I	Detection of tilt mechanism tilt (DDX)		
95	R_SENS/NC	O	(KOS)		
96	ZACT_CONT/LEN_ON	O	Disc LED ON/OFF (Mid at DDX)		H: ON, L: OFF
96	ZACT_CONT/ZACT_CONT	I	Panel mechanism slide position detection (KVT)		
96	ZACT_CONT/NC	O	Lo/KOS at DDX		
97	AUTO_DIM/AUTO_DIM	I	Auto dimmer input (KVT)		
97	AUTO_DIM/NC	O	DDX/KOS		
98	YDATA/YDATA	I	Touch data input (KVT/DDX)		
98	YDATA/NC	O	(KOS)		
99	XDATA/XDATA	I	Touch data input (KVT/DDX)		
99	XDATA/NC	O	(KOS)		
100	TYPE0	I	Setup of destination	①	

MICROCOMPUTER'S TERMINAL DESCRIPTION

Truth Value Table

① KVT/DDX/KOS Setup of destination

MODEL	Category	Destination	TYPE3	TYPE2	TYPE1	TYPE0
Lo	KVT	K	0	0	0	*
		E	0	0	0	*
		M	0	0	0	*
		V/X	0	0	0	*
		R	0	0	0	*
	DDX	K	0	0	1	*
		E	0	0	1	*
		M	0	0	1	*
		V/X	0	0	1	*
		R	0	0	1	*
	KOS	K	0	1	0	*
		E	0	1	0	*
		M	0	1	0	*
		V/X	0	1	0	*
		R	0	1	0	*
	AVN	K	0	1	1	*
		E	0	1	1	*
		M	0	1	1	*
		V/X	0	1	1	*
		R	0	1	1	*
Mid	KVT	K	1	0	0	*
		E	1	0	0	*
		M	1	0	0	*
		V/X	1	0	0	*
		R	1	0	0	*
	DDX	K	1	0	1	*
		E	1	0	1	*
		M	1	0	1	*
		V/X	1	0	1	*
		R	1	0	1	*
	KOS	K	1	1	0	*
		E	1	1	0	*
		M	1	1	0	*
		V/X	1	1	0	*
		R	1	1	0	*

TYPE0 is AD input. Refer to the next table (TYPE0 Setup Voltage) for the “*”.

TYPE0 Setup Voltage

Destination	μ-com setup value		
	min	Mid point voltage	max
K	0.00	0.00	0.41
E	0.42	0.83	1.23
M	1.24	1.65	2.06
V/X	2.07	2.48	2.88
R	2.89		3.30

MICROCOMPUTER'S TERMINAL DESCRIPTION

NTSC_PAL Setup

		Audio	γ				T/C
		VSYNC_DET	D8	D15	D9 0: NTSC, 1: PAL	SYNC_SW	NT_PAL
NTSC	GRA	-	1	0	1	Hi: IN2	Lo
	DVD	-	1		1	Lo: IN1	
	VD	Yes	0		-	Lo: IN1	
	None	None	0		-	Hi: IN2	
	iPod	-	1		0	Lo: IN1	
	None	-	1		0	Hi: IN2	
	TV	-	0		-	Lo: IN1	
	NAVI	-	1		1	Lo: IN1	
PAL	DVD	-	1	0	1	Lo: IN1	Hi
	VD	Yes	0		-	Lo: IN1	
	None	None	0		-	Hi: IN2	
	iPod	-	1		1	Lo: IN1	
	None	-	1		1	Hi: IN2	
	TV	-	0		-	Lo: IN1	

OSD_MODE (Thinning measure between CPLD OFF/ON control)

	NTSC	PAL (NT_PAL: Hi)
FULL	Lo	Hi
NORMAL		
JUST		Lo
ZOOM		
CINEMA (ZOOM2)		

MICROCOMPUTER'S TERMINAL DESCRIPTION

● AUDIO μ -COM: 703030BYGCJ30 (X34: IC101)

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
1	TV_JUDGE	I	TV-BOX new/old detection		
2	TUN_SCL	O	F/E I2C clock output terminal		
3	NAVI_RX	I	Navi control data input		
4	NAVI_TX	O	Navi control data output		
5	TV_MC_REQ	O	Communication request to TV_COM		
6	EVDD				
7	EVSS				
8	TV_SC_CON	O	Start-up request to TV_COM		
9	BEEP	O	BEEP		When BEEP: Pulse output
10	MIX_REMO	I	Remote controller input		
11	SYS_SREQ	O	Communication request to SYS_COM		
12	SYS_MDATA	I	SYS_COM communication data input		
13	SYS_SDATA	O	SYS_COM communication data output		
14	SYS_MCLK	I	SYS_COM communication clock		
15	SYS_MREQ	I	SYS_COM communication request input		
16	EXT_CON	O	EXT-CONT output		
17	VSNC_DET	I	Video detection		
18	VPP				
19	RGB_MUTE	O	MUTE RGB except when NAVI or SECAM		
20	RGB_SW	O	NAVI/SECAM switching		
21	AIN_SEL5	O	Audio in switching (KOS)		
21	NC	O	KVT/DDX Only		
22	AIN_SEL6	O	Audio in switching (KOS)		
22	NC	O	KVT/DDX Only		
23	R_QUAL	I	RDS decoder QUAL input terminal		
24	R_DATA	I	RDS decoder DATA input terminal		
25	R_AFS_H	I/O	Constant number switching when noise detected		
26	AM+B	O	AM power supply ON		H: When AM, L: EXCEPT
27	AUTO_SW_1	O	SW for video detection		H: AVIN1, AVIN2, L: BACK CAMERA
28	AUTO_SW_2	O	Video detection, NTSC/PAL determination		H: AVIN2, L: AVIN1, BACK CAMERA
29	SEL_CLK	O	CLK for Audio and Video selector		
30	SEL_DATA	O	DATA for Audio and Video selector		
31	RESET				
32	XT1				
33	XT2				
34	REGC				
35	X2				
36	X1				
37	VSS				

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
38	VDD				
39	CLKOUT				
40	PRE_MUTESW	O	PREout sub woofer MUTE		H: MUTE OFF, L: MUTE ON
41	PRE_MUTER	O	PREout rear MUTE		H: MUTE OFF, L: MUTE ON
42	PRE_MUTEF	O	PREout front MUTE		H: MUTE OFF, L: MUTE ON
43	RELAY_SW1	O	ON/OFF of external equipment relay control		H: Relay ON, L: Relay OFF
44	RELAY_SW2	O	ON/OFF of external equipment relay control		H: Relay ON, L: Relay OFF
45	RELAY_SW3	O	ON/OFF of external equipment relay control		H: Relay ON, L: Relay OFF
45	NC	O	Low Only		L fixed
46	RELAY_SW4	O	ON/OFF of external equipment relay control		H: Relay ON, L: Relay OFF
46	NC	O	Low Only		L fixed
47	RELAY_DET1	I	Detection of external equipment relay control		When RELAY_SW1 is Hi, L: Normal, H: Error (Hi when SW1 is Low)
48	RELAY_DET2	I	Detection of external equipment relay control		When RELAY_SW2 is Hi, L: Normal, H: Error (Hi when SW2 is Low)
49	RELAY_DET3	I	Detection of external equipment relay control		When RELAY_SW3 is Hi, L: Normal, H: Error (Hi when SW3 is Low)
49	NC	O	Low Only		L fixed
50	RELAY_DET4	I	Detection of external equipment relay control		When RELAY_SW4 is Hi, L: Normal, H: Error (Hi when SW4 is Low)
50	NC	O	Low Only		L fixed
51	ILL_DET	I	ILL detection		L: Illumi ON
52	PAK_DET	I	Parking detection		H: Parking ON
53	REV_DET	I	Reverse detection		L: Reverse ON
54	P_CON	O	P-CON control output		L: When STANDBY or POWER OFF EXCEPT: H
55	BVDD				
56	BVSS				
57	ANT_CON	O	P-ANT control output		H: ANT UP, L: ANT DOWN
58	NC	O			
59	PWIC_STBY	O	PWIC standby		H: POWER ON, L: POWER OFF
60	PWIC_MUTE	O	PWIC_FR MUTE		L: MUTE ON
61	AUD_MUTE_C	O	E-VOL inputSEL_C MUTE		L: MUTE ON, H: MUTE OFF
62	AUD_MUTE_B	O	E-VOL inputSEL_B MUTE		L: MUTE ON, H: MUTE OFF
63	AUD_MUTE_A	O	E-VOL inputSEL_A MUTE		L: MUTE ON, H: MUTE OFF
64	AUD_MUTE2	O	E-VOL center, SWMUTE		L: MUTE ON, H: MUTE OFF
65	AUD_MUTE1	O	E-VOL rear MUTE		L: MUTE ON, H: MUTE OFF
66	AUD_MUTE0	O	E-VOL front MUTE		L: MUTE ON, H: MUTE OFF
67	AUD_SDA	I/O	E-VOL data output		
67	AUD_SDA	I/O	ROM correction E2PROM communication data input/output		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
68	AUD_SCL	O	E-VOL clock output		
68	AUD_SCL	O	ROM correction E2PROM communication clock output		
69	PON	O	A8V,V5V,SW5V ON/OFF		H: Only when in RESET sequence L: Other output
70	LX_RST	O	Hardware-reset to slave unit		
71	AVDD				
72	AVSS				
73	AVREF				
74	PWIC_DCDET	I	SP_FR output DC offset detection		L: When detected
75	LINE_MUTE	I	LINE-MUTE input detection		Normal: 1.6V, TEL MUTE: 1V or lower NAVI MUTE: 2.5V or higher
76	NC				
77	A_WRT_E2P	I	Used when writing E2PROM		H: When writing E2PROM
78	LX_MUTE	I	MUTE request from slave unit		
79	A_TYPE0	I	Destination (Voltage reading)	②	Refer to the truth value table
80	A_TYPE1	I	KVT or DDX	①	Refer to the truth value table
81	A_TYPE2	I	OEM or Other	①	Refer to the truth value table
82	A_TYPE3	I	Hi or Low	①	Refer to the truth value table
83	TUN_IFC	I	F/E IFC OUT input terminal		H: Station found, L: Station not found
84	TUN_SMET	I	S meter input		
85	R_NOISE	I	FM noise detection terminal		
86	RIP_MUTE	O	Power IC inside		H: MUTE OFF, L: MUTE ON
87	BU_DET	I	BU reduced voltage detection		H: Reduced voltage detection
88	TV_SC_REQ	I	Communication request from TV_COM		
89	SYS_ON	I	SYS_COM communication control input		H: Start up request from AUDIO_μ-com
90	R_CLK	I	RDS decoder CLK input terminal		
91	LX_REQ_S	I	Communication request from slave unit		
92	LX_REQ_M	O	Communication request to slave unit		
93	LX_CON	O	Start-up request to slave unit		
94	A_FLASH_MDATA	I	Data from Flash re-write terminal writer		
94	LX_DATA_S	I	Data from slave unit		
95	A_FLASH_SDATA	O	Data to Flash re-write terminal writer		
95	LX_DATA_M	O	Data to slave unit		
96	A_FLASH_SCK	I	Clock from Flash re-write terminal writer		
96	LX_CLK	O	LX BUS clock		
97	TV_SC_DATA	I	DATA input from TV_COM		
98	TV_MC_DATA	O	DATA output to TV_COM		
99	TV_BP_CLK	O	CLK output to TV_COM		
100	TUN_SDA	I/O	F/E I2C data input/output terminal		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Truth Value Table

① TYPE1, 2 and 3 Truth Value Table

Category	TYPE3	TYPE2	TYPE1	TYPE0
KVT Hi MODEL	1	0	0	*1
KVT Low MODEL	0	0	0	*1
DDX Hi MODEL	1	0	1	*1
DDX Low MODEL	0	0	1	*1
KOS Hi MODEL	1	1	0	*1
KOS Low MODEL	0	1	0	*1
AVN MODEL	0	1	1	*1

TYPE0 is AD input.

Refer to the next table (TYPE0 Setup Voltage) for the “*1”.

② TYPE0 Setup Voltage

Destination	μ-com setup value		
	min	Mid point voltage	max
K	0.00	0.00	0.62
E	0.63	1.25	1.87
M	1.88	2.50	3.12
V/X	3.13	3.75	4.37
R	4.38		5.00

Detection of interrupt signal (if there is a signal or not)

Decide if there is a signal or not based on the number of pulses that is coming in the VSYNC_DET terminal (Pin 17) within 100ms.

	Name of control line	VSYNC_DET
	μ-com terminal number	17
Is there a signal or not?	No	3 or less
	Yes.	4~7
	No	8~

MICROCOMPUTER'S TERMINAL DESCRIPTION

● MEDIA MICROPROCESSOR: EP9307IRZ (X88: IC106)

Pin No.	Pin Name	I/O	Application	Processing Operation Description
A1	#CS1	I	Watchdog startup	
A10	RXDVAL	I	(ETHER I/F for design)	
A11	MIITXD1	O	(ETHER I/F for design)	
A12	CRS	I	(ETHER I/F for design)	
A13	MIN_CE	O	Not used (For High model Mini liquid crystal chip enable)	
A14	NC			
A17	NC	I		
A2	#CS7	I	BOOT bus width select	
A3	SDCLKEN	O	SDRAM clock enable	
A4	DA31	I/O	Data bus	
A5	DA29	I/O	Data bus	
A6	DA27	I/O	Data bus	
A7	NC			
A8	#RD	O	Memory read	
A9	MIIRXD3	I	(ETHER I/F for design)	
B1	AD25	O	Address bus	
B10	MIIRXD1	I	(ETHER I/F for design)	
B11	MIITXD2	O	(ETHER I/F for design)	
B12	TXEN	O	(ETHER I/F for design)	
B13	MIN_D_CONT	O	Not used (For High model Mini liquid crystal data buffer control)	L: Data output to mini liquid crystal H: Data input from mini liquid crystal
B14	NAND_R_#B	O	Not used (NAND Flash READY/BUSY)	L: BUSY, H: READY
B15	NC			
B16	DA_MCLK	O	AUDIO DAC Master clock	I2S
B17	3.3V			
B2	#CS2	I	Watchdog startup	
B2	#CS2	O	SRAM chip select	
B3	#CS6	I	BOOT bus width select	
B3	#CS6	O	Nor Flash chip select	
B4	AD20	O	Address bus	
B5	DA30	I/O	Data bus	
B6	AD18	O	Address bus	
B7	EP_STBY	O	Permission to turn OFF the mother power supply	
B8	AD17	O	Address bus	
B9	RXCLK	I	(ETHER I/F for design)	
C1	AD23	O	Address bus	
C10	MIIRXD2	I	(ETHER I/F for design)	

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing Operation Description
C11	TXCLK	I	(ETHER I/F for design)	
C12	MIITXD0	O	(ETHER I/F for design)	
C13	CLD	I	(ETHER I/F for design)	
C14	OSD_CE	O	OSD communication chip enable	SPI
C15	TRSTN	I	(JTAG I/F for design)	
C16,C17	NC			
C2	DA26	I/O	Data bus	
C3	#CS3	O	SRAM chip select	
C5	AD24	O	Address bus	
C6	AD19	O	Address bus	
C7	EP_SREQ	O	EP9307 communication request	
C8	#WR	O	Memory write	
C9	MDIO	I/O	(ETHER I/F for design)	
D1	#SDCS3	O	SDRAM chip select	
D10	MDC	O	(ETHER I/F for design)	
D11	RXERR	I	(ETHER I/F for design)	
D12	MIITXD3	O	(ETHER I/F for design)	
D13	IPOD_BSY	I	iPod READY/BUSY	L: BUSY, H: READY
D14	LOW_#MID	I	Setup of destination	H: LOW model, L: MID model
D15~D17	NC			
D2	DA23	I/O	Data bus	
D3	SDCLK	O	SDRAM clock	Commercial product: 100MHz Thermal expansion product: 92MHz
D4	DA24	I/O	Data bus	
D5	MIN_CLK	O	Not used (For High model Mini liquid crystal communication clock)	
D6	EP_MREQ	I	SysCom communication request	
D7	DA28	I/O	Data bus	
D8	#EP_INI	I	Reset start notification	
D9	AD16	O	Address bus	
E1	#SDCS2	O	SDRAM chip select	
E10	vddr			
E11	MIIRXD0	I	(ETHER I/F for design)	
E12	TXERR	O	(ETHER I/F for design)	
E13	EP_CON	I	Permission to operate PE9307	
E14	USB1_ERR	I	5V over current detection in USB1	L: Over current is detected.
E15	USB1_EN	O	Control of USB1 5V over current detection IC	L: USB5V OFF, H: USB5V ON
E16	NC			

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing Operation Description
E17	NC			
E2	#SDWE	O	SDRAM write enable	
E3	DA22	I/O	Data bus	
E4	AD3	O	Address bus	
E5	DA15	I/O	Data bus	
E6	AD21	O	Address bus	
E7	DA17	I/O	Data bus	
E8,E9	vddr			
F1	#RAS	O	SDRAM RAS	
F10	vddc			
F11	gndr			
F12	EP_BUDET	I	Momentary power down notification	L: Normal operation H: Momentary power down detection
F13	NC			
F14	ADC_GND			
F15~F17	NC			
F2	#SDCS1	O	SDRAM chip select	
F3	#SDCS0	O	SDRAM chip select	
F4	#DQM3	O	Memory data mask	
F5	AD5	O	Address bus	
F6~F8	gndr			
F9	vddc			
G1	#DQM0	O	Memory data mask	
G12	gndr			
G13	USB0_ERR	I	5V over current detection in USB0	L: Over current is detected
G14	EGPIO10/DREQ1			L: Over current is detected
G15~G17	NC			
G2	#CAS	O	SDRAM CAS	
G3	DA21	I/O	Data bus	
G4	AD22	O	Address bus	
G5	vddr			
G6	gndr			
H1	DA18	I/O	Data bus	
H10	gndc			
H12	gndr			
H13	vddr			
H14	USB0_EN	O	Control of USB0 5V over current detection IC	L: USB5V OFF, H: USB5V ON
H15	#EP_RST0	I	Power on reset	

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing Operation Description
H16	MIN_DO	O	Not used (For High model Mini liquid crystal data output)	
H17	NC			
H2	DA20	I/O	Data bus	
H3	DA19	I/O	Data bus	
H4	DA16	I/O	Data bus	
H5	vddr			
H6	vddc			
H8,H9	gndc			
J1	AD6	O	Address bus	
J10	gndc			
J12	vddc			
J13	vddr			
J14	OSD_ROMSEL	I	OSD ROM select	L: Built-in, H: External
J15	MIN_DI	O	Not used (For High model Mini liquid crystal data input)	
J16	#CS0	O	Nor Flash chip select	
J17	NAND_CLE	O	Not used (NAND Flash Command latch enable)	
J2	DA14	I/O	Data bus	
J3	AD7	O	Address bus	
J4	DA13	I/O	Data bus	
J5	vddr			
J6	vddc			
J8	gndc			
K1	AD4	O	Address bus	
K10	gndc			
K12	vddc			
K13	NAND_#CE	O	Not used (NAND Flash Chip enable)	
K14	PLL_VDD		Main oscillator power supply 1.8V	
K15	NAND_ALE	O	Not used (NAND Flash Address latch enable)	
K16	NAND_#RE	O	Not used (NAND Flash Read enable)	
K17	NAND_#WE	O	Not used (NAND Flash Write enable)	
K2	DA12	I/O	Data bus	
K3	DA10	I/O	Data bus	
K4	DA11	I/O	Data bus	
K5	vddr			
K6	gndr			
K8,K9	gndc			
L1	DA9	I/O	Data bus	

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing Operation Description
L12	gndr			
L13	NAND_D7	O	Not used (NAND Flash Data bus)	
L14	NAND_D5	O	Not used (NAND Flash Data bus)	
L15	PLL_GND		Main oscillator GND	
L17	XTALO		Main clock	14.7456MHz
L2	AD2	O	Address bus	
L3	AD1	O	Address bus	
L4	DA8	I/O	Data bus	
L5	NC			
L6	gndr			
M1	NC			
M10,M11	gndr			
M12	NAND_D6	O	Not used (NAND Flash Data bus)	
M13	NAND_D4	O	Not used (NAND Flash Data bus)	
M14	NAND_D1	O	Not used (NAND Flash Data bus)	
M15	NAND_D0	O	Not used (NAND Flash Data bus)	
M16	NAND_D3	O	Not used (NAND Flash Data bus)	
M17	NAND_D2	O	Not used (NAND Flash Data bus)	
M2	AD0	O	Address bus	
M3	#DQM1	O	Memory data mask	
M4	#DQM2	O	Memory data mask	
M5	E_R5	O	Video data bus (Red)	
M6,M7	gndr			
M8	vddc			
M9	vddc			
N1	E_R2	O	Video data bus (Red)	
N10	vddr			
N11	I2C_SCL	O	Communication clock (I2C)	
N11	I2C_SCL	I	BOOT mode	L: External BOOT, H: Internal BOOT
N12	DA_SDO0	O	AUDIO DAC data	I2S
N12	DA_SDO0	I	BOOT bus width select	
N13	CTS	I	(UART I/F for design)	
N14	RXD0	I	(UART I/F for design)	
N15	TXD0	O	(UART I/F for design)	
N16	UART_TXD1	O	(UART I/F for design)	
N17	UART_TXD2	O	EP9307 communication data	
N2	E_R4	O	Video data bus (Red)	

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing Operation Description
N3	E_R3	O	Video data bus (Red)	
N4	E_R1	O	Video data bus (Red)	
N5	E_R0	O	Video data bus (Red)	
N6	DA5	I/O	Data bus	
N7~N9	vddr			
P1	SPCLK	O	Video dot clock	
P10	TCK	I	(JTAG I/F for design)	
P11	BOOT1	I	Test mode select	
P12	I2C_SDA	I/O	Communication data (I2C)	
P12	I2C_SDA	I	Test mode select	
P13	G_LED	O	Green LED	
P14	R_LED	O	Red LED	
P15	NC			
P16	UART_RDX1	I	(UART I/F for design)	
P17	UART_RDX2	I	System μ -com communication data	
P2	E_G4	O	Video data bus (Green)	
P3	E_G5	O	Video data bus (Green)	
P4	E_B3	O	Video data bus (Blue)	
P5	AD15	O	Address bus	
P6	AD13	O	Address bus	
P7	AD12	O	Address bus	
P8	DA2	I/O	Data bus	
P9	AD8	O	Address bus	
R1	E_G3	O	Video data bus (Green)	
R10	TDI	I	(JTAG I/F for design)	
R11	BOOT0	I	Test mode select	
R12	DA_LRCLK	O	AUDIO DAC Sample rate clock	I2S
R13	OSD_DATA	O	OSD communication data	SPI
R14	NC			
R15	USB0_NEG	I/O	USB0 data	
R16	DA_SCLK	O	AUDIO DAC Data bit clock	I2S
R17	USB0_POS	I/O	USB0 data	
R2	E_HSYNC	O	Video H-SYNC	
R3	E_G0	O	Video data bus (Green)	
R4	E_B5	O	Video data bus (Blue)	
R5	E_B0	O	Video data bus (Blue)	
R6	AD14	O	Address bus	

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing Operation Description
R7	DA4	I/O	Data bus	
R8	DA1	I/O	Data bus	
R9	NC			
T1	NC			
T10	TMS	I	(JTAG I/F for design)	
T11	gndr			
T12	NC			
T13	INT2	I	(ETHER I/F for design)	
T14	NC			
T15	USB1_POS	I/O	USB1 data	
T16,T17	NC			
T2	NC			
T3	E_VSYNC	O	Video V-SYNC	
T4	E_G1	O	Video data bus (Green)	
T5	E_B2	O	Video data bus (Blue)	
T6	DA7	I/O	Data bus	
T7	AD11	O	Address bus	
T8	AD9	O	Address bus	
T9	NC			
U1	NC			
U10	TDO	O	(JTAG I/F for design)	
U11	NC			
U12	OSD_CLK	O	OSD communication clock	SPI
U13,U14	NC			
U15	RTS	O	(JTAG I/F for design)	
U16	USB1_NEG	I/O	USB1 data	
U17	NC			
U2	NC			
U3	E_G2	O	Video data bus (Green)	
U4	E_B4	O	Video data bus (Blue)	
U5	E_B1	O	Video data bus (Blue)	
U6	DA6	I/O	Data bus	
U7	DA3	I/O	Data bus	
U8	AD10	O	Address bus	
U9	DA0	I/O	Data bus	

TEST MODE

1. Generals

1-1. Purpose

This document has been prepared to identify the items required in the test mode used in the 07Visual Product production process.

1-2. Scope of applications

This document is applicable to models that are listed in Table 1-2-1.

Class	Series	Model Name	Destination
MID	KVT	KVT-819DVD	K
		KVT-829DVD	E
		KVT-839DVD	M/V/X/R
	DDX	DDX8019	K
		DDX8029	E
		DDX8039	M/V/X/R
LOW	KVT	KVT-719DVD	K
		KVT-729DVD	E
		KVT-739DVD	M/V/X/R
	DDX	DDX7019	K
		DDX7029	E
		DDX7039	M/V/X/R
	KOS	KOS-V500	K/E/M
	DNX	DNX7100	K
		DNX7200	E
–	F-MONITOR	KOS-L702	K/E/M

Table 1-2-1 List of Models in 07Visual Product

1-3. Overview

The following sections describe display specifications, control specification of key/remote controller, operations of components, etc. in the test mode of 07Visual Product.

2. Test mode specification

2-1. Operations

Product can be transferred into the test mode using the following three approaches:

- ① While pressing [SRC] and [ATT] keys at the same time (SRC+ATT), press Reset key to start the system. (In the KOS series, press [MODE] and [VOL.UP] keys)
- ② Connect the region-writing jig to Lx connector and press [Reset] key to start the system.
- ③ Connect unit/BOX designed for use exclusively in the test mode and press [Reset] key to start the system.
- ④ Connect BOX/Monitor designed for use exclusively in the test mode and press [Reset] key to start the system.
- ⑤ When in standby source, use “AUD SW” on the remote controller to enter Tenkey1→6→3→4→2 in order to transfer to the test mode.

- Step ③ is only applicable to KVT series.
- Step ④ is only applicable to KOS series (including KOS Monitor). [Reset] key can be used for both Monitor and Box.
- In addition to unit/BOX (③/④), X14 (System μ-com: Special μ-com) is also designed exclusively for X88 FCT.

2-2. Screen transition

During the test mode, selecting Graphic screen transfers the screen to Test Mode Main screen.

A variety of screens that can be transferred from Test Mode Main screen is shown in Figure 2-2-1.

Refer to Section 2-3 for functions in each screen. (Note that screens that can be transferred from Test Mode Main screen vary depending on the model.)

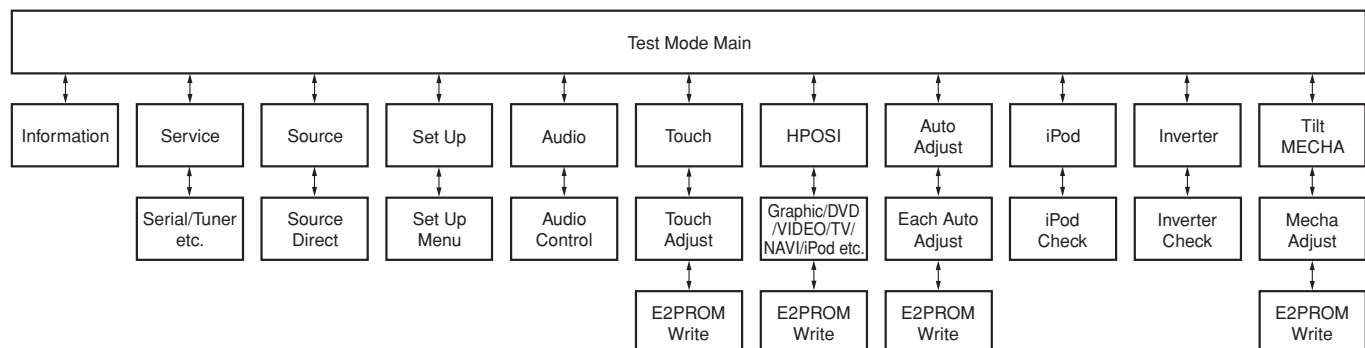


Figure 2-2-1 Screens transferred from Test Mode Main screen

TEST MODE

2-3. Specification of screens

This section describes the test mode functions available in each screen.

2-3-1. Test Mode Main screen

This section describes the keys for transferring to each screen from Test Mode Main screen.

The variety of screens displayed on Test Mode Main screen is shown in Figure 2-3-1.

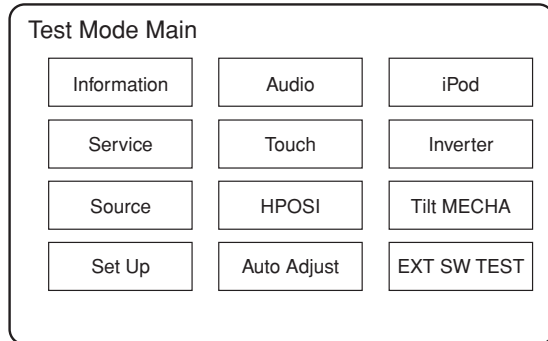


Figure 2-3-1 Test Mode Main screen

[Key specification]

Information: Move on to Information screen.
 Service: Move on to Service screen.
 Source: Move on to Source Direct screen.
 Set Up: Move on to Set Up Menu screen.
 Audio: Move on to Audio Control Menu screen.
 Touch: Move on to Touch Adjust screen.
 HPOSI: Move on to HPOSI Adjust screen.
 Auto Adjust: Move on to Auto Adjust Menu screen.
 iPod: Move on to iPod Authentication Confirmation screen.
 Inverter: Move on to Inverter Confirmation screen.
 Tilt MECHA: Move on to Tilt MECHA Position Adjustment screen. Only in "DDX" and "DNX" series
 ExtSw Test: Ext-Sw waveform output (Output is "400ms ON/OFF" using operations, SW1→SW2→SW3→SW4.) Operation SW3/4 for "MID KOS".

2-3-2. Information screen

This screen shows such data as Serial No., Version information of each μ -com, Region code, Status, etc.

The contents displayed on the Information screen are shown in Figure 2-3-2.

Figure 2-3-2 Information screen

- Monitor μ Com information is shown only when the "KOS Monitor" is connected.
- B/E, F/E, Region, and macrovision information are shown only for the "KVT/DDX/DNX" series.
- TV Tuner Box is shown only when the "TV" is connected ("V500" is "V---").
- Version information of the "OSD-ROM" is shown at the left of the OSD display of the iPod image.
- Display shown before System/Audio is Model: Mid/Low and Type: KVT/DDX/DNX/KOS.

[Key specification]

Return: Move on to Test Mode Main screen.

2-3-3. Service screen

This screen is used to display or clear service information. Chroma data in the E2PROM is cleared. DC Offset detection information is displayed or cleared.

The contents displayed on the Service screen are shown in Figure 2-3-3.

Figure 2-3-3 Service screen

- "DVD Service INFO" and "DVD DivX Registration Code Clear" are shown only for the "KVT/DDX/DNX" series.

TEST MODE

[Key specification]

Init: Select the item to be initialized.

■Start: Pressing and holding (for 2 seconds or longer) initializes the selected item's information.

Serial: Move on to Serial No. Manual Input screen.

Clear: Clear Chroma data or DC Offset information in the E2PROM.

DVD Service INFO: Switch DVD video and display DVD service information using "B/E OSD".

Tuner Mute Level: Move on to the Tuner Mute Level Adjustment screen.

DVD DivX Registration Clear: Clear DVD DivX Registration Code.

Return: Move on to Test Mode Main screen.

● Service Information

Select the item to be initialized by pressing the [Init] key (multiple items can be selected/selected items are highlighted).

After selection is completed, press and hold the [Start] key for 1 second or longer to initialize the displayed service information.

● Chroma

Chroma information is normally displayed as "Ready" and "CLR OK/NG" when E2PROM data is cleared.

When not completing Reset after Clear, setup data is not modified. After resetting, cleared data is reflected.

In case of "KOS" series, clear Chroma data; touch correction value and HPOS1 correction value in E2PROM.

● DC Offset

When DC Offset detection information is shown as "None", offset is not detected. When it is shown as "Detect (x)", offset is detected. X=0~3: Number of capacitor leaks detected.

Clear the detection information with the [Clear] key.

● DVD DivX Registration Code

Display Registration Code of DivX and clear the Code with the [Clear] key.

After clearing the Code, "None" will be displayed.

* Clear the code only after ejecting the disc.

● DVD Service INFO

Switch DVD video and display DVD service information using "B/E OSD".

Use the [DISP] key and CURSOR (right or left) on the remote controller*1 to feed pages.

Press [VSEL] key or [FNC] key to return from DVD image to Service screen.

Once the DVD Image screen is shown by selecting the DVD Service INFO, the OSD is no more displayed on the DVD image screen. Re-start the set by recycling the ACC/Power (i.e., ACC/Power Off→On) to display the OSD on the DVD Image screen.

*1: RC-DV430 (DVD MODE)

2-3-4. Serial No. Entry screen

Enter the serial code of each set from this screen.

Serial No. Entry screen is shown in Figure 2-3-4.

The figure illustrates the Serial No. Entry screen in two states. The top screen shows a numeric keypad with digits 1 through 9 and 0, and 'Clear' and 'Cancel' buttons. The bottom screen shows a numeric keypad with digits 1 through 9 and 0, and 'Clear', 'Cancel', and 'Enter' buttons. An arrow points from the top screen to the bottom screen, indicating a transition or a different state of the same screen.

Figure 2-3-4 Serial No. Entry screen

[Key specification]

0~9: 10key for entering the serial No.

Clear: Clear the serial No. which is being input.

Cancel: Move on to Service screen.

Enter: Start entering the serial No.

(When entry is successfully completed, "Write OK" is displayed. When entry is not successful, "Write NG" is displayed)

When "Write OK" is displayed, use this key to move on to the Service screen.

If "Write NG" is displayed, transfer to the test mode again and repeat entry from the first step.

TEST MODE

2-3-5. Tuner Mute Level screen

Adjust the Mute Level stored in the E2PROM of the Tuner F/E.
Tuner Mute Level Setup screen is shown in Figure 2-3-5.

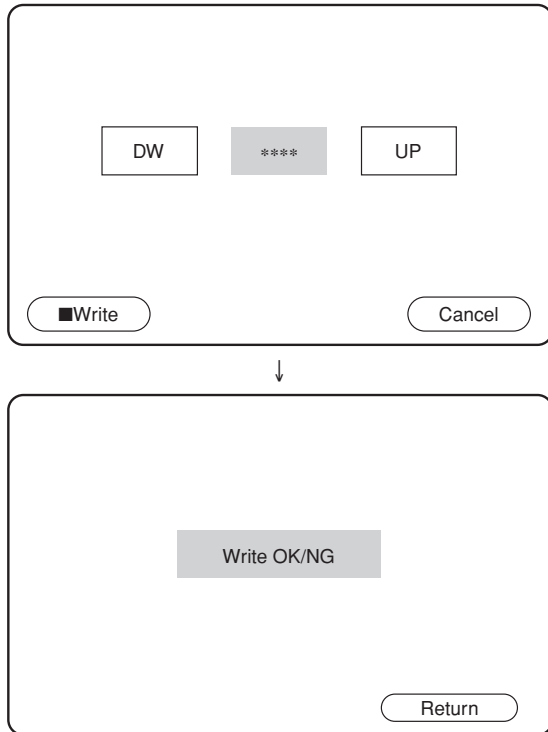


Figure 2-3-5 Tuner Mute Level Setup screen

[Key specification]

UP: Mute Level Up

DW: Mute Level Down

■Write: Press and hold (for 2 seconds or longer) to make an entry in E2PROM.

Return: Move on to Service screen.

- Adjust the Tuner Mute Level under the following conditions. Under conditions other than the followings, adjustment of the Tuner Mute Level is not possible if the Tuner Mute Level Setup screen is shown.
Frequency should be set before transferring to the Tuner Mute Level Setup screen.
Audio source: Tuner
LOUD: OFF
Volume: Step30
Frequency: Default value of the set
Note that frequency remains unchanged after completion of setup and after screen exits from the Tuner Mute Level Setup screen.

2-3-6. Source/Set Up/Audio screen

Source Direct, Set Up, and Audio Control screens can be transferred to in the same nominal manner as for other screens.

2-3-7. Touch screen

Fine-adjust fluctuation of Touch of each set.

Touch 4 markers one by one, and adjustment is complete when "Write OK" is displayed on the screen.

If "Write NG" is shown, go to the test mode again to start over the adjustment.

Touch Adjustment Service screen is shown in Figure 2-3-6.

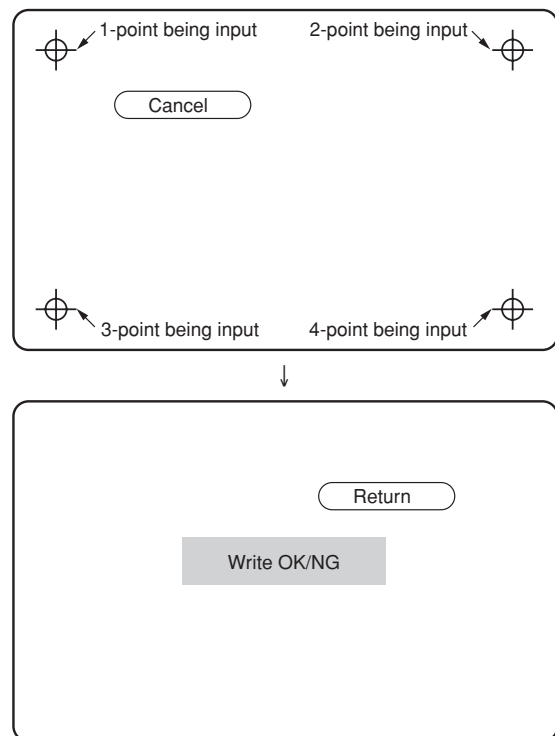


Figure 2-3-6 TOUCH screen

[Key specification]

Cancel: When the Cancel button is pressed while entering the 1-point, the screen returns to Test Mode Main screen. When the Cancel button is pressed while entering a point other than the 2-point, the screen returns the status to enter the 1-point.

Return: When the "Return" button is pressed, the screen returns to Test Mode Main screen.

Note: If "NG" is shown, go to the test mode again to start over the adjustment.

TEST MODE

2-3-8. HPOSI screen

Adjust each screen's horizontal display position.

The screen shall be transferred like "Graphic→NAVI→".

(In case of "KOS" series, screen shall be changed as follows:

"Graphic→VIDEO (NT)→NAVI→VIDEO (PAL)")

HSY adjustment is applicable to "KVT/DDX Graphic" and "DNX Graphic/NAVI". Adjustment screen is shown in Figure 2-3-7.

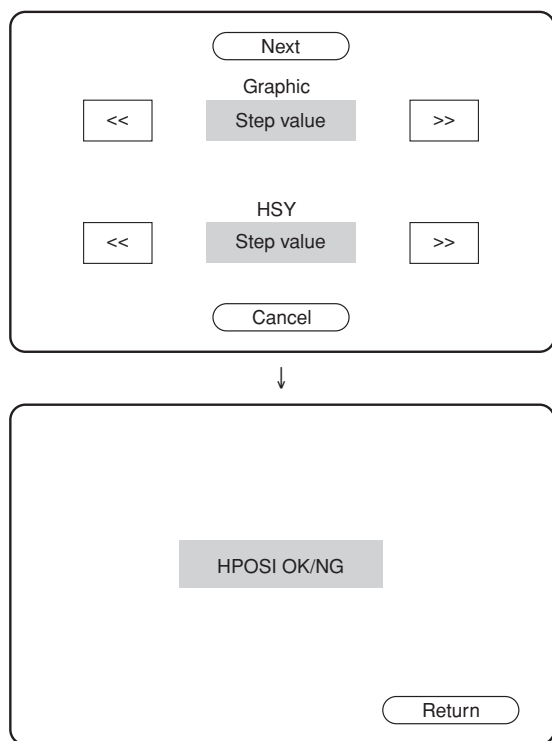


Figure 2-3-7 HPOSI screen

[Key specification]

Next: Move on to the next HPOSI screen. When the screen is the NAVI screen, start writing in the E2PROM.

<<: Screen moves toward the left.

>>: Screen moves toward the right.

Cancel: Move on to Test Mode Main screen.

Return: Move on to Test Mode Main screen.

If "HPOSI NG (E2PROM Write NG)" is shown, go to the test mode again to start over the adjustment.

DVD wallpaper should be fixed to NTSC. When adjusting DVD, TDV-540A (Title3-Chapter16) shall be played. After loading the DISC, use Ten-key 4 to transfer to "Title3-Chapter16". (KVT/DDX/DNX)

Note: If "NG" is shown, go to the test mode again to start over the adjustment.

2-3-9. Auto Adjust screen

This section displays the keys that are related to auto adjustment.

The contents displayed on the Auto Adjust screen are shown in Figure 2-3-8.

Note: Data related with Chroma auto adjustment can be cleared by the [Clear] key on the Service screen.

Refer to hardware service documents for equipment to connect to the set.

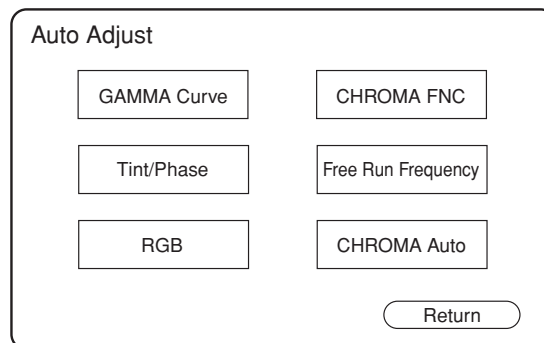


Figure 2-3-8 Auto Adjust screen

[Key specification]

GAMMA Curve: Move on to GAMMA Curve screen.

Tint/Phase: Move on to Tint/Phase screen.

RGB: Move on to RGB screen.

CHROMA FNC: Move on to CHROMA FNC screen.

Free Run Frequency: Move on to Free Run Frequency screen.

CHROMA Auto: Collectively adjust the following: "Free Run Frequency→Tint/Phase→GAMMA".

Return: Move on to Test Mode Main screen.

2-3-9-1. GAMMA Curve screen

Auto adjust the γ curve of the Chroma γ IC and save it in E2PROM.

The screen after the completion of GAMMA Curve auto adjustment is shown in Figure 2-3-9.

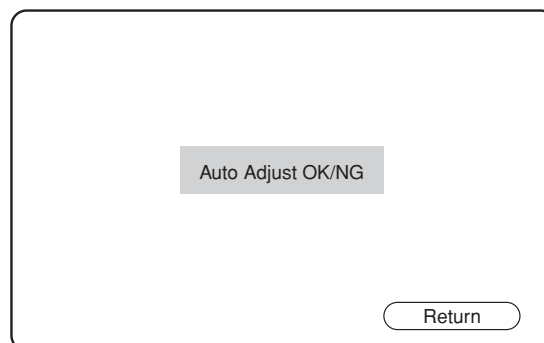


Figure 2-3-9 GAMMA Curve screen

TEST MODE

[Key specification]

Return: Move on to Auto Adjust screen.

2-3-9-2. Tint/Phase screen

Auto adjust the Tint/Phase of the Chroma γ IC and save them in E2PROM.

The screen after the completion of Tint/Phase auto adjustment is shown in Figure 2-3+10.

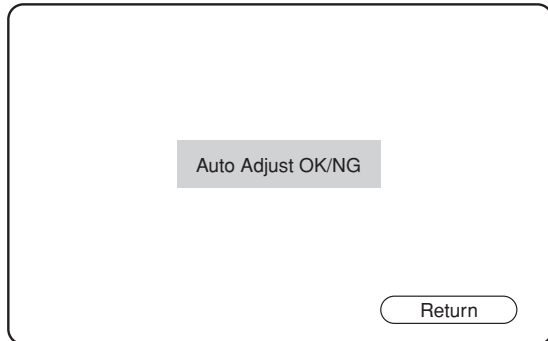


Figure 2-3-10 Tint/Phase screen

[Key specification]

Return: Move on to Auto Adjust screen.

2-3-9-3. RGB screen

After auto adjustment of RGB, save it in E2PROM. (This is applicable only to "KOS" series.)

The screen after the completion of RGB auto adjustment is shown in Figure 2-3-11.

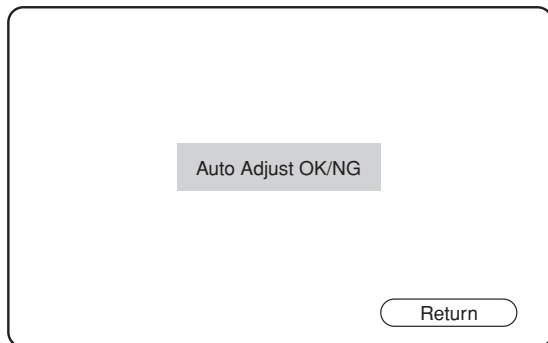


Figure 2-3-11 RGB screen

[Key specification]

Return: Move on to Auto Adjust screen.

2-3-9-4. CHROMA FNC screen

Manually adjust the Chroma γ IC, and save it in E2PROM. This adjustment should be made from the remote controller. The CHROMA FNC screen is shown in Figure 2-3-12.

The Chroma data in the E2PROM can be erased by the [CHROMA Clear] key on the Service screen.

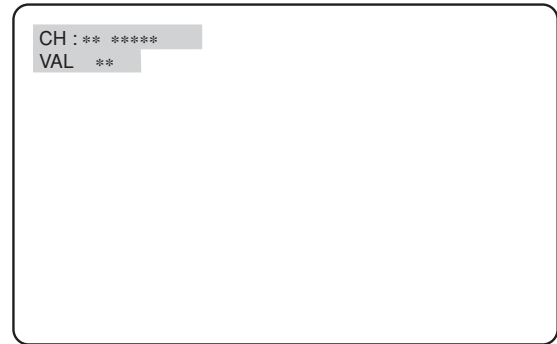


Figure 2-3-12 CHROMA FNC screen

[Key specification (Remote controller)]

Direct: Chroma adjustment mode ON/OFF (Writing in the E2PROM)

Play/Pause: Setup/Clear Chroma setup value

Tenkey7: To the items before Chroma adjustment

Tenkey8: Chroma adjustment setup value UP

Tenkey9: To the next item in the Chroma adjustment

Tenkey0: Chroma adjustment setup value DW

2-3-9-5. Free Run Frequency screen

After auto adjustment of Free Run Frequency, save it in the E2PROM. (This is applicable only to "KVT/DDX/DNX" series.)

The screen after completion of Free Run Frequency auto adjustment is shown in Figure 2-3-13.

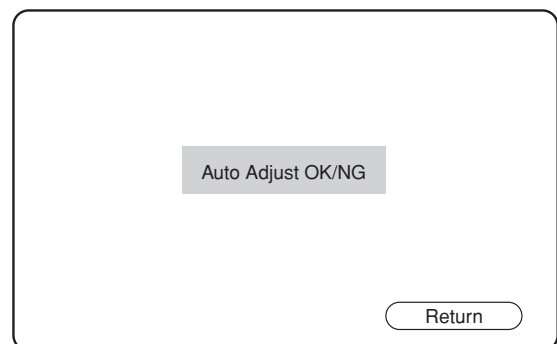


Figure 2-3-13 Free Run Frequency screen

[Key specification]

Return: Move on to Auto Adjust screen.

2-3-9-6. CHROMA Auto screen

Successively perform adjustments in 2-3-9-5 Free Run Frequency auto adjustment, 2-3-9-2 Tint/Phase auto adjustment, and 2-3-9-1 GAMMA Curve auto adjustment, and save them in the E2PROM.

The screen shown after completion of auto adjustment is shown in Figure 2-3-14.

TEST MODE

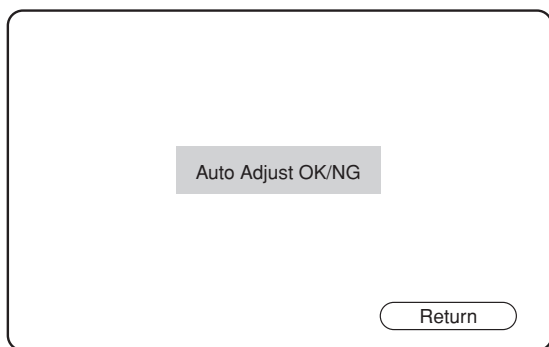


Figure 2-3-14 CHROMA Auto screen

[Key specification]

Return: Move on to Auto Adjust screen.

2-3-10. iPod screen

Check communication for iPod authentication.

The iPod screen is shown in Figure 2-3-15.

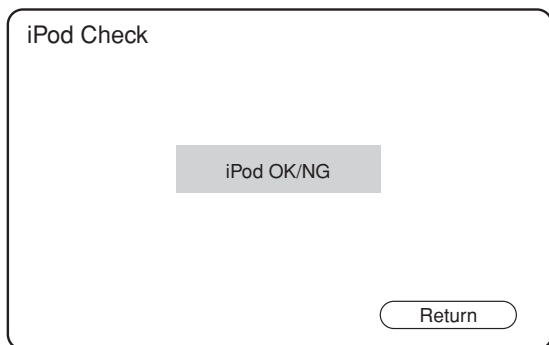
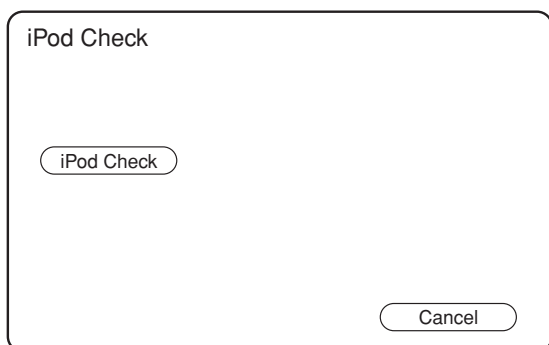


Figure 2-3-15 iPod screen

[Key specification]

iPod Check: Start checking communication for iPod authentication.

Cancel, Return: Move on to Test Mode Main screen.

2-3-11. Inverter screen

Change inverter frequency.

Inverter screen is shown in Figure 2-3-16.

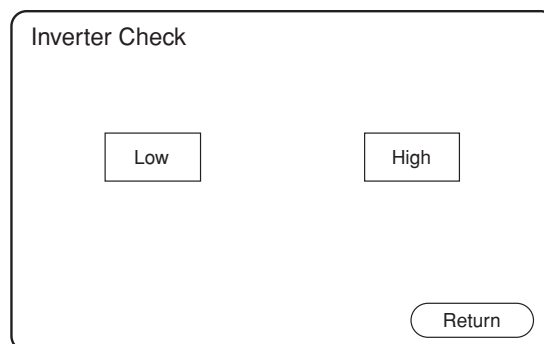


Figure 2-3-16 Inverter screen

[Key specification]

Low: Set inverter frequency to Low level.

High: Set inverter frequency to High level.

Cancel, Return: Move on to Test Mode Main screen.

2-3-12. Tilt MECHA screen

Adjust the panel mechanism position. (DDX/DNX)

The Tilt MECHA screen is shown in Figure 2-3-17.

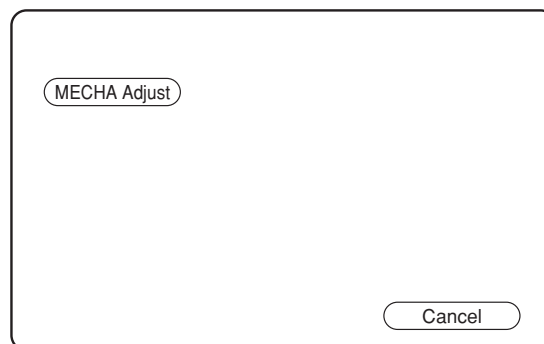


Figure 2-3-17 Tilt MECHA screen

[Key specification]

MECHA Adjust: Start mechanism position adjustment.

Cancel, Return: Move on to Test Mode Main screen.

TEST MODE

If “MECHA Adjust (E2PROM Write NG)” is displayed, go to the test mode again to start over the adjustment.

The “NG” is shown under any one of the following conditions: (When “NG” is shown, position is not written in the E2PROM.)

E2PROM writing error

NG when voltage acquired is 0.177V or higher in the Open.

NG when voltage acquired is lower than 2.746V or higher than 2.888V in the Close.

Note: If “NG” is displayed, check if the mechanism position adjustment jig is properly installed and then go to the test mode again to start over the adjustment.

2-4. Functional specification

This section describes the test mode specification for each function.

2-4-1. Display

Basically, specialized screen when in the Test Mode.

Display Touch position (+). However, shall not be displayed in Touch Adjust screen (under adjustment).

2-4-2. Key

Hard key specification is listed in Table 2-4-1. (Note that the keys that are not listed in the table have conventional functions.)

Key	KVT (Internal SP)	KVT (BOX SP)	DDX/DNX	KOS (Monitor)
AUTO MID	Normal	Short: Invalid Long: Flicker	–	–
AUTO LOW	Normal	Short: Invalid Long: Flicker	–	–
ATT	Motor driver	Motor driver	Motor driver	–
V.SEL	V.SEL+ AV-OUT	V.SEL+ AV-OUT	V.SEL+ AV-OUT	V.SEL+ AV-OUT
FNC	No “Easy” mode	No “Easy” mode	No “Easy” mode	No “Easy” mode

(Reference)

Mode Description	KVT	DDX/DNX	KOS
The Test Mode	SRC + ATT + Reset	SRC + ATT + Reset	MODE + VOLUP + Reset
Span switching	SRC + VOL. DW + Reset	SRC + VOL. DW + Reset	VSEL + VOL. DW + Reset

Mode Description	KVT	DDX/DNX	KOS
Clear DC Offset/ Service/Memory, etc.	SRC + AUTO (TI) + Reset	SRC + FUNC + Reset	VSEL + FUNC + Reset
Retailer mode On	EJECT + VOL. DW + Reset	EJECT + VOL. DW + Reset	×
Retailer mode Off	SRC + Reset	SRC + Reset	×
RDS test drive mode	EJECT + ATT + Reset	EJECT + ATT + Reset	FUNC + VOLUP + Reset

Table 2.4.1 Hard Key

2-4-3. Remote controller

Remote controller specifications are listed in Table 2-4-2. (Note that the keys that are not listed in the table have conventional functions.)

Mode of the remote controller shall be “AUDIO”.

Key	Function
Band (FM+)	Video mode selection (NAVI/VIDEO/iPod/DVD)
M/S (AM-)	DVD audio/image switching (Other than “KOS”)
Tenkey1	Tilt mechanism position adjustment (Only in “DDX/DNX”), Illumination switching (KVT)
Tenkey2	DC Offset detection direct switching (Only for “CD-CH” source)
Tenkey3	The V-IN (R-CAM) mirror mode switching
Tenkey4	HPOS! DVD confirmation direct switching (Other than “KOS”)
Tenkey5	NAVI forced interruption
Tenkey6	Call Screen Adjustment screen
Tenkey7	To the items before Chroma adjustment
Tenkey8	Chroma adjustment setup value UP
Tenkey9	To the next item in the Chroma adjustment
Tenkey0	Chroma adjustment setup value DW
Direct	Chroma adjustment mode ON/OFF (Writing in the E2PROM)
Play/Pause	Setup/Clear Chroma setup value

Table 2-4-2 Keys on Remote controller

2-4-4. Video control

- When in the test mode, unit boots up in the VIDEO mode. Use [FNC] key to move on to Test Mode Main screen.
- In conjunction with V.SEL, AV-OUT is also switched (Any AV-OUT can be accepted in Graphic and NAVI).
AVIN→iPod→R_CAM→NAVI→(DVD)→(TV)→AVIN . . .
- Skip Easy Control screen with the [FNC] key.
- OSD is not displayed when input is VIDEO image. (OSD is displayed when the V.SEL is switched. However, OSD is not displayed in VIDEO mode.)

TEST MODE

2-4-5. Tuner

- When unable to access E2PROM, display Error (Tuner screen).
- K3I forced switching
Force to narrow by pressing and holding Preset4.
: xxx.x1MHz
Force to middle by pressing and holding Preset5.
: xxx.x2MHz
Force to wide by pressing and holding Preset6.
: xxx.x3MHz
- Switch Span (K↔M) with [SRC] key + [VOL.DW] key + [Reset] key. (In the KOS series, use [VSEL] key + [VOL.DW] key + [Reset] key)
Span information is displayed on the Information screen.
- In the Tuner source, P-CON is turned OFF when "RDS PS" is "RDS_TEST".

2-4-6. TV Tuner

- If destination is E, set the TV2 default value to "Area 5 (Russia), 8ch (191.25MHz)" (when KTC-V500 is connected).
- If destination is E, set the TV2 default value to "Area 4 (Russia), 8ch (191.25MHz)" (when KTC-V300 is connected).
- HPOSI adjustment mode shall be TV1.

If started up as above, even if the test mode is cleared by ACC, Power OFF→ON, setting values are retained. (Default value is resumed by Reset.)

2-4-7. DVD

- Use CD media KTD-02A and DVD media TDV-540A/TTD-100 and play back in the order of sequence shown in the following Table.
- When Loading, set to Title1-Chapter1.
- Set region code at the position for the time code.
- Title3-Chapter16 (Monoscope) is directly selected by pressing Tenkey4 while adjusting HPOSI.
- CDDA checking (KTD-02A)
Use "Track UP/DW" to play back in the order of sequence as shown: 1↔9↔15↔10↔11↔12↔13↔14↔9↔1...
Track 28 is directly selected by pressing [RDM] key.
- DVD audio/video checking (TDV-540A)
Use "Chapter UP/DW" to play back in the order of sequence as shown in Tables 2-4-3 and 2-4-4.
Use M/S (AM-) on the remote controller to switch Video/Audio.

For DVD video checking				
Title	Chapter			Audiostream1
1	1			Audiostream1
3	6	Level		Audiostream1
3	7	S/N		Audiostream1
3	17	AM/PM noise		Audiostream1
3	8	Frequency characteristics		Audiostream1
3	12	Color measurement		Audiostream1
4	1	1kHz, 0dB	PCM96k/24bit	Audiostream3
4	6	17Hz	PCM96k/24bit	Audiostream3

Table 2-4-3 DVD Video checking

For DVD audio checking				
Title	Chapter			Audiostream1
1	1			Audiostream3
4	1	1kHz, 0dB	PCM96k/24bit	Audiostream3
4	6	17Hz	PCM96k/24bit	Audiostream3
4	16	44kHz	PCM96k/24bit	Audiostream3
4	2	Infinity	PCM96k/24bit	Audiostream3
4	3	L	PCM96k/24bit	Audiostream3
4	4	R	PCM96k/24bit	Audiostream3
4	1	1kHz, 0dB	Dolby	Audiostream1
4	2	Infinity	Dolby	Audiostream1

Table 2-4-4 DVD Audio checking

2-4-8. Audio

- Default setting of Volume should be Step30.
- BAL/FAD setting is changed among MIN↔CENT↔MAX by 1 click.
- Xover setting is changed between MIN↔MAX by 1 click.
- Tone setting is changed among MIN↔CENT↔MAX by 1 click.
- The default setting of Tone (EQ) should be Flat.
- The default setting of System Q should be Off.
- When there is Digital Out terminal, setting should always be the output On setting.
- Default setting of Line Mute should be On.

2-4-9. AVIF

- Default setting of Interruption of AVIN should be On.
- Default setting of R-CAM Interruption should be On.
- Normally an interruption occurs when the R-CAM is detected.
- The Reverse condition is always set at On (R-CAM is available in V.SEL).

TEST MODE

- Default setting of NAVI interruption SP should be Front ALL.
- V-IN mirror mode switching is done by Tenkey3 on the remote controller.

2-4-10. Screen adjustment

- By pressing the remote control Tenkey6 on each video screen, each video screen's Screen adjustment items are displayed.
- Default value is Center. Click once to change between Full Down↔Center↔Full Up.
- Default value of Bright during illumination Off should be MAX. (Bright should be Center when illumination is On.)

2-4-11. BEEP

- Beep regardless of any destination. But do not output BEEP during screen selection and iPod/USB operation. (While in Standby source, BEEP cannot be output because of PWIC restriction.)

2-4-12. DC Offset

- DC Offset detection status (normal/error) clear
By the Service information screen's DC Offset information [Clear] key, clear E2PROM's DC Offset detection information.
- DC Offset detection information is displayed on the Information screen/Service information screen.
- While in the test mode, even if DC Offset is detected, it is not written into E2PROM.
However, a detection operation shall be carried out and when the DC Offset is detected, Protect shall be displayed and it will become an all CH Mute operation.
- Volume setting is changed to the setting values below by pressing the remote control Tenkey2.
Source: CD-CH
Assigned DISC: KTD-02A
Assigned Track: 15 (20Hz, 0dB)
Specified VOL: 28 Step (Mid), 26 Step (Low)

2-4-13. Flicker adjustment

- KVT
 - ① Connect Special Box to enter the test mode.
 - ② Press [AUTO] key to turn flicker adjustment On.
 - ③ Slide the monitor in the foreground, set screen mode to ZOOM and set image mode to VIDEO.
 - ④ Press [AUTO] key to turn flicker adjustment Off.
 - ⑤ Slide the monitor innermost (Test mode default value), set screen mode to FULL, and set image as it is changed during the adjustment.

- DDX/DNX/KOS

- ① Connect the region writing jig to Lx, and turn on the power to turn flicker adjustment On.
- ② Screen mode should be set to ZOOM and image should be set to VIDEO.
- ③ By turning the power Off, flicker adjustment is set to Off.

2-4-14. Panel mechanism

- Touch operations shall be available even when the Tilt mechanism is in the Full Open condition. (Only in "DDX/DNX" series)
- When the ZAC mechanism is set to Open, make the Angle vertical and place Slide to the hindmost. (This is applicable only to "KVT" series.)
- The Slide and Angle settings in the ZAC mechanism are changed among MIN↔CENT↔MAX by 1 click. (This is applicable only to "KVT" series.)

2-4-15. Driver for Panel mechanism motor

- When the [ATT] key is pressed and held, driver port for motor shall be On.
When the [ATT] key is pressed and held, and with the ON key pressed once, the motor is On in the reverse direction, and stopped by the Off key.
When the On key is pressed for the second time, the motor is On in the normal direction, and stopped by the Off key. Subsequently repeat the same steps.

2-4-16. E2PROM Contents clear

- Clear the E2PROM contents which should not remain when shipping the unit.
KVT: Clear the contents of E2PROM with "[SRC] key + AUTO (TI) + [Reset] key".
DDX/DNX: Clear the contents of E2PROM with "[SRC] key + [FNC] key + [Reset] key".
KOS: Clear the contents of E2PROM with "[VSEL] key + [FNC] key + [Reset] key".
Clear OK: Boot up normally.
Clear NG: Error display (at all the models). In "DDX/DNX" series, the SI will not be lit.
Contents of display "E2PROM Clear NG"
The following information is cleared: DC Offset information / Memory information / Retailer mode information / Service information
- If a jig is connected and the region is written in, the following information shall be cleared.
Serial No. / Security code / Touch correction / HPOSI

TEST MODE

correction / Mechanism position adjustment / DC Offset information / Memory information / Retailer mode information / Service information

Note: Since the above data is cleared (not defined) when the E2PROM has been replaced during the service, it is required to re-adjust the data in the test mode.

2-4-17. Security Code writing-in

- To write-in the Security Code (for other destinations than K/R) maintained in pair with the serial number, call out the Security screen from the Setup screen with the [Security Set Up] key.
- When E2PROM's Security Code is blank in other destinations than K/R, Set key is displayed. Press the Set key.
- In the Security Code writing-in screen, run the same operation as when registering Security Code in normal mode, and press [Enter] key to start writing.

Note: The Security Code to be entered here is a set-specific code linked to the serial No.

- If "Complete" is displayed, operation was completed normally, and if "NG" is displayed, operation was completed with errors.

Note: If NG, go to the test mode again and repeat from the 1st step.

● Procedure to clear Security Code

- If the unit is started with the Security ON condition when the destination is K/R, use the following procedure to clear the Security Code (in the mode other than the test mode).

- ① When unit is Reset or is switched on after backup is OFF, with the condition that Security is ON, unit boots up from the Security Code Entry screen.
- ② Manually enter the code from the remote controller following the next procedure where the AudioSW mode has to be selected on the accessory (remote controller).

Step 1: "K" input (Press Tenkey5 2 times)

Step 2: "C" input (Press Tenkey2 3 times)

Step 3: "A" input (Press Tenkey2 once)

Step 4: "Q" input (Press Tenkey7 2 times)

Note: On the other remote controller than that provided as an accessory, pressing Tenkey7 2 times enters "R" in the unit.

When entry is made improperly during the Steps 1~4, repeat code entry from Step 1 after entering another remote controller Key.

- ② When the Security Code input screen is cleared, clearing of the SecurityCode is complete.

2-4-18. Other

- Do not operate the Back Up Memory function in the test mode.

ADJUSTMENT

1. Flicker adjustment

● Condition (As in the previous models)

Video source: VIDEO

Video: Luster white 30%~50%

BRIGHT: MAX

MODEL: ZOOM

● Adjustment procedure

- ① Display luster white 30%~50%
- ② Place a flicker adjustment jig to the monitor and observe the waveform with an oscilloscope.
- ③ Turn VR*** and adjust to make the amplitude of the waveform to minimum.

KVT: VR203, DDX: VR100



Oscilloscope range: 20mV, 0.5mS
(setting at the time of 04 commercial production)

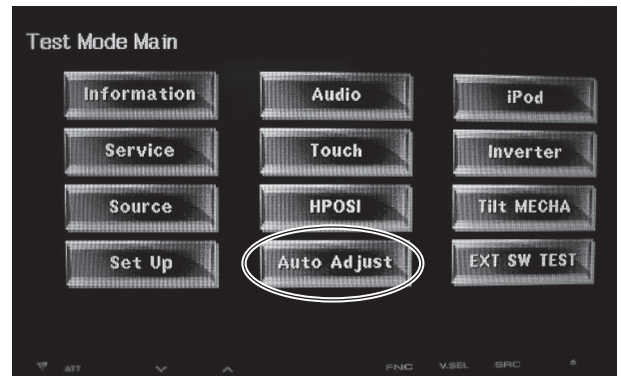
● Note

- ① In checking the screen after the adjustment, move the monitor up and down in order to confirm that the screen does not flicker. (This check is also carried out on the 06 model.)
- ② Noise due to AC200V can be observed in the flicker adjustment jig and oscilloscope and thus carefully set up the power supply and GND of the jig and oscilloscope. In 06 model, GND of the measurement equipment has been floated.

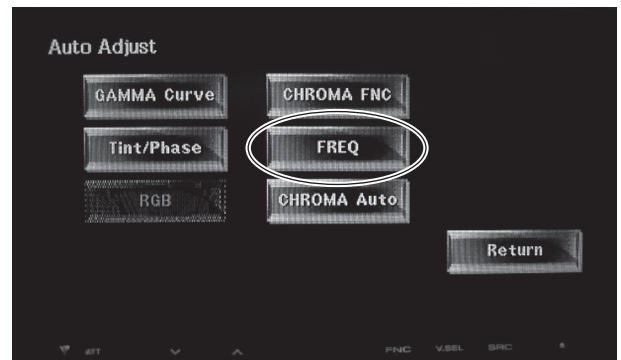
2. Free-run frequency adjustment

● Adjustment procedure

- ① Press Auto Adjust on the Test Mode Main screen.



- ② Press FREQ on the Auto Adjust screen.



Completion of the procedure with "Auto Adjust OK"

DVD video signal is used as the reference signal for the adjustment (15.734kHz).

DVD wall paper that is shown at the start of the TEST mode is fixed to the NTSC display regardless of its destination. Once a DISC is played, the wall paper turns into the display mode of the destination.

(When the DVD video signal is in PAL mode, the adjustment becomes NG.)

ADJUSTMENT

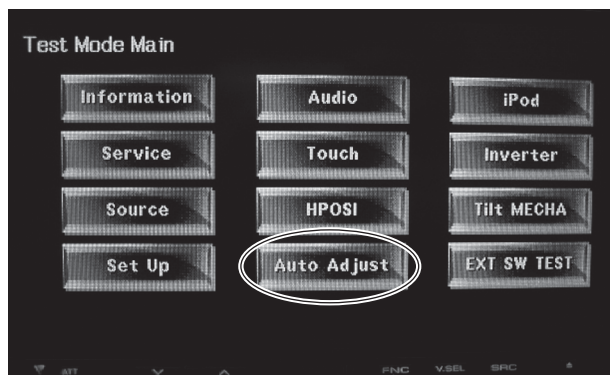
3. TINT/PHASE Adjustment (Auto)

● Adjustment requirement

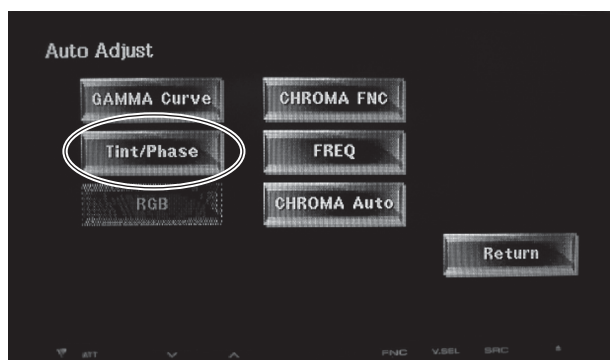
Input signal: Input magenta (PAL) in VIDEO 1.

● Adjustment Method

- ① Press Auto Adjust on the Test Mode Main screen.



- ② Press Tint/Phase on the Auto Adjust screen.

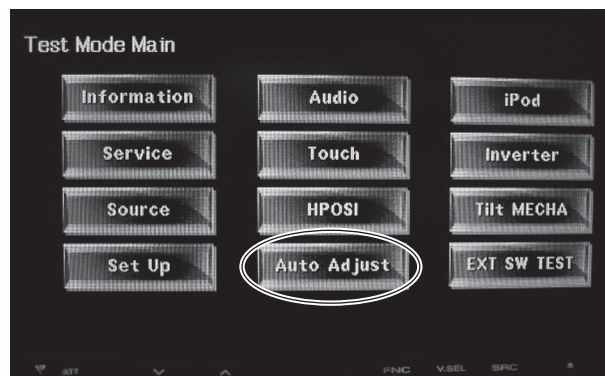


- ③ Confirm that "Auto Set OK" is displayed after the auto adjustment and that no flickering or horizontal stripes is observed on the magenta to complete the adjustment.

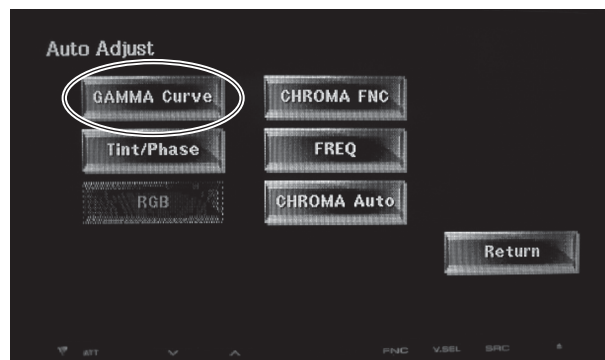
4. Gamma adjustment

● Adjustment method

- ① Press Auto Adjust on the Test Mode Main screen.



- ② Press GAMMA Curve on the Auto Adjust screen.



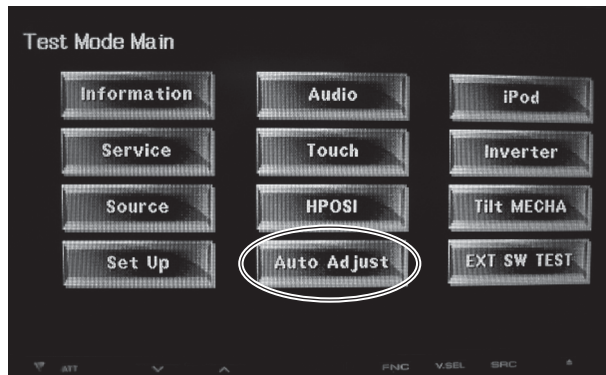
- ③ Confirm that "Auto Set OK" is displayed after the auto adjustment and that lower 8 steps are being brighten gradually from the left side to complete the adjustment.

ADJUSTMENT

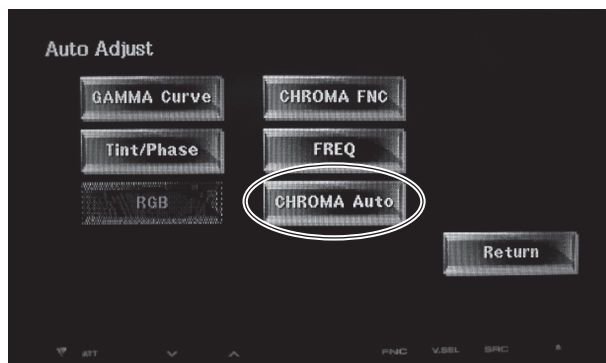
5. Free-run, TINT PHASE and Gamma adjustments

● Adjustment method

- ① Press Auto Adjust on the Test Mode Main screen.



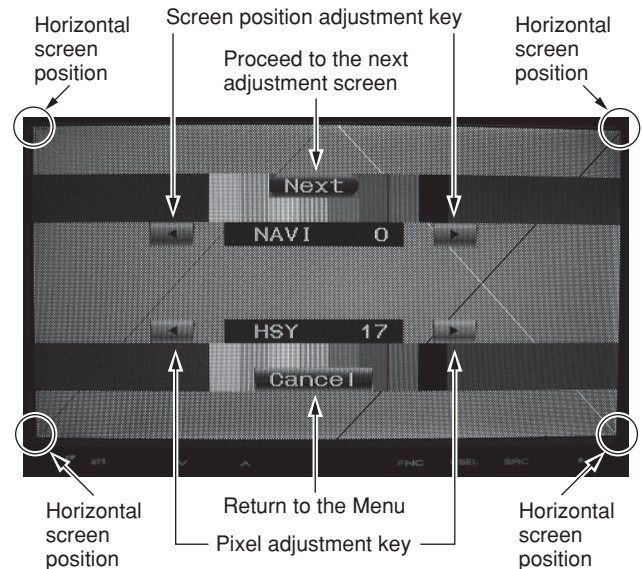
- ② Press CHROMA Auto on the Auto Adjust screen.



- ③ Make the following adjustments at the same time in the order of sequence as shown: Free-run adjustment→TINT PHASE adjustment→Gamma adjustment

6. Adjustment of Horizontal display start position, pixel

Display position should be adjusted after the completion of the free-run adjustment.



Screen position adjustment key (HPOSI): The whole screen's horizontal display starting position adjustment

Pixel adjustment key (HSY): Adjustment of horizontal display position of pixel.

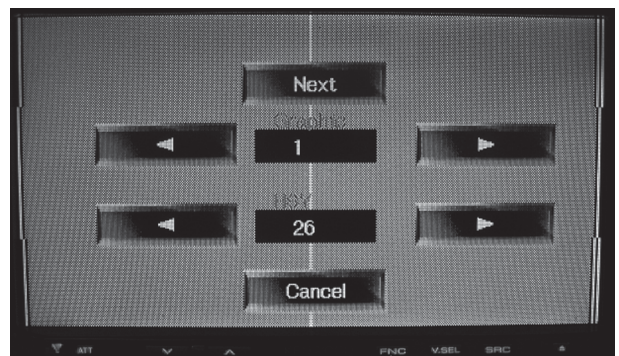
● Image on the adjustment screen

GRAPHIC: Special screen used only for adjustment (See below)

DNX_NAVI: Special screen used only for adjustment of GARMIN (See below)

DDX_NAVI: Input KNA-DV3200.

• GRAPHIC adjustment screen

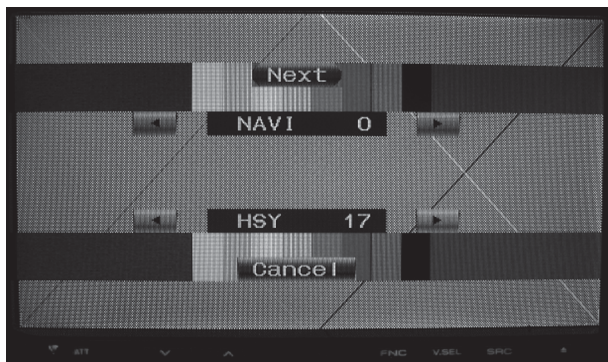


ADJUSTMENT

• DNX GARMIN adjustment screen

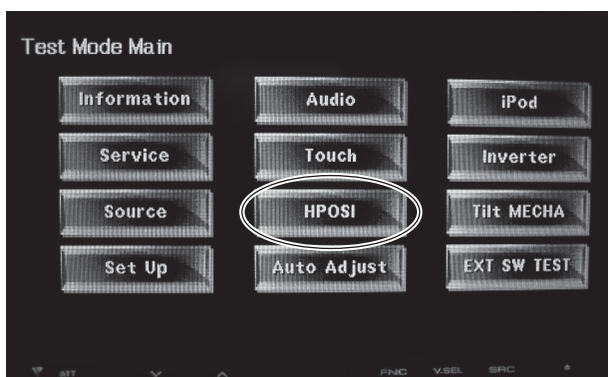
Procedure to display NAVI adjustment screen

- ① Start the set.
- ② Connect special jig on MINI_USB of NAVI.



● Adjustment procedure

- ① Press HPOSI on the Test Mode Main screen.



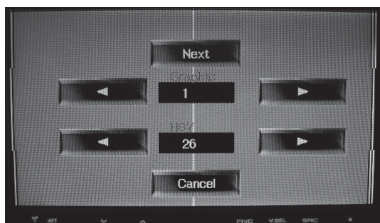
- ② Adjust the horizontal display start position for 2 types of the display, Graphic and NAVI.

- ②-1 Graphic: HSY default value: 20

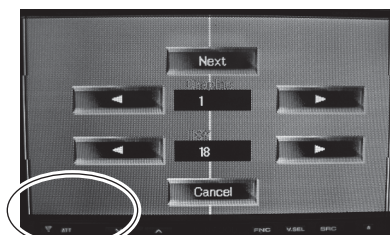
At first, use the pixel adjustment key to eliminate blur from the lower left and upper right corners on the screen. Then, use the screen adjustment key to make the Graphic screen symmetrical.

• Pixel adjustment

OK



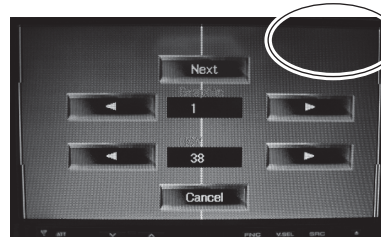
NG



Eliminate brown blur on this corner

NG

Eliminate black blur on this corner

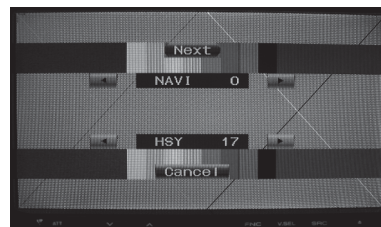


- ②-2-1 DNX_NAVI: HSY default value: 20

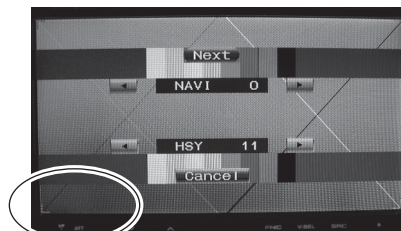
At first, use the pixel adjustment key to eliminate blur from the lower left and upper right corners on the screen. Then, use the screen position adjustment key to make the NAVI screen symmetrical.

• Pixel Adjustment

OK



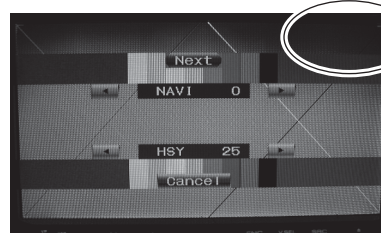
NG



Eliminate brown blur on this corner

NG

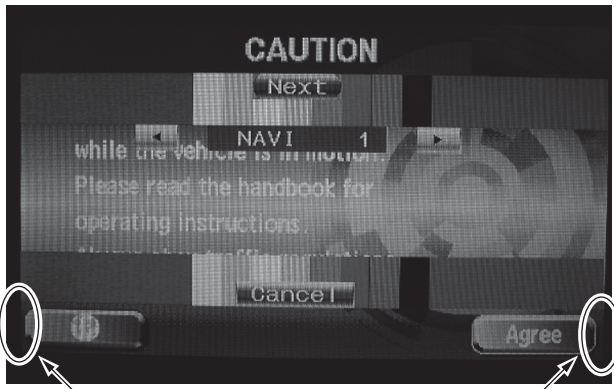
Eliminate black blur on this corner



ADJUSTMENT

②-2-2 DDX_NAVI:

Use the screen adjustment key to make the NAVI screen symmetrical.



Adjust the screen such that KEY (gap) at the right and left side becomes symmetrical

Note 1

If the center of the screen cannot be located right on the middle of the display, while adjusting the horizontal display start position, (i.e., when the display moves a bit too left when it is moved by 1 step toward left and it moves a bit too right when it is moved by 1 step toward right), press "NEXT" to finalize the adjustment when the display is located towards the left. (The screen is moved toward the left by 1 or 2 dots).

Note 2

Allowable limit of adjustment: 0~50 (Note that the screen can be adjusted between 0~100.)

Please make sure that the steps over 50 are not used in the adjustment.

Note 3

Changes in the adjustment procedure. Please make sure that the following changes are observed:

- If the blur is observed at the upper side of the entire screen when the Step is 20 (default); Decrease the step (use the left KEY) to make adjustment.
- If the blur is observed at the lower side of the entire screen when the Step is 20 (default); Increase the step (use the right KEY) to make adjustment.
- If the blur is observed on the entire screen when the Step is 20 (default) and it is difficult to tell if the bur is at the upper or lower side of the screen; Increase the step (use the right KEY) to make adjustment.
- If the blur is hardly observed on the entire screen when the Step is 20 (default) (and it is OK not to make the adjustment); Shift the step for the moment until the blur is observed and then re-adjust the screen.

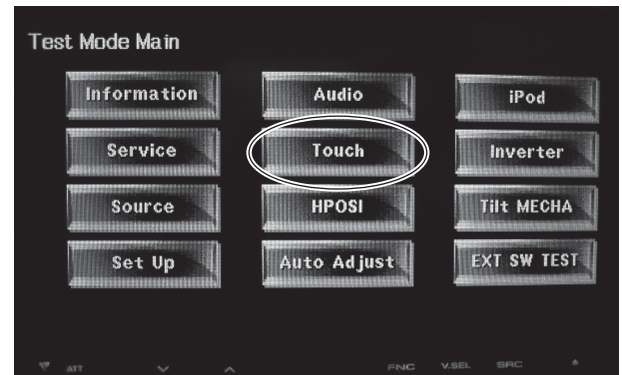
After adjustment, press the [Next] key, and if "Hposi OK" is displayed, adjustment is completed.

7. Touch panel adjustment

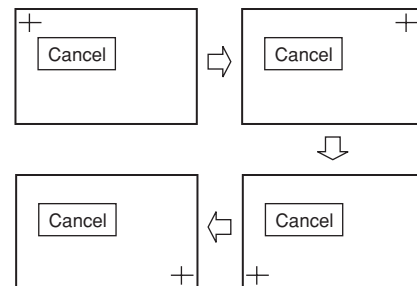
Touch panel should be adjusted after the free-run and screen position adjustments.

● Adjustment procedure

- ① Press the Touch Key on the Test Mode Menu screen to enter the Touch panel adjustment screen.



- ② Touch the center of "+" mark below in the following order. Upper left→Upper right→Lower left→Lower right
To touch, make sure to use the designated touch stick.
- ③ After adjustment is completed for 4 areas, if "Write OK" is displayed, the adjustment is completed.
Press Return to exit from the Touch screen.



If the center of "+" mark wasn't pressed accurately, press Cancel to start over the adjustment.

Note

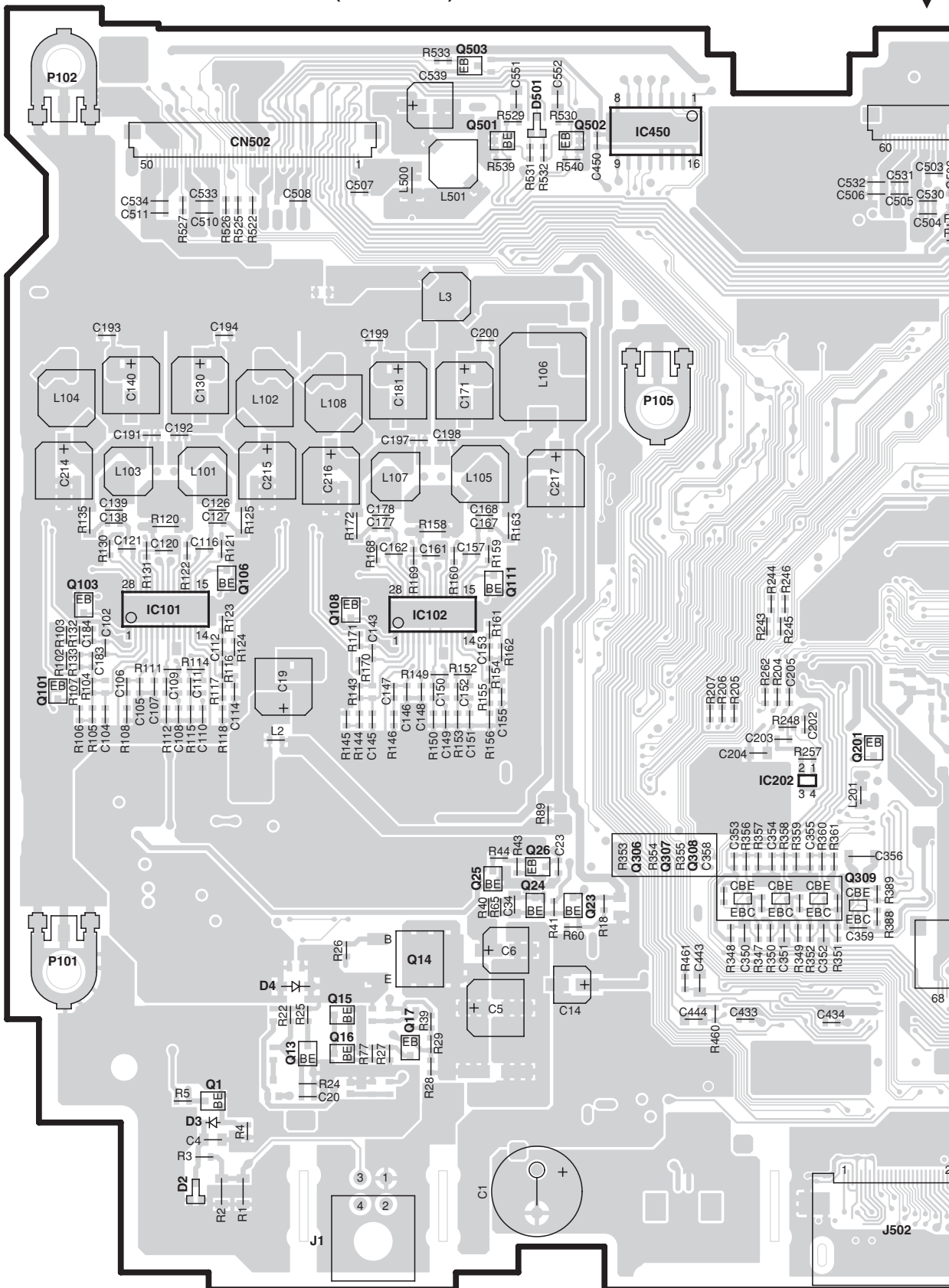
The touch panel adjustment data is finalized when the touch stick is released from the mark.

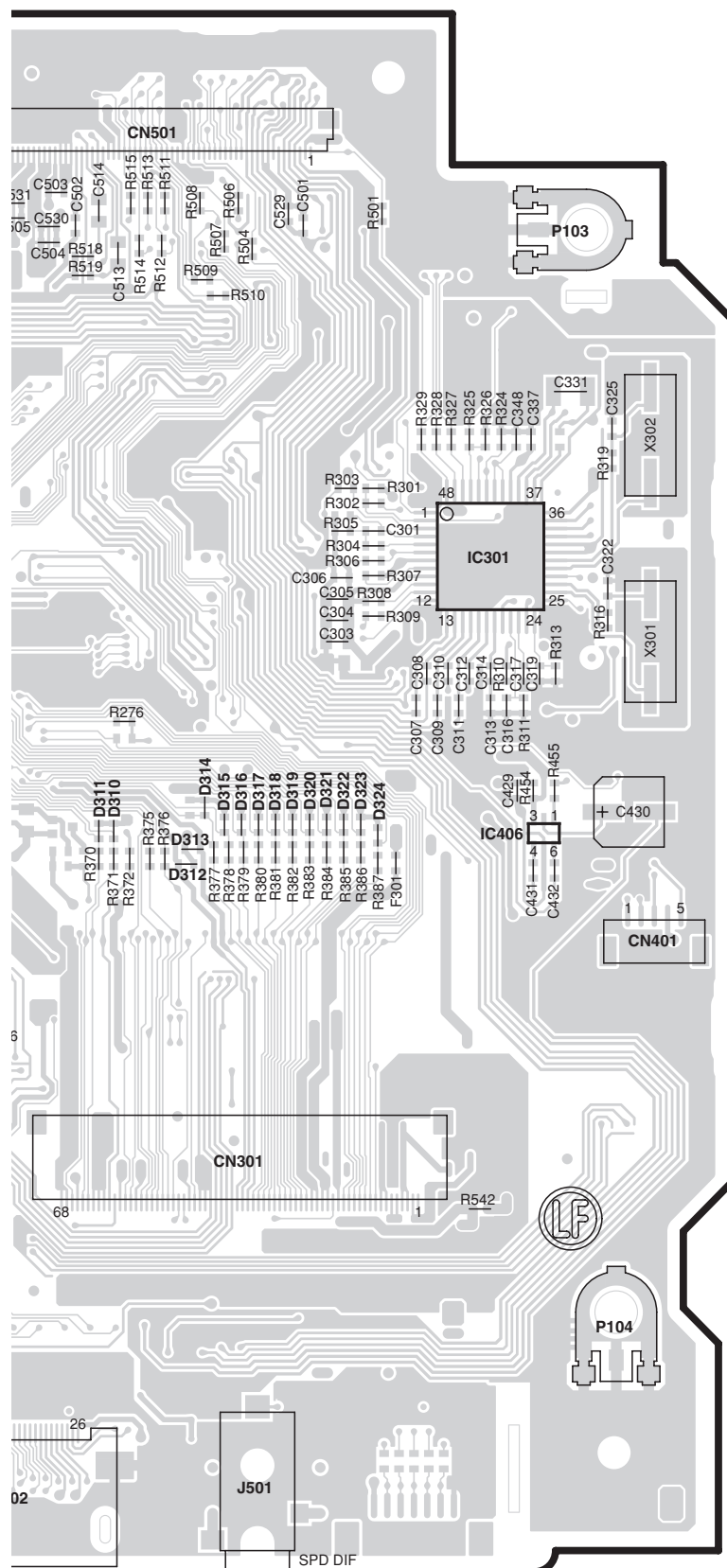
Therefore, the Knack for Adjustment is not to release the touch stick from the mark right after touching the center of the "+" mark, but to confirm that the stick is exactly on the center of the "+" mark while keeping touching the screen. (If the stick is not exactly on the center of the mark, move the stick onto the center of the mark while keeping touching the screen.)

Then, quickly and vertically release the stick from the screen.

PC BOARD (COMPONENT SIDE VIEW)

VIDEO CONTROL UNIT X14-983x-xx (J76-0389-32)



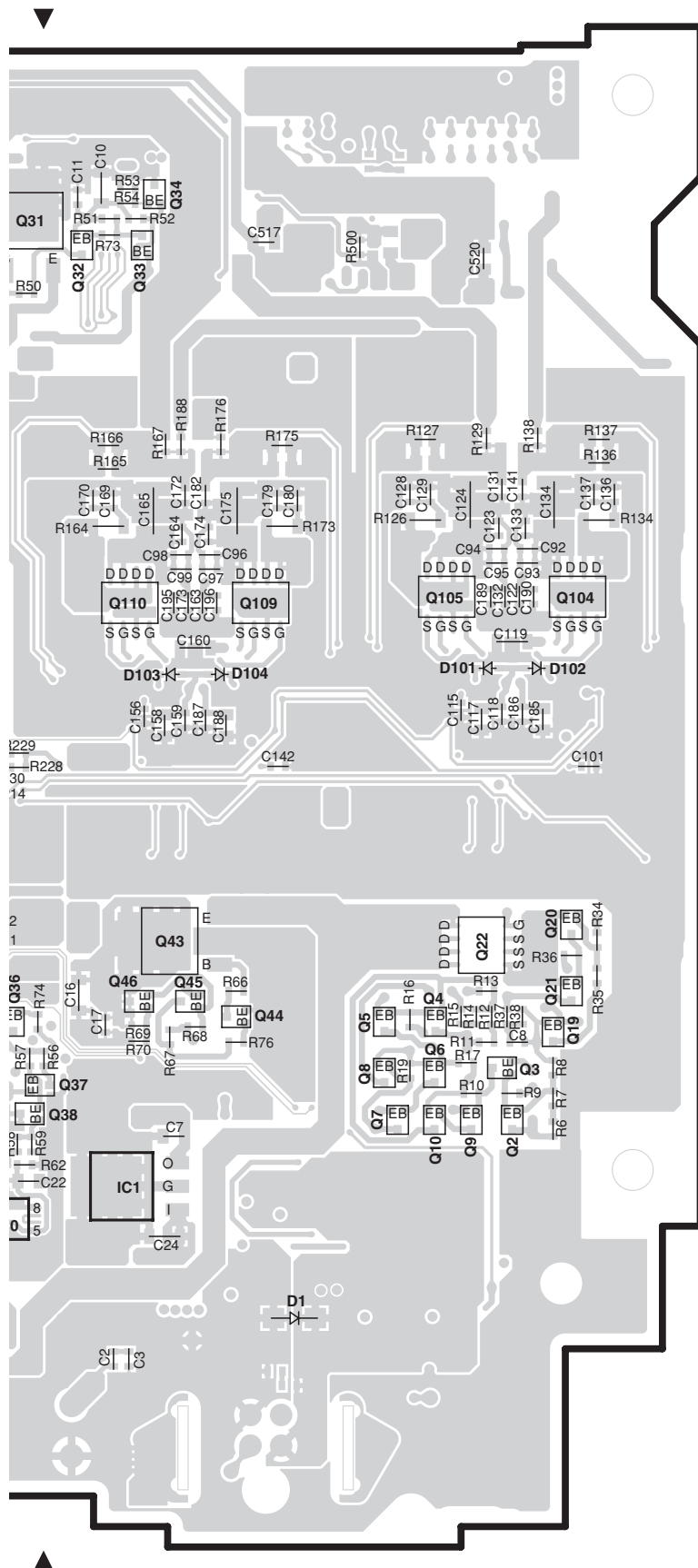


X14-983x-xx

Ref. No.	Address
IC101	4B
IC102	4C
IC202	5E
IC301	3G
IC406	4G
Q1	6B
Q13	6C
Q14	5C
Q15	6C
Q16	6C
Q17	6C
Q23	5D
Q24	5D
Q25	5C
Q26	5D
Q101	4A
Q103	4B
Q106	4B
Q108	4C
Q111	4D
Q201	5E
Q306	5D
Q307	5D
Q308	5D
Q309	5E
Q501	2C
Q502	2D
Q503	2C

Refer to the schematic diagram for the values of resistors and capacitors.

50



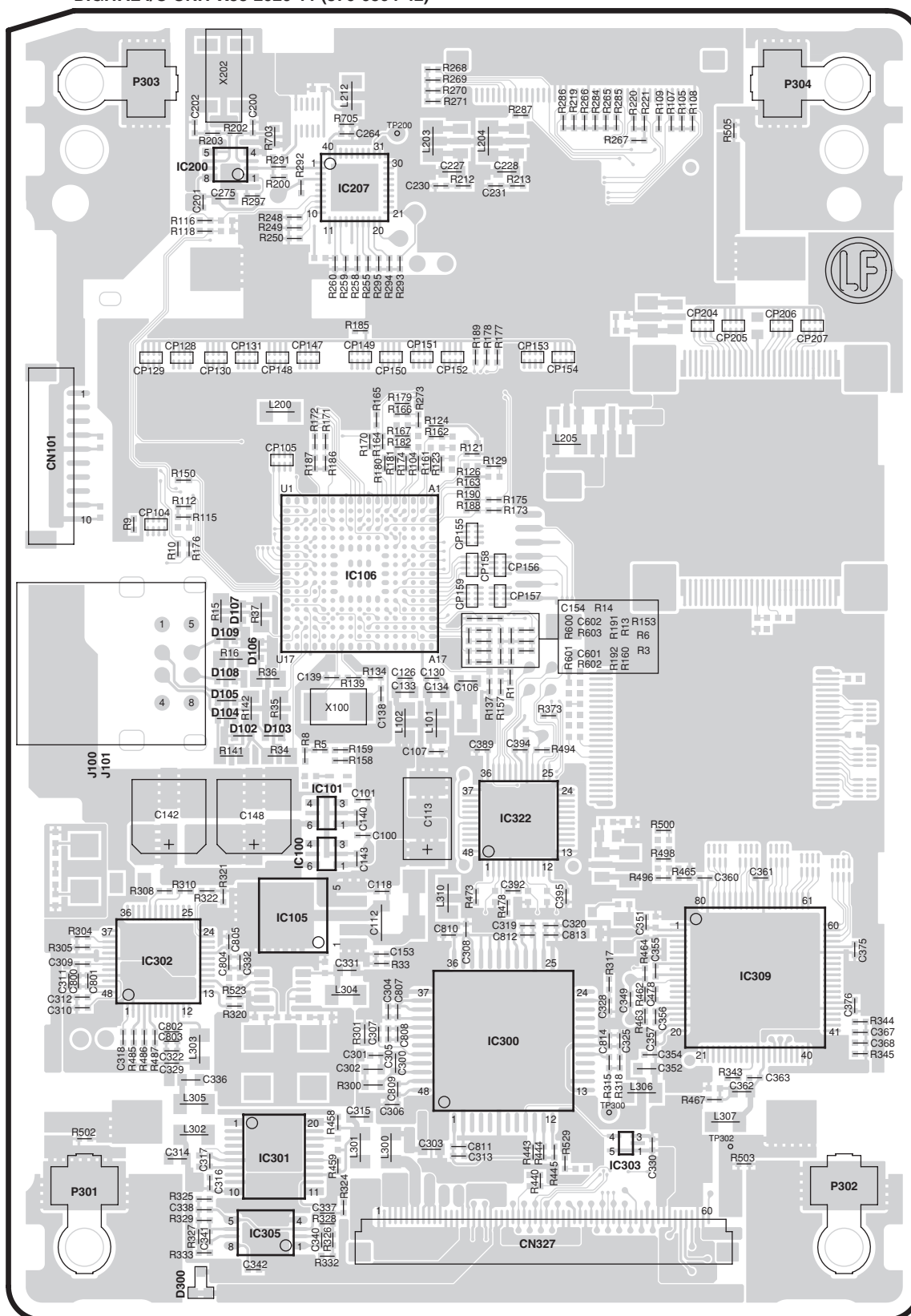
X14-983x-xx

Ref. No.	Address	Ref. No.	Address
IC1	6P	Q22	5Q
IC2	5M	Q31	2O
IC10	6O	Q32	2P
IC201	4N	Q33	2P
IC203	3N	Q34	2P
IC205	4O	Q35	5O
IC302	4L	Q36	5O
IC303	4L	Q37	5P
IC304	4L	Q38	5P
IC400	5L	Q43	5P
IC401	5L	Q44	5P
IC402	4M	Q45	5P
IC403	4M	Q46	5P
IC404	3M	Q104	3R
IC405	3M	Q105	3Q
IC407	6O	Q109	3P
IC408	6N	Q110	3P
IC501	6M	Q203	5N
IC502	6L	Q204	3O
IC503	2O	Q205	4O
Q2	5Q	Q206	3N
Q3	5Q	Q207	4N
Q4	5Q	Q208	3O
Q5	5Q	Q209	3O
Q6	5Q	Q210	3O
Q7	5Q	Q301	3L
Q8	5Q	Q304	3L
Q9	5Q	Q305	3M
Q10	5Q	Q401	3L
Q19	5R	Q504	6M
Q20	5R	Q508	2O
Q21	5R		

Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD (COMPONENT SIDE VIEW)

DIGITAL I/O UNIT X88-2020-11 (J76-0394-42)



X88-2020-11

Ref. No	Address
IC100	5V
IC105	5V
IC106	4V
IC200	2V
IC207	2V
IC301	6V
IC302	5V
IC305	6V
IC309	5X
IC322	5W

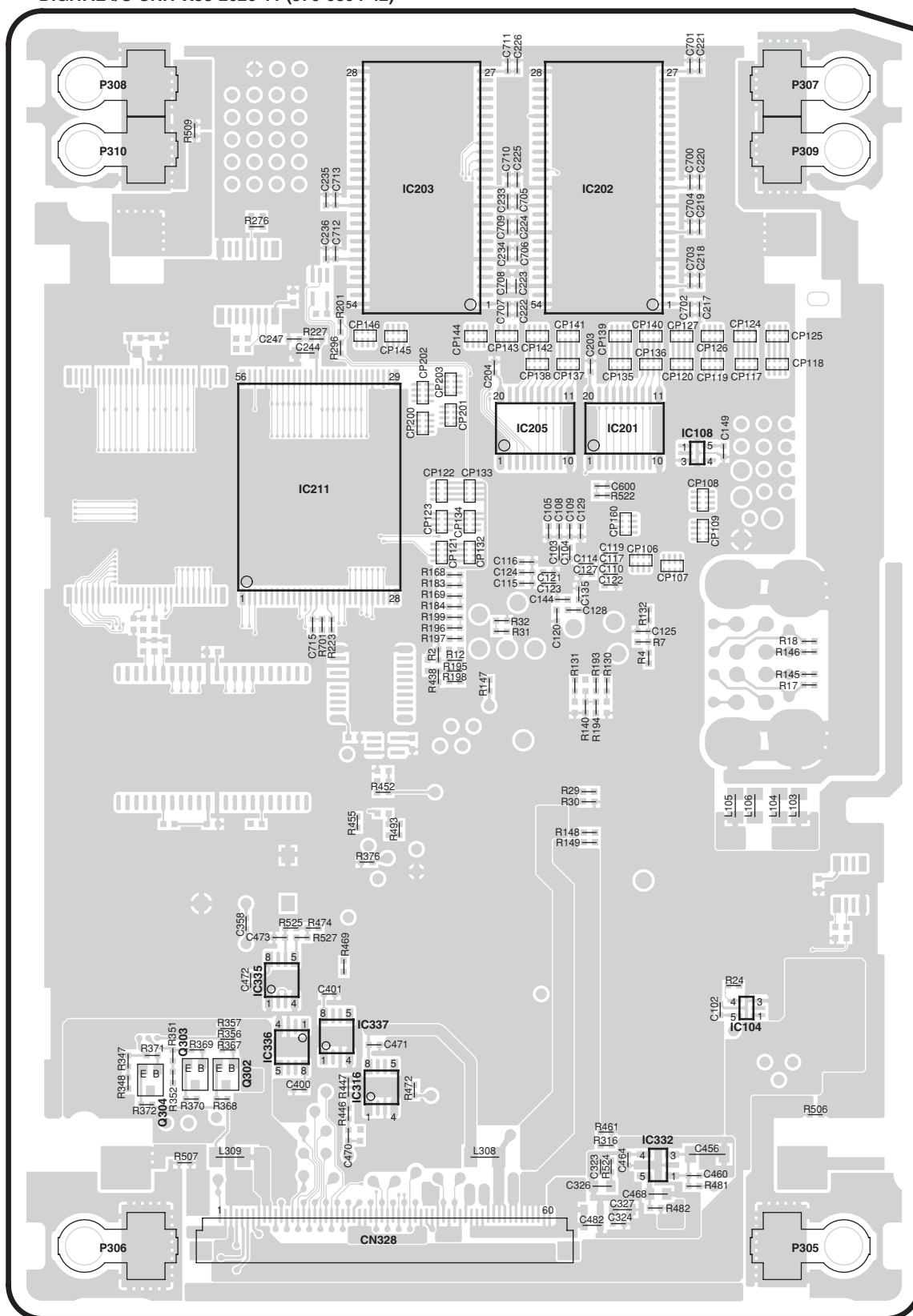
Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD (FOIL SIDE VIEW)

DIGITAL I/O UNIT X88-2020-11 (J76-0394-42)

X88-2020-11

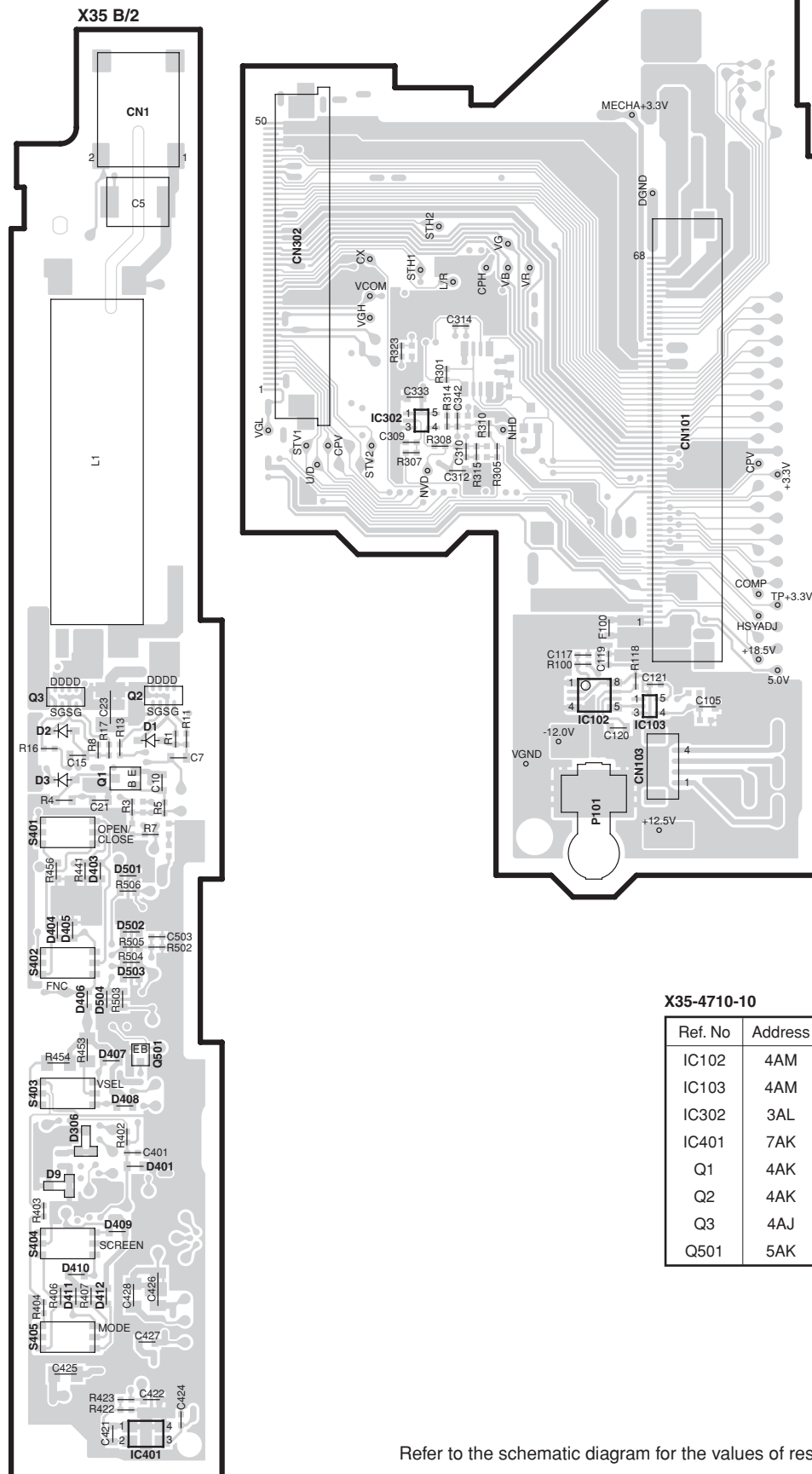
Ref. No	Address
IC104	6AC
IC108	3AC
IC201	3AC
IC202	2AC
IC203	2AB
IC205	3AB
IC211	3AB
IC316	6AB
IC332	6AC
IC336	6AA
IC337	6AB
Q302	6AA
Q303	6AA
Q304	6AA



Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD (FOIL SIDE VIEW)

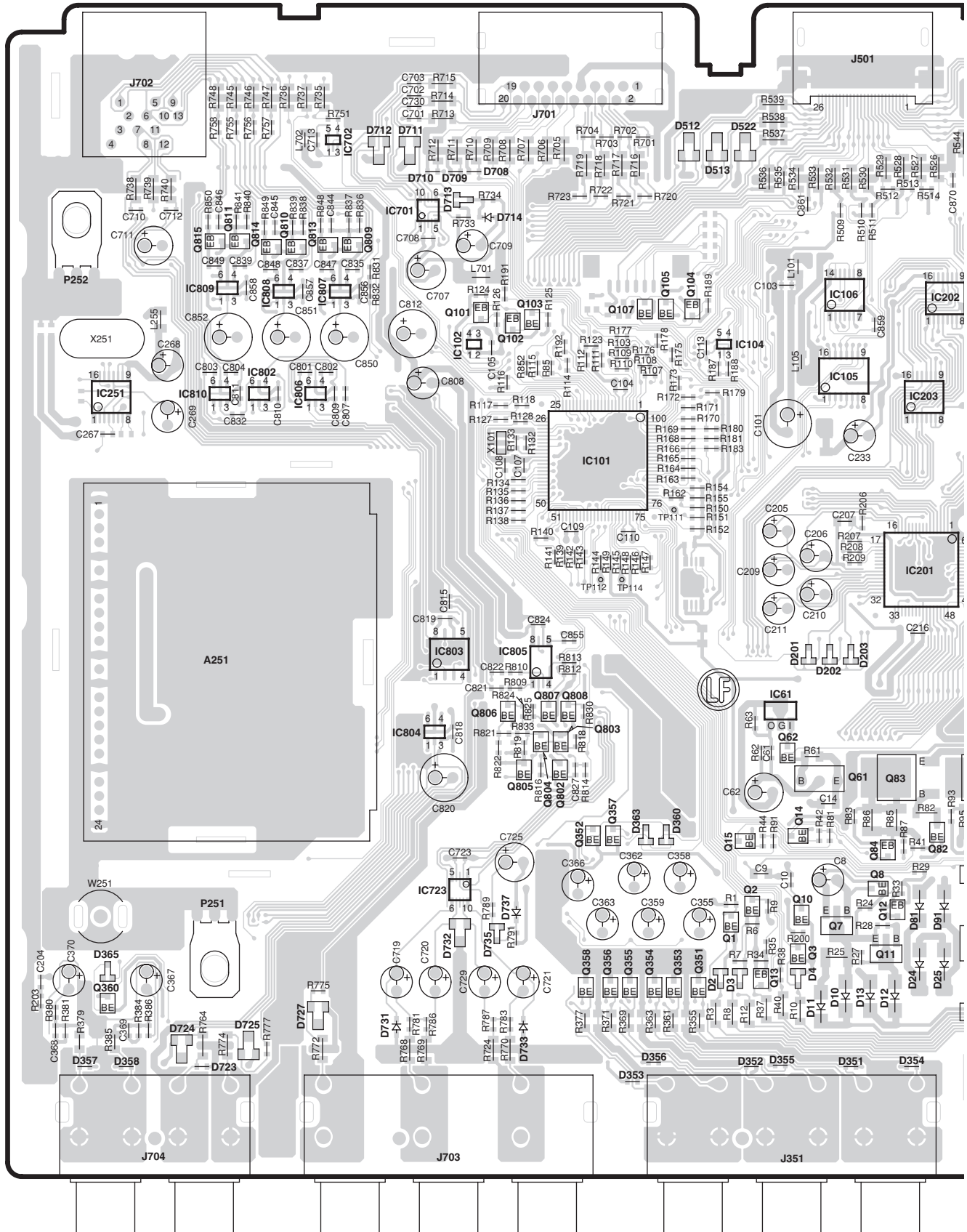
VIDEO UNIT X35-4710-10 A/2 (J76-0385-22)



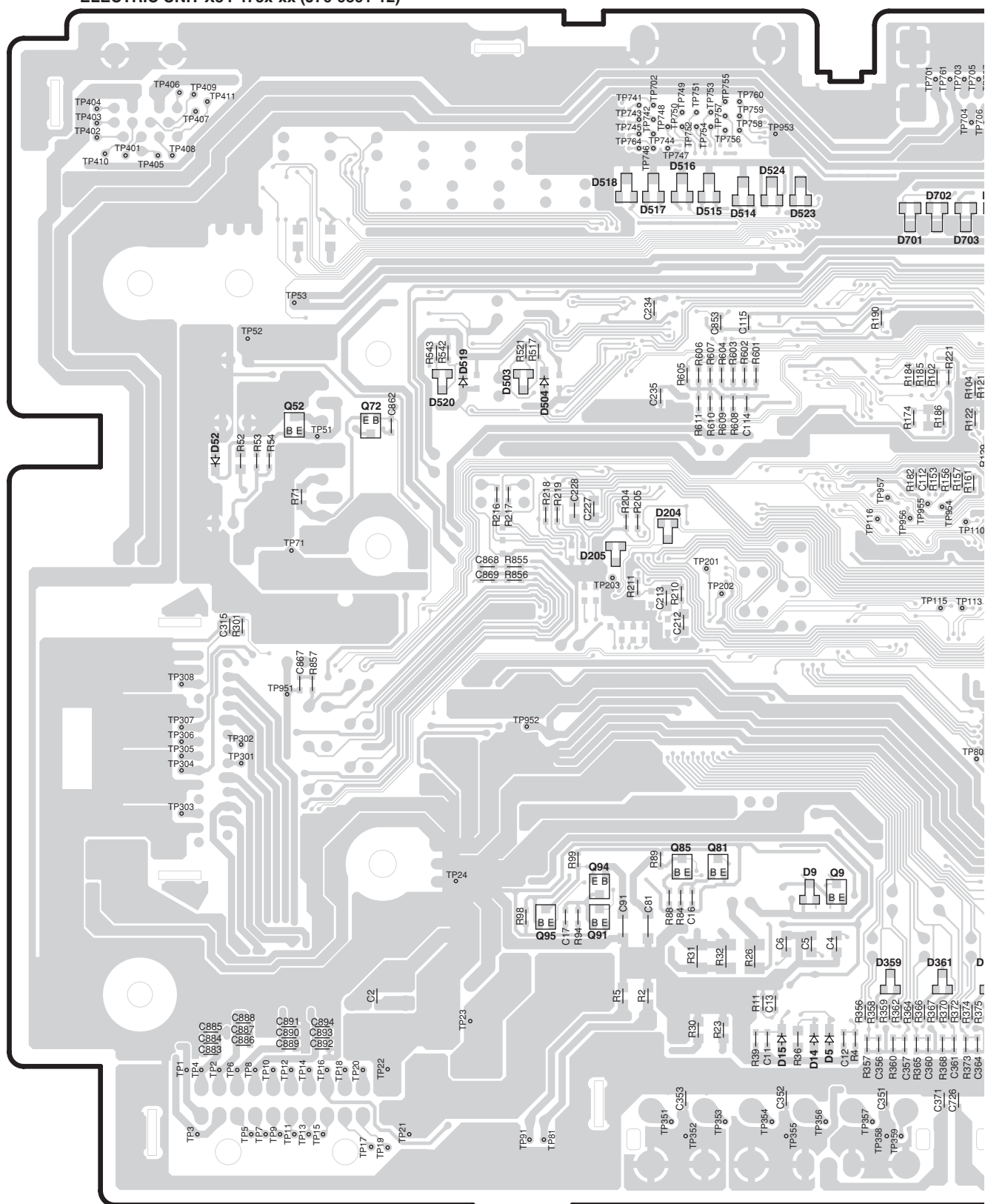
Refer to the schematic diagram for the values of resistors and capacitors.

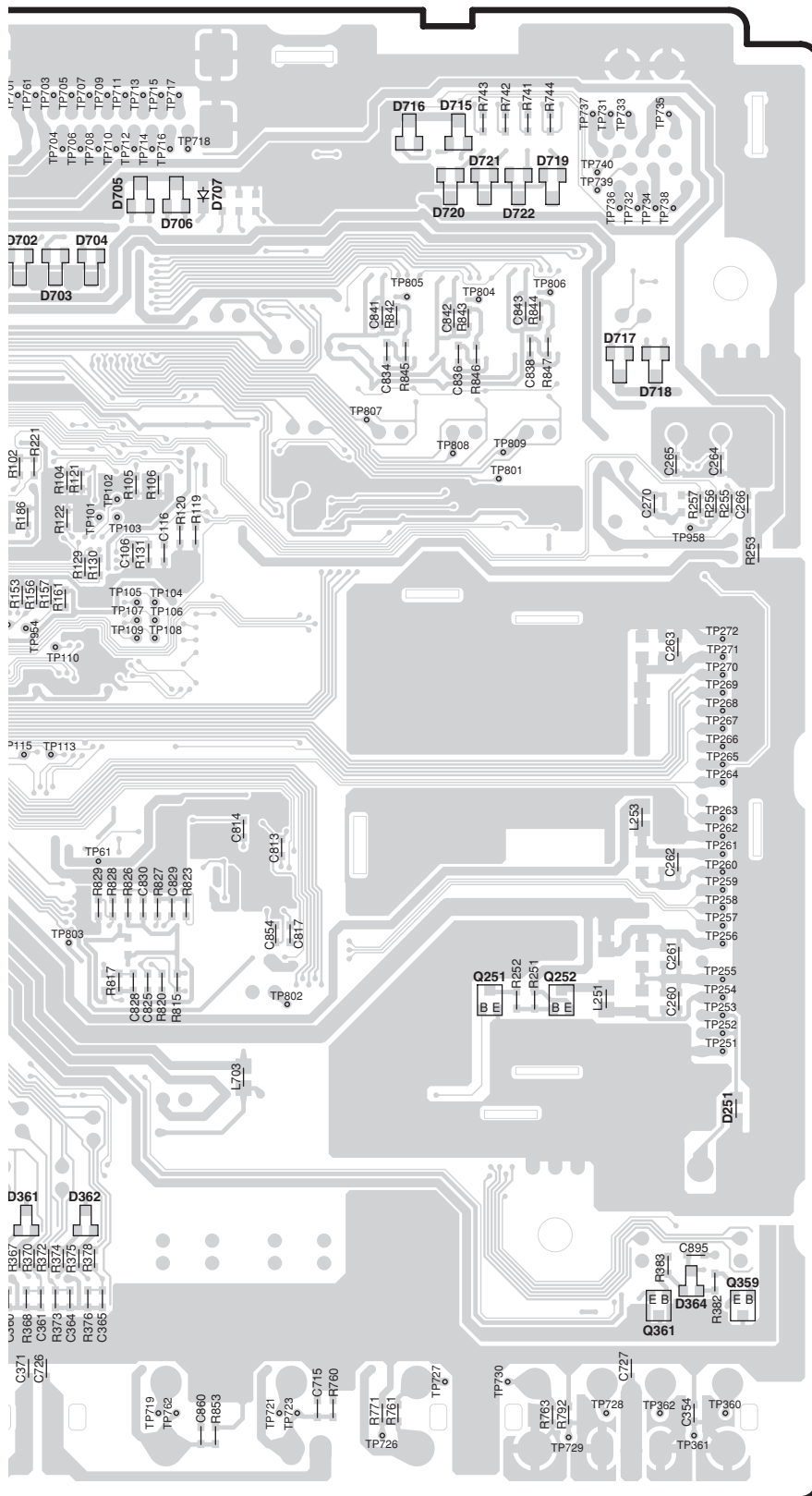
PC BOARD (COMPONENT SIDE VIEW)

ELECTRIC UNIT X34-475x-xx (J76-0391-12)



ELECTRIC UNIT X34-475x-xx (J76-0391-12)





X34-475x-xx

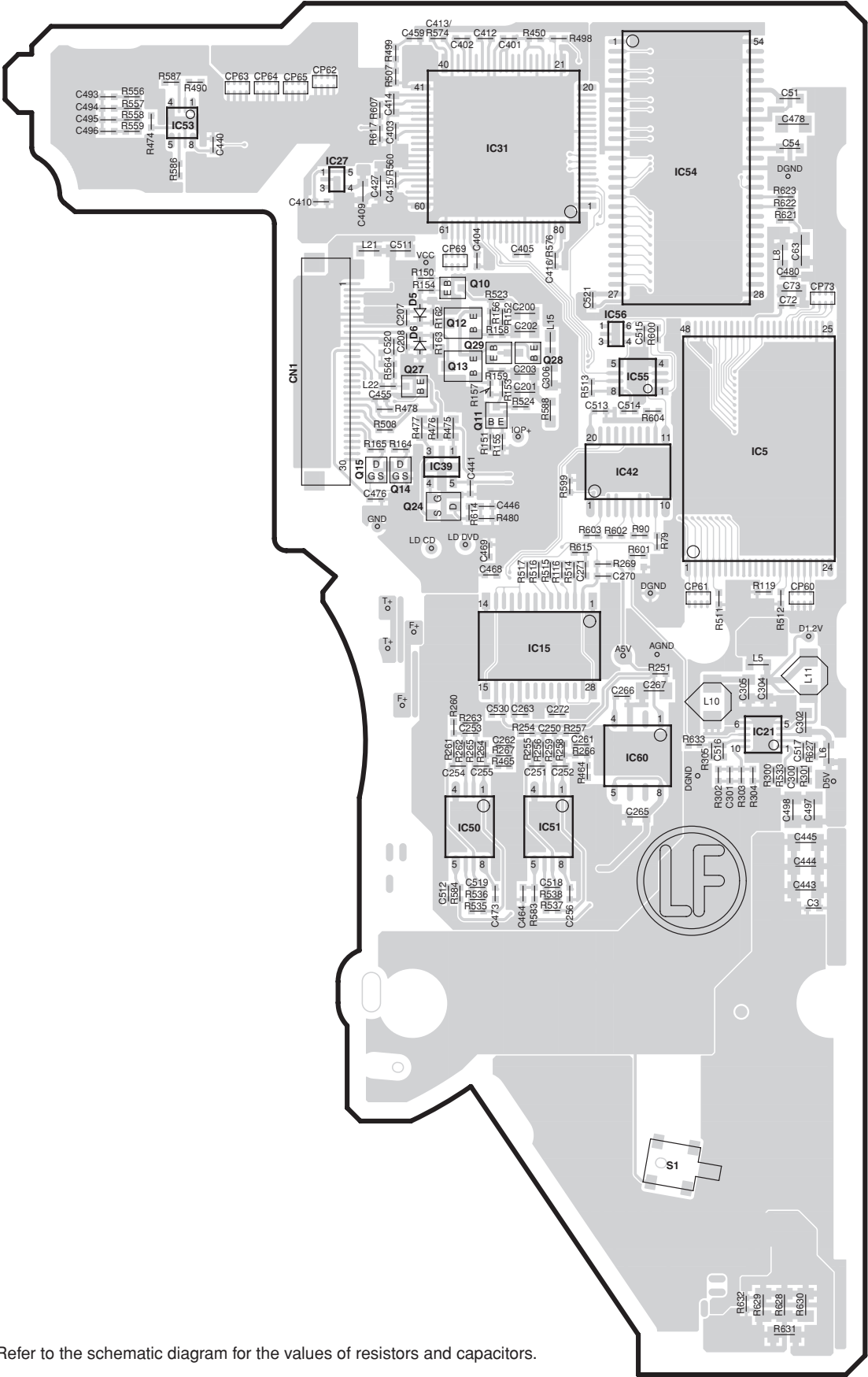
Ref. No	Address
Q9	5BC
Q52	3AZ
Q72	3BA
Q81	5BB
Q85	5BB
Q91	5BB
Q94	5BB
Q95	5BB
Q251	5BE
Q252	5BF
Q359	6BF
Q361	6BF

Refer to the schematic diagram for the values of resistors and capacitors.

KVT-719DVD/729DVD
/729DVDY/739DVD

PC BOARD (COMPONENT SIDE VIEW)

DVD UNIT X37-1120-03 (J76-0162-02)



X37-1120-03		
Ref. No	Address	
IC5	3BL	
IC15	4BK	
IC21	4BL	
IC39	3BK	
IC42	3BL	
IC50	5BK	
IC51	5BK	
IC54	2BL	
IC55	3BL	
IC56	3BL	
IC60	5BL	
Q10	3BK	
Q11	3BK	
Q12	3BK	
Q13	3BK	
Q14	3BK	
Q15	3BJ	
Q24	3BK	
Q27	3BK	
Q28	3BK	
Q29	3BK	

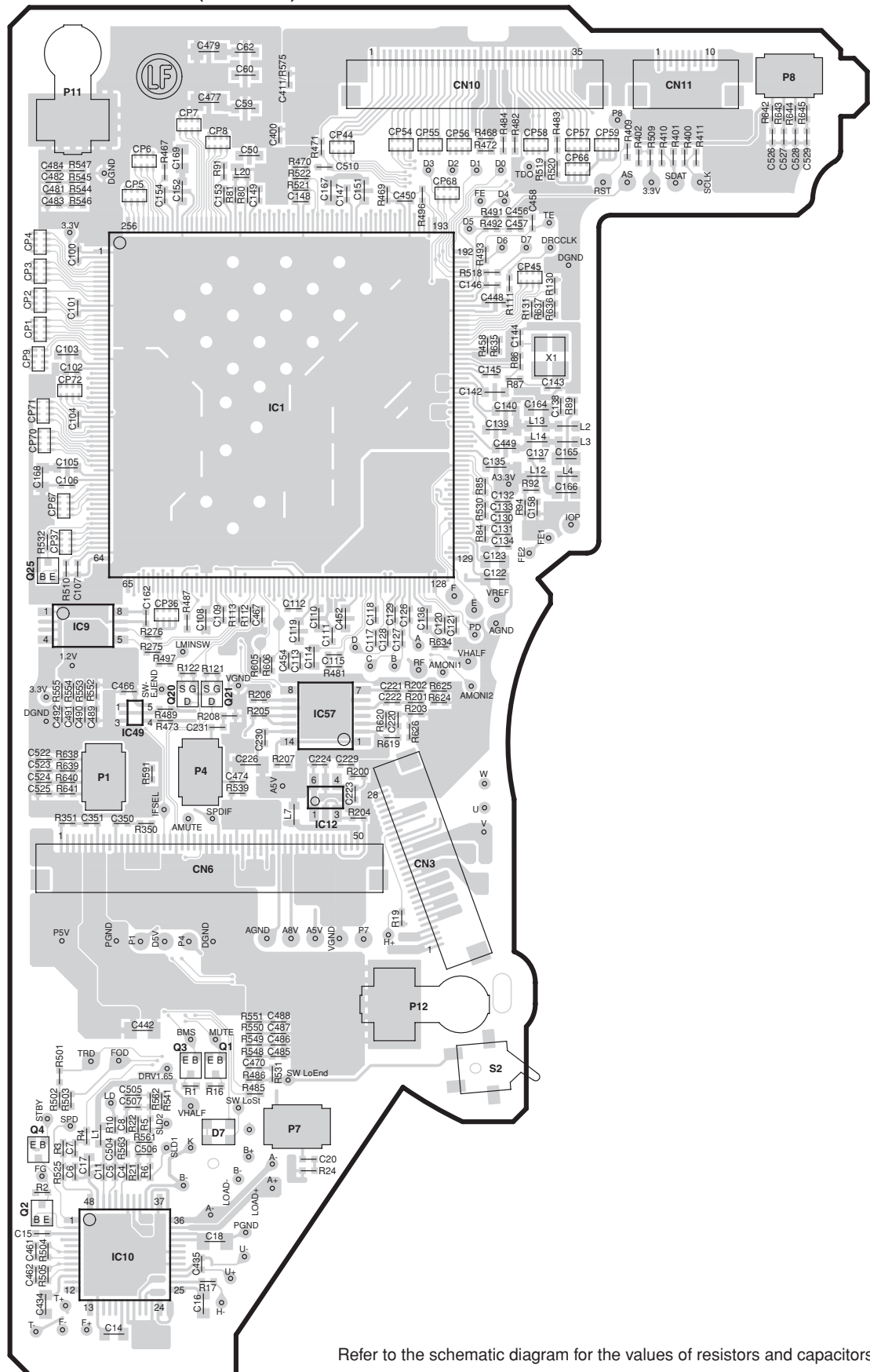
Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD (FOIL SIDE VIEW)

DVD UNIT X37-1120-03 (J76-0162-02)

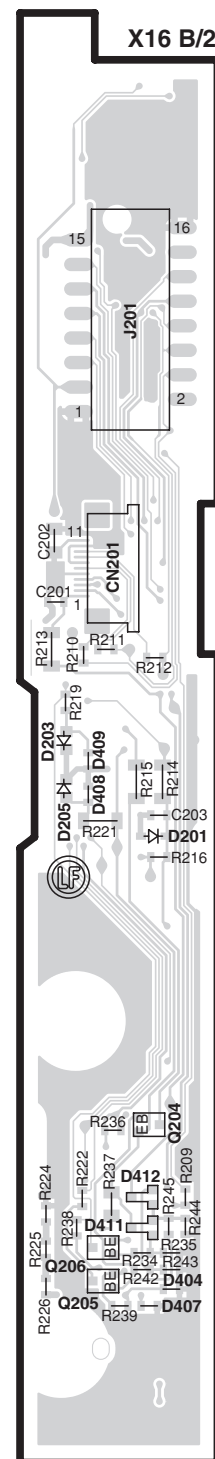
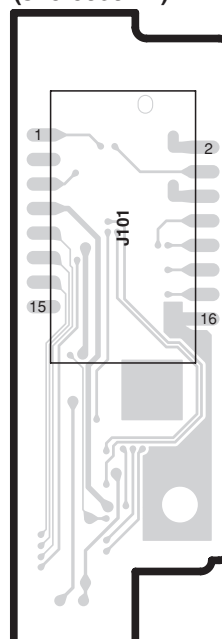
X37-1120-03

Ref. No	Address
IC1	3BP
IC9	4BO
IC10	7BO
IC12	5BP
IC49	4BO
IC57	4BP
Q1	6BO
Q2	6BN
Q3	6BO
Q4	6BN
Q20	4BO
Q21	4BO
Q25	4BN



Refer to the schematic diagram for the values of resistors and capacitors.

(FOIL SIDE VIEW)

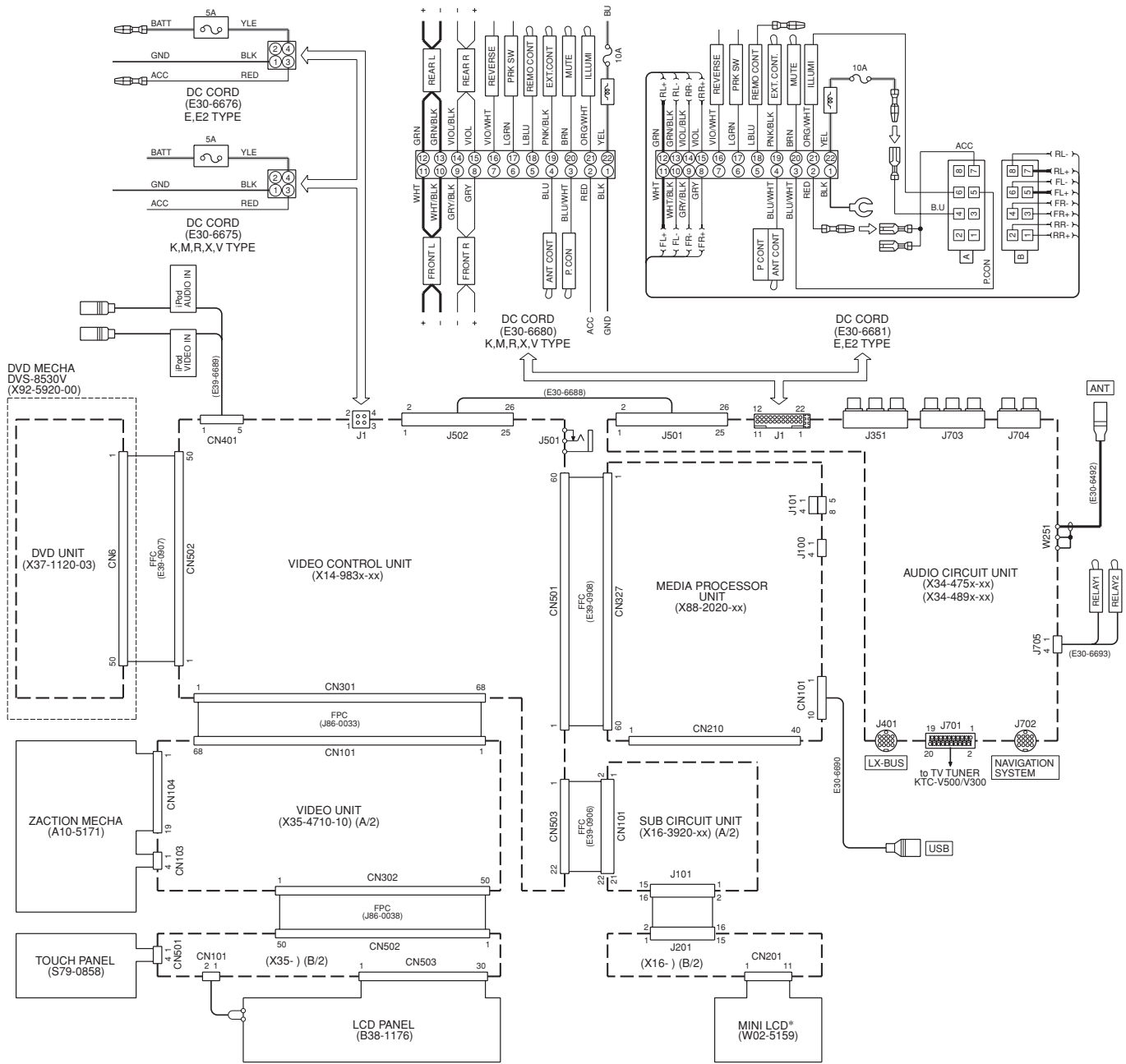


Ref. No	Address
IC201	5BS
Q101	3BU

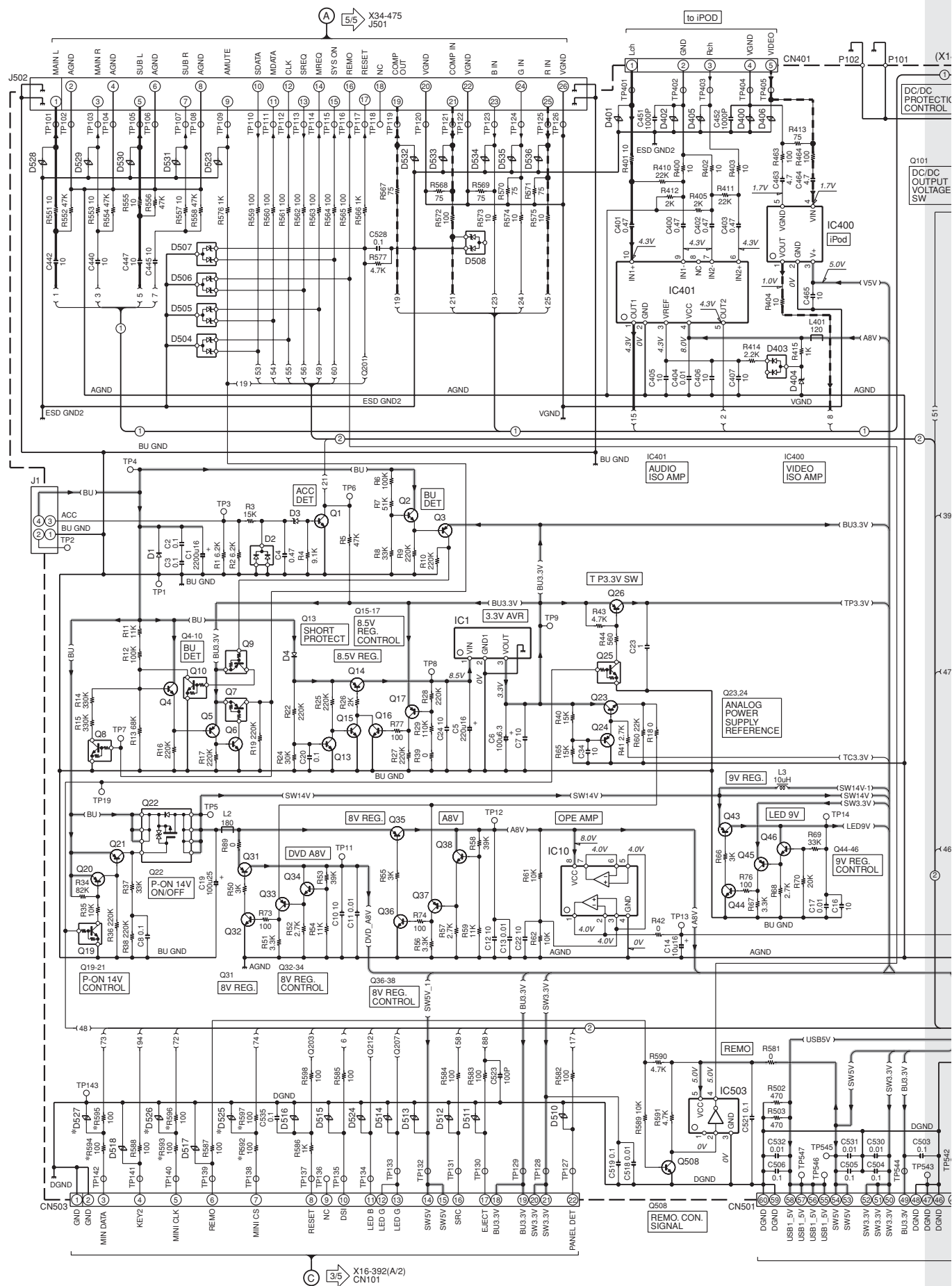
Ref. No	Address
Q206	6BW

62

INTERCONNECTION DIAGRAM

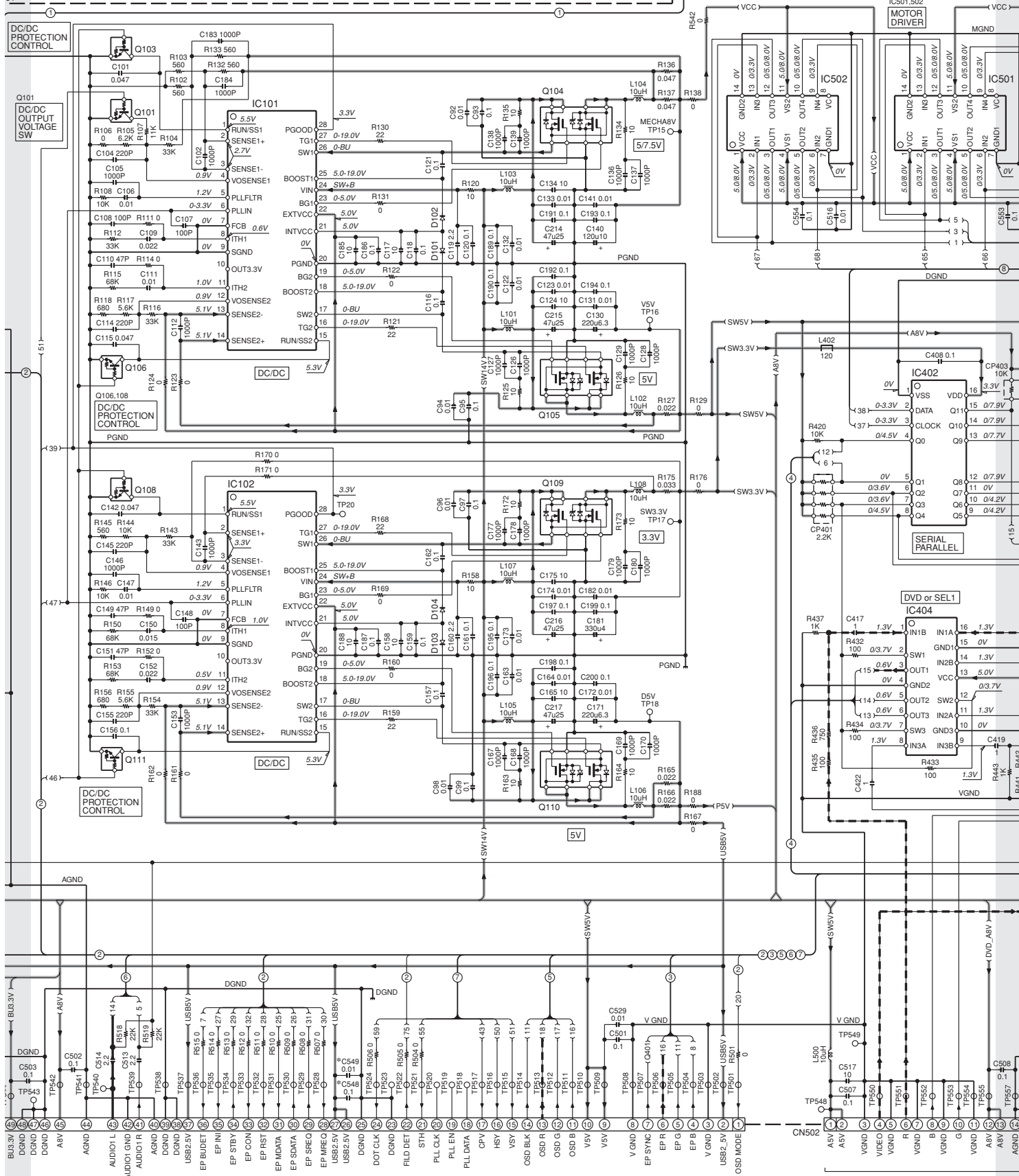


*KVT-8#9DVD ONLY

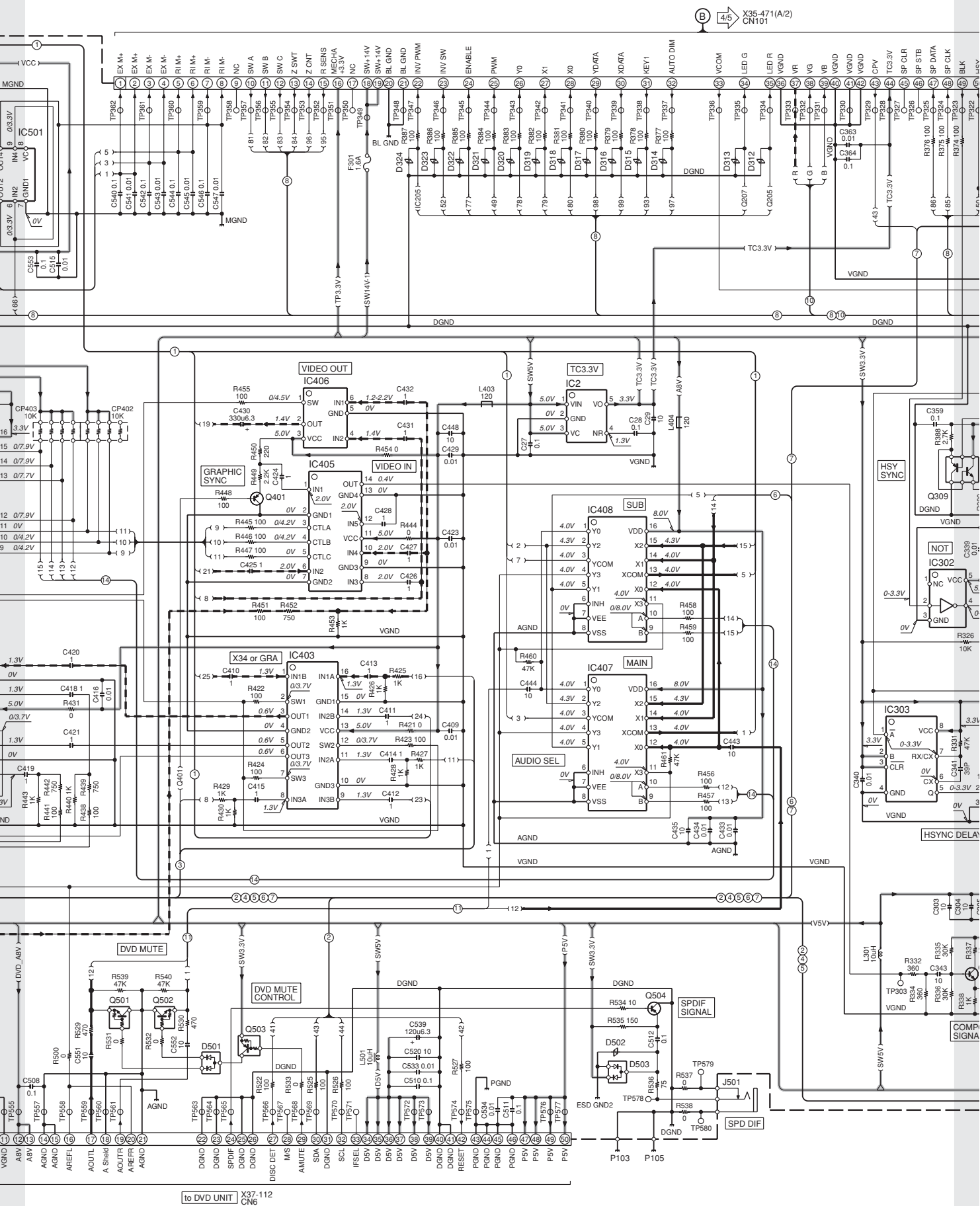


01

(X14-983x-xx)



D 2/5 X88-202
CN327 or CN328



MODEL NAME	UNIT NO.	④	C450, 548,549	D525, 527	IC450	Q211, 212	R258	R259	R263, 592-599	R264, 599
KVT-719D0D	0-10	—	—	—	—	—	—	10K	—	YE
KVT-739D0D	3-21	—	—	—	—	—	YES	—	—	YE
KVT-729D0D	2-71	YES	—	—	—	—	YES	3.3K	—	YE
KVT-729D0D	2-21	YES	—	—	—	—	—	—	—	YE
KVT-739D0D	2-71	YES	—	—	—	—	YES	10K	—	YE
KVT-739D0D	2-71	YES	—	—	—	—	YES	30K	—	YE
KVT-819D0D	0-11	—	YES	YES	YES	YES	—	10K	YES	—
KVT-839D0D	3-22	—	YES	YES	YES	YES	YES	—	YES	—
KVT-829D0D	2-72	YES	YES	YES	YES	YES	YES	3.3K	YES	—
KVT-829D0D	2-22	YES	YES	YES	YES	YES	YES	10K	YES	—
KVT-839D0D	0-22	YES	YES	YES	YES	YES	YES	10K	YES	—
KVT-839D0D	0-22	YES	YES	YES	YES	YES	YES	10K	YES	—



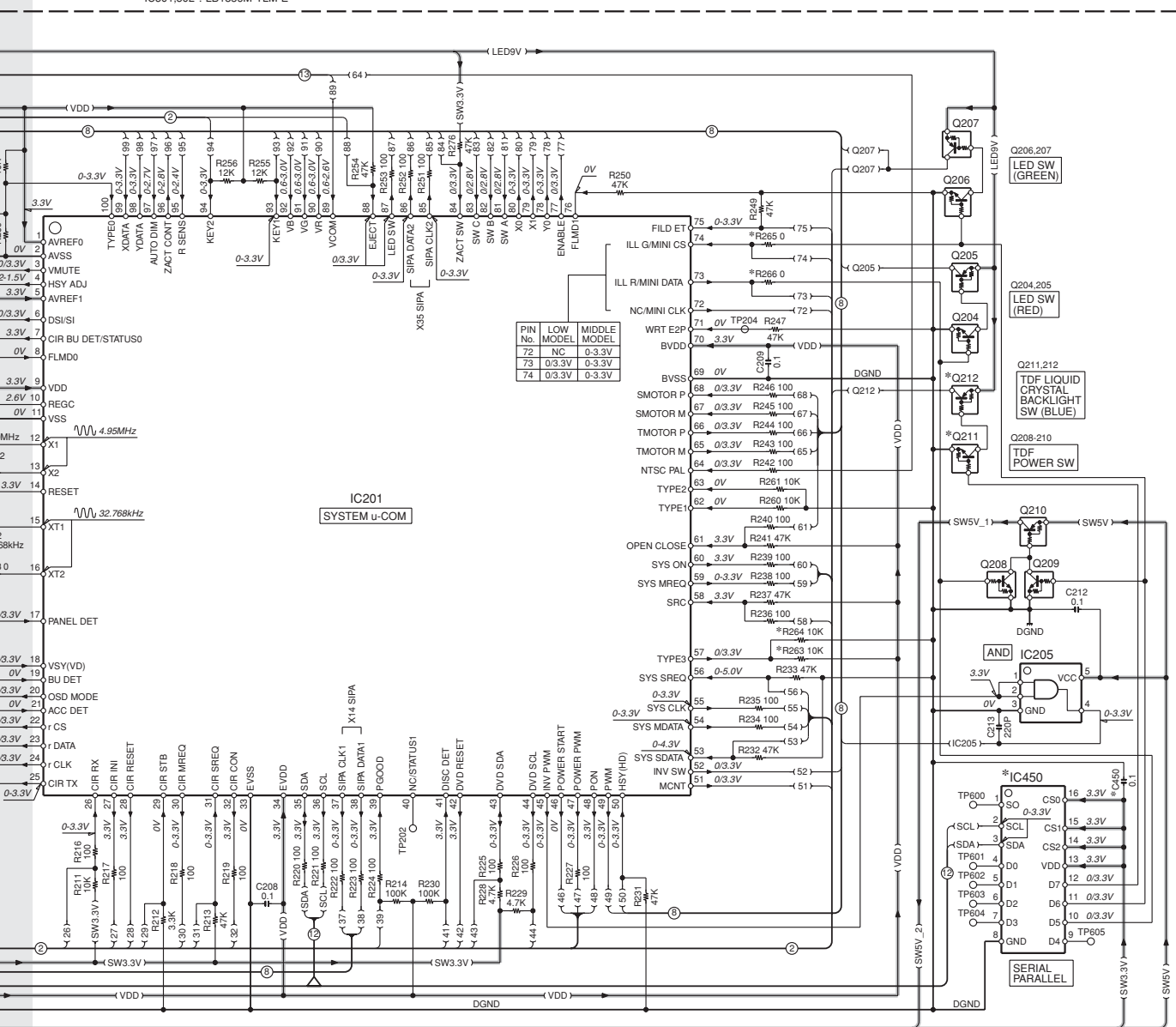
	R263, 592-597	R264- 266
	—	YES
	—	YES
K	—	YES
	—	YES
K	—	YES
	YES	—
	YES	—
K	YES	—
	YES	—
K	YES	—

IC1	: SI-3033KMS
IC2	: PQ1X31MZ2PH
IC10	: NM4565V-ZB
IC101,102:	TC-3727L-EN
IC201	: 7032613GC315A
IC202	: 703261330MT1G
IC203	: BR24L08FU-W
IC204	: NOT USED
IC205	: TC7SE108FU-F
IC301	: RB5P0090M
IC302,503:	TC7SE104FU-F
IC303	: TC7WH1123FU-F
IC304	: TC7SH04FU-F
IC305	: NJM2505AF-ZB
IC401	: NM2794RB2BZ
IC402	: BU2090FS
IC403,404:	MM1234KFBE-E
IC405	: BA7649F
IC406	: MM1508KNRE-E
IC407,408:	TC4052BFT
IC450	: M62320FP
IC501,502:	LM1836M-TLM-E

Q1,2,4,6,13,15,16,23,32,34,36,
38,44,46,48,50 : 2SC4081
Q3,5,17,20,21,24,33,37,45,50,54
Q7,503 : DTA114EUA
Q8,10,25,101,204,206,208,209,
211,305 : DTC114YUA
Q9 : DTA114YUA
Q13,31,35,43 : 2SB184
Q19,103,106,108,111,201 : DTC144EUA
Q22 : TPC8110-F
Q26 : SBT21689
Q104,105,109,110 : HAT2218R-E
Q203,207 : DTA144EUA
Q205,212 : DTB123VK
Q304,343-309 : UHZ1N
Q501 S02 : DTC232TU
Q508 : 2SC3437-F(Y)

D1	:	1SR154-400
D2,301	:	DAN202U
D3	:	UDZS6.2B
D4	:	EP05Q04
D101-104	:	1SS357-F
D310,311,314-324,401,	:	402,405,510-513,
515-518,523,525-527*	:	AVRM1608120M6A
D312,313,514,524	:	AVRM1608180M6A
D400,406,502,528-536*	:	AVRM1608270MAA
D403,501	:	DAP202U
D404	:	UDZS4.7B
D503	:	DA204U
D504-508	:	ST26.2N

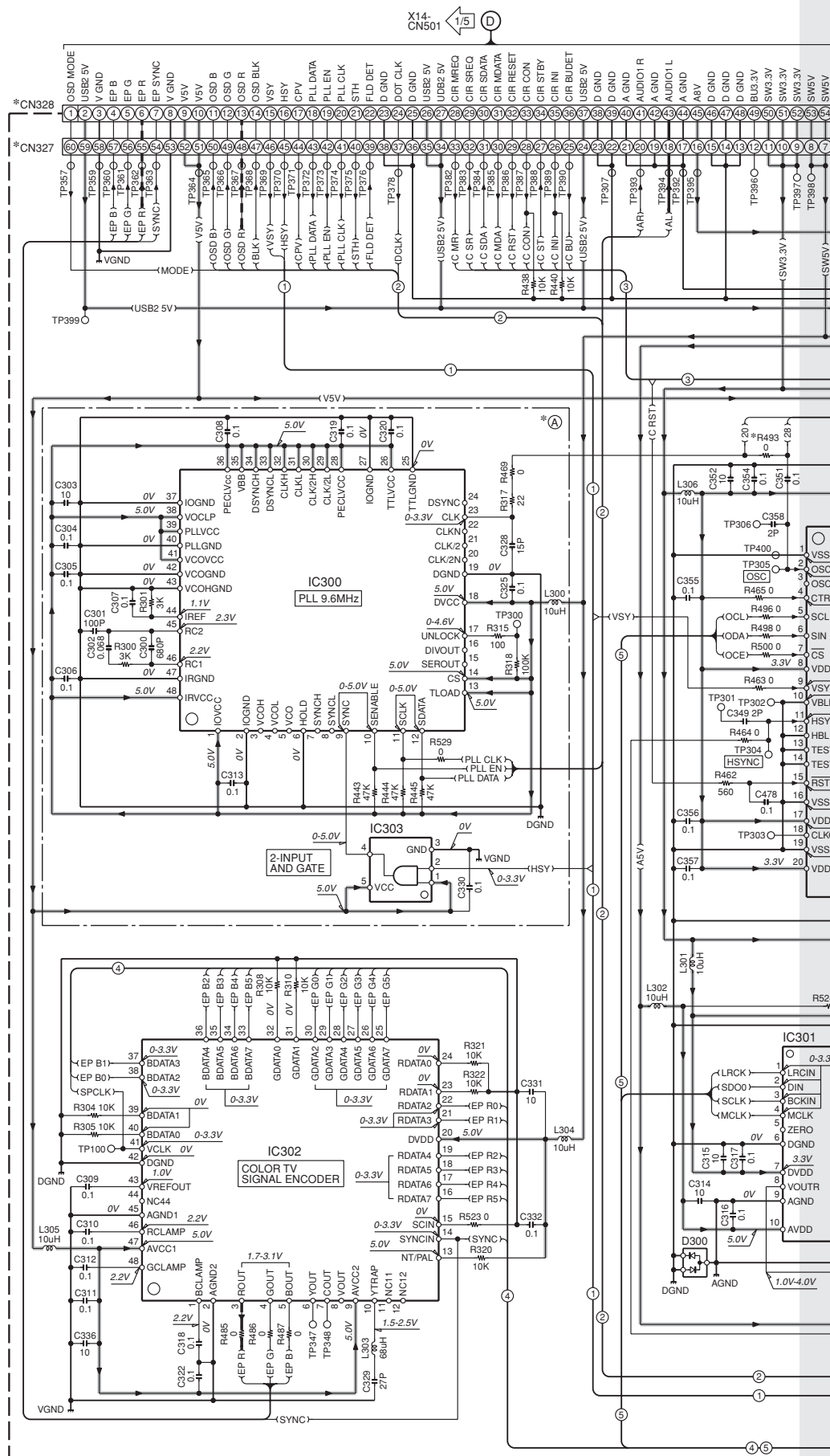
 VIDEO LINE
 SIGNAL LINE
 GND LINE
 +B LINE

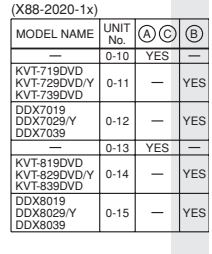


KVT-719DVD/729DVD/729DVDY/739DVD (1/5)

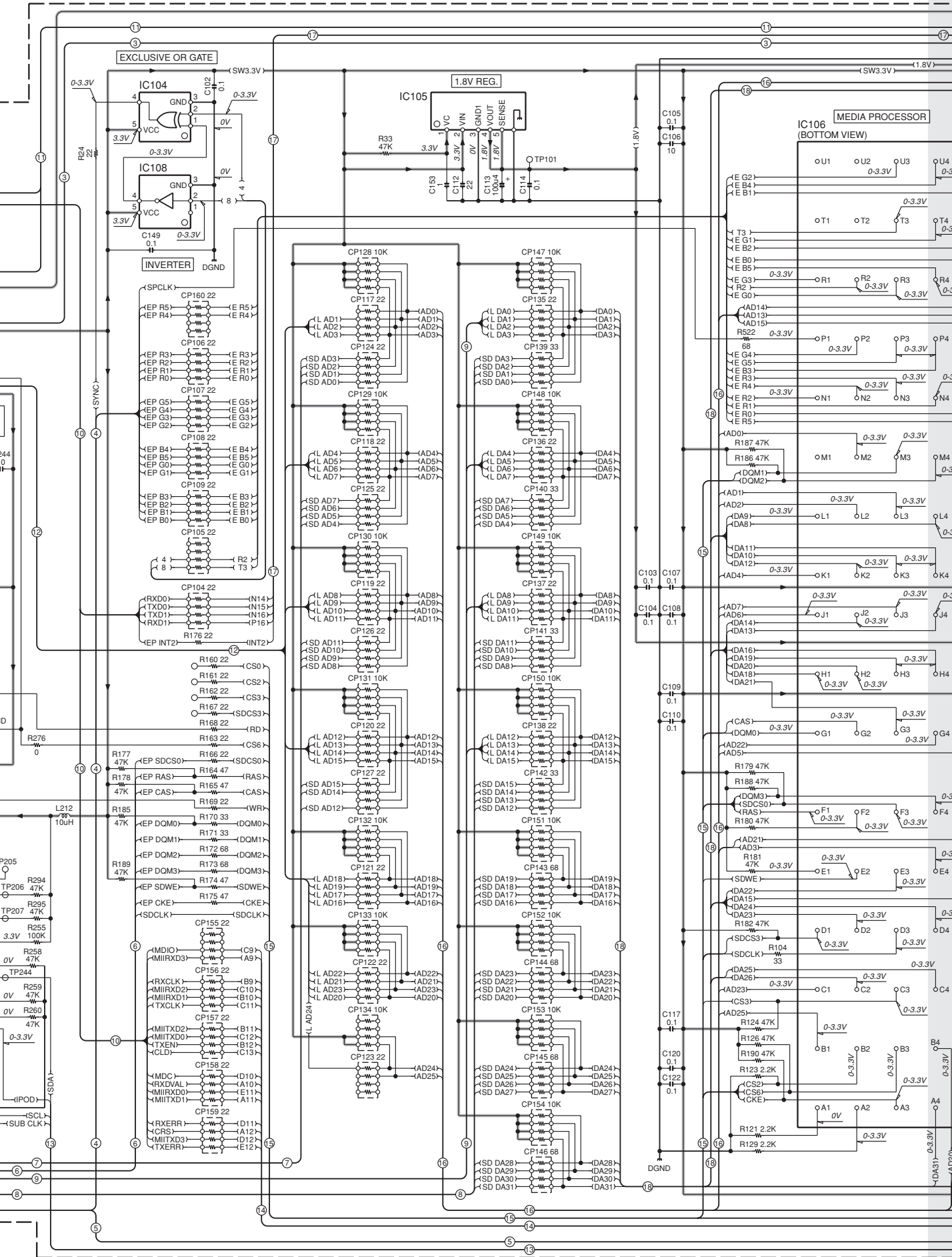
CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
 △ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

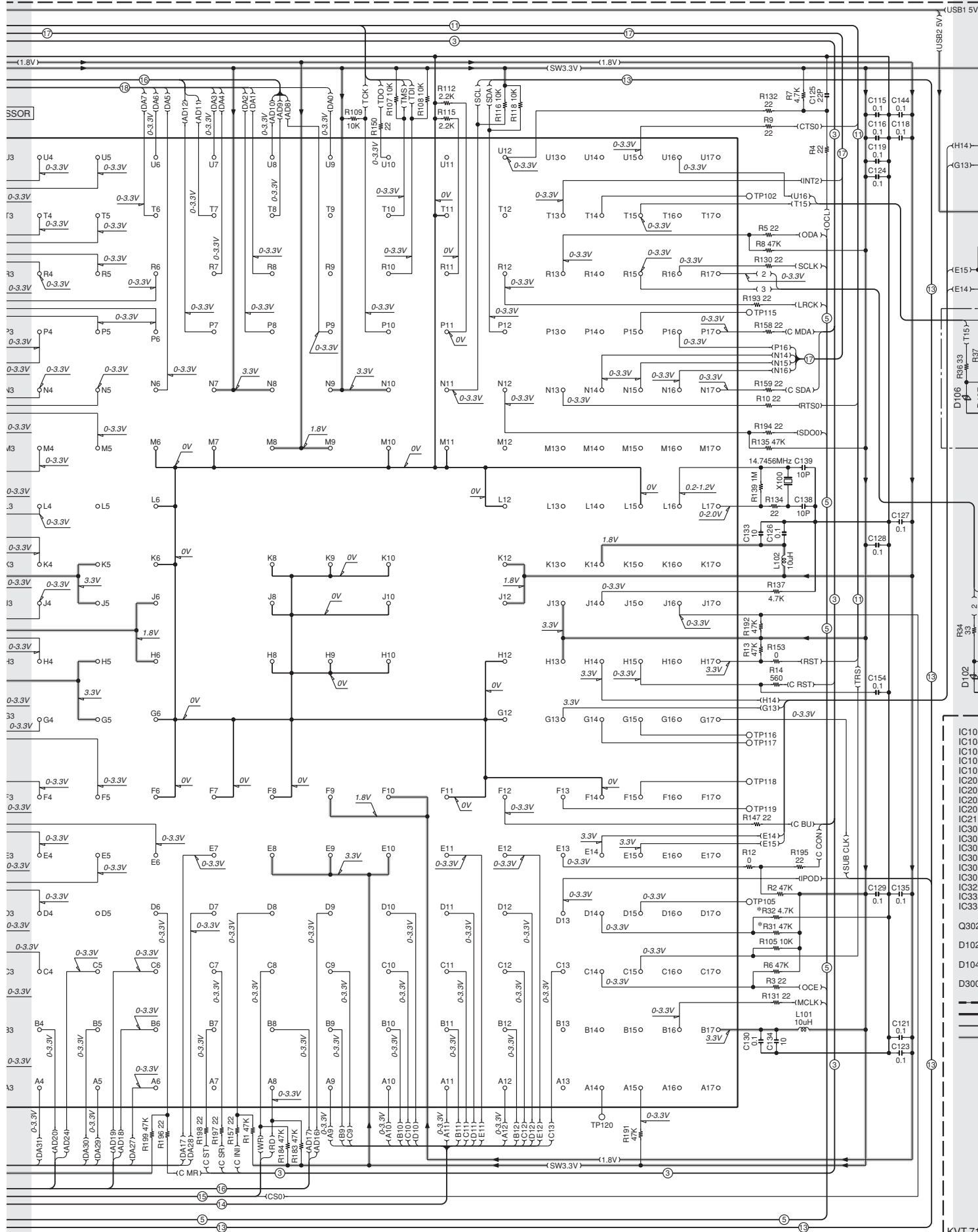
- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

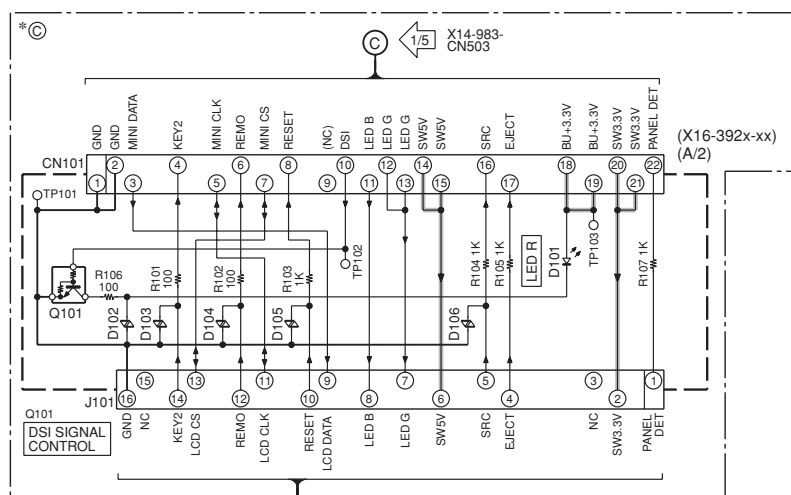




71



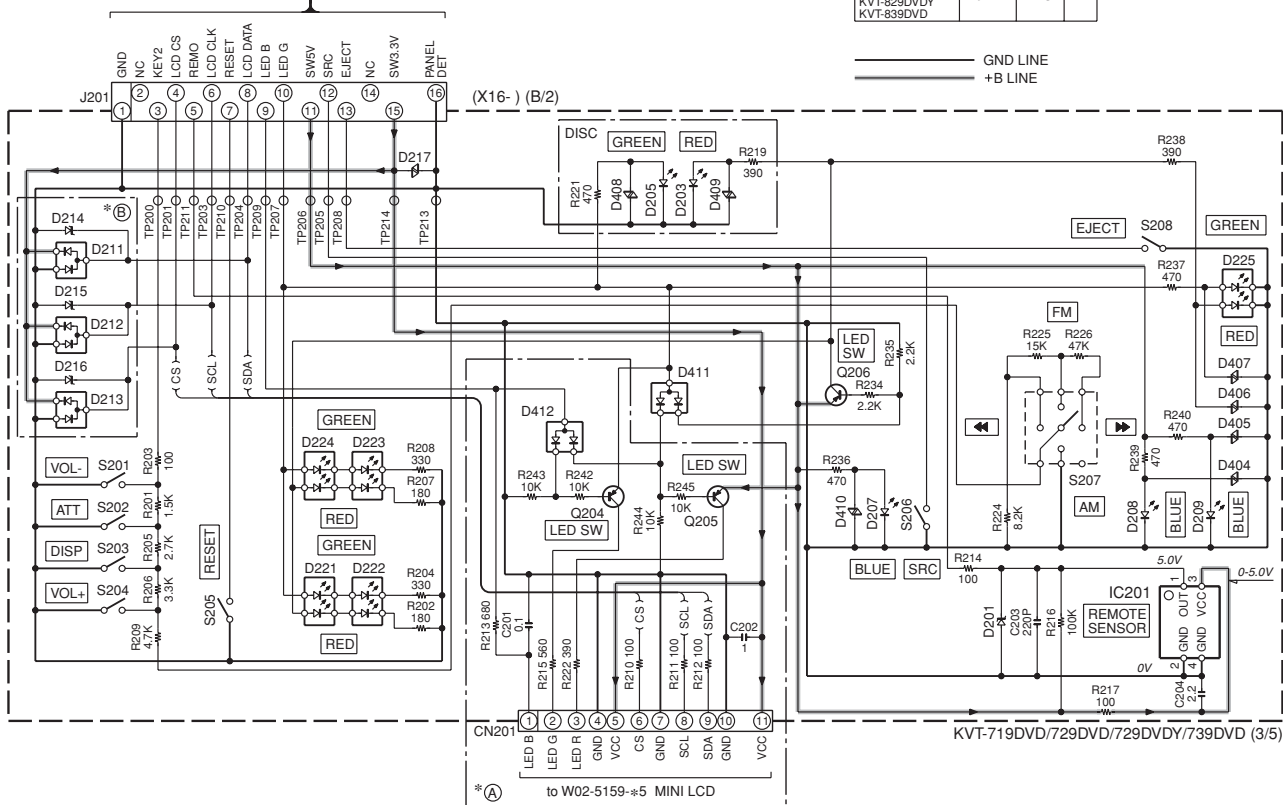
KVT-719DVD/729DVD
/729DVDY/739DVD



IC201	: RS-181
Q101	: DTC114YUA
Q204-206	: 2SA1576A
D101,203	: B30-1713-05
D102,404-410	: AVR1608180M6A
D103-106	: AVR1608180M6A
D201,214-216	: UDZ56.2B
D205	: B30-1740-05
D207-209	: B30-1767-05
D211-213	: DA204U
D217	: AVR1608120M6A
D221-225	: B30-1605-05
D411,412	: DAP202U

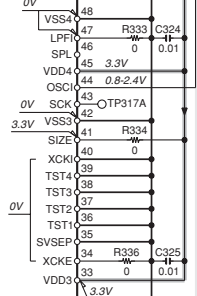
MODEL NAME	UNIT No.	(A)	(B)	(C)
KVT-719DVD	0-10	—	—	YES
KVT-729DVD	0-10	—	—	YES
KVT-729DVDY	0-10	—	—	YES
KVT-739DVD	0-10	—	—	YES
KVT-819DVD	0-11	YES	—	—
KVT-829DVD	0-11	YES	—	—
KVT-829DVDY	0-11	YES	—	—
KVT-839DVD	0-11	YES	—	—

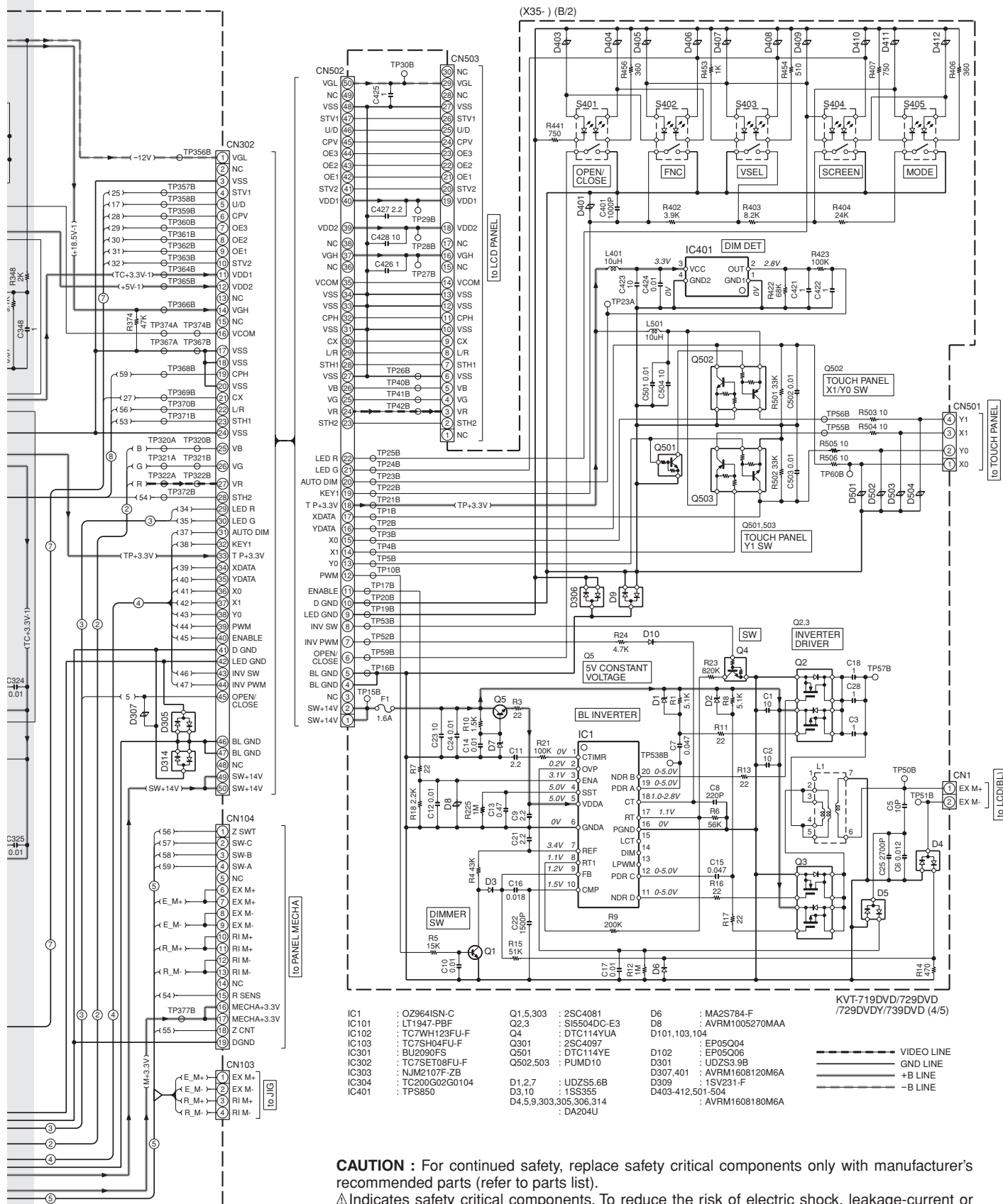
— GND LINE
— +B LINE



CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
 ▲ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

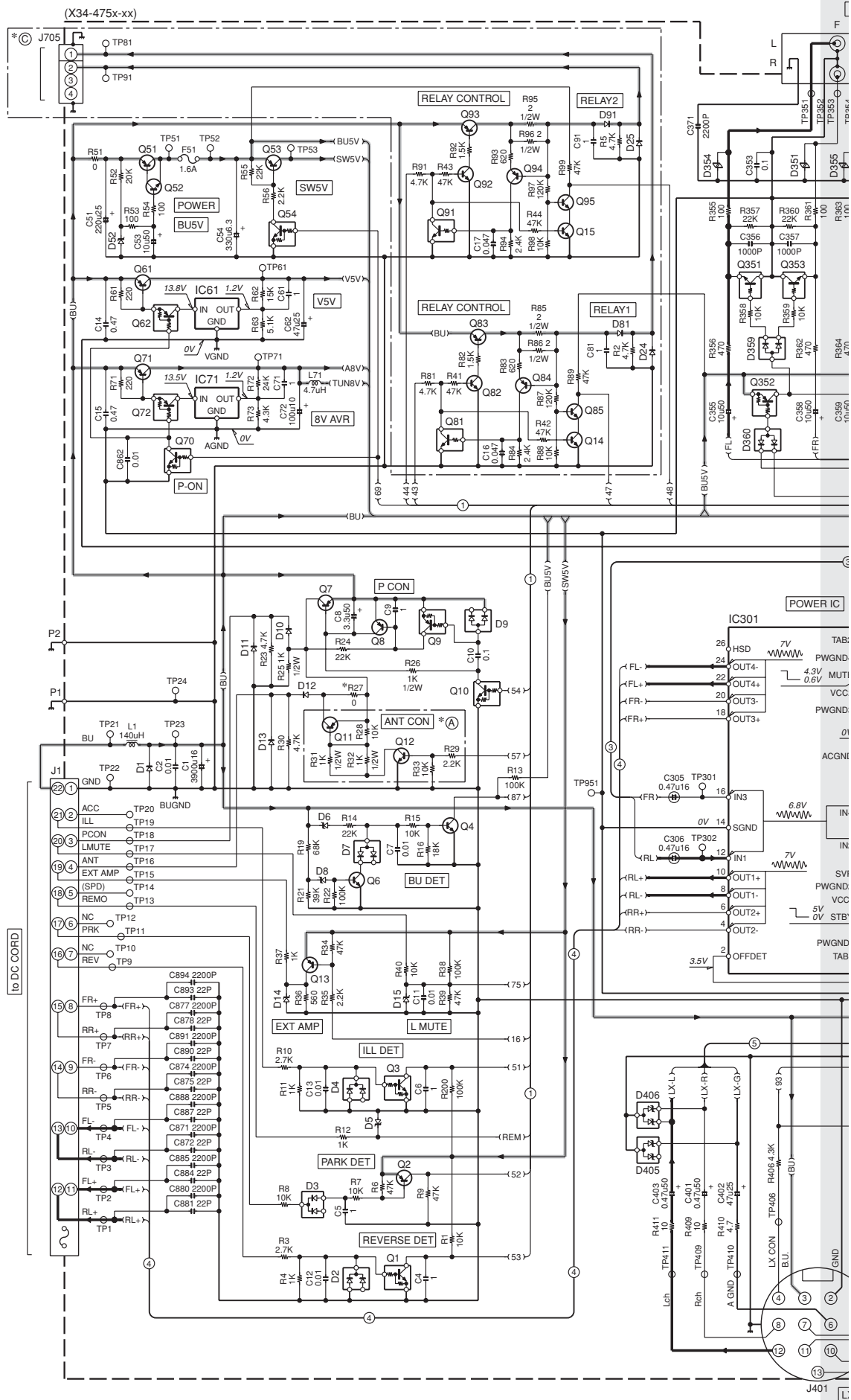


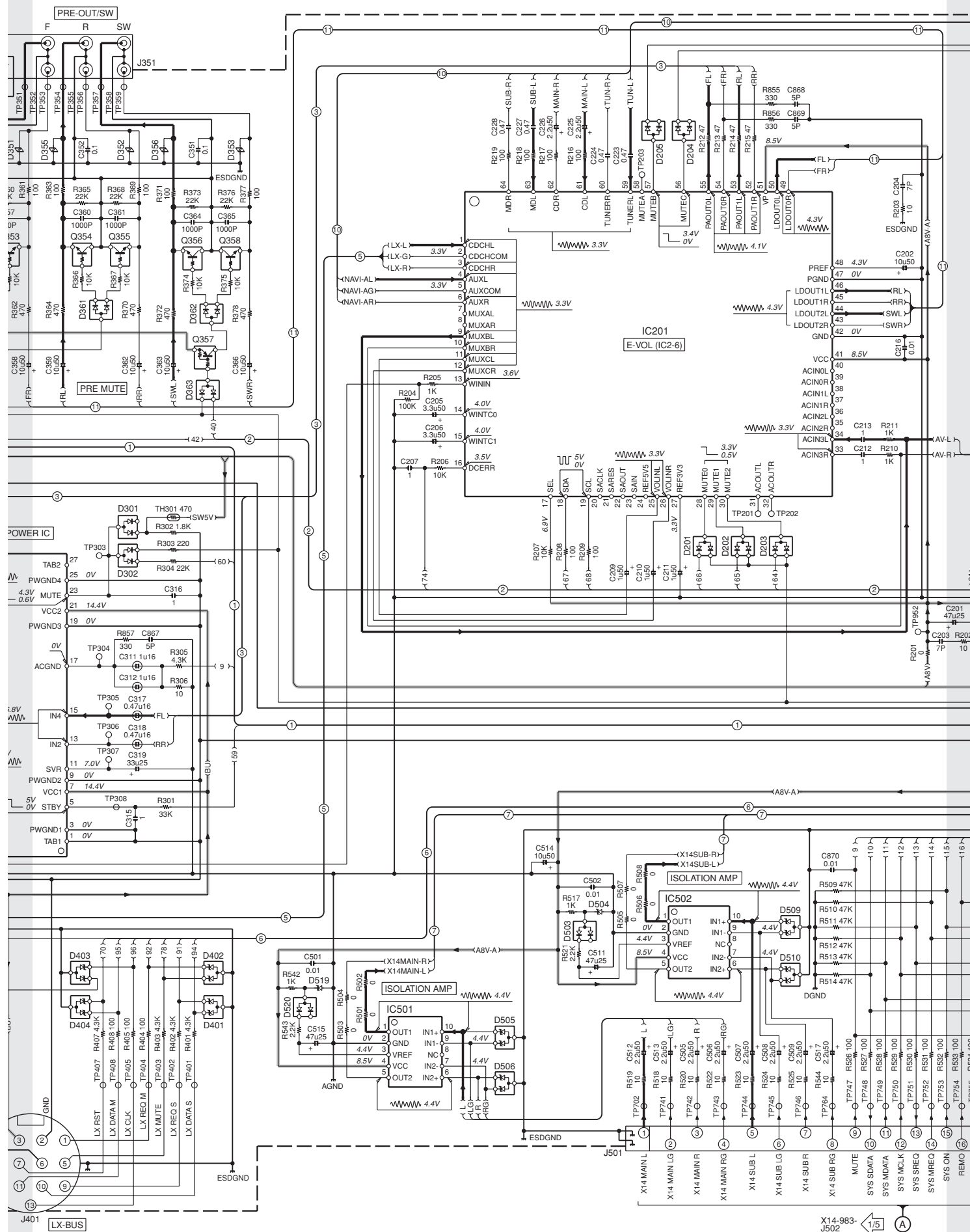


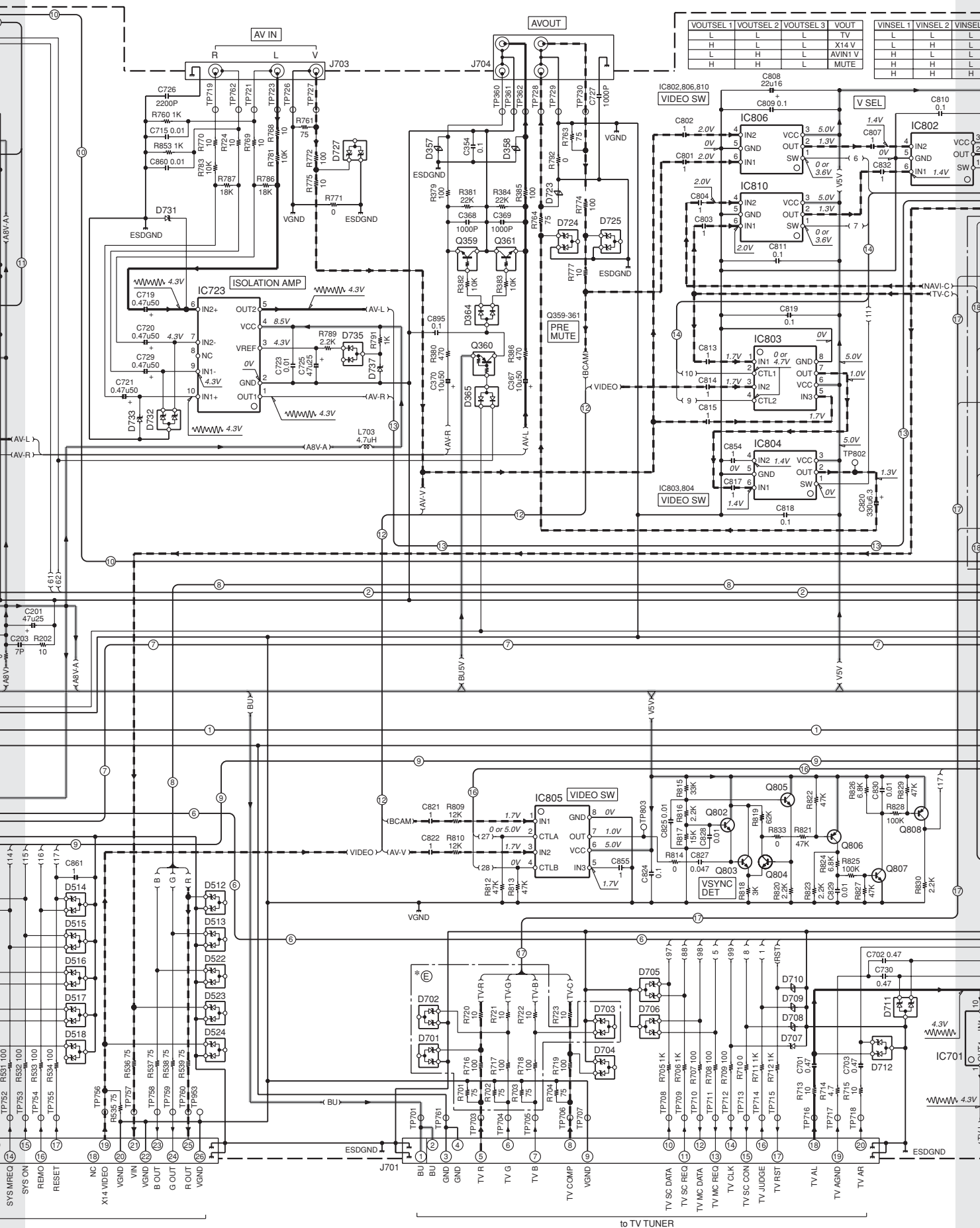
CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

△Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

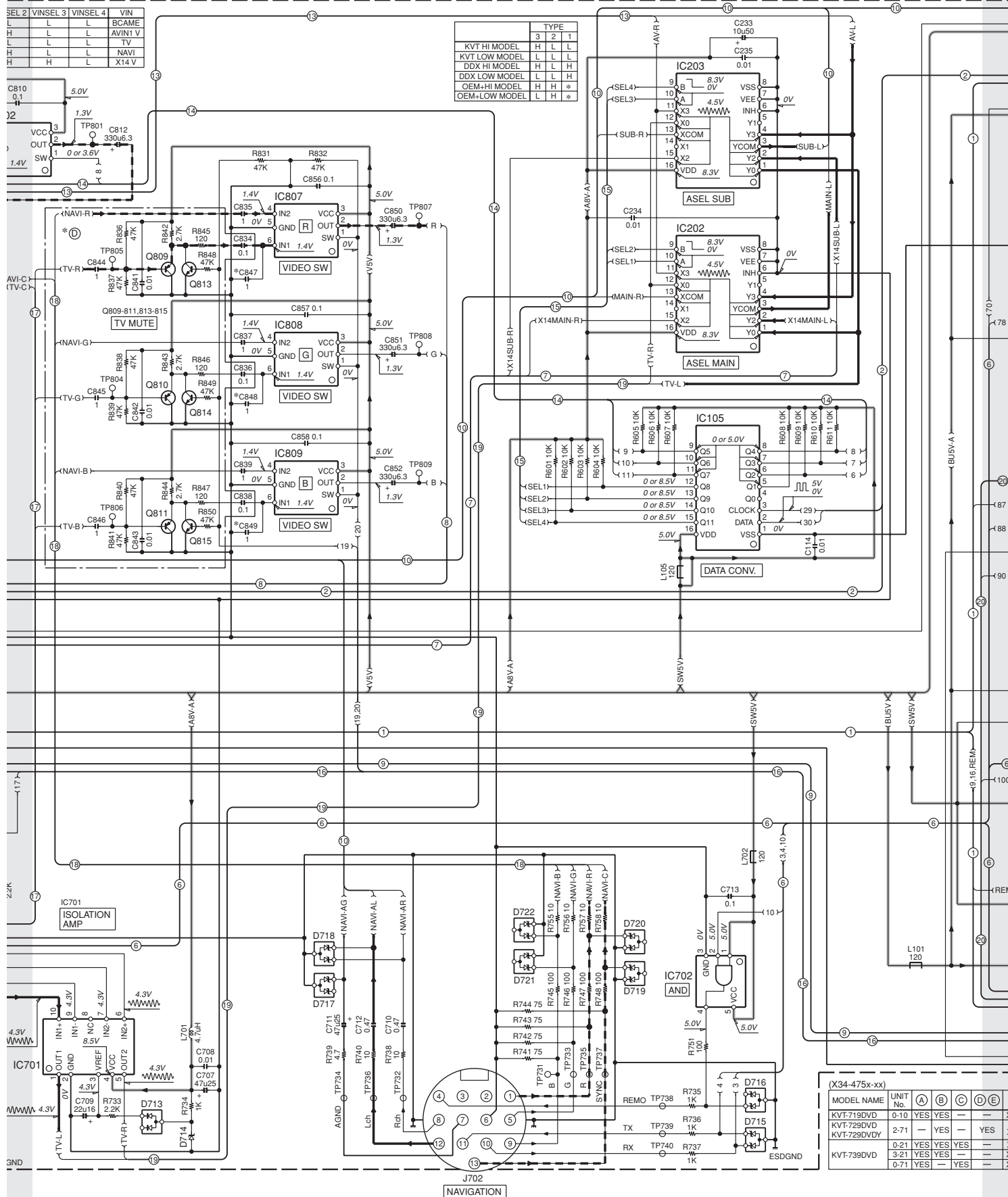
- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

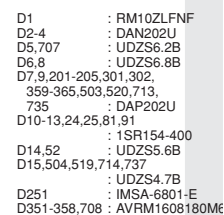


KVT-719DVD/729DVD
/729DVDY/739DVD

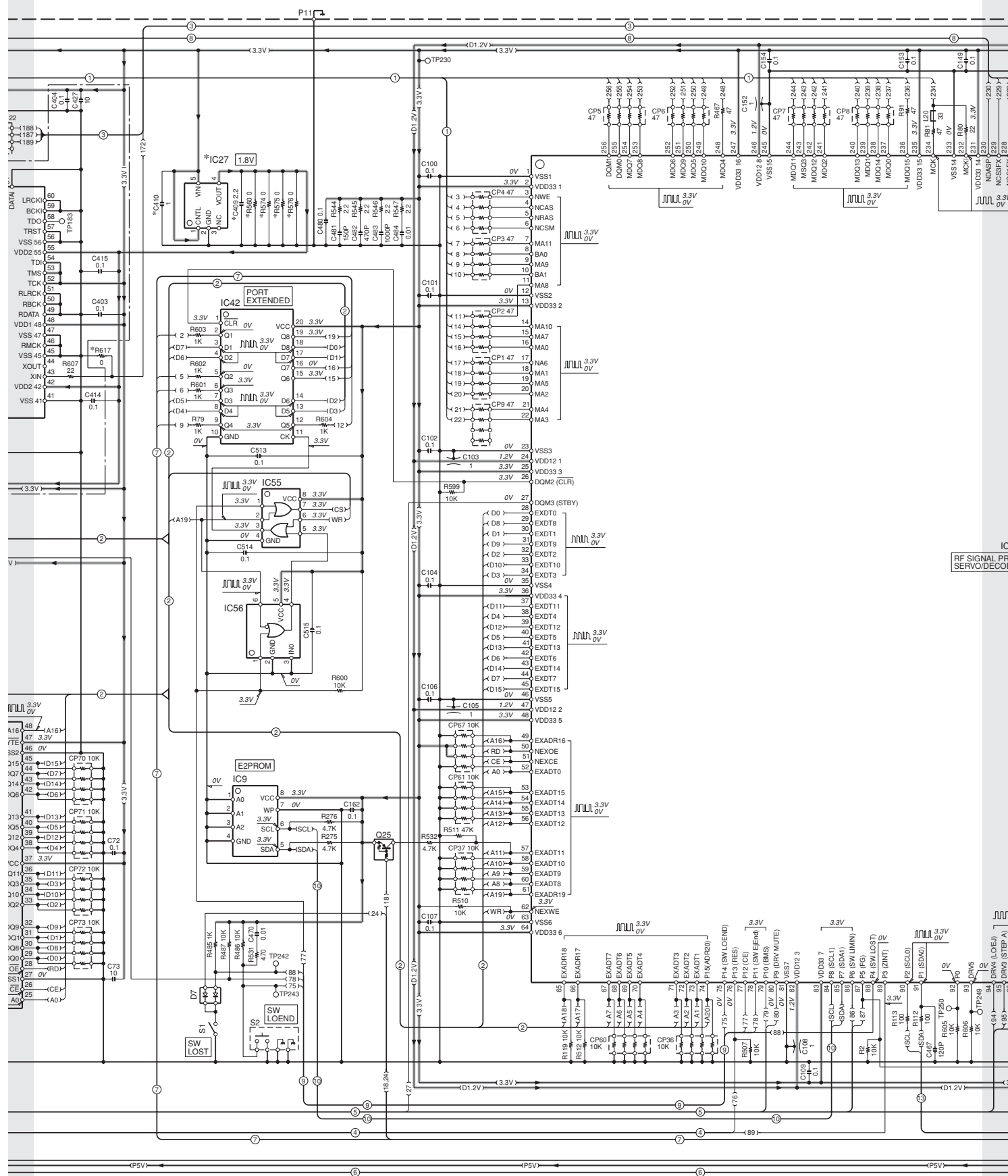


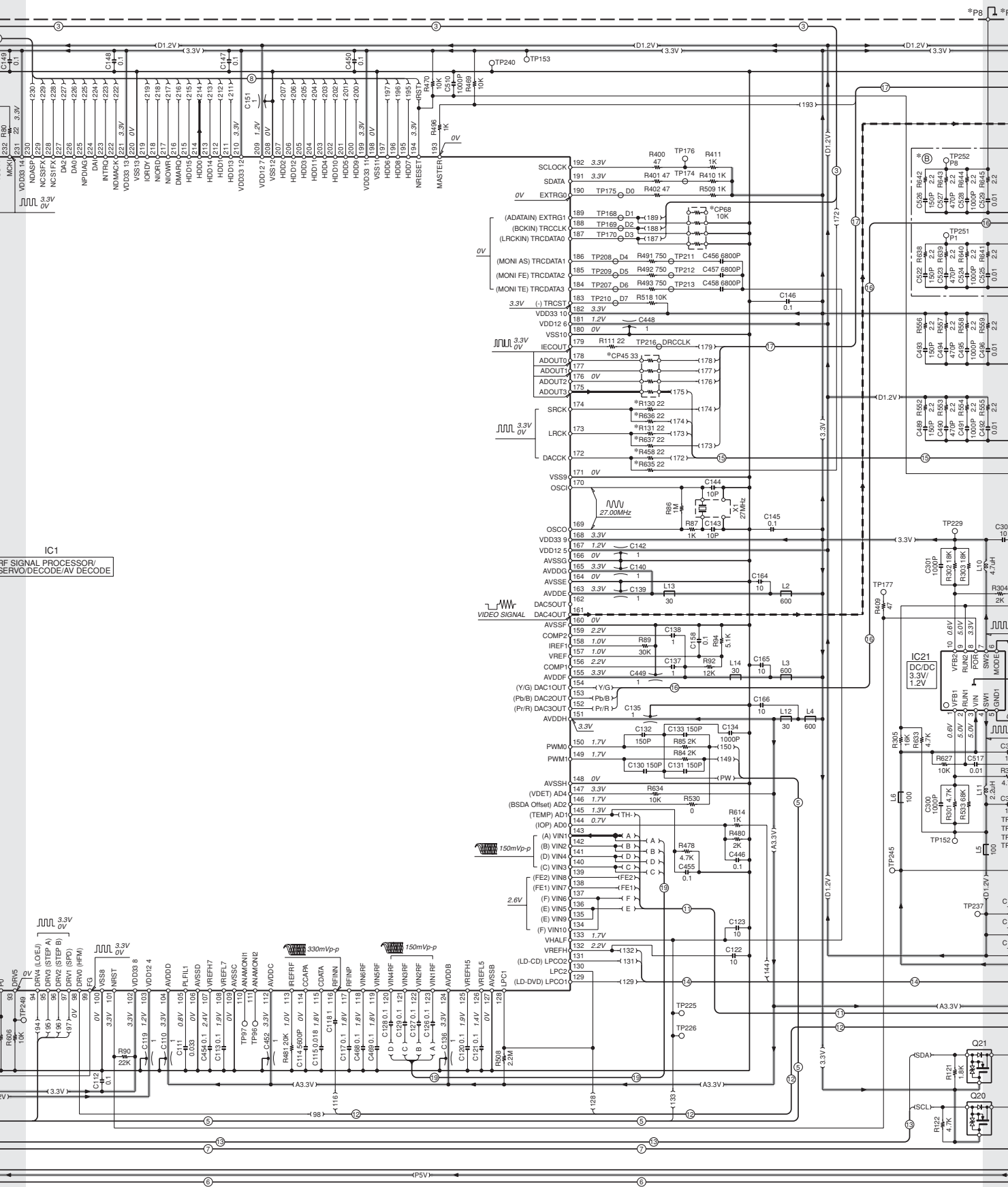
KVT-719DVD/729DVD /729DVDY/739DVD





KVT-719DVD/729DVD
/729DVDY/739DVD





CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
 ▲ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

KVT-719DVD/729DVD /729DVDY/739DVD

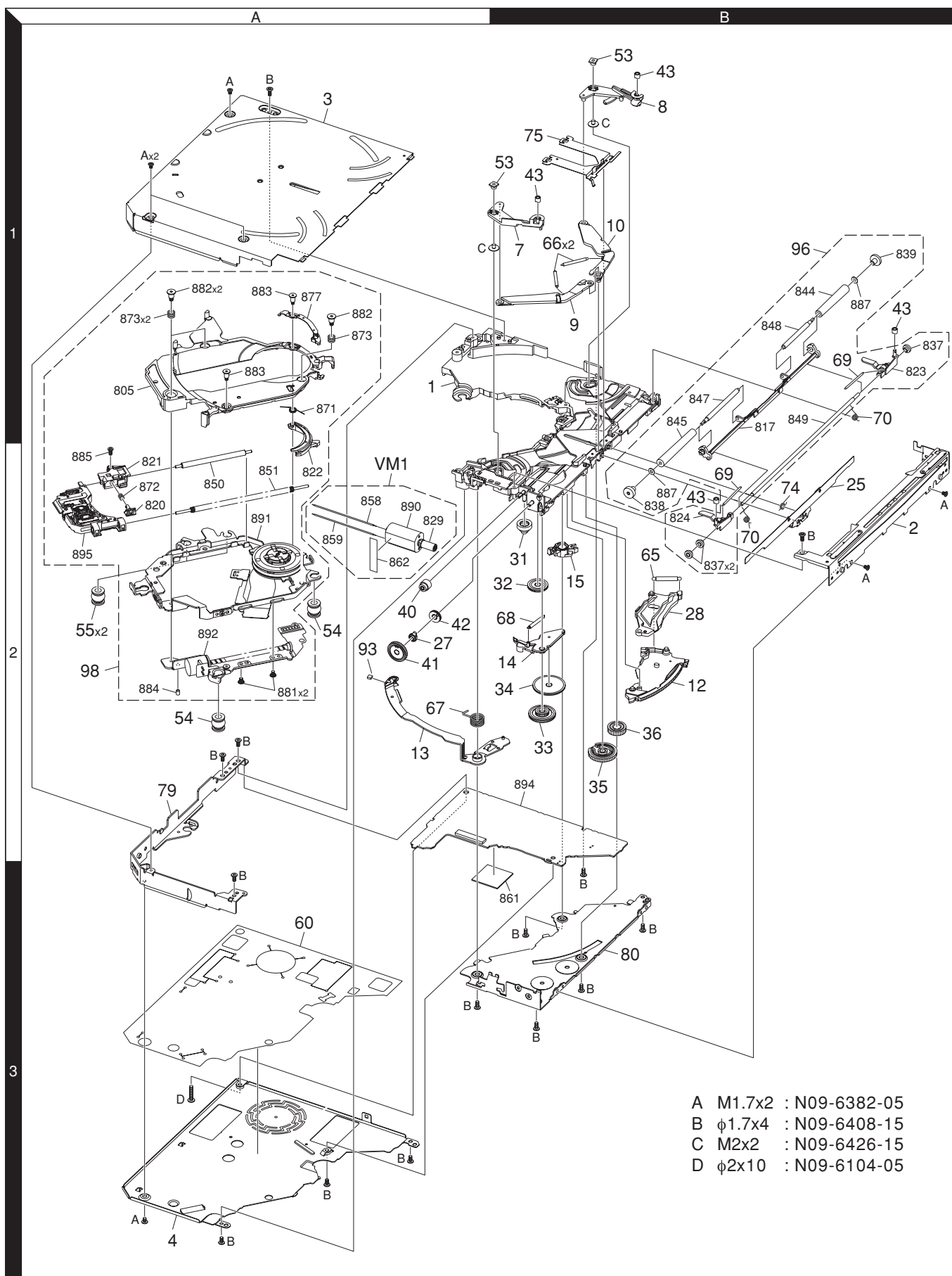
IC1 : MN2DS0016AAUB
IC3 : S29AL32D70TF1
IC9 : S-34CS04AFT
IC10 : AN41250A-VB
IC12 : MM1671XNRE
IC15 : AK4396VF
IC21 : LTC3546EDD-F
IC22 : NUM2865F318ZB
IC31 : LC82360-E
IC39 : NUJ7042
IC42 : TC74HC273FT
IC49 : TC73G04FU-F
IC50,51 : NUM4580V-ZB
IC53 : TC7WH08FK-F
IC54 : IS45S16800TL1
IC55 : TC7WH432FU-F
IC56 : HD74LV1GW57AE
IC57 : NUM2573V-ZB
IC60 : MM1665AHBE

Q1-4,25 : DTA143XE
Q10,11 : 2SC4817
Q12,13 : 2SB1709
Q14,15,20,21 : 2SK3019
Q24 : SSM3J15FU-F
Q27 : DTA143ZE
Q28,29 : 2SA1774

D5,6 : 015AZ5.1-F(Y)
D7 : 1SS402-F

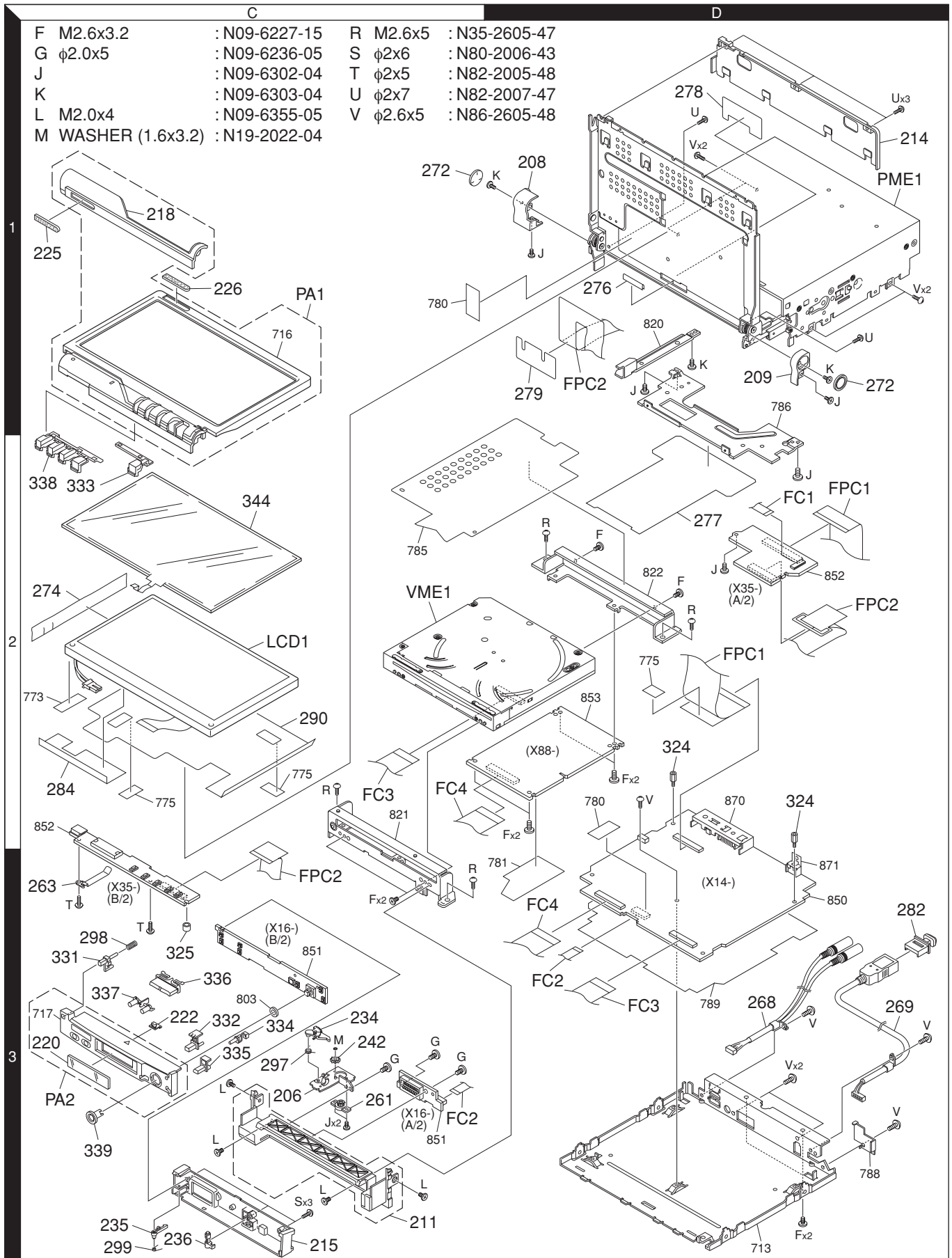
UNIT NO.		MODEL NAME	C20, 231,474	C409, 410	CN1	CN2	CN3	CN4	CN5	CN6	CN7	CN8	CN9	CN10	CN11	CN12	CN13	CN14	CN15	CN16	CN17	CN18	CN19	CN20	CN21	CN22	CN23	CN24	CN25	CN26	CN27	CN28	CN29	CN30	CN31	CN32	CN33	CN34	CN35	CN36	CN37	CN38	CN39	CN40	CN41	CN42	CN43	CN44	CN45	CN46	CN47	CN48	CN49	CN50	CN51	CN52	CN53	CN54	CN55	CN56	CN57	CN58	CN59	CN60	CN61	CN62	CN63	CN64	CN65	CN66	CN67	CN68	CN69	CN70	CN71	CN72	CN73	CN74	CN75	CN76	CN77	CN78	CN79	CN80	CN81	CN82	CN83	CN84	CN85	CN86	CN87	CN88	CN89	CN90	CN91	CN92	CN93	CN94	CN95	CN96	CN97	CN98	CN99	CN100	CN101	CN102	CN103	CN104	CN105	CN106	CN107	CN108	CN109	CN110	CN111	CN112	CN113	CN114	CN115	CN116	CN117	CN118	CN119	CN120	CN121	CN122	CN123	CN124	CN125	CN126	CN127	CN128	CN129	CN130	CN131	CN132	CN133	CN134	CN135	CN136	CN137	CN138	CN139	CN140	CN141	CN142	CN143	CN144	CN145	CN146	CN147	CN148	CN149	CN150	CN151	CN152	CN153	CN154	CN155	CN156	CN157	CN158	CN159	CN160	CN161	CN162	CN163	CN164	CN165	CN166	CN167	CN168	CN169	CN170	CN171	CN172	CN173	CN174	CN175	CN176	CN177	CN178	CN179	CN180	CN181	CN182	CN183	CN184	CN185	CN186	CN187	CN188	CN189	CN190	CN191	CN192	CN193	CN194	CN195	CN196	CN197	CN198	CN199	CN200	CN201	CN202	CN203	CN204	CN205	CN206	CN207	CN208	CN209	CN210	CN211	CN212	CN213	CN214	CN215	CN216	CN217	CN218	CN219	CN220	CN221	CN222	CN223	CN224	CN225	CN226	CN227	CN228	CN229	CN230	CN231	CN232	CN233	CN234	CN235	CN236	CN237	CN238	CN239	CN240	CN241	CN242	CN243	CN244	CN245	CN246	CN247	CN248	CN249	CN250	CN251	CN252	CN253	CN254	CN255	CN256	CN257	CN258	CN259	CN260	CN261	CN262	CN263	CN264	CN265	CN266	CN267	CN268	CN269	CN270	CN271	CN272	CN273	CN274	CN275	CN276	CN277	CN278	CN279	CN280	CN281	CN282	CN283	CN284	CN285	CN286	CN287	CN288	CN289	CN290	CN291	CN292	CN293	CN294	CN295	CN296	CN297	CN298	CN299	CN300	CN301	CN302	CN303	CN304	CN305	CN306	CN307	CN308	CN309	CN310	CN311	CN312	CN313	CN314	CN315	CN316	CN317	CN318	CN319	CN320	CN321	CN322	CN323	CN324	CN325	CN326	CN327	CN328	CN329	CN330	CN331	CN332	CN333	CN334	CN335	CN336	CN337	CN338	CN339	CN340	CN341	CN342	CN343	CN344	CN345	CN346	CN347	CN348	CN349	CN350	CN351	CN352	CN353	CN354	CN355	CN356	CN357	CN358	CN359	CN360	CN361	CN362	CN363	CN364	CN365	CN366	CN367	CN368	CN369	CN370	CN371	CN372	CN373	CN374	CN375	CN376	CN377	CN378	CN379	CN380	CN381	CN382	CN383	CN384	CN385	CN386	CN387	CN388	CN389	CN390	CN391	CN392	CN393	CN394	CN395	CN396	CN397	CN398	CN399	CN400	CN401	CN402	CN403	CN404	CN405	CN406	CN407	CN408	CN409	CN410	CN411	CN412	CN413	CN414	CN415	CN416	CN417	CN418	CN419	CN420	CN421	CN422	CN423	CN424	CN425	CN426	CN427	CN428	CN429	CN430	CN431	CN432	CN433	CN434	CN435	CN436	CN437	CN438	CN439	CN440	CN441	CN442	CN443	CN444	CN445	CN446	CN447	CN448	CN449	CN450	CN451	CN452	CN453	CN454	CN455	CN456	CN457	CN458	CN459	CN460	CN461	CN462	CN463	CN464	CN465	CN466	CN467	CN468	CN469	CN470	CN471	CN472	CN473	CN474	CN475	CN476	CN477	CN478	CN479	CN480	CN481	CN482	CN483	CN484	CN485	CN486	CN487	CN488	CN489	CN490	CN491	CN492	CN493	CN494	CN495	CN496	CN497	CN498	CN499	CN500	CN501	CN502	CN503	CN504	CN505	CN506	CN507	CN508	CN509	CN510	CN511	CN512	CN513	CN514	CN515	CN516	CN517	CN518	CN519	CN520	CN521	CN522	CN523	CN524	CN525	CN526	CN527	CN528	CN529	CN530	CN531	CN532	CN533	CN534	CN535	CN536	CN537	CN538	CN539	CN540	CN541	CN542	CN543	CN544	CN545	CN546	CN547	CN548	CN549	CN550	CN551	CN552	CN553	CN554	CN555	CN556	CN557	CN558	CN559	CN560	CN561	CN562	CN563	CN564	CN565	CN566	CN567	CN568	CN569	CN570	CN571	CN572	CN573	CN574	CN575	CN576	CN577	CN578	CN579	CN580	CN581	CN582	CN583	CN584	CN585	CN586	CN587	CN588	CN589	CN590	CN591	CN592	CN593	CN594	CN595	CN596	CN597	CN598	CN599	CN600	CN601	CN602	CN603	CN604	CN605	CN606	CN607	CN608	CN609	CN610	CN611	CN612	CN613	CN614	CN615	CN616	CN617	CN618	CN619	CN620	CN621	CN622	CN623	CN624	CN625	CN626	CN627	CN628	CN629	CN630	CN631	CN632	CN633	CN634	CN635	CN636	CN637	CN638	CN639	CN640	CN641	CN642	CN643	CN644	CN645	CN646	CN647	CN648	CN649	CN650	CN651	CN652	CN653	CN654	CN655	CN656	CN657	CN658	CN659	CN660	CN661	CN662	CN663	CN664	CN665	CN666	CN667	CN668	CN669	CN670	CN671	CN672	CN673	CN674	CN675	CN676	CN677	CN678	CN679	CN680	CN681	CN682	CN683	CN684	CN685	CN686	CN687	CN688	CN689	CN690	CN691	CN692	CN693	CN694	CN695	CN696	CN697	CN698	CN699	CN700	CN701	CN702	CN703	CN704	CN705	CN706	CN707	CN708	CN709	CN710	CN711	CN712	CN713	CN714	CN715	CN716	CN717	CN718	CN719	CN720	CN721	CN722	CN723	CN724	CN725	CN726	CN727	CN728	CN729	CN730	CN731	CN732	CN733	CN734	CN735	CN736	CN737	CN738	CN739	CN740	CN741	CN742	CN743	CN744	CN745	CN746	CN747	CN748	CN749	CN750	CN751	CN752	CN753	CN754	CN755	CN756	CN757	CN758	CN759	CN760	CN761	CN762	CN763	CN764	CN765	CN766	CN767	CN768	CN769	CN770	CN771	CN772	CN773	CN774	CN775	CN776	CN777	CN778	CN779	CN780	CN781	CN782	CN783	CN784	CN785	CN786	CN787	CN788	CN789	CN790	CN791	CN792	CN793	CN794	CN795	CN796	CN797	CN798	CN799	CN800	CN801	CN802	CN803	CN804	CN805	CN806	CN807	CN808	CN809	CN810	CN811	CN812	CN813	CN814	CN815	CN816	CN817	CN818	CN819	CN820	CN821	CN822	CN823	CN824	CN825	CN826	CN827	CN828	CN829	CN830	CN831	CN832	CN833	CN834	CN835	CN836	CN837	CN838	CN839	CN840	CN841	CN842	CN843	CN844	CN845	CN846	CN847	CN848	CN849	CN850	CN85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EXPLODED VIEW (DVD MECHANISM)



- A M1.7x2 : N09-6382-05
- B ϕ 1.7x4 : N09-6408-15
- C M2x2 : N09-6426-15
- D ϕ 2x10 : N09-6104-05

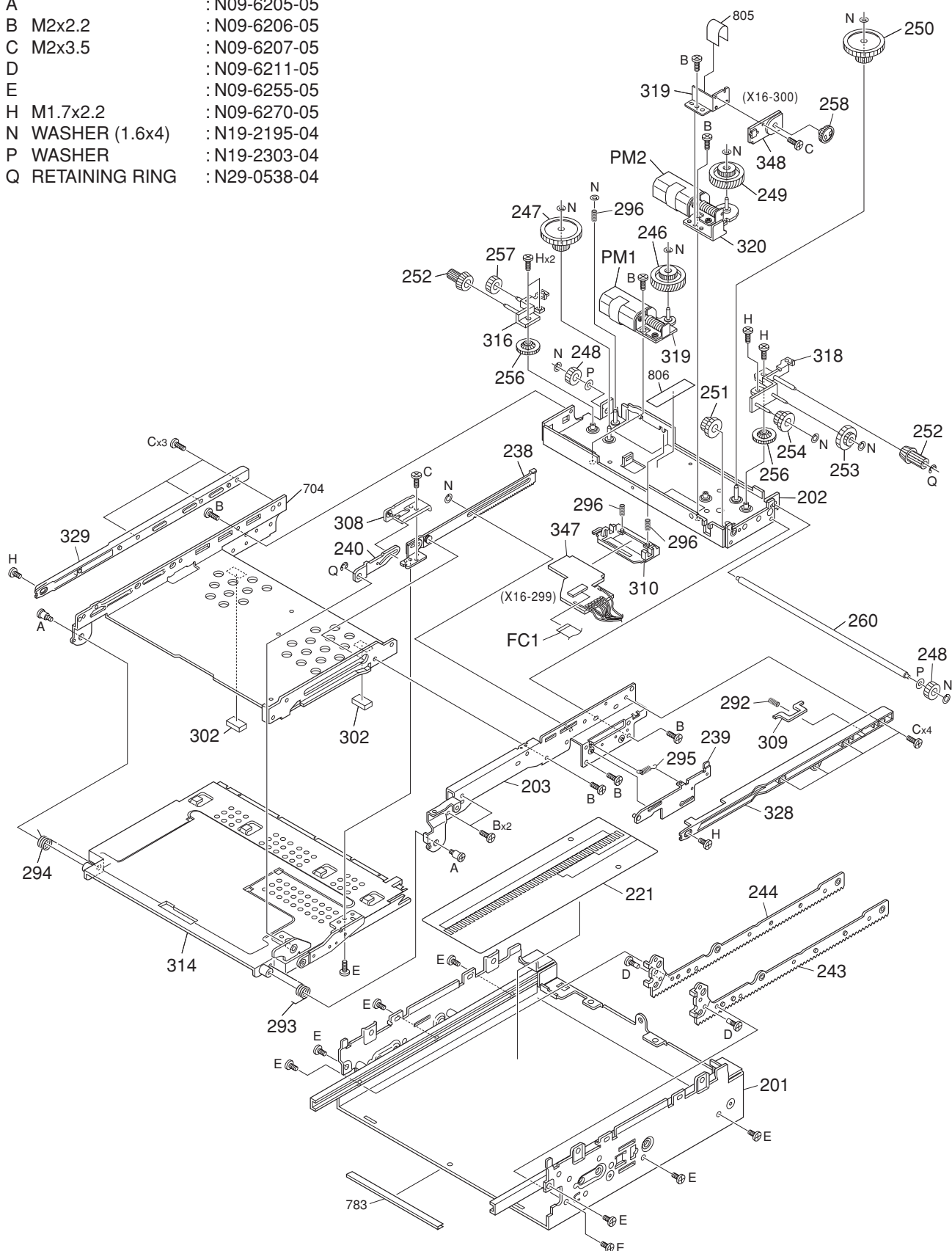
EXPLODED VIEW (UNIT)



Parts with the exploded numbers larger than 700 are not supplied.

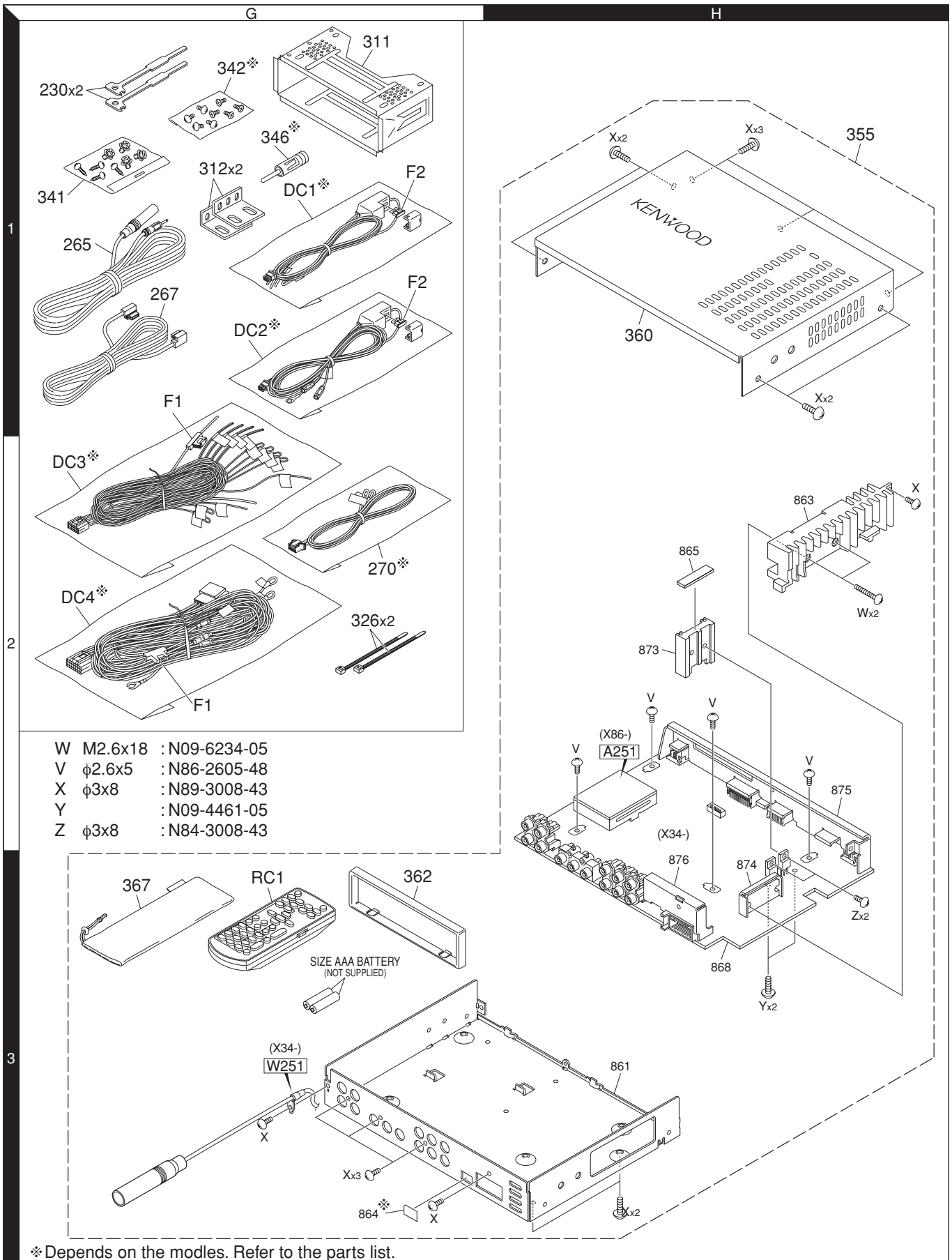
EXPLODED VIEW (DRIVE MECHANISM)

A	: N09-6205-05
B M2x2.2	: N09-6206-05
C M2x3.5	: N09-6207-05
D	: N09-6211-05
E	: N09-6255-05
H M1.7x2.2	: N09-6270-05
N WASHER (1.6x4)	: N19-2195-04
P WASHER	: N19-2303-04
Q RETAINING RING	: N29-0538-04



Parts with the exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (TUNER BOX & ACCESSORIES)



KVT-719DVD/729DVD /729DVDY/739DVD

PARTS LIST

* New parts

Parts without **Parts No.** are not supplied.

Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.

Teile ohne **Parts No.** werden nicht geliefert.

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
KVT-719DVD/729DVD/729DVDY/739DVD					
201	3F	*	A10-5164-02	CHASSIS CALKING ASSY	
202	2F	*	A10-5166-03	CHASSIS CALKING ASSY	
203	2F	*	A10-5168-03	CHASSIS CALKING ASSY	
206	3C	*	A11-1645-14	SUB CHASSIS CALKING ASSY	
208	1D	*	A21-6584-02	DRESSING PANEL	
209	1D	*	A21-6585-03	DRESSING PANEL	
211	3C	*	A22-3124-13	SUB PANEL ASSY	
214	1D	*	A46-1818-02	REAR COVER	
215	3C	*	A46-1849-01	REAR COVER	
PA1	1C	*	A64-4106-11	PANEL ASSY	K
PA1	1C	*	A64-4107-11	PANEL ASSY	R1
PA1	1C	*	A64-4108-11	PANEL ASSY	E1E2
PA1	1C	*	A64-4109-11	PANEL ASSY	M1X1
PA2	3C	*	A64-4116-02	PANEL ASSY	KR1X1
PA2	3C	*	A64-4117-02	PANEL ASSY	E1E2M1
PME1	1D	*	A10-5171-01	CHASSIS ASSY	
-			B46-0606-04	ID CARD	KR1
-			B46-0612-14	ID CARD	E1E2M1
-			B46-0612-14	ID CARD	X1
-		*	B54-4513-00	INSTALLATION MANUAL (ENG.SPA.)	KR1
-		*	B54-4514-00	INSTALLATION MANUAL (FRE.)	K
-		*	B54-4515-00	INSTALLATION MANUAL (POR.)	R1
-		*	B54-4516-00	INSTALLATION MANUAL (ENG.)	E1E2
-		*	B54-4517-00	INSTALLATION MANU (FRE.GER.DUT)	E1
-		*	B54-4517-00	INSTALLATION MANU (ITA.SPA.POR)	E1
-		*	B54-4518-00	INSTALLATION MANUAL (ENG.KOR.)	M1X1
-		*	B54-4519-00	INSTALLATION MANUAL (T-CHI.KOR)	M1
-		*	B59-1880-00	SUB-INSTRUCTION MANUAL	
-		*	B64-3569-00	INSTRUCTION MANUAL (ENG.)	KR1
-		*	B64-3570-00	INSTRUCTION MANUAL (FRE.)	K
-		*	B64-3571-00	INSTRUCTION MANUAL (SPA.)	KR1
-		*	B64-3572-00	INSTRUCTION MANUAL (POR.)	R1
-		*	B64-3573-00	INSTRUCTION MANUAL (ENG.)	E1E2
-		*	B64-3574-00	INSTRUCTION MANUAL (FRE.)	E1
-		*	B64-3575-00	INSTRUCTION MANUAL (GER.)	E1
-		*	B64-3576-00	INSTRUCTION MANUAL (DUT.)	E1
-		*	B64-3577-00	INSTRUCTION MANUAL (ITA.)	E1
-		*	B64-3578-00	INSTRUCTION MANUAL (SPA.)	E1
-		*	B64-3579-00	INSTRUCTION MANUAL (POR.)	E1
-		*	B64-3580-00	INSTRUCTION MANUAL (ENG.)	M1X1
-		*	B64-3581-00	INSTRUCTION MANUAL (T-CHI.)	M1
-		*	B64-3582-00	INSTRUCTION MANUAL (KOR.)	M1
218	1C	*	B07-3202-02	ESCUTCHEON	K
218	1C	*	B07-3203-02	ESCUTCHEON	R1M1X1
218	1C	*	B07-3204-02	ESCUTCHEON	E1E2
220	3C	*	B10-4955-03	FRONT GLASS	
221	3F	*	B11-1453-04	REFLECTION SHEET	
222	3C	*	B19-2330-04	LIGHTING BOARD	
225	1C	*	B43-1518-04	BADGE	
226	1C	*	B43-1527-04	BADGE	
LCD1	2C	*	B38-1176-05	LCD	
230	1G		D10-4674-04	LEVER	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
234	3C	*	D10-4727-03*A	ARM	
235	3C	*	D10-4728-04*A	ARM	
236	3C	*	D10-4729-04*A	LEVER	
238	2F	*	D10-4836-03	ARM ASSY	
239	2F	*	D10-4837-04	LEVER ASSY	
240	2E	*	D10-4840-03	ARM	
242	3C	*	D13-2280-04*A	GEAR	
243	3F	*	D13-2335-03	RACK (GEAR)	
244	3F	*	D13-2336-03	RACK (GEAR)	
246	1F	*	D13-2338-04	GEAR	
247	1F	*	D13-2339-04	GEAR	
248	2F	*	D13-2340-04	GEAR	
249	1F	*	D13-2341-04	GEAR	
250	1F	*	D13-2342-04	GEAR	
251	1F	*	D13-2343-04	GEAR	
252	1E	*	D13-2344-04	GEAR	
253	2F	*	D13-2345-04	GEAR	
254	2F	*	D13-2346-04	GEAR	
256	1F	*	D13-2349-04	GEAR	
257	1F	*	D13-2350-04	GEAR	
258	1F	*	D13-2351-04	GEAR	
260	2F	*	D21-2446-03	SHAFT	
261	3C		D39-0239-05	DAMPER	
263	3C	*	E29-2109-04	LEAD PLATE	
265	2G	*	E30-6483-05	CORD WITH PLUG	
267	1G	*	E30-6688-05	CORD WITH PLUG	
268	3D	*	E30-6689-05	CORD WITH PLUG	
269	3D	*	E30-6690-05	CORD WITH PLUG	
270	2G	*	E30-6693-05	CORD WITH PLUG	
DC1	1G	*	E30-6675-05	DC CORD	M1X1
DC1	1G	*	E30-6675-05	DC CORD	KR1M1
DC2	1G	*	E30-6676-15	DC CORD	X1
DC3	1G	*	E30-6680-05	DC CORD	E1E2
DC3	1G	*	E30-6680-05	DC CORD	KR1M1
DC3	1G	*	E30-6680-05	DC CORD	X1
DC4	1G	*	E30-6681-15	DC CORD	E1E2
FC1	2F	*	E39-0665-05	FLAT CABLE	
FC2	3D	*	E39-0906-05	FLAT CABLE	
FC3	3D	*	E39-0907-05	FLAT CABLE	
FC4	3D	*	E39-0908-05	FLAT CABLE	
272	1D	*	F07-1184-04	COVER	
274	2C	*	F09-1802-04	SHEET	
276	1D	*	F09-2865-04	SHEET	
277	2D	*	F09-2866-04	SHEET	
278	1D	*	F09-2867-04	SHEET	
279	1D	*	F09-2868-04	SHEET	
282	3D	*	F09-2890-04	CAP	
284	2C	*	F12-0775-04	SHIELDING SHEET	
290	2C	*	F20-2401-03	INSULATING SHEET	
F1	1G		F06-1032-05	FUSE 10A	
F2	1G		F52-0004-05	MINI FUSE 5A	
292	2F	*	G01-3222-04	COMPRESSION SPRING	
293	3F	*	G01-3223-04	TORSION COIL SPRING	
294	3F	*	G01-3224-04	TORSION COIL SPRING	

E1 : KVT-729DVD **E2** : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) **R1** : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) **M1** : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

KVT-719DVD/729DVD/729DVDY/739DVD

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
295	2F	*	G01-3225-04	EXTENSION SPRING	
296	2F	*	G01-3226-04	COMPRESSION SPRING	
297	3C		G01-3265-04	TORSION COIL SPRING	
298	3C		G01-3266-04	COMPRESSION SPRING	
299	3C		G01-3267-04	TORSION COIL SPRING	
302	2E	*	G11-3587-04	CUSHION	K M1X1 E1 E2 R1
-		*	H54-4026-03	ITEM CARTON CASE	
-		*	H54-4027-03	ITEM CARTON CASE	
-		*	H54-4028-03	ITEM CARTON CASE	
-		*	H54-4029-03	ITEM CARTON CASE	
-		*	H54-4064-03	ITEM CARTON CASE	
308	2E	*	J19-7004-03	HOLDER	
309	2F	*	J19-7005-04	STABILIZER	
310	2F	*	J19-7007-03	HOLDER	
311	1G		J21-9823-03	MOUNTING HARDWARE ASSY	
312	1G		J22-0054-14	MOUNTING HARDWARE	
314	3E	*	J22-0198-02	MOUNTING HARDWARE ASSY	
316	1F	*	J22-0200-04	MOUNTING HARDWARE ASSY	
318	1F	*	J22-0202-04	MOUNTING HARDWARE ASSY	
319	1F	*	J22-0203-03	MOUNTING HARDWARE ASSY	
319	1F	*	J22-0212-04	MOUNTING HARDWARE	
320	1F	*	J22-0206-03	MOUNTING HARDWARE ASSY	
324	2D	*	J32-1373-04	HEXAGON BOSS	
325	3C	*	J39-0864-04	SPACER	
326	2G		J61-0620-05	WIRE BAND	
328	2F	*	J90-1092-03	GUIDE	
329	2E	*	J90-1093-03	GUIDE	
FPC1	2D	*	J86-0033-15	FPC (LEAD FREE)	
FPC2	1D	*	J86-0038-05	FPC (LEAD FREE)	
331	3C		K24-4346-04	PUSH KNOB (RELEASE)	
332	3C	*	K24-4673-03	PUSH KNOB (SRC)	
333	2C	*	K24-4680-03	PUSH KNOB (M.CTRL)	
334	3C	*	K24-4681-04	PUSH KNOB (RESET)	
335	3C	*	K24-4682-13	PUSH KNOB (EJECT)	
336	3C	*	K25-1871-03	PUSH KNOB (VOL)	
337	3C	*	K25-1872-03	PUSH KNOB (ATT.AUTO)	
338	2C	*	K25-1875-02	PUSH KNOB (OPEN-SCRN)	KR1M1 X1
339	3C	*	K28-0221-04	KEY TOP (4WAY)	
341	1G		N99-1753-05	SCREW SET	
342	1G		N99-1775-05	SCREW SET	
342	1G		N99-1775-05	SCREW SET	
A	2E	*	N09-6205-05	STEPPED SCREW	
B	1F	*	N09-6206-05	MACHINE SCREW (M2X2.2)	
C	2E	*	N09-6207-05	MACHINE SCREW (M2X3.5)	
D	3F	*	N09-6211-05	STEPPED SCREW	
E	3F	*	N09-6225-05	MACHINE SCREW	
F	2D		N09-6227-15	MACHINE SCREW (M2.6X 3.2NI)	
G	3C		N09-6236-05	SEMS (TAPTITE SCREW)(2.0X 5)	
H	1F	*	N09-6270-05	MACHINE SCREW (M1.7X2.2)	
J	1D	*	N09-6302-04	MACHINE SCREW	
K	1D	*	N09-6303-04	MACHINE SCREW	
L	3C		N09-6355-05	MACHINE SCREW (M2.0X4)	
M	3C		N19-2022-04	FLAT WASHER (1.6X3.2X0.25)	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
N	1F	*	N19-2195-04	FLAT WASHER (1.6X4X0.25 BL)	
P	1F	*	N19-2303-04	FLAT WASHER	
Q	2E	*	N29-0538-04	RETAINING RING (2)	
R	2D		N35-2605-47	BINDING HEAD MACHINE SCREW	
S	3C		N80-2006-43	PAN HEAD TAPTITE SCREW	
T	3C		N82-2005-48	BINDING HEAD TAPTITE SCREW	
U	1D	*	N82-2007-47	BINDING HEAD TAPTITE SCREW	
V	3D		N86-2605-48	BINDING HEAD TAPTITE SCREW	
344	2C	*	S79-0858-05	SWITCH ASSY (7INCH/T0.7)	E1E2
346	2G		T90-0552-05	ANTENNA ADAPTOR	
PM1	1F	*	T42-1097-04	MOTOR ASSY	
PM2	1F	*	T42-1099-04	MOTOR ASSY	
347	2F	*	W02-5121-05	ELECTRIC CIRCUIT MODULE	K M1 X1 E1E2 R1
348	1F	*	W02-5122-05	ELECTRIC CIRCUIT MODULE	
355	1H	*	X90-4240-10	TUNER ASSY	
355	1H	*	X90-4240-21	TUNER ASSY	
355	1H	*	X90-4240-71	TUNER ASSY	
355	1H	*	X90-4242-71	TUNER ASSY	
355	1H	*	X90-4243-21	TUNER ASSY	
VME1	2C	*	X92-5920-00	DVD MECHANISM ASSY (DVS-8530V)	
TUNER ASSY (X90-424x-xx)					
360	1H	*	A01-4425-11	METALLIC CABINET	M1X1 KR1E1 E2 M1X1 KR1E1
360	1H	*	A01-4432-11	METALLIC CABINET	
360	1H	*	A01-4432-11	METALLIC CABINET	
RC1	2G	*	A70-2082-15	REMOTE CONTROLLER AS (RC-DV330)	
RC1	2G	*	A70-2083-15	REMOTE CONTROLLER AS (RC-DV340)	
RC1	2G	*	A70-2083-15	REMOTE CONTROLLER AS (RC-DV340)	E2
362	3G		B07-3159-02	ESCUTCHEON	
V	2H		N86-2605-48	BINDING HEAD TAPTITE SCREW	
W	2H		N09-6234-05	MACHINE SCREW (M2.6X18)	
X	1H		N89-3008-43	BINDING HEAD TAPTITE SCREW	
367	3G		W01-1661-05	CARRYING CASE	
VIDEO CONTROL UNIT (X14-983x-xx)					
C1			C90-5670-05	ELECTRO	2200UF 16WV CHIP C 0.10UF K CHIP C 0.47UF K CHIP EL 220UF 16WV CHIP EL 100UF 6.3WV
C2,3			CK73GB1H104K	CHIP C	
C4			CK73FB1E474K	CHIP C	
C5			CE32BF1C221M	CHIP EL	
C6			CE32BF0J101M	CHIP EL	
C7			CK73FB0J106K	CHIP C	10UF K CHIP C 0.10UF K CHIP C 10UF K CHIP C 0.010UF K CHIP C 10UF K
C8			CK73GB1H104K	CHIP C	
C10			CK73EB1A106K	CHIP C	
C11			CK73GB1H103K	CHIP C	
C12			CK73EB1A106K	CHIP C	
C13			CK73GB1H103K	CHIP C	0.010UF K CHIP EL 10UF 16WV CHIP C 10UF K CHIP C 0.010UF K CHIP EL 100UF 25WV
C14			CE32BJ1C100M	CHIP EL	
C16			CK73EB1C106K	CHIP C	
C17			CK73GB1H103K	CHIP C	
C19			CE32BF1E101M	CHIP EL	
C20			CK73GB1H104K	CHIP C	0.10UF K CHIP C 10UF K
C22			CK73FB0J106K	CHIP C	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

VIDEO CONTROL UNIT (X14-983x-xx)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation	Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
C23			CK73GB1A105K	CHIP C 1.0UF K		C161,162			CK73GB1H104K	CHIP C 0.10UF K	
C24			CK73EB1C106K	CHIP C 10UF K		C163,164			CK73GB1H103K	CHIP C 0.010UF K	
C27,28			CK73GB1H104K	CHIP C 0.10UF K		C165			C93-1367-05	CHIP C 10UF K	
C29			CK73FB0J106K	CHIP C 10UF K		C167-170			CK73GB1H102K	CHIP C 1000PF K	
C34			CK73FB0J106K	CHIP C 10UF K		C171		*	CE32AV0J221M	CHIP EL 220UF 6.3WV	
C92			CK73GB1H103K	CHIP C 0.010UF K		C172-174			CK73GB1H103K	CHIP C 0.010UF K	
C93			CK73GB1H104K	CHIP C 0.10UF K		C175			C93-1367-05	CHIP C 10UF K	
C94			CK73GB1H103K	CHIP C 0.010UF K		C177-180			CK73GB1H102K	CHIP C 1000PF K	
C95			CK73GB1H104K	CHIP C 0.10UF K		C181		*	CE32AV0G331M	CHIP EL 330UF 4.0WV	
C96			CK73GB1H103K	CHIP C 0.010UF K		C182			CK73GB1H103K	CHIP C 0.010UF K	
C97			CK73GB1H104K	CHIP C 0.10UF K		C183,184			CK73GB1H102K	CHIP C 1000PF K	
C98			CK73GB1H103K	CHIP C 0.010UF K		C185			CK73FB0J106K	CHIP C 10UF K	
C99			CK73GB1H104K	CHIP C 0.10UF K		C186,187			CK73GB1H104K	CHIP C 0.10UF K	
C101			CK73GB1H473K	CHIP C 0.047UF K		C188			CK73FB0J106K	CHIP C 10UF K	
C102			CK73GB1H102K	CHIP C 1000PF K		C189-200			CK73GB1H104K	CHIP C 0.10UF K	
C104			CC73GCH1H221J	CHIP C 220PF J		C201			CK73FB0J106K	CHIP C 10UF K	
C105			CK73GB1H102K	CHIP C 1000PF K		C202			CK73GB1H103K	CHIP C 0.010UF K	
C106			CK73GB1H103K	CHIP C 0.010UF K		C203			CK73GB1H104K	CHIP C 0.10UF K	
C107,108			CC73GCH1H101J	CHIP C 100PF J		C204			CK73FB0J475K	CHIP C 4.7UF K	
C109			CK73GB1H223K	CHIP C 0.022UF K		C205			CK73GB1H104K	CHIP C 0.10UF K	
C110			CC73GCH1H470J	CHIP C 47PF J		C206			CC73GCH1H220J	CHIP C 22PF J	
C111			CK73GB1H103K	CHIP C 0.010UF K		C207			CC73GCH1H180J	CHIP C 18PF J	
C112			CK73GB1H102K	CHIP C 1000PF K		C208,209			CK73GB1H104K	CHIP C 0.10UF K	
C114			CC73GCH1H221J	CHIP C 220PF J		C210			CK73GB1H103K	CHIP C 0.010UF K	
C115			CK73GB1H473K	CHIP C 0.047UF K		C212			CK73GB1H104K	CHIP C 0.10UF K	
C116			CK73GB1H104K	CHIP C 0.10UF K		C213			CK73GB1H221K	CHIP C 220PF K	
C117			CK73FB0J106K	CHIP C 10UF K		C214-217			CE32BM1E470M	CHIP EL 47UF 25WV	
C118			CK73GB1H104K	CHIP C 0.10UF K		C260			CK73GB1H102K	CHIP C 1000PF K	
C119			CK73EB1E225K	CHIP C 2.2UF K		C301			CK73GB1A105K	CHIP C 1.0UF K	
C120,121			CK73GB1H104K	CHIP C 0.10UF K		C303-305			CK73FB0J106K	CHIP C 10UF K	
C122,123			CK73GB1H103K	CHIP C 0.010UF K		C306			CK73GB1H104K	CHIP C 0.10UF K	
C124			C93-1367-05	CHIP C 10UF K		C307-312			CK73GB1H103K	CHIP C 0.010UF K	
C126-129			CK73GB1H102K	CHIP C 1000PF K		C313			CC73GCH1H821J	CHIP C 820PF J	
C130		*	CE32AV0J221M	CHIP EL 220UF 6.3WV		C314			CK73GB1A105K	CHIP C 1.0UF K	
C131-133			CK73GB1H103K	CHIP C 0.010UF K		C315			CK73EB1A106K	CHIP C 10UF K	
C134			C93-1367-05	CHIP C 10UF K		C316			CK73GB1A105K	CHIP C 1.0UF K	
C136-139			CK73GB1H102K	CHIP C 1000PF K		C317			CK73GB1H682K	CHIP C 6800PF K	
C140		*	CE32AV1A121M	CHIP EL 120UF 10WV		C319			CK73GB1H104K	CHIP C 0.10UF K	
C141			CK73GB1H103K	CHIP C 0.010UF K		C321			CK73GB1H103K	CHIP C 0.010UF K	
C142			CK73GB1H473K	CHIP C 0.047UF K		C322			CC73GCH1H050C	CHIP C 5.0PF C	
C143			CK73GB1H102K	CHIP C 1000PF K		C323			CK73GB1A474K	CHIP C 0.47UF K	
C145			CC73GCH1H221J	CHIP C 220PF J		C324			CK73GB1H103K	CHIP C 0.010UF K	
C146			CK73GB1H102K	CHIP C 1000PF K		C325			CC73GCH1H080D	CHIP C 8.0PF D	
C147			CK73GB1H103K	CHIP C 0.010UF K		C325			CC73GCH1H080D	CHIP C 8.0PF D	
C148			CC73GCH1H101J	CHIP C 100PF J		C327-329			CK73FB0J106K	CHIP C 10UF K	
C149			CC73GCH1H470J	CHIP C 47PF J		C330			CK73GB1H104K	CHIP C 0.10UF K	
C150			CK73GB1H153K	CHIP C 0.015UF K		C331			C93-1403-05	CHIP C 22UF M	
C151			CC73GCH1H470J	CHIP C 47PF J		C333-335			CK73EB1C106K	CHIP C 10UF K	
C152			CK73GB1H223K	CHIP C 0.022UF K		C336,337			CK73GB1H104K	CHIP C 0.10UF K	
C153			CK73GB1H102K	CHIP C 1000PF K		C338			CK73GB1H102K	CHIP C 1000PF K	
C155			CC73GCH1H221J	CHIP C 220PF J		C339,340			CK73GB1H103K	CHIP C 0.010UF K	
C156,157			CK73GB1H104K	CHIP C 0.10UF K		C341			CC73GCH1H390J	CHIP C 39PF J	
C158			CK73FB0J106K	CHIP C 10UF K		C342			CK73GB1H103K	CHIP C 0.010UF K	
C159			CK73GB1H104K	CHIP C 0.10UF K		C343			CK73EB1A106K	CHIP C 10UF K	
C160			CK73EB1E225K	CHIP C 2.2UF K		C344			CK73GB1H103K	CHIP C 0.010UF K	

E1E2M1
X1

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

⚠ Indicates safety critical components.

PARTS LIST

VIDEO CONTROL UNIT (X14-983x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
C348			CK73GCH1H101J	CHIP C 100PF J		C551,552			CK73FB0J106K	CHIP C 10UF K	
C350-352			CK73FB0J106K	CHIP C 10UF K		C553,554			CK73GB1H104K	CHIP C 0.10UF K	
C353-355			CK73GB1H102K	CHIP C 1000PF K		CN301			E41-2065-05	FLAT CABLE CONNECTOR	
C356			CK73EB1C106K	CHIP C 10UF K		CN401	*		E41-2806-05	PIN ASSY	
C358			CK73GB1H103K	CHIP C 0.010UF K		CN501			E41-2237-05	FLAT CABLE CONNECTOR (60P)	
C359			CK73GB1H104K	CHIP C 0.10UF K		CN502			E41-2197-05	FLAT CABLE CONNECTOR (50P)	
C361			CK73GB1H103K	CHIP C 0.010UF K		CN503	*		E41-2410-05	FLAT CABLE CONNECTOR (22P)	
C362			CK73GB1H104K	CHIP C 0.10UF K		J1	*		E58-1065-05	RECTANGULAR RECEPTACLE (4P)	
C363			CK73GB1H103K	CHIP C 0.010UF K		J501			E11-0638-05	PHONE JACK	
C364			CK73GB1H104K	CHIP C 0.10UF K		J502	*		E58-1069-05	RECTANGULAR RECEPTACLE	
C400-403			CK73GB1A474K	CHIP C 0.47UF K		F301			F53-0297-05	FUSE (UL,CSA) 1.6A	
C404			CK73GB1H103K	CHIP C 0.010UF K		L2			L92-0373-05	CHIP FERRITE	
C405-407			CK73FB0J106K	CHIP C 10UF K		L3	*		L33-2369-05	CHOKE COIL	
C408			CK73GB1H104K	CHIP C 0.10UF K		L101	*		L33-2369-05	CHOKE COIL	
C409			CK73GB1H103K	CHIP C 0.010UF K		L102	*		L33-2370-05	CHOKE COIL	
C410-415			CK73GB1A105K	CHIP C 1.0UF K		L103	*		L33-2369-05	CHOKE COIL	
C416			CK73GB1H103K	CHIP C 0.010UF K		L104,105	*		L33-2370-05	CHOKE COIL	
C417-422			CK73GB1A105K	CHIP C 1.0UF K		L106	*		L33-2417-05	CHOKE COIL	
C423			CK73GB1H103K	CHIP C 0.010UF K		L107	*		L33-2369-05	CHOKE COIL	
C424-428			CK73GB1A105K	CHIP C 1.0UF K		L108	*		L33-2370-05	CHOKE COIL	
C429			CK73GB1H103K	CHIP C 0.010UF K		L201	*		L92-0319-05	CHIP FERRITE	
C430			CE32BQ0J331M	CHIP EL 330UF 6.3WV		L301-303			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
C431,432			CK73GB1A105K	CHIP C 1.0UF K		L305			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
C433,434			CK73GB1H103K	CHIP C 0.010UF K		L401-404			L92-0319-05	CHIP FERRITE	
C435			CK73EB1A106K	CHIP C 10UF K		L500			L41-1001-28	SMALL FIXED INDUCTOR (10U)	
C440			CK73FB0J106K	CHIP C 10UF K		L501	*		L33-2369-05	CHOKE COIL	
C442-445			CK73FB0J106K	CHIP C 10UF K		X201			L78-1210-05	RESONATOR (4.95MHZ)	
C447,448			CK73FB0J106K	CHIP C 10UF K		X202	*		L77-2917-15	CRYSTAL RESONATOR (32.768KHZ)	
C451,452			CK73GB1H102K	CHIP C 1000PF K		X301			L77-2905-05	CRYSTAL RESONATOR (3.579545MHZ)	
C463,464			CK73GB0J475K	CHIP C 4.7UF K		X302			L77-2906-05	CRYSTAL RESONATOR (4.433619MHZ)	
C465			CK73FB0J106K	CHIP C 10UF K		X302			L77-2906-05	CRYSTAL RESONATOR (4.433619MHZ)	E1E2M1 X1
C501-508			CK73GB1H104K	CHIP C 0.10UF K		CP401			RK74GB1J222J	CHIP-COM 2.2K J 1/16W	
C510-512			CK73GB1H104K	CHIP C 0.10UF K		CP402,403			RK74GB1J103J	CHIP-COM 10K J 1/16W	
C513,514			CK73FB1A225K	CHIP C 2.2UF K		R1,2	*		RK73EB2E622J	CHIP R 6.2K J 1/4W	
C515,516			CK73GB1H103K	CHIP C 0.010UF K		R3			RK73GB2A153J	CHIP R 15K J 1/10W	
C517			CK73FB0J106K	CHIP C 10UF K		R4			RK73GB2A912J	CHIP R 9.1K J 1/10W	
C518			CK73GB1H103K	CHIP C 0.010UF K		R5			RK73GB2A473J	CHIP R 47K J 1/10W	
C519			CK73GB1H104K	CHIP C 0.10UF K		R6			RK73GH2A104D	CHIP R 100K D 1/10W	
C520			CK73FB0J106K	CHIP C 10UF K		R7			RK73GH2A513D	CHIP R 51K D 1/10W	
C521			CK73GB1H104K	CHIP C 0.10UF K		R8			RK73GH2A333D	CHIP R 33K D 1/10W	
C523			CK73GCH1H101J	CHIP C 100PF J		R9,10			RK73GB2A224J	CHIP R 220K J 1/10W	
C528			CK73GB1H104K	CHIP C 0.10UF K		R11			RK73GH2A113D	CHIP R 11K D 1/10W	
C529-534			CK73GB1H103K	CHIP C 0.010UF K		R12			RK73GH2A104D	CHIP R 100K D 1/10W	
C535			CK73GB1H104K	CHIP C 0.10UF K		R13			RK73GH2A683D	CHIP R 68K D 1/10W	
C539	*		CE32AV0J121M	CHIP EL 120UF 6.3WV		R14,15			RK73GH2A334D	CHIP R 330K D 1/10W	
C540			CK73GB1H104K	CHIP C 0.10UF K		R16,17			RK73GB2A224J	CHIP R 220K J 1/10W	
C541			CK73GB1H103K	CHIP C 0.010UF K		R18			RK73GB2A000J	CHIP R 0.0 J 1/10W	
C542			CK73GB1H104K	CHIP C 0.10UF K		R19			RK73GB2A224J	CHIP R 220K J 1/10W	
C543			CK73GB1H103K	CHIP C 0.010UF K		R22			RK73GB2A224J	CHIP R 220K J 1/10W	
C544			CK73GB1H104K	CHIP C 0.10UF K		R24			RK73GB2A303J	CHIP R 30K J 1/10W	
C545			CK73GB1H103K	CHIP C 0.010UF K		R25			RK73GB2A224J	CHIP R 220K J 1/10W	
C546			CK73GB1H104K	CHIP C 0.10UF K		R26			RK73GB2A202J	CHIP R 2.0K J 1/10W	
C547			CK73GB1H103K	CHIP C 0.010UF K		R27,28			RK73GB2A224J	CHIP R 220K J 1/10W	
C548			CK73GB1H104K	CHIP C 0.10UF K							
C549			CK73GB1H103K	CHIP C 0.010UF K							

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

VIDEO CONTROL UNIT (X14-983x-xx)

Ref. No.	Ad	New	Parts No.	Description	Destination	Ref. No.	Ad	New	Parts No.	Description	Destination
R29			RK73GB2A114J	CHIP R 110K J 1/10W		R134,135			RK73EB2E100J	CHIP R 10 J 1/4W	
R34			RK73GB2A823J	CHIP R 82K J 1/10W		R136,137		*	R92-5160-05	CHIP R 0.047 J 1/4W	
R35			RK73GB2A103J	CHIP R 10K J 1/10W		R138			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R36			RK73GB2A224J	CHIP R 220K J 1/10W		R143			RK73GH2A333D	CHIP R 33K D 1/10W	
R37			RK73GB2A333J	CHIP R 33K J 1/10W		R144			RK73GH2A103D	CHIP R 10K D 1/10W	
R38			RK73GB2A224J	CHIP R 220K J 1/10W		R145			RK73GH2A561D	CHIP R 560 D 1/10W	
R39			RK73GB2A000J	CHIP R 0.0 J 1/10W		R146			RK73GB2A103J	CHIP R 10K J 1/10W	
R40			RK73GB2A153J	CHIP R 15K J 1/10W		R149			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R41			RK73GB2A272J	CHIP R 2.7K J 1/10W		R150			RK73GB2A683J	CHIP R 68K J 1/10W	
R42			RK73GB2A000J	CHIP R 0.0 J 1/10W		R152			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R43			RK73GB2A472J	CHIP R 4.7K J 1/10W		R153			RK73GB2A683J	CHIP R 68K J 1/10W	
R44			RK73GB2A561J	CHIP R 560 J 1/10W		R154			RK73GH2A333D	CHIP R 33K D 1/10W	
R50			RK73GB2A302J	CHIP R 3.0K J 1/10W		R155			RK73GH2A562D	CHIP R 5.6K D 1/10W	
R51			RK73GB2A332J	CHIP R 3.3K J 1/10W		R156			RK73GH2A681D	CHIP R 680 D 1/10W	
R52			RK73GB2A272J	CHIP R 2.7K J 1/10W		R158			RK73EB2E100J	CHIP R 10 J 1/4W	
R53			RK73GB2A393J	CHIP R 39K J 1/10W		R159			RK73GB2A220J	CHIP R 22 J 1/10W	
R54			RK73GB2A113J	CHIP R 11K J 1/10W		R160-162			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R55			RK73GB2A302J	CHIP R 3.0K J 1/10W		R163,164			RK73EB2E100J	CHIP R 10 J 1/4W	
R56			RK73GB2A332J	CHIP R 3.3K J 1/10W		R165,166		*	R92-5158-05	CHIP R 0.022 J 1/4W	
R57			RK73GB2A272J	CHIP R 2.7K J 1/10W		R167			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R58			RK73GB2A393J	CHIP R 39K J 1/10W		R168			RK73GB2A220J	CHIP R 22 J 1/10W	
R59			RK73GB2A113J	CHIP R 11K J 1/10W		R169-171			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R60			RK73GB2A223J	CHIP R 22K J 1/10W		R172,173			RK73EB2E100J	CHIP R 10 J 1/4W	
R61,62			RK73GB2A103J	CHIP R 10K J 1/10W		R175		*	R92-5159-05	CHIP R 0.033 J 1/4W	
R65			RK73GB2A153J	CHIP R 15K J 1/10W		R176			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R66			RK73GB2A302J	CHIP R 3.0K J 1/10W		R188			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R67			RK73GB2A332J	CHIP R 3.3K J 1/10W		R201			RK73GB2A473J	CHIP R 47K J 1/10W	
R68			RK73GB2A272J	CHIP R 2.7K J 1/10W		R202,203			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R69			RK73GB2A333J	CHIP R 33K J 1/10W		R204-208			RK73GB2A101J	CHIP R 100 J 1/10W	
R70			RK73GB2A203J	CHIP R 20K J 1/10W		R209,210			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R73,74			RK73GB2A101J	CHIP R 100 J 1/10W		R211			RK73GB2A103J	CHIP R 10K J 1/10W	
R76,77			RK73GB2A101J	CHIP R 100 J 1/10W		R212			RK73GB2A332J	CHIP R 3.3K J 1/10W	
R89			RK73GB2A000J	CHIP R 0.0 J 1/10W		R213			RK73GB2A473J	CHIP R 47K J 1/10W	
R102,103			RK73GH2A561D	CHIP R 560 D 1/10W		R214			RK73GB2A104J	CHIP R 100K J 1/10W	
R104			RK73GH2A333D	CHIP R 33K D 1/10W		R215			RK73GB2A473J	CHIP R 47K J 1/10W	
R105			RK73GH2A622D	CHIP R 6.2K D 1/10W		R216-227			RK73GB2A101J	CHIP R 100 J 1/10W	
R106			RK73GB2A000J	CHIP R 0.0 J 1/10W		R228,229			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R107			RK73GH2A113D	CHIP R 11K D 1/10W		R230			RK73GB2A104J	CHIP R 100K J 1/10W	
R108			RK73GB2A103J	CHIP R 10K J 1/10W		R231-233			RK73GB2A473J	CHIP R 47K J 1/10W	
R111			RK73GB2A000J	CHIP R 0.0 J 1/10W		R234-236			RK73GB2A101J	CHIP R 100 J 1/10W	
R112			RK73GB2A333J	CHIP R 33K J 1/10W		R237			RK73GB2A473J	CHIP R 47K J 1/10W	
R114			RK73GB2A000J	CHIP R 0.0 J 1/10W		R238-240			RK73GB2A101J	CHIP R 100 J 1/10W	
R115			RK73GB2A683J	CHIP R 68K J 1/10W		R241			RK73GB2A473J	CHIP R 47K J 1/10W	
R116			RK73GH2A333D	CHIP R 33K D 1/10W		R242-246			RK73GB2A101J	CHIP R 100 J 1/10W	
R117			RK73GH2A562D	CHIP R 5.6K D 1/10W		R247			RK73GB2A473J	CHIP R 47K J 1/10W	
R118			RK73GH2A681D	CHIP R 680 D 1/10W		R248			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R120			RK73EB2E100J	CHIP R 10 J 1/4W		R249,250			RK73GB2A473J	CHIP R 47K J 1/10W	
R121			RK73GB2A220J	CHIP R 22 J 1/10W		R251-253			RK73GB2A101J	CHIP R 100 J 1/10W	
R122-124			RK73GB2A000J	CHIP R 0.0 J 1/10W		R254			RK73GB2A473J	CHIP R 47K J 1/10W	
R125,126			RK73EB2E100J	CHIP R 10 J 1/4W		R255,256			RK73GB2A123J	CHIP R 12K J 1/10W	
R127		*	R92-5158-05	CHIP R 0.022 J 1/4W		R257			RK73GB2A473J	CHIP R 47K J 1/10W	
R129			RK73GB2A000J	CHIP R 0.0 J 1/10W		R258			RK73GB2A103J	CHIP R 10K J 1/10W	R1E1E2
R130			RK73GB2A220J	CHIP R 22 J 1/10W		R258			RK73GB2A103J	CHIP R 10K J 1/10W	X1
R131			RK73GB2A000J	CHIP R 0.0 J 1/10W		R258-261			RK73GB2A103J	CHIP R 10K J 1/10W	M1
R132,133			RK73GH2A561D	CHIP R 560 D 1/10W		R259			RK73GB2A303J	CHIP R 30K J 1/10W	X1

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
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X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

VIDEO CONTROL UNIT (X14-983x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
R259			RK73GB2A332J	CHIP R 3.3K J 1/10W	E1E2	R394			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R259-261			RK73GB2A103J	CHIP R 10K J 1/10W	K	R400-403			RK73EB2E100J	CHIP R 10 J 1/4W	
R260,261			RK73GB2A103J	CHIP R 10K J 1/10W	R1E1E2	R404			RK73GB2A100J	CHIP R 10 J 1/10W	
R260,261			RK73GB2A103J	CHIP R 10K J 1/10W	X1	R405			RK73GB2A202J	CHIP R 2.0K J 1/10W	
R262			RK73GB2A104J	CHIP R 100K J 1/10W		R410,411			RK73GB2A223J	CHIP R 22K J 1/10W	
R264			RK73GB2A103J	CHIP R 10K J 1/10W		R412			RK73GB2A202J	CHIP R 2.0K J 1/10W	
R265,266			RK73GB2A000J	CHIP R 0.0 J 1/10W		R413			RK73GB2A750J	CHIP R 75 J 1/10W	
R276			RK73GB2A473J	CHIP R 47K J 1/10W		R414			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R301			RK73GB2A102J	CHIP R 1.0K J 1/10W		R415			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R302			RK73GB2A101J	CHIP R 100 J 1/10W		R420			RK73GB2A103J	CHIP R 10K J 1/10W	
R303			RK73GB2A000J	CHIP R 0.0 J 1/10W		R421			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R304			RK73GB2A681J	CHIP R 680 J 1/10W		R422-424			RK73GB2A101J	CHIP R 100 J 1/10W	
R305			RK73GB2A222J	CHIP R 2.2K J 1/10W		R425-430			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R306			RK73GB2A000J	CHIP R 0.0 J 1/10W		R431			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R307			RK73GH2A183D	CHIP R 18K D 1/10W		R432-435			RK73GB2A101J	CHIP R 100 J 1/10W	
R308			RK73GB2A473J	CHIP R 47K J 1/10W		R436			RK73GB2A751J	CHIP R 750 J 1/10W	
R309			RK73GB2A000J	CHIP R 0.0 J 1/10W		R437			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R310			RK73GB2A561J	CHIP R 560 J 1/10W		R438			RK73GB2A101J	CHIP R 100 J 1/10W	
R311			RK73GB2A105J	CHIP R 1.0M J 1/10W		R439			RK73GB2A751J	CHIP R 750 J 1/10W	
R312			RK73GB2A000J	CHIP R 0.0 J 1/10W		R440			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R313			RK73GB2A105J	CHIP R 1.0M J 1/10W		R441			RK73GB2A101J	CHIP R 100 J 1/10W	
R316			RK73GH2A222D	CHIP R 2.2K D 1/10W		R442			RK73GB2A751J	CHIP R 750 J 1/10W	
R317			RK73GB2A822J	CHIP R 8.2K J 1/10W		R443			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R318			RK73GB2A562J	CHIP R 5.6K J 1/10W		R444			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R319			RK73GH2A681D	CHIP R 680 D 1/10W	E1E2M1	R445-448			RK73GB2A101J	CHIP R 100 J 1/10W	
R319			RK73GH2A681D	CHIP R 680 D 1/10W	X1	R449			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R320-322			RK73GB2A000J	CHIP R 0.0 J 1/10W		R450			RK73GB2A221J	CHIP R 220 J 1/10W	
R324			RK73GB2A103J	CHIP R 10K J 1/10W		R451			RK73GB2A101J	CHIP R 100 J 1/10W	
R325			RK73GB2A000J	CHIP R 0.0 J 1/10W		R452			RK73GB2A751J	CHIP R 750 J 1/10W	
R326			RK73GB2A103J	CHIP R 10K J 1/10W		R453			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R327-330			RK73GB2A101J	CHIP R 100 J 1/10W		R454			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R331			RK73GH2A473D	CHIP R 47K D 1/10W		R455-459			RK73GB2A101J	CHIP R 100 J 1/10W	
R332			RK73GB2A361J	CHIP R 360 J 1/10W		R460,461			RK73GB2A473J	CHIP R 47K J 1/10W	
R334			RK73GB2A361J	CHIP R 360 J 1/10W		R463,464			RK73EB2E101J	CHIP R 100 J 1/4W	
R335,336			RK73GB2A303J	CHIP R 30K J 1/10W		R500,501			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R337			RK73GB2A100J	CHIP R 10 J 1/10W		R504-515			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R338			RK73GB2A102J	CHIP R 1.0K J 1/10W		R518,519			RK73GB2A223J	CHIP R 22K J 1/10W	
R339			RK73GB2A000J	CHIP R 0.0 J 1/10W		R522			RK73GB2A101J	CHIP R 100 J 1/10W	
R342			RK73GB2A000J	CHIP R 0.0 J 1/10W		R525-527			RK73GB2A101J	CHIP R 100 J 1/10W	
R344			RK73GB2A222J	CHIP R 2.2K J 1/10W		R529,530			RK73GB2A471J	CHIP R 470 J 1/10W	
R345			RK73GH2A432D	CHIP R 4.3K D 1/10W		R531-533			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R346			RK73GH2A152D	CHIP R 1.5K D 1/10W		R534			RK73GB2A100J	CHIP R 10 J 1/10W	
R347			RK73GH2A104D	CHIP R 100K D 1/10W		R535			RK73GB2A151J	CHIP R 150 J 1/10W	
R348			RK73GH2A363D	CHIP R 36K D 1/10W		R536			RK73EB2E750J	CHIP R 75 J 1/4W	
R349			RK73GH2A104D	CHIP R 100K D 1/10W		R537,538			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R350			RK73GH2A363D	CHIP R 36K D 1/10W		R539,540			RK73GB2A473J	CHIP R 47K J 1/10W	
R351			RK73GH2A104D	CHIP R 100K D 1/10W		R542			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R352			RK73GH2A363D	CHIP R 36K D 1/10W		R551			RK73GB2A100J	CHIP R 10 J 1/10W	
R353-355			RK73GB2A362J	CHIP R 3.6K J 1/10W		R552			RK73GB2A473J	CHIP R 47K J 1/10W	
R356-361			RK73GH2A102D	CHIP R 1.0K D 1/10W		R553			RK73GB2A100J	CHIP R 10 J 1/10W	
R370,371			RK73GB2A101J	CHIP R 100 J 1/10W		R554			RK73GB2A473J	CHIP R 47K J 1/10W	
R372,373			RK73GB2A000J	CHIP R 0.0 J 1/10W		R555			RK73GB2A100J	CHIP R 10 J 1/10W	
R374-387			RK73GB2A101J	CHIP R 100 J 1/10W		R556			RK73GB2A473J	CHIP R 47K J 1/10W	
R388			RK73GB2A272J	CHIP R 2.7K J 1/10W		R557			RK73GB2A100J	CHIP R 10 J 1/10W	
R389			RK73GB2A222J	CHIP R 2.2K J 1/10W		R558			RK73GB2A473J	CHIP R 47K J 1/10W	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

VIDEO CONTROL UNIT (X14-983x-xx)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation	Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
R559-565 R566 R567 R568-571 R572			RK73EB2E101J RK73EB2E102J RK73EB2E750J RK73GB2A750J RK73GB2A101J	CHIP R 100 J 1/4W CHIP R 1.0K J 1/4W CHIP R 75 J 1/4W CHIP R 75 J 1/10W CHIP R 100 J 1/10W		IC400 IC401 IC402 IC403,404 IC405		*	NJM2505AF-ZB NJM2794RB2ZB BU2090FS MM1234XFBE-E BA7649F	ANALOGUE IC ANALOGUE IC MOS-IC ANALOGUE IC ANALOGUE IC	
R573-575 R576 R577 R581 R582-585			RK73GB2A100J RK73GB2A102J RK73GB2A472J RK73GB2A000J RK73EB2E101J	CHIP R 10 J 1/10W CHIP R 1.0K J 1/10W CHIP R 4.7K J 1/10W CHIP R 0.0 J 1/10W CHIP R 100 J 1/4W		IC406 IC407,408 IC501,502 IC503 Q1,2			MM1508XNRE-E TC4052BFT LB1836M-TLM-E TC7SET04FU-F 2SC4081	ANALOGUE IC MOS-IC ANALOGUE IC MOS-IC TRANSISTOR	
R586 R587,588 R589 R590,591 R598			RK73EB2E102J RK73EB2E101J RK73GB2A103J RK73GB2A472J RK73GB2A101J	CHIP R 1.0K J 1/4W CHIP R 100 J 1/4W CHIP R 10K J 1/10W CHIP R 4.7K J 1/10W CHIP R 100 J 1/10W		Q3 Q4 Q5 Q6 Q7			2SA1576A 2SC4081 2SA1576A 2SC4081 DTA114EUA	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR	
D1 D2 D3 D4 D101-104		*	1SR154-400 DAN202U UDZS6.2B EP05Q04 1SS357-F	DIODE DIODE ZENER DIODE DIODE DIODE		Q8 Q9 Q10 Q13 Q14			DTC114YUA DTA114TUA DTC114YUA 2SC4081 2SB1184	DIGITAL TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR	
D301 D310,311 D312,313 D314-324 D400			DAN202U AVRM1608120M6A AVRM1608180M6A AVRM1608120M6A AVRM1608270MAA	DIODE VARISTOR VARISTOR VARISTOR VARISTOR		Q15,16 Q17 Q19 Q20,21 Q22			2SC4081 2SA1576A DTC144EUA 2SA1576A TPC8110-F	TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR FET	
D401,402 D403 D404 D405 D406			AVRM1608120M6A DAP202U UDZS4.7B AVRM1608120M6A AVRM1608270MAA	VARISTOR DIODE ZENER DIODE VARISTOR VARISTOR		Q23 Q24 Q25 Q26 Q31			2SC4081 2SA1576A DTC114YUA 2SB1689 2SB1184	TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR	
D501 D502 D503 D504-508 D510-513			DAP202U AVRM1608270MAA DA204U STZ6.2N AVRM1608120M6A	DIODE VARISTOR DIODE ZENER DIODE VARISTOR		Q32 Q33 Q34 Q35 Q36			2SC4081 2SA1576A 2SC4081 2SB1184 2SC4081	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	
D514 D515-518 D523 D524 D528-536			AVRM1608180M6A AVRM1608120M6A AVRM1608120M6A AVRM1608180M6A AVRM1608270MAA	VARISTOR VARISTOR VARISTOR VARISTOR VARISTOR		Q37 Q38 Q43 Q44 Q45			2SA1576A 2SC4081 2SB1184 2SC4081 2SA1576A	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	
IC1 IC2 IC10 IC101,102 IC201		*	SI-3033KMS PQ1X331M2ZPH NJM4565V-ZB LTC3728LEGN 703261YGC315A	ANALOGUE IC ANALOGUE IC ANALOGUE IC ANALOGUE IC MICROCONTROLLER IC		Q46 Q101 Q103 Q104,105 Q106		*	2SC4081 DTC114YUA DTC144EUA HAT2218R-E DTC144EUA	TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR DUAL FET DIGITAL TRANSISTOR	
IC202 IC203 IC203 IC203 IC203		*	S1000N30N4T1G W05-1260-00 W05-1261-00 W05-1262-00 W05-1263-00	ANALOGUE IC ROM IC ROM IC ROM IC ROM IC	K E1E2 M1 R1X1	Q108 Q109,110 Q111 Q201 Q203		*	DTC144EUA HAT2218R-E DTC144EUA DTC144EUA DTA144EUA	DIGITAL TRANSISTOR DUAL FET DIGITAL TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR	
IC205 IC301 IC302 IC303 IC304			TC7SET08FU-F RB5P0090M TC7SET04FU-F TC7WH123FU-F TC7SH04FU-F	MOS-IC ANALOGUE IC MOS-IC MOS-IC MOS-IC		Q204 Q205 Q206 Q207 Q208,209			DTC114YUA DTB123YK DTC114YUA DTB123YK DTC114YUA	DIGITAL TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

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PARTS LIST

VIDEO CONTROL UNIT (X14-983x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
Q210 Q301 Q304 Q305 Q306-309			DTB123YK 2SC4081 UMZ1N DTC114YUA UMZ1N	DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR	
Q401 Q501,502 Q503 Q504 Q508			2SA1576A DTC323TU DTA114EUA 2SA1576A 2SC3437-F(Y)	TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR	
SWITCH UNIT (X16-3920-10)					
D101 D203 D205 D207-209 D221-225			B30-1713-05 B30-1713-05 B30-1740-05 B30-1767-05 B30-1605-05	LED (SR,TS) LED (SR,TS) LED (CL-270PG-C-TSL) LED LED (2COLOR PG/RED)	
C203 C204			CC73GCH1H221J CK73FB1A225K	CHIP C 220PF J CHIP C 2.2UF K	
CN101 J101 J201			E41-2366-05 E58-1008-05 E59-0843-05	FLAT CABLE CONNECTOR RECTANGULAR RECEPTACLE RECTANGULAR PLUG	
R101,102 R103-105 R106 R107 R201			RK73EB2E101J RK73EB2E102J RK73GB2A101J RK73EB2E102J RK73GB2A152J	CHIP R 100 J 1/4W CHIP R 1.0K J 1/4W CHIP R 100 J 1/10W CHIP R 1.0K J 1/4W CHIP R 1.5K J 1/10W	
R202 R203 R204 R205 R206			RK73GB2A181J RK73GB2A101J RK73GB2A331J RK73GB2A272J RK73GB2A332J	CHIP R 180 J 1/10W CHIP R 100 J 1/10W CHIP R 330 J 1/10W CHIP R 2.7K J 1/10W CHIP R 3.3K J 1/10W	
R207 R208 R209 R214 R216			RK73GB2A181J RK73GB2A331J RK73GB2A472J RK73EB2E101J RK73GB2A104J	CHIP R 180 J 1/10W CHIP R 330 J 1/10W CHIP R 4.7K J 1/10W CHIP R 100 J 1/4W CHIP R 100K J 1/10W	
R217 R219 R221 R224 R225			RK73EB2E101J RK73GB2A391J RK73EB2E471J RK73GB2A822J RK73GB2A153J	CHIP R 100 J 1/4W CHIP R 390 J 1/10W CHIP R 470 J 1/4W CHIP R 8.2K J 1/10W CHIP R 15K J 1/10W	
R226 R234,235 R236 R237 R238			RK73GB2A473J RK73GB2A222J RK73GB2A471J RK73FB2B471J RK73GB2A391J	CHIP R 47K J 1/10W CHIP R 2.2K J 1/10W CHIP R 470 J 1/10W CHIP R 470 J 1/8W CHIP R 390 J 1/10W	
R239,240			RK73GB2A471J	CHIP R 470 J 1/10W	
S201-206 S207 S208			S70-0901-05 S70-0874-05 S70-0901-05	TACT SWITCH TACT SWITCH TACT SWITCH	
D102 D103-106 D201			AVRM1608180M6A AVRM1005270MAA UDZS6.2B	VARISTOR VARISTOR ZENER DIODE	

Ref. No.	Add	New	Parts No.	Description	Destination
D217 D404-410 D411 IC201 Q101			AVRM1608120M6A AVRM1608180M6A DAP202U RS-181 DTC114YUA	VARISTOR VARISTOR DIODE ANALOGUE IC DIGITAL TRANSISTOR	
Q206			2SA1576A	TRANSISTOR	
ELECTRIC UNIT (X34-475x-xx)					
C1 C2 C4-6 C7 C8			C90-5612-05 CK73GB1H103K CK73FB1C105K CK73GB1H103K CD04AS1H3R3M	ELECTRO 3900UF 16WV CHIP C 0.010UF K CHIP C 1.0UF K CHIP C 0.010UF K ELECTRO 3.3UF 50WV	
C9 C10 C11-13 C14,15 C16,17			CK73FB1C105K CK73GB1H104K CK73GB1H103K CK73FB1E474K CK73GB1H473K	CHIP C 1.0UF K CHIP C 0.10UF K CHIP C 0.010UF K CHIP C 0.47UF K CHIP C 0.047UF K	M1X1
C51 C53 C54 C61 C62			CD04AY1E221M CD04AY1H100M CD04AY0J331M CK73GB1A105K CD04AY1E470M	ELECTRO 220UF 25WV ELECTRO 10UF 50WV ELECTRO 330UF 6.3WV CHIP C 1.0UF K ELECTRO 47UF 25WV	
C71 C72 C81 C91 C101			CK73GB1A105K CD04AY1A101M CK73EB1E105K CK73EB1E105K CD04BJ0J331M	CHIP C 1.0UF K ELECTRO 100UF 10WV CHIP C 1.0UF K CHIP C 1.0UF K ELECTRO 330UF 6.3WV	M1X1 M1X1
C103 C104,105 C106 C107-110 C112			CK73GB1H102K CK73GB1H104K CK73GB1A105K CK73GB1H104K CK73GB1H102K	CHIP C 1000PF K CHIP C 0.10UF K CHIP C 1.0UF K CHIP C 0.10UF K CHIP C 1000PF K	
C113-116 C201 C202 C203,204 C205,206			CK73GB1H103K CD04BJ1E470M CD04AS1V100M CC73GCH1H070D CD04AS1H3R3M	CHIP C 0.010UF K ELECTRO 47UF 25WV ELECTRO 10UF 35WV CHIP C 7.0PF D ELECTRO 3.3UF 50WV	
C207 C209-211 C212,213 C216 C223,224			CK73FB1C105K CD04AS1H010M CK73FB1C105K CK73GB1H103K CK73FB1E474K	CHIP C 1.0UF K ELECTRO 1UF 50WV CHIP C 1.0UF K CHIP C 0.010UF K CHIP C 0.47UF K	
C225,226 C227,228 C233 C234,235 C260-263			CD04AS1H2R2M CK73FB1E474K CD04AS1V100M CK73GB1H103K CK73GB1H103K	ELECTRO 2.2UF 50WV CHIP C 0.47UF K ELECTRO 10UF 35WV CHIP C 0.010UF K CHIP C 0.010UF K	
C264,265 C264,265 C266 C266 C267			CC73GCH1H100D CC73GCH1H100D CK73GB1H103K CK73GB1H103K CC73GCH1H331J	CHIP C 10PF D CHIP C 10PF D CHIP C 0.010UF K CHIP C 0.010UF K CHIP C 330PF J	KR1E1 E2M1 KR1E1 E2M1 KR1E1
C267 C268,269			CC73GCH1H331J CD04AS1V100M	CHIP C 330PF J ELECTRO 10UF 35WV	E2M1 KR1E1

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

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PARTS LIST

ELECTRIC UNIT (X34-475x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
C268,269 C270 C270 C305,306 C311,312			CD04AS1V100M CK73GB1H103K CK73GB1H103K C90-6779-05 C90-6780-05	ELECTRO 10UF 35WV CHIP C 0.010UF K CHIP C 0.010UF K ELECTRO 0.47UF 16WV ELECTRO 1UF 16WV	E2M1 KR1E1 E2M1
C315,316 C317,318 C319 C351-354 C355			CK73GB1A105K C90-6779-05 CD04BM1E330M CK73GB1H104K CD04AS1V100M	CHIP C 1.0UF K ELECTRO 0.47UF 16WV ELECTRO 33UF 25WV CHIP C 0.10UF K ELECTRO 10UF 35WV	
C356,357 C358,359 C360,361 C362,363 C364,365			CK73GB1H102K CD04AS1V100M CK73GB1H102K CD04AS1V100M CK73GB1H102K	CHIP C 1000PF K ELECTRO 10UF 35WV CHIP C 1000PF K ELECTRO 10UF 35WV CHIP C 1000PF K	
C366,367 C368,369 C370 C371 C401			CD04AS1V100M CK73GB1H102K CD04AS1V100M CK73GB1H222K CD04AS1HR47M	ELECTRO 10UF 35WV CHIP C 1000PF K ELECTRO 10UF 35WV CHIP C 2200PF K ELECTRO 0.47UF 50WV	
C402 C403 C501,502 C505-509 C511			CD04BJ1E470M CD04AS1HR47M CK73GB1H103K CD04AS1H2R2M CD04BJ1E470M	ELECTRO 47UF 25WV ELECTRO 0.47UF 50WV CHIP C 0.010UF K ELECTRO 2.2UF 50WV ELECTRO 47UF 25WV	
C512,513 C514 C515 C517 C701-703			CD04AS1H2R2M CD04AS1V100M CD04BJ1E470M CD04AS1H2R2M CK73GB1A474K	ELECTRO 2.2UF 50WV ELECTRO 10UF 35WV ELECTRO 47UF 25WV ELECTRO 2.2UF 50WV CHIP C 0.47UF K	
C707 C708 C709 C710 C711			CD04BJ1E470M CK73GB1H103K CD04AS1C220M CK73GB1A474K CD04BJ1E470M	ELECTRO 47UF 25WV CHIP C 0.010UF K ELECTRO 22UF 16WV CHIP C 0.47UF K ELECTRO 47UF 25WV	
C712 C713 C715 C719-721 C723			CK73GB1A474K CK73GB1H104K CK73GB1H103K CD04AS1HR47M CK73GB1H103K	CHIP C 0.47UF K CHIP C 0.10UF K CHIP C 0.010UF K ELECTRO 0.47UF 50WV CHIP C 0.010UF K	
C725 C726 C727 C729 C730			CD04BJ1E470M CK73GB1H222K CK73GB1H102K CD04AS1HR47M CK73GB1A474K	ELECTRO 47UF 25WV CHIP C 2200PF K CHIP C 1000PF K ELECTRO 0.47UF 50WV CHIP C 0.47UF K	
C801-804 C807 C808 C809-811 C812			CK73GB1A105K CK73GB1A105K CD04AS1C220M CK73GB1H104K CD04BJ0J331M	CHIP C 1.0UF K CHIP C 1.0UF K ELECTRO 22UF 16WV CHIP C 0.10UF K ELECTRO 330UF 6.3WV	
C813-815 C817 C818,819 C820 C821,822			CK73GB1A105K CK73GB1A105K CK73GB1H104K CD04BJ0J331M CK73GB1A105K	CHIP C 1.0UF K CHIP C 1.0UF K CHIP C 0.10UF K ELECTRO 330UF 6.3WV CHIP C 1.0UF K	

Ref. No.	Add	New	Parts No.	Description	Destination
C824 C825 C827 C828-830 C832			CK73GB1H104K CK73GB1H103K CK73GB1H473K CK73GB1H103K CK73GB1A105K	CHIP C 0.10UF K CHIP C 0.010UF K CHIP C 0.047UF K CHIP C 0.010UF K CHIP C 1.0UF K	
C834 C835 C836 C837 C838			CK73GB1H104K CK73GB1A105K CK73GB1H104K CK73GB1A105K CK73GB1H104K	CHIP C 0.10UF K CHIP C 1.0UF K CHIP C 0.10UF K CHIP C 1.0UF K CHIP C 0.10UF K	E1E2 E1E2 E1E2
C839 C841-843 C844-846 C847-849 C847-849			CK73GB1A105K CK73GB1H103K CK73GB1A105K CK73GB1A105K CK73GB1A105K	CHIP C 1.0UF K CHIP C 0.010UF K CHIP C 1.0UF K CHIP C 1.0UF K CHIP C 1.0UF K	E1E2 E1E2 KR1M1 X1
C850-852 C853 C854,855 C856-858 C859			CD04BJ0J331M CC73GCH1H101J CK73GB1A105K CK73GB1H104K CC73GCH1H101J	ELECTRO 330UF 6.3WV CHIP C 100PF J CHIP C 1.0UF K CHIP C 0.10UF K CHIP C 100PF J	
C860 C861 C862 C867-869 C870			CK73GB1H103K CK73GB1A105K CK73GB1H103K CC73GCH1H050C CK73GB1H103K	CHIP C 0.010UF K CHIP C 1.0UF K CHIP C 0.010UF K CHIP C 5.0PF C CHIP C 0.010UF K	
C871 C872 C874 C875 C877			CK73GB1H222K CC73GCH1H220J CK73GB1H222K CC73GCH1H220J CK73GB1H222K	CHIP C 2200PF K CHIP C 22PF J CHIP C 2200PF K CHIP C 22PF J CHIP C 2200PF K	
C878 C880 C881 C884 C885			CC73GCH1H220J CK73GB1H222K CC73GCH1H220J CC73GCH1H220J CK73GB1H222K	CHIP C 22PF J CHIP C 2200PF K CHIP C 22PF J CHIP C 22PF J CHIP C 2200PF K	
C887 C888 C890 C891 C893			CC73GCH1H220J CK73GB1H222K CC73GCH1H220J CK73GB1H222K CC73GCH1H220J	CHIP C 22PF J CHIP C 2200PF K CHIP C 22PF J CHIP C 2200PF K CHIP C 22PF J	
C894 C895			CK73GB1H222K CK73GB1H104K	CHIP C 2200PF K CHIP C 0.10UF K	
J1 J351 J401 J501 J701		*	E58-1043-05 E63-0944-05 E56-0856-05 E58-1069-05 E58-1034-05	RECTANGULAR RECEPTACLE PIN JACK CYLINDRICAL RECEPTACLE RECTANGULAR RECEPTACLE RECTANGULAR RECEPTACLE	
J702 J703 J704 J705 W251		*	E56-0868-05 E63-0943-05 E63-0945-05 E58-1067-05 E30-6492-05	CYLINDRICAL RECEPTACLE PIN JACK PIN JACK RECTANGULAR RECEPTACLE CORD WITH PLUG	M1X1
F51	3G		F53-0297-05	FUSE (UL,CSA) 1.6A	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
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PARTS LIST

ELECTRIC UNIT (X34-475x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
L1			L33-1063-25	CHOKE COIL		R40			RK73EB2E103J	CHIP R 10K J 1/4W	
L71			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)		R41-44			RK73GB2A473J	CHIP R 47K J 1/10W	M1X1
L101			L92-0319-05	CHIP FERRITE		R51			RK73EB2E000J	CHIP R 0.0 J 1/4W	
L105			L92-0319-05	CHIP FERRITE		R52			RK73FB2B203J	CHIP R 20K J 1/8W	
L251			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)		R53,54			RK73GB2A101J	CHIP R 100 J 1/10W	
L253			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)		R55			RK73GB2A223J	CHIP R 22K J 1/10W	
L255			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)	KR1E1	R56			RK73FB2B222J	CHIP R 2.2K J 1/8W	
L255			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)	E2M1	R61			RK73FB2B221J	CHIP R 220 J 1/8W	
L701			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)		R62			RK73GH2A153D	CHIP R 15K D 1/10W	
L702			L92-0319-05	CHIP FERRITE		R63			RK73GH2A512D	CHIP R 5.1K D 1/10W	
L703			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)		R71			RK73FB2B221J	CHIP R 220 J 1/8W	
X101		*	L78-1220-05	RESONATOR (19.8000MHZ)		R72			RK73GH2A243D	CHIP R 24K D 1/10W	
X251			L77-2002-05	CRYSTAL RESONATOR	KR1E1	R73			RK73GH2A432D	CHIP R 4.3K D 1/10W	
X251			L77-2002-05	CRYSTAL RESONATOR	E2M1	R81			RK73GB2A472J	CHIP R 4.7K J 1/10W	M1X1
Y	3H		N09-4461-05	TAPTITE SCREW		R82			RK73EB2E152J	CHIP R 1.5K J 1/4W	M1X1
Z	3H		N84-3008-43	PAN HEAD TAPTITE SCREW		R83			RK73GB2A621J	CHIP R 620 J 1/10W	M1X1
R1			RK73GB2A103J	CHIP R 10K J 1/10W		R84			RK73GB2A242J	CHIP R 2.4K J 1/10W	M1X1
R2			RK73FB2B472J	CHIP R 4.7K J 1/8W	M1X1	R85,86		*	RK73PB2H2R0J	CHIP R 2.0 J 1/2W	M1X1
R3			RK73EB2E272J	CHIP R 2.7K J 1/4W		R87			RK73GB2A124J	CHIP R 120K J 1/10W	M1X1
R4			RK73GB2A102J	CHIP R 1.0K J 1/10W		R88			RK73GB2A103J	CHIP R 10K J 1/10W	M1X1
R5			RK73FB2B472J	CHIP R 4.7K J 1/8W	M1X1	R89			RK73GB2A473J	CHIP R 47K J 1/10W	M1X1
R6			RK73GB2A473J	CHIP R 47K J 1/10W		R91			RK73GB2A472J	CHIP R 4.7K J 1/10W	M1X1
R7			RK73GB2A103J	CHIP R 10K J 1/10W		R92			RK73EB2E152J	CHIP R 1.5K J 1/4W	M1X1
R8			RK73EB2E103J	CHIP R 10K J 1/4W		R93			RK73GB2A621J	CHIP R 620 J 1/10W	M1X1
R9			RK73GB2A473J	CHIP R 47K J 1/10W		R94			RK73GB2A242J	CHIP R 2.4K J 1/10W	M1X1
R10			RK73EB2E272J	CHIP R 2.7K J 1/4W		R95,96		*	RK73PB2H2R0J	CHIP R 2.0 J 1/2W	M1X1
R11			RK73GB2A102J	CHIP R 1.0K J 1/10W		R97			RK73GB2A124J	CHIP R 120K J 1/10W	M1X1
R12			RK73EB2E102J	CHIP R 1.0K J 1/4W		R98			RK73GB2A103J	CHIP R 10K J 1/10W	M1X1
R13			RK73GB2A104J	CHIP R 100K J 1/10W		R99			RK73GB2A473J	CHIP R 47K J 1/10W	M1X1
R14			RK73GB2A223J	CHIP R 22K J 1/10W		R102			RK73GB2A472J	CHIP R 4.7K J 1/10W	M1X1
R15			RK73GB2A103J	CHIP R 10K J 1/10W		R103-106			RK73GB2A473J	CHIP R 47K J 1/10W	
R16			RK73GB2A183J	CHIP R 18K J 1/10W		R107			RK73GB2A101J	CHIP R 100 J 1/10W	
R19			RK73GB2A683J	CHIP R 68K J 1/10W		R108			RK73GB2A471J	CHIP R 470 J 1/10W	
R21			RK73GB2A393J	CHIP R 39K J 1/10W		R109-112			RK73GB2A101J	CHIP R 100 J 1/10W	
R22			RK73GB2A104J	CHIP R 100K J 1/10W		R114-117			RK73GB2A101J	CHIP R 100 J 1/10W	
R23			RK73FB2B472J	CHIP R 4.7K J 1/8W		R118			RK73GB2A223J	CHIP R 22K J 1/10W	
R24			RK73GB2A223J	CHIP R 22K J 1/10W		R119-126			RK73GB2A473J	CHIP R 47K J 1/10W	
R25,26			RK73PB2H102J	CHIP R 1.0K J 1/2W		R127-130			RK73GB2A101J	CHIP R 100 J 1/10W	
R27			RK73GB2A000J	CHIP R 0.0 J 1/10W	E1E2	R131			RK73GB2A103J	CHIP R 10K J 1/10W	
R28			RK73GB2A103J	CHIP R 10K J 1/10W	KR1M1	R132			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R28			RK73GB2A103J	CHIP R 10K J 1/10W	X1	R133			RK73GB2A153J	CHIP R 15K J 1/10W	
R29			RK73GB2A222J	CHIP R 2.2K J 1/10W	KR1M1	R134			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R29			RK73GB2A222J	CHIP R 2.2K J 1/10W	X1	R135-139			RK73GB2A101J	CHIP R 100 J 1/10W	
R30			RK73FB2B472J	CHIP R 4.7K J 1/8W		R140			RK73GB2A473J	CHIP R 47K J 1/10W	
R31,32			RK73PB2H102J	CHIP R 1.0K J 1/2W	KR1M1	R141			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R31,32			RK73PB2H102J	CHIP R 1.0K J 1/2W	X1	R142-147			RK73GB2A101J	CHIP R 100 J 1/10W	
R33			RK73GB2A103J	CHIP R 10K J 1/10W	KR1M1	R148,149			RK73GB2A103J	CHIP R 10K J 1/10W	
R33			RK73GB2A103J	CHIP R 10K J 1/10W	X1	R150-152			RK73GB2A473J	CHIP R 47K J 1/10W	
R34			RK73GB2A473J	CHIP R 47K J 1/10W		R153-156			RK73GB2A103J	CHIP R 10K J 1/10W	X1
R35			RK73GB2A222J	CHIP R 2.2K J 1/10W		R154-156			RK73GB2A103J	CHIP R 10K J 1/10W	R1E1E2
R36			RK73FB2B561J	CHIP R 560 J 1/8W		R154-157			RK73GB2A103J	CHIP R 10K J 1/10W	KM1
R37			RK73EB2E102J	CHIP R 1.0K J 1/4W		R157			RK73GB2A303J	CHIP R 30K J 1/10W	X1
R38			RK73GB2A104J	CHIP R 100K J 1/10W		R157			RK73GB2A332J	CHIP R 3.3K J 1/10W	E1E2
R39			RK73GB2A473J	CHIP R 47K J 1/10W		R161			RK73GB2A103J	CHIP R 10K J 1/10W	R1E1E2
						R161			RK73GB2A103J	CHIP R 10K J 1/10W	M1X1

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
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△ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-475x-xx)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
R162 R163 R164 R164,165 R164,165			RK73GB2A101J RK73GB2A102J RK73GB2A222J RK73GB2A222J RK73GB2A222J	CHIP R 100 J 1/10W CHIP R 1.0K J 1/10W CHIP R 2.2K J 1/10W CHIP R 2.2K J 1/10W CHIP R 2.2K J 1/10W	X1 KR1E1 E2M1
R166 R168-177 R178 R179,180 R181-184			RK73GB2A101J RK73GB2A101J RK73GB2A471J RK73GB2A104J RK73GB2A473J	CHIP R 100 J 1/10W CHIP R 100 J 1/10W CHIP R 470 J 1/10W CHIP R 100K J 1/10W CHIP R 47K J 1/10W	
R185 R186-188 R189,190 R191,192 R200			RK73GB2A472J RK73GB2A104J RK73GB2A473J RK73GB2A101J RK73GB2A104J	CHIP R 4.7K J 1/10W CHIP R 100K J 1/10W CHIP R 47K J 1/10W CHIP R 100 J 1/10W CHIP R 100K J 1/10W	
R201 R202,203 R204 R205 R206,207			RK73EB2E000J RK73GB2A100J RK73GB2A104J RK73GB2A102J RK73GB2A103J	CHIP R 0.0 J 1/4W CHIP R 10 J 1/10W CHIP R 100K J 1/10W CHIP R 1.0K J 1/10W CHIP R 10K J 1/10W	
R208,209 R210,211 R212-215 R216-219 R221			RK73GB2A101J RK73GB2A102J RK73GB2A470J RK73GB2A101J RK73GB2A104J	CHIP R 100 J 1/10W CHIP R 1.0K J 1/10W CHIP R 47 J 1/10W CHIP R 100 J 1/10W CHIP R 100K J 1/10W	
R251 R252 R253 R255-257 R255-257			RK73GB2A223J RK73GB2A102J RK73GB2A000J RK73GB2A222J RK73GB2A222J	CHIP R 22K J 1/10W CHIP R 1.0K J 1/10W CHIP R 0.0 J 1/10W CHIP R 2.2K J 1/10W CHIP R 2.2K J 1/10W	KR1E1 E2M1
R301 R302 R303 R304 R305			RK73GB2A333J RK73GB2A182J RK73GB2A221J RK73GB2A223J RK73GB2A432J	CHIP R 33K J 1/10W CHIP R 1.8K J 1/10W CHIP R 220 J 1/10W CHIP R 22K J 1/10W CHIP R 4.3K J 1/10W	
R306 R355 R356 R357 R358,359			RK73GB2A100J RK73FB2B101J RK73GB2A471J RK73GB2A223J RK73GB2A103J	CHIP R 10 J 1/10W CHIP R 100 J 1/8W CHIP R 470 J 1/10W CHIP R 22K J 1/10W CHIP R 10K J 1/10W	
R360 R361 R362 R363 R364			RK73GB2A223J RK73FB2B101J RK73GB2A471J RK73FB2B101J RK73GB2A471J	CHIP R 22K J 1/10W CHIP R 100 J 1/8W CHIP R 470 J 1/10W CHIP R 100 J 1/8W CHIP R 470 J 1/10W	
R365 R366,367 R368 R369 R370			RK73GB2A223J RK73GB2A103J RK73GB2A223J RK73FB2B101J RK73GB2A471J	CHIP R 22K J 1/10W CHIP R 10K J 1/10W CHIP R 22K J 1/10W CHIP R 100 J 1/8W CHIP R 470 J 1/10W	
R371 R372 R373 R374,375 R376			RK73FB2B101J RK73GB2A471J RK73GB2A223J RK73GB2A103J RK73GB2A223J	CHIP R 100 J 1/8W CHIP R 470 J 1/10W CHIP R 22K J 1/10W CHIP R 10K J 1/10W CHIP R 22K J 1/10W	
R377 R378 R379 R380 R381			RK73FB2B101J RK73GB2A471J RK73FB2B101J RK73GB2A471J RK73GB2A223J	CHIP R 100 J 1/8W CHIP R 470 J 1/10W CHIP R 100 J 1/8W CHIP R 470 J 1/10W CHIP R 22K J 1/10W	
R382,383 R384 R385 R386 R401-403		*	RK73GB2A103J RK73GB2A223J RK73FB2B101J RK73GB2A471J RK73EB2E432J	CHIP R 10K J 1/10W CHIP R 22K J 1/10W CHIP R 100 J 1/8W CHIP R 470 J 1/10W CHIP R 4.3K J 1/4W	
R404,405 R406,407 R408 R409 R410		*	RK73EB2E101J RK73EB2E432J RK73EB2E101J RK73EB2E100J RK73EB2E4R7J	CHIP R 100 J 1/4W CHIP R 4.3K J 1/4W CHIP R 100 J 1/4W CHIP R 10 J 1/4W CHIP R 4.7 J 1/4W	
R411 R501-508 R509-514 R517 R518-520			RK73EB2E100J RK73GB2A000J RK73GB2A473J RK73GB2A102J RK73EB2E100J	CHIP R 10 J 1/4W CHIP R 0.0 J 1/10W CHIP R 47K J 1/10W CHIP R 1.0K J 1/10W CHIP R 10 J 1/4W	
R521 R522-525 R526-534 R535 R536-539			RK73GB2A222J RK73EB2E100J RK73EB2E101J RK73GB2A750J RK73EB2E750J	CHIP R 2.2K J 1/10W CHIP R 10 J 1/4W CHIP R 100 J 1/4W CHIP R 75 J 1/10W CHIP R 75 J 1/4W	
R542 R543 R544 R601-611 R701-704			RK73GB2A102J RK73GB2A222J RK73EB2E100J RK73GB2A103J RK73GB2A750J	CHIP R 1.0K J 1/10W CHIP R 2.2K J 1/10W CHIP R 10 J 1/4W CHIP R 10K J 1/10W CHIP R 75 J 1/10W	E1E2
R704 R704 R705,706 R707-709 R710			RK73GB2A750J RK73GB2A750J RK73EB2E102J RK73EB2E101J RK73EB2E000J	CHIP R 75 J 1/10W CHIP R 75 J 1/10W CHIP R 1.0K J 1/4W CHIP R 100 J 1/4W CHIP R 0.0 J 1/4W	KR1M1 X1
R711,712 R713 R714 R715 R716-719			RK73EB2E102J RK73EB2E100J RK73EB2E4R7J RK73EB2E100J RK73EB2E101J	CHIP R 1.0K J 1/4W CHIP R 10 J 1/4W CHIP R 4.7 J 1/4W CHIP R 10 J 1/4W CHIP R 100 J 1/4W	E1E2
R719 R719 R720-723 R723 R723			RK73EB2E101J RK73EB2E101J RK73GB2A100J RK73GB2A100J RK73GB2A100J	CHIP R 100 J 1/4W CHIP R 100 J 1/4W CHIP R 10 J 1/10W CHIP R 10 J 1/10W CHIP R 10 J 1/10W	KR1M1 X1 E1E2 KR1M1 X1
R724 R733 R734 R735-737 R738			RK73EB2E100J RK73GB2A222J RK73GB2A102J RK73EB2E102J RK73EB2E100J	CHIP R 10 J 1/4W CHIP R 2.2K J 1/10W CHIP R 1.0K J 1/10W CHIP R 1.0K J 1/4W CHIP R 10 J 1/4W	
R739 R740 R741-744 R745-748 R751			RK73EB2E4R7J RK73EB2E100J RK73GB2A750J RK73EB2E101J RK73GB2A101J	CHIP R 4.7 J 1/4W CHIP R 10 J 1/4W CHIP R 75 J 1/10W CHIP R 100 J 1/4W CHIP R 100 J 1/10W	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
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△ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-475x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
R755-758			RK73GB2A100J	CHIP R 10 J 1/10W		D24,25			1SR154-400	DIODE	M1X1
R760			RK73GB2A102J	CHIP R 1.0K J 1/10W		D52			UDZS5.6B	ZENER DIODE	
R761			RK73GB2A750J	CHIP R 75 J 1/10W		D81			1SR154-400	DIODE	M1X1
R763			RK73GB2A750J	CHIP R 75 J 1/10W		D91			1SR154-400	DIODE	M1X1
R764			RK73EB2E750J	CHIP R 75 J 1/4W		D201-205			DAP202U	DIODE	
R768-770			RK73EB2E100J	CHIP R 10 J 1/4W		D251			IMSA-6801-E	SURGE ABSORBER	
R771			RK73GB2A000J	CHIP R 0.0 J 1/10W		D301,302			DAP202U	DIODE	
R772			RK73EB2E101J	CHIP R 100 J 1/4W		D351-358			AVRM1608180M6A	VARISTOR	
R774			RK73EB2E101J	CHIP R 100 J 1/4W		D359-365			DAP202U	DIODE	
R775			RK73GB2A100J	CHIP R 10 J 1/10W		D401-406			STZ6.8N	ZENER DIODE	
R777			RK73GB2A100J	CHIP R 10 J 1/10W		D503			DAP202U	DIODE	
R781			RK73GB2A103J	CHIP R 10K J 1/10W		D504			UDZS4.7B	ZENER DIODE	
R783			RK73GB2A103J	CHIP R 10K J 1/10W		D505,506			STZ6.8N	ZENER DIODE	
R786,787			RK73GB2A183J	CHIP R 18K J 1/10W		D509,510			STZ6.8N	ZENER DIODE	
R789			RK73GB2A222J	CHIP R 2.2K J 1/10W		D512-518			STZ6.2N	ZENER DIODE	
R791			RK73GB2A102J	CHIP R 1.0K J 1/10W		D519			UDZS4.7B	ZENER DIODE	
R792			RK73GB2A000J	CHIP R 0.0 J 1/10W		D520			DAP202U	DIODE	
R809,810			RK73GB2A123J	CHIP R 12K J 1/10W		D522-524			STZ6.2N	ZENER DIODE	
R812,813			RK73GB2A473J	CHIP R 47K J 1/10W		D701-706			STZ6.2N	ZENER DIODE	E1E2
R814			RK73GB2A000J	CHIP R 0.0 J 1/10W		D704-706			STZ6.2N	ZENER DIODE	KR1M1
R815			RK73GH2A333D	CHIP R 33K D 1/10W		D704-706			STZ6.2N	ZENER DIODE	X1
R816			RK73GH2A222D	CHIP R 2.2K D 1/10W		D707			UDZS6.2B	ZENER DIODE	
R817			RK73GH2A153D	CHIP R 15K D 1/10W		D708			AVRM1608180M6A	VARISTOR	
R818			RK73GB2A302J	CHIP R 3.0K J 1/10W		D709,710			AVRM1608120M6A	VARISTOR	
R819			RK73GB2A623J	CHIP R 62K J 1/10W		D711			STZ6.2N	ZENER DIODE	
R820			RK73GB2A222J	CHIP R 2.2K J 1/10W		D712			STZ6.8N	ZENER DIODE	
R821,822			RK73GB2A473J	CHIP R 47K J 1/10W		D713			DAP202U	DIODE	
R823			RK73GB2A222J	CHIP R 2.2K J 1/10W		D714			UDZS4.7B	ZENER DIODE	
R824			RK73GB2A682J	CHIP R 6.8K J 1/10W		D715-717			STZ6.2N	ZENER DIODE	
R825			RK73GB2A104J	CHIP R 100K J 1/10W		D718			STZ6.8N	ZENER DIODE	
R826			RK73GB2A682J	CHIP R 6.8K J 1/10W		D719-722			STZ6.2N	ZENER DIODE	
R827			RK73GB2A473J	CHIP R 47K J 1/10W		D723			AVRM1608270MAA	VARISTOR	
R828			RK73GB2A104J	CHIP R 100K J 1/10W		D724,725			STZ6.2N	ZENER DIODE	
R829			RK73GB2A473J	CHIP R 47K J 1/10W		D727			STZ6.8N	ZENER DIODE	
R830			RK73GB2A222J	CHIP R 2.2K J 1/10W		D731			UDZS8.2B	ZENER DIODE	
R831,832			RK73GB2A473J	CHIP R 47K J 1/10W		D732			STZ6.2N	ZENER DIODE	
R833			RK73GB2A000J	CHIP R 0.0 J 1/10W		D733			UDZS8.2B	ZENER DIODE	
R836-841			RK73GB2A473J	CHIP R 47K J 1/10W	E1E2	D735			DAP202U	DIODE	
R842-844			RK73GB2A272J	CHIP R 2.7K J 1/10W	E1E2	D737			UDZS4.7B	ZENER DIODE	
R845-847			RK73GB2A121J	CHIP R 120 J 1/10W	E1E2	IC61			M5237ML-CF0J	ANALOGUE IC	
R848-850			RK73GB2A473J	CHIP R 47K J 1/10W	E1E2	IC71			M5237ML-CF0J	ANALOGUE IC	
R851			RK73GB2A000J	CHIP R 0.0 J 1/10W		IC101		*	703030BYGCJ30	MICROCONTROLLER IC	
R852			RK73GB2A101J	CHIP R 100 J 1/10W		IC102			S-80842CNNB-G	MOS-IC	
R853			RK73GB2A102J	CHIP R 1.0K J 1/10W		IC104			TC7SET08FU-F	MOS-IC	
R855-857			RK73GB2A331J	CHIP R 330 J 1/10W		IC105			BU2090FS	MOS-IC	
D1			RM10ZLFNF	DIODE		IC106			TC74VHCT08AFT	MOS-IC	
D2-4			DAN202U	DIODE		IC201			E-TDA7415CB	ANALOGUE IC	
D5			UDZS6.2B	ZENER DIODE		IC202,203			TC4052BFT	MOS-IC	
D6			UDZS6.8B	ZENER DIODE		IC251			E-TDA7479AD	ANALOGUE IC	KR1E1
D7			DAP202U	DIODE		IC251			E-TDA7479AD	ANALOGUE IC	E2M1
D8			UDZS6.8B	ZENER DIODE		IC301			E-TDA7850A	ANALOGUE IC	
D9			DAP202U	DIODE		IC501,502		*	NJM2794RB2ZB	ANALOGUE IC	
D10-13			1SR154-400	DIODE		IC701		*	NJM2794RB2ZB	ANALOGUE IC	
D14			UDZS5.6B	ZENER DIODE		IC702			TC7S08FU-F	MOS-IC	
D15			UDZS4.7B	ZENER DIODE		IC723		*	NJM2794RB2ZB	ANALOGUE IC	

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PARTS LIST

ELECTRIC UNIT (X34-475x-xx)

Ref. No.	Ad	New	Parts No.	Description	Destination
IC802			MM1508XNRE-E	ANALOGUE IC	
IC803			BA7652AF	ANALOGUE IC	
IC804			MM1508XNRE-E	ANALOGUE IC	
IC805			BA7653AFV	ANALOGUE IC	
IC806			MM1503-E	ANALOGUE IC	
IC807-809			MM1508XNRE-E	ANALOGUE IC	
IC810			MM1503-E	ANALOGUE IC	
Q1			DTC124EUA	DIGITAL TRANSISTOR	
Q2			2SA1576A	TRANSISTOR	
Q3			DTC124EUA	DIGITAL TRANSISTOR	
Q4			2SC4081	TRANSISTOR	
Q6			2SC4081	TRANSISTOR	
Q7			2SB1188(Q,R)	TRANSISTOR	
Q8			2SA1576A	TRANSISTOR	
Q9			DTA114EUA	DIGITAL TRANSISTOR	
Q10			DTC114YUA	DIGITAL TRANSISTOR	
Q11			2SB1188(R)	TRANSISTOR	KR1M1
Q11			2SB1188(R)	TRANSISTOR	X1
Q12			2SC4081	TRANSISTOR	KR1M1
Q12			2SC4081	TRANSISTOR	X1
Q13			2SA1576A	TRANSISTOR	
Q14,15			2SC4081	TRANSISTOR	M1X1
Q51			2SB1565(E,F)	TRANSISTOR	
Q52			2SC4081	TRANSISTOR	
Q53			2SB1689	TRANSISTOR	
Q54			DTC124EUA	DIGITAL TRANSISTOR	
Q61			2SB1443	TRANSISTOR	
Q62			DTA124EUA	DIGITAL TRANSISTOR	
Q70			DTC124EUA	DIGITAL TRANSISTOR	
Q71			2SB1565(E,F)	TRANSISTOR	
Q72			DTA124EUA	DIGITAL TRANSISTOR	
Q81			DTC114TUA	DIGITAL TRANSISTOR	M1X1
Q82			2SC4081	TRANSISTOR	M1X1
Q83			2SB1184	TRANSISTOR	M1X1
Q84			2SA1576A	TRANSISTOR	M1X1
Q85			2SC4081	TRANSISTOR	M1X1
Q91			DTC114TUA	DIGITAL TRANSISTOR	M1X1
Q92			2SC4081	TRANSISTOR	M1X1
Q93			2SB1184	TRANSISTOR	M1X1
Q94			2SA1576A	TRANSISTOR	M1X1
Q95			2SC4081	TRANSISTOR	M1X1
Q101,102			DTC144EUA	DIGITAL TRANSISTOR	
Q103			DTA114EUA	DIGITAL TRANSISTOR	
Q104			DTA114TUA	DIGITAL TRANSISTOR	
Q105			DTC114TUA	DIGITAL TRANSISTOR	
Q107		*	RT1N440M	TRANSISTOR	
Q251			DTC124EUA	DIGITAL TRANSISTOR	
Q252			2SB1689	TRANSISTOR	
Q351			DTC323TU	DIGITAL TRANSISTOR	
Q352			DTA144EUA	DIGITAL TRANSISTOR	
Q353-356			DTC323TU	DIGITAL TRANSISTOR	
Q357			DTA144EUA	DIGITAL TRANSISTOR	
Q358,359			DTC323TU	DIGITAL TRANSISTOR	
Q360			DTA144EUA	DIGITAL TRANSISTOR	
Q361			DTC323TU	DIGITAL TRANSISTOR	

Ref. No.	Ad	New	Parts No.	Description	Destination
Q802-805			2SC4081	TRANSISTOR	
Q806			2SA1576A	TRANSISTOR	
Q807			2SC4081	TRANSISTOR	
Q808			2SA1576A	TRANSISTOR	KR1M1
Q808			2SA1576A	TRANSISTOR	X1
Q808-811			2SA1576A	TRANSISTOR	E1E2
Q813-815			2SC4081	TRANSISTOR	E1E2
TH301			PRF18BE471QB2	POSITIVE RESISTOR	
A251		*	X86-4080-12	FRONT-END UNIT	KR1X1
A251		*	X86-4082-71	FRONT-END UNIT	E1E2M1
VIDEO UNIT (X35-4710-10)					
C1,2			C93-1396-05	CHIP C	10UF Z
C3			C93-1283-05	CHIP C	1.0UF K
C5			C93-1363-05	CHIP C	10PF
C6			C93-1361-05	CHIP C	0.012UF
C7			CK73GB1H473K	CHIP C	0.047UF K
C8			C93-1383-05	CHIP C	220PF F
C9			CK73GB0J225K	CHIP C	2.2UF K
C10			CK73GB1H103K	CHIP C	0.010UF K
C11			CK73GB0J225K	CHIP C	2.2UF K
C12			CK73HB1E103K	CHIP C	0.010UF K
C13			CK73GB1A474K	CHIP C	0.47UF K
C14			CK73HB1E103K	CHIP C	0.010UF K
C15			CK73GB1H473K	CHIP C	0.047UF K
C16			CK73HB1C183K	CHIP C	0.018UF K
C17			CK73HB1E103K	CHIP C	0.010UF K
C18			C93-1283-05	CHIP C	1.0UF K
C21			CK73GB0J225K	CHIP C	2.2UF K
C22			CK73HB1H152K	CHIP C	1500PF K
C23			C93-1396-05	CHIP C	10UF Z
C24			CK73GB1H103K	CHIP C	0.010UF K
C25			C93-1286-05	CHIP C	2700PF
C28			C93-1283-05	CHIP C	1.0UF K
C100			CC73GCH1H151J	CHIP C	150PF J
C101			CK73GB1H104K	CHIP C	0.10UF K
C102			CK73FB0J106K	CHIP C	10UF K
C103			CK73GB1H103K	CHIP C	0.010UF K
C104			CE32AU1C220M	CHIP EL	22UF 16WV
C105			CK73GB1H104K	CHIP C	0.10UF K
C106			CK73GB1H103K	CHIP C	0.010UF K
C107,108			CK73EB1C106K	CHIP C	10UF K
C109			CK73FB1C105K	CHIP C	1.0UF K
C110			CK73GB1H103K	CHIP C	0.010UF K
C112			CK73FB1E154K	CHIP C	0.15UF K
C113			CK73EB1E225K	CHIP C	2.2UF K
C114			CK73GB1C224K	CHIP C	0.22UF K
C115			CK73GB1H104K	CHIP C	0.10UF K
C116			CK73EB0J226K	CHIP C	22UF K
C117			CK73HB1H102K	CHIP C	1000PF K
C118			CK73GB1H103K	CHIP C	0.010UF K
C119			CK73HB1E103K	CHIP C	0.010UF K
C120			CK73GB1H104K	CHIP C	0.10UF K
C121			CK73HB1E103K	CHIP C	0.010UF K
C301			CK73EB1C106K	CHIP C	10UF K

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

⚠ Indicates safety critical components.

PARTS LIST

VIDEO UNIT (X35-4710-10)

Ref. No.	Add	New	Parts No.	Description	Destination
C302			C93-1396-05	CHIP C 10UF Z	
C303			CK73GB1H103K	CHIP C 0.010UF K	
C304			CK73GB1H104K	CHIP C 0.10UF K	
C305,306			CK73GB1H103K	CHIP C 0.010UF K	
C307			CK73FB0J106K	CHIP C 10UF K	
C308			CK73GB1H103K	CHIP C 0.010UF K	
C309			CC73HCH1H100D	CHIP C 10PF D	
C310			CK73HB1C333K	CHIP C 0.033UF K	
C311			CK73HB1E103K	CHIP C 0.010UF K	
C312			CK73GB1H103K	CHIP C 0.010UF K	
C313,314			CK73HB1E103K	CHIP C 0.010UF K	
C315,316			CK73GB1H104K	CHIP C 0.10UF K	
C317			CK73HB1E103K	CHIP C 0.010UF K	
C318,319			CK73GB1H104K	CHIP C 0.10UF K	
C320			CC73HCH1H330J	CHIP C 33PF J	
C321			CK73GB1H104K	CHIP C 0.10UF K	
C322			CC73GCH1E102J	CHIP C 1000PF J	
C323			CC73HCH1H101J	CHIP C 100PF J	
C324,325			CK73HB1E103K	CHIP C 0.010UF K	
C326			CC73GCH1H681J	CHIP C 680PF J	
C327,328			CK73GB1H104K	CHIP C 0.10UF K	
C329			CC73HCH1H101J	CHIP C 100PF J	
C330			CK73FB0J106K	CHIP C 10UF K	
C331,332			CC73HCH1H390J	CHIP C 39PF J	
C333			CK73GB1H104K	CHIP C 0.10UF K	
C334			CK73GB1H103K	CHIP C 0.010UF K	
C335			CK73GB1H104K	CHIP C 0.10UF K	
C337			CK73HB1E103K	CHIP C 0.010UF K	
C338			CK73GB1H103K	CHIP C 0.010UF K	
C339			CC73HCH1H221J	CHIP C 220PF J	
C340			CC73HCH1H101J	CHIP C 100PF J	
C342			CC73HCH1H100D	CHIP C 10PF D	
C346,347			CK73HB1E103K	CHIP C 0.010UF K	
C348			CK73FB1C105K	CHIP C 1.0UF K	
C349			C93-1389-05	CHIP C 33PF J	
C350		*	CK73GB0J106M	CHIP C 10UF M	
C401			CK73HB1H102K	CHIP C 1000PF K	
C421,422			CK73GB1A105K	CHIP C 1.0UF K	
C423			CK73FB0J106K	CHIP C 10UF K	
C424			CK73HB1E103K	CHIP C 0.010UF K	
C425			CK73FB1C105K	CHIP C 1.0UF K	
C426			CK73EB1E105K	CHIP C 1.0UF K	
C427			CK73GB0J225K	CHIP C 2.2UF K	
C428			CK73FB0J106K	CHIP C 10UF K	
C501-503			CK73HB1E103K	CHIP C 0.010UF K	
C504			CK73FB0J106K	CHIP C 10UF K	
CN1			E41-2483-05	PIN ASSY	
CN101			E41-2608-05	FLAT CABLE CONNECTOR	
CN103			E41-2359-05	PIN ASSY	
CN104			E41-2444-05	FLAT CABLE CONNECTOR	
CN302		*	E41-2761-05	FLAT CABLE CONNECTOR	
CN501			E41-2087-05	FLAT CABLE CONNECTOR	
CN502		*	E41-2762-05	FLAT CABLE CONNECTOR	
CN503			E41-2564-05	FLAT CABLE CONNECTOR	

Ref. No.	Add	New	Parts No.	Description	Destination
F1			F53-0297-05	FUSE (UL,CSA) 1.6A	
F100			F53-0280-05	FUSE 0.63A	
L1			L19-0783-05	TRANSFORMER FOR CONVERTER	
L101,102			L41-3392-13	SMALL FIXED INDUCTOR (3.3UH)	
L103			L41-4792-13	SMALL FIXED INDUCTOR (4.7UH)	
L104-106			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
L302,303			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
L306			L41-5695-33	SMALL FIXED INDUCTOR (5.6U)	
L307			L41-8281-15	SMALL FIXED INDUCTOR (0.82U)	
L401			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
L501			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
CP301,302			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
CP303			RK74HB1J101J	CHIP-COM 100 J 1/16W	
R1			RK73HB1J512J	CHIP R 5.1K J 1/16W	
R3			RK73HB1J220J	CHIP R 22 J 1/16W	
R4			RK73GH2A433D	CHIP R 43K D 1/10W	
R5			RK73HB1J153J	CHIP R 15K J 1/16W	
R6			RK73HH1J563D	CHIP R 56K D 1/16W	
R7			RK73HB1J220J	CHIP R 22 J 1/16W	
R8			RK73HB1J512J	CHIP R 5.1K J 1/16W	
R9			RK73HH1J204D	CHIP R 200K D 1/16W	
R10			RK73FB2B152J	CHIP R 1.5K J 1/8W	
R11			RK73HB1J220J	CHIP R 22 J 1/16W	
R12			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R13			RK73HB1J220J	CHIP R 22 J 1/16W	
R14			RK73GH2A471D	CHIP R 470 D 1/10W	
R15			RK73GH2A513D	CHIP R 51K D 1/10W	
R16,17			RK73HB1J220J	CHIP R 22 J 1/16W	
R18			RK73HB1J222J	CHIP R 2.2K J 1/16W	
R21			RK73HB1J104J	CHIP R 100K J 1/16W	
R22			RK73GB2A515J	CHIP R 5.1M J 1/10W	
R23			RK73HH1J824D	CHIP R 820K D 1/16W	
R24			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R100			RK73HB1J100J	CHIP R 10 J 1/16W	
R101			RK73GH2A104D	CHIP R 100K D 1/10W	
R102			RK73GH2A113D	CHIP R 11K D 1/10W	
R103			RK73GH2A184D	CHIP R 180K D 1/10W	
R104			RK73GH2A133D	CHIP R 13K D 1/10W	
R105			RK73HB1J473J	CHIP R 47K J 1/16W	
R118		*	RK73HB1J754J	CHIP R 750K J 1/16W	
R119			RK73FB2B222J	CHIP R 2.2K J 1/8W	
R201			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R218			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R219			RK73HB1J103J	CHIP R 10K J 1/16W	
R301			RK73HB1J220J	CHIP R 22 J 1/16W	
R304,305			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R307			RK73HB1J101J	CHIP R 100 J 1/16W	
R308			RK73HB1J621J	CHIP R 620 J 1/16W	
R310			RK73HB1J101J	CHIP R 100 J 1/16W	
R313			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R314,315			RK73HB1J103J	CHIP R 10K J 1/16W	
R316			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R319			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R320			RK73HB1J000J	CHIP R 0.0 J 1/16W	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
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△ Indicates safety critical components.

PARTS LIST

VIDEO UNIT (X35-4710-10)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
R321			RK73GH2A472D	CHIP R 4.7K D 1/10W	
R323			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R324,325			RK73GH2A472D	CHIP R 4.7K D 1/10W	
R326			RK73HH1J473D	CHIP R 47K D 1/16W	
R327			RK73HH1J683D	CHIP R 68K D 1/16W	
R328			RK73HH1J153D	CHIP R 15K D 1/16W	
R329			RK73HH1J101D	CHIP R 100 D 1/16W	
R330			RK73HH1J182D	CHIP R 1.8K D 1/16W	
R331			RK73HH1J331D	CHIP R 330 D 1/16W	
R332			RK73HH1J332D	CHIP R 3.3K D 1/16W	
R333,334			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R336			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R337,338			RK73HB1J101J	CHIP R 100 J 1/16W	
R339			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R340-344			RK73HB1J101J	CHIP R 100 J 1/16W	
R345			RK73HH1J683D	CHIP R 68K D 1/16W	
R346			RK73HH1J105D	CHIP R 1.0M D 1/16W	
R347			RK73HH1J153D	CHIP R 15K D 1/16W	
R348			RK73HB1J202J	CHIP R 2.0K J 1/16W	
R349			RK73HB1J133J	CHIP R 13K J 1/16W	
R350-352			RK73HB1J101J	CHIP R 100 J 1/16W	
R354			RK73HB1J300J	CHIP R 30 J 1/16W	
R355			RK73HB1J820J	CHIP R 82 J 1/16W	
R357			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R358			RK73HB1J103J	CHIP R 10K J 1/16W	
R359,360			RK73HB1J100J	CHIP R 10 J 1/16W	
R361,362			RK73HB1J103J	CHIP R 10K J 1/16W	
R365			RK73HB1J101J	CHIP R 100 J 1/16W	
R366-370			RK73HB1J103J	CHIP R 10K J 1/16W	
R371			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R373			RK73HB1J561J	CHIP R 560 J 1/16W	
R374			RK73HB1J473J	CHIP R 47K J 1/16W	
R376			RK73HB1J103J	CHIP R 10K J 1/16W	
R377			RK73HB1J912J	CHIP R 9.1K J 1/16W	
R378			RK73HB1J562J	CHIP R 5.6K J 1/16W	
R380			RK73HB1J473J	CHIP R 47K J 1/16W	
R381			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R385			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R389			RK73HB1J221J	CHIP R 220 J 1/16W	
R391			RK73HB1J100J	CHIP R 10 J 1/16W	
R392			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R393,394			RK73HB1J202J	CHIP R 2.0K J 1/16W	
R396			RK73HB1J101J	CHIP R 100 J 1/16W	
R397			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R398,399			RK73HB1J101J	CHIP R 100 J 1/16W	
R402			RK73HB1J392J	CHIP R 3.9K J 1/16W	
R403			RK73HB1J822J	CHIP R 8.2K J 1/16W	
R404			RK73HB1J243J	CHIP R 24K J 1/16W	
R406			RK73GB2A361J	CHIP R 360 J 1/10W	
R407			RK73GB2A751J	CHIP R 750 J 1/10W	
R422			RK73HB1J683J	CHIP R 68K J 1/16W	
R423			RK73HB1J104J	CHIP R 100K J 1/16W	
R441			RK73GB2A751J	CHIP R 750 J 1/10W	
R453			RK73FB2B102J	CHIP R 1.0K J 1/8W	
R454			RK73FB2B511J	CHIP R 510 J 1/8W	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
R456			RK73GB2A361J	CHIP R 360 J 1/10W	
R501,502			RK73HB1J333J	CHIP R 33K J 1/16W	
R503-506			RK73GB2A100J	CHIP R 10 J 1/10W	
R609-612			RK73GB2A000J	CHIP R 0.0 J 1/10W	
VR203			R32-0328-05	SEMI FIXED VARIABLE RESISTOR	
S401-405			S70-0937-05	TACT SWITCH	
D1,2			UDZS5.6B	ZENER DIODE	
D3			1SS355	DIODE	
D4,5			DA204U	DIODE	
D6			MA2S784-F	DIODE	
D7			UDZS5.6B	ZENER DIODE	
D8			AVRM1005270MAA	VARIATOR	
D9			DA204U	DIODE	
D10			1SS355	DIODE	
D101			EP05Q04	DIODE	
D102			EP05Q06	DIODE	
D103,104			EP05Q04	DIODE	
D301			UDZS3.9B	ZENER DIODE	
D303			DA204U	DIODE	
D305,306			DA204U	DIODE	
D307			AVRM1608120M6A	VARIATOR	
D309			1SV231-F	VARIABLE CAPACITANCE DIODE	
D314			DA204U	DIODE	
D401			AVRM1608120M6A	VARIATOR	
D403-412			AVRM1608180M6A	VARIATOR	
D501-504			AVRM1608180M6A	VARIATOR	
IC1			OZ964ISN-C	ANALOGUE IC	
IC101			LT1947-PBF	ANALOGUE IC	
IC102			TC7WH123FU-F	MOS-IC	
IC103			TC7SH04FU-F	MOS-IC	
IC301			BU2090FS	MOS-IC	
IC302			TC7SET08FU-F	MOS-IC	
IC303			NJM2107F-ZB	ANALOGUE IC	
IC304			TC200G02G0104	MOS-IC	
IC401			TPS850	ANALOGUE IC	
Q1			2SC4081	TRANSISTOR	
Q2,3			SI5504DC-E3	DUAL FET	
Q4			DTC114YUA	DIGITAL TRANSISTOR	
Q5			2SC4081	TRANSISTOR	
Q301			2SC4097	TRANSISTOR	
Q303			2SC4081	TRANSISTOR	
Q501			DTC114YE	DIGITAL TRANSISTOR	
Q502,503			PUMD10	DUAL TRANSISTOR	
DVD UNIT (X37-1120-03) IN DVD MECHANISM					
C3			CK73HB1A104K	CHIP C 0.10UF K	
C4		*	CC73HCH1H471J	CHIP C 470PF J	
C5-7			CK73HB1E103K	CHIP C 0.010UF K	
C8		*	CC73HCH1H471J	CHIP C 470PF J	
C11			CK73HB1E103K	CHIP C 0.010UF K	
C14		*	CK73GB0J106M	CHIP C 10UF M	
C15			CK73HB1A104K	CHIP C 0.10UF K	
C16		*	CK73GB0J106M	CHIP C 10UF M	
C17			CK73GB0J475K	CHIP C 4.7UF K	
C18			CK73FB0J226M	CHIP C 22UF M	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

DVD UNIT (X37-1120-03) IN DVD MECHANISM

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
C20		*	CC73HCH1H102J	CHIP C 1000PF J		C267			CK73FB0J226M	CHIP C 22UF M	
C50,51			C93-1228-05	CHIP C 1UF M		C270			CK73HB0J105K	CHIP C 1.0UF K	
C54			C93-1228-05	CHIP C 1UF M		C271		*	CC73HCH1H102J	CHIP C 1000PF J	
C59,60			C93-1228-05	CHIP C 1UF M		C272			CK73HB0J105K	CHIP C 1.0UF K	
C62			C93-1228-05	CHIP C 1UF M		C300,301		*	CC73HCH1H102J	CHIP C 1000PF J	
C63			CK73FB0J226M	CHIP C 22UF M		C302		*	CK73GB0J106M	CHIP C 10UF M	
C72			CK73HB1A104K	CHIP C 0.10UF K		C304-306		*	CK73GB0J106M	CHIP C 10UF M	
C73		*	CK73GB0J106M	CHIP C 10UF M		C350,351		*	CC73HCH1H102J	CHIP C 1000PF J	
C100-102			CK73HB1A104K	CHIP C 0.10UF K		C434		*	CK73GB0J106M	CHIP C 10UF M	
C103			C93-1228-05	CHIP C 1UF M		C435			CK73HB1E103K	CHIP C 0.010UF K	
C104			CK73HB1A104K	CHIP C 0.10UF K		C441			CK73HB1A104K	CHIP C 0.10UF K	
C105			C93-1228-05	CHIP C 1UF M		C442-445			CK73FB0J226M	CHIP C 22UF M	
C106,107			CK73HB1A104K	CHIP C 0.10UF K		C446			CK73HB1A104K	CHIP C 0.10UF K	
C108			C93-1228-05	CHIP C 1UF M		C448,449			C93-1228-05	CHIP C 1UF M	
C109			CK73HB1A104K	CHIP C 0.10UF K		C450			CK73HB1A104K	CHIP C 0.10UF K	
C110			C93-1228-05	CHIP C 1UF M		C452			C93-1228-05	CHIP C 1UF M	
C111			CK73HB1C333K	CHIP C 0.033UF K		C454,455			CK73HB1A104K	CHIP C 0.10UF K	
C112,113			CK73HB1A104K	CHIP C 0.10UF K		C456-458			CK73HB1H682K	CHIP C 6800PF K	
C114			CK73GB1H562K	CHIP C 5600PF K		C461			CK73HB1H472K	CHIP C 4700PF K	
C115			CK73HB1C183K	CHIP C 0.018UF K		C462			CK73HB1E103K	CHIP C 0.010UF K	
C117			CK73HB1A104K	CHIP C 0.10UF K		C464			CK73HB0J105K	CHIP C 1.0UF K	
C118			CK73HB0J105K	CHIP C 1.0UF K		C466			CK73HB1A104K	CHIP C 0.10UF K	
C119			C93-1228-05	CHIP C 1UF M		C467			CC73HCH1H121J	CHIP C 120PF J	
C120,121			CK73HB1A104K	CHIP C 0.10UF K		C468,469			CK73HB1A104K	CHIP C 0.10UF K	
C122,123		*	CK73GB0J106M	CHIP C 10UF M		C470			CK73HB1E103K	CHIP C 0.010UF K	
C126-129			CK73HB1A104K	CHIP C 0.10UF K		C473			CK73HB1A104K	CHIP C 0.10UF K	
C130-133			CC73HCH1H151J	CHIP C 150PF J		C474		*	CC73HCH1H102J	CHIP C 1000PF J	
C134		*	CC73HCH1H102J	CHIP C 1000PF J		C476			CC73HCH1H101J	CHIP C 100PF J	
C135,136			C93-1228-05	CHIP C 1UF M		C477-479			CK73FB0J226M	CHIP C 22UF M	
C137,138			CK73HB0J105K	CHIP C 1.0UF K		C480			CK73HB1A104K	CHIP C 0.10UF K	
C139,140			C93-1228-05	CHIP C 1UF M		C481			CC73HCH1H151J	CHIP C 150PF J	
C142			C93-1228-05	CHIP C 1UF M		C482		*	CC73HCH1H471J	CHIP C 470PF J	
C143,144			CC73HCH1H100D	CHIP C 10PF D		C483		*	CC73HCH1H102J	CHIP C 1000PF J	
C145-149			CK73HB1A104K	CHIP C 0.10UF K		C484			CK73HB1E103K	CHIP C 0.010UF K	
C151,152			C93-1228-05	CHIP C 1UF M		C485			CC73HCH1H151J	CHIP C 150PF J	
C153,154			CK73HB1A104K	CHIP C 0.10UF K		C486		*	CC73HCH1H471J	CHIP C 470PF J	
C158			CK73HB1A104K	CHIP C 0.10UF K		C487		*	CC73HCH1H102J	CHIP C 1000PF J	
C162			CK73HB1A104K	CHIP C 0.10UF K		C488			CK73HB1E103K	CHIP C 0.010UF K	
C164-169		*	CK73GB0J106M	CHIP C 10UF M		C489			CC73HCH1H151J	CHIP C 150PF J	
C200-203		*	CK73GB0J106M	CHIP C 10UF M		C490		*	CC73HCH1H471J	CHIP C 470PF J	
C207,208			CK73HB1A104K	CHIP C 0.10UF K		C491		*	CC73HCH1H102J	CHIP C 1000PF J	
C220-223			CK73HB0J105K	CHIP C 1.0UF K		C492			CK73HB1E103K	CHIP C 0.010UF K	
C224			CK73HB1E103K	CHIP C 0.010UF K		C493			CC73HCH1H151J	CHIP C 150PF J	
C226			CK73FB0J226M	CHIP C 22UF M		C494		*	CC73HCH1H471J	CHIP C 470PF J	
C229,230			CK73HB1E103K	CHIP C 0.010UF K		C495		*	CC73HCH1H102J	CHIP C 1000PF J	
C231		*	CC73HCH1H102J	CHIP C 1000PF J		C496			CK73HB1E103K	CHIP C 0.010UF K	
C250		*	CC73HCH1H102J	CHIP C 1000PF J		C497,498			CK73FB0J226M	CHIP C 22UF M	
C251,252			CC73HCH1H221J	CHIP C 220PF J		C504,505			CK73HB1H472K	CHIP C 4700PF K	
C253		*	CC73HCH1H102J	CHIP C 1000PF J		C506,507		*	CC73HCH1H102J	CHIP C 1000PF J	
C254,255			CC73HCH1H221J	CHIP C 220PF J		C510		*	CC73HCH1H102J	CHIP C 1000PF J	
C256			CK73HB1A104K	CHIP C 0.10UF K		C511		*	CK73GB0J106M	CHIP C 10UF M	
C261,262		*	CC73HCH1H331J	CHIP C 330PF J		C512			CK73HB0J105K	CHIP C 1.0UF K	
C263			CK73HB0J105K	CHIP C 1.0UF K		C513-515			CK73HB1A104K	CHIP C 0.10UF K	
C265			CK73GB1A105K	CHIP C 1.0UF K		C516			CK73HB1C333K	CHIP C 0.033UF K	
C266			CK73HB1C333K	CHIP C 0.033UF K		C517			CK73HB1E103K	CHIP C 0.010UF K	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

DVD UNIT (X37-1120-03) IN DVD MECHANISM

Ref. No.	Add	New	Parts No.	Description	Destination
C518,519			CC73HCH1H470J	CHIP C 47PF J	
C520		*	CC73HCH1H102J	CHIP C 1000PF J	
C521			CK73HB0J105K	CHIP C 1.0UF K	
C522			CC73HCH1H151J	CHIP C 150PF J	
C523		*	CC73HCH1H471J	CHIP C 470PF J	
C524		*	CC73HCH1H102J	CHIP C 1000PF J	
C525			CK73HB1E103K	CHIP C 0.010UF K	
C526			CC73HCH1H151J	CHIP C 150PF J	
C527		*	CC73HCH1H471J	CHIP C 470PF J	
C528		*	CC73HCH1H102J	CHIP C 1000PF J	
C529			CK73HB1E103K	CHIP C 0.010UF K	
C530			CK73HB0J105K	CHIP C 1.0UF K	
CN1			E41-2594-05	FLAT CABLE CONNECTOR	
CN3		*	E41-2596-05	FLAT CABLE CONNECTOR	
CN6			E41-2603-05	FLAT CABLE CONNECTOR	
CN10		*	E41-2602-05	FLAT CABLE CONNECTOR	
L1			L92-0365-05	CHIP FERRITE	
L2-4		*	L92-0612-05	CHIP FERRITE	
L5,6		*	L92-0611-05	CHIP FERRITE	
L7,8		*	L92-0612-05	CHIP FERRITE	
L10		*	L33-2281-05	SMALL FIXED INDUCTOR	
L11		*	L33-2280-05	SMALL FIXED INDUCTOR	
L12-14			L92-0365-05	CHIP FERRITE	
L15		*	L92-0612-05	CHIP FERRITE	
L20		*	L92-0617-05	CHIP FERRITE	
L21		*	L92-0612-05	CHIP FERRITE	
L22			L92-0838-05	CHIP FERRITE	
X1		*	L77-2924-05	CRYSTAL RESONATOR (27MHZ,30PPM)	
CP1-9			RK74HB1J470J	CHIP-COM 47 J 1/16W	
CP36,37			RK74HB1J103J	CHIP-COM 10K J 1/16W	
CP44,45			RK74HB1J330J	CHIP-COM 33 J 1/16W	
CP54-56			RK74HB1J330J	CHIP-COM 33 J 1/16W	
CP57			RK74HB1J820J	CHIP-COM 82 J 1/16W	
CP58			RK74HB1J330J	CHIP-COM 33 J 1/16W	
CP59-68			RK74HB1J103J	CHIP-COM 10K J 1/16W	
CP69			RK74HB1J220J	CHIP-COM 22 J 1/16W	
CP70-73			RK74HB1J103J	CHIP-COM 10K J 1/16W	
R1-4			RK73HB1J103J	CHIP R 10K J 1/16W	
R5,6			RK73HH1J123D	CHIP R 12K D 1/16W	
R10			RK73HB1J163J	CHIP R 16K J 1/16W	
R16			RK73HB1J103J	CHIP R 10K J 1/16W	
R17			RK73HB1J271J	CHIP R 270 J 1/16W	
R19			RK73HB1J301J	CHIP R 300 J 1/16W	
R21,22			RK73HH1J103D	CHIP R 10K D 1/16W	
R24			RK73HB1J4R7J	CHIP R 4.7 J 1/16W	
R79			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R80			RK73HB1J220J	CHIP R 22 J 1/16W	
R81			RK73HB1J470J	CHIP R 47 J 1/16W	
R84,85			RK73HB1J202J	CHIP R 2.0K J 1/16W	
R86			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R87			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R89			RK73HH1J303D	CHIP R 30K D 1/16W	
R90			RK73HB1J223J	CHIP R 22K J 1/16W	

Ref. No.	Add	New	Parts No.	Description	Destination
R91			RK73HB1J470J	CHIP R 47 J 1/16W	
R92			RK73HH1J123D	CHIP R 12K D 1/16W	
R94			RK73HH1J512D	CHIP R 5.1K D 1/16W	
R111			RK73HB1J220J	CHIP R 22 J 1/16W	
R112,113			RK73HB1J101J	CHIP R 100 J 1/16W	
R116			RK73HB1J103J	CHIP R 10K J 1/16W	
R119			RK73HB1J103J	CHIP R 10K J 1/16W	
R121			RK73HB1J182J	CHIP R 1.8K J 1/16W	
R122			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R131			RK73HB1J220J	CHIP R 22 J 1/16W	
R150,151			RK73HB1J100J	CHIP R 10 J 1/16W	
R152,153			RK73HB1J471J	CHIP R 470 J 1/16W	
R154,155			RK73HB1J751J	CHIP R 750 J 1/16W	
R156,157			RK73HB1J560J	CHIP R 56 J 1/16W	
R158,159			RK73HB1J2R2J	CHIP R 2.2 J 1/16W	
R162,163			RK73HB1J104J	CHIP R 100K J 1/16W	
R164,165			RK73HH1J101D	CHIP R 100 D 1/16W	
R200-203		*	RK73HH1J201D	CHIP R 200 D 1/16W	
R204-207		*	RK73HH1J151D	CHIP R 150 D 1/16W	
R208			RK73HB1J4R7J	CHIP R 4.7 J 1/16W	
R251			RK73HB1J1R0J	CHIP R 1.0 J 1/16W	
R254		*	RK73HH1J912D	CHIP R 9.1K D 1/16W	
R255		*	RK73HH1J752D	CHIP R 7.5K D 1/16W	
R256			RK73HH1J331D	CHIP R 330 D 1/16W	
R257		*	RK73HH1J912D	CHIP R 9.1K D 1/16W	
R258		*	RK73HH1J752D	CHIP R 7.5K D 1/16W	
R259			RK73HH1J331D	CHIP R 330 D 1/16W	
R260		*	RK73HH1J912D	CHIP R 9.1K D 1/16W	
R261		*	RK73HH1J752D	CHIP R 7.5K D 1/16W	
R262			RK73HH1J331D	CHIP R 330 D 1/16W	
R263		*	RK73HH1J912D	CHIP R 9.1K D 1/16W	
R264		*	RK73HH1J752D	CHIP R 7.5K D 1/16W	
R265			RK73HH1J331D	CHIP R 330 D 1/16W	
R266,267			RK73HH1J101D	CHIP R 100 D 1/16W	
R269			RK73HB1J100J	CHIP R 10 J 1/16W	
R275,276			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R300,301			RK73HH1J472D	CHIP R 4.7K D 1/16W	
R302,303		*	RK73HH1J183D	CHIP R 18K D 1/16W	
R304			RK73HH1J202D	CHIP R 2.0K D 1/16W	
R305			RK73HB1J163J	CHIP R 16K J 1/16W	
R350,351			RK73HB1J4R7J	CHIP R 4.7 J 1/16W	
R400-402			RK73HB1J470J	CHIP R 47 J 1/16W	
R409			RK73HB1J470J	CHIP R 47 J 1/16W	
R410,411			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R450			RK73HB1J202J	CHIP R 2.0K J 1/16W	
R458			RK73HB1J220J	CHIP R 22 J 1/16W	
R464,465			RK73HH1J101D	CHIP R 100 D 1/16W	
R467			RK73HB1J470J	CHIP R 47 J 1/16W	
R468-470			RK73HB1J103J	CHIP R 10K J 1/16W	
R471			RK73HB1J820J	CHIP R 82 J 1/16W	
R472,473			RK73HB1J330J	CHIP R 33 J 1/16W	
R475			R92-3350-05	CHIP R 2.2 F 1/10W	
R476		*	R92-5112-05	CHIP R 4.7 F 1/10W	
R477			RK73GH2A111D	CHIP R 110 D 1/10W	
R478			RK73HH1J472D	CHIP R 4.7K D 1/16W	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
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△ Indicates safety critical components.

PARTS LIST

DVD UNIT (X37-1120-03) IN DVD MECHANISM

Ref. No.	Add	New	Parts No.	Description	Destination
R480			RK73HH1J202D	CHIP R 2.0K D 1/16W	
R481			RK73HH1J203D	CHIP R 20K D 1/16W	
R482-484			RK73HB1J820J	CHIP R 82 J 1/16W	
R485			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R486,487			RK73HB1J103J	CHIP R 10K J 1/16W	
R489			RK73HB1J220J	CHIP R 22 J 1/16W	
R491-493			RK73HB1J751J	CHIP R 750 J 1/16W	
R496,497			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R498			RK73HB1J101J	CHIP R 100 J 1/16W	
R501		*	RK73HH1J132D	CHIP R 1.3K D 1/16W	
R502			RK73HH1J333D	CHIP R 33K D 1/16W	
R503			RK73HH1J203D	CHIP R 20K D 1/16W	
R504			RK73HB1J242J	CHIP R 2.4K J 1/16W	
R505			RK73HB1J821J	CHIP R 820 J 1/16W	
R507			RK73HB1J103J	CHIP R 10K J 1/16W	
R508			RK73HB1J225J	CHIP R 2.2M J 1/16W	
R509			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R510			RK73HB1J103J	CHIP R 10K J 1/16W	
R511			RK73HB1J473J	CHIP R 47K J 1/16W	
R512,513			RK73HB1J103J	CHIP R 10K J 1/16W	
R514-517			RK73HB1J220J	CHIP R 22 J 1/16W	
R518-522			RK73HB1J103J	CHIP R 10K J 1/16W	
R523,524			RK73HB1J4R7J	CHIP R 4.7 J 1/16W	
R525			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R530			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R531			RK73HB1J471J	CHIP R 470 J 1/16W	
R532			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R533			RK73HH1J683D	CHIP R 68K D 1/16W	
R535-538		*	RK73HH1J821D	CHIP R 820 D 1/16W	
R539			RK73HB1J4R7J	CHIP R 4.7 J 1/16W	
R541		*	RK73HH1J122D	CHIP R 1.2K D 1/16W	
R544-559			RK73HB1J2R2J	CHIP R 2.2 J 1/16W	
R560			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R561,562			RK73HH1J682D	CHIP R 6.8K D 1/16W	
R563		*	RK73HH1J122D	CHIP R 1.2K D 1/16W	
R564			RK73HB1J4R7J	CHIP R 4.7 J 1/16W	
R574-576			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R583,584		*	RK73HH1J391D	CHIP R 390 D 1/16W	
R588		*	R92-5112-05	CHIP R 4.7 F 1/10W	
R591			RK73HB1J820J	CHIP R 82 J 1/16W	
R599,600			RK73HB1J103J	CHIP R 10K J 1/16W	
R601-604			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R605,606			RK73HB1J103J	CHIP R 10K J 1/16W	
R614			RK73HH1J102D	CHIP R 1.0K D 1/16W	
R615			RK73HB1J1R0J	CHIP R 1.0 J 1/16W	
R617			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R619			RK73HB1J513J	CHIP R 51K J 1/16W	
R620			RK73HB1J333J	CHIP R 33K J 1/16W	
R621			RK73HB1J103J	CHIP R 10K J 1/16W	
R622			RK73HB1J333J	CHIP R 33K J 1/16W	
R623			RK73HB1J220J	CHIP R 22 J 1/16W	
R624-626			RK73HH1J332D	CHIP R 3.3K D 1/16W	
R627			RK73HB1J103J	CHIP R 10K J 1/16W	
R628,629		*	R92-5147-05	CHIP R 1.2 D 1/4W	
R630,631		*	R92-5146-05	CHIP R 1.0 D 1/4W	
Ref. No.	Add	New	Parts No.	Description	Destination
R632		*	RK73HH1J270D	CHIP R 27 D 1/16W	
R633			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R634			RK73HB1J103J	CHIP R 10K J 1/16W	
R636			RK73HB1J220J	CHIP R 22 J 1/16W	
R638-645			RK73HB1J2R2J	CHIP R 2.2 J 1/16W	
S1		*	S68-0911-15	PUSH SWITCH	
S2		*	S68-0910-05	PUSH SWITCH	
D5,6		*	015AZ5.1-F(Y)	ZENER DIODE	
D7			1SS402-F	DIODE	
IC1		*	MN2DS0016AAUB	MOS-IC	
IC5		*	-	ROM IC	
IC9		*	-	ROM IC	
IC10		*	AN41250A-VB	ANALOGUE IC	
IC12		*	MM1671XNRE	ANALOGUE IC	
IC15		*	AK4396VF	MOS-IC	
IC21		*	-	MOS-IC	
IC39			NJU7042	ANALOGUE IC	
IC42			TC74VHC273FT	MOS-IC	
IC49		*	TC7SG04FU-F	MOS-IC	
IC50,51			NJM4580V-ZB	ANALOGUE IC	
IC54		*	IS45S16800TL1	DRAM IC	
IC55			TC7WH32FU-F	MOS-IC	
IC56		*	HD74LV1GW57AE	MOS-IC	
IC57		*	NJM2573V-ZB	ANALOGUE IC	
IC60		*	-	ANALOGUE IC	
Q1-4			DTA143XE	DIGITAL TRANSISTOR	
Q10,11			2SC4617	TRANSISTOR	
Q12,13		*	2SB1709	TRANSISTOR	
Q14,15			2SK3019	FET	
Q20,21			2SK3019	FET	
Q24		*	SSM3J15FU-F	FET	
Q25			DTA143XE	DIGITAL TRANSISTOR	
Q27			DTA143ZE	DIGITAL TRANSISTOR	
Q28,29			2SA1774	TRANSISTOR	
DIGITAL I/O UNIT(X88-2020-11)					
C100			CC73HCH1H101J	CHIP C 100PF J	
C102-105			CK73HB1A104K	CHIP C 0.10UF K	
C106		*	CK73GB0J106M	CHIP C 10UF M	
C107-110			CK73HB1A104K	CHIP C 0.10UF K	
C112			CK73EB0J226K	CHIP C 22UF K	
C113		*	C92-1983-05	ELECTRO 100UF 4WV	
C114-124			CK73HB1A104K	CHIP C 0.10UF K	
C125			CC73HCH1H220J	CHIP C 22PF J	
C126-130			CK73HB1A104K	CHIP C 0.10UF K	
C133,134		*	CK73GB0J106M	CHIP C 10UF M	
C135			CK73HB1A104K	CHIP C 0.10UF K	
C138,139			CC73HCH1H100D	CHIP C 10PF D	
C142		*	CE32BN0J221M	CHIP EL 220UF 6.3WV	
C143			CK73HB0J105K	CHIP C 1.0UF K	
C144			CK73HB1A104K	CHIP C 0.10UF K	
C149			CK73HB1A104K	CHIP C 0.10UF K	
C153			CK73HB0J105K	CHIP C 1.0UF K	
C154			CK73HB1A104K	CHIP C 0.10UF K	
C200			CC73HCH1H220J	CHIP C 22PF J	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
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● IC5, IC21, and IC60 in the DVD unit (X37-1120-03) are not replaceable components. In case of defective of any of these ICs, replace the DVD mechanism assembly.

△ Indicates safety critical components.

PARTS LIST

DIGITAL I/O UNIT(X88-2020-11)

Ref. No.	Add	New	Parts No.	Description	Destination
C201 C202 C203,204 C217-226 C227,228		*	CK73HB1A104K CC73HCH1H220J CK73HB1A104K CK73HB1A104K CK73GB0J106M	CHIP C 0.10UF K CHIP C 22PF J CHIP C 0.10UF K CHIP C 0.10UF K CHIP C 10UF M	
C230,231 C233-236 C244 C247 C264		*	CK73HB1H102K CK73HB1A104K CK73GB0J106M CK73HB1H102K CK73HB1A104K	CHIP C 1000PF K CHIP C 0.10UF K CHIP C 10UF M CHIP C 1000PF K CHIP C 0.10UF K	
C275 C309-312 C314,315 C316-318 C322-324		*	CK73GB0J106M CK73HB1A104K CK73GB0J106M CK73HB1A104K CK73HB1A104K	CHIP C 10UF M CHIP C 0.10UF K CHIP C 10UF M CHIP C 0.10UF K CHIP C 0.10UF K	
C326,327 C329 C331 C332 C336		*	CK73GB0J106M CC73HCH1H270J CK73GB0J106M CK73HB1A104K CK73GB0J106M	CHIP C 10UF M CHIP C 27PF J CHIP C 10UF M CHIP C 0.10UF K CHIP C 10UF M	
C337,338 C340,341 C342 C349 C351		*	CK73HB1H152K CC73HCH1H331J CK73HB1E103K CC73HCH1H020C CK73HB1A104K	CHIP C 1500PF K CHIP C 330PF J CHIP C 0.010UF K CHIP C 2.0PF C CHIP C 0.10UF K	
C352 C354-357 C358 C360,361 C362		*	CK73GB0J106M CK73HB1A104K CC73HCH1H020C CK73HB1A104K CK73GB0J106M	CHIP C 10UF M CHIP C 0.10UF K CHIP C 2.0PF C CHIP C 0.10UF K CHIP C 10UF M	
C363 C367 C368 C375,376 C389			CK73HB1A104K CK73HB0J105K CK73HB1A104K CK73HB1A104K CK73HB1A104K	CHIP C 0.10UF K CHIP C 1.0UF K CHIP C 0.10UF K CHIP C 0.10UF K CHIP C 0.10UF K	
C392 C394,395 C400,401 C456 C460			CK73HB1A104K CK73HB1A104K CK73HB1A104K CK73EB1A106K CK73HB1A104K	CHIP C 0.10UF K CHIP C 0.10UF K CHIP C 0.10UF K CHIP C 10UF K CHIP C 0.10UF K	
C464 C468 C470,471 C478 C482		*	CK73HB1C473K CK73GB0J106M CK73HB1E103K CK73HB1A104K CK73GB1H222K	CHIP C 0.047UF K CHIP C 10UF M CHIP C 0.010UF K CHIP C 0.10UF K CHIP C 2200PF K	
C700-713 C715 C800 C801,802 C803,804			CK73HB1H222K CK73HB1A104K CK73HB1H222K CK73HB1H102K CK73HB1H222K	CHIP C 2200PF K CHIP C 0.10UF K CHIP C 2200PF K CHIP C 1000PF K CHIP C 2200PF K	
C805			CK73HB1H102K	CHIP C 1000PF K	
CN101 CN210 CN327		*	E41-2839-05 E41-2195-05 E41-2237-05	PIN ASSY FLAT CABLE CONNECTOR FLAT CABLE CONNECTOR	

Ref. No.	Add	New	Parts No.	Description	Destination
L101,102 L103,104 L200 L203-205 L212			L41-1005-33 L92-0321-05 L41-1005-33 L41-1005-33 L41-1005-33	SMALL FIXED INDUCTOR (10U) CHIP FERRITE SMALL FIXED INDUCTOR (10U) SMALL FIXED INDUCTOR (10U) SMALL FIXED INDUCTOR (10U)	
L301,302 L303 L304-310 X100 X202		*	L41-1005-33 L41-6805-33 L41-1005-33 L77-2941-05 L77-2917-15	SMALL FIXED INDUCTOR (10U) SMALL FIXED INDUCTOR (68U) SMALL FIXED INDUCTOR (10U) CRYSTAL RESONATOR (14.7456MHZ) CRYSTAL RESONATOR (32.768KHZ)	
CP104-109 CP117-127 CP128-134 CP135-138 CP139-142			RK74HB1J220J RK74HB1J220J RK74HB1J103J RK74HB1J220J RK74HB1J330J	CHIP-COM 22 J 1/16W CHIP-COM 22 J 1/16W CHIP-COM 10K J 1/16W CHIP-COM 22 J 1/16W CHIP-COM 33 J 1/16W	
CP143-146 CP147-154 CP155-160 CP200-203 CP204-207			RK74HB1J680J RK74HB1J103J RK74HB1J220J RK74HB1J220J RK74HB1J103J	CHIP-COM 68 J 1/16W CHIP-COM 10K J 1/16W CHIP-COM 22 J 1/16W CHIP-COM 22 J 1/16W CHIP-COM 10K J 1/16W	
R1,2 R3-5 R6 R7 R8			RK73HB1J473J RK73HB1J220J RK73HB1J473J RK73HB1J472J RK73HB1J473J	CHIP R 47K J 1/16W CHIP R 22 J 1/16W CHIP R 47K J 1/16W CHIP R 4.7K J 1/16W CHIP R 47K J 1/16W	
R9,10 R12 R13 R14 R15,16			RK73HB1J220J RK73HB1J000J RK73HB1J473J RK73HB1J561J RK73FB2B220J	CHIP R 22 J 1/16W CHIP R 0.0 J 1/16W CHIP R 47K J 1/16W CHIP R 560 J 1/16W CHIP R 22 J 1/8W	
R17,18 R24 R29 R30 R31			RK73HB1J153J RK73HB1J220J RK73HB1J473J RK73HB1J472J RK73HB1J473J	CHIP R 15K J 1/16W CHIP R 22 J 1/16W CHIP R 47K J 1/16W CHIP R 4.7K J 1/16W CHIP R 47K J 1/16W	
R33 R34-37 R104 R105 R107-109			RK73HB1J473J RK73FB2B270J RK73HB1J330J RK73HB1J103J RK73HB1J103J	CHIP R 47K J 1/16W CHIP R 27 J 1/8W CHIP R 33 J 1/16W CHIP R 10K J 1/16W CHIP R 10K J 1/16W	
R112 R115 R116 R118 R121			RK73HB1J222J RK73HB1J222J RK73HB1J103J RK73HB1J103J RK73HB1J222J	CHIP R 2.2K J 1/16W CHIP R 2.2K J 1/16W CHIP R 10K J 1/16W CHIP R 10K J 1/16W CHIP R 2.2K J 1/16W	
R123 R124 R126 R129 R130-132			RK73HB1J222J RK73HB1J473J RK73HB1J473J RK73HB1J222J RK73HB1J220J	CHIP R 2.2K J 1/16W CHIP R 47K J 1/16W CHIP R 47K J 1/16W CHIP R 2.2K J 1/16W CHIP R 22 J 1/16W	
R134 R137 R139 R140 R141,142			RK73HB1J220J RK73HB1J472J RK73HB1J105J RK73HB1J222J RK73FB2B220J	CHIP R 22 J 1/16W CHIP R 4.7K J 1/16W CHIP R 1.0M J 1/16W CHIP R 2.2K J 1/16W CHIP R 22 J 1/8W	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
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△ Indicates safety critical components.

PARTS LIST

DIGITAL I/O UNIT(X88-2020-11)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
R145,146			RK73HB1J153J	CHIP R 15K J 1/16W		R369			RK73HB1J101J	CHIP R 100 J 1/16W	
R147			RK73HB1J220J	CHIP R 22 J 1/16W		R370			RK73HB1J272J	CHIP R 2.7K J 1/16W	
R148			RK73HB1J473J	CHIP R 47K J 1/16W		R371			RK73HB1J101J	CHIP R 100 J 1/16W	
R149			RK73HB1J472J	CHIP R 4.7K J 1/16W		R372			RK73HB1J272J	CHIP R 2.7K J 1/16W	
R150			RK73HB1J220J	CHIP R 22 J 1/16W		R373			RK73HB1J103J	CHIP R 10K J 1/16W	
R153			RK73HB1J000J	CHIP R 0.0 J 1/16W		R376			RK73HB1J222J	CHIP R 2.2K J 1/16W	
R157-163			RK73HB1J220J	CHIP R 22 J 1/16W		R438			RK73HB1J103J	CHIP R 10K J 1/16W	
R164,165			RK73HB1J470J	CHIP R 47 J 1/16W		R440			RK73HB1J103J	CHIP R 10K J 1/16W	
R166-169			RK73HB1J220J	CHIP R 22 J 1/16W		R445			RK73HB1J473J	CHIP R 47K J 1/16W	
R170,171			RK73HB1J330J	CHIP R 33 J 1/16W		R446			RK73HB1J101J	CHIP R 100 J 1/16W	
R172,173			RK73HB1J680J	CHIP R 68 J 1/16W		R447			RK73GB2A515J	CHIP R 5.1M J 1/10W	
R174,175			RK73HB1J470J	CHIP R 47 J 1/16W		R452			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R176			RK73HB1J220J	CHIP R 22 J 1/16W		R455			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R177-192			RK73HB1J473J	CHIP R 47K J 1/16W		R458,459			RK73HB1J473J	CHIP R 47K J 1/16W	
R193-198			RK73HB1J220J	CHIP R 22 J 1/16W		R461			RK73HB1J473J	CHIP R 47K J 1/16W	
R199			RK73HB1J473J	CHIP R 47K J 1/16W		R462			RK73HB1J561J	CHIP R 560 J 1/16W	
R200			RK73HB1J330J	CHIP R 33 J 1/16W		R463-465			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R201			RK73HB1J000J	CHIP R 0.0 J 1/16W		R467			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R202			RK73HB1J106J	CHIP R 10M J 1/16W		R472,473			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R203			RK73HB1J334J	CHIP R 330K J 1/16W		R478			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R212,213			RK73HB1J100J	CHIP R 10 J 1/16W		R481,482			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R219-221			RK73HB1J472J	CHIP R 4.7K J 1/16W		R485-487			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R223			RK73HB1J473J	CHIP R 47K J 1/16W		R494			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R227			RK73HB1J100J	CHIP R 10 J 1/16W		R496			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R248-250			RK73HB1J473J	CHIP R 47K J 1/16W		R498			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R255			RK73HH1J104D	CHIP R 100K D 1/16W		R500			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R258-260			RK73HB1J473J	CHIP R 47K J 1/16W		R502,503			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R265-271			RK73HB1J472J	CHIP R 4.7K J 1/16W		R505-507			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R273			RK73HB1J000J	CHIP R 0.0 J 1/16W		R509			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R276			RK73HB1J000J	CHIP R 0.0 J 1/16W		R522			RK73HB1J680J	CHIP R 68 J 1/16W	
R284-287			RK73HB1J473J	CHIP R 47K J 1/16W		R523			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R291			RK73HB1J330J	CHIP R 33 J 1/16W		R524			RK73HB1J330J	CHIP R 33 J 1/16W	
R292-295			RK73HB1J473J	CHIP R 47K J 1/16W		R527			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R296			RK73HB1J000J	CHIP R 0.0 J 1/16W		R701			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R297			RK73HB1J103J	CHIP R 10K J 1/16W							
R304,305			RK73HB1J103J	CHIP R 10K J 1/16W		D102,103	*		AVRL1613R3FTA	VARIATOR	
R308			RK73HB1J103J	CHIP R 10K J 1/16W		D104,105			IMSA-6802-E	SURGE ABSORBER	
R310			RK73HB1J103J	CHIP R 10K J 1/16W		D300			DA204U	DIODE	
R316			RK73HB1J473J	CHIP R 47K J 1/16W		IC100			MIC2005-05YM6	MOS-IC	
R320-322			RK73HB1J103J	CHIP R 10K J 1/16W		IC104			TC7S86FU-F	MOS-IC	
R324,325			RK73HB1J103J	CHIP R 10K J 1/16W		IC105			SI-3018KM	ANALOGUE IC	
R326,327			RK73HB1J822J	CHIP R 8.2K J 1/16W		IC106			-	MICROPROCESSOR IC	
R328,329			RK73HB1J472J	CHIP R 4.7K J 1/16W		IC108			TC7SH04FU-F	MOS-IC	
R332,333			RK73HB1J151J	CHIP R 150 J 1/16W		IC200			TC7WHU04FU-F	MOS-IC	
R343			RK73HB1J101J	CHIP R 100 J 1/16W		IC201			TC74LCX245FT	MOS-IC	
R344			RK73HB1J680J	CHIP R 68 J 1/16W		IC202,203	*		K4S561632HUI7	DRAM IC	
R345			RK73HB1J152J	CHIP R 1.5K J 1/16W		IC205			TC74LCX245FT	MOS-IC	
R347	*		RK73HH1J100D	CHIP R 10 D 1/16W		IC207	*		341S1962	MICROPROCESSOR IC	
R348			RK73HH1J131D	CHIP R 130 D 1/16W		IC211	*		DW128F70NF9W7	ROM IC	
R351	*		RK73HH1J100D	CHIP R 10 D 1/16W		IC301	*		WM8728SEDSR	ANALOGUE IC	
R352			RK73HH1J131D	CHIP R 130 D 1/16W		IC302	*		BH7240AKV	MOS-IC	
R356	*		RK73HH1J100D	CHIP R 10 D 1/16W		IC305			NJM2100V-ZB	ANALOGUE IC	
R357			RK73HH1J131D	CHIP R 130 D 1/16W		IC309	*		LC74735NW8A20	MOS-IC	
R367			RK73HB1J101J	CHIP R 100 J 1/16W		IC316			TC7WHU04FU-F	MOS-IC	
R368			RK73HB1J272J	CHIP R 2.7K J 1/16W		IC322	*		L4032VN8IPINO	MOS-IC (48PIN 32V)	

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● IC106 in the DIGITAL I/O UNIT (X88-2020-11) is not a replaceable component. In case of defective of this IC, replace the entire unit (X88-2020-11).

△ Indicates safety critical components.

Ref. No.	Ad	New	Parts No.	Description	Destination
IC332 IC336,337 Q302-304			NJM2864F05-ZB TC7WH14FU-F 2SA1576A	ANALOGUE IC MOS-IC TRANSISTOR	
DVD MECHANISM ASSY (X92-5920-00) (DVS-8530V)					
1	1A	*	A10-5331-41	CHASSIS	
2	2B		A10-5332-41	CHASSIS	
3	1A	*	A10-5333-31	CHASSIS	
4	3A	*	A10-5334-22	CHASSIS	
7	1B	*	D10-4918-12	ARM	
8	1B	*	D10-4919-12	ARM	
9	1B	*	D10-4920-02	LEVER	
10	1B	*	D10-4921-02	LEVER	
12	2B	*	D10-4922-12	SLIDER	
13	2A	*	D10-4923-12	ARM	
14	2B	*	D10-4924-13	ARM	
15	2B	*	D10-4925-12	ARM	
25	2B	*	D10-4938-04	SLIDER ASSY	
27	2A	*	D10-4945-04	LEVER	
28	2B	*	D12-0639-02	CAM	
31	2B	*	D13-2402-04	GEAR	
32	2B	*	D13-2403-04	GEAR	
33	2B	*	D13-2404-04	GEAR	
34	2B	*	D13-2405-04	GEAR	
35	2B	*	D13-2406-04	GEAR	
36	2B	*	D13-2407-04	GEAR	
40	2A		D13-2413-04	GEAR	
41	2A		D13-2415-04	GEAR	
42	2A		D13-2416-04	GEAR	
43	1B	*	D14-1013-14	ROLLER	
53	1B	*	D21-2487-04	SHAFT	
54	2A	*	D39-0269-05	DAMPER	
55	2A	*	D39-0270-05	DAMPER	
60	3A	*	F09-2825-23	SHEET	
65	2B	*	G01-3298-04	EXTENSION SPRING	
66	1B	*	G01-3299-04	EXTENSION SPRING	
67	2A	*	G01-3300-14	TORSION COIL SPRING	
68	1B	*	G01-4601-04	EXTENSION SPRING	
69	1B	*	G01-4602-04	EXTENSION SPRING	
70	1B	*	G01-4604-04	TORSION COIL SPRING	
74	2B	*	G01-4609-14	TORSION COIL SPRING	
75	1B	*	G02-1550-03	FLAT SPRING	
79	2A	*	J22-0475-11	MOUNTING HARDWARE	
80	3B	*	J22-0476-01	MOUNTING HARDWARE	
A	1A	*	N09-6382-05	MACHINE SCREW (M1.7X2.0)	
B	3B	*	N09-6408-15	TAPTITE SCREW (1.7X4 P-TITE)	
C	1B	*	N09-6426-15	MACHINE SCREW (LOAD ARM SCREW	
D	3A		N09-6104-05	MACHINE SCREW (2X10 S-TITE)	
93	2A	*	T99-0471-05	MAGNET	
96	1B	*	X94-2080-00	ROLLER ASSY	
98	2A	*	X94-2060-00	TRAVERSE ASSY (PICKUP,SPINDLE)	
VM1	2A	*	X94-2070-00	MOTOR ASSY (LOADING)	

Ref. No.	Add	New	Parts No.	Description	Destination

⚠ Indicates safety critical components.

SPECIFICATIONS

Monitor section

Picture size
..... 6.97 inches (diagonal) wide, 154.1 x 87.1mm
Display system Transparent TN LCD panel
Drive system TFT active matrix system
Number of pixels 336,960 (480H x 234V x RGB)
Effective pixels 99.99%
Pixel arrangement RGB striped arrangement
Back lighting Cold Cathode Fluorescent Tube

DVD section

D/A Converter 24bit
Decoder Linear PCM/ Dolby Digital/ dts/MP3/ WMA/AAC
Wow & Flutter Below Measurable Limit
Frequency Response
Sampling frequency; 96kHz 20~44,000Hz
Sampling frequency; 48kHz 20~22,000Hz
Sampling frequency; 44.1kHz 20~20,000Hz
Total Harmonic Distortion 0.01% (1kHz)
S/N Ratio 98dB (DVD-Video 96k)
Dynamic Range 98dB (DVD-Video 96k)
DISC Format DVD-Video/ VIDEO-CD/ CD-DA
Sampling frequency 44.1kHz/ 48kHz/ 96kHz
Quantifying bit number 16/ 20/ 24 bit

USB IF section

USB Standard USB 1.1/ 2.0
File System FAT 16/ 32
Maximum Power Supply Current 500mA
D/A Converter 24Bit
Decoder MP3/ WMA/ AAC

FM tuner section

Frequency Range
K,R 87.9~107.9MHz (200kHz)
M,X 87.5~108.0MHz (50kHz), 87.9~107.9MHz (200kHz)
E 87.5~108.0MHz (50kHz)
Usable Sensitivity (S/N : 26dB)
K,R,M,X 9.3dBf (0.8μV/75Ω)
E 0.7μV/75Ω
Quieting Sensitivity (S/N : 46dB) 15.2dBf (1.6μV/75Ω)
Frequency Response (± 3.0dB) 30Hz~15kHz

S/N

K,R,M,X 70dB (MONO)
E 65dB (MONO)
Selectivity (±400kHz) ≥80dB
Stereo Separation
K,R,M,X 40dB (1kHz)
E 35dB (1kHz)

AM tuner section : K,R,X type

Frequency Range
K,R 530~1700kHz (10kHz)
X 531~1161kHz (9kHz), 530~1700kHz (10kHz)
Usable Sensitivity 28dBμ

LW Tuner section : M,E type

Frequency Range 153~281kHz (9kHz)
Usable Sensitivity
M 28dBμ
E 45μV

MW Tuner section : M,E type

Frequency Range
M 531~1611kHz (9kHz), 530~1700kHz (10kHz)
E 531kHz~1611kHz (9kHz)
Usable Sensitivity 28dBμ (25μV)

Video section

Color system of external video input
K,R NTSC
M,X,E NTSC/ PAL
External video input level (RCA jacks) 1Vp-p/75Ω
External audio max input level (RCA jacks) 2V/25kΩ
Analog RGB input 0.7Vp-p/75Ω
Video Output level (RCA jacks) 1Vp-p/75Ω
Audio Output level (RCA jacks) 1.2V/10kΩ

Audio section

Maximum Power (Front & Rear) 50W x 4
Full Bandwidth Power (Front & Rear)
K,R (4Ω, 14.4V, 1% THD) 22W x 4
M,X (at less than 1% THD) 22W x 4
E (PWR DIN45324, +B=14.4V) 30W x 4

SPECIFICATIONS

Preout level.....2V/10kΩ
Preout impedance ≤600Ω
Speaker impedance..... 4~8Ω
Tone action
 Bass 100Hz±8dB
 Middle 1kHz±8dB
 Treble 10kHz±8dB

External SW : M,X type

Maximum Power Supply Current 500mA

General

Operating voltage 14.4V (11~16V allowable)
Current Consumption 15A
Installation Size (W × H × D)
 Main Unit
 182 × 53 × 161 mm, 7-3/16 × 2-1/16 × 6-3/8 inch
 Hideaway unit
 228 x 40 x 176 mm, 9 x 1-9/16 × 6-15/16 inch

Operational Temperature Range -10°C~+60°C
Storage Temperature Range -20°C~+85°C
Weight
 Main unit 2.2kg (4.9lbs)
 Hideaway unit..... 1.1kg (2.4lbs)

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Although the effective pixels for the liquid crystal panel is given as 99.99% or more, 0.01% of pixels may not light or may light incorrectly.

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DANGER:
Please do not look at the laser beam directly during repair or operation check.

