

SERVICE MANUAL

BX1 CHASSIS

<u>MODEL</u>	<u>COMMANDER</u> <u>DEST.</u>	<u>CHASSIS NO.</u>	<u>MODEL</u>	<u>COMMANDER</u> <u>DEST.</u> <u>CHASSIS NO.</u>
KV-14CT1B	RM-W100 FR	SCC-U89C-A		
KV-14CT1E	RM-W100 ESP	SCC-U91C-A		
KV-14CT1K	RM-W100 OIRT	SCC-U92C-A		
KV-14CT1U	RM-W100 UK	SCC-U93B-A		



TRINITRON® COLOR TV
SONY®

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CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR THE CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP.

WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD DUE TO LIVE CHASSIS, THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARKED $\triangle$ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENTION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MARQUE $\triangle$ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIÉCES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT, NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

CAUTION

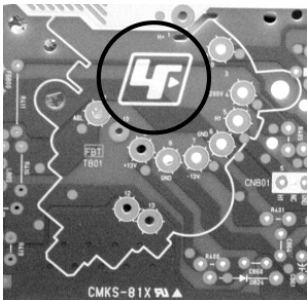
Lead Free Soldered Boards

The circuit boards listed below (Table 1) may have been processed using Lead Free Solder. The boards are identified by the LF logo . e.g A,C board (see example).

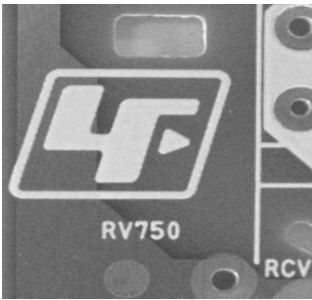
Board	Function
A	ONE CHIP PROCESSOR, DEFLECTION, POWER SUPPLY, AUDIO, TUNER, IF, JACK, SCART TERMINAL
C	RGB AMP

(Table 1)

example 1 (A Board)



example 2 (C Board)



The servicing of these boards requires special precautions to be taken as outlined below:

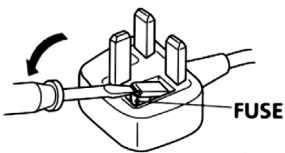
1. It is strongly recommended to use Sony Approved Lead Free Solder material in order to guarantee optimal quality of new solder joints.
2. Due to higher melting point of Lead Free Solder, the soldering iron tip temperature needs to be set to chip (350 degree centigrade) and lead component (380 degree centigrade) for not more than 4 seconds. This requires soldering equipment capable of accurate temperature control coupled with a good heat recovery characteristics.

WARNING
(FOR EUROPE MODEL WITH “U” (UK) ONLY)
(KV-14CT1U only)

The flexible mains lead is supplied to connected a B.S. 1363 fused plug having a fuse of 5 AMP rating. Should the fuse need to be replaced, use a 5 AMP FUSE approved by ASTA to BS 1362, i.e one that carries the  mark.

IF THE PLUG SUPPLIED WITH THIS APPLIANCE IS NOT SUITABLE FOR THE OUTLET SOCKETS IN YOUR HOME, IT SHOULD BE CUT OFF AND APPROPRIATE PLUG FITTED. THE PLUG SEVERED FROM THE MAINS LEAD MUST BE DESTROYED AS A PLUG WITH BARED WIRES IS DANGEROUS IF ENGAGED IN A LIVE SOCKET.

When an alternative type of plug is used, it should be fitted with a 5 AMP FUSE, otherwise the circuit should be protected by a 5 AMP FUSE at the distribution board.



How to replace the fuse?
Open the fuse compartment with a screw driver blade and replace the fuse.

SELF DIAGNOSTIC FUNCTION

The units in this manual contain a self diagnostic function. If an error occurs, the STANDBY (⏻) indicator will automatically begin to flash. A description of the self-diagnosis function is explained in the instruction manual. The number of times the STANDBY (⏻) indicator flashes translates to a probable source of the problem. If an error symptom cannot be reproduced, the remote commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

1. DIAGNOSTIC TEST INDICATORS

When an errors occurs, the STANDBY (⏻) indicator will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the indicator will identify the first of the problem areas.

Result for all of the following diagnosis items are displayed on screen. No error has occurred if the screen displays a "0".

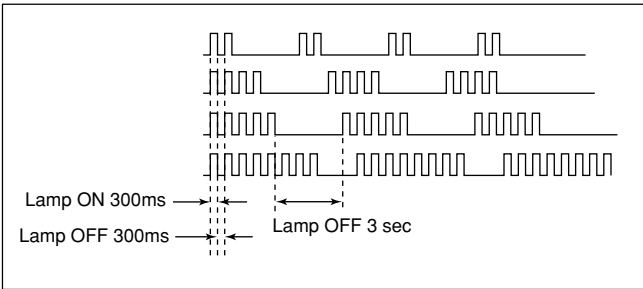
Diagnosis Item Description	No. of timer STANDBY (⏻) indicator flashes	Self-Diagnostic display/ Diagnosis result	Probable Cause Location	Detected Symptoms
Power does not turn on	Does not light	–	- Power cord is not plugged in. - Fuse is burned out (F600) A board.	- Power does not come on. - No power is supplied on TV. - AC Power supply is faulty.
+B overcurrent (OCP)*	2 times	2:0 or 2:1 ~ 255	- H OUT (Q805) is shorted. (A board) - IC751 is shorted. (C board)	- Power does not come on. - Load on power line is shorted.
V-Protect	4 times	4:0 or 4:1 ~ 255	+13V is not supplied. (A board) - IC804 is faulty. (A board)	- Has entered standby state after horizontal raster. - Vertical deflection pulse is stopped. - Power line is shorted or power supply is shorted.
IK (AKB)	5 times	5:0 or 5:1 ~ 255	- Video OUT (IC1545) is faulty. (A board) - IC001 is faulty. (A board) - Screen (G2) is improperly adjusted.**	- No raster is generated. - CRT Cathode current detection reference pulse output is small.
HV Protect	8 times	8:0 or 8:1 ~ 255	- IC604 faulty. - IC602 faulty.	- No power supply to CRT ANODE. - No RASTER is generated.

* If a +B overcurrent is detected, stoppage of the vertical deflection is detected simultaneously. The symptom that is diagnosed first by the mirco controller is displayed on the screen.

** Refer to Screen (G2) Adjustment in this manual.

2. DISPLAY OF STANDBY (⏻) INDICATOR

FLASH COUNT



Diagnostic Item	Flash Count*
+B overcurrent	2 times
V-Protect	4 times
IK (AKB)	5 times
HV Protect	8 times

* One flash count is not used for self-diagnosis.



3. STOPPING THE STANDBY (⏻) INDICATOR FLASH

Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY (⏻) indicator from flashing.

4. SELF-DIAGNOSTIC SCREEN DISPLAY

For errors with symptoms such as "power sometimes shuts off" or "screen sometimes goes off" that cannot be confirmed, it is possible to bring up past occurrences of failure on the screen for confirmation.

[To Bring Up Screen Test]

In standby mode, press buttons on the remote commander sequentially in rapid succession as shown below:

Display ➡ Channel ➡ Volume ➡ Power / TV



Note that this differs from entering the service mode (volume).

The following screen will be displayed indicating the error count.

ERROR MENU	
2 :	0
3 :	N/A
4 :	0
5 :	1
8 :	0
101 :	N/A

Numeral "0" means that no fault was detected.
Numerical "1" means the number of a fault occurrence (1 ~ 255).

5. HANDLING OF SELF-DIAGNOSTIC SCREEN DISPLAY

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen during repairs. When you have completed the repairs, clear the result display to "0".

Unless the result display is cleared to "0", the self-diagnosis function will not be able to detect subsequent faults after completion of the repairs.

[Clearing the result display]

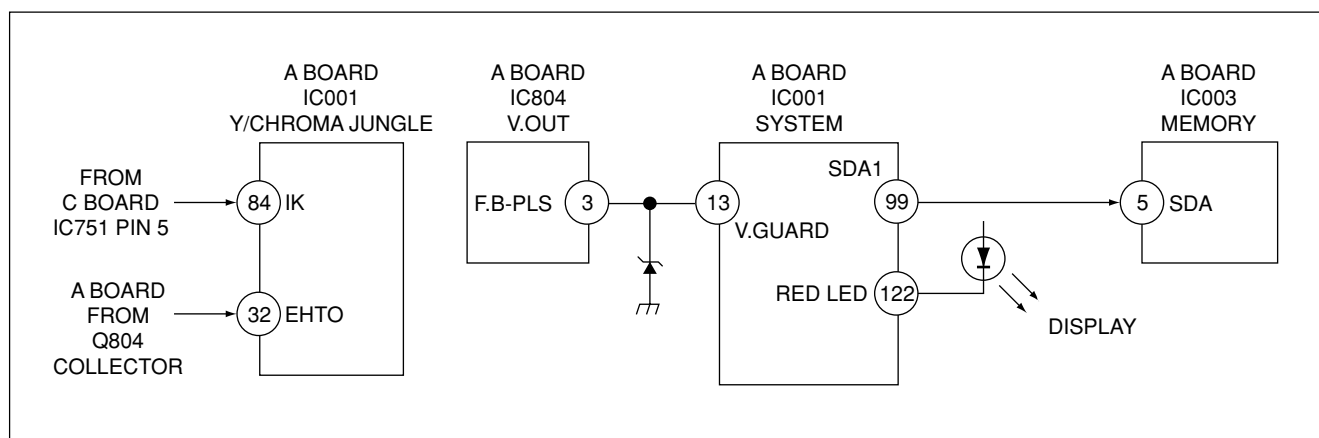
To clear the result display to "0", press buttons on the remote commander subsequent as shown below when the self-diagnostic screen is being displayed.

[8] → [0]

[Quitting Self-diagnostic screen]

To quit the entire self-diagnostic screen, turn off the power switch on the remote commander or the main unit.

6. SELF-DIAGNOSTIC CIRCUIT



[+B overcurrent (OCP)]

Occurs when an overcurrent on the +B(135V) line is detected by pin 32 of IC001 (A board). If the voltage of pin 32 of IC001 (A board) is more than 4V, the unit will automatically go to standby.

[V-PROTECT]

Occurs when an absence of the vertical deflection pulse is detected by pin 13 of IC001 (A board).

[IK (AKB)]

If the RGB levels* do not balance within 15 sec after the power is turned on, this error will be detected by IC001 (A board). TV will stay on, but there will be 5 times LED blinking.

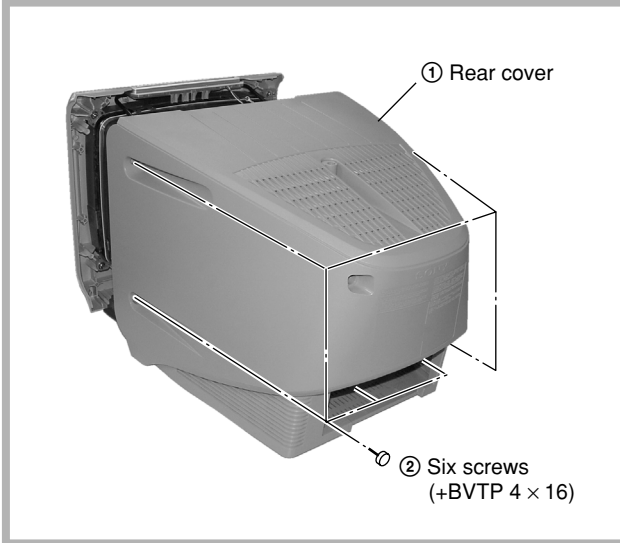
[HV PROTECT]

Occurs when IC001 internal HV protect detects an abnormal H-Pulse (frequency) due to improper power supply to IC001. TV cuts off high voltage power of anode CRT. No picture will be detected. eg: IC602, IC604 go faulty.

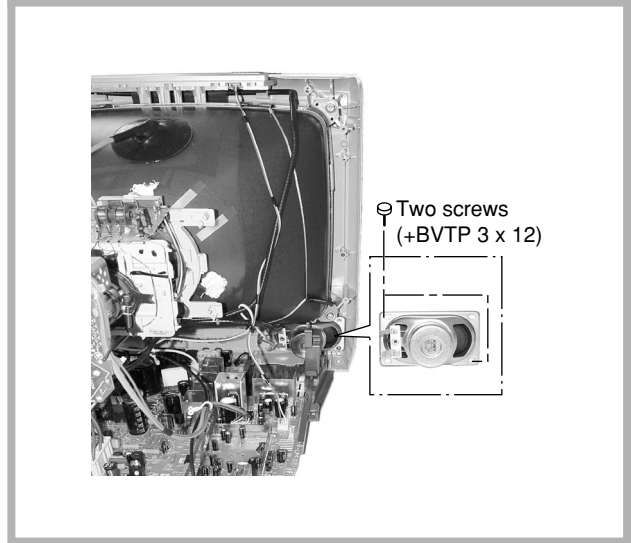
* (Refers to the RGB levels of the AKB detection Ref pulse that detects IK.)

SECTION 1 DISASSEMBLY

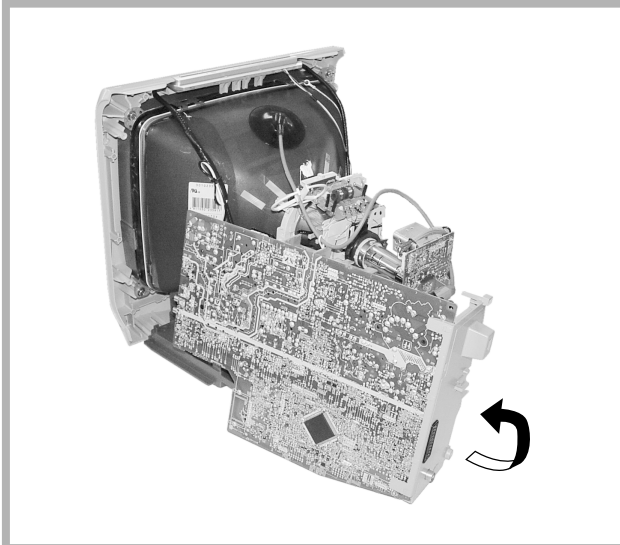
1-1. REAR COVER REMOVAL



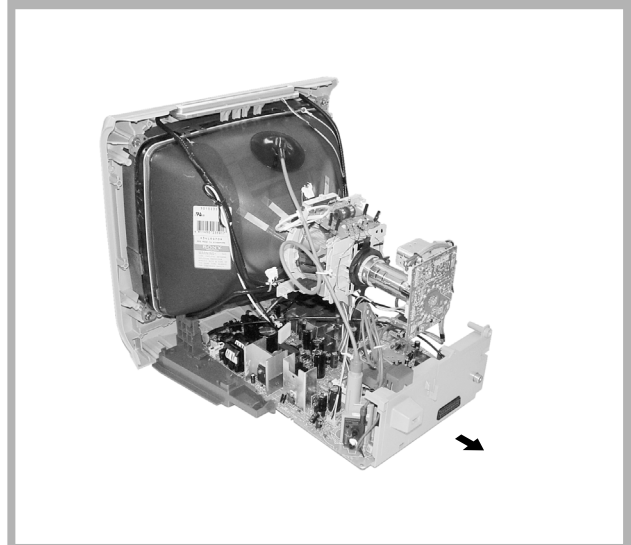
1-2. SPEAKER REMOVAL



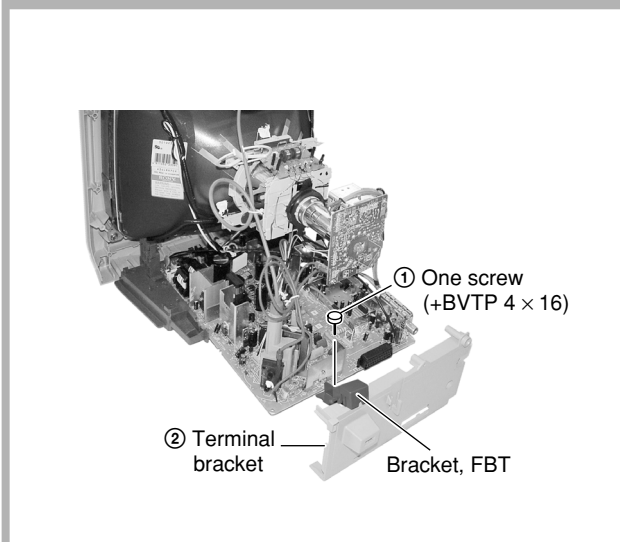
1-3. SERVICE POSITION



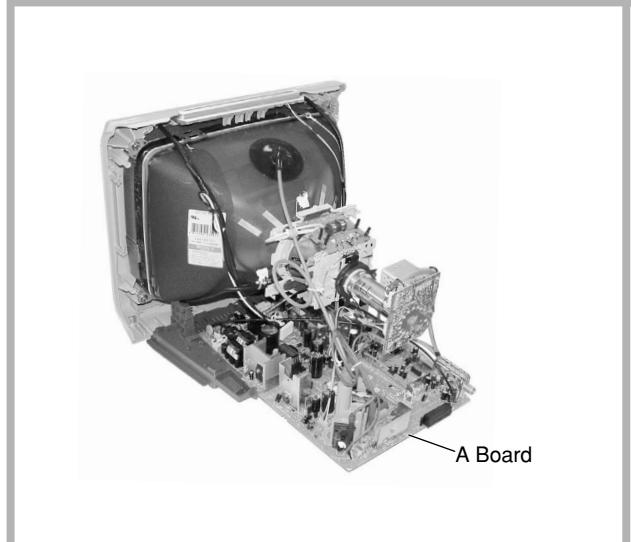
1-4. CHASSIS ASSY REMOVAL



1-5. TERMINAL BRACKET REMOVAL



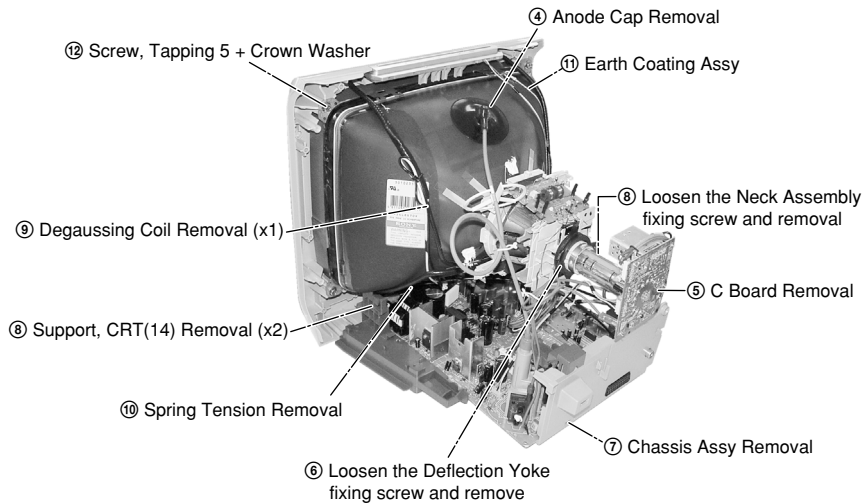
1-6. A BOARD REMOVAL



1-7. PICTURE TUBE REMOVAL

Note:

- Please make sure the TV set is not in standing position before removing necessary CRT support located on bottom right and left.
- 1) Place the TV set with the CRT face down on a cushion jig.
- 2) Removal the rear cover.
- 3) Unplug all interconnecting leads from the Deflection Yoke, Degaussing Coils and CRT grounding strap.

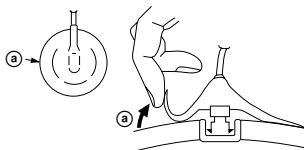


• REMOVAL OF ANODE-CAP

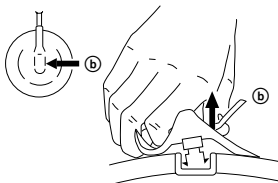
Note:

- After removing the anode, short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT.

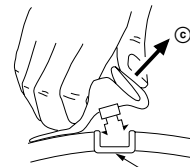
• REMOVING PROCEDURES



- Turn up one side of the rubber cap in the direction indicated by the arrow ①.



- Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ②.
- When one side of the rubber cap is separated from

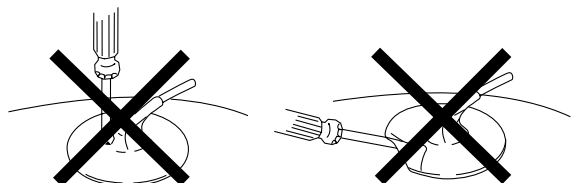


anode button

the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ③.

• HOW TO HANDLE AN ANODE-CAP

- Do not damage the surface of anode-caps with sharp shaped objects.
- Do not press the rubber too hard so as not to damage the inside of anode-cap. A metal fitting called the shatter-hook terminal is built into the rubber.
- Do not turn the foot of rubber over too hard. The shatter-hook terminal will stick out or damage the rubber.



SECTION 2

SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.

Set the controls as follows unless otherwise noted:

VIDEO MODE STANDARD

PICTURE CONTROL NORMAL

BRIGHTNESS CONTROL NORMAL

Perform the adjustments in the following order :

1. Beam Landing
2. Convergence
3. Focus
4. Screen (G2)
5. White Balance

Note : Test Equipment Required.

1. Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital Multimeter
5. Oscilloscope

Preparation:

In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west. Switch on the set's power and degauss with the degausser.

2-1. BEAM LANDING

Picture Mode : LIVE

1. Input a white signal with the pattern generator. Set the contrast and brightness to normal.
2. Set the pattern generator raster signal to a green raster.
3. Move the deflection yoke to the rear and adjust with the purity control so that the green is at the centre and the blue and red take up equally sized areas on each side of the screen. (see figure 2-1 and figure 2-1-1)

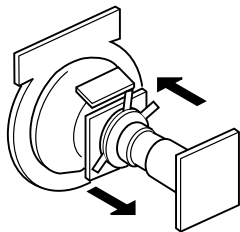


Figure 2-1

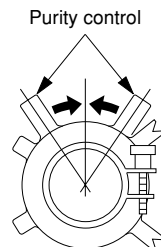


Figure 2-1-1

7. If the beam does not land correctly in all the corners, use a magnet to correct it. (see figure 2-1-3)

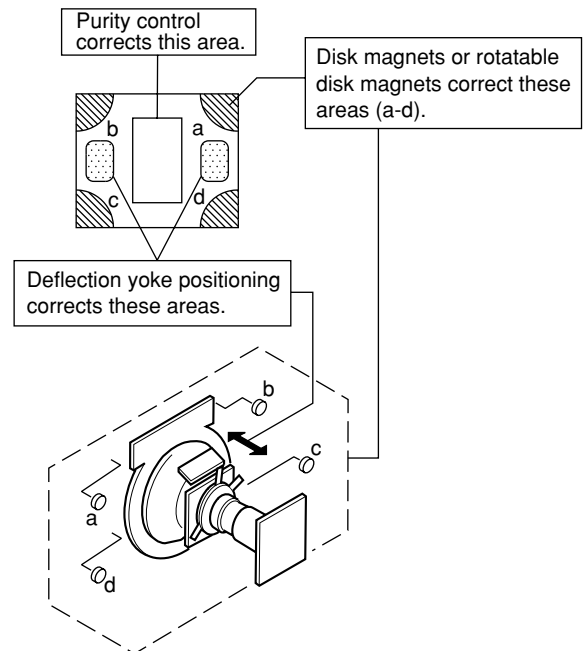


Figure 2-1-3

4. Move the deflection yoke forward and adjust so that the entire screen is green. (see figure 2-1-2)

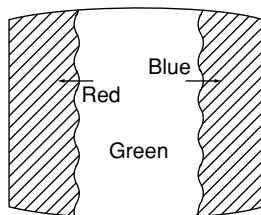


Figure 2-1-2

Caution:

High voltages are present on the Deflection yoke terminals. Take care when handling the deflection yoke whilst carrying out adjustments.

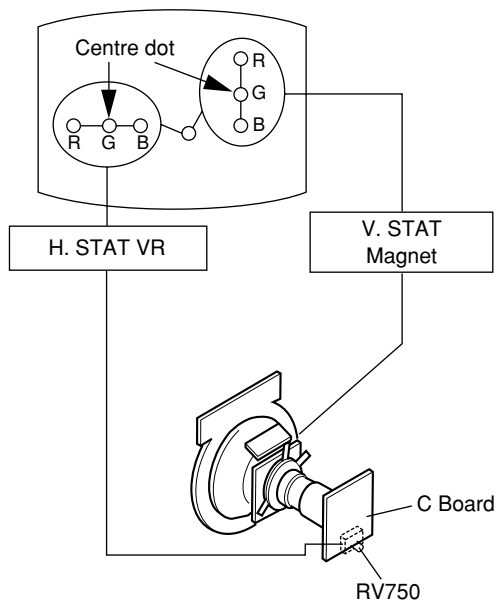
5. Switch the raster signal to blue, then red and verify the condition.
6. When the position of deflection yoke have been decided, fasten the deflection yoke with the screws and DY spacers.

2-2. CONVERGENCE

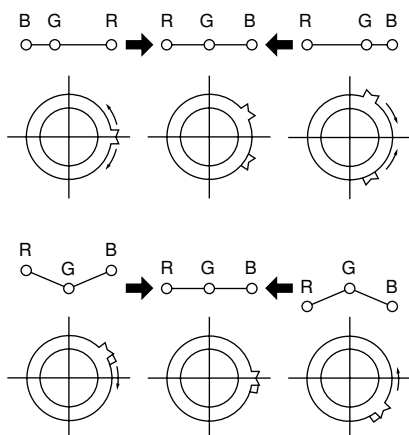
Preparation:

- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Receive dot/hatch signal.
- Picture Mode : MOVIE

(A) Horizontal and Vertical Static Convergence

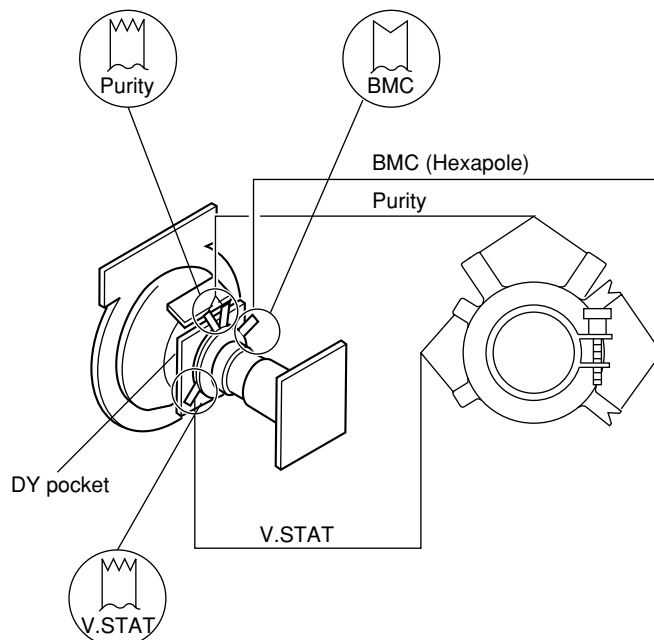


1. (Moving vertically), adjust the V. STAT magnet so that the red, green and blue dots are on top of each other at the centre of the screen.
2. (Moving horizontally), adjust the H. STAT VR control so that the red, green and blue dots are on top of each other at the centre of the screen.
3. BMC (Hexapole) Magnet
If the red, green and blue dots are not balanced or aligned then use the BMC magnet to adjust in the manner described below.



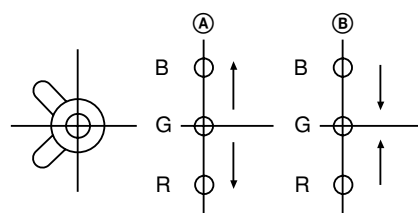
4. If the H. STAT variable resistor cannot bring the red, green and blue dots together at the centre of the screen, adjust the horizontal convergence with the H. STAT variable resistor and the V. STAT magnet in the manner given below.

(In this case, the H. STAT variable resistor and the V. STAT magnet influence each other, so be sure to perform adjustments while tracking.)

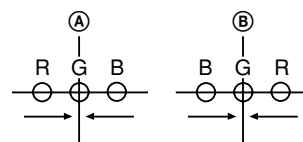


Operation of V. STAT magnet.

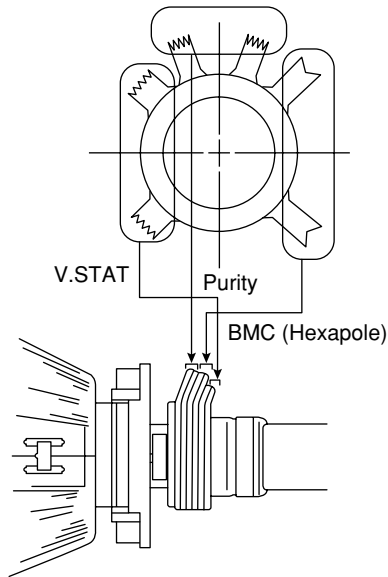
If the V. STAT is moved in the "A" and "B" arrows, the red, green and blue dots moves as shown below.



Moved RV750 H. STAT the red, green and blue dots move as shown below.



5. Layout of each control.

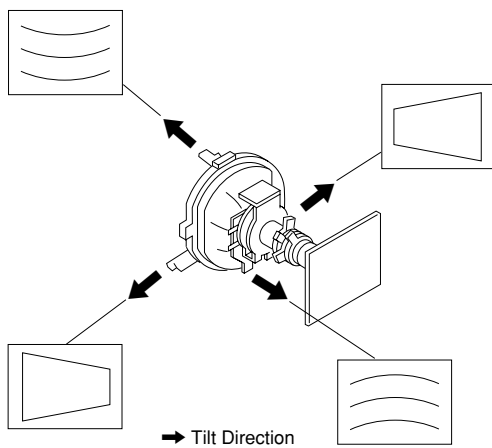


6. Geometry Adjustment.

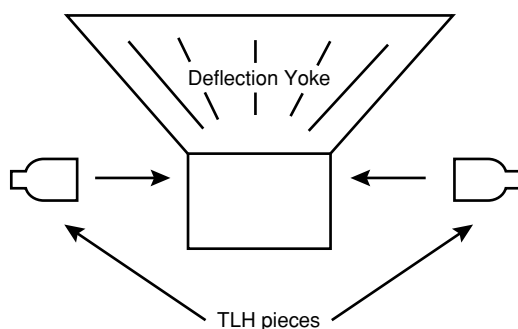
Preparation:

Before starting this adjustment, adjust the horizontal and vertical static convergence.

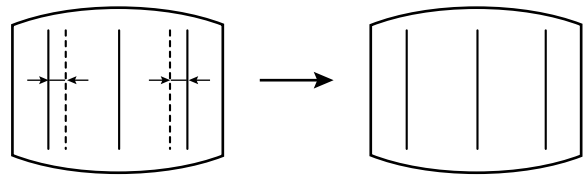
- Remove the deflection yoke spacer.
- Tilt the deflection yoke as indicated in the figure below and optimise the geometry.
Tilting the DY up and down will balance the upper and lower pin adjustment.
Tilting the DY left and right will balance the H-Trap adjustment.
- Re-install the deflection yoke spacer.



7. H-TILT Adjustment



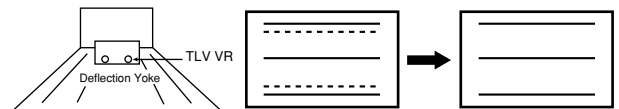
H-TILT correction can be performed by adding a TLH correction assembly to the Deflection Yoke.



8. YCH Adjustment

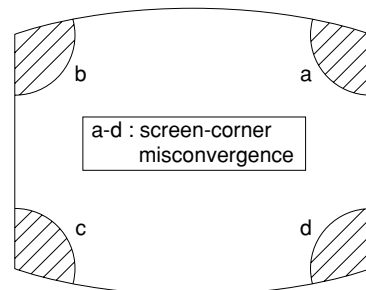


9. TLV Adjustment

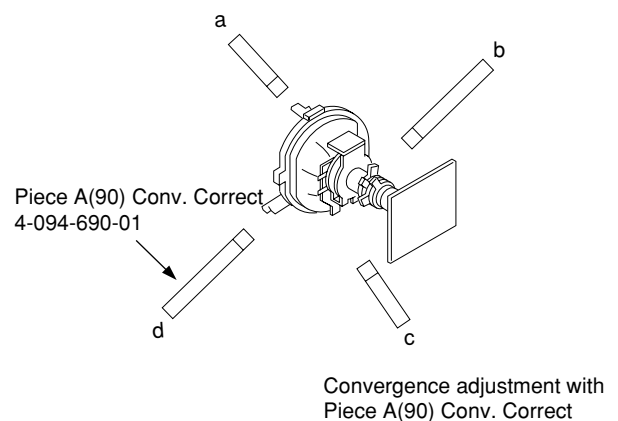


10. Screen Corner Convergence.

If you are unable to adjust the corner convergence properly, this can be corrected with the use of Piece A(90) Conv. Correct.

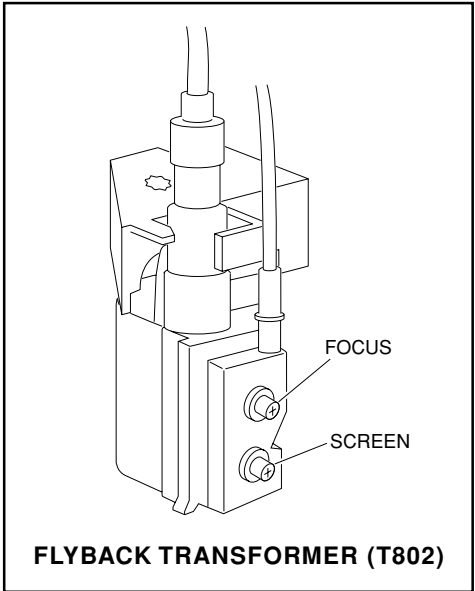


Install the Piece A(90) Conv. Correct assembly for the area that needs correcting.



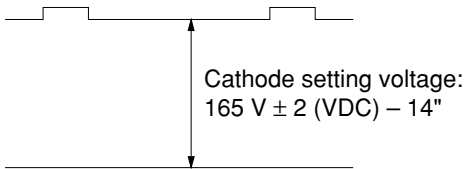
2-3. FOCUS ADJUSTMENT

- 1. Receive digital monoscope pattern.
- 2. Set Picture Mode to PERSONAL.
- 3. Adjust focus VR to obtain the best focus at the centre of the screen.
- 4. Change the receiving signal to white pattern and blue back.
- 5. Confirm magenta ring is not noticeable. In case magenta is very obvious, adjust the focus VR to take balance of magenta ring and focus.



2-4. G2(SCREEN) ADJUSTMENT

- 1. Input a dot signal from the pattern generator.
- 2. Set the Picture, Brightness and Colour to minimum.
- 3. Apply 165V DC from an external power supply to the R,G and B cathodes of the CRT.
- 4. Adjust brightness to obtain cathode value to value below.
- 5. Whilst watching the picture, adjust the G2 control [SCREEN] located on the Flyback Transformer to the point just before the flyback return lines disappear.



2-5. WHITE BALANCE ADJUSTMENT

- 1. Enter into Service Menu.
- 2. Input white pattern signal.
- 3. Set picture to PERSONAL mode.
- 4. Select WHBL "RDRV" and fix the value to 25 hex.
- 5. Adjust WHBL "GDRV" and "BDRV" and adjust the data for best white balance in highlight condition.
- 6. Adjust WHBL "BKOR" and "BKOG" and adjust the data for best white balance cut-off condition.
- 7. Set the offset settings for LIVE and GAME mode as stated in the table 1 below:-

OFFSET TABLE (Table 1)

Live	← Personal	← Game
Adjusted value +2	BKOR (adjusted)	Adjusted value
Adjusted value -3	BKOG (adjusted)	Adjusted value
25hex	RDRV (25hex)	25hex
Adjusted value +2	GDRV (adjusted)	Adjusted value -2
Adjusted value +4	BDRV (adjusted)	Adjusted value -6

SECTION 3 CIRCUIT ADJUSTMENTS

3-1. ADJUSTMENT WITH COMMANDER

Service adjustment to this model can be performed using the supplied remote commander RM-W100.

a. ENTERING SERVICE MODE

With the unit on standby, press the following sequence of buttons on the remote commander.

➡ Display  ➡ Channel  5 ➡ Volume  ➡ Power  / TV 

'TT --' will appear in the upper right corner of the screen.

Other status information will also be displayed.

b. Press 'MENU' on the remote commander to obtain service menu on the screen.

GEOM
WHBL
SADJ
YC
SYNC
PICT
SW
VIF

c. The screen only displays 8 items at one time. To move to the corresponding item use the up down buttons on the remote commander.

d. Press the right / left button or ENTER button on the remote commander to enter into the required item.

Item Name	Range	Data
HPOS	(0,63)	52
HPAR	(0,63)	40

e. The screen only display 12 items at one time. To move to the corresponding item use the up down buttons on the remote commander.

f. Press right to increase or left to decrease the data.

g. Press the 'MENU' button on the remote commander to quit from Service Menu. Screen will still display 'TT --'. To exit from 'TT --' menu, press 0 twice, 'TEST', 'TV' or switch the TV into standby mode.

Note:

- After carrying out the service adjustments, to prevent the customer accessing the 'Service Menu' switch the TV set OFF and then ON.

3-2. ADJUSTMENT ITEM TABLE

TVJ	Functionality		Initial	Range	Function	Table & Note	Device Name	Common	50	60	w50	w60
Category	No	Name	Dec	Dec								
GEOM	000	HPOS	031	063	Horizontal Shift (HS)	50/60/w50/w60(+ JPN RGB)	TV-Processor		31	31	31	31
	001	HPAR	031	063	Horizontal Parallelogram	50/60/w50/w60			31	31	31	31
	002	HBOW	031	063	Horizontal Bow	50/60/w50/w60			31	31	31	31
	003	VLIN	031	063	Vertical Linearity	50/60/w50/w60			31	31	31	31
	004	VSCR	031	063	Vertical Scroll	50/60/w50/w60			31	31	31	31
	005	HSIZ	031	063	EW Width (EW)	50/60/w50/w60(+ JPN RGB)			31	31	31	31
	006	EWPW	031	063	EW Parabola/Width (PW)	50/60/w50/w60			31	31	31	31
	007	UCOP	017	063	EW Upper Corner Parabola	50/60/w50/w60			17	17	17	17
	008	LCOP	017	063	EW Lower Corner Parabola	50/60/w50/w60			17	17	17	17
	009	EWTZ	031	063	EW Trapezium	50/60/w50/w60			31	31	31	31
	010	VSLP	031	063	Vertical Slope (VS)	50/60/w50/w60			31	31	31	31
	011	VSIZ	015	063	Vertical Amplitude	50/60/w50/w60			15	15	15	15
	012	SCOR	014	063	S-Correction (SC)	50/60/w50/w60			14	14	14	14
	013	VPOS	031	063	Vertical Shift (VSH)	50/60/w50/w60			31	31	31	31
	014	HBL	000	001	RGB Blanking Mode	50/60/w50/w60			01	01	01	01
	015	WBF	007	015	Timing of Wide Blanking (WBF)	50/60/w50/w60			09	09	09	09
	016	WBR	007	015	Timing of Wide Blanking (WBR)	50/60/w50/w60			10	10	10	10
	017	SBL	000	001	Service Blanking	none		00				
	018	COPY	000	001	Copy the GEO data to all 50/60Hz NVM area	none		00				

-  shaded items are adjustable data.
-  no data.

TVJ	Functionality		Initial	Range	Function	Table & Note	Device Name	Common	Live (COOL other)	GAME (WARM other)	MOVIE/ PERSONAL (NEUTRAL other)	LIVE (COOL RGB)	GAME (WARM RGB)	MOVIE/ PERSONAL (NEUTRAL RGB)	Other	RGB	YUV	Pic mode 0 (LIVE)	Pic mode 1 (MOVIE)	Pic mode 2 (GAME)	Pic mode 3 (PERSONAL)
Category	No	Name	Dec	Dec																	
WHBL	000	BKOR	031	063	Black Level Offset R	col temp (HIGH/LOW/Normal)*(UV/RGB/Others)	TV-Processor		31	31	31	31	31	31							
	001	BKOG	031	063	Black Level Offset G	col temp (HIGH/LOW/Normal)*(UV/RGB/Others)			31	31	31	31	31	31							
	002	RDRV	037	063	White Point R	col temp (HIGH/LOW/Normal)*(UV/RGB/Others)			37	37	37	37	37	37							
	003	GDRV	037	063	White Point G	col temp (HIGH/LOW/Normal)*(UV/RGB/Others)			37	37	37	37	37	37							
	004	BDRV	037	063	White Point B	col temp (HIGH/LOW/Normal)*(UV/RGB/Others)			37	37	37	37	37	37							
	005	LPG	000	001	RGB Gain Preset	none		00													
	006	PGR	031	127	Preset Gain R (PGR)	none		45													
	007	PGG	031	127	Preset Gain G (PGG)	none		45													
	008	PGB	031	127	Preset Gain B (PGB)	none		45													
	009	GNOF	000	015	Preset Gain Offset	none	CCC loop	08													
	010	SBRT	031	063	Sub-Brightness	Others/RGB/YUV										34	30				
	011	SBRO	000	003	Sub-Brightness Offset (Intelligent Pic)	none		00													
	012	EGL	000	001	Enable Gain Loop CCC System	none		00													
	013	SGL	000	003	Selection of High Current in CCC System	none		00													
	014	AKB	000	001	Black Current Stabilization	none		00													
	015	CBS	000	001	Control Sequence of Beam Current Limiting	none		00													
	016	RGBB	000	003	RGB Blanking	none		00													
	017	BLBG	000	001	Blanking of Blue & Green Output	none		00													
	018	OFB	000	001	Black Level Offset Blue	none		00													
	019	NSBR	000	015	Non-Standard Brightness Offset	none		05													
	020	WBP	000	003	Color Temp setting (0:High, 1:Normal, 2:3:Low)	Picture Mode												00	01	02	01

TVJ	Functionality		Initial	Range	Function	Table & Note	Device Name	Common	50pal (TV)	50pal (Video)	50secam (TV)	50secam (video)	60TV	60Video	50RGB	60RGB	Pic mode 0 (LIVE)	Pic mode 1 (MOVIE)	Pic mode 2 (GAME)	Pic mode 3 (PERSONAL)	TV-IP ON	Video	RGB	TV Wide	Video Wide			
Category	No	Name	Dec	Dec																								
SADJ	000	PMAX	063	063	Picture Maximum	(TV/Video)*(Normal/Wide)<-Normal/Wide> (+ JPN RGB)	TV-Processor														34	34		26	26			
	001	SHUE	007	015	Sub-Hue	TV/Video																07	08					
	002	SSHP	015	063	Sub-Sharpness	TV/Video/YUV (+ JPN RGB)																23	31	10				
	003	SSHO	000	003	Sub-Sharpness Offset (Intelligent Pic)	none		03																				
	004	SCOL	031	063	Sub-Color	50pal(tv)/50pal(video)/50secam(tv)/50secam(video)/ 60TV/60video/50YUV/60YUV/50RGB/60RGB			24	28	24	28	22	26	28	26												
	005	SCOO	000	003	Sub-Color Offset (Intelligent Pic)	none		02																				
	006	PIC	031	127	Picture Control [GA:0~100(valid); >100(invalid), Others:0~63(valid); ignore bit 6(invalid)]	Picture Mode (GA: Personal = User Reset Data)												63	35	38	55							
	007	COL	031	127	Color Control [GA:0~100(valid); >100(invalid), Others:0~63(valid); ignore bit 6(invalid)]	Picture Mode (GA: Personal = User Reset Data)													36	31	31	31						
	008	BRT	031	127	Brightness Control [GA:0~100(valid); >100(invalid), Others:0~63(valid); ignore bit 6(invalid)]	Picture Mode (GA: Personal = User Reset Data)														31	35	31	31					
	009	HUE	031	127	Hue Control [GA:0~100(valid); >100(invalid), Others:0~63(valid); ignore bit 6(invalid)]	Picture Mode (GA: Personal = User Reset Data)														31	31	31	31					
	010	SHP	031	127	Sharpness Control [GA:0~100(valid); >100(invalid), Others:0~63(valid); ignore bit 6(invalid)]	Picture Mode (GA: Personal = User Reset Data)														35	28	31	31					
	011	PECO	002	003	Picture data in power save mode (valid for JAPAN only)	Picture Mode* (Eco std/Eco much)																						
012	PRLV	002	003	Coefficient of power save mode (valid for JAPAN only)	Eco std/Eco much																							

-  shaded items are adjustable data.
-  no data.

TVJ	Functionality		Initial	Range	Function	Table & Note	Device Name	Common	Others	PAL(TV)	NTSC(TV)	SECAM (TV)	PAL (Video)	NTSC (Video)	SECAM (Video)	S-INPUT	SECAM	NTSC	TV
Category	No	Name	Dec	Dec															
YC	000	PFRQ	000	003	Peaking Center Frequency and Delay		TV-Processor	00											
	001	RPA	001	003	Ratio Pre & Over Shoot	TV/other			02										01
	002	RPO	002	003	Ratio of Positive & Negative Peaks	TV/other			01										01
	003	YDLY	012	015	Y-Delay	(PAL/NTSC/SECAM)*(TV/VIDEO)+YUV/S-INPUT				06	06	06	05	05	05	05			
	004	CMAT	000	003	PAL-SECAM or NTSC (Japan/USA) Matrix	(JPN RGB)		00											
	005	ACL	001	001	Automatic Color Limiting			01											
	006	CB	000	001	Chroma Bandpass Center Frequency	valid only with TV (*Video : 0 fix)		00											
	007	SBO	001	003	SECAM Black Offset			01											
	008	CHSE	001	003	PAL/NTSC Ident Sensitivity			02											
	009	CLO	000	001	Center Frequency of Cloche (Bell) Filter			00											
	010	CTRP	000	001	Chroma Trap Mode	SECAM/others			00								01		
	011	BPS	000	001	Bypass of Chroma Base-band Delay Line	NTSC/others			00									00	
	012	FCO	000	001	Forced Color On			00											
	013	TINT	031	063	Base-Band Tint Control	YUV/Others			31										
	014	TUV	000	001	Tint Control on UV Signals			00											

TVJ	Functionality		Initial	Range	Function	Table & Note	Device Name	Common	50	60	Others	TV-IP ON	Video	Teletext	TV-IP OFF	No Signal
Category	No	Name	Dec	Dec												
SYNC	000	SYS	000	001	Synchronization on YSYNC Input		TV-Processor	00								
	001	FO	000	003	Phase 1 Time Constant	TV IP ON/TV IP OFF/Video/Teletext/Auto Tuning or No signal(RF)						00	03	01	03	00
	002	VID	000	001	Video Ident Mode	50/60			00	00						
	003	FSL	000	001	Forced Slicing Level for Vertical Sync			00								
	004	SSL	000	001	Slicing Level Sync Separator	50/60			00	00						
	005	SVID	001	007	Source Selection for Video Identification	YUV/Others					00					
	006	FORF	000	003	Forced Field Frequency			03								
	007	MVK	000	001	Macro Vision Keying			01								

- shaded items are adjustable data.
- no data.

TVJ	Functionality		Initial	Range	Function	Table & Note	Device Name	Common	Others	RGB	Picture: Live	TV (Live)	TV (Others)	Video (Live)	Video (Others)	Color Temp (COOL)	Color Temp (Others)	Color Temp (Warm)	Color Temp (Neutral)
Category	No	Name	Dec	Dec															
PICT	000	CADL	007	015	Cathode Drive Level		TV-Processor	03											
	001	CFA	000	003	Comb Filter Mode			01											
	002	SOC	002	003	Soft Clipping Level			02											
	003	PWL	001	001	Peak White Limiting Switch			01											
	004	WHTL	006	015	Peak White Limiting			07											
	005	GAM	001	001	Gamma			01											
	006	WTS	001	003	Gamma Control and White Stretch	Live/Others			00		01								
	007	TFR	000	001	DC Transfer Ratio of Luminance Signal	Live/Others (+ JPN RGB)			00		01								
	008	COR	003	003	Coring	(TV/Video)*(Dyna/others)						02	02	00	01				
	009	CORO	000	001	Coring Offset (Intelligent Pic)			01											
	010	BKS	003	003	Black Stretch	RGB/others			02	02									
	011	AAS	001	001	Black Area to Switch off the Black Stretch			01											
	012	DSK	000	001	Dynamic Skin Control			00											
	013	BLS	000	001	Blue Stretch	col temp (HIGH/OTHERS)										01	00		
	014	NBLS	000	001	Operation Blue Stretch Circuit			00											
	015	NRR	000	001	Non Red Reduction	col temp (HIGH/LOW/NORMAL)										01		00	00

TVJ	Functionality		Initial	Range	Function	Table & Note	Device Name	Common	TV	Video
Category	No	Name	Dec	Dec						
SW	000	CV2	000	001	CVBS2 Input Signal Selection		TV-Processor	00		
	001	SVO	001	003	Function of IFVO/SVO/CVBSI Pin @ 48	TV/Video/YUV			01	01
	002	DFL	000	001	Flash Protection			00		

-  shaded items are adjustable data.
-  no data.

TVJ	Functionality		Initial	Range	Function	Table & Note	Device Name	Common
Category	No	Name	Dec	Dec				
VIF	000	OIFD	036	063	Offset IF Demodulator		TV-Processor	36
	001	AGCT	031	063	AGC Take-over			36
	002	STM	000	001	Search Tuning Mode			01
	003	GD	000	001	Group Delay on CVBS1 Signal			00
	004	AGCS	001	003	IF AGC Speed			00
	005	FFI	000	001	Fast Filter IF PLL			00
	006	OAMP	003	003	Video Output Signal Amplitude (only L & L'System)			03
	007	VAI	000	001	System I Output Signal Amplitude Correction (only L & L'System)			01

TVJ	Functionality		Initial	Range	Function	Table & Note	Device Name	Common
Category	No	Name	Dec	Dec				
SDEM	000	FMWS	000	003	Window Selection for FM Demodulator		TV-Processor	02
	001	QSS	001	001	Quasi Split Sound (QSS) Amplifier Mode (except GA Model)			01
	002	BPB	000	001	Bypass of Sound Bandpass Filter			00
	003	AMLO	000	001	Audio Output Signal for AM Sound			00
	004	HPVC	000	001	Head Phone Volume Control			00

-  shaded items are adjustable data.
-  no data.

TVJ	Functionality		Initial	Range	Function	Table & Note	Device Name	Common
Category	No	Name	Dec	Dec				
TXT	000	TXV	039	063	Teletext Vertical Position for Philips		Text Decoder	37
	001	THD	005	127	Teletext H-sync Active Edge Shift			05
	002	TBR	004	015	Teletext RGB Brightness			08

TVJ	Functionality		Initial	Range	Function	Table & Note	Device Name	Common	50	60
Category	No	Name	Dec	Dec						
OPTM	000	ASHT	006	007	auto shut off timer (data*5 min)			06		
	001	OSDB	000	015	OSD Brightness		MMR/Micro 60h	03		
	002	OSDH	005	015	OSD Horizontal Position		MMR/Micro 60h	06		
	003	OSDV	037	063	OSD Vertical Position	50/60	MMR/Micro 60h		61	33
	004	MUTE	000	001	No Signal Mute Switch (1 = enabled)			01		
	005	RFUL	015	015	RF Signal Change Counter after Unlocked (Disable when 0fh)			04		
	006	RFLK	015	015	RF Signal Change Counter after Locked (Disable when 0fh)			00		
	007	AVUL	015	015	AV Signal Change Counter after Unlocked (Disable when 0Fh)			04		
	008	AVLK	015	015	AV Signal Change Counter after Locked (Disable when 0Fh)			00		
	009	LANG	000	003	OSD language shipping condition			00		
	010	HTXT	000	001	sync separator sw		TV-Processor	00		
	011	CMSS	000	001	Sync sw		TV-Processor	01		
	012	DCXO	127	255	DCXO Offset from Flash Value		SFR/Micro 60h	70		
	013	EXBL	000	015	Extended Blanking Timer to Eliminate White Noise			07		
	014	TSYS	000	003	Memorize TV System in NVM at Test Reset (GA Model)			00		
	015	TVOU	001	001	TV out mute condition 0:Always Mute Off, 1: Mute without signal (EURO Model)			01		

-  shaded items are adjustable data.
-  no data.

TVJ	Functionality		Initial	Range	Function	Table & Note	Device Name	Common
Category	No	Name	Dec	Dec				
OPTB	000	IALL	000	001	Standard Write Switch (not memorized in NVM)			00
	001	OPB1	000	255	Option 1 (System related)			*
	002	OPB2	000	255	Option 2 (Video Signal related)			*
	003	OPB3	000	255	Option 3 (Stereo Decoding related)			*
	004	OPB4	000	255	Option 4 (Miscellaneous)			*
	005	OPB5	000	255	Option 5 (Miscellaneous)			*
	006	OPB6	000	255	Option 6 (OSD Language related)			*
	007	BSWT	000	015	Band Switch Wait Time (not memorized in NVM)			00

-  shaded items are adjustable data.
-  no data.

* refer page 21-23 for data.

NOTE

-  shaded items are adjustable data.
-  no data.
- Standard data listed on the Adjustment Item Table are reference values, therefore it may be different for each model and for each mode.
- Note for Different Data: Those are the standard data values written on the microprocessor. Therefore, the data values of the modes are stored respectively in the memory. In case of a device replacement, adjustment by rewriting the data value is necessary for some items.

OPTION NOTE**OPB1**

Item	SPEED SEARCH		M/N	L'	L(Euro), M(GA)	B/G	I	D/K	DEC
KV-14CT1B	0	1	0	1	1	1	1	0	94
KV-14CT1U	0	1	0	0	0	0	1	0	96
KV-14CT1E	0	1	0	0	0	1	0	1	69
KV-14CT1K	0	1	0	0	0	1	0	1	69

SPEED SEARCH (Time of speed search)

00 = disabled (original cycle speed),
 01 = 4 time speed from the original,
 10 = 6 time speed from the original,
 11 = 8 time speed from the original
 0 = disabled, 1 = enabled

TV System Selection

OPB2

Item	D1	AV Multi/PAM(GA)	Component	Composite (SCART)		SECAM	Color decoding		DEC
KV-14CT1B	0	0	0	0	1	1	0	0	12
KV-14CT1U	0	0	0	0	1	1	0	0	12
KV-14CT1E	0	0	0	0	1	1	0	0	12
KV-14CT1K	0	0	0	0	1	1	0	0	12

D1 (D1 Terminal)

0 = not available, 1 = available

AV Multi/PAM (AV Multi Terminal) – JP

0 = not available, 1 = available

Portable Audio Mode – GA

0 = not available, 1 = available

Component (Component [YCbCr] Terminals)

0 = not available, 1 = available

Composite (No. of Composite Terminals)

00 = no composite terminal (Euro : no Scart) BX1L: No Video

(SCART) (No. of SCART Terminals)

01 = 1 composite terminal (Euro : 1 Scart) BX1L:2 Video in

10 = 2 composite terminal (Euro : 2 Scart) BX1L:3 Video in

11 = 3 composite terminal (Euro : no terminal BX1L: 4 Video in)

SECAM (SECAM Color System)

0 = disabled, 1 = enabled

Color decoding (Color Crystal Selection)

00 = PAL/NTSC/SECAM (Multi), 01 = NTSC (3.58MHz)

10 = PAL/NTSC/SECAM (4.43MHz), 11 = PAL/NTSC (Tri-Norma)

OPB3

Item	HDEV	NICAM ST	NICAM BI	A2 ST	Thai Bilingual	JP/US ST	Korean ST	MONO	DEC
KV-14CT1B	0	0	0	0	0	0	0	1	01
KV-14CT1U	0	0	0	0	0	0	0	1	01
KV-14CT1E	0	0	0	0	0	0	0	1	01
KV-14CT1K	0	0	0	0	0	0	0	1	01

HDEV (High Deviation Mode)

0 = disabled, 1 = enabled

NICAM ST (NICAM Stereo)

0 = disabled, 1 = enabled

NICAM BI (NICAM Bilingual)

0 = disabled, 1 = enabled

A2 ST/BI (A2 [West German] Stereo/Bilingual)

0 = disabled, 1 = enabled

Thai Bilingual (A2 [Thai] Bilingual) or Force SAP if JP/US ST is active

0 = disabled, 1 = enabled

JP/US ST (JP/US Stereo)

0 = disabled, 1 = enabled

Korean ST (Korean Stereo)

0 = disabled, 1 = enabled

MONO (Monaural Model)

0 = Stereo (SSD) Model, 1 = Monaural Model

OPB4

Item	Firmware/SMAT	1 spk Models	VM	Equalizer	Surround	V-Chip	TOP	TEXT	DEC
KV-14CT1B	0	1	0	0	0	0	0	1	65
KV-14CT1U	0	1	0	0	0	0	0	1	65
KV-14CT1E	0	1	0	0	0	0	0	1	65
KV-14CT1K	0	1	0	0	0	0	0	1	65

Firmware	(SSD Firmware Downloading)	0 = disabled, 1 = enabled
SMAT	Surround Matrix	0 = Active, 1 = Passive
1 spk Models	1 Speaker Models	0 = 2 or 3 Speakers Models, 1 = 1 speaker Models
VM	(Velocity Modulation)	0 = disabled, 1 = enabled
Equalizer	(5-band Equalizer Model)	0 = Bass/Treble Model, 1 = Equalizer Model
Surround	(US/GA Surround Selection)	0 = Off/Simulated/Surround, 1 = Off/Simulated/WOW/TruSurround (US) 1 = Off/Simulated/SRS(3D)Surround (GA)
V-Chip	(V-Chip Model)	0 = Channel Block Model (no rating) 1 = Parental Control Model (rating)
TOP	(Forced TOP)	0 = Auto Mode (TOP/FLOF), 1 = Forced TOP
TEXT	(Teletext Model)	0 = Non-Teletext Model, 1 = Teletext Model

OPB5

Item	Full Surround	No Surround	Forced 60	ASD	Tilt	IP Plus	IP	Wide	DEC
KV-14CT1B	0	1	0	0	1	1	1	1	79
KV-14CT1U	0	1	0	0	1	1	1	1	79
KV-14CT1E	0	1	0	0	1	1	1	1	79
KV-14CT1K	0	1	0	0	1	1	1	1	79

Full Surround	(Full Surround option - no for euro model)	0 = Normal surround model, 1 = Full surround model (Off/simulated/surround/SRS/WOW/TruSurround)
No Surround	(No Surround Model)	0 = Surround Model, 1 = Non-Surround Model
Forced 60	(Forced 60Hz in no signal)	0 = 50Hz, 1 = 60Hz
ASD	(Automatic Standard Detection)	0 = disabled, 1 = enabled
Tilt	(Tilt Correction/PIC Rotation)	0 = disabled, 1 = enabled
IP Plus	(Intelligent Picture Plus)	0 = disabled, 1 = enabled
IP	(Intelligent Picture)	0 = disabled, 1 = enabled
Wide	(Wide Mode/V-Compressed)	0 = disabled, 1 = enabled

OPB6

Item	GA US	Latin	Feature 2	Feature 1	OSD Language Selection				DEC
KV-14CT1B	0	0	0	0	0	0	0	1	01
KV-14CT1U	0	0	0	0	0	0	1	1	03
KV-14CT1E	0	0	0	0	0	0	0	0	00
KV-14CT1K	0	0	0	0	0	0	1	0	02

GA US	(US Model Destination)		0 = US/Canada/Latin, 1 = Taiwan/Korea/Philippine
Latin	(US Model Latin Destination)		0 = US/Canada (No Volume Figure Display) 1 = Latin (Volume Figure Display)
Feature 2	(Temporary for BX1L)		0 = Comb Not available 1 = Comb Available
Feature 1	(Temporary for BX1L)		0 = PiP Not available 1 = PiP Available
OSD Language Selection (English always available except JP)		US	01xx = French, 0x1x = Spanish 0xx1 = Portuguese
		US (GA NTSC)	1x1x = Complicated Chinese, 1xx1 = Korean
		GA	1xxx = Simplified Chinese, x1xx = Arabic, xx1x = Thai xxx1 = Vietnamese
		EU	0000 = Destination ADE 0001 = Destination BL 0010 = Destination KR 0011 = Destination U

3-3. T-MODE:

T-Mode is available by pressing the 'TEST' button once, OSD 'T' appears. The function described below are available by selecting the indicated keys. The 'T' is released automatically after each command is executed.

KEY	T-MODE FUNCTION
volume +	volume maximum
volume –	volume minimum
picture +	picture maximum
picture –	picture minimum
colour up	colour maximum
colour down	colour minimum
brightness-bright	brightness maximum
brightness-dark	brightness minimum
hue-purplish	hue-purplish
hue-greenish	hue-greenish
sharpness-sharp	sharpness maximum
sharpness-soft	sharpness minimum
balance left	balance full left (only stereo)
balance right	balance full right (only stereo)
treble up	treble maximum (only stereo)
treble down	treble minimum (only stereo)
bass up	bass maximum (only stereo)
bass down	bass minimum (only stereo)

3-4. TT-MODE:

TT-Mode is available by pressing the 'TEST' button twice, OSD 'TT – –' appears. The function described below are available by pressing two digits.

00	Exit from TT mode
01	Set Picture Level to Maximun
02	Set Picture Level to Minimum
03	Set Volume to 35%
04	Set Volume to 50%
05	Set Volume to 65%
06	Set Volume to 80%
07	Ageing Mode On
08	Shipping Condition
11	Sub Picture Adjustment
12	Sub Colour Adjustment
13	Sub Brightness Adjustment
14	Text H Position Adjustment
15	Rotation Coil Test
19	Factory Mode Enable/Disable
21	Destination ADEKR
22	Destination BL
24	Destination U
31	Auto Shutoff Disable/Enable
33	Rotation On/Off
41	Re-initialise NVM
43	Select Dual A Sound (only stereo)
44	Select Dual B Sound (only stereo)
45	Select Mono Sound (only stereo)
46	Select Stereo Sound (only stereo)

48	Set NVM as non-virgin
49	Set NVM as virgin
61	Auto AGC Adjustment
64	RGB priority (toggle) On: FS input (Pin 16)is always active Off: FS input is active only in AV1 (Scart)
65	RGB Auto Detection (Toggle) Auto: AV1 or RGB is automatically selected at the change of AV input to AV1 (Scart) by user or mode Pin 8 Off: AV input toggle has AV1 and RGB respectively (TV --> AV1 --> RGB --> AV2 -->...)
67	Manual AGC Adjustment
71	Force PAL Video
72	Un-force PAL (cancel the function above)
73	Enable Zweiton D/K2 System (6.5/6.74) (only stereo)
74	Enable Zweiton D/K3 System (6.5/5.74) (only stereo)
78	Balance Full Left (only stereo)
79	Balance Full Right (only stereo)
81	Auto NICAM DCXO calibration (only stereo)
87	Local Keys Test
93	Set 16:9 zoom mode
95	Set 4:3 Zoom Mode
99	Display Error and Working Time Menu

To release the 'TT-Mode', press 0 twice, press 'TEST', press 'TV' or switch the TV into standby mode.

3-5. T-Cyan MODE:

T-Cyan Mode is available by pressing the 'TEST' and 'Cyan' keys. T-Cyan is basically for white balance and geometry adjustments. The functions described below are available by pressing the indicated keys.

In T-Cyan Mode a single 'T' is displayed in cyan colour. To release from this mode, press the 'TV' key once.

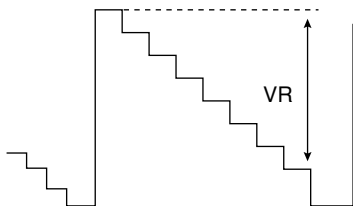
KEY	T CYAN FUNCTION
1	Pin Amplitude –
2	Vertical Centre –
3	Pin Amplitude +
4	Vertical Centre +
5	Vertical Size +
6	Horizontal Centre +
7	Horizontal Size –
8	Vertical Centre +
9	Horizontal Size +
0	Vertical Size –
Volume +	Upper Corner Pin +
Volume –	Lower Corner Pin +
Programme +	Upper Corner Pin –
Programme –	Lower Corner Pin –
Cyan	Bow –
Yellow	Pin Phase –
Green	Bow –
Red	Pin Phase +
Video	Vangle +
Information	Vangle –

3-6. SUB BRIGHTNESS ADJUSTMENT

1. Input a PAL monoscope pattern.
2. Go to Test Mode.
3. Press 'Test' 'Test 13' on the Remote commander.
PICTURE MINIMUM, BRIGHTNESS 50%
4. Select WHBL "SBRT" by pressing right  or left  button and adjust "SBRT" data. To adjust the data, again press right  to increase or left  to decrease the data until there is barely a difference between 0 IRE and 10 IRE signal levels.

3-7. SUB CONTRAST ADJUSTMENT

1. Select Video Mode.
2. Input PAL Colour Bar to TV set.
3. Set the following condition:
PICTURE 100%, COLOUR 0%, BRIGHTNESS 50%
(IN PERSONAL MODE)
4. Connect an oscilloscope to pin 4 (R output) of CN004.
5. Enter Service Menu.
6. Set PICT 03 "PWL" to 00 and WHBL 17 "BLBG" to 01.
7. Select SADJ "PMA" with right  or left  button of the commander then adjust VR within spec with right  or left  button.



$VR = 1.38 \pm 0.03 \text{ Vp-p}$
(Difference is within 30mV)

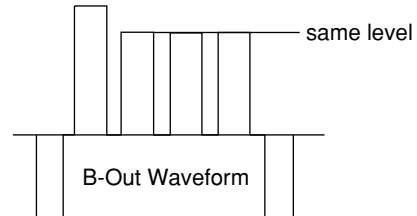
8. Set "PWL" and "BLBG" back to initial data respectively.

OR

1. Input a video signal that contains a small 100% white area on a black background.
2. Connect a digital voltmeter to pin 10 of J751 (C board).
3. Adjust the sub-contrast ("TT11") to obtain a voltage of $81 \pm 5V$.

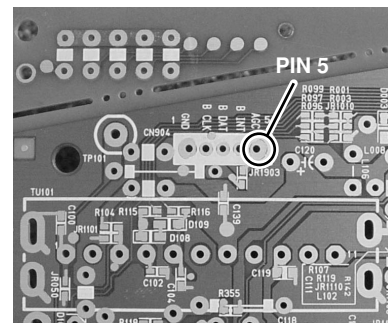
3-8. SUB COLOUR ADJUSTMENT

1. Receive a PAL colour bar signal.
2. Connect an oscilloscope to Pin 2 of CN004(A board).
3. Enter into the Service Menu.
4. Set PICT 06 "WTS" to 00.
5. Adjust SADJ "SCOL" data so that the cyan, magenta and blue colour bars are equal level.

**3-9. TUNER AGC ADJUSTMENT**

Note: There should be no need to adjust the AGC as this is pre-adjusted during manufacturing. If the AGC does need adjustment then follow steps 1 to 4 as below.

1. Receive a signal of 61dBuV/75ohm terminated via the tuner antenna socket.
2. Connect a voltmeter to the AGC pin 5 of CN904 (mount side of A board).
3. Confirm that the AGC voltage is 3.2volts ± 0.5 volts.
4. If adjustment is required, then re-adjust the AGCT in service menu to obtain a voltage of 3.2V $\pm 0.5V$.

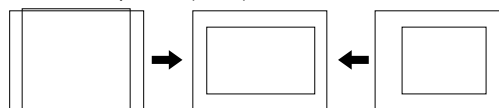


3-10. DEFLECTION ADJUSTMENT

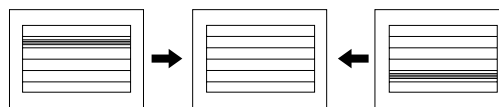
1. Set the TV mode to normal (4:3).
2. Enter into the 'GEOMETRY' service menu.
3. Select and adjust each item in order to obtain the optimum image. (see table below)
4. Repeat the above for 16:9.

GEOMETRY			Remark
HPOS	(0,63)	Adj	Horizontal Shift
HPAR	(0,63)	Adj	Horizontal Parallelogram
HBOW	(0,63)	Adj	Horizontal Bow
VLIN	(0,63)	Adj	Vertical Linearity
VSCR	(0,63)	31	Vertical Scroll
HSIZ	(0,63)	Adj	EW Width
EWPW	(0,63)	Adj	EW Parabola/Width
UCOP	(0,63)	Adj	EW Upper Corner Parabola
LCOP	(0,63)	Adj	EW Lower Corner Parabola
EWTZ	(0,63)	Adj	EW Trapezium
VSLP	(0,63)	31	Vertical Scope
VSIZ	(0,63)	Adj	Vertical Amplitude
SCOR	(0,63)	Adj	S-Correction
VPOS	(0,63)	Adj	Vertical Shift
WBF	(0,63)	06	Timing of Wide Blanking
WBR	(0,63)	06	Timing of Wide Blanking

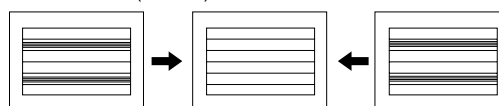
Vertical Amplitude (VSIZ)



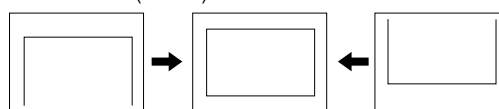
Vertical Linearity (VLIN)



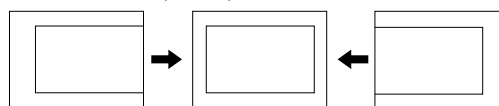
S-Correction (SCOR)



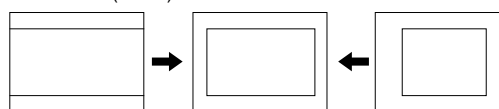
Vertical Shift (VPOS)



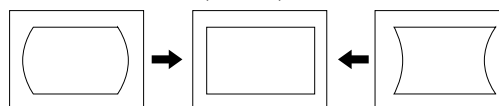
Horizontal Shift (HPOS)



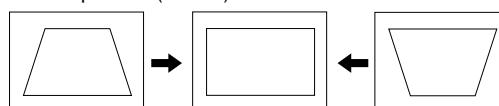
EW Width (HSIZ)



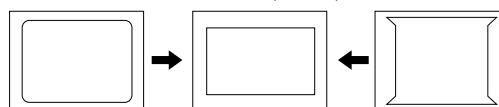
EW Parabola/Width (EWPW)



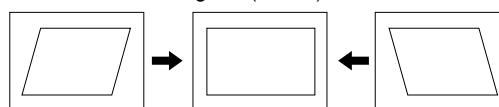
EW Trapezium (EWTZ)



EW Upper Coner Parabola (UCOP)
EW Lower Coner Parabola (LCOP)



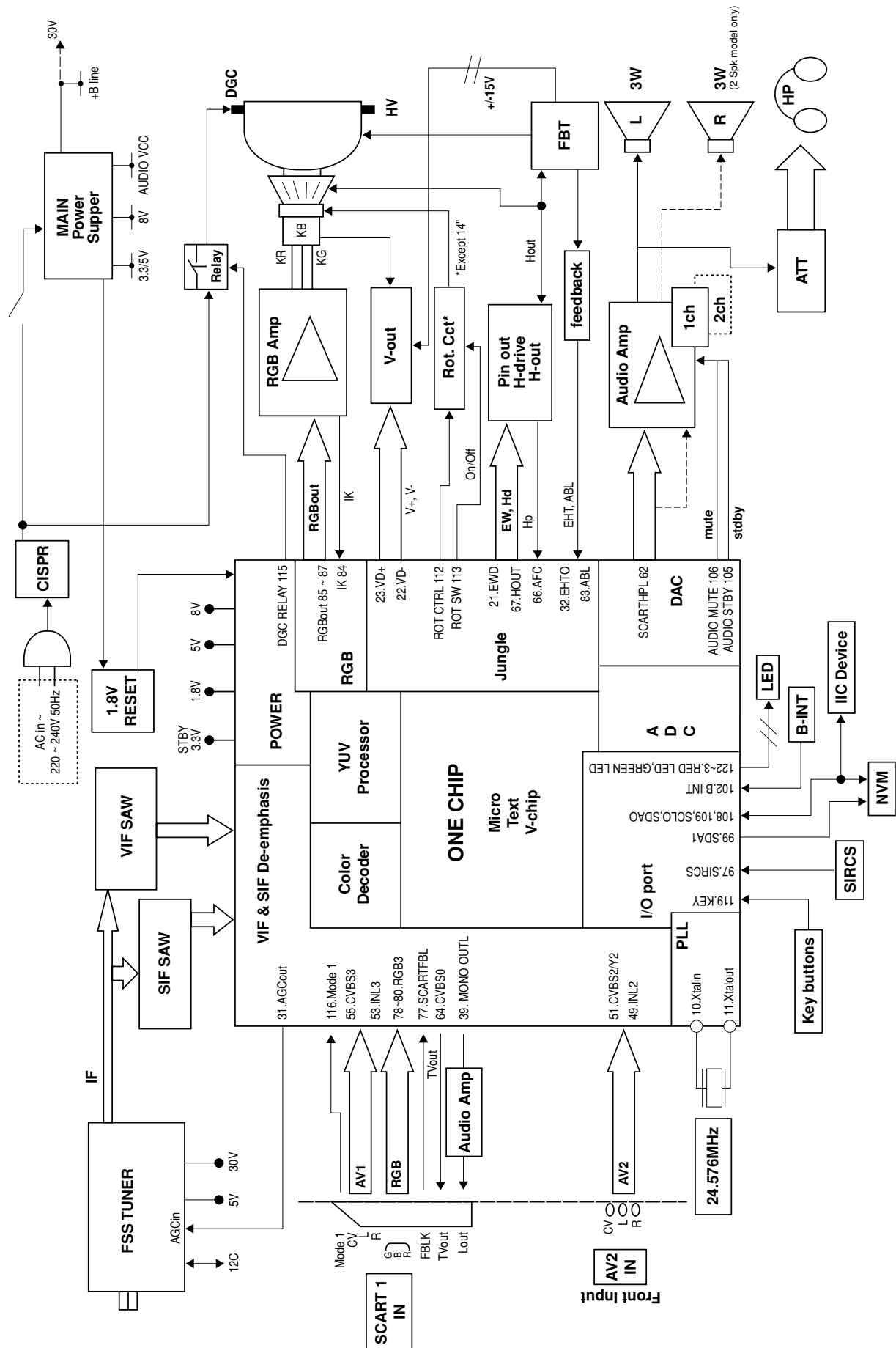
Horizontal Parallelogram (HPAR)



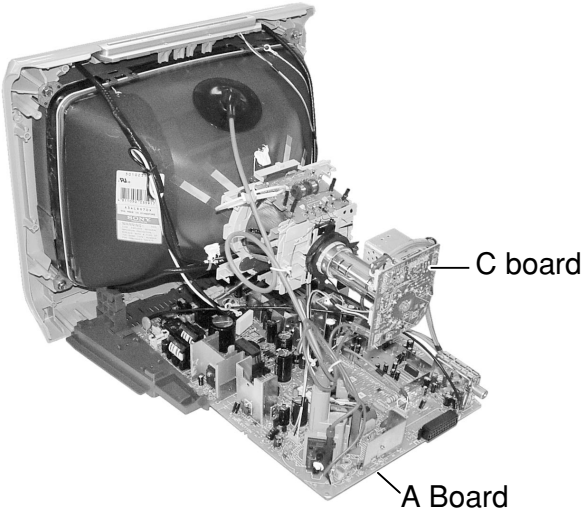
SECTION 4 DIAGRAMS

4-1. BLOCK DIAGRAM

(MONO MODELS)



4-2. CIRCUIT BOARDS LOCATION



4-3. SCHEMATIC DIAGRAM

Note:

- All capacitors are in μF unless otherwise noted.
- All electrolytic capacitors are rated at 50V unless otherwise noted.
- All resistors are in ohms.
 $\text{k}\Omega = 1000\Omega$, $\text{M}\Omega = 1000\text{k}\Omega$
- Indication of resistance which does not have rating electrical power is as follows.

Pitch: 5 mm
Rating electrical power 1/4W (CHIP: 1/10W)

- : nonflammable resistor.
- Δ : internal component.
- : panel designation or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B unless otherwise noted.
- **Readings are taken with a color-bar signal input.**
- **Readings are taken with a 10 $\text{M}\Omega$ digital multimeter.**
- **Voltage are dc with respect to ground unless otherwise noted.**
- **Voltage variations may be noted due to normal production tolerances.**
- **All voltage are in Volt.**
- * : Cannot be measured.
- **Circled numbers are waveform references.**
- : B +bus.
- : B -bus.
- : signal path.

Note: The reference number which starts with Wxxx (eg: W003) indicates a wire to wire connection.

Note: Components marked as XX are not fitted on this model.

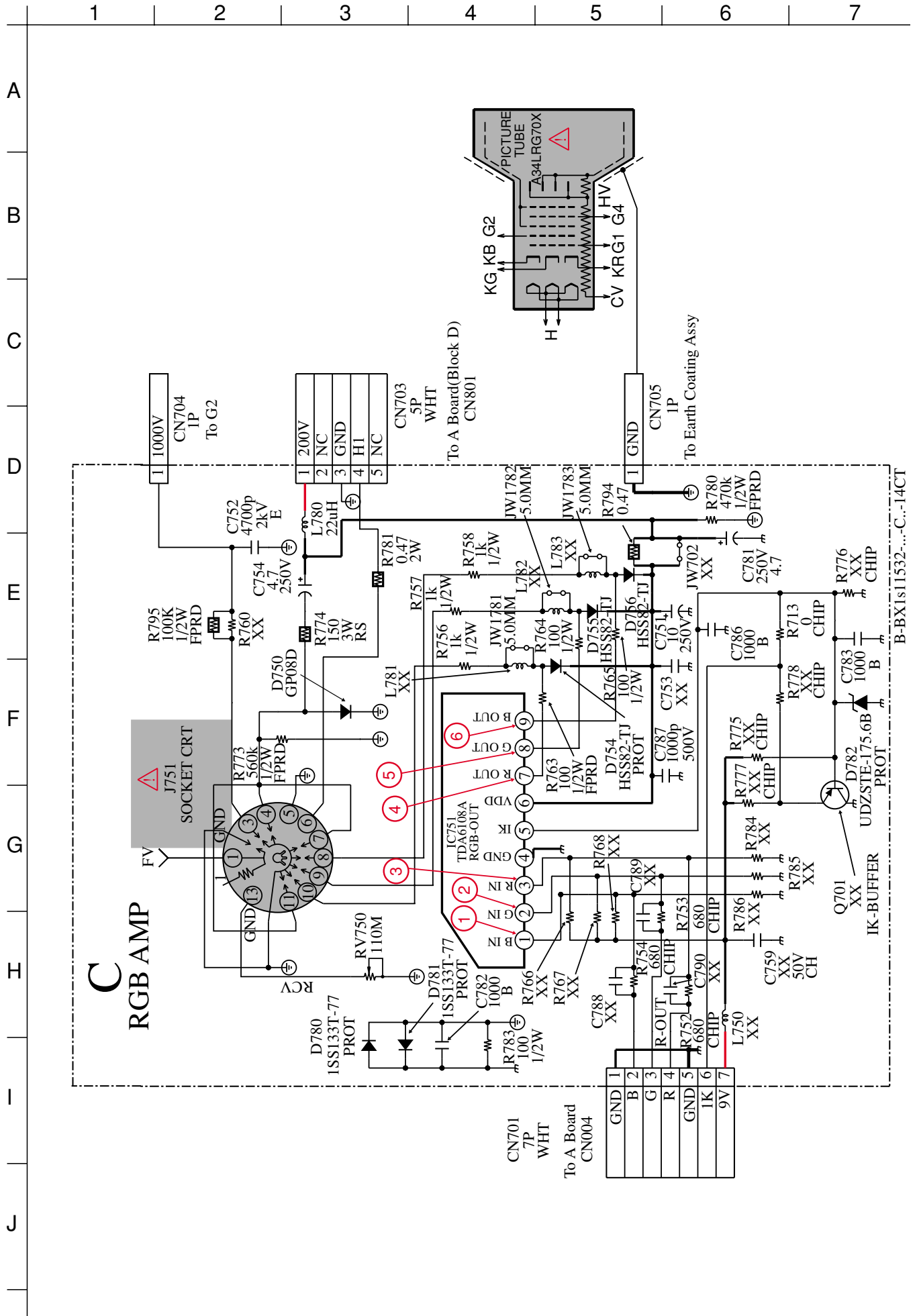
Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: *	ADJUSTMENT RESISTOR
	: LF-8L	MICRO INDUCTOR
	: TA	TANTALUM
COIL CAPACITOR	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

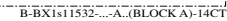
Note: The component identified by shading and mark Δ are critical for safety. Replace only with part number specified.

Note: "A" board schematic diagram is divided into 6 blocks. Each block is named by its function and block "alphabet".
eg: Processor (Block A)
Joint connection between boards can be identified using the block alphabet followed by sequence numbering.
eg: -<HOUT-DEFL (A10) To D11
Meaning: Block A joint A10 is connected to Block D joint D11

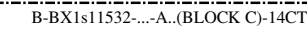
4-3-1. C Board Schematic Diagram



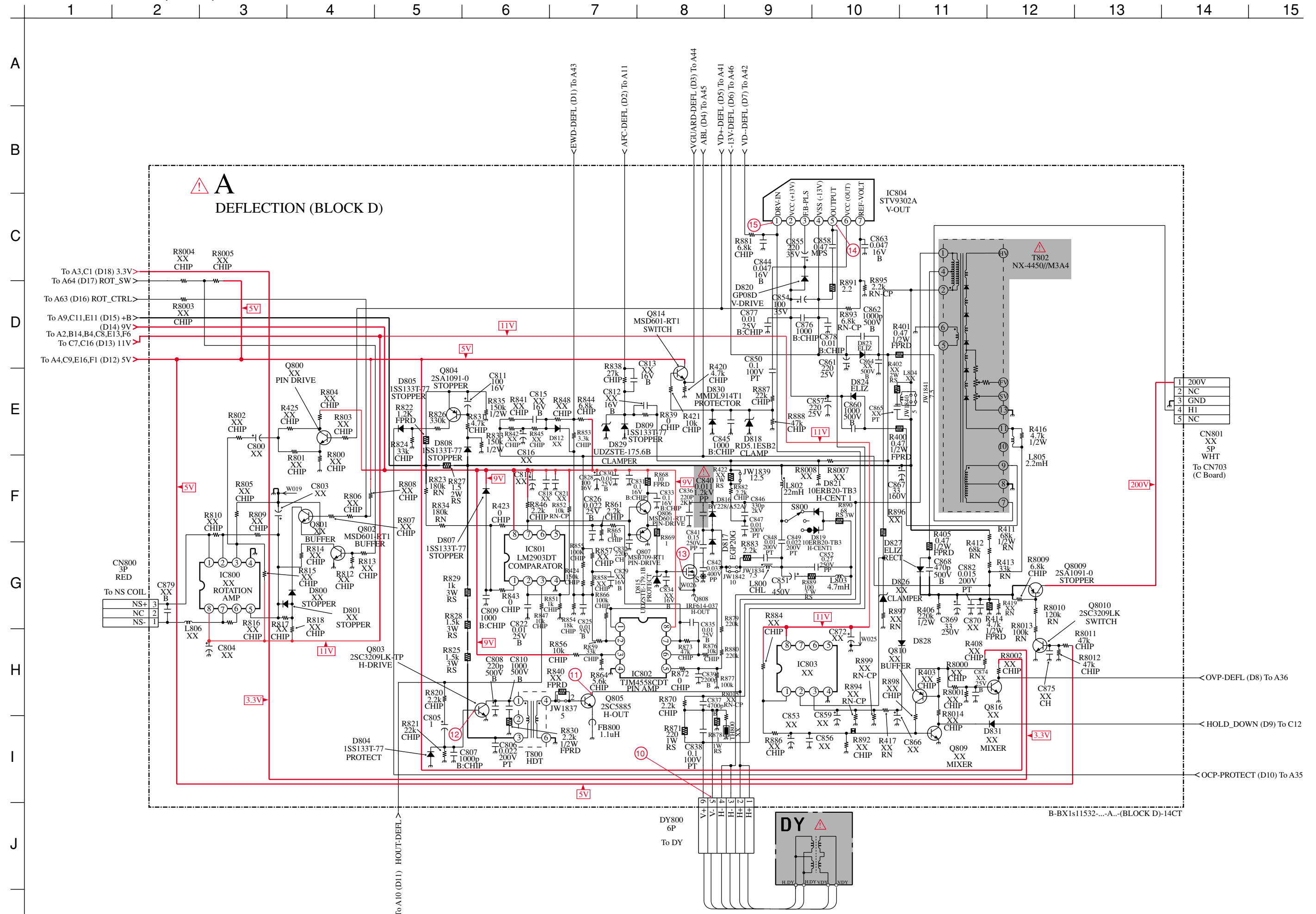
1



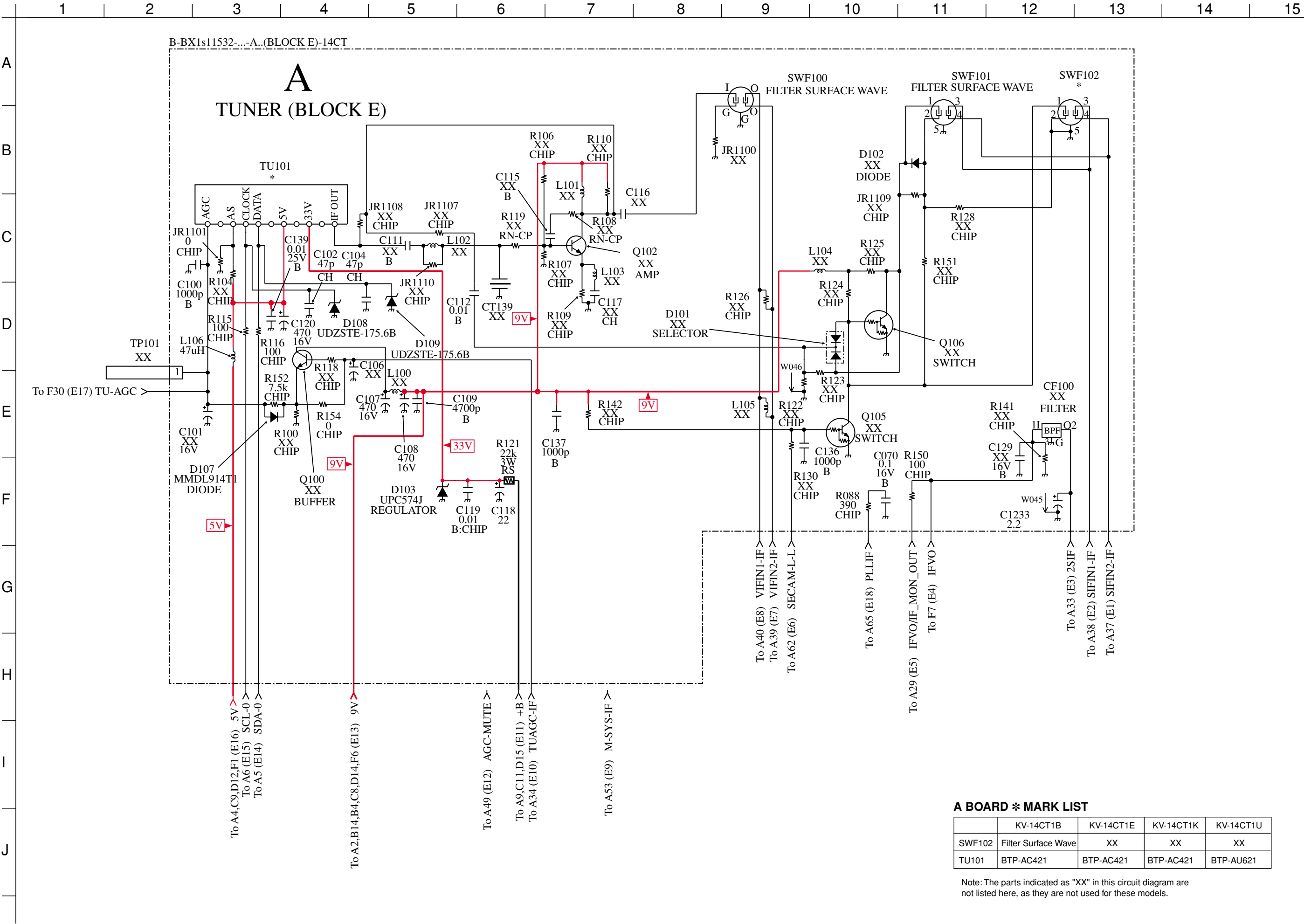
J



4-3-5. A Board – Deflection (Block D)



4-3-6. A Board – Tuner (Block E)

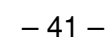


A BOARD * MARK LIST

	KV-14CT1B	KV-14CT1E	KV-14CT1K	KV-14CT1U
SWF102	Filter Surface Wave	XX	XX	XX
TU101	BTP-AC421	BTP-AC421	BTP-AC421	BTP-AU621

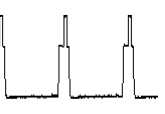
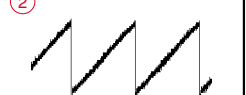
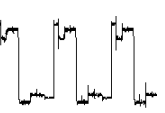
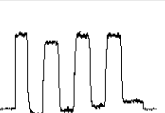
Note: The parts indicated as "XX" in this circuit diagram are not listed here, as they are not used for these models.

A
—
B
—
C
—
D
—
E
—
F
—
G
—
H
—
I
—
J

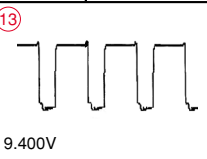
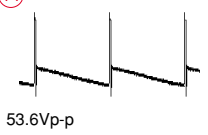
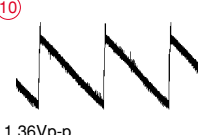
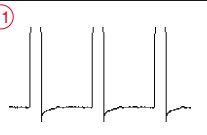


4-4. VOLTAGE MEASUREMENT & WAVEFORM

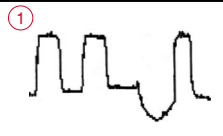
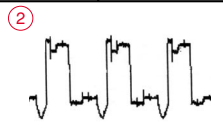
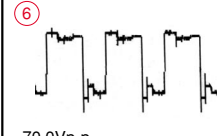
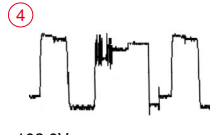
A BOARD VOLTAGE LIST AND WAVEFORM

Ref	Pin No.	Voltage[v]	Ref	Pin No.	Voltage[v]	Ref	Pin No.	Voltage[v]		
IC001	1	0		49	2.2		89	0		
	2	0		50	2.2		90	3.3		
	3	2.0		51	1.4		91	0		
	4	3.3		52	0		92	0		
	5	3.3		53	2.2		93	1.7		
	6	0		54	2.2		94	3.3		
	7	3.3		55	0		95	0		
	8	0		56	2.2		96	1.7		
	9	3.3		57	2.2		97	3.2		
	10	—		58	1.4		98	0.7		
	11	1.5		59	1.6		99	0.7		
	12	0		60	2.3		100	2.0		
	13	0.1		61	0		101	3.3		
	14	2.5		62	0		102	0.02		
	15	0		63	2.4		103	0.02		
	16	1.8		64	1.3		104	3.0		
	17	2.3		65	0.4		105	2.7		
	18	0		66	0.7		106	0.01		
	19	2.3		⑤  5.36Vp-p	107		3.3			
	20	2.3			108		0.08			
	21	4.0			109		3.3			
	①  820.0mVp-p	110			3.3					
		22			1.7		111	1.05		
					②  1.76Vp-p		112	0.5		
							23	1.8	113	0
								③  1.92Vp-p	114	2.0
	24								2.0	115
		25							2.0	116
				26	2.4				117	2.0
					27		0		118	2.0
							28	0	119	0
	29							0.2	120	2.0
		30						0.2	121	0
				31				4.8	122	0
					32			0.5	123	3.3
							33	0	124	0
	34							0	125	0
		35						0	126	3.3
				36				2.4	127	3.4
					37			0	128	3.3
							38	2.2	IC002	VCC
	39							2.4		OUT
		40						0		GND
				41				0	IC003	1
					42			0		2
							43	0.5		3
	44							0		4
		45						8.5		5
				46				2.8		6
					47			0		7
48			1.3			8	3.3			
	⑦  1.54Vp-p		IC200			1	0.0			
		86				1.7	2	0.0		
				⑧  1.40Vp-p		3	19.7			
					87	1.1	4	0.0		
⑨  1.46Vp-p						5	0.0			
						88	3.3	6	0.0	
		89						7	0.0	
				90				8	10.7	
					91			9	0	
92								10	0.80	
	93						11	0		
		94					12	9.6		
			95			IC601	1	3.06		
				96			2	20.5		
97							3	0.03		
	98						4	0.05		
		99					5	0.50		
			100			IC602	I	10.2		
				101			G	0		
102							O	-9.02		
	103					IC604	I	4.96		
		104					G	0		
			105				O	-9.02		
				106		IC800	1	5.7		
107										

A BOARD VOLTAGE LIST AND WAVEFORM

Ref	Pin No.	Voltage[v]	Ref	Pin No.	Voltage[v]	Ref	Pin No.	Voltage[v]
	2	5.09		E	0	Q808	S	0
	3	5.09	Q105	B	3.6	 9.400V		
	4	0		C	0			
	5	4.6		E	0			
	6	4.6	Q106	B	0		G	5.6
	7	4.6		C	4.2		D	10.05
	8	10.2		E	4.8		B	0
IC801	1	2.0	Q200	B	1.9	Q814	C	5.0
	2	0.8		C	0		E	0.1
	3	1.5		E	0	Q900	B	4.7
	4	0	Q201	B	20.2		C	0
	5	2.7		C	20.9		E	4.1
	6	2.0		E	20.9	Q901	B	0.2
	7	6.0	Q202	B	9.0		C	0
	8	9.0		C	0.1		E	0
IC802	1	3.0		E	8.9	Q903	B	4.35
	2	3.2	Q205	B	2.7		C	0
	3	3.2		C	5.5		E	0
	4	0		E	0	Q908	B	0.2
	5	3.0	Q601	B	0.04		C	0.6
	6	3.0		C	14.2		E	0
	7	4.0		E	0	Q909	B	0
	8	9.1	Q605	B	24.8		C	0.2
IC803	1	0		C	219		E	0.6
	2	0		E	23.5	Q910	B	2.43
	3	0	Q608	B	0		C	4.7
	4	0		C	20.2		E	4.10
	5	0		E	0	Q911	B	2.43
	6	0	Q609	B	0.62		C	4.7
	7	0		C	0		E	4.2
	8	10.3		E	0	Q912	B	0.07
IC804	1	0.41	Q800	B	1.8		C	0.6
 680.0mVp-p				C	9.0	Q8009	B	194.5
	2	12.3		E	1.15		C	194.5
	3	-12.3	Q801	B	0.42		E	194.7
	4	-13.3		C	0	Q8010	B	0.54
	5	20.1		E	0		C	0
 53.6Vp-p			Q802	B	0	 1.36Vp-p		
	6	13.04		C	4.6			
	7	0.42		E	0			
PH600	1	23.8	Q803	B	0	DY800		
	2	22.8		C	6.21			
	3	0		E	0			
	4	2.7	Q804	B	133.7			
Q001	B	0		C	0			
	C	2.2	Q805	B	0			
	E	0		C	137.4			
Q006	B	0	 312.0Vp-p					
	C	0						
	E	0						
Q007	B	0		E	0			
	C	3.34	Q806	B	5.8			
	E	1.0		C	9.0			
Q008	B	-0.28		E	5.6			
	C	0	Q807	B	6.0			
	E	0		C	0			
Q009	B	0		E	5.6			
	C	0						
	E	0						
Q012	B	0.6						
	C	0						

C BOARD VOLTAGE LIST AND WAVEFORM

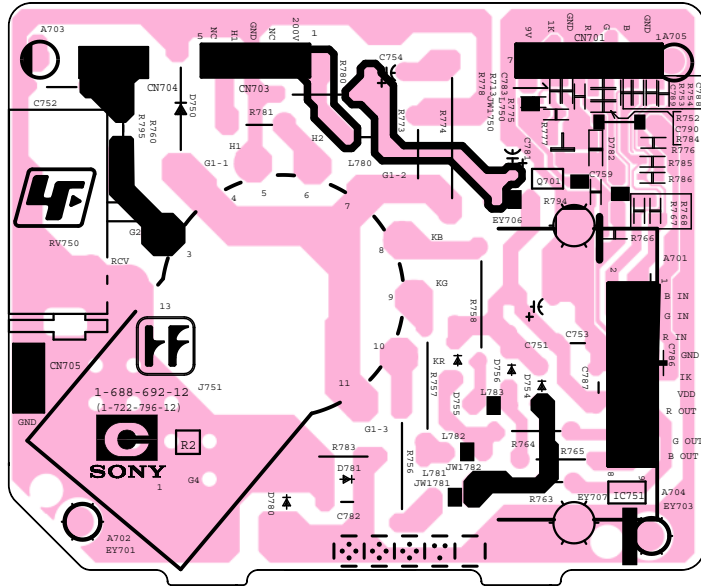
Ref	Pin No.	Voltage[v]	Ref	Pin No.	Voltage[v]
IC751	1	1.8		8	141.8
	① 			⑤ 	
		940.0Vp-p			100.0Vp-p
	2	1.8		9	143.7
	② 			⑥ 	
		1.26Vp-p			70.0Vp-p
	3	1.8	Q701	B	4.35
	③ 			C	0
		1.34Vp-p		E	0
	4	0	J751	4	0.20
	5	4.3		7	0.20
	6	194.5		11	0.20
	7	141.8		3	285.3
	④ 			5	0
		102.0Vp-p		6	0
				8	143.8
				9	142.0
				10	143.0

4-5. PRINTED WIRING BOARD & PARTS LOCATION

PRINTED WIRING BOARDS

C [RGB OUT]

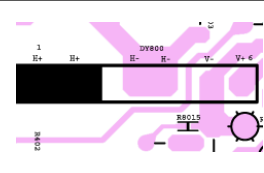
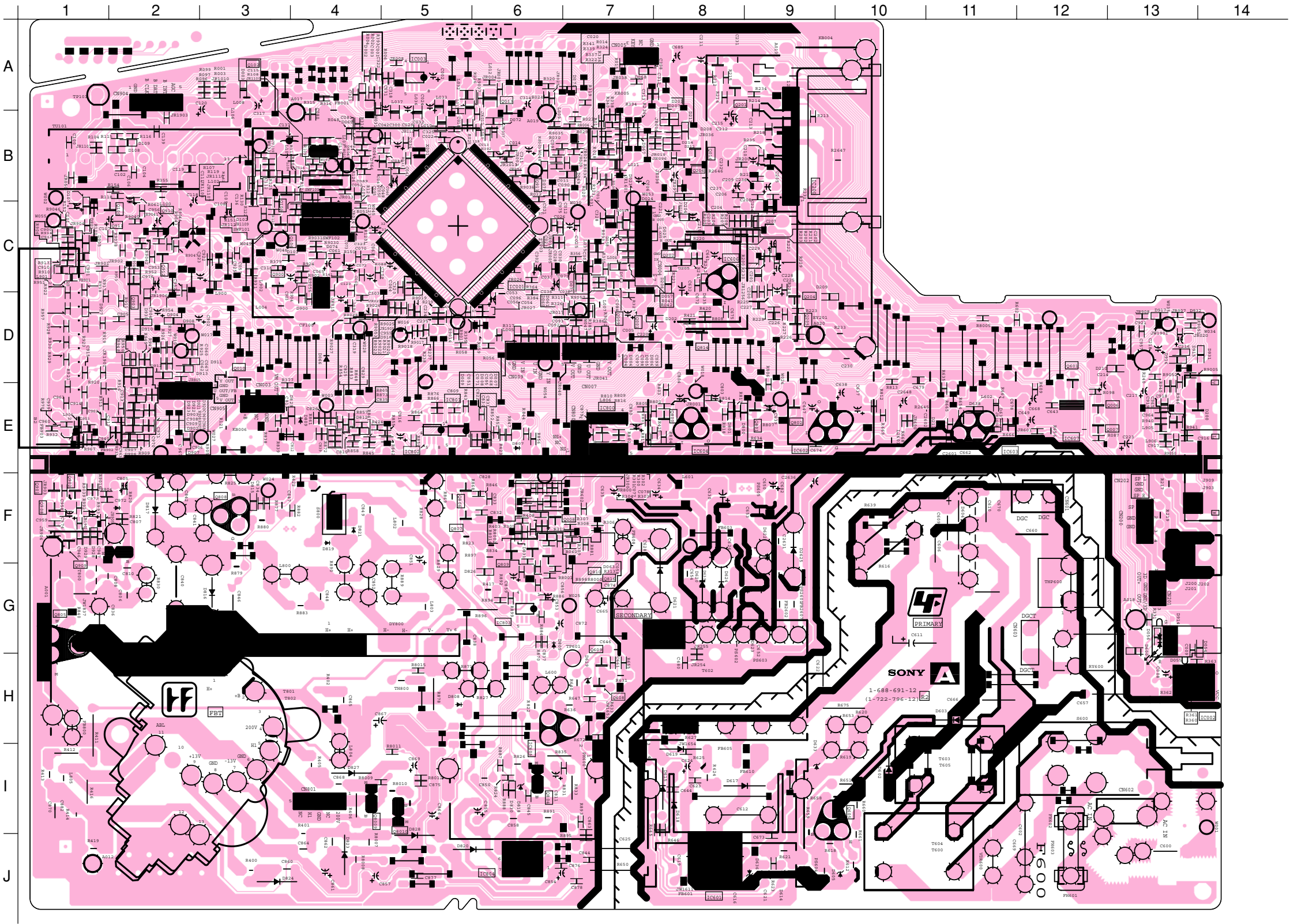
– C Board –



PRINTED WIRING BOARDS

A [PROCESSOR, AUDIO, POWER SUPPLY, DEFLECTION, TUNER, JACK, SCART TERMINAL]

— A Board —



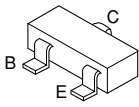
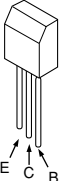
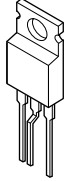
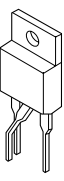
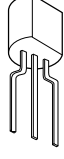
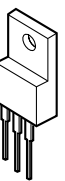
NOTE:
The circuit indicated at left contains high voltage of over 1220 Vp-p. Please pay attention when inspecting or repairing it to prevent an electric shock.

A BOARD

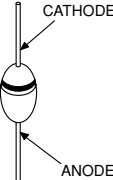
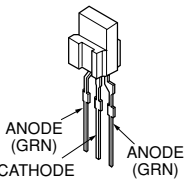
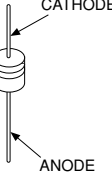
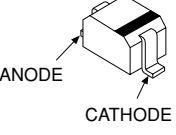
IC		Q910	C-2	D615	I-8
IC001	C-6	Q911	C-2	D617	I-8
IC002	H-14	Q912	C-2	D618	I-8
IC003	A-5	Q913	B-6	D619	I-8
IC200	B-9	DIODE		D620	G-8
IC601	J-8			D621	G-8
IC602	E-9	D002	A-4	D622	F-9
IC603	E-11	D003	A-3	D623	G-9
IC604	E-8	D004	D-7	D624	G-8
IC605	I-6	D005	D-7	D625	F-9
IC606	C-8	D006	D-7	D629	H-7
IC607	E-12	D007	D-6	D633	I-9
IC800	E-7	D008	D-6	D635	D-8
IC801	E-5	D009	D-5	D636	J-9
IC802	E-5	D023	B-7	D637	E-11
IC803	G-6	D024	B-7	D638	E-11
IC804	J-6	D025	C-8	D639	G-8
PH600	I-7	D054	G-14	D800	E-8
TRANSISTOR		D055	H-13	D801	E-8
Q001	D-7	D056	G-13	D805	G-6
Q006	E-13	D057	D-8	D807	E-6
Q007	E-13	D058	C-7	D808	H-5
Q008	F-7	D059	C-7	D809	F-4
Q009	D-7	D060	D-6	D812	E-4
Q010	D-3	D061	D-6	D815	F-3
Q013	A-6	D062	C-7	D816	G-3
Q016	B-8	D063	G-7	D817	F-2
Q100	C-2	D064	B-4	D818	I-6
Q102	A-3	D065	B-4	D819	F-4
Q105	C-3	D066	D-4	D820	J-5
Q106	C-4	D067	B-7	D821	F-4
Q202	C-8	D068	A-7	D823	J-4
Q203	A-8	D069	B-7	D824	J-3
Q204	D-9	D070	B-6	D826	G-5
Q205	D-9	D071	A-7	D827	I-4
Q206	B-8	D072	B-6	D829	E-4
Q601	D-12	D073	C-4	D830	I-6
Q605	I-10	D074	C-7	D831	F-6
Q608	H-7	D075	C-3	D900	D-4
Q609	G-7	D101	C-3	D901	C-1
Q800	E-8	D102	C-3	D902	E-2
Q8009	I-4	D107	B-1	D903	E-2
Q801	E-9	D108	B-2	D904	D-2
Q8010	I-5	D109	B-2	D905	C-1
Q802	E-9	D200	E-14	D906	E-2
Q804	I-6	D202	D-8	D907	E-2
Q805	G-1	D203	A-8	D908	D-2
Q806	F-5	D204	C-8	D910	D-2
Q807	F-5	D205	C-8	D911	D-3
Q808	F-3	D206	C-8	D912	D-2
Q809	F-6	D207	A-8	D913	D-3
Q810	G-7	D208	B-8	D914	G-13
Q814	D-8	D209	C-9	D915	D-13
Q816	G-7	D210	D-12	D916	D-13
Q900	C-3	D211	E-11	D917	D-13
Q901	F-1	D212	B-8	D918	D-5
Q902	F-1	D213	B-8	D921	E-2
Q903	D-2	D214	B-8	D922	E-2
Q908	F-1	D600	G-13	D923	E-2
Q909	G-1	D602	I-10	D927	D-1
		D603	H-11	D928	F-1
		D604	F-11	D929	F-1
		D605	J-9	D930	D-2
		D614	J-9	D931	D-14
				D932	D-13

4-6. SEMICONDUCTORS

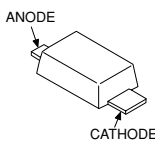
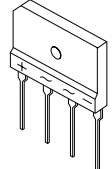
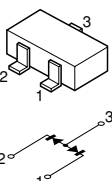
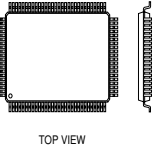
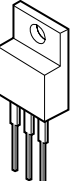
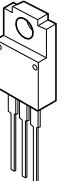
TRANSISTOR

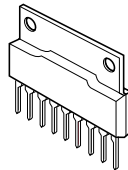
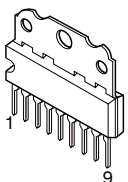
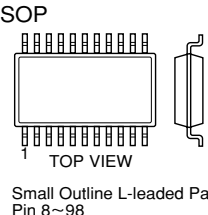
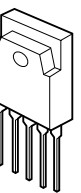
					
MSD601-RT1 UN2211 UN2216 MSB709-RT1	2SC3209LK	IRF614-005	FN155	2SA1091-0	2SC5885

DIODE

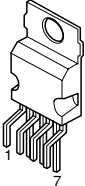
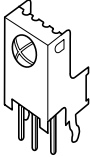
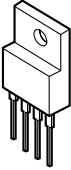
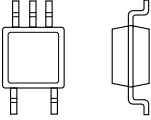
					
BY228/A52A	SPB-25MVWF	HSS82-TJ RD5.1ESB2 MTZJ-T-77-15 UPC574J 1SS133T-77	AM01AV1 D1NL20U D3SB6M-F EGP20G EL1Z GPO8D RU4AM-T3	S3L20UF4 10ERB20-TB3 10ERB20-TA2B5 11EQS10-TBS D3S6M-F	MMDL914T1 RD3.6SB

IC

					
MA2ZD14001SO UDZSTE-175.6B UDZSTE-179.1B	D3SB60F3	1PS226-115	TDA11020H/ N1A000AK	SE135N-LF38	BA033T

					
AN17804A	TDA6108AJK/N1	TA7805S	CAT24WC16J1-TE13 LM2903DT TJM4558CDT		STR-F6264S-LF1357

IC

			 TOP VIEW		
STV9302A	RPM7240-SH5	PQ09RD1SJ00H PQ018EFO1SZH	BA18BC0FP-E2		

SECTION 5

EXPLODED VIEWS

NOTE:

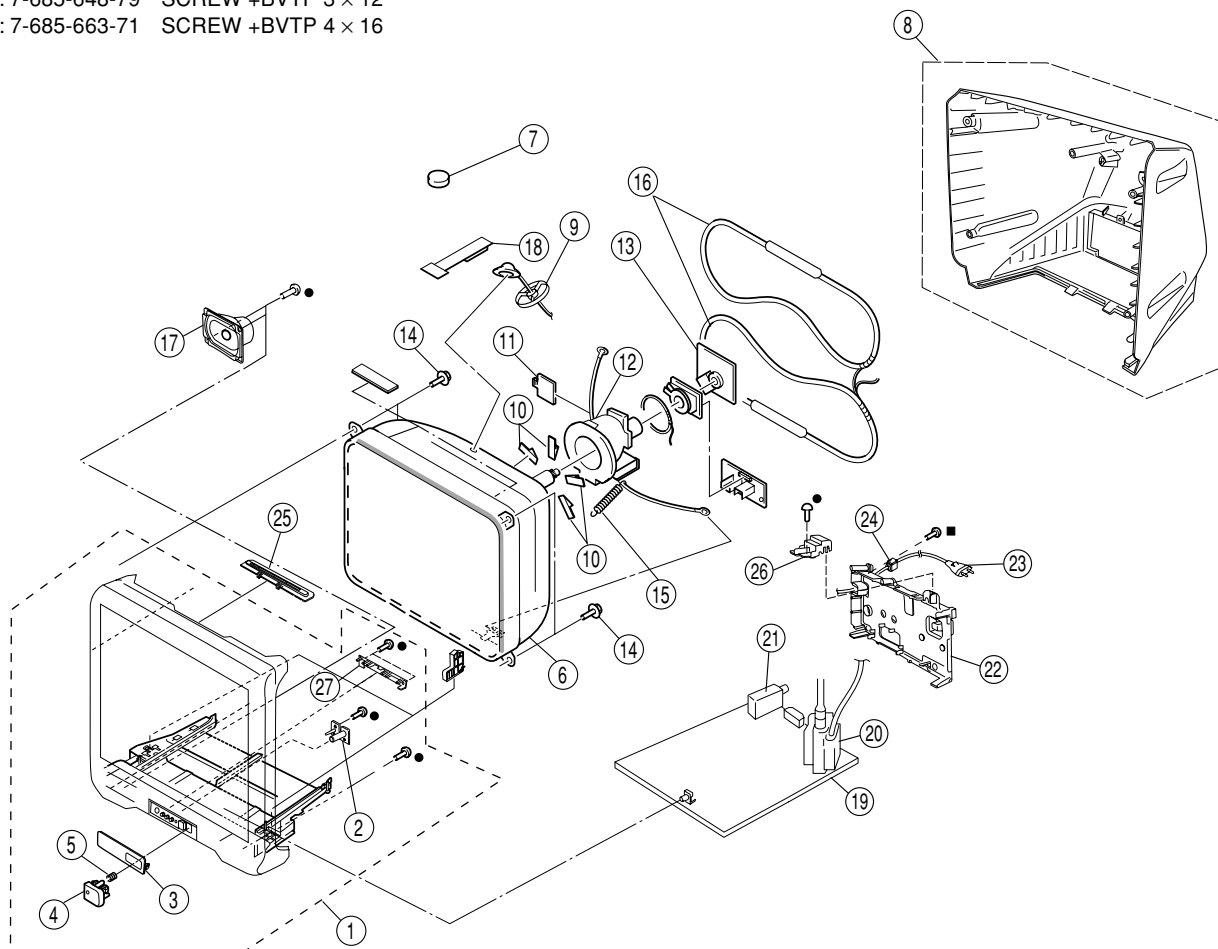
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark $\triangle$ are critical for safety.
Replace only with part number specified.

5-1. CHASSIS

● : 7-685-648-79 SCREW +BVTP 3 × 12

■ : 7-685-663-71 SCREW +BVTP 4 × 16



REF. NO.	PART NO.	DESCRIPTION	REMARK
1	X-4041-369-1	BEZNET ASSY	2-5, 27
2	* 4-092-231-01	GUIDE, LIGHT	
3	4-092-229-01	DOOR CONTROL	
4	4-092-230-01	BUTTON POWER	
5	4-036-405-71	SPRING COMPRESSION	
6	$\triangle$ 8-735-570-05	PICTURE TUBE (A34LRG70X)	
7	1-452-032-00	MAGNET DISC	
8	4-091-911-01	COVER REAR (■ 6 screws)	
9	4-202-554-02	HOLDER HV CABLE	
10	4-074-601-02	SPACER DY	
11	4-077-228-02	PIECE TLH CONVERGENCE	
12	$\triangle$ 8-451-401-51	DEFLECTION YOKE (Y14RSA-L3)	
		(KV-14CT1B/1K/1U)	
	$\triangle$ 8-451-401-11	DEFLECTION YOKE (Y14RSA-S)	
		(KV-14CT1E)	
13	* A-1405-473-A	MOUNTED PWB, C	
14	4-057-862-01	SCREW, TAPPING 5 + CROWN WASHER	
15	4-369-318-21	SPRING TENSION	
16	$\triangle$ 1-456-278-11	DEGAUSSING COIL	

REF. NO.	PART NO.	DESCRIPTION	REMARK
17	1-825-293-11	LOUD SPEAKER (5 x 9 CM)	
18	4-094-690-01	PIECE A (90) CONV, CORRECT	
19	* A-1302-283-A	COMPLETE PWB, A (KV-14CT1B)	
	* A-1302-405-A	COMPLETE PWB, A (KV-14CT1E/1K)	
	* A-1302-428-A	COMPLETE PWB, A (KV-14CT1U)	
20	$\triangle$ 1-453-309-21	TRANSFORMER ASSY FLYBACK	
		(NX-4450//M3A4)	
21	8-598-623-00	TUNER FSS BTP-AC421 (KV-14CT1B/1E/1K)	
	8-598-624-00	TUNER FSS BTP-AU621 (KV-14CT1U)	
22	* 4-093-760-01	BRACKET TERMINAL	
23	$\triangle$ 1-783-083-11	CORD POWER (WITH FILTER)	
		(KV-14CT1B/1E/1K)	
	$\triangle$ 1-776-204-12	CORD, POWER (FILTER) (KV-14CT1U)	
24	4-022-115-00	HOLDER AC CORD	
25	1-477-678-71	TOP SWITCH BLOCK	
26	* 4-092-370-11	BRACKET, FBT	
27	* 4-093-771-01	COVER, FRONT PANEL	

SECTION 6 ELECTRICAL PARTS LIST

A

NOTE:

The components identified by shading and mark $\triangle$ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

- All resistors are in ohms
- F : nonflammable

CAPACITORS

- MF : μ F, PF : μ μF

COILS

- MMH : mH, UH : μ H

REF NO.	PART NO.	DESCRIPTION	REMARK
	* A-1302-283-A	COMPLETE PWB, A (KV-14CT1B)	
	* A-1302-405-A	COMPLETE PWB, A (KV-14CT1E/1K)	
	* A-1302-428-A	COMPLETE PWB, A (KV-14CT1U)	*****
	* 1-564-508-11	PLUG, CONNECTOR 5P	
	* 1-564-510-11	PLUG, CONNECTOR 7P	
	1-900-704-55	LEAD ASSY, JUMPER	
	4-382-854-01	SCREW (M3X8), P, SW (+)	
	4-382-854-21	SCREW (M3X14), P, SW (+)	
A015	* 4-055-304-01	HOLDER, LED	
A016	* 4-042-408-01	PIN, COATING LEAD	
A018	* 4-042-408-01	PIN, COATING LEAD	

COMMON PARTS LIST

<CAPACITOR>

C001	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C002	1-126-935-11	ELECT	470UF	20.00%	16V
C003	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C004	1-126-933-11	ELECT	100UF	20.00%	16V
C005	1-126-933-11	ELECT	100UF	20.00%	16V
C006	1-126-933-11	ELECT	100UF	20.00%	16V
C008	1-126-947-11	ELECT	47UF	20.00%	25V
C010	1-164-315-11	CERAMIC CHIP	470PF	5.00%	50V
C012	1-127-715-91	CERAMIC CHIP	0.22UF	10%	16V
C013	1-126-933-11	ELECT	100UF	20.00%	16V
C014	1-127-715-91	CERAMIC CHIP	0.22UF	10%	16V
C018	1-127-715-91	CERAMIC CHIP	0.22UF	10%	16V
C020	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C021	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C022	1-127-715-91	CERAMIC CHIP	0.22UF	10%	16V
C023	1-125-891-11	CERAMIC CHIP	0.47UF	10.00%	10V
C024	1-126-965-91	ELECT	22UF	20.00%	50V
C025	1-127-715-91	CERAMIC CHIP	0.22UF	10%	16V
C026	1-126-947-11	ELECT	47UF	20.00%	25V
C028	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C029	1-126-965-91	ELECT	22UF	20.00%	50V
C030	1-127-715-91	CERAMIC CHIP	0.22UF	10%	16V
C031	1-126-965-91	ELECT	22UF	20.00%	50V
C036	1-126-933-11	ELECT	100UF	20.00%	16V
C037	1-126-963-11	ELECT	4.7UF	20.00%	50V
C038	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C041	1-162-968-11	CERAMIC CHIP	0.0047UF	10.00%	50V
C042	1-127-715-91	CERAMIC CHIP	0.22UF	10%	16V
C044	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C046	1-162-969-11	CERAMIC CHIP	0.0068UF	10.00%	25V
C048	1-127-715-91	CERAMIC CHIP	0.22UF	10%	16V
C049	1-164-227-11	CERAMIC CHIP	0.022UF	10.00%	25V
C050	1-126-964-11	ELECT	10UF	20.00%	50V

C052	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C053	1-164-227-11	CERAMIC CHIP	0.022UF	10.00%	25V
C054	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C055	1-136-167-00	FILM	0.15UF	5.00%	50V
C056	1-126-933-11	ELECT	100UF	20.00%	16V
C057	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C058	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C060	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C061	1-162-966-11	CERAMIC CHIP	0.0022UF	10.00%	50V
C062	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C063	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C064	1-126-961-11	ELECT	2.2UF	20.00%	50V
C065	1-126-962-11	ELECT	3.3UF	20.00%	50V
C067	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C069	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C070	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C072	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C073	1-126-961-11	ELECT	2.2UF	20.00%	50V
C077	1-165-176-11	CERAMIC CHIP	0.047UF	10.00%	16V
C078	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C080	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C081	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C089	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C090	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C091	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C092	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C093	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C094	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C095	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C096	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C100	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C101	1-126-933-11	ELECT	100UF	20.00%	16V
C102	1-162-923-11	CERAMIC CHIP	47PF	5.00%	50V
C104	1-162-923-11	CERAMIC CHIP	47PF	5.00%	50V
C107	1-126-935-11	ELECT	470UF	20.00%	16V
C108	1-126-935-11	ELECT	470UF	20.00%	16V
C109	1-162-968-11	CERAMIC CHIP	0.0047UF	10.00%	50V
C112	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V
C116	1-162-968-11	CERAMIC CHIP	0.0047UF	10.00%	50V
C118	1-126-965-91	ELECT	22UF	20.00%	50V
C119	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V
C120	1-126-935-11	ELECT	470UF	20.00%	16V
C136	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C137	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C139	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C200	1-127-715-91	CERAMIC CHIP	0.22UF	10%	16V
C203	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C204	1-130-495-00	MYLAR	0.1UF	5.00%	50V
C206	1-164-227-11	CERAMIC CHIP	0.022UF	10.00%	25V
C209	1-126-961-11	ELECT	2.2UF	20.00%	50V

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REF NO.	PART NO.	DESCRIPTION	REMARK		
C210	1-126-968-11	ELECT	100UF	20.00%	50V
C211	1-126-963-11	ELECT	4.7UF	20.00%	50V
C212	1-126-942-61	ELECT	1000UF	20.00%	25V
C213	1-115-339-11	CERAMIC CHIP	0.1UF	10.00%	50V
C217	1-126-942-61	ELECT	1000UF	20.00%	25V
C218	1-126-965-91	ELECT	22UF	20.00%	50V
C219	1-126-934-11	ELECT	220UF	20.00%	16V
C220	1-126-964-11	ELECT	10UF	20.00%	50V
C223	1-128-549-11	ELECT	3300UF	20.00%	35V
C232	1-137-374-11	MYLAR	0.047UF	5.00%	50V
C234	1-164-315-11	CERAMIC CHIP	470PF	5.00%	50V
C300	1-127-715-91	CERAMIC CHIP	0.22UF	10%	16V
C301	1-164-315-11	CERAMIC CHIP	470PF	5.00%	50V
C302	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C303	1-126-933-11	ELECT	100UF	20.00%	16V
C304	1-126-933-11	ELECT	100UF	20.00%	16V
C308	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C311	1-126-961-11	ELECT	2.2UF	20.00%	50V
C312	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C313	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C316	1-125-891-11	CERAMIC CHIP	0.47UF	10.00%	10V
C317	1-126-934-11	ELECT	220UF	20.00%	16V
C318	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C319	1-162-923-11	CERAMIC CHIP	47PF	5.00%	50V
C320	1-162-923-11	CERAMIC CHIP	47PF	5.00%	50V
C321	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C322	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C323	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C325	1-164-227-11	CERAMIC CHIP	0.022UF	10.00%	25V
C328	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C600	Δ 1-119-895-51	CERAMIC	4700PF	20.00%	250V
C602	Δ 1-165-538-11	MYLAR	0.1UF	10	275V
C605	1-161-830-00	CERAMIC	0.0047UF	99%	500V
C606	1-161-830-00	CERAMIC	0.0047UF	99%	500V
C609	1-161-830-00	CERAMIC	0.0047UF	99%	500V
C610	1-161-830-00	CERAMIC	0.0047UF	99%	500V
C611	1-117-751-11	ELECT(BLOCK)	220UF	20.00%	450V
C612	1-125-893-11	FILM	680PF	3.00%	1.5KV
C616	1-164-230-11	CERAMIC CHIP	220PF	5.00%	50V
C619	1-130-491-00	MYLAR	0.047UF	5.00%	50V
C621	1-126-963-11	ELECT	4.7UF	20.00%	50V
C622	Δ 1-119-894-51	CERAMIC	2200PF	20.00%	250V
C623	1-162-966-11	CERAMIC CHIP	0.0022UF	10.00%	50V
C624	1-126-967-11	ELECT	47UF	20.00%	50V
C625	Δ 1-127-942-51	CERAMIC	330PF	10%	250V
C626	1-102-228-00	CERAMIC	470PF	10.00%	500V
C628	1-125-772-91	CERAMIC	1500PF	10.00%	2KV
C630	1-128-549-11	ELECT	3300UF	20.00%	35V
C632	1-126-953-11	ELECT	2200UF	20.00%	35V
C634	1-126-941-11	ELECT	470UF	20.00%	25V
C635	1-126-971-11	ELECT	470UF	20.00%	50V
C637	1-126-933-11	ELECT	100UF	20.00%	16V
C638	1-126-933-11	ELECT	100UF	20.00%	16V
C639	1-126-933-11	ELECT	100UF	20.00%	16V
C641	1-126-933-11	ELECT	100UF	20.00%	16V
C643	1-125-891-11	CERAMIC CHIP	0.47UF	10.00%	10V
C644	1-164-315-11	CERAMIC CHIP	470PF	5.00%	50V
C647	1-126-935-11	ELECT	470UF	20.00%	16V
C649	1-126-933-11	ELECT	100UF	20.00%	16V
C652	1-102-228-00	CERAMIC	470PF	10.00%	500V

REF NO.	PART NO.	DESCRIPTION	REMARK		
C653	1-102-228-00	CERAMIC	470PF	10.00%	500V
C654	1-102-228-00	CERAMIC	470PF	10.00%	500V
C657	Δ 1-127-942-51	CERAMIC	330PF	10%	250V
C660	Δ 1-165-539-11	MYLAR	0.22UF	10	275V
C662	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C665	1-110-626-11	ELECT	330UF	20.00%	160V
C666	Δ 1-165-538-11	MYLAR	0.1UF	10	275V
C668	1-126-933-11	ELECT	100UF	20.00%	16V
C670	Δ 1-127-942-51	CERAMIC	330PF	10%	250V
C672	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C678	1-164-505-11	CERAMIC CHIP	2.2UF		16V
C680	1-164-315-11	CERAMIC CHIP	470PF	5.00%	50V
C682	1-115-466-91	ELECT	1000UF	20.00%	16V
C685	1-126-934-11	ELECT	220UF	20.00%	16V
C805	1-126-960-11	ELECT	1UF	20.00%	50V
C806	1-106-375-12	MYLAR	0.022UF	99%	200V
C807	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C808	1-102-244-00	CERAMIC	220PF	10.00%	500V
C809	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C810	1-162-318-11	CERAMIC	0.001UF	10.00%	500V
C811	1-126-933-11	ELECT	100UF	20.00%	16V
C822	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C825	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C826	1-164-227-11	CERAMIC CHIP	0.022UF	10.00%	25V
C828	1-126-933-11	ELECT	100UF	20.00%	16V
C830	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C831	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C832	1-164-230-11	CERAMIC CHIP	220PF	5.00%	50V
C833	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C835	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C836	1-162-131-11	CERAMIC	220PF	10.00%	2KV
C837	1-162-968-11	CERAMIC CHIP	0.0047UF	10.00%	50V
C838	1-106-220-00	MYLAR	0.1UF	10.00%	100V
C839	1-162-966-11	CERAMIC CHIP	0.0022UF	10.00%	50V
C840	Δ 1-117-645-11	FILM	11000PF	3.00%	1.2KV
C841	1-117-661-71	FILM	0.15UF	5.00%	250V
C842	1-100-123-21	FILM	0.033UF	5%	400V
C844	1-165-176-11	CERAMIC CHIP	0.047UF	10.00%	16V
C845	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C846	1-117-767-91	CERAMIC	330PF	10.00%	2KV
C847	1-107-364-11	MYLAR	0.01UF	10.00%	200V
C848	1-107-364-11	MYLAR	0.01UF	10.00%	200V
C849	1-106-375-12	MYLAR	0.022UF	99%	200V
C850	1-106-220-00	MYLAR	0.1UF	10.00%	100V
C851	1-107-675-11	ELECT	1UF	20.00%	450V
C852	1-117-664-11	FILM	0.27UF	5.00%	250V
C854	1-126-948-11	ELECT	100UF	20.00%	35V
C855	1-107-894-11	ELECT	220UF	20.00%	35V
C857	1-104-666-11	ELECT	220UF	20.00%	25V
C858	1-137-194-81	FILM	0.47UF	5.00%	50V
C860	1-162-318-11	CERAMIC	0.001UF	10.00%	500V
C861	1-104-666-11	ELECT	220UF	20.00%	25V
C862	1-162-318-11	CERAMIC	0.001UF	10.00%	500V
C863	1-165-176-11	CERAMIC CHIP	0.047UF	10.00%	16V
C867	1-165-441-81	ELECT	33UF	20%	160V
C868	1-102-228-00	CERAMIC	470PF	10.00%	500V
C869	1-107-654-11	ELECT	33UF	20.00%	250V
C876	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C877	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C878	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V

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REF NO.	PART NO.	DESCRIPTION	REMARK	REF NO.	PART NO.	DESCRIPTION	REMARK
C882	1-106-363-00	MYLAR	0.0068UF 99% 200V	D074	8-719-081-97	MMDL914T1	
C904	1-126-957-11	ELECT	0.22UF 20.00% 50V	D075	8-719-069-60	UDZSTE-179.1B	
C908	1-164-346-11	CERAMIC CHIP	1UF 16V	D101	8-719-066-11	1PS184-115	
C909	1-164-346-11	CERAMIC CHIP	1UF 16V	D103	8-759-157-40	UPC574J	
C914	1-162-959-11	CERAMIC CHIP	330PF 5.00% 50V	D107	8-719-074-43	BAS316-115	
C915	1-162-959-11	CERAMIC CHIP	330PF 5.00% 50V	D107	8-719-081-97	MMDL914T1	
C917	1-162-959-11	CERAMIC CHIP	330PF 5.00% 50V	D107	8-719-404-50	MA111-TX	
C918	1-164-346-11	CERAMIC CHIP	1UF 16V	D108	8-719-069-55	DIODE UDZSTE-175.6B	
C923	1-126-947-11	ELECT	47UF 20.00% 25V	D109	8-719-069-55	DIODE UDZSTE-175.6B	
C940	1-164-315-11	CERAMIC CHIP	470PF 5.00% 50V	D200	8-719-062-51	1PS226-115	
C947	1-164-315-11	CERAMIC CHIP	470PF 5.00% 50V	D201	8-719-081-97	MMDL914T1	
C952	1-107-826-11	CERAMIC CHIP	0.1UF 10.00% 16V	D202	8-719-081-97	MMDL914T1	
C953	1-107-826-11	CERAMIC CHIP	0.1UF 10.00% 16V	D203	8-719-081-97	MMDL914T1	
C955	1-127-715-91	CERAMIC CHIP	0.22UF 10% 16V	D204	8-719-081-97	MMDL914T1	
C956	1-126-933-11	ELECT	100UF 20.00% 16V	D205	8-719-081-97	MMDL914T1	
C967	1-164-505-11	CERAMIC CHIP	2.2UF 16V	D208	8-719-081-97	MMDL914T1	
C972	1-162-964-11	CERAMIC CHIP	0.001UF 10.00% 50V	D211	8-719-062-51	1PS226-115	
C973	1-126-964-11	ELECT	10UF 20.00% 50V	D212	8-719-081-97	MMDL914T1	
C975	1-162-964-11	CERAMIC CHIP	0.001UF 10.00% 50V	D213	8-719-081-97	MMDL914T1	
C976	1-126-935-11	ELECT	470UF 20.00% 16V	D214	8-719-081-97	MMDL914T1	
C1019	1-127-715-91	CERAMIC CHIP	0.22UF 10% 16V	D600	8-719-081-97	MMDL914T1	
C1233	1-126-961-11	ELECT	2.2UF 20.00% 50V	D602	6-500-481-31	DIODE AM01AV1	
C2602	1-102-114-00	CERAMIC	470PF 10.00% 50V	D603	6-500-481-31	DIODE AM01AV1	
C2631	1-102-228-00	CERAMIC	470PF 10.00% 500V	D604	8-719-077-77	D3SB60F3	
C2636	1-126-972-11	ELECT	1000UF 20.00% 50V	D605	8-719-109-85	RD5.1ESB2	
C2648	1-126-952-11	ELECT	1000UF 20.00% 35V	D617	6-500-567-11	DIODE 10ERB20-TA2B5	
<CONNECTOR>				D618	8-719-063-70	D1NL20U	
CN005	* 1-564-506-11	PLUG, CONNECTOR 3P		D619	6-500-567-11	DIODE 10ERB20-TA2B5	
CN202	* 1-564-506-11	PLUG, CONNECTOR 3P		D621	8-719-312-10	RU4AM-T3	
CN601	* 1-691-134-11	PIN, CONNECTOR (PC BOARD) 2P		D622	8-719-085-37	11EQS10-TB5	
CN602	* 1-580-843-11	PIN, CONNECTOR (POWER)		D623	6-500-567-31	DIODE 10ERB20-TB3	
CN603 $\triangle$	1-508-786-13	PIN, CONNECTOR (5MM PITCH) 2P		D624	8-719-510-73	S3L20UF4	
CN902	1-794-656-11	CONNECTOR, SCART 21P		D629	8-719-109-85	RD5.1ESB2	
CN904	* 1-564-508-11	PLUG, CONNECTOR 5P		D633	8-719-923-86	MTZJ-T-77-15	
<DIODE>				D635	8-719-157-97	RD3.6SB	
D002	8-719-081-97	MMDL914T1		D637	8-719-072-70	MA2ZD14001S0	
D003	8-719-081-97	MMDL914T1		D638	8-719-081-97	MMDL914T1	
D023	8-719-069-60	UDZSTE-179.1B		D639	8-719-027-22	D3S6M-F	
D024	8-719-069-60	UDZSTE-179.1B		D804	8-719-991-33	1SS133T-77	
D025	8-719-069-60	UDZSTE-179.1B		D805	8-719-991-33	1SS133T-77	
D054	8-719-069-55	DIODE UDZSTE-175.6B		D807	8-719-991-33	1SS133T-77	
D055	8-719-069-55	DIODE UDZSTE-175.6B		D808	8-719-991-33	1SS133T-77	
D056	8-719-081-97	MMDL914T1		D809	8-719-991-33	1SS133T-77	
D057	8-719-081-97	MMDL914T1		D815	8-719-069-60	UDZSTE-179.1B	
D058	8-719-081-97	MMDL914T1		D816	8-719-081-00	DIODE BY228/A52A/	
D059	8-719-081-97	MMDL914T1		D817	8-719-979-85	EGP20G	
D060	8-719-069-54	UDZSTE-175.1B		D818	8-719-109-85	RD5.1ESB2	
D061	8-719-081-97	MMDL914T1		D819	6-500-567-31	DIODE 10ERB20-TB3	
D062	8-719-069-55	DIODE UDZSTE-175.6B		D820	8-719-908-03	GP08D	
D063	8-719-081-97	MMDL914T1		D821	6-500-567-31	DIODE 10ERB20-TB3	
D064	8-719-069-55	DIODE UDZSTE-175.6B		D823	8-719-302-43	EL1Z	
D065	8-719-069-55	DIODE UDZSTE-175.6B		D824	8-719-302-43	EL1Z	
D066	8-719-908-03	GP08D		D827	8-719-302-43	EL1Z	
D068	8-719-069-55	DIODE UDZSTE-175.6B		D829	8-719-069-55	DIODE UDZSTE-175.6B	
D071	8-719-081-97	MMDL914T1		D830	8-719-081-97	MMDL914T1	
D072	8-719-081-97	MMDL914T1		D903	8-719-069-55	DIODE UDZSTE-175.6B	
D072	8-719-404-50	MA111-TX		D904	8-719-069-55	DIODE UDZSTE-175.6B	
				D911	8-719-069-55	DIODE UDZSTE-175.6B	
				D912	8-719-069-55	DIODE UDZSTE-175.6B	
				D913	8-719-069-55	DIODE UDZSTE-175.6B	
				D914	8-719-083-18	DIODE SPB-25MVWF	

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REF NO.	PART NO.	DESCRIPTION	REMARK		
D915	8-719-069-55	DIODE UDZSTE-175.6B			
D918	8-719-069-55	DIODE UDZSTE-175.6B			
D920	8-719-069-55	DIODE UDZSTE-175.6B			
D927	8-719-069-55	DIODE UDZSTE-175.6B			
D928	8-719-069-60	UDZSTE-179.1B			
D930	8-719-069-55	DIODE UDZSTE-175.6B			
D931	8-719-157-97	RD3.6SB			
D932	8-719-157-97	RD3.6SB			
D933	6-500-028-01	DIODE MM3Z9V1ST1			
D933	8-719-069-60	UDZSTE-179.1B			
D933	8-719-070-62	DIODE PDZ9.1B-115			
D2625	8-719-510-73	S3L20UF4			
<CONNECTOR>					
DY800	* 1-580-798-11	CONNECTOR PIN (DY) 6P			
<FUSE>					
F600	$\triangle$ 1-576-232-21	FUSE	5A	250V	5A
<FERRITE BEAD>					
FB001	1-410-397-21	FERRITE	1.1UH		
FB603	1-410-397-21	FERRITE	1.1UH		
FB608	1-412-911-31	FERRITE	0UH		
FB800	1-410-397-21	FERRITE	1.1UH		
FB2602	1-410-397-21	FERRITE	1.1UH		
FH603	1-533-725-11	FUSE HOLDER	0A	0V	
<IC>					
IC001	6-703-512-01	IC TDA11020H/N1A000AK			
IC002	6-704-532-01	RPM7240-H5			
IC003	8-759-678-07	CAT24WC16JL-TE1			
IC200	6-703-474-01	IC AN17804A			
IC601	6-704-263-01	IC STR-F6267S LF1357			
IC602	6-703-479-01	IC PQ09RD1SJ00H			
IC603	6-703-478-01	IC PQ018EF01SZH			
IC604	8-759-231-53	TA7805S			
IC605	6-705-063-01	IC SE135N-LF38			
IC606	8-759-445-59	BA033T			
IC607	8-759-832-05	IC BA18BC0FP-E2			
IC801	6-703-708-01	IC LM2903DT			
IC802	6-701-937-01	IC TJM4558CDT			
IC804	6-703-470-01	IC STV9302A			
<JACK>					
J200	1-770-786-22	JACK			
J909	1-779-205-11	JACK, PIN 2P			
<CHIP CONDUCTOR>					
JR001	1-216-864-11	SHORT CHIP	0		
JR002	1-216-864-11	SHORT CHIP	0		
JR003	1-216-864-11	SHORT CHIP	0		
JR004	1-216-864-11	SHORT CHIP	0		
JR005	1-216-864-11	SHORT CHIP	0		
JR006	1-216-864-11	SHORT CHIP	0		
JR008	1-216-864-11	SHORT CHIP	0		
JR009	1-216-864-11	SHORT CHIP	0		

REF NO.	PART NO.	DESCRIPTION	REMARK
JR012	1-216-864-11	SHORT CHIP	0
JR013	1-216-864-11	SHORT CHIP	0
JR014	1-216-864-11	SHORT CHIP	0
JR015	1-216-864-11	SHORT CHIP	0
JR016	1-216-864-11	SHORT CHIP	0
JR017	1-216-864-11	SHORT CHIP	0
JR018	1-216-864-11	SHORT CHIP	0
JR019	1-216-864-11	SHORT CHIP	0
JR020	1-216-864-11	SHORT CHIP	0
JR021	1-216-864-11	SHORT CHIP	0
JR024	1-216-864-11	SHORT CHIP	0
JR025	1-216-864-11	SHORT CHIP	0
JR026	1-216-864-11	SHORT CHIP	0
JR027	1-216-864-11	SHORT CHIP	0
JR036	1-216-864-11	SHORT CHIP	0
JR037	1-216-864-11	SHORT CHIP	0
JR038	1-216-864-11	SHORT CHIP	0
JR040	1-216-864-11	SHORT CHIP	0
JR041	1-216-864-11	SHORT CHIP	0
JR050	1-216-864-11	SHORT CHIP	0
JR051	1-216-864-11	SHORT CHIP	0
JR093	1-216-864-11	SHORT CHIP	0
JR096	1-216-864-11	SHORT CHIP	0
JR097	1-216-864-11	SHORT CHIP	0
JR098	1-216-864-11	SHORT CHIP	0
JR111	1-216-864-11	SHORT CHIP	0
JR112	1-216-864-11	SHORT CHIP	0
JR200	1-216-864-11	SHORT CHIP	0
JR300	1-216-864-11	SHORT CHIP	0
JR600	1-216-864-11	SHORT CHIP	0
JR601	1-216-864-11	SHORT CHIP	0
JR602	1-216-864-11	SHORT CHIP	0
JR800	1-216-864-11	SHORT CHIP	0
JR805	1-216-864-11	SHORT CHIP	0
JR901	1-216-864-11	SHORT CHIP	0
JR902	1-216-864-11	SHORT CHIP	0
JR903	1-216-864-11	SHORT CHIP	0
JR904	1-216-864-11	SHORT CHIP	0
JR905	1-216-864-11	SHORT CHIP	0
JR906	1-216-864-11	SHORT CHIP	0
JR907	1-216-864-11	SHORT CHIP	0
JR1011	1-216-864-11	SHORT CHIP	0
JR1100	1-216-864-11	SHORT CHIP	0
JR1101	1-216-864-11	SHORT CHIP	0
JR1107	1-216-864-11	SHORT CHIP	0
JR1108	1-216-864-11	SHORT CHIP	0
JR1902	1-216-864-11	SHORT CHIP	0
JR1903	1-216-864-11	SHORT CHIP	0
JR1907	1-216-864-11	SHORT CHIP	0
<COIL>			
L003	1-414-856-11	INDUCTOR	10UH
L004	1-414-187-11	INDUCTOR	47UH
L005	1-414-856-11	INDUCTOR	10UH
L006	1-414-856-11	INDUCTOR	10UH
L007	1-414-856-11	INDUCTOR	10UH
L008	1-414-856-11	INDUCTOR	10UH
L009	1-414-856-11	INDUCTOR	10UH
L010	1-469-525-91	INDUCTOR	10UH
L011	1-469-525-91	INDUCTOR	10UH
L012	1-412-058-11	INDUCTOR	10UH

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Replace only with part number specified.

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REF NO.	PART NO.	DESCRIPTION	REMARK
L013	1-469-525-91	INDUCTOR	10UH
L031	1-469-525-91	INDUCTOR	10UH
L032	1-469-525-91	INDUCTOR	10UH
L033	1-469-525-91	INDUCTOR	10UH
L035	1-469-525-91	INDUCTOR	10UH
L036	1-469-525-91	INDUCTOR	10UH
L037	1-469-525-91	INDUCTOR	10UH
L100	1-414-857-11	INDUCTOR	100UH
L104	1-410-989-11	INDUCTOR	0.47UH
L106	1-414-187-11	INDUCTOR	47UH
L600	1-412-533-21	INDUCTOR	47UH
L601	1-412-533-21	INDUCTOR	47UH
L602	1-412-529-11	INDUCTOR	22UH
L800	1-424-795-11	COIL, HORIZONTAL LINEARITY	
L802	1-406-679-11	INDUCTOR	22MH
L803	1-414-493-41	INDUCTOR	4.7MH
L805	1-408-947-00	INDUCTOR	2.2MH
L900	1-469-525-91	INDUCTOR	10UH
L901	1-412-001-31	INDUCTOR	3.9UH
L902	1-414-187-11	INDUCTOR	47UH
L903	1-410-993-42	INDUCTOR	1UH
L904	1-410-993-42	INDUCTOR	1UH
L905	1-410-993-42	INDUCTOR	1UH
L906	1-410-993-42	INDUCTOR	1UH
L2601	1-412-525-31	INDUCTOR	10UH
<PHOTO COUPLER>			
PH600	$\triangle$ 6-600-187-01	PHOTO COUPLER PC123Y22JOOF	
<IC LINK>			
PS602	$\triangle$ 1-533-597-41	IC LINK	5A 90V
PS603	$\triangle$ 1-533-597-41	IC LINK	5A 90V
PS604	1-533-597-41	IC LINK	5A 90V
PS605	$\triangle$ 1-533-597-41	IC LINK	5A 90V
PS2601	$\triangle$ 1-533-597-41	IC LINK	5A 90V
<TRANSISTOR>			
Q001	8-729-421-22	UN2211	
Q006	8-729-424-67	UN2216	
Q007	8-729-424-67	UN2216	
Q008	8-729-010-25	MSD601-RT1	
Q013	8-729-010-25	MSD601-RT1	
Q016	8-729-421-22	UN2211	
Q105	8-729-424-67	UN2216	
Q106	8-729-424-67	UN2216	
Q200	8-729-421-22	UN2211	
Q201	8-729-010-05	MSB709-RT1	
Q202	8-729-010-05	MSB709-RT1	
Q206	8-729-421-22	UN2211	
Q601	8-729-010-25	MSD601-RT1	
Q605	6-550-572-01	TRANSISTOR FN155	
Q608	8-729-010-25	MSD601-RT1	
Q609	8-729-010-25	MSD601-RT1	
Q803	8-729-140-50	2SC3209LK	
Q804	8-729-200-17	2SA1091-O	
Q805	6-550-410-01	TRANSISTOR 2SC5885	
Q806	8-729-010-25	MSD601-RT1	

REF NO.	PART NO.	DESCRIPTION	REMARK
Q807	8-729-010-05	MSB709-RT1	
Q808	8-729-053-33	IRF614-037	
Q814	8-729-010-25	MSD601-RT1	
Q903	8-729-010-05	MSB709-RT1	
Q908	8-729-424-67	UN2216	
Q909	8-729-424-67	UN2216	
Q910	8-729-010-25	MSD601-RT1	
Q911	8-729-010-25	MSD601-RT1	
Q912	8-729-421-22	UN2211	
Q913	8-729-421-22	UN2211	
Q8009	8-729-200-17	2SA1091-O	
Q8010	8-729-140-50	2SC3209LK	
<RESISTOR>			
R001	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R002	1-216-809-11	METAL CHIP	100 5% 1/10W
R003	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R004	1-216-809-11	METAL CHIP	100 5% 1/10W
R010	1-216-833-11	METAL CHIP	10K 5% 1/10W
R011	1-216-821-11	METAL CHIP	1K 5% 1/10W
R012	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R014	1-216-809-11	METAL CHIP	100 5% 1/10W
R015	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
R018	1-216-809-11	METAL CHIP	100 5% 1/10W
R020	1-216-809-11	METAL CHIP	100 5% 1/10W
R023	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R024	1-216-809-11	METAL CHIP	100 5% 1/10W
R025	1-216-809-11	METAL CHIP	100 5% 1/10W
R026	1-216-809-11	METAL CHIP	100 5% 1/10W
R029	1-216-809-11	METAL CHIP	100 5% 1/10W
R030	1-216-809-11	METAL CHIP	100 5% 1/10W
R038	1-216-809-11	METAL CHIP	100 5% 1/10W
R039	1-216-809-11	METAL CHIP	100 5% 1/10W
R041	1-216-809-11	METAL CHIP	100 5% 1/10W
R042	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R044	1-216-834-11	METAL CHIP	12K 5% 1/10W
R045	1-216-809-11	METAL CHIP	100 5% 1/10W
R046	1-216-809-11	METAL CHIP	100 5% 1/10W
R048	1-216-809-11	METAL CHIP	100 5% 1/10W
R051	1-218-885-11	METAL CHIP	39K 0.5% 1/10W
R056	1-216-809-11	METAL CHIP	100 5% 1/10W
R058	1-216-809-11	METAL CHIP	100 5% 1/10W
R060	1-216-809-11	METAL CHIP	100 5% 1/10W
R061	1-216-819-11	METAL CHIP	680 5% 1/10W
R087	1-216-813-11	METAL CHIP	220 5% 1/10W
R088	1-216-816-11	METAL CHIP	390 5% 1/10W
R096	1-216-813-11	METAL CHIP	220 5% 1/10W
R097	1-216-813-11	METAL CHIP	220 5% 1/10W
R098	1-216-813-11	METAL CHIP	220 5% 1/10W
R099	1-216-813-11	METAL CHIP	220 5% 1/10W
R115	1-216-809-11	METAL CHIP	100 5% 1/10W
R116	1-216-809-11	METAL CHIP	100 5% 1/10W
R121	1-215-925-11	METAL OXIDE	22K 5% 3W
R122	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R124	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R125	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R128	1-216-864-11	SHORT CHIP	0
R130	1-216-809-11	METAL CHIP	100 5% 1/10W
R142	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R150	1-216-809-11	METAL CHIP	100 5% 1/10W
R152	1-218-713-11	METAL CHIP	7.5K 0.5% 1/10W

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REF NO.	PART NO.	DESCRIPTION	REMARK
R154	1-216-864-11	SHORT CHIP	0
R203	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
R204	1-216-833-11	METAL CHIP	10K 5% 1/10W
R205	1-218-867-11	METAL CHIP	6.8K 5% 1/10W
R207	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
R210	1-216-837-11	METAL CHIP	22K 5% 1/10W
R212	1-216-864-11	SHORT CHIP	0
R213	1-216-835-11	METAL CHIP	15K 5% 1/10W
R214	1-216-835-11	METAL CHIP	15K 5% 1/10W
R215	1-216-833-11	METAL CHIP	10K 5% 1/10W
R216	1-216-833-11	METAL CHIP	10K 5% 1/10W
R217	1-249-411-11	CARBON	330 5% 1/4W
R218	1-216-295-91	SHORT CHIP	0
R219	1-249-411-11	CARBON	330 5% 1/4W
R220	1-216-864-11	SHORT CHIP	0
R221	1-216-821-11	METAL CHIP	1K 5% 1/10W
R235	1-249-401-11	CARBON	47 5% 1/4W
R236	1-216-833-11	METAL CHIP	10K 5% 1/10W
R239	1-216-809-11	METAL CHIP	100 5% 1/10W
R240	1-216-864-11	SHORT CHIP	0
R241	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R242	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R300	1-216-809-11	METAL CHIP	100 5% 1/10W
R301	1-216-861-11	METAL CHIP	2.2M 5% 1/10W
R303	1-216-861-11	METAL CHIP	2.2M 5% 1/10W
R304	1-216-855-11	METAL CHIP	680K 5% 1/10W
R307	1-216-855-11	METAL CHIP	680K 5% 1/10W
R309	1-216-857-11	METAL CHIP	1M 5% 1/10W
R310	1-216-821-11	METAL CHIP	1K 5% 1/10W
R311	1-216-841-11	METAL CHIP	47K 5% 1/10W
R312	1-216-857-11	METAL CHIP	1M 5% 1/10W
R313	1-216-847-11	METAL CHIP	150K 5% 1/10W
R314	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W
R315	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W
R317	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
R320	1-218-863-11	METAL CHIP	4.7K 0.5% 1/10W
R322	1-218-863-11	METAL CHIP	4.7K 0.5% 1/10W
R323	1-216-809-11	METAL CHIP	100 5% 1/10W
R324	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R331	1-216-809-11	METAL CHIP	100 5% 1/10W
R336	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R337	1-216-817-11	METAL CHIP	470 5% 1/10W
R338	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R339	1-216-809-11	METAL CHIP	100 5% 1/10W
R340	1-216-833-11	METAL CHIP	10K 5% 1/10W
R341	1-216-809-11	METAL CHIP	100 5% 1/10W
R355	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
R356	1-216-864-11	SHORT CHIP	0
R360	1-216-864-11	SHORT CHIP	0
R363	1-216-864-11	SHORT CHIP	0
R364	1-216-821-11	METAL CHIP	1K 5% 1/10W
R379	1-216-843-11	METAL CHIP	68K 5% 1/10W
R380	1-216-809-11	METAL CHIP	100 5% 1/10W
R384	1-216-809-11	METAL CHIP	100 5% 1/10W
R385	1-216-809-11	METAL CHIP	100 5% 1/10W
R386	1-216-809-11	METAL CHIP	100 5% 1/10W
R392	1-216-833-11	METAL CHIP	10K 5% 1/10W
R393	1-216-809-11	METAL CHIP	100 5% 1/10W
R394	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R395	1-216-845-11	METAL CHIP	100K 5% 1/10W
R400	1-260-288-11	CARBON	0.47 5% 1/2W

REF NO.	PART NO.	DESCRIPTION	REMARK
R401	1-260-288-11	CARBON	0.47 5% 1/2W
R405	1-260-288-11	CARBON	0.47 5% 1/2W
R406	1-260-127-11	CARBON	220K 5% 1/2W
R411	1-214-909-00	METAL	68K 1% 1/2W
R412	1-214-773-00	METAL	68K 1% 1/4W
R413	1-215-457-00	METAL	33K 1% 1/4W
R414	1-260-336-11	CARBON	4.7K 5% 1/2W
R416	1-260-107-11	CARBON	4.7K 5% 1/2W
R420	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R421	1-216-833-11	METAL CHIP	10K 5% 1/10W
R423	1-216-864-11	SHORT CHIP	0
R424	1-218-899-11	METAL CHIP	150K 0.5% 1/16W
R602	1-216-833-11	METAL CHIP	10K 5% 1/10W
R609	1-216-833-11	METAL CHIP	10K 5% 1/10W
R612	1-215-429-00	METAL	2.2K 1% 1/4W
R619	1-216-363-21	METAL OXIDE	0.33 5% 2W
R620	1-216-363-21	METAL OXIDE	0.33 5% 2W
R621	1-249-409-11	CARBON	220 5% 1/4W
R624	1-215-429-00	METAL	2.2K 1% 1/4W
R625	1-216-864-11	SHORT CHIP	0
R627	1-249-385-11	CARBON	2.2 5% 1/4W
R631	1-249-425-11	CARBON	4.7K 5% 1/4W
R634	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R635	1-216-833-11	METAL CHIP	10K 5% 1/10W
R636	1-249-421-11	CARBON	2.2K 5% 1/4W
R639	1-202-962-11	CEMENTED	3.3 5% 10W
R645	1-218-899-11	METAL CHIP	150K 0.5% 1/16W
R646	1-218-851-11	METAL CHIP	1.5K 0.5% 1/10W
R647	1-216-821-11	METAL CHIP	1K 5% 1/10W
R650	$\triangle$ 1-240-917-91	METAL	8.2M 5% 1W
R655	1-216-809-11	METAL CHIP	100 5% 1/10W
R656	1-249-381-11	CARBON	1 5% 1/4W
R658	1-245-480-21	METAL	560K 1% 1/4W
R659	1-245-482-21	METAL	680K 1% 1/4W
R667	1-216-821-11	METAL CHIP	1K 5% 1/10W
R668	1-216-839-11	METAL CHIP	33K 5% 1/10W
R820	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R821	1-216-837-11	METAL CHIP	22K 5% 1/10W
R822	1-249-418-11	CARBON	1.2K 5% 1/4W
R823	1-245-468-21	METAL	180K 1% 1/4W
R824	1-216-839-11	METAL CHIP	33K 5% 1/10W
R825	1-243-608-71	METAL OXIDE	1.5K 5% 3W
R826	1-247-891-00	CARBON	330K 5% 1/4W
R827	1-216-317-71	METAL OXIDE	1.5 5% 2W
R828	1-243-608-71	METAL OXIDE	1.5K 5% 3W
R829	1-243-606-71	METAL OXIDE	1K 5% 3W
R830	1-260-332-51	CARBON	2.2K 5% 1/2W
R831	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R833	1-260-125-11	CARBON	150K 5% 1/2W
R834	1-245-468-21	METAL	180K 1% 1/4W
R835	1-260-125-11	CARBON	150K 5% 1/2W
R838	1-216-838-11	METAL CHIP	27K 5% 1/10W
R839	1-216-864-11	SHORT CHIP	0
R843	1-216-864-11	SHORT CHIP	0
R844	1-218-867-11	METAL CHIP	6.8K 5% 1/10W
R846	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R847	1-216-833-11	METAL CHIP	10K 5% 1/10W
R851	1-216-821-11	METAL CHIP	1K 5% 1/10W
R852	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
R853	1-218-859-11	METAL CHIP	3.3K 0.5% 1/10W

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REF NO.	PART NO.	DESCRIPTION	REMARK
R854	1-218-877-11	METAL CHIP	18K 0.5% 1/10W
R855	1-216-864-11	SHORT CHIP	0
R856	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
R859	1-218-883-11	METAL CHIP	33K 0.5% 1/10W
R861	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R864	1-218-865-11	METAL CHIP	5.6K 0.5% 1/10W
R865	1-216-821-11	METAL CHIP	1K 5% 1/10W
R866	1-218-895-11	METAL CHIP	100K 0.5% 1/10W
R868	1-249-393-11	CARBON	10 5% 1/4W
R869	1-249-381-11	CARBON	1 5% 1/4W
R870	1-218-855-11	METAL CHIP	2.2K 0.5% 1/10W
R871	1-243-692-71	METAL OXIDE	220 5% 1W
R872	1-216-864-11	SHORT CHIP	0
R873	1-216-841-11	METAL CHIP	47K 5% 1/10W
R876	1-216-833-11	METAL CHIP	10K 5% 1/10W
R877	1-218-895-11	METAL CHIP	100K 0.5% 1/10W
R878	1-216-349-00	METAL OXIDE	1 5% 1W
R879	1-245-470-21	METAL	220K 1% 1/4W
R880	1-245-470-21	METAL	220K 1% 1/4W
R881	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W
R882	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R883	1-249-421-11	CARBON	2.2K 5% 1/4W
R887	1-216-837-11	METAL CHIP	22K 5% 1/10W
R888	1-218-887-11	METAL CHIP	47K 0.5% 1/10W
R889	1-243-531-71	METAL OXIDE	100 5% 3W
R890	1-215-910-00	METAL OXIDE	68 5% 3W
R891	1-249-385-11	CARBON	2.2 5% 1/4W
R893	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W
R895	1-218-855-11	METAL CHIP	2.2K 0.5% 1/10W
R907	1-216-840-11	METAL CHIP	39K 5% 1/10W
R908	1-216-840-11	METAL CHIP	39K 5% 1/10W
R918	1-216-805-11	METAL CHIP	47 5% 1/10W
R920	1-216-849-11	METAL CHIP	220K 5% 1/10W
R921	1-216-849-11	METAL CHIP	220K 5% 1/10W
R922	1-218-285-11	METAL CHIP	75 5% 1/10W
R925	1-216-809-11	METAL CHIP	100 5% 1/10W
R926	1-216-809-11	METAL CHIP	100 5% 1/10W
R927	1-216-809-11	METAL CHIP	100 5% 1/10W
R928	1-218-285-11	METAL CHIP	75 5% 1/10W
R929	1-218-285-11	METAL CHIP	75 5% 1/10W
R930	1-218-285-11	METAL CHIP	75 5% 1/10W
R940	1-216-849-11	METAL CHIP	220K 5% 1/10W
R945	1-216-833-11	METAL CHIP	10K 5% 1/10W
R947	1-216-839-11	METAL CHIP	33K 5% 1/10W
R949	1-216-833-11	METAL CHIP	10K 5% 1/10W
R951	1-216-021-00	RES-CHIP	68 5% 1/10W
R952	1-216-821-11	METAL CHIP	1K 5% 1/10W
R953	1-216-853-11	METAL CHIP	470K 5% 1/10W
R954	1-216-821-11	METAL CHIP	1K 5% 1/10W
R957	1-218-285-11	METAL CHIP	75 5% 1/10W
R967	1-216-853-11	METAL CHIP	470K 5% 1/10W
R993	1-216-817-11	METAL CHIP	470 5% 1/10W
R1201	1-216-853-11	METAL CHIP	470K 5% 1/10W
R2646	1-249-381-11	CARBON	1 5% 1/4W
R2647	1-249-429-11	CARBON	10K 5% 1/4W
R8009	1-218-867-11	METAL CHIP	6.8K 5% 1/10W
R8010	1-245-464-21	METAL	120K 1% 1/4W
R8011	1-216-841-11	METAL CHIP	47K 5% 1/10W
R8012	1-216-841-11	METAL CHIP	47K 5% 1/10W
R8013	1-245-462-21	METAL	100K 1% 1/4W
R9013	1-216-809-11	METAL CHIP	100 5% 1/10W
R9021	1-216-809-11	METAL CHIP	100 5% 1/10W

REF NO.	PART NO.	DESCRIPTION	REMARK
R9023	1-216-809-11	METAL CHIP	100 5% 1/10W
R9025	1-216-809-11	METAL CHIP	100 5% 1/10W
R9027	1-216-838-11	METAL CHIP	27K 5% 1/10W
R9034	1-216-809-11	METAL CHIP	100 5% 1/10W
R9035	1-216-809-11	METAL CHIP	100 5% 1/10W
R9036	1-216-864-11	SHORT CHIP	0
R9037	1-216-809-11	METAL CHIP	100 5% 1/10W
R9039	1-216-864-11	SHORT CHIP	0
R9040	1-216-857-11	METAL CHIP	1M 5% 1/10W
R9041	1-216-857-11	METAL CHIP	1M 5% 1/10W
R9042	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
R9043	1-216-821-11	METAL CHIP	1K 5% 1/10W
R9044	1-216-817-11	METAL CHIP	470 5% 1/10W
R9045	1-216-809-11	METAL CHIP	100 5% 1/10W
R9046	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R9047	1-216-833-11	METAL CHIP	10K 5% 1/10W
R9051	1-216-864-11	SHORT CHIP	0
R9052	1-216-864-11	SHORT CHIP	0
R9053	1-218-285-11	METAL CHIP	75 5% 1/10W
R9057	1-216-809-11	METAL CHIP	100 5% 1/10W
R9062	1-249-417-11	CARBON	1K 5% 1/4W
<RELAY>			
RY600	$\triangle$ 1-755-198-12	RELAY, AC POWER	
<SWITCH>			
S600	$\triangle$ 1-571-433-31	SWITCH, PUSH (AC POWER)	
S800	1-572-707-11	SWITCH, LEVER	
SWF100	1-579-273-11	FILTER, SURFACE WAVE	
SWF101	1-767-873-11	FILTER, SURFACE WAVE	
<TRANSFORMER>			
T600	$\triangle$ 1-456-354-11	LINE FILTER COIL	
T602	$\triangle$ 1-439-692-11	CONVERTER TRANSFORMER (SRT)	
T603	$\triangle$ 1-456-354-11	LINE FILTER COIL	
T800	1-435-374-11	TRANSFORMER, FERRITE (HDT)	
T802	$\triangle$ 1-453-309-21	TRANSFORMER ASSY FLY BACK (NX-4450/M3A4)	
<THERMISTOR>			
THP600	$\triangle$ 1-804-530-11	THERMISTOR, POSITIVE	
<TEST PIN>			
TP02	1-536-354-00	POST PIN	
TP03	1-536-354-00	POST PIN	
TP04	1-536-354-00	POST PIN	
TP601	1-536-354-00	POST PIN	
<VARISTOR>			
VDR600	1-804-995-11	VARISTOR	
<CRYSTAL>			
X001	1-795-839-21	QUARTZ CRYSTAL UNIT	



The components identified by shading
and mark Δ are critical for safety.
Replace only with part number specified.

REF NO.	PART NO.	DESCRIPTION	REMARK
VARIANT PARTS LIST			
<SWITCH>			
SWF102	1-767-083-11	FILTER, SURFACE WAVE (KV-14CT1B)	
<TUNER>			
TU101	8-598-623-00	TUNER, FSS BTP-AC421 (KV-14CT1B/1E/1K)	
TU101	8-598-624-00	TUNER, FSS BTP-AU621 (KV-14CT1U)	

* A-1405-473-A MOUNTED PWB, C *****			
	4-382-854-01	SCREW (M3X8), P, SW (+)	
<CAPACITOR>			
C751	1-107-961-91	ELECT 10UF 20.00% 250V	
C752	1-115-350-51	CERAMIC 0.0047UF 2KV	
C754	1-107-651-11	ELECT 4.7UF 20.00% 250V	
C781	1-107-960-11	ELECT 4.7UF 20.00% 250V	
C782	1-102-074-00	CERAMIC 0.001UF 10.00% 50V	
C783	1-162-964-11	CERAMIC CHIP 0.001UF 10.00% 50V	
C786	1-162-964-11	CERAMIC CHIP 0.001UF 10.00% 50V	
C787	1-164-645-11	CERAMIC 1000PF 10.00% 500V	
<CONNECTOR>			
CN701	* 1-564-510-11	PLUG, CONNECTOR 7P	
CN703	* 1-564-508-11	PLUG, CONNECTOR 5P	
CN704	1-695-915-11	TAB (CONTACT)	
CN705	1-695-915-11	TAB (CONTACT)	
<DIODE>			
D750	8-719-908-03	GP08D	
D754	8-719-970-83	HSS82-TJ	
D755	8-719-970-83	HSS82-TJ	
D756	8-719-970-83	HSS82-TJ	
D780	8-719-991-33	ISS133T-77	
D781	8-719-991-33	ISS133T-77	
D782	8-719-069-55	DIODE UDZSTE-175.6B	
<IC>			
IC751	6-703-482-01	IC TDA6108AJF/N1	
<JACK>			
J751	Δ 1-451-544-11	SOCKET, CRT	

REF NO.	PART NO.	DESCRIPTION	REMARK
<COIL>			
L780	1-410-667-31	INDUCTOR 22UH	
<RESISTOR>			
R713	1-216-864-11	SHORT CHIP 0	
R752	1-216-819-11	METAL CHIP 680 5% 1/10W	
R753	1-216-819-11	METAL CHIP 680 5% 1/10W	
R754	1-216-819-11	METAL CHIP 680 5% 1/10W	
R756	1-219-746-11	METAL 1K 5% 1/2W	
R757	1-219-746-11	METAL 1K 5% 1/2W	
R758	1-219-746-11	METAL 1K 5% 1/2W	
R763	1-260-087-11	CARBON 100 5% 1/2W	
R764	1-260-087-11	CARBON 100 5% 1/2W	
R765	1-260-087-11	CARBON 100 5% 1/2W	
R773	1-260-132-11	CARBON 560K 5% 1/2W	
R774	1-215-912-11	METAL OXIDE 150 5% 3W	
R780	1-260-131-11	CARBON 470K 5% 1/2W	
R781	1-243-949-71	METAL OXIDE 0.47 5% 2W	
R783	1-260-087-11	CARBON 100 5% 1/2W	
R794	1-249-377-11	CARBON 0.47 5% 1/4W	
R795	1-260-352-11	CARBON 100K 5% 1/2W	
<VARIABLE RESISTOR>			
RV750	1-241-656-11	RES, ADJ, METAL FILM 110M	

ACCESSORIES AND PACKING MATERIALS *****			
	1-501-615-32	ANTENNA, LOOP (KV-14CT1U)	
	1-501-939-12	ANTENNA, TELESCOPIC (KV-14CT1B/1E/1K)	
	* 4-093-050-01	CUSHION (PULP), UPPER	
	* 4-093-051-01	CUSHION (PULP), LOWER	
	* 4-093-115-01	INDIVIDUAL CARTON	
	* 4-206-555-01	BAG, PROTECTION	
	4-093-927-12	MANUAL, INSTRUCTION (KV-14CT1B)	
	4-093-927-72	MANUAL, INSTRUCTION (KV-14CT1B)	
	4-093-927-22	MANUAL, INSTRUCTION (KV-14CT1E)	
	* 4-093-927-32	MANUAL, INSTRUCTION (KV-14CT1E)	
	4-093-927-42	MANUAL, INSTRUCTION (KV-14CT1E)	
	4-093-927-62	MANUAL, INSTRUCTION (KV-14CT1K)	
	4-093-927-52	MANUAL, INSTRUCTION (KV-14CT1U)	

REMOTE COMMANDER *****			
	1-477-861-11	STANDARDTYPE COMMANDER RM-W100	

SONY®

4-093-927-12(1)



409392712

FD Trinitron Colour Television

Mode d'emploi

FR

Bedienungsanleitung

DE

Manuale d'Istruzioni

IT

Gebruiksaanwijzing

NL

***KV-21CT1B
KV-14CT1B***

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Introduction

Merci d'avoir choisi ce téléviseur couleur Sony à Ecran Plat FD Trinitron.

Avant d'utiliser le téléviseur, lisez attentivement ce manuel et conservez-le pour vous y référer ensuite.

Symboles utilisés dans ce manuel :

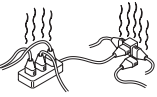
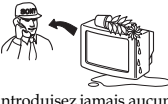
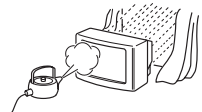
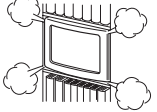
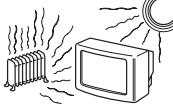
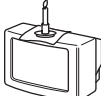
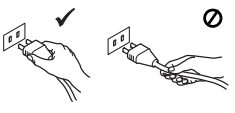
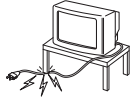
-  Remarques importantes.
-  Information concernant la fonction.
- 1,2...Instructions à suivre.
-  Les touches noires de la télécommande indiquent sur quelles touches appuyer pour exécuter les diverses fonctions.
-  Résultat des instructions.

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Consignes de sécurité

 Ce modèle fonctionne uniquement sur tension secteur de 220-240 volts. Ne connectez pas trop d'appareils sur la même prise afin de ne pas risquer un incendie ou un choc électrique.	 Pour des raisons environnementales et de sécurité, il est recommandé de ne pas laisser le téléviseur en veille lorsque vous ne l'utilisez pas. Pour des périodes prolongées d'inutilisation, débranchez-le de la prise de courant.	 N'introduisez jamais aucun objet dans le téléviseur afin de ne pas risquer un choc électrique. Assurez-vous de ne jamais renverser de liquide dans l'appareil. Si un liquide ou un objet pénétrait dans le téléviseur, débranchez-le par la prise secteur et ne l'utilisez plus avant sa vérification par le service après-vente.
 N'ouvrez pas le capot et le boîtier arrière du téléviseur. Contactez toujours le service après-vente en cas de problème.	 Pour votre sécurité, ne touchez aucune partie du téléviseur, cordon secteur ou câble d'antenne lors d'un orage.	 Pour écarter tout risque d'incendie ou d'électrocution, n'exposez pas le téléviseur à l'humidité ou à la pluie.
 N'obstruez jamais les orifices d'aération du téléviseur. Pour une aération correcte, laissez toujours un espace libre d'au moins 10 cm autour de l'appareil (surtout si vous l'encastrez dans un meuble).	 Ne posez jamais le téléviseur dans un endroit chaud, humide ou trop poussiéreux. Ne l'installez pas dans un endroit où il pourrait être soumis à des vibrations mécaniques.	 Pour ne pas risquer un incendie, éloignez du téléviseur tout objet inflammable ou lumière incandescente (par exemple des bougies).
 Nettoyez l'écran et le coffret de votre téléviseur avec un chiffon doux légèrement humide. N'utilisez pas de tampon abrasif, d'appareil de nettoyage alcalin, de poudre récurrente ou de solvant comme de l'alcool, du benzine ou un vaporisateur antistatique. Comme précaution de sécurité, nous vous recommandons de toujours débrancher le téléviseur avant le nettoyage.	 Débranchez le téléviseur par la fiche d'alimentation. Ne tirez pas sur le cordon.	 Prenez garde de ne pas placer des objets lourds sur le cordon d'alimentation afin de ne pas l'endommager. Nous vous recommandons de ne pas enrouler de cordon trop long autour des supports à l'arrière du téléviseur.
 Installez le téléviseur sur un meuble stable. Ne permettez pas aux enfants de monter dessus. Ne placez pas le téléviseur sur un côté ou sur la façade.	 Débranchez le téléviseur du courant secteur avant de le déplacer. D'une façon générale, pendant son transport évitez les vibrations et les déformations. Si le téléviseur tombait ou était endommagé, faites le vérifier immédiatement par le service après-vente.	 Ne couvrez pas les zones d'aération du téléviseur avec des éléments tels que des rideaux, des journaux, etc...

Présentation générale des touches de la télécommande

Visualisation de l'information sur l'écran

Appuyez sur cette touche pour présenter toutes les informations sur l'écran. Appuyez à nouveau pour les faire disparaître.

Coupage du son

Appuyez sur cette touche pour couper le son. Appuyez à nouveau pour le récupérer.

Sélection de la source d'entrée

Appuyez plusieurs fois sur cette touche jusqu'à ce que le symbole de la source d'entrée apparaisse sur l'écran.

Cette touche ne fonctionne qu'en mode télétexte.

La fonction A/B associée à cette touche ne fonctionne pas sur ce téléviseur.

Sélection des chaînes

Appuyez sur ces touches pour sélectionner les chaînes.

Pour des numéros de chaîne à deux chiffres, appuyez sur le troisième chiffre rapidement.

ou

Appuyez sur -/-- et ensuite sur le premier et le second chiffre. Si vous vous trompez en introduisant le premier chiffre, introduisez cependant le deuxième chiffre (de 0 à 9) et répétez ensuite l'opération.

Marche Temporaire

Réglez le téléviseur pour qu'il se mette automatiquement sous tension.

Arrêt Temporaire

Réglez le téléviseur pour qu'il se mette automatiquement hors tension.

Touche sans fonction sur cet appareil.

Réglage du volume

Appuyez sur cette touche pour régler le volume du téléviseur. Cette touche ne fonctionne qu'en mode télétexte.

La fonction D associée à cette touche ne fonctionne pas sur ce téléviseur.

Sélection du mode d'image

Appuyez plusieurs fois sur cette touche pour changer de mode d'image.

Eteindre temporairement le téléviseur

Appuyez sur cette touche pour éteindre temporairement le téléviseur (le voyant de mise en veille s'éclairera). Appuyez à nouveau pour allumer le téléviseur à partir du mode veille (standby).

Pour une meilleure économie d'énergie, il est conseillé d'éteindre complètement le téléviseur lorsqu'on ne l'utilise pas.



En l'absence de signal antenne, si l'on n'appuie sur aucune touche, le téléviseur passera automatiquement en mode veille (standby) au bout de 15 minutes.

Sélection du mode TV

Appuyez sur cette touche pour désactiver le télétexte ou l'entrée vidéo.

Retour à la dernière chaîne

Appuyez plusieurs fois sur cette touche pour revenir à la dernière chaîne sélectionnée (la chaîne précédente doit avoir été visionnée pendant 5 secondes au moins).

Sélection des chaînes

Appuyez sur cette touche pour sélectionner la chaîne suivante ou la chaîne précédente.

Activation du Système des Menus

Appuyez sur cette touche pour que le menu apparaisse sur l'écran. Appuyez à nouveau pour le désactiver.

Touches de sélection du menu

- ▲ Monter d'un niveau
- ▼ Descendre d'un niveau
- ◀ Aller au menu où à la sélection précédente
- ▶ Aller au menu où à la sélection suivante

☑ Confirmer la sélection

Sélection du Télétexte

Appuyez sur cette touche pour afficher le télétexte.

Sélection du format de l'écran

Appuyez plusieurs fois sur cette touche pour passer du format de l'écran 4 : 3 (image conventionnelle) à une image au format 16 : 9.

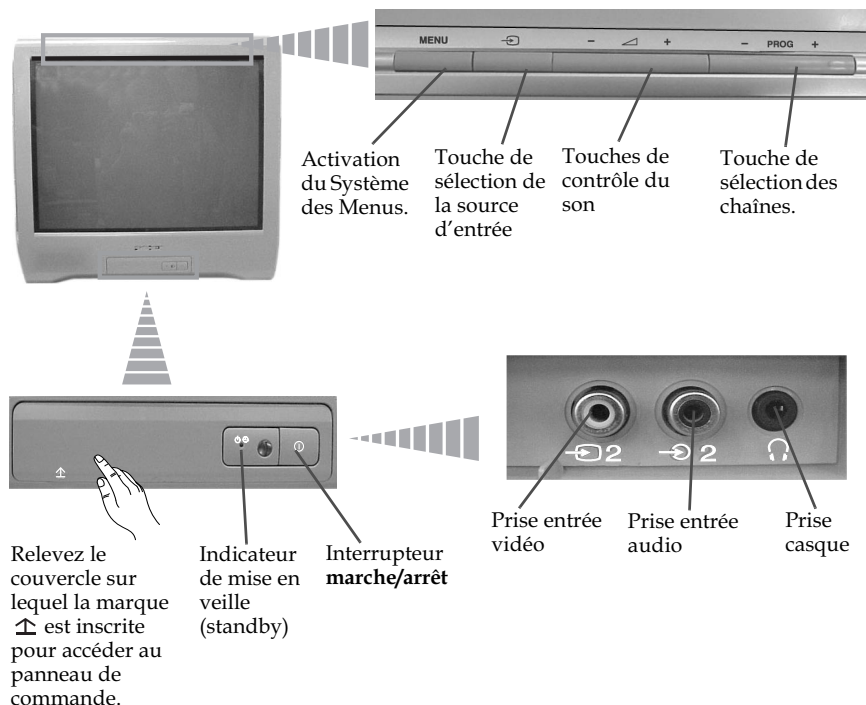


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Oltre les fonctions de télévision, toutes les touches de couleur sont aussi utilisées pour les fonctions de télétexte. Pour tout renseignement complémentaire, consultez le chapitre "Télétexte" de ce mode d'emploi (voir page 16).

Présentation générale des touches du téléviseur

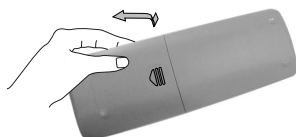


Insertion des piles dans la télécommande



Vérifiez que les piles sont correctement placées!

Respectez l'environnement : déposez les piles usagées dans les conteneurs prévus à cet effet.



Branchement de l'antenne amovible (pour KV-14CT1B uniquement)

i Pour une meilleure réception de l'image, nous vous conseillons de connecter l'appareil à une antenne extérieure. Cependant, si vous ne disposez pas d'antenne extérieure mais que le signal VHF/UHF est suffisamment fort, vous pouvez connecter l'antenne télescopique fournie avec cet appareil comme indiqué ci-dessous :

1 Insérez l'antenne dans la rainure située sur la partie supérieure du téléviseur jusqu'à ce qu'elle fasse "clic".



2 Connectez le câble de l'antenne au connecteur arrière de l'appareil.

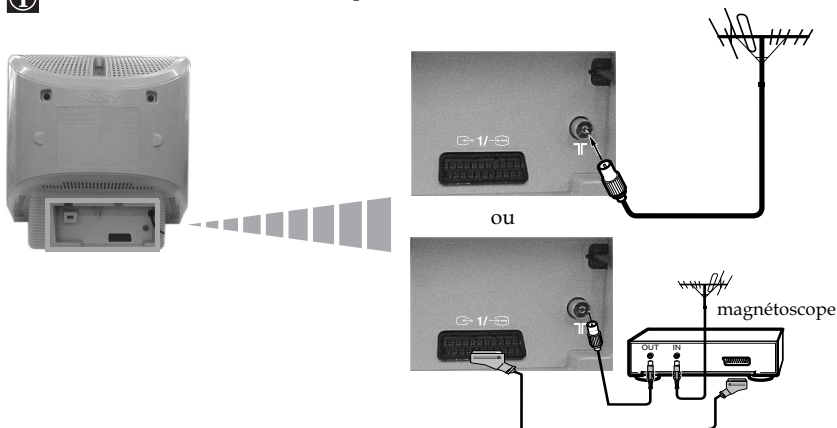


3 Allumez l'appareil et orientez l'antenne de façon à obtenir une bonne réception de l'image.

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Branchement de l'antenne extérieure et du magnétoscope

i Les câbles de connexion ne sont pas fournis.



Le branchement par connecteur Péritel est présenté en option

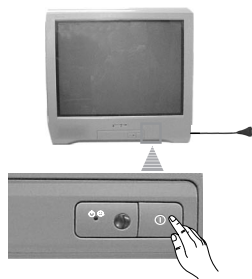
A Pour de plus amples détails sur le branchement du magnétoscope, consultez le chapitre "Connexion des équipements en option" de ce mode d'emploi (voir page 17).

Mise sous tension et mémorisation automatique des chaînes du téléviseur

i La première fois que vous allumerez le téléviseur, une séquence de menus apparaîtra sur l'écran. Elle vous permettra de 1) sélectionner la langue des écrans de menus, 2) sélectionner le pays dans lequel vous désirez utiliser l'appareil, 3) chercher et mémoriser automatiquement toutes les chaînes disponibles (émetteurs TV), 4) modifier l'ordre dans lequel les chaînes (émetteurs TV) apparaissent sur l'écran et 5) régler l'inclinaison de l'image (pour KV-21CT1B uniquement).

Cependant si, au bout d'un certain temps, vous devez à nouveau changer la langue des menus ou de pays, reprendre la mémorisation automatique (en cas de déménagement par ex.) ou modifier l'ordre des canaux, vous pouvez le faire en sélectionnant le menu approprié  (Réglage) ou  (Réglage des chaînes).

- 1 Connectez l'interrupteur du téléviseur à la prise de courant (220-240V CA, 50Hz). Appuyez sur l'interrupteur marche/ arrêt  de la partie frontale du téléviseur pour l'allumer. La première fois que vous allumerez le téléviseur, le menu **Language** (Langue) apparaîtra automatiquement sur l'écran.

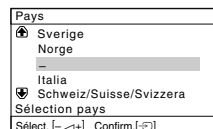


- 2 Appuyez sur la touche  +/- sur le panneau de commande supérieur pour sélectionner la langue, puis appuyez sur  pour confirmer la sélection. A partir de ce moment, tous les menus apparaîtront dans la langue que vous avez choisie.



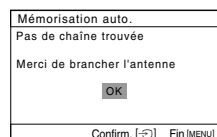
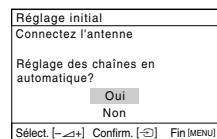
- 3 Le menu **Pays** apparaîtra automatiquement sur l'écran. Appuyez sur la touche  +/- pour sélectionner le pays dans lequel vous désirez utiliser le téléviseur et appuyez ensuite sur la touche  pour confirmer la sélection.

i Si le pays où vous allez utiliser le téléviseur ne figure pas sur la liste, sélectionnez "-" au lieu de sélectionner un pays.



- 4 Assurez-vous que le câble d'antenne est correctement branché suivant les instructions fournies, puis appuyez sur  pour confirmer. Le réglage et la mémorisation automatique de tous les canaux (émetteurs TV) disponibles commencent.

- A** • Ce processus peut demander quelques minutes. Soyez patient et n'appuyez sur aucune touche tant que durera le processus de mémorisation. Sinon, le processus ne serait pas complet.
- Si le téléviseur n'a trouvé aucune chaîne (émetteur TV) après la mémorisation automatique, vous verrez apparaître sur l'écran un message vous demandant de brancher l'antenne. Veuillez la brancher comme indiqué à la page 7 de ce manuel et appuyez ensuite sur la touche . Le processus de mémorisation automatique reprendra.



5 Lorsque toutes les chaînes (émetteurs TV) ont été réglées et mémorisées, le menu **Ordre des chaînes** apparaît automatiquement sur l'écran. Il permet de changer l'ordre d'apparition des chaînes sur l'écran.

a) Si vous ne désirez pas changer l'ordre des chaînes, appuyez sur MENU.

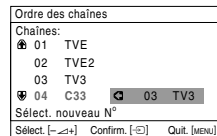
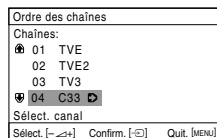
b) Si vous désirez changer l'ordre des chaînes:

i Le changement de l'emplacement d'une chaîne bouleversera l'ordre des chaînes suivantes. Il faut donc commencer cette réorganisation dans l'ordre croissant (ex: TF1 sur le numéro 1, France 2 sur le numéro 2, France 3 sur le numéro 3, etc...)

1 Appuyez sur la touche $\triangleleft$ +/- pour sélectionner le numéro de la chaîne et le canal (émetteur TV) que vous désirez changer de place et appuyez ensuite sur $\rightarrow$.

2 Appuyez sur la touche $\triangleleft$ +/- pour sélectionner le nouveau numéro de chaîne sous lequel vous désirez mémoriser le canal (émetteur TV) sélectionné et appuyez ensuite sur $\rightarrow$.

3 Reprenez à b) 1 et b) 2 si vous désirez réorganiser d'autres chaînes de télévision.

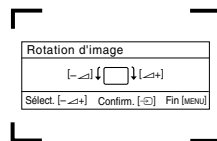


6 **i** L'option suivante est uniquement disponible pour le KV-21CT1B.

Du fait du magnétisme terrestre, l'image peut apparaître penchée. Le menu **Rotation d'image** vous permet de régler l'image si nécessaire.

a) Si cela n'est pas nécessaire, appuyez sur $\rightarrow$.

b) Si cela s'avère nécessaire, appuyez sur $\triangleleft$ +/- pour rectifier toute inclinaison de l'image. Finalement, appuyez sur la touche $\rightarrow$ pour la mémoriser.



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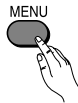
- i** Pour que le menu apparaisse de nouveau, maintenez enfoncée la touche MENU du panneau de commande supérieur pendant cinq secondes environ.
- Les touches MENU, $\left[\begin{smallmatrix} + \\ - \end{smallmatrix} \right]$ et $\blacktriangleleft$ / $\blacktriangleright$ / $\blacktriangledown$ / $\blacktriangleup$ de la télécommande peuvent également être utilisées pour effectuer les opérations ci-dessus.

Le téléviseur est prêt à fonctionner.

Introduction au Système des menus et son utilisation

i Ce téléviseur utilise un système de menus sur écran pour vous guider dans les diverses opérations que vous effectuez. Utilisez les touches suivantes de la télécommande pour passer d'un menu à l'autre :

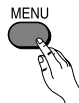
1 Appuyez sur la touche **MENU** pour présenter le premier niveau de menu sur l'écran.



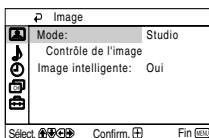
- 2** • Pour obtenir le menu ou l'option désirée, appuyez sur la touche **↓** ou **↑**.
• Pour entrer dans le menu ou l'option sélectionnée, appuyez sur la touche **➡**.
• Pour revenir au menu ou à l'option précédente, appuyez sur la touche **⬅**.
• Pour modifier les réglages de l'option sélectionnée, appuyez sur la touche **↓/↑/⬅** ou **➡**.
• Pour confirmer et mémoriser votre sélection, appuyez sur la touche **[OK]**.



3 Appuyez sur la touche **MENU** pour revenir à l'image télévisée.



Image



Le menu “Image” vous permet de modifier les réglages de l'image.

Pour cela :

Après avoir sélectionné l'option que vous désirez modifier, appuyez sur la touche **➡**. Puis appuyez plusieurs fois sur **↓/↑/⬅** ou **➡** pour modifier le réglage et ensuite sur **[OK]** pour entrer ce nouveau réglage en mémoire.

Ce menu vous permet aussi de modifier le mode de l'image suivant le type de chaîne que vous êtes en train de regarder :

Mode	Studio (pour régler le contraste et la netteté de l'image). Cinéma (pour une image mettant les détails en valeur). Jeux (pour les jeux sur console). Personnel (pour un réglage en fonction de vos préférences).	
Contrôle de l'image	Contraste	Appuyez sur la touche ↓ ou ⬅ pour réduire le contraste de l'image. Appuyez sur la touche ↑ ou ➡ pour renforcer le contraste de l'image.

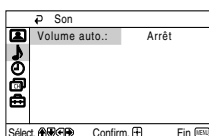
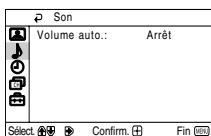
Luminosité	Appuyez sur la touche ▼ ou ◀ pour obtenir une image plus sombre. Appuyez sur la touche ▲ ou ▶ pour obtenir une image plus lumineuse.
Couleurs	Appuyez sur la touche ▼ ou ◀ pour réduire l'intensité des couleurs. Appuyez sur la touche ▲ ou ▶ pour augmenter l'intensité des couleurs
Teinte	Appuyez sur la touche ▼ ou ◀ pour affaiblir les tons verts. Appuyez sur la touche ▲ ou ▶ pour intensifier les tons verts.
 Teinte	ne peut être réglé pour le signal couleur NTSC (p. ex. vidéos provenant des Etats-Unis).
Netteté	Appuyez sur la touche ▼ ou ◀ pour adoucir l'image. Appuyez sur la touche ▲ ou ▶ pour raviver l'image.
R à Z	Sélectionnez  pour ramener l'image à la configuration d'usine.

Image intelligente	Oui/Arrêt	Sélectionnez pour optimiser la qualité d'image. Par exemple, réduire le niveau sonore lorsque le signal est faible.
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 A chaque modification du réglage “Contrôle de l'image”, “Mode” passe automatiquement à “Personnel” et le nouveau réglage est enregistré sous “Personnel”.

Son

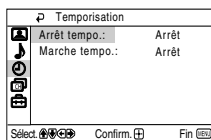


Le menu “Son” permet de modifier les paramètres du son.

Volume auto. Oui/Arrêt

Le niveau du volume des chaînes (émetteurs (TV) doit rester stable, indépendamment du signal émis (p. ex. dans le cas d’annonces publicitaires).

⌚ Temporisation



Le menu “Temporisation” vous permet de modifier les réglages du programmeur.

Arrêt Temporaire L’option “Arrêt tempo.” qui fait partie du menu “Temporisation”, vous permet de sélectionner un temps après lequel le téléviseur passe automatiquement en mode d'arrêt temporaire (standby).

Pour cela :

Après avoir sélectionné l'option, appuyez sur la touche , puis sur  ou  pour sélectionner la durée (1 heure 30 minutes au plus) et appuyez sur la touche  pour entrer cette nouvelle donnée en mémoire.



- Si, pendant que vous regardez la télévision, vous désirez savoir le temps qui reste avant l'arrêt, appuyez sur la touche .
- Une minute avant que le téléviseur ne passe en mode d'attente, le message “Le télé va s'arrêter” s'affiche automatiquement à l'écran du téléviseur.

Marche Temporaire

L'option “Marche tempo.” qui fait partie du menu “Temporisation”, vous permet de sélectionner une période de temps après laquelle le téléviseur se connectera automatiquement à partir du mode d'arrêt temporaire (standby).

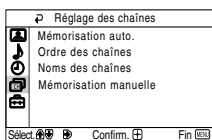
Pour cela :

Après avoir sélectionné l'option, appuyez sur la touche , puis sur la touche  ou  pour sélectionner la durée (12 heures au plus) et appuyez sur la touche  pour entrer cette nouvelle donnée en mémoire. Finalement, appuyez sur la touche  de mise en veille (standby) de la télécommande et, lorsque le temps fixé se sera écoulé, le téléviseur s'allumera automatiquement. Une fois le délai sélectionné écoulé, le téléviseur se met automatiquement sous tension et “Marche tempo.” s'affiche à l'écran.



- L'indicateur  de mise en veille (standby) du téléviseur s'allume en orange pour indiquer que la fonction de minuterie “Marche tempo.” est activée.
- Toute panne ou coupure de courant annulera cette fonction.
- Si aucune touche n'est activée pendant plus d'une heure après la mise sous tension du téléviseur à l'aide de la fonction “Marche tempo.”, le téléviseur passe automatiquement en mode d'attente

CH Réglage des chaînes



Le menu "Réglage des chaînes" vous permet de présélectionner des chaînes sur ce téléviseur.

Mémorisation automatiques

L'option "Mémorisation auto." du menu "Réglage des chaînes" permet au téléviseur de chercher et de mémoriser tous les canaux (émetteurs TV) disponibles.

Pour cela :

Après avoir sélectionné l'option, appuyez sur la touche et procédez ensuite comme indiqué au chapitre "Mise sous tension et mémorisation automatique des chaînes du téléviseur", étape 4 (voir page 8).

Ordre des chaînes

L'option "Ordre des chaînes" du menu "Réglage des chaînes", vous permet de changer l'ordre d'apparition des canaux (émetteurs TV).

Pour cela :

Après avoir sélectionné l'option, appuyez sur la touche et procédez ensuite comme indiqué dans le chapitre "Mise sous tension et mémorisation automatique des chaînes du téléviseur", étape 5b) (voir page 9).

Noms des chaînes

L'option "Noms des chaînes" du menu "Réglage des chaînes" vous permet d'attribuer à une chaîne un nom de cinq caractères maximum.

Pour cela :

- 1 Après avoir sélectionné l'option, appuyez sur la touche . Appuyez sur la touche ou pour sélectionner la chaîne que vous désirez nommer, puis appuyez sur la touche .
- 2 Appuyez sur . Lorsque le premier élément de la colonne Nom est mis en valeur, appuyez sur la touche ou pour sélectionner une lettre, un chiffre ou " " pour un espace en blanc et appuyez ensuite sur la touche pour confirmer ce caractère. Sélectionnez les quatre autres caractères de la même façon et appuyez enfin sur la touche pour les mémoriser.

voir page suivante, SVP...

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Mémorisation manuelle

L'option "Mémorisation manuelle" du menu "Réglage des chaînes", vous permet :

- a) De régler les canaux (émetteurs TV) ou une entrée magnétoscope dans l'ordre des chaînes que vous désirez.

Pour cela :

- 1 Après avoir sélectionné l'option "Mémorisation manuelle", appuyez sur la touche . L'option **Chaîne** étant mise en relief, appuyez sur la touche  et ensuite, appuyez sur la touche  ou  pour sélectionner le numéro de chaîne sur lequel vous désirez mémoriser un émetteur TV ou le canal vidéo (pour le canal vidéo, nous vous conseillons de sélectionner la chaîne numéro "0"). Appuyez sur la touche .
-  L'option suivante apparaîtra uniquement suivant le pays sélectionné dans le menu "Langue/Pays".
- 2 Après avoir sélectionné l'option **Norme**, appuyez sur la touche  et ensuite, appuyez sur la touche  ou  pour sélectionner la norme d'émission de télévision (**B/G** pour l'Europe occidentale, **L** pour la France, **I** pour la Grande-Bretagne ou **D/K** pour l'Europe de l'Est). Appuyez sur la touche .
- 3 Après avoir sélectionné l'option **Canal**, appuyez sur la touche  et ensuite, appuyez sur la touche  ou  pour sélectionner le type de canal ("**C**" pour les chaînes hertziennes ou "**S**" pour les chaînes câblées). Appuyez sur la touche  puis appuyez sur les touches numériques pour introduire directement le numéro du canal de l'émetteur TV ou celui du signal du canal vidéo. Si vous ne connaissez pas le numéro du canal, appuyez sur la touche  ou  pour le chercher. Lorsque vous trouverez le canal que vous désirez entrer en mémoire, appuyez deux fois sur la touche .

Reprenez toutes ces étapes pour régler et mémoriser d'autres canaux.

- b) Même lorsque la fonction de réglage fin automatique (AFT) est toujours activée, il est cependant possible, si vous observez une distorsion de l'image, de la régler manuellement pour en améliorer la réception.

Pour cela :

Pendant que vous regardez la chaîne (émetteur TV) sur laquelle vous désirez procéder à ce réglage fin, sélectionnez l'option **AFT** et ensuite, appuyez sur la touche . Appuyez sur la touche  ou  pour régler le niveau de fréquence du canal entre -15 et +15. Finalement, appuyez deux fois sur la touche  pour entrer en mémoire cette nouvelle donnée.

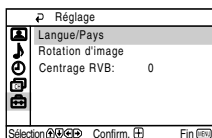
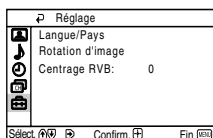
- c) Sauter des numéros de chaîne que vous ne désirez pas utiliser lorsque la sélection est effectuée au moyen des touches PROG +/-.

Pour cela :

En mettant en valeur l'option **Chaîne**, appuyez sur la touche **PROG** +/- jusqu'à l'apparition du numéro de chaîne que vous désirez supprimer. Lorsque celui-ci apparaît sur l'écran, sélectionnez l'option **Saut** et ensuite, appuyez sur la touche . Appuyez sur la touche  ou  pour sélectionner **Oui** et, finalement, appuyez deux fois sur la touche  pour le mémoriser.

Si vous désirez plus tard annuler cette fonction, sélectionnez à nouveau "Non" au lieu de "Oui".

Réglage



Le menu “Réglage” vous permet de modifier diverses configurations de ce téléviseur.

Langue/Pays

L'option “Langue/Pays” du menu “Réglage”, vous permet de sélectionner la langue dans laquelle vous désirez que les menus sur écran apparaissent. Elle vous permet aussi de sélectionner le pays dans lequel vous désirez utiliser le téléviseur.

Pour cela :

Après avoir sélectionné l'option, appuyez sur la touche  et procédez ensuite comme il vous est indiqué au chapitre “Mise sous tension et memorisation automatique des chaînes du téléviseur”, étapes 2 et 3 (voir page 8).

Rotation d'image (pour KV-21CT1B uniquement)

Du fait du magnétisme terrestre, l'image télévisée peut apparaître penchée. Dans ce cas, vous pouvez la régler en utilisant l'option “Rotation d'image” du menu “Réglage”.

Pour cela :

Après avoir sélectionné l'option, appuyez sur la touche . Appuyez sur  ou  ( ou ) pour rectifier toute inclinaison de l'image. Finalement, appuyez sur la touche  pour le mémoriser.

Centrage RVB

En connectant une source de signaux RVB, comme une “PlayStation”, il se peut que vous ayez à régler le centrage horizontal de l'image. Dans ce cas, vous pouvez le faire en utilisant l'option “Centrage RVB” du menu “Réglage”.

Pour cela :

Après avoir sélectionné l'option, appuyez sur la touche . Puis appuyez sur la touche  ou  pour régler le centrage de l'image de -10 à +10. Finalement, appuyez sur la touche  pour le mémoriser.

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Télétexte

i Le télétexte est un service d'information que diffuse la plupart des chaînes télévisées. La page du sommaire du service de télétexte (en général, la page 100) explique comment utiliser ce service. Pour évoluer à l'intérieur du télétexte, utilisez les touches de la télécommande comme indiqué ci-dessous.

A Vérifiez que vous utilisez un canal de télévision disposant d'un signal d'émission suffisamment fort pour éviter des erreurs de télétexte.

Entrer dans le service de Télétexte :

Après avoir sélectionné la chaîne (émetteur TV) qui transmet le service de télétexte que vous désirez consulter, appuyez sur la touche .



Sélectionner une page de Télétexte :

A l'aide des touches numériques de la télécommande, introduisez les trois chiffres du numéro de page que vous désirez consulter.

- Si vous vous trompez, choisissez trois chiffres quelconques et recommencez ensuite à introduire le numéro de page correct.
- Si le compteur de pages ne s'arrête pas, c'est que la page demandée n'est pas disponible. Dans ce cas, introduisez un autre numéro de page.

Pour vérifier le contenu d'un service Télétexte :

Appuyez sur la touche .

Sélectionner la page suivante ou la page précédente :

Appuyez sur la touche  ou .

Superposer le télétexte à l'image télévisée :

Pendant que vous voyez le télétexte, appuyez sur la touche . Appuyez à nouveau sur cette touche pour sortir du mode télétexte.

Pour figer une page Télétexte :

Certaines pages de télétexte comprennent des pages secondaires qui défilent automatiquement. Pour figer une page secondaire, appuyez sur la touche . Appuyez à nouveau sur cette touche pour libérer le blocage.

Voir une information cachée (par ex. : la solution d'une devinette) :

Appuyez sur la touche . Appuyez à nouveau sur cette touche pour que l'information soit à nouveau cachée.

Pour agrandir l'affichage Télétexte :

Appuyez sur . A chaque pression sur la touche , l'affichage Télétexte change comme suit : Agrandir la moitié supérieure → Agrandir la moitié inférieure → Taille normale.

Pour afficher une page Télétexte pendant le visionnage d'un programme télévisé.

- 1 Saisissez le numéro de Télétexte auquel vous souhaitez vous référer, puis appuyez sur .
- 2 Lorsque le numéro de page s'affiche, appuyez sur  pour visionner le texte de la page Télétexte.

Quitter le service Télétexte :

Appuyez sur la touche .

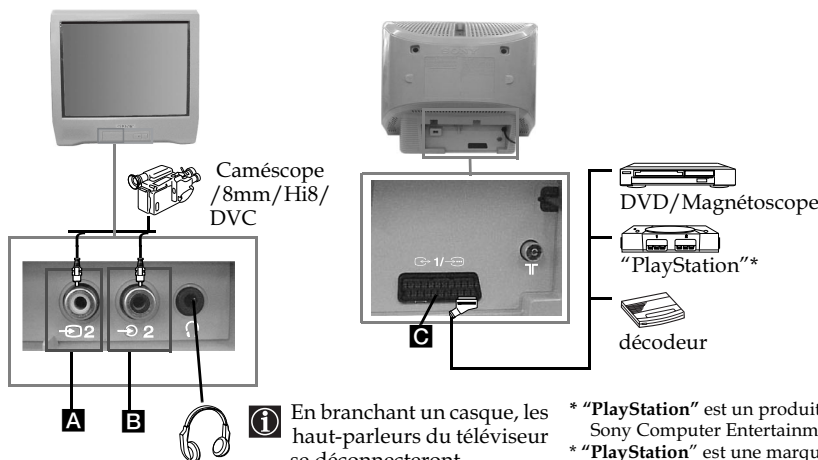
Fastext

i Le service Fastext permet d'avoir accès aux pages de télétexte en appuyant sur une seule touche.

Lorsque vous êtes dans le service de télétexte et au cas où il y a émission de signaux Fastext, un menu de codes couleur s'affiche au bas de la page : il permet d'accéder directement à une page. Pour cela, appuyez sur la touche de couleur correspondante de la télécommande (rouge, verte, jaune ou bleue).

Connexion des équipements en option

i Vous pouvez connecter à votre téléviseur une large gamme d'équipements optionnels, comme illustré ci-dessous (les câbles de connexion ne sont pas fournis).



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Connexion d'un magnétoscope :

Pour connecter un magnétoscope, consultez le chapitre "Branchement de l'antenne extérieure et du magnétoscope".

Nous vous conseillons de connecter le magnétoscope en utilisant un câble PériTel. Faute de quoi, vous devrez régler manuellement le canal du signal vidéo par le menu "Mémoire de la télévision" (pour cela, consultez le paragraphe a) page 14).

Consultez aussi le mode d'emploi de votre magnétoscope pour savoir comment obtenir le canal du signal vidéo.

Utilisation des équipements en option

- 1 Connectez l'équipement optionnel au connecteur adéquat du téléviseur comme indiqué ci-dessus.
- 2 Allumez l'équipement que vous avez connecté.
- 3 Pour obtenir l'image de l'équipement connecté, appuyez plusieurs fois sur la touche jusqu'à ce que le symbole correct d'entrée s'inscrive sur l'écran.

Symbole

1

1

2

Signaux d'entrée

- Signal d'entrée audio/ vidéo par le connecteur PériTel **C**.
- Signal d'entrée RVB par le connecteur PériTel **C**. Ce symbole n'apparaît que si une entrée RVB est connectée.
- Signal d'entrée vidéo du connecteur RCA **A** et signal d'entrée audio du connecteur **B**.

- 4 Pour revenir à l'image télévisée, appuyez sur la touche de la télécommande.

Spécifications

Norme de TV :

Suivant le pays sélectionné :
B/G/H, L, I, D/K

Standard couleur :

PAL, SECAM
NTSC 3.58, 4.43 (entrée vidéo seulement)

Couverture de canaux :

VHF: E2-E12
UHF: E21-E69
CATV: S1-S20
HYPER: S21-S41
L: F2-F10, B-Q, F21-F69
I: UHF B21-B69
D/K: R1-R12, R21-R69

Tube image :

Ecran plat FD Trinitron

Connecteurs arrières :

1/  Connecteur Péritel de 21 broches
(norme CENELEC) y compris
entrée audio/vidéo, entrée RVB,
sortie audio/vidéo TV.

Connecteurs frontaux :

2 entrée vidéo – connecteur RCA
2 entrée audio – connecteur RCA
 prise pour casque

Sortie son :

1 x 6W (puissance musicale)
1 x 3W (RMS)

Consommation d'énergie :

- KV-21CT1B: 56W
- KV-14CT1B: 50W

Consommation d'énergie en mode veille (standby) :

< 1W

Dimensions (l x h x prf) :

- KV-21CT1B: Env. 497 x 461 x 487 mm
- KV-14CT1B: Env. 374 x 355 x 420 mm

Poids

- KV-21CT1B: Env. 24 kg
- KV-14CT1B: Env. 11 kg

Accessoires fournis :

1 télécommande (RM-W100)
2 piles norme IEC
1 Antenne (pour KV-14CT1B uniquement)

Divers :

- Télétex, Fastext, TOPtext
- Arrêt temporaire.
- Marche temporaire.

La conception et les spécifications sont susceptibles de subir des modifications sans préavis de notre part.

Papier recyclé - Chlore : 0% 

Dépannage

 Voici quelques solutions simples qui vous permettront de résoudre des problèmes liés à la qualité de l'image et du son.

Problème	Solution
Pas d'image (écran noir) et pas de son.	• Vérifiez que l'antenne est bien branchée. • Allumez le téléviseur en appuyant sur la touche  de la partie frontale de l'appareil. • Si le voyant  du téléviseur est bien allumé, appuyez sur la touche  de la télécommande.
Mauvaise image ou pas d'image, mais bonne qualité sonore.	• Par le système des menus, entrez dans le "Contrôle de l'image" et sélectionnez "R à Z" pour revenir aux réglages d'usine (voir page 10).
Pas d'image ni de menu d'information de l'équipement optionnel branché à la prise Péritel située à l'arrière de l'appareil.	• Vérifiez que l'équipement optionnel est allumé et appuyez plusieurs fois sur la touche  de la télécommande jusqu'à ce que le symbole d'entrée correct apparaisse sur l'écran (voir page 17).
Image de bonne qualité mais pas de son.	• Appuyez sur la touche  + de la télécommande. • Vérifiez qu'un casque n'est pas branché.
Pas de couleur (programmes couleur).	• Par le système de menus, entrez dans le menu "Contrôle de l'image" et sélectionnez "R à Z" pour revenir aux réglages d'usine (voir page 10).
Distorsion de l'image en changeant de chaîne ou en sélectionnant le télétexte.	• Eteignez l'équipement branché aux connecteurs Péritel 21 broches situé à l'arrière du téléviseur.
Caractères erronés sur les pages de télétexte.	• Par le menu, sélectionnez l'option "Langue/Pays" et sélectionnez ensuite le pays dans lequel fonctionne le téléviseur (voir page 15).
L'image apparaît penchée. (pour KV-21CT1B uniquement)	• Par le système des menus sélectionnez l'option "Rotation d'image" dans le menu "Réglage" et corrigez l'inclinaison (voir page 15).
Image mais bruit.	• Par le système de menus, sélectionnez l'option "AFT" du menu "Mémorisation manuelle" et réglez manuellement la mémorisation pour obtenir une meilleure image (voir page 14). • Par le système des menus, sélectionnez l'option "Image intelligente" du menu "Image" et sélectionnez "Oui" pour atténuer le bruit de l'image (voir page 10).
Télécommande non opérationnelle.	• Changez les piles.
L'indicateur  de mise en veille (standby) du téléviseur clignote en rouge.	• Veuillez contacter le service après-vente Sony le plus proche.

 En cas de panne, confiez votre téléviseur à un personnel spécialisé. N'ouvrez jamais l'appareil.

Les principaux émetteurs français

i Compte tenu des évolutions, les émetteurs et canaux annoncés ci-après sont donnés à titre d'information et non d'engagement. Pour la réception de la majorité des émetteurs, l'antenne doit être en "position horizontale". Lorsqu'elle doit être en "position verticale", la lettre V suit le numéro de canal.

EMETTEURS	CANAUX					
	TF1	A2	FR3	CANAL+	ARTE	M6
1 ABBEVILLE Iimeux	63	67	60			
2 AJACCIO Coli Chiavari	31	21	24			
3 ALBERTVILLE tort du Mont	45	39	42	07V		
4 ALENCON Mont d'Amain	48	51	54			
5 ALES l'Hermitage					52	60
6 AMIENS St-Just/DURY	27	21	24	65		
7 ANGERS Rochefort	41	47	44	05 ou 10	49	52
8 ANGOULEME St-Saturnin	47	44	41	10	51	53
9 ARGENTON/CREUSE Malicornay					31	34
10 AURILLAC ALIVERGNE La Bastide	46	40	43			
11 AUTUN Bois de Rol	54		54	09V		
12 AUXERRE Molesmes	48	51	54			
13 AVIGNON Mont Ventoux/LE PONTET	37	31	34			
14 BAR DE LUC Willeroncourt	42	45	39		47	54
15 BASTIA Serra di Pigno	51	48	54			
16 BAYONNE La Rhune	41	47	44			
17 BERGERAC Audrix	64	58	61	07V	56	
18 BESANÇON Lomont/BREGILLE	37	34	31			
BESANÇON Montfaucon	47	41	44	03V	45	
19 BORDEAUX Bouillac	29	23	26	08V		
20 BOULOGNE Mont Lambert	63	57	60	08	65	43
21 BOUGES Neuvy	29	34	37	10		
22 BOURG EN BRESSE "Ramasse"	23	26	29	08	21	
23 BREST Roc Tr dudon					38	32
24 BRIVE Lissac	27	21	24	10	34	
25 CAEN "Brullemail"	23	29	26	06		
CAEN Mont Pincon/CHU	48	51	54	04		
26 CANNES Vallarius	22	25	28	09	38	60
27 CARCASSONE Pic de Nore					63	
28 CHAMBERY Mont du Chat	64	58	61	03V		
29 CHAMONIX Aiguille du Midi	29	58	23	08		
30 CHAMPAGNOLLE Le Bulay	25	28	22			
31 CHARTES Montlandon	58	61	64			
32 CHAUMONT Chalindray	55	50	63	09	47	
33 CHERBOURG Olgosville	52	49	55			
34 CLERMONT-FERRAND Puy de Côme/ROYAT	65	59	62	06 ou 08	35	
35 CLUSES St-Sigismond	22	28	25	05	58	61
36 CORTE Antisanti	56	50	53	06		
37 DUON Nuit St-Georges	59	61	54			
38 DUNQUERQUE Mont de Cats	59	62	65	09	46V	43V
39 EPINAL Bois de la Vierge	42	39	45		59	62
40 FORBACH Kreutzberg	65	60	63	10V		
41 GAP Mont Colombis	47	22	25	28		
42 GEX Mont Rond	27	21	24	09		
43 GRENOBLE Chamrousse	27	21	24	05V		
44 GUERET St-Léger	56	50	53	06 ou 09	59	62
45 HIRSON Landouzy	64	58	61	09		
46 HYERES Cap Béal	54	48	51			
47 LA BAULE ESCOUBLAC "St-Clare"	65	59	62	06		
48 LA ROCHELLE "Mireuil"					38	
49 LAVAL Mont Rochard					48	51
50 LE CREUSOT Mont St-Vincent	63	57	60			
51 LE HAVRE Harfleur	35	33	30	67	38	60
52 LE HAVRE Basse Normandie	46	43	40	05	53	
53 LE MANS Mayer		35				
54 LE PUY St-Jean de Nay	24	27	21	05V	32	
55 LENS "Bouvigny"	63	57	60			
56 LESPARRÉ Ordonnac	51	54				
57 LILLE Boubigny/LAMBERSART	39	45	42			
58 LIMOGES Les Cars	27	21	24	05	51	54
59 LONGWY Bois du châ	56	50	53	05/07/10		
60 LORIENT "Plaoerneur"	52	47	44	08		
61 LYON Fourvière				62		
62 LYON Mont Pilat	61	58	64	66	28	22
63 MACON Bois de Cevens	46	40	43	10		
64 MANTES Mudétour	57	55	49			
	64	58	61		55	53

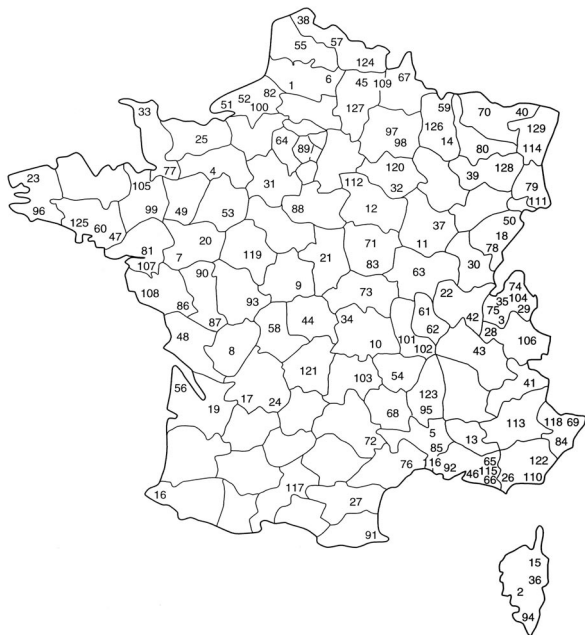
Les principaux émetteurs français

EMETTEURS		CANAUX					
		TF1	A2	FR3	CANAL+	ARTE	M6
65	MARSEILLE Grande Etoile	29	23	26	05	32	38
66	MARSEILLE Pomègues	40	46	43	57	54	
67	MAUBEUGE Rousies	39	42	45	29	32	
68	MENDE Truc de Fortino	37/31	34	68			
69	MENTON Cap Martin	62	50	56	68		
70	MELZ Luttange	37	34	31	05V	39	
71	MEZIERES Sury	29	23	26	36		
72	MILLAU Levezou	47	44	41	10		
73	MONTLUCON "Maregnon"					49	52
74	MONNETTIER MORNEX Mont Salève	42	45	48	64		
75	MONTMELLIAN Le Fort	64	58	61	09		
76	MONTPELLIER Saint-Baudille	56	50	53	63	48V	
77	MORTAIN Grande Fontaine	50	52	55			
78	MORTEAU Monteblon	48	54	51			
79	MULHOUSE Belvédère	27	21	24	05	55	
80	NANCY Malzéville	23	29	26	08	55	43
81	NANTES Hute Goulaine	23	29	26	09V	21	65
82	NEUF CHATEL Croixdelle	51	48	54	65		
83	NEVERS "Challuy"					41	
84	NICE Mont Alban/LA MADELEINE	64	58	61	66 ou 32	51	
85	NIMES "Bas Rhône"					31	37
86	NIORT Maisonnay	22	28	25	06V	38	
87	NIORT Sud Vendée			58			
88	ORLEANS Trainou	42	39	45		52	53
89	PARIS Tour Eiffel	25	22	28	06	30	33
	PARIS EST Chennevières	43	46	40	53	48	58
	PARIS NORD Sannois	45	39	56	59	65	62
	PARIS SUD Villebon	49	52	62	65	58	42
90	PARTHENAY Amailoux	52	49	55			
91	PERPIGNAN Pic Néolous	22	25	28	07		
92	PIGNANS N D des Anges	46	43	40	56		
93	POITIERS "Les Couronneries"						
	/Hospital des Champs					41	41
94	PORTO VECCHIO Col de Méla	40	34	37			
95	PRIVAS Crête Blandine	64	58	61			
96	QUIMPER	29	37	31	06		
97	REIMS Charleville	29	23	26	36		
98	REIMS Hutvillers	43	46	40	09	63	
99	RENNES Saint-Pern	39	45	42	07	34	31
100	ROUEN Grande Couronne	23	33	26	07	59	62
101	SAINT ETIENNE Croix de Guizay	35	30	33	38	65	62
102	SAINT ETIENNE "Pilat"	46	40	43	10		
103	SAINT FLOUR Vabres	52	49	55			
104	SAINT GINGOLPH Montpélerin	39	41	63			
105	SAINT-MALO	53V	45	42	07		
106	SAINT-MARTIN DE BELLE VILLE						
	Point de la Masse	48	51	54			
107	SAINT-NAZAIRE "Pomichet la Ville-Blais"	23	29	26	06		
108	SAINT-NAZAIRE "Etoile du Matin"					55	52
109	SAINT-QUENTIN "Gauchy"					30	33
110	SAINT-RAPHAEL Pic de l'Ours	25	28	22	10V		
111	SARREBOURG Donon	40	53	50			
112	SENS Gisy les Nobles	57	63	60	05		
113	SERRES Beaumont	50	53	56	04		
114	STRASBOURG Nordhein	62	56	43	10V		
115	TARASCON S/ARIEGE Montoulieu	52	55	49	08		
116	TOULON Cap Sicie	51	48	54	09	57	60
117	TOULOUSE Pechbonnieu	45	39	42	07		
	TOULOUSE Pic du Midi	27	21	24	05	32	34
	TOULOUSE Aquitaine			47			
118	TOURETTE DU CHAUTEAU Mt Vial	54	62	65			
119	TOURS Chissay	65	59	62			57
120	TROYES Les riceys	27	24	21	07		29
121	USSEL Meymac	42	45	39			
122	UTELLE La Madone	47	44	41			
123	VALENCE "St-Romaine de l'Erps"					53	
124	VALENCIENNES "marly"					49	34
125	VANNES Moustoir AC	50	56	53	05	58	
126	VERDUN Septsarges	65	59	62			
127	VILLERS COTTEREST Fleury	65V	59V	62V			
128	VITTEL Thuillères	30	35	32			
129	WISSEMBOURG Eiselberg	54	48	51			

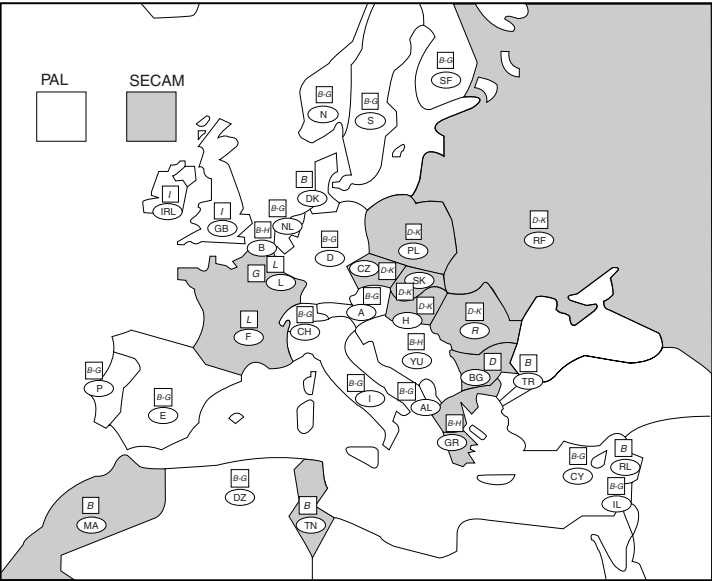
FR

voir page suivante, SVP...

Les principaux émetteurs français

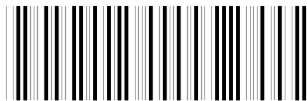


Répartition Européenne des normes et standards



SONY®

4-093-927-32(1)



409392732

FD Trinitron Colour Television

Manual de Instrucciones

ES

Manual de Instruções

PT

Brugervejledning

DK

Käyttöohjeet

FI

Bruksanvisning

NO

Instruktionsbok

SE

***KV-21CT1E
KV-14CT1E***

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Introducción

Gracias por elegir este televisor en color Sony de Pantalla Plana FD Trinitron.

Antes de utilizar el televisor, lea este manual atentamente y consérvelo para futuras referencias.

Símbolos utilizados en este manual:

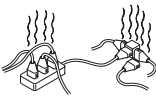
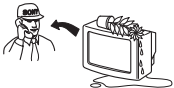
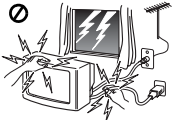
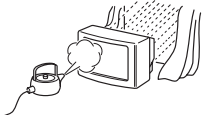
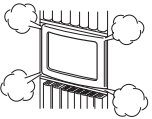
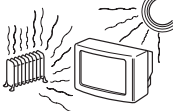
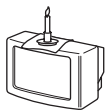
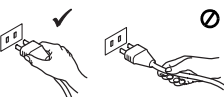
-  Información importante.
-  Información sobre la función.
- 1,2...Secuencia de las instrucciones a seguir.
-  Los botones sombreados del mando a distancia, muestran los botones que ha de pulsar para ejecutar las diferentes instrucciones.
-  Información sobre el resultado de las instrucciones.

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ES

Normas de Seguridad

 Este aparato sólo debe utilizarse con fuentes de alimentación de 220-240 V C.A. No enchufe demasiados aparatos en el mismo enchufe ya que podría causar descargas eléctricas o incendio.	 Por razones medioambientales y de seguridad, se recomienda no dejar el aparato en modo de desconexión temporal cuando no se utilice. Apáguelo pulsando el interruptor principal y desenchufándolo cuando vaya a estar ausente.	 Nunca introduzca objetos ni derrame ningún tipo de líquido dentro del aparato ya que podría provocar descargas eléctricas o incendio. En caso de que algún objeto o líquido caiga dentro del aparato, no utilice el televisor. Avise de inmediato al servicio técnico.
 No abra la tapa posterior del aparato. En caso necesario, acuda al servicio técnico.	 Para su propia seguridad, durante una tormenta, no toque ninguna parte del aparato; especialmente el cable de alimentación y el de la antena.	 Para evitar riesgo de incendio o descargas eléctricas, no exponga el aparato a la lluvia ni a la humedad.
 No obstruya ni cubra las ranuras de ventilación del aparato. Para que haya una ventilación correcta, deje un espacio de al menos 10 cm alrededor del aparato.	 Nunca instale el aparato en lugares excesivamente calientes, húmedos o polvorientos. No instale el aparato en lugares donde pueda sufrir vibraciones mecánicas.	 Para evitar riesgo de incendio, mantenga lejos del aparato los objetos inflamables, velas, y todo aquello que pudiera causar incendio.
 Limpie la pantalla y el mueble del televisor con un paño suave y ligeramente humedecido. No utilice estropajos, limpiadores abrasivos, alcalinos, ningún tipo de disolvente, como alcohol o bencina ni sprays antiestáticos. Como medida de seguridad, desenchufe el televisor antes de limpiarlo.	 Desenchufe el aparato tirando directamente de la clavija. Nunca tire del cable.	 No coloque objetos pesados sobre el cable de alimentación ya que podría dañarlo. Le recomendamos que enrolle la parte sobrante del cable de alimentación en el enrollacables situado en la parte posterior del aparato.
 Coloque el aparato sobre un estante o mueble lo suficientemente fuerte, grande y estable para sostenerlo. No permita que los niños salten sobre él. No lo coloque de lado o boca arriba.	 Si ha de mover el aparato, desenchúfelo antes de hacerlo. Al transportarlo, tenga cuidado con las superficies desiguales, escalones, etc. Si se le cae el aparato o sufre algún golpe, avise inmediatamente al servicio técnico.	 No cubra las ranuras de ventilación con ningún objeto como cortinas, periódicos, etc.

Descripción general de los botones del mando a distancia

Mostrar información en pantalla

Púlselo para mostrar todas las indicaciones en pantalla. Vuelva a pulsarlo para cancelar.

Eliminación del sonido

Púlselo para eliminar el sonido. Vuelva a pulsarlo para recuperarlo.

Selección de la fuente de entrada

Púlselo repetidamente hasta que el símbolo de la fuente de entrada deseada aparezca en la pantalla.

Este botón sólo funciona en modo teletexto.

La función A/B asociada a este botón, no funciona en este televisor.

Selección de canales

Púlselos para seleccionar canales. Para números de programa de dos dígitos, pulse el segundo dígito en un tiempo inferior a 3 segundos.

o

Pulse -/-- y a continuación, el primer y el segundo dígito. Si se equivoca al introducir el primer dígito, continúe introduciendo el segundo dígito (del 0 al 9) y, seguidamente, repita de nuevo la operación.

Conexión automática

Configure el televisor para que se conecte automáticamente.

Desconexión automática

Configure el televisor para que se desconecte automáticamente.

Botón sin función en este aparato.

Ajuste del volumen

Púlselo para ajustar el volumen del televisor.

Este botón sólo funciona en modo teletexto. La función D asociada a este botón, no funciona en este televisor.

Selección del modo de imagen

Púlselo repetidamente para cambiar el modo de imagen.

Apagar temporalmente el televisor

Púlselo para apagar temporalmente el televisor (el indicador de modo de espera  se iluminará). Vuelva a pulsarlo para encender el televisor desde el modo de desconexión temporal (standby).

Para ahorrar energía, se recomienda apagar por completo el televisor cuando no lo utilice.

 Si durante 15 minutos no hay señal de televisión ni se pulsa ningún botón, el televisor pasará automáticamente al modo de desconexión temporal (standby).

Selección del modo TV

Púlselo para desactivar el teletexto o la entrada de vídeo.

Vuelta al último canal seleccionado

Púlselo para volver a ver el último canal seleccionado (el canal anterior debe haber sido visionado previamente durante al menos 5 segundos).

Selección de canales

Púlselo para seleccionar el canal siguiente o anterior.

Activación del sistema de menús

Púlselo para ver el menú en pantalla. Vuelva a pulsarlo para desactivarlo y ver la pantalla normal de televisión.

Botones para la selección del menú

-  Subir un nivel
-  Bajar un nivel
-  Ir al menú o selección anterior
-  Ir al menú o selección siguiente
-  Confirmar la selección

Selección de Teletexto

Púlselo para visualizar el teletexto.

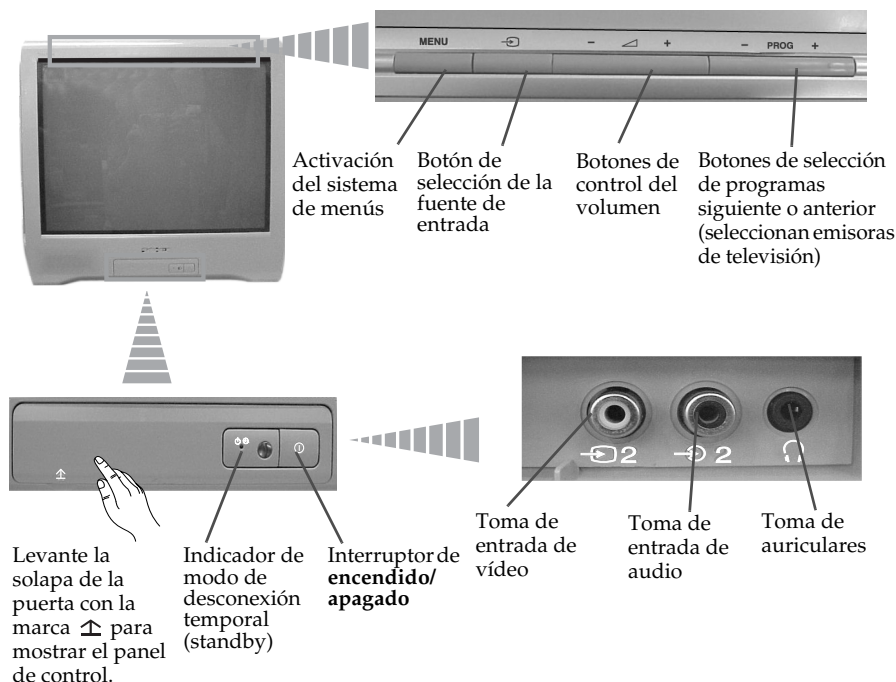
Selección del formato de la pantalla

Púlselo repetidamente para cambiar el formato de la pantalla: 4:3 para imagen convencional o 16:9 para imitación de pantalla amplia.

ES

 Además de las funciones de televisión, todos los botones con color se utilizan también para las operaciones de teletexto. Para más información, consulte el capítulo sobre "Teletexto" de este manual de instrucciones (ver página 16).

Descripción general de los botones del televisor



Instalación de las pilas en el mando a distancia

Asegúrese de colocar las pilas suministradas con las polaridades en la posición correcta. Sea respetuoso con el medio ambiente y deposite las pilas usadas en el contenedor específico para ello.



Conexión de una antena portátil (sólo para KV-14CT1E)

i Para obtener una mejor recepción de imagen, le recomendamos que conecte el televisor a una antena exterior. No obstante, si no dispone de antena exterior pero la señal local de VHF/UHF es lo suficientemente fuerte, puede conectar la antena telescópica suministrada con este televisor tal y como se indica a continuación:

1 inserte la antena en la ranura situada en la parte superior del televisor hasta que ésta haga “clic”.



2 Conecte el cable de la antena al terminal situado en la parte posterior del televisor.

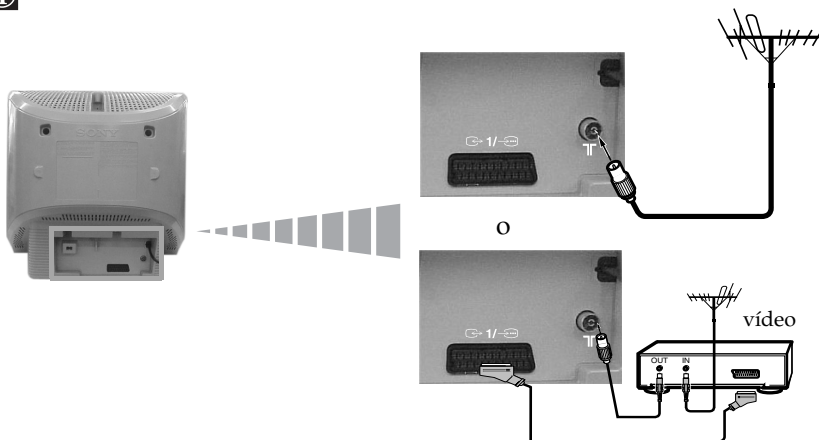


3 Encienda el televisor y oriente la antena para obtener una buena recepción de imagen.

ES

Conexión de la antena y del vídeo

i Los cables de conexión no se suministran.



La conexión a través del Euroconector es opcional

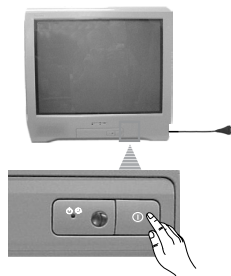
A Para más detalles sobre la conexión del vídeo, consulte el capítulo “Conexión de equipos opcionales” de este manual de instrucciones (ver página 17).

Encendido y Sintonización automática del TV

i La primera vez que encienda el televisor, aparecerá en la pantalla una secuencia de menús a través de los cuales podrá: 1) seleccionar el idioma de los menús, 2) seleccionar el país donde desea utilizar el aparato, 3) buscar y almacenar automáticamente todos los canales disponibles (emisoras de televisión) 4) cambiar el orden en que los canales (emisoras de televisión) aparecen en pantalla y 5) ajustar la inclinación de la imagen (sólo para KV-21CT1E).

No obstante, si más adelante necesita modificar alguno de estos ajustes, puede hacerlo seleccionando la opción apropiada en  (menú de Configuración) o  (menú Ajuste de canales).

- 1 Conecte el enchufe del televisor a la toma de corriente (220-240V CA, 50Hz). Pulse el interruptor de encendido/apagado  de la parte frontal del televisor para encenderlo.
La primera vez que encienda el televisor, el menú **Language** (Idioma) aparecerá automáticamente en la pantalla.



- 2 Pulse el botón  +/- del panel de control superior para seleccionar el idioma y, a continuación, pulse el botón  para confirmar la selección. A partir de ahora, todos los menús aparecerán en el idioma seleccionado.

Language
 Svenska
Norsk
English
Nederlands
 Français
Select language
Select [-<+] Confirm [->]

- 3 En la pantalla aparecerá automáticamente el menú **País**. Pulse el botón  +/- para seleccionar el país donde desea utilizar el televisor y, a continuación, pulse el botón  para confirmar la selección.

i Si en la lista no aparece el país donde va a utilizar el televisor, seleccione "-" en lugar de un país.

País
 Sverige
Norge
-
Italia
 Schweiz/Suisse/Svizzera
Selecione país
Sel. [-<+] Confirm [->]

- 4 Asegúrese de que la antena está conectada conforme a las indicaciones y pulse el botón  para confirmarlo. El televisor empieza a sintonizar y memorizar automáticamente todos los canales (emisoras de televisión) disponibles.



- Este proceso puede durar unos minutos. Tenga paciencia y no pulse ningún botón mientras dure el proceso de sintonización o de lo contrario, el proceso no se completaría.
- Si el televisor no ha encontrado ningún canal (emisora de televisión) tras efectuar la sintonización automática, en la pantalla aparecerá un mensaje pidiéndole que conecte la antena. Por favor conéctela tal y como se indica en la pág. 7 de este manual y pulse . El proceso de sintonización automática se reanudará de nuevo.

Ajuste inicial
Por favor, primero conecte la antena
¿Desea iniciar la sintonía automática?
Sí
No
Sel. [-<+] Confirm [->] Fin[MENU]

Sintonía Automática
No se encuentra el canal
Por favor conecte la antena
OK
Confirmar [->] Fin[MENU]

5 Una vez que el televisor ha sintonizado y memorizado todos los canales (emisoras de televisión), en pantalla aparece automáticamente el menú **Ordenación de Programas** para que pueda cambiar el orden en que los canales aparecen en la pantalla.

a) Si no desea cambiar el orden de los canales, pulse MENU.

b) Si desea cambiar el orden de los canales:

- 1 Pulse el botón $\triangleleft$ +/- para seleccionar el número de programa con el canal (emisora de televisión) que desea cambiar de posición y, a continuación, pulse $\rightarrow$.
- 2 Pulse $\triangleleft$ +/- para seleccionar el nuevo número de programa en el que desea memorizar el canal (emisora de televisión) seleccionado y, a continuación, pulse $\rightarrow$.
- 3 Repita los pasos b)1 y b)2 si desea reordenar otros canales de televisión.

Ordenación de Programas	
Programa:	
01 TVE	
02 TVE2	
03 TV3	
04 C33	
Seleccione canal	
Sel. [->+]	Confirmar [->] Salir [MENU]

Ordenación de Programas	
Programa:	
01 TVE	
02 TVE2	
03 TV3	
04 C33	03 TV3
Sel. nueva posición	
Sel. [->+]	Confirmar [->] Salir [MENU]

6 **i** La opción siguiente sólo está disponible para el modelo KV-21CT1E.

Debido al magnetismo terrestre, es posible que la imagen aparezca inclinada. El menú **Rotación Imagen** le permite reajustar la imagen en caso necesario.

a) Si no es necesario, pulse $\rightarrow$.

b) Si es necesario, pulse $\triangleleft$ +/- para corregir la inclinación de la imagen y, por último, pulse $\rightarrow$ para almacenarla.

Rotación Imagen	
[->] $\left[\begin{array}{c} \square \\ \square \end{array} \right] \leftarrow$	
Sel. [->+]	Confirmar [->] Fin [MENU]

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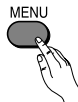
- i** • Para hacer que el menú aparezca de nuevo, mantenga pulsado durante unos 5 segundos el botón MENU del panel de control superior.
- Los botones MENU, $\left[\begin{array}{c} \square \\ \square \end{array} \right]$ y $\blacktriangle$ / $\blacktriangleright$ / $\blacktriangledown$ / $\blacktriangleleft$ del mando a distancia también se pueden utilizar para las operaciones mencionadas arriba.

 El televisor está listo para funcionar.

Introducción y manejo del sistema de menús

i Este televisor utiliza un sistema de menús en pantalla para guiarle en las diferentes operaciones. Utilice los siguientes botones del mando a distancia para desplazarse a través de los menús:

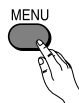
1 Pulse el botón **MENU** para mostrar el primer nivel de menú en pantalla.



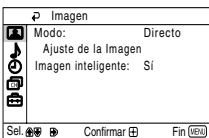
- 2**
- Para resaltar el menú u opción deseados, pulse **↓** o **↑**.
 - Para entrar en el menú u opción seleccionados, pulse **→**.
 - Para volver al menú u opción anterior, pulse **←**.
 - Para modificar los ajustes de la opción seleccionada, pulse **↓/↑/←/→** o **→**.
 - Para confirmar y memorizar su selección, pulse **[Entrar]**.



3 Pulse el botón **MENU** para volver a la pantalla normal de televisión.



Imagen



El menú de “Imagen” le permite modificar los ajustes de la imagen.

Para ello:

Tras seleccionar la opción que desea modificar, pulse **→**. A continuación, pulse repetidamente **↓/↑/←/→** o **→** para modificar el ajuste y finalmente pulse **[Entrar]** para memorizarlo.

Este menú también le permite modificar el modo de imagen según el tipo de programa que esté viendo:

Modo	Directo (para realzar el contraste y la nitidez de la imagen). Películas (para una imagen detallada con precisión). Juegos (para juegos electrónicos). Personal (para ajustar sus preferencias).	
Ajuste de la Imagen	Contraste	Pulse ↓ o ← para reducir el contraste de la imagen. Pulse ↑ o → para reazar el contraste de la imagen.
	Brillo	Pulse ↓ o ← para oscurecer la imagen. Pulse ↑ o → para incrementar el brillo de la imagen.
	Color	Pulse ↓ o ← para disminuir la intensidad del color. Pulse ↑ o → para aumentar la intensidad del color.

Tonalidad Pulse o para aminorar los tonos verdes.
Pulse o para incrementar los tonos verdes.

Tonalidad no se puede ajustar para la señal de color NTSC (p.ej. vídeos de los EE.UU.).

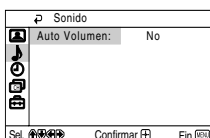
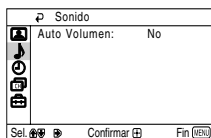
Nitidez Pulse o para atenuar la imagen.
Pulse o para avivar la imagen.

Preestablecido Seleccione para restablecer la imagen a los niveles prefijados en fábrica.

Imagen inteligente **Sí/No** Seleccionar para optimizar la calidad de la imagen.
P. ej., para reducir el nivel de ruido cuando la señal es débil.

Si se realizan modificaciones en “Ajuste de la Imagen”, “Modo” se ajustará automáticamente en “Personal” y el nuevo valor se almacenará en dicho ajuste.

Sonido

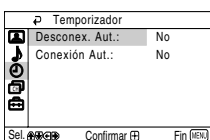
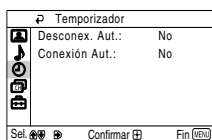


El menú “Sonido” le permite cambiar los ajustes de sonido.

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Auto Volumen **Sí/No** El nivel de volumen de los canales (emisoras de televisión) debe permanecer estable, independientemente de la señal emitida (p.ej., en el caso de anuncios publicitarios).

Temporizador



El menú “Temporizador” le permite modificar los ajustes del temporizador.

Desconexión Automática

La opción de “Desconex. Aut.” dentro del menú “Temporizador”, le permite seleccionar un periodo de tiempo tras el cual el televisor entrará automáticamente en la modalidad de desconexión temporal (standby).

Para ello:

Tras seleccionar la opción, pulse . A continuación pulse  o  para seleccionar el intervalo de tiempo (máximo 1 hora 30 minutos) y finalmente pulse  para memorizarlo.



- Si desea ver el tiempo restante hasta la desconexión mientras ve la televisión, pulse el botón .
- Un minuto antes de que el televisor entre en modo de desconexión temporal, aparecerá automáticamente el mensaje “1 minuto para apagarse” en la pantalla del televisor.

Conexión Automática

La opción de “Conexión Aut.” dentro del menú “Temporizador”, le permite seleccionar un periodo de tiempo tras el cual el televisor se conectará automáticamente desde la modalidad de desconexión temporal (standby).

Para ello:

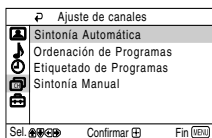
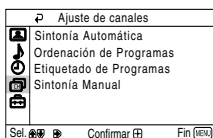
Tras seleccionar la opción, pulse . A continuación pulse  o  para seleccionar el intervalo de tiempo (máximo 12 horas) y pulse  para memorizarlo. Finalmente pulse el botón  de desconexión temporal (standby) del mando a distancia, y tras el intervalo de tiempo fijado, el televisor se encenderá automáticamente.

Una vez seleccionado el tiempo, el televisor se enciende automáticamente y en la pantalla aparece la indicación “Conexión Aut.”.



- El indicador de modo de desconexión temporal (standby)  del televisor se iluminará en ámbar para indicar que “Conexión Aut.” está activado.
- Cualquier fallo o interrupción en el fluido eléctrico, anulará esta función.
- Si después de que el televisor se haya encendido con el ajuste “Conexión Aut.” no pulsa ningún botón durante más de una hora, el televisor entrará automáticamente en el modo de espera.

Ajuste de canales



El menú "Ajuste de canales" permite memorizar los canales de este televisor.

Sintonía Automática

La opción de "Sintonía Automática" dentro del menú "Ajuste de canales", le permite que el televisor busque y almacene todos los canales (emisoras de televisión) disponibles.

Para ello:

Tras seleccionar la opción, pulse  y, a continuación, proceda tal y como se indica en el capítulo "Encendido y Sintonización automática del TV", pasos 4 (ver página 8).

Ordenación de Programas

La opción de "Ordenación de Programas" dentro del menú "Ajuste de canales", le permite cambiar el orden en que los canales (emisoras de televisión) aparecen en el televisor.

Para ello:

Tras seleccionar la opción, pulse  y, a continuación, proceda tal y como se indica en el capítulo "Encendido y Sintonización automática del TV", paso 5b) (ver página 9).

Etiquetado de Programas

La opción "Etiquetado de Programas" dentro del menú "Ajuste de canales", le permite asignar un nombre, de cinco caracteres como máximo, a un canal.

Para ello:

- 1 Tras seleccionar la opción, pulse . Pulse  o  para seleccionar el número de programa que desea etiquetar, a continuación, pulse .
- 2 Pulse . Con el primer elemento de la columna **Nombre** resaltado, pulse  o  para seleccionar una letra, un número o " _ " para un espacio en blanco y a continuación, pulse  para confirmar ese carácter. Seleccione los otros cuatro caracteres de la misma forma. Finalmente pulse  para memorizarlo.

continúa...

ES

Sintonía Manual La opción de "Sintonía Manual" dentro del menú "Ajuste de canales", le permite:

- a) Sintonizar uno a uno y en el orden de programa que desee, los canales (emisoras de televisión) o una entrada de vídeo.

Para ello:

- 1 Tras seleccionar la opción de "Sintonía Manual", pulse **➡**. Con la opción **Programa** resaltada, pulse **➡** y, a continuación, pulse **▼** o **▲** para seleccionar el número de programa (posición) en el que desea sintonizar una emisora de televisión o el canal de vídeo (para el canal de vídeo recomendamos que seleccione el número de programa "0"). Pulse **⬅**.



La siguiente opción sólo aparecerá dependiendo del país que haya seleccionado en el menú "Idioma/País".

- 2 Tras seleccionar la opción **Sistema**, pulse **➡**. A continuación, pulse **▼** o **▲** para seleccionar el sistema de televisión (**B/G** para los países de Europa occidental o **D/K** para los de Europa oriental). Pulse **➡**.
- 3 Tras seleccionar la opción **Canal**, pulse **➡** y, a continuación, pulse **▼** o **▲** para seleccionar el tipo de canal ("**C**" para canales terrestres o "**S**" para canales por cable). Pulse **➡**. A continuación, pulse los botones numéricos para introducir directamente el número del canal de la emisora de televisión o el de la señal del canal de vídeo. Si no sabe el número del canal, pulse **▼** o **▲** para buscarlo. Cuando encuentre el canal que desea memorizar pulse **[+/-]** dos veces.

Repita todos estos pasos para sintonizar y memorizar más canales.

- b) Aún cuando la sintonización fina automática (AFT) está siempre activada, también puede ajustarla de forma manual para obtener una mejor recepción de la imagen en caso de que ésta aparezca distorsionada.

Para ello:

Mientras esté viendo el canal (emisora de televisión) en el que desea realizar la sintonización fina, seleccione la opción **AFT** y, a continuación, pulse **➡**. Pulse **▼** o **▲** para ajustar el nivel de frecuencia del canal entre -15 y +15. Finalmente, pulse **[+/-]** dos veces para memorizarlo.

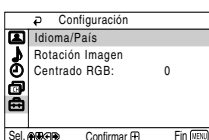
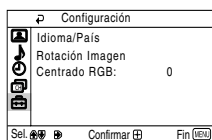
- c) Omitir los números de programa que no desee para saltárselos al seleccionarlos con los botones **PROG +/-**.

Para ello:

Resaltando la opción **Programa**, pulse **PROG +** o **-** hasta que aparezca el número de programa que desea omitir. Cuando éste aparezca en la pantalla, seleccione la opción **Omitir** y, a continuación, pulse **➡**. Pulse **▼** o **▲** para seleccionar **Sí** y finalmente, pulse **[+/-]** dos veces para memorizarlo.

Si más adelante desea anular esta función, seleccione de nuevo "No" en lugar de "Sí".

Configuración



El menú “Configuración” le permite modificar algunas de las configuraciones de este televisor.

Idioma/País

La opción de “Idioma/País” dentro del menú “Configuración”, le permite seleccionar el idioma en que desea que aparezcan los menús en la pantalla. También le permite seleccionar el país donde desea utilizar el televisor.

Para ello:

Tras seleccionar la opción, pulse  y, a continuación, proceda tal y como se indica en el capítulo “Encendido y Sintonización automática del TV”, pasos 2 y 3 (ver página 8).

Rotación Imagen (sólo para KV-21CT1E)

Debido al magnetismo terrestre, es posible que la imagen aparezca inclinada. En este caso, puede reajustarla utilizando la opción de “Rotación Imagen” dentro del menú “Configuración”.

Para ello:

Tras seleccionar la opción, pulse . Pulse  o  ( o ) para corregir la inclinación de la imagen y, por último, pulse  para almacenarla.

Centrado RGB

Al conectar una fuente de señales RGB, como una “PlayStation”, puede que sea necesario ajustar el centrado horizontal de la imagen. En este caso, puede ajustarla utilizando la opción de “Centrado RGB” dentro del menú “Configuración”.

Para ello:

Mientras esté viendo una señal de entrada RGB seleccione la opción “Centrado RGB”, y pulse . A continuación pulse  o  para ajustar el centrado de la imagen entre -10 y +10. Finalmente, pulse  para memorizarlo.

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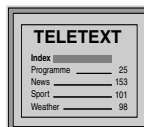
Teletexto

i Teletexto es un servicio de información que transmiten la mayoría de las emisoras de televisión. La página de índice del servicio de teletexto (página 100 por lo general) proporciona información sobre cómo utilizar este servicio. Para operar dentro del teletexto, utilice los botones del mando a distancia tal y como se indica en esta página.

A Asegúrese de utilizar un canal de televisión con una señal fuerte, pues de lo contrario, podrían producirse errores de teletexto.

Entrar en el servicio de Teletexto:

Tras seleccionar el canal (emisora de televisión) que transmita el servicio de teletexto que desee ver, pulse .



Seleccionar una página de Teletexto:

Introduzca los tres dígitos del número de página que desee ver, utilizando los botones numéricos del mando a distancia.

- Si se equivoca, introduzca tres dígitos cualesquiera y, a continuación, vuelva a introducir el número de página correcto.
- Si el contador de páginas no se detiene, es porque la página requerida no está disponible. En ese caso, introduzca otro número de página.

Para comprobar el contenido de un servicio de Teletexto:

Pulse .

Seleccionar la página siguiente o anterior:

Pulse  o .

Superponer teletexto con la imagen de televisión:

Mientras esté viendo teletexto, pulse . Púlselo de nuevo para salir del modo de teletexto.

Retener una página:

Algunas páginas de teletexto contienen subpáginas que van rotando automáticamente. Para retener una subpágina, pulse . Púlselo de nuevo para cancelar la retención.

Visualizar una información oculta (p. ej.: soluciones de adivinanzas):

Pulse . Púlselo de nuevo para volver a ocultar la información.

Para ampliar la pantalla del Teletexto:

Pulse . Cada vez que pulse este botón , la pantalla del Teletexto cambiará del modo siguiente: Aumentar la mitad superior → Aumentar la mitad inferior → Tamaño normal.

Para esperar a que aparezca una página de Teletexto mientras ve un programa de televisión.

- 1 Introduzca el número de Teletexto de la página que desea consultar y, a continuación, pulse .
- 2 Cuando aparezca el número de página, pulse  para ver el texto.

Salir del servicio de teletexto:

Pulse .

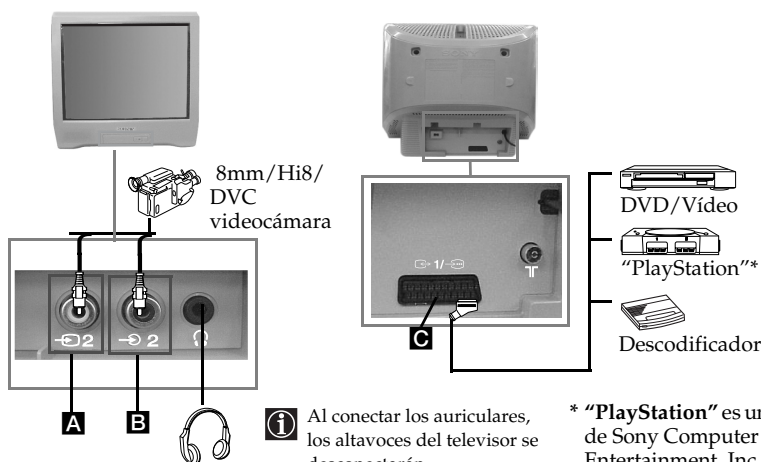
Fastext

i El servicio Fastext permite acceder a las páginas de teletexto mediante la pulsación de un solo botón.

Estando dentro del servicio de teletexto y en caso de que se emitan señales de Fastext, en la parte inferior de la pantalla aparece un menú de códigos de color que le permite acceder directamente a una página. Para ello, pulse el botón de color correspondiente (rojo, verde, amarillo o azul) del mando a distancia.

Conexión de equipos opcionales

i Es posible conectar al televisor una amplia gama de equipos opcionales tal y como se muestra a continuación (los cables de conexión no se suministran).



i Al conectar los auriculares, los altavoces del televisor se desconectarán automáticamente.

* "PlayStation" es un producto de Sony Computer Entertainment, Inc.
* "PlayStation" es una marca registrada de Sony Computer Entertainment, Inc.

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Conexión de un vídeo:

Para conectar un vídeo, consulte el capítulo "Conexión de una antena exterior y del vídeo". Le aconsejamos que conecte el vídeo utilizando un cable de Euroconector. Si no utiliza este cable, tendrá que sintonizar manualmente el canal de la señal de vídeo mediante el menú de "Sintonía Manual" (para ello, consulte el apartado a) de la página 14). Consulte también el manual de instrucciones de su vídeo para ver cómo conseguir el canal de la señal de vídeo.

Manejo de los equipos opcionales

- 1 Conecte el equipo opcional al conector adecuado del televisor tal y como se indica arriba.
- 2 Encienda el equipo conectado.
- 3 Para ver la imagen del equipo conectado, pulse repetidamente el botón hasta que aparezca en la pantalla el símbolo correcto de entrada.

Símbolo

Señales de entrada

1

• Señal de entrada de audio/vídeo mediante el Euroconector **C**

1

• Señal de entrada RGB mediante el Euroconector **C**. Este símbolo sólo aparece si ha conectado una entrada RGB.

2

• Señal de entrada de vídeo a través del conector RCA **A** y señal de entrada de audio a través de **B**.

- 4 Para recuperar la imagen normal de televisión, pulse el botón del mando a distancia.

Especificaciones

El sistema de recepción de señales de estos televisores, cumplen la normativa requerida por la ley española del Real Decreto 1160/89.

Sistema de TV:

Dependiendo del país que haya seleccionado:
B/G/H, D/K

Sistema de color:

PAL, SECAM
NTSC 3.58, 4.43 (sólo entrada de vídeo)

Cobertura de canales:

VHF: E2-E12
UHF: E21-E69
CATV: S1-S20
HYPER: S21-S41
D/K: R1-R12, R21-R69

Tubo de imagen:

Pantalla Plana FD Trinitron

Terminales posteriores:

 Euroconector de 21 pins (norma CENELEC) incluidas entrada de audio/vídeo, entrada RGB, salida de audio/vídeo de TV.

Terminales frontales:

 2 entrada de vídeo – conector RCA
 2 entrada de audio – conector RCA
 toma para auriculares

Salida de sonido:

1 x 6 W (potencia musical)
1 x 3 W (RMS)

Consumo de energía:

- KV-21CT1E: 56 W
- KV-14CT1E: 50 W

Consumo de energía en modo de desconexión temporal (standby):

< 1 W

Dimensiones (an x al x prf):

- KV-21CT1E: Approx. 497 x 461 x 487 mm
- KV-14CT1E: Approx. 374 x 355 x 420 mm

Peso:

- KV-21CT1E: Approx. 24 kg
- KV-14CT1E: Approx. 11 kg

Accesorios suministrados:

1 Mando a distancia (RM-W100)
2 Pilas de norma IEC.
1 Antena telescópica (sólo para KV-14CT1E)

Otras características:

- Teletexto, Fastext, TOPtext.
- Desconexión automática.
- Conexión automática.

Diseño y especificaciones sujetos a cambios sin previo aviso.

Paper Ecológico - Libre de cloro 

Solución de problemas

 A continuación se ofrecen algunas soluciones sencillas para resolver problemas relacionados con la imagen y el sonido.

Problema	Solución
Ausencia de imagen (la pantalla aparece oscura) y sin sonido.	• Compruebe la conexión de la antena. • Enchufe el televisor y pulse el botón  de la parte frontal del aparato. • Si el indicador  del televisor está encendido, pulse el botón  del mando a distancia.
La imagen es deficiente o inexistente pero la calidad de sonido es buena.	• Mediante el sistema de menús, entre en el menú de "Ajuste de la Imagen" y seleccione "Preestablecido" para recuperar los ajustes de fábrica (ver página 10).
Ausencia de imagen o del menú de información del equipo opcional conectado al Euroconector de la parte posterior del televisor.	• Asegúrese que ha encendido el equipo opcional y pulse varias veces el botón  del mando a distancia hasta que el símbolo de entrada correcto aparezca en la pantalla (ver página 17).
Buena calidad de imagen pero no hay sonido.	• Pulse el botón  + del mando a distancia. • Compruebe que los auriculares están desconectados.
Los programas en color no se ven en color.	• Mediante el sistema de menús, entre en el menú de "Ajuste de la Imagen" y seleccione "Preestablecido" para recuperar los ajustes de fábrica (ver página 10).
La imagen aparece distorsionada al cambiar de programa o al seleccionar el teletexto.	• Apague el equipo conectado al Euroconector de 21 pins de la parte posterior del televisor.
Caracteres erróneos en las páginas de teletexto.	• Mediante el sistema de menús, seleccione la opción "Idioma/País" y seleccione el país en el cual está operando el televisor (ver página 15).
La imagen aparece inclinada. (sólo para KV-21CT1E)	• Mediante el sistema de menús, seleccione la opción "Rotación Imagen" dentro del menú de "Configuración" y corrija la inclinación (ver página 15).
Imagen con ruido.	• Mediante el sistema de menús, seleccione la opción "AFT" dentro del menú de "Sintonía Manual" y ajuste la sintonización manualmente para obtener una mejor recepción de la imagen (ver página 14). • Mediante el sistema de menús, seleccione la opción "Imagen inteligente" dentro del menú de "Imagen" y seleccione "Si" para atenuar el ruido de imagen (ver página 10).
El mando a distancia no funciona.	• Cambie las pilas.
El indicador de modo de espera  parpadeará en rojo en el televisor.	• Póngase en contacto con el servicio técnico de Sony más cercano.

 En caso de averías, haga que personal especializado examine el televisor. No abra nunca el aparato.

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SONY®

4-093-927-52(1)



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FD Trinitron Colour Television

Instruction Manual

GB

***KV-21CT1U
KV-14CT1U***

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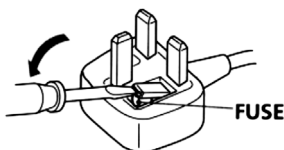
NOTICE FOR CUSTOMERS IN THE UNITED KINGDOM

A moulded plug complying with BS1363 is fitted to this equipment for your safety and convenience.

Should the fuse in the plug supplied need to be replaced, a 5 AMP fuse approved by ASTA or BSI to BS 1362 (i.e. marked with  or ) must be used.

When an alternative type of plug is used it should be fitted with a 5 AMP FUSE, otherwise the circuit should be protected by a 5 AMP FUSE at the distribution board.

If the plug supplied with this equipment has a detachable fuse cover, be sure to attach the fuse cover after you change the fuse. Never use the plug without the fuse cover. If you should lose the fuse cover, please contact your nearest Sony service centre.



How to replace the fuse

Open the fuse compartment with a blade screwdriver, and replace the fuse.

• IMPORTANT

If the plug supplied is not suitable for the socket outlets in your home, it should be cut off and an appropriate plug fitted in accordance with the following instructions:

The wires in this mains lead are coloured in accordance with the following code:

Blue Neutral

Brown Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red. Do not connect either wire to the earth terminal in the plug which is marked by the letter E or by the safety earth symbol  or coloured green or green and yellow.

WARNING

- To prevent shock hazard, do not insert the plug cut off from the mains lead into a socket outlet. This plug cannot be used and should be destroyed.
- To prevent fire or shock hazard, do not expose the unit to rain or moisture.
- Dangerously high voltages are present inside the set. Do not open the cabinet. Refer servicing to qualified personnel only.

Introduction

Thank you for choosing this Sony FD Trinitron Colour Television.

Before operating the TV, please read this manual thoroughly and retain it for future reference.

Symbols used in the manual:

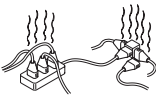
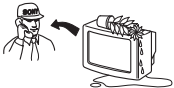
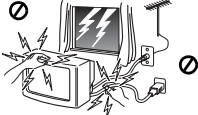
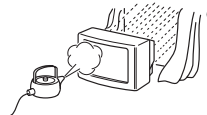
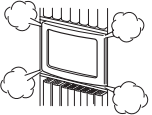
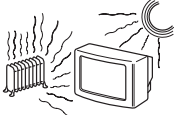
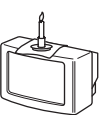
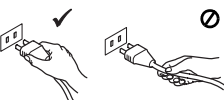
-  Important information.
-  Information on a feature.
- 1,2...Sequence of instructions.
-  Shaded buttons on the remote control show you the buttons you have to press to follow the sequence of the instructions.
-  Informs you of the result of instructions.

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Safety Information

 This set is to operate on a 220-240V AC supply only. Take care not to connect too many appliances to the same power socket as this could result in fire or electric shock.	 For environmental and safety reasons, it is recommended that the TV set is not left in standby mode when not in use. Disconnect from the mains.	 Never push objects of any kind into the set as this could result in a fire or electric shock. Never spill liquid of any kind on the set. If any liquid or solid object does fall through, do not operate the TV. Have it checked immediately by qualified personnel.
 Do not open the cabinet and the rear cover of the TV. Refer to qualified service personnel only.	 For your own safety, do not touch any part of the TV, power lead or aerial lead during lightning storms.	 To prevent fire or shock hazard, do not expose the TV to rain or moisture.
 Do not cover the ventilation openings of the TV. For ventilation, leave a space of at least 10cm all around the set.	 Never place the TV in hot, humid or excessively dusty places. Do not install the TV where it may be exposed to mechanical vibrations.	 To prevent fire, keep inflammable objects or naked lights (e.g. candles) away from the TV.
 Clean the screen and cabinet with a soft, lightly dampened cloth. Do not use any type of abrasive pad, alkaline cleaner, scouring powder or solvent, such as alcohol or benzene, or antistatic spray. As a safety precaution, unplug the TV before cleaning it.	 Pull out the power lead by the plug. Do not pull on the power lead itself.	 Take care not to place heavy objects on the power lead as this could result in damage. We recommend you wind any excess lead around the holders provided on the rear of the TV.
 Place the TV on a secure stable stand. Do not allow children to climb on to it. Do not place the TV on its side or face up.	 Unplug the power lead before moving the TV. Avoid uneven surfaces, quick steps or excessive force. If the set has been dropped or damaged, have it checked immediately by qualified service personnel.	 Do not cover the ventilation openings of the TV with items such as curtains or newspapers, etc.

Overview of Remote Control Buttons

Displaying on screen information

Press to display all on-screen indications. Press again to cancel.

Muting the sound

Press to mute TV sound. Press again to restore the sound.

Selecting input source

Press repeatedly until the desired input symbol of the source appears on the TV screen.

This button only works in Teletext mode.

Function A/B associated to this button does not work with this TV.

Selecting channels

Press to select channels. For double-digit programme numbers, enter the second digit within 3 seconds.

or

Press -/-- and then the first and second digit.

If you enter an incorrect first digit, this should be corrected by entering another digit (0-9) and then selecting -/-- button again to enter the programme number of your choice.

On timer

Set TV to switch on automatically.

Sleep timer

Set TV to switch off automatically.

This button does not work on this set.

Adjusting TV volume

Press to adjust the volume of the TV.

This button only works in Teletext mode.

Function ♪ associated to this button does not work with this TV.

Selecting picture mode

Press repeatedly to change the picture mode.

To temporarily switch off TV

Press to temporarily switch off TV (the standby indicator  on TV lights up). Press again to switch on TV from standby mode.

To save energy we recommend switching off completely when TV is not in use.

 After 15 minutes without a signal and without any button being pressed, the TV switches automatically into standby mode.

Selecting TV mode

Press to switch off teletext or video input.

Back to the channel last watched

Press to watch the last channel selected (watched for at least 5 seconds).

Selecting channels

Press to select the next or previous channel.

Displaying the menu system

Press to display the menu on the TV screen. Press again to remove the menu display from the TV screen.

Menu selection

- ▲ Scroll Up
- ▼ Scroll Down
- ◀ Previous menu or selection
- ▶ Next menu or selection
- ⏏ Confirm your selection

Selecting Teletext

Press to switch on teletext.

Selecting screen format

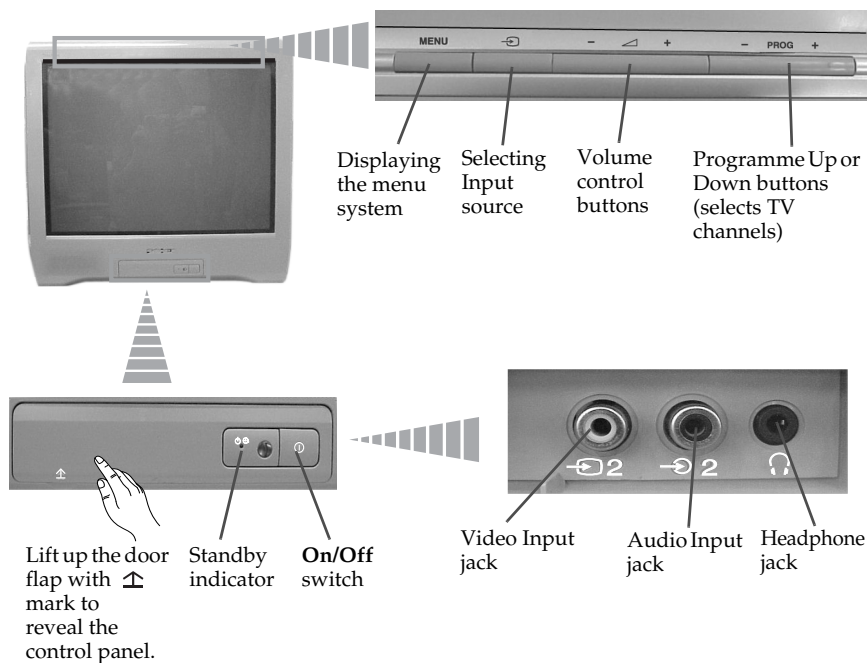
Press to view programmes in 16:9 mode. Press again to return to 4:3 mode.



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 Besides TV functions, all coloured buttons as well as green symbols are also used for Teletext operation. For more details, please refer to "Teletext" section of this instruction manual (see page 16).

Overview of TV Buttons



Inserting Batteries into the Remote Control

- Make sure you insert the supplied batteries using the correct polarities. Always remember to dispose of used batteries in an environmental friendly way.



Connecting an Indoor Aerial (only for KV-14CT1U)

i For a better reception we recommend you connect an external aerial. However, where an external aerial is not available and your local UHF signal is strong, you can connect the supplied loop aerial as follows:

1 Insert the loop aerial into the opening on top of the set until it clicks.



2 Connect the aerial connector to the aerial socket on the rear of the set.

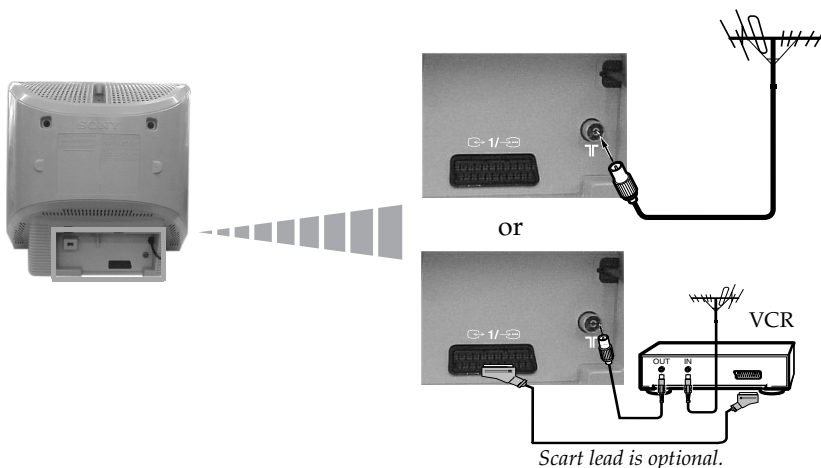


3 After switching on the TV, adjust the aerial for optimum reception.

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Connecting an Outdoor Aerial and VCR

i Connecting cables are not supplied.

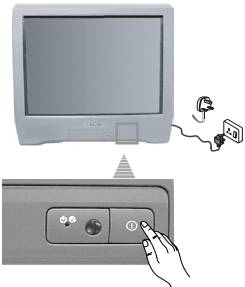


A For more details of VCR connection, please refer to the section "Connecting Optional Equipment" of this instruction manual (see page 17).

Switching On the TV and Automatically Tuning

i The first time you switch on your TV, a sequence of menu screens appear on the TV enabling you to: 1) choose the language of the menu screen, 2) search and store all available channels (TV Broadcast), 3) change the order in which the channels (TV Broadcast) appear on the screen and 4) adjust the picture slant (only for KV-21CT1U). However, if you need to change any of these settings at a later date, you can do that by selecting the appropriate option in the  (Set Up) or  (Channel Set Up) menu.

1 Connect the TV plug to the mains socket (220-240V AC, 50Hz). Press  On/Off button on the TV set to switch on the TV. The first time you switch on the TV, a **Language** menu displays automatically on the TV screen.



2 Press  /  button on the top control panel to select the language, then press  to confirm your selection. From now on all menus will appear in the selected language.

Language	
	Svenska
	Norsk
	English
	Nederlands
	Français
Select language	
Select  Confirm 	

3 Ensure the aerial is connected as instructed, then press  to confirm. The TV automatically starts searching and storing all available broadcast channels for you.

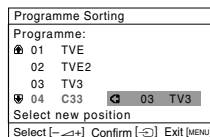
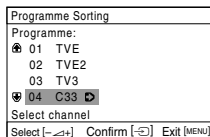
-  This procedure could take some minutes. Please be patient and do not press any buttons, otherwise automatic tuning will not be completed.
- If no channels were found during the auto tuning process, a new menu appears automatically on the screen asking you to connect the aerial. Please connect the aerial (see page 7) and press . The auto tuning process will start again.

Initial Set Up	
First please connect aerial	
Do you want to start automatic tuning?	
 	
Select  Confirm 	

Auto Tuning	
No channel found	
Please connect aerial	
	
Confirm  End [MENU]	

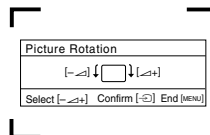
4 After all available channels are captured and stored, the **Programme Sorting** menu appears automatically on the screen enabling you to change the order in which the channels appear on the screen.

- a) If you wish to keep the broadcast channels in the tuned order, press MENU.
- b) If you wish to store the channels in a different order:
 - 1 Press $\triangleleft$ + / - to select the programme number with the channel (TV Broadcast) you wish to rearrange, then press $\rightarrow$.
 - 2 Press $\triangleleft$ + / - to select the new programme number position for your selected channel (TV Broadcast), then press $\rightarrow$.
 - 3 Repeat steps b)1 and b)2 if you wish to change the order of the other channels.



5 The following option is only available for KV-21CT1U. Because of the earth's magnetism, the picture might slant. The **Picture Rotation** menu allows you to correct the picture slants if it is necessary.

- a) If it is not necessary, press $\rightarrow$.
- b) If it is necessary, press $\triangleleft$ + / - to correct any slant of the picture. Finally press $\rightarrow$ to store.



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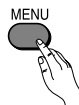
- To allow this menu to appear again, press and hold MENU button at top control panel for about 5 seconds.
- The MENU, $\rightarrow$ and $\uparrow$ / $\downarrow$ / $\leftarrow$ / $\rightarrow$ buttons on the remote control can also be used for the operations above.

Your TV is now ready for use.

Introducing and Using the Menu System

i Your TV uses an on-screen menu system to guide you through the operations. Use the following buttons on the Remote Control to operate the menu system:

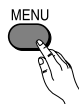
1 Press **MENU** to switch the menu on.



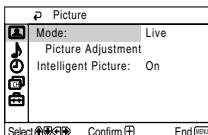
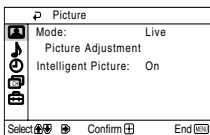
- 2**
- To highlight the desired menu or option, press **↓** or **↑**.
 - To enter to the selected menu or option, press **➡**.
 - To return to the last menu or option, press **⬅**.
 - To alter settings of your selected option, press **↓** / **↑** / **⬅** or **➡**.
 - To confirm and store your selection, press **⏻**.



3 Press **MENU** to remove the menu from the screen.



Picture



The “Picture” menu allows you to alter the picture adjustments.

To do this:

After selecting the item you want to alter, press **➡**, then press **↓** / **↑** / **⬅** or **➡** repeatedly to adjust it and finally press **⏻** to store the new adjustment.

This menu also allows you to customize the picture mode based on the programme you are watching:

Mode	Live	(for enhanced picture contrast and sharpness).
	Movie	(for a finely detailed picture).
	Game	(for a picture from game).
	Personal	(for your own custom settings).

Picture Adjustment	Contrast	Press ↓ or ⬅ to reduce picture contrast. Press ↑ or ➡ to enhance picture contrast.
	Brightness	Press ↓ or ⬅ to darken the picture. Press ↑ or ➡ to brighten the picture.
	Colour	Press ↓ or ⬅ to decrease colour intensity. Press ↑ or ➡ to increase colour intensity.

Hue Press or to decrease the green tones.
Press or to increase the green tones.

Hue can only be adjusted for NTSC colour signal (e.g. USA video tapes).

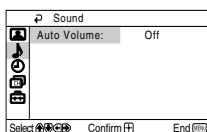
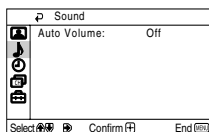
Sharpness Press or to soften the picture.
Press or to sharpen the picture.

Reset Select to reset the picture to the factory preset levels.

Intelligent Picture On/Off Select to optimize the picture quality.
E.g. reduce noise level when signal is weak.

If any changes are made to “Picture Adjustment”, “Mode” will switch automatically to “Personal” and the new setting will be stored as “Personal”.

Sound

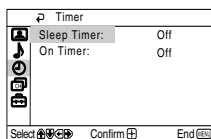
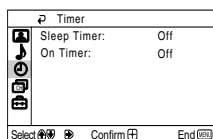


The “Sound” menu allows you to alter the sound adjustments.

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Auto Volume On/Off Volume level of the channels will stay the same, independent of the broadcast signal (e.g. in the case of advertisements).

Timer



The “Timer” menu allows you to alter the timer adjustments.

Sleep Timer

The “Sleep Timer” option in the “Timer” menu allows you to select a time period for the TV to switch itself automatically into the standby mode.

To do this:

After selecting the option, press , then press  or  to set the time period delay (max. of 1 hour and 30 minutes) and finally press  to store.



- While watching the TV, you can press the  button on the remote control to display the time remaining.
- One minute before the TV switches itself into standby mode, “TV will turn off soon” is displayed on the TV screen automatically.

On Timer

The “On Timer” option in the “Timer” menu allows you to select a time period for the TV to switch itself automatically on from standby mode.

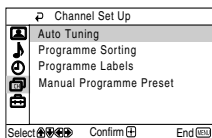
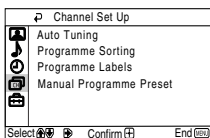
To do this:

After selecting the option, press , then press  or  to set the time period delay (max. of 12 hours) and finally press  to store. Finally press the standby button  on the remote control. After the selected length of time, the TV switches on automatically and “On Timer” will appear on the screen.



- The standby indicator  on the TV set lights up in amber to indicate that “On Timer” is active.
- Any loss of power will cause these settings to be cleared.
- If no buttons are pressed for more than one hour after the TV is turned on using the “On Timer”, the TV automatically goes into standby mode.

Channel Set Up



The “Channel Set Up” menu allows you to preset channels on this TV.

Auto Tuning

The “Auto Tuning” option in the “Channel Set Up” menu allows you to automatically search and store all available TV channels.

To do this:

After selecting the option, press  and then proceed in the same way as in the step 3 of the section “Switching On the TV and Automatically Tuning” (see page 8).

Programme Sorting

The “Programme Sorting” option in the “Channel Set Up” menu allows you to change the order in which the channels (TV Broadcast) appear on the screen.

To do this:

After selecting the option, press  and then proceed in the same way as in step 4b) of the section “Switching On the TV and Automatically Tuning” (see page 9).

Programme Labels

The “Programme Labels” option in the “Channel Set Up” menu allows you to name a channel using up to five characters (letters or numbers).

To do this:

- 1 After selecting the option, press . Press  or  to select the programme number with the channel you wish to name, then press .
- 2 Press . With the first element of the label column highlighted, press  or  to select a letter or number (select “_” for a blank), then press  to confirm this character. Select the other four characters in the same way. Finally press  to store.

continued...

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Manual Programme Preset

The "Manual Programme Preset" option in the "Channel Set Up" menu allows you to:

- a) Preset channels or a video input source one by one to the programme order of your choice.

To do this:

- 1 After selecting the "Manual Programme Preset" option, press **➡**. Highlight the **Programme** option and press **➡**. Press **▼** or **▲** to select a programme number on which you want to preset the channel (for VCR, select programme number "0"), then press **➡**.
- 2 After selecting the **Channel** option, press **➡**. Then press the number buttons to directly enter the channel number of the TV Broadcast. If you do not know the channel number, press **▼** or **▲** to search for it. When you tune the desired channel, press **⏮** twice to store.

Repeat all the above steps to tune and store more channels.

- b) Normally the automatic fine tuning (AFT) will give the best possible picture, however you can manually fine tune the TV to obtain a better picture if the picture is distorted.

To do this:

While watching the channel (TV Broadcast) you wish to fine tune, select the **AFT** option and press **➡**. Next press **▼** or **▲** to adjust the fine tuning between -15 and +15. Finally press **⏮** twice to store.

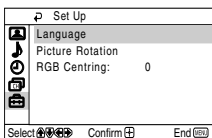
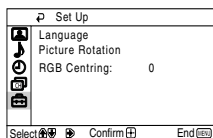
- c) Skip any unwanted programme numbers when they are selected with the **PROG +/-** button.

To do this:

Highlighting the **Programme** option, press **PROG +/-** to select the programme number you want to skip. When the programme you want to skip appears on the screen, select the **Skip** option and press **➡**. Next press **▼** or **▲** to select **Yes**. Finally press **⏮** twice to confirm and store.

*To cancel this function afterwards, select **No** instead of **Yes** in the step above.*

Set Up



The “Set Up” menu allows you to alter various options on this TV.

Language

The “Language” option in the “Set Up” menu allows you to select the language that the menus are displayed in.

To do this:

After selecting the option, press  and then proceed in the same way as in the step 2 of the section “Switching On the TV and Automatically Tuning” (see page 8).

Picture Rotation (only for KV-21CT1U)

Because of the earth’s magnetism, the picture might slant. In this case, you can correct the picture slant by using the option “Picture Rotation” in the “Set Up” menu.

To do this:

After selecting the option, press . Press  or  ( or ) to correct any slant of the picture. Finally press  to store.

RGB Centring

When connecting an RGB source, such as a “PlayStation”, you may need to readjust the horizontal position of the picture. In that case, you can readjust it through the “RGB Centring” option in the “Set Up” menu.

To do this:

While watching an RGB source, select the “RGB Centring” option and press . Press  or  to adjust the centre of the picture between -10 and +10. Finally press  to confirm and store.

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Teletext

i Teletext is an information service transmitted by most TV stations. The index page of the Teletext service (usually page 100) gives you information on how to use the service. To operate Teletext, use the remote control buttons as indicated below.

A Be sure to use a channel (TV Broadcast) with a strong signal, otherwise Teletext errors may occur.

To switch on Teletext:

After selecting the TV channel which carries the Teletext service you wish to view, press **⏏**.

To select a Teletext page:

Input 3 digits for the page number, using the numbered buttons.

- If you have made a mistake, retype the correct page number.
- If the counter on the screen continues searching, it is because this page is not available. In that case, input another page number.

TELETEXT	
Index	25
Programme	153
News	101
Sport	98
Weather	

To check the contents of a Teletext service:

Press **⏏**.

To access the next or preceding page:

Press **⏏** or **⏏**.

To superimpose teletext on to the TV:

Whilst you are viewing Teletext, press **⏏**. Press it again to cancel Teletext mode.

To freeze a teletext page:

Some Teletext pages have sub-pages which follow on automatically. To stop them, press **⏏**. Press it again to cancel the freeze.

To reveal concealed information (e.g., answer to a quiz):

Press **⏏**. Press it again to conceal the information.

To enlarge the Teletext display:

Press **⏏**. Each time you press **⏏**, the Teletext display changes as follows: Enlarge upper half → Enlarge lower half → Normal size.

To stand by for a Teletext page while watching a TV program.

- 1 Enter the Teletext number that you want to refer to, then press **⏏**.
- 2 When the page number is displayed, press **⏏** to show the Text.

To switch off Teletext:

Press **⏏**.

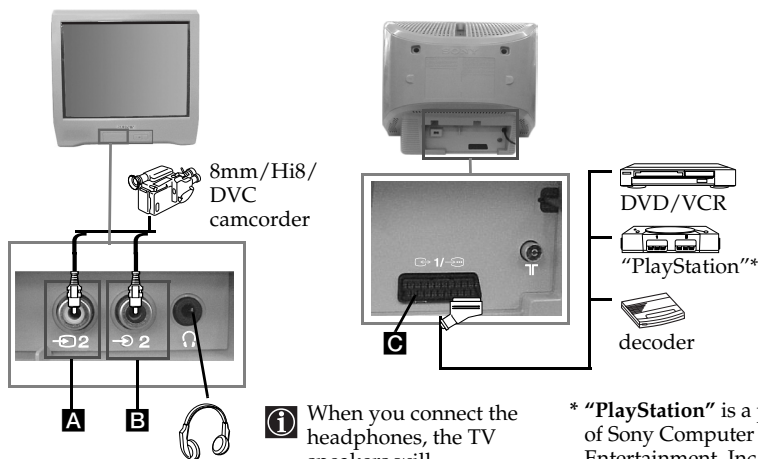
Fasttext

i Fasttext service lets you access pages with one push of a button.

While you are in Teletext mode and Fasttext is broadcast, a colour coded menu appears at the bottom of the teletext page. Press the colour button (red, green, yellow or blue) to access the corresponding page.

Connecting Optional Equipment

i Using the following instructions, you can connect a wide range of optional equipment to your TV set (connecting cables are not supplied).



i When you connect the headphones, the TV speakers will automatically be muted

* "PlayStation" is a product of Sony Computer Entertainment, Inc.
* "PlayStation" is a trademark of Sony Computer Entertainment, Inc.

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Connecting a VCR:

To connect a VCR, please refer to the section "Connecting an outdoor aerial and VCR" of this instruction manual. We recommend you connect your VCR using a Scart lead. If you do not have a Scart lead, tune in the VCR test signal to the TV programme number "0" by using the "Manual Programme Preset" option (for details on how to manually programme these presets, see page 14, step a).

Refer to your VCR instruction manual to find out how to find the output channel of your VCR.

Using Optional Equipment

- 1 Connect your equipment to the designated TV socket, as indicated above.
- 2 Switch on the connected equipment.
- 3 To watch the picture of the connected equipment, press  repeatedly until the correct input symbol appears on the screen.

Symbol

Input Signals

 1

• Audio / video input signal through the Scart connector **C**

 1

• RGB input signal through the Scart connector **C**. This symbol appears only if a RGB source has been connected.

 2

• Video input signal through the phono socket **A** and Audio input signal through **B**.

- 4 Press  button on the remote control to return to the normal TV picture.

Specifications

TV system:

I

Colour system:

PAL, SECAM

NTSC 3.58, 4.43 (only Video In)

Channel Coverage:

UHF B21-B69

Picture Tube:

Flat Display FD Trinitron

Rear Terminals

 21-pin Scart connector
(CENELEC standard) including
audio/video input, RGB input,
TV audio/video output.

Front Terminals

 2 video input – phono jack
 2 audio input – phono jack
 headphone jack

Sound Output:

1 x 6 W (music power)

1 x 3 W (RMS)

Power Consumption:

- KV-21CT1U: 56 W

- KV-14CT1U: 50 W

Standby Power Consumption:

< 1 W

Dimensions (w x h x d):

- KV-21CT1U: Approx. 497 x 461 x 487 mm

- KV-14CT1U: Approx. 374 x 355 x 420 mm

Weight:

- KV-21CT1U: Approx. 24 kg

- KV-14CT1U: Approx. 11 kg

Accessories supplied:

1 Remote Control (RM-W100)

2 Batteries (IEC designated)

1 Loop aerial (only for KV-14CT1U)

Other features:

- Teletext, Fasttext, TOPtext

- Sleep Timer

- On Timer

Design and specifications are subject to change without notice.

Ecological Paper- Totally Chlorine Free 

Troubleshooting

 Here are some simple solutions to the problems which may affect the picture and sound.

Problem	Solution
No picture (screen is dark) and no sound.	• Check the aerial connection. • Plug the TV in and press the  button on the front of TV. • If the standby indicator  is on, press  button on the remote control.
Poor or no picture (screen is dark), but good sound.	• Using the menu system, select the "Picture Adjustment" menu and select "Reset" to return to the factory settings (see page 10).
No picture or no menu information from equipment connected to the Scart connector.	• Check that the optional equipment is on and press  repeatedly on the remote control until the correct input symbol is displayed on the screen (see page 17).
Good picture, no sound.	• Press the  + button on the remote control. • Check that the headphones are not connected.
No colour on colour programmes.	• Using the menu system, select the "Picture Adjustment" menu and select "Reset" to return to factory settings (see page 10).
Distorted picture when changing programmes or selecting teletext.	• Turn off any equipment connected to the Scart connector on the rear of the TV.
Picture slanted (only for KV-21CT1U).	• Using the menu system, select the "Picture Rotation" option in the "Set Up" menu to correct the picture slant (see page 15).
Noisy picture when viewing a TV channel.	• Using the menu system, select the "Manual Programme Preset" menu and adjust Fine Tuning (AFT) to obtain better picture reception (see page 14). • Using the menu system, select the "Intelligent Picture" option in the "Picture" menu and select "On" to reduce the noise in the picture (see page 10).
Remote control does not function.	• Replace the batteries.
The standby indicator  on the TV flashes red.	• Contact your nearest Sony service centre.

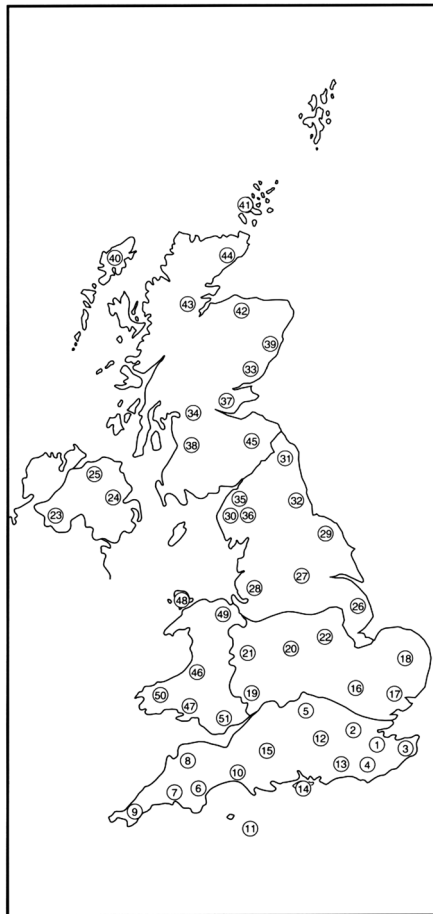
 In case of problems, have your TV serviced by qualified personnel. Never open the casing yourself.

GB

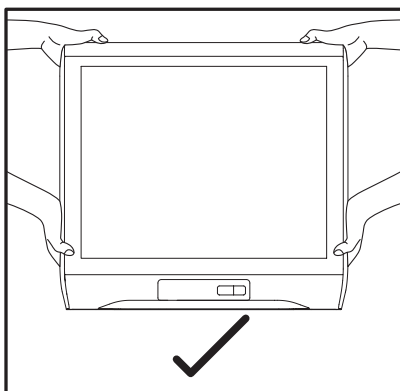
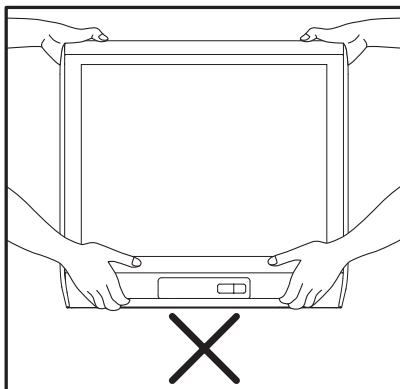
Television Channel Number Guide for United Kingdom

i Only the main transmitters are listed. Information regarding the regional sub-relay channel numbers can be obtained by contacting The BBC Engineering Information Dept., Telephone Number 020 7852 5040.

MAIN TRANSMITTERS	BBC1	BBC2	ITV	CH4	CH5
London & South East					
① Bluebell Hill	40	46	43	65	–
② Crystal Palace	26	33	23	30	–
③ Dover	50	56	66	53	–
④ Heathfield	49	52	64	67	–
⑤ Oxford	57	63	60	53	49
South-West					
⑥ Beacon Hill	57	63	60	53	–
⑦ Caradon Hill	22	28	25	32	–
⑧ Huntshaw Cross	55	62	59	65	67
⑨ Redruth	51	44	41	47	37
⑩ Stockland Hill	33	26	23	29	–
Channel Islands					
⑪ Fremont Point	51	44	41	47	–
South					
⑫ Hannington	39	45	42	66	–
⑬ Midhurst	61	55	58	68	–
⑭ Rowridge	31	24	27	21	–
West					
⑮ Mendip	58	64	61	54	37
East					
⑯ Sandy Heath	31	27	24	21	39
⑰ Sudbury	51	44	41	47	–
⑱ Tacolneston	62	55	59	65	52
Midlands (West)					
⑲ Ridge Hill	22	28	25	32	–
⑳ Sutton Coldfield	46	40	43	50	–
㉑ The Wrekin	26	33	23	29	–
Midlands (East)					
㉒ Waltham	58	64	61	54	–
Northern Ireland					
㉓ Brougher Mountain	22	28	25	32	–
㉔ Divis	31	27	24	21	–
㉕ Limavady	55	62	59	65	–
North					
㉖ Belmont	22	28	25	32	56
㉗ Emley Moor	44	51	47	41	37
North-West					
㉘ Winter Hill	55	62	59	65	48
North-East					
㉙ Bilsdale West Moor	33	26	29	23	–
㉚ Caldbeck	30	34	28	32	56
㉛ Chatton	39	45	49	42	–
㉜ Pontop Pike	58	64	61	54	–
Scotland					
㉝ Angus	57	63	60	53	–
㉞ Black Hill	40	46	43	50	37
㉟ Sandale	22	67	–	–	–
㊱ Caldbeck	–	–	28	32	56
㊲ Craigkelly	31	27	24	21	48
㊳ Darvel	33	26	23	29	–
㊴ Durris	22	28	25	32	67
㊵ Eitshal (Lewis)	33	26	23	29	–
㊶ Keellyang Hill	40	46	43	50	–
㊷ Knock More	33	26	23	29	–
㊸ Rosemarkie	39	45	49	42	–
㊹ Rumster Forest	31	27	24	21	–
㊺ Selkirk	55	62	59	65	52
Wales					
㊻ Blaenplwyf	31	27	24	21	56
㊼ Carmel	57	63	60	53	–
㊽ Llandona	57	63	60	53	–
㊾ Moel-y-Parc	52	45	49	42	–
㊿ Presely	46	40	43	50	37
① Wenvoe	44	51	41	47	–



KV-21CT1U



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FD Trinitron Colour Television

Instruction Manual

GB

Инструкции за експлоатация

BG

Návod k obsluze

CZ

Kezelési útmutató

HU

Instrukcja obsługi

PL

Инструкция по эксплуатации

RU

Návod na obsluhu

SK

***KV-21CT1K
KV-14CT1K***

Introduction

Thank you for choosing this Sony FD Trinitron Colour Television.

Before operating the TV, please read this manual thoroughly and retain it for future reference.

Symbols used in the manual:

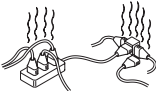
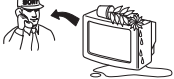
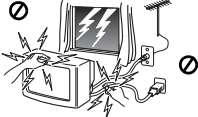
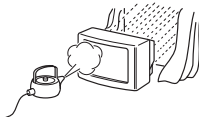
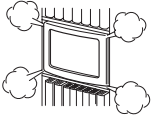
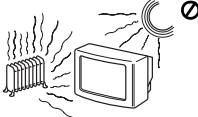
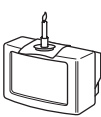
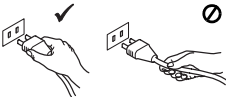
-  Important information.
-  Information on a feature.
- 1,2...Sequence of instructions.
-  Shaded buttons on the remote control show you the buttons you have to press to follow the sequence of the instructions.
-  Informs you of the result of instructions.

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GB

Safety Information

 This set is to operate on a 220-240V AC supply only. Take care not to connect too many appliances to the same power socket as this could result in fire or electric shock.	 For environmental and safety reasons, it is recommended that the TV set is not left in standby mode when not in use. Disconnect from the mains.	 Never push objects of any kind into the set as this could result in a fire or electric shock. Never spill liquid of any kind on the set. If any liquid or solid object does fall through, do not operate the TV. Have it checked immediately by qualified personnel.
 Do not open the cabinet and the rear cover of the TV. Refer to qualified service personnel only.	 For your own safety, do not touch any part of the TV, power lead or aerial lead during lightning storms.	 To prevent fire or shock hazard, do not expose the TV to rain or moisture.
 Do not cover the ventilation openings of the TV. For ventilation, leave a space of at least 10cm all around the set.	 Never place the TV in hot, humid or excessively dusty places. Do not install the TV where it may be exposed to mechanical vibrations.	 To prevent fire, keep inflammable objects or naked lights (e.g. candles) away from the TV.
 Clean the screen and cabinet with a soft, lightly dampened cloth. Do not use any type of abrasive pad, alkaline cleaner, scouring powder or solvent, such as alcohol or benzine, or antistatic spray. As a safety precaution, unplug the TV before cleaning it.	 Pull out the power lead by the plug. Do not pull on the power lead itself.	 Take care not to place heavy objects on the power lead as this could result in damage. We recommend you wind any excess lead around the holders provided on the rear of the TV.
 Place the TV on a secure stable stand. Do not allow children to climb on to it. Do not place the TV on its side or face up.	 Unplug the power lead before moving the TV. Avoid uneven surfaces, quick steps or excessive force. If the set has been dropped or damaged, have it checked immediately by qualified service personnel.	 Do not cover the ventilation openings of the TV with items such as curtains or newspapers, etc.

Overview of Remote Control Buttons

Displaying on screen information

Press to display all on-screen indications. Press again to cancel.

Muting the sound

Press to mute TV sound. Press again to restore the sound.

Selecting input source

Press repeatedly until the desired input symbol of the source appears on the TV screen.

This button only works in Teletext mode.

Function A/B associated to this button does not work with this TV.

Selecting channels

Press to select channels. For double-digit programme numbers, enter the second digit within 3 seconds.

or

Press --/-- and then the first and second digit.

If you enter an incorrect first digit, this should be corrected by entering another digit (0-9) and then selecting --/-- button again to enter the programme number of your choice.

On timer

Set TV to switch on automatically.

Sleep timer

Set TV to switch off automatically.

This button does not work on this set.

Adjusting TV volume

Press to adjust the volume of the TV.

This button only works in Teletext mode.

Function ↵ associated to this button does not work with this TV.

Selecting picture mode

Press repeatedly to change the picture mode.

To temporarily switch off TV

Press to temporarily switch off TV (the standby indicator  on TV lights up). Press again to switch on TV from standby mode.

To save energy we recommend switching off completely when TV is not in use.

 After 15 minutes without a signal and without any button being pressed, the TV switches automatically into standby mode.

Selecting TV mode

Press to switch off teletext or video input.

Back to the channel last watched

Press to watch the last channel selected (watched for at least 5 seconds).

Selecting channels

Press to select the next or previous channel.

Displaying the menu system

Press to display the menu on the TV screen. Press again to remove the menu display from the TV screen.

Menu selection

- ↑ Scroll Up
- ↓ Scroll Down
- ◀ Previous menu or selection
- ▶ Next menu or selection
- ↵ Confirm your selection

Selecting Teletext

Press to switch on teletext.

Selecting screen format

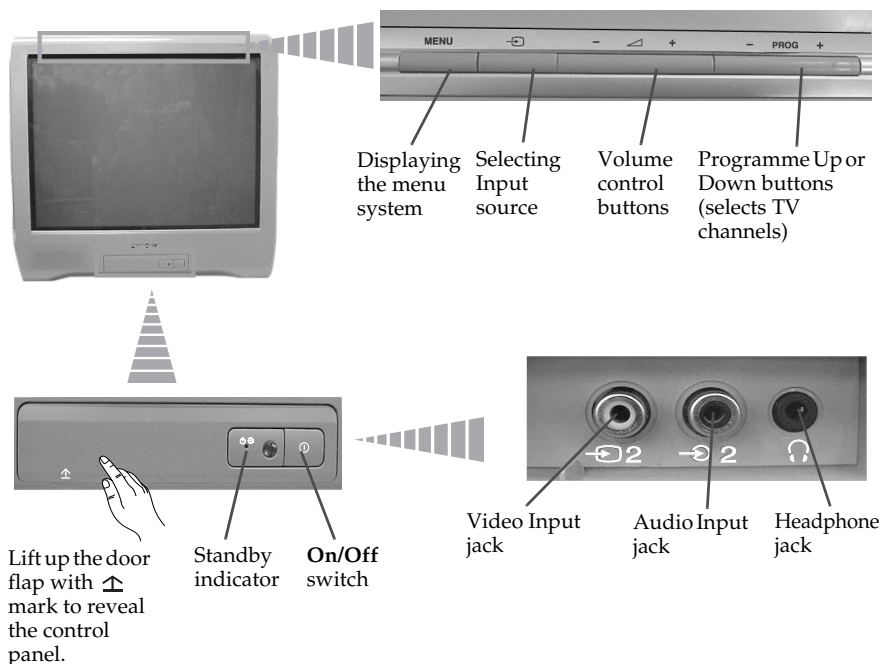
Press to view programmes in 16:9 mode. Press again to return to 4:3 mode.



GB

 Besides TV functions, all coloured buttons as well as green symbols are also used for Teletext operation. For more details, please refer to "Teletext" section of this instruction manual (see page 16).

Overview of TV Buttons



Inserting Batteries into the Remote Control

- Make sure you insert the supplied batteries using the correct polarities. Always remember to dispose of used batteries in an environmental friendly way.



Connecting an Indoor Aerial (only for KV-14CT1K)

i For a better reception we recommend you connect an external aerial. However, where an external aerial is not available and your local VHF/UHF signal is strong, you can connect the supplied indoor aerial as follows:

1 Insert the aerial into the opening on top of the set until it clicks.



2 Connect the aerial connector to the aerial socket on the rear of the set.

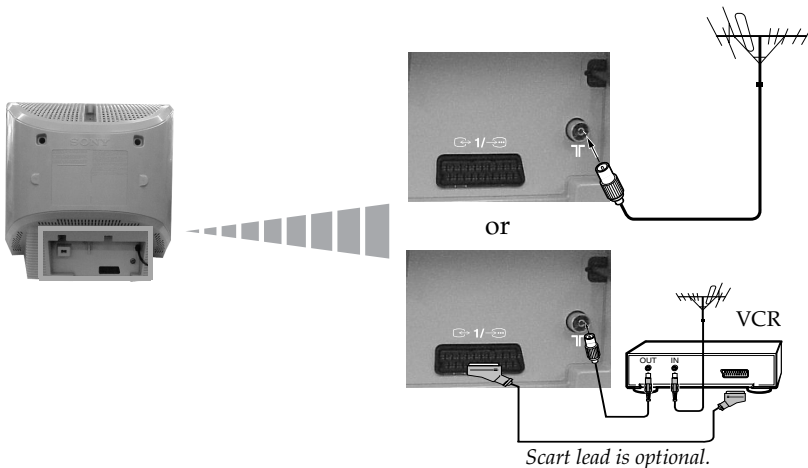


3 After switching on the TV, adjust the aerial for optimum reception.

GB

Connecting an Outdoor Aerial and VCR

i Connecting cables are not supplied.



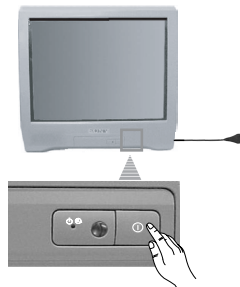
A For more details of VCR connection, please refer to the section "Connecting Optional Equipment" of this instruction manual (see page 17).

Switching On the TV and Automatically Tuning

i The first time you switch on your TV, a sequence of menu screens appear on the TV enabling you to: 1) choose the language of the menu screen, 2) choose the country in which you wish to operate the TV, 3) search and store all available channels (TV Broadcast), 4) change the order in which the channels (TV Broadcast) appear on the screen and 5) adjust the picture slant (only for KV-21CT1K).

However, if you need to change any of these settings at a later date, you can do that by selecting the appropriate option in the  (Set Up) or  (Channel Set Up) menu.

- 1** Connect the TV plug to the mains socket (220-240 V AC, 50 Hz). Press  On/Off button on the TV set to switch on the TV. The first time you switch on the TV, a **Language** menu displays automatically on the TV screen.



- 2** Press  +/- button on the top control panel to select the language, then press  to confirm your selection. From now on all menus will appear in the selected language.

Language	
	Svenska
	Norsk
	English
	Nederlands
	Français
	Select language
Select [ +]	Confirm [

- 3** The **Country** menu appears automatically on the TV screen. Press  +/- button to select the country in which you will operate the TV set, then press  to confirm your selection.

- i**
- If the country in which you want to use the TV set does not appear in the list, select “-” instead of a country.
 - In order to avoid wrong teletext characters for Cyrillic languages we recommend to select Russia in the case that your own country does not appear in the list.

Country	
	Sverige
	Norge
	-
	Italia
	Schweiz/Suisse/Svizzera
	Select Country
Select [ +]	Confirm [

- 4** Ensure the aerial is connected as instructed, then press  to confirm. The TV automatically starts searching and storing all available broadcast channels for you.

- A**
- This procedure could take some minutes. Please be patient and do not press any buttons, otherwise automatic tuning will not be completed.
 - If no channels were found during the auto tuning process, a new menu appears automatically on the screen asking you to connect the aerial. Please connect the aerial (see page 7) and press . The auto tuning process will start again.

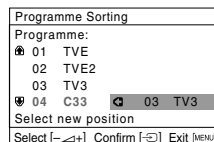
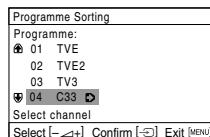
Initial Set Up	
First please connect aerial	
Do you want to start automatic tuning?	
	Yes
	No
Select [ +]	Confirm [] End [MENU]
Auto Tuning	
No channel found	
Please connect aerial	
	OK
Confirm [] End [MENU]	

5 After all available channels are captured and stored, the **Programme Sorting** menu appears automatically on the screen enabling you to change the order in which the channels appear on the screen.

a) If you wish to keep the broadcast channels in the tuned order, press MENU.

b) If you wish to store the channels in a different order:

- 1 Press $\triangleleft$ +/– to select the programme number with the channel (TV Broadcast) you wish to rearrange, then press $\rightarrow$.
- 2 Press $\triangleleft$ +/– to select the new programme number position for your selected channel (TV Broadcast), then press $\rightarrow$.
- 3 Repeat steps b) 1 and b) 2 if you wish to change the order of the other channels.

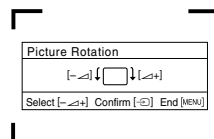


6 **i** The following option is only available for KV-21CT1K.

Because of the earth's magnetism, the picture might slant. The **Picture Rotation** menu allows you to correct the picture slants if it is necessary.

a) If it is not necessary, press $\rightarrow$.

b) If it is necessary, press $\triangleleft$ +/– to correct any slant of the picture. Finally press $\rightarrow$ to store.



GB

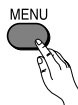
- i** • To allow this menu to appear again, press and hold MENU button at top control panel for about 5 seconds.
- The MENU, $\square$ and $\blacktriangle$ / $\blacktriangleright$ / $\blacktriangledown$ / $\blacktriangleleft$ buttons on the remote control can also be used for the operations above.

Your TV is now ready for use.

Introducing and Using the Menu System

i Your TV uses an on-screen menu system to guide you through the operations. Use the following buttons on the Remote Control to operate the menu system:

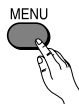
1 Press **MENU** to switch the menu on.



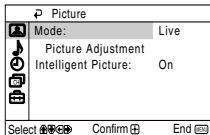
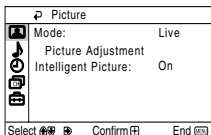
- 2** • To highlight the desired menu or option, press **↓** or **↑**.
• To enter to the selected menu or option, press **→**.
• To return to the last menu or option, press **←**.
• To alter settings of your selected option, press **↓** / **↑** / **←** or **→**.
• To confirm and store your selection, press **[Enter]**.



3 Press **MENU** to remove the menu from the screen.



Picture



The “Picture” menu allows you to alter the picture adjustments.

To do this:

After selecting the item you want to alter, press **→**, then press **↓** / **↑** / **←** or **→** repeatedly to adjust it and finally press **[Enter]** to store the new adjustment.

This menu also allows you to customize the picture mode based on the programme you are watching:

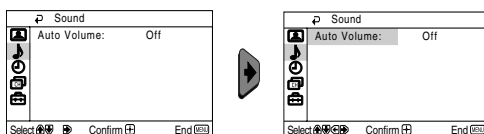
Mode	Live (for enhanced picture contrast and sharpness). Movie (for a finely detailed picture). Game (for a picture from game). Personal (for your own custom settings).
-------------	--

Picture Adjustment	Contrast	Press ↓ or ← to reduce picture contrast. Press ↑ or → to enhance picture contrast.
	Brightness	Press ↓ or ← to darken the picture. Press ↑ or → to brighten the picture.
	Colour	Press ↓ or ← to decrease colour intensity. Press ↑ or → to increase colour intensity.

Hue	Press or to decrease the green tones. Press or to increase the green tones.
Hue can only be adjusted for NTSC colour signal (e.g. USA video tapes).	
Sharpness	Press or to soften the picture. Press or to sharpen the picture.
Reset	Select to reset the picture to the factory preset levels.
Intelligent Picture	On/Off Select to optimize the picture quality. E.g. reduce noise level when signal is weak.

If any changes are made to “Picture Adjustment”, “Mode” will switch automatically to “Personal” and the new setting will be stored as “Personal”.

Sound

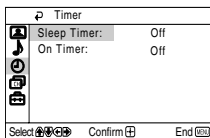
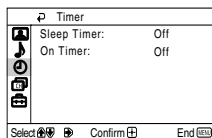


The “Sound” menu allows you to alter the sound adjustments.

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Auto Volume	On/Off
Volume level of the channels will stay the same, independent of the broadcast signal (e.g. in the case of advertisements).	

Timer



The “Timer” menu allows you to alter the timer adjustments.

Sleep Timer

The “Sleep Timer” option in the “Timer” menu allows you to select a time period for the TV to switch itself automatically into the standby mode.

To do this:

After selecting the option, press , then press  or  to set the time period delay (max. of 1 hour 30 minutes) and finally press  to store.



- While watching the TV, you can press the  button on the remote control to display the time remaining.
- One minute before the TV switches itself into standby mode, “TV will turn off soon” is displayed on the TV screen automatically.

On Timer

The “On Timer” option in the “Timer” menu allows you to select a time period for the TV to switch itself automatically on from standby mode.

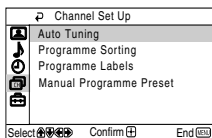
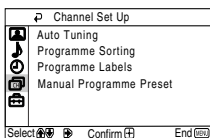
To do this:

After selecting the option, press , then press  or  to set the time period delay (max. of 12 hours) and finally press  to store. Finally press the standby button  on the remote control. After the selected length of time, the TV switches on automatically and “On Timer” will appear on the screen.



- The standby indicator  on the TV set lights up in amber to indicate that “On Timer” is active.
- Any loss of power will cause these settings to be cleared.
- If no buttons are pressed for more than one hour after the TV is turned on using the “On Timer”, the TV automatically goes into standby mode.

Channel Set Up



The “Channel Set Up” menu allows you to preset channels on this TV.

Auto Tuning

The “Auto Tuning” option in the “Channel Set Up” menu allows you to automatically search and store all available TV channels.

To do this:

After selecting the option, press  and then proceed in the same way as in the step 4 of the section “Switching On the TV and Automatically Tuning” (see page 8).

Programme Sorting

The “Programme Sorting” option in the “Channel Set Up” menu allows you to change the order in which the channels (TV Broadcast) appear on the screen.

To do this:

After selecting the option, press  and then proceed in the same way as in step 5b) of the section “Switching On the TV and Automatically Tuning” (see page 9).

GB

Programme Labels

The “Programme Labels” option in the “Channel Set Up” menu allows you to name a channel using up to five characters (letters or numbers).

To do this:

- 1 After selecting the option, press . Press  or  to select the programme number with the channel you wish to name, then press .
- 2 Press . With the first element of the label column highlighted, press  or  to select a letter or number (select “_” for a blank), then press  to confirm this character. Select the other four characters in the same way. Finally press  to store.

continued...

Manual Programme Preset

The "Manual Programme Preset" option in the "Channel Set Up" menu allows you to:

- a) Preset channels or a video input source one by one to the programme order of your choice.

To do this:

- 1 After selecting the "Manual Programme Preset" option, press . Highlight the **Programme** option and press . Press  or  to select a programme number on which you want to preset the channel (for VCR, select programme number "0"), then press .



The following option is only available depending on the country you have selected in the "Language/Country" menu.

- 2 After selecting the **System** option, press . Press  or  to select the TV Broadcast system (**B/G** for western European countries or **D/K** for eastern European countries), then press .
- 3 After selecting the **Channel** option, press . Then press  or  to select the channel tuning (**C** for terrestrial channels or **S** for cable channels). Next press . After that, press the number buttons to directly enter the channel number of the TV Broadcast. If you do not know the channel number, press  or  to search for it. When you tune the desired channel, press  twice to store.

Repeat all the above steps to tune and store more channels.

- b) Normally the automatic fine tuning (AFT) will give the best possible picture, however you can manually fine tune the TV to obtain a better picture if the picture is distorted.

To do this:

While watching the channel (TV Broadcast) you wish to fine tune, select the **AFT** option and press . Next press  or  to adjust the fine tuning between -15 and +15. Finally press  twice to store.

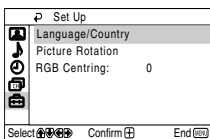
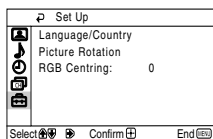
- c) Skip any unwanted programme numbers when they are selected with the PROG +/- button.

To do this:

Highlighting the **Programme** option, press **PROG +/-** to select the programme number you want to skip. When the programme you want to skip appears on the screen, select the **Skip** option and press . Next press  or  to select **Yes**. Finally press  twice to confirm and store.

*To cancel this function afterwards, select **No** instead of **Yes** in the step above.*

Set Up



The “Set Up” menu allows you to alter various options on this TV.

Language/ Country

The “Language/Country” option in the “Set Up” menu allows you to select the language that the menus are displayed in.

To do this:

After selecting the option, press  and then proceed in the same way as in the step 2 and 3 of the section “Switching On the TV and Automatically Tuning” (see page 8).

Picture Rotation (only for KV-21CT1K)

Because of the earth’s magnetism, the picture might slant. In this case, you can correct the picture slant by using the option “Picture Rotation” in the “Set Up” menu.

To do this:

After selecting the option, press . Press  or  ( or ) to correct any slant of the picture. Finally press  to store.

RGB Centring

When connecting an RGB source, such as a “PlayStation”, you may need to readjust the horizontal position of the picture. In that case, you can readjust it through the “RGB Centring” option in the “Set Up” menu.

To do this:

While watching an RGB source, select the “RGB Centring” option and press . Press  or  to adjust the centre of the picture between -10 and +10. Finally press  to confirm and store.

GB

Teletext

i Teletext is an information service transmitted by most TV stations. The index page of the Teletext service (usually page 100) gives you information on how to use the service. To operate Teletext, use the remote control buttons as indicated below.

A Be sure to use a channel (TV Broadcast) with a strong signal, otherwise Teletext errors may occur.

To switch on Teletext :

After selecting the TV channel which carries the Teletext service you wish to view, press **⏏**.

To select a Teletext page:

Input 3 digits for the page number, using the numbered buttons.

- If you have made a mistake, retype the correct page number.
- If the counter on the screen continues searching, it is because this page is not available. In that case, input another page number.

TELETEXT	
Index	25
Programme	153
News	101
Sport	98
Weather	

To check the contents of a Teletext service:

Press **⏏**.

To access the next or preceding page:

Press **⏏** or **⏏**.

To superimpose teletext on to the TV:

Whilst you are viewing Teletext, press **⏏**. Press it again to cancel Teletext mode.

To freeze a teletext page:

Some Teletext pages have sub-pages which follow on automatically. To stop them, press **⏏**. Press it again to cancel the freeze.

To reveal concealed information (e.g., answer to a quiz):

Press **?**. Press it again to conceal the information.

To enlarge the Teletext display:

Press **⏏**. Each time you press **⏏**, the Teletext display changes as follows: Enlarge upper half → Enlarge lower half → Normal size.

To stand by for a Teletext page while watching a TV program.

- 1 Enter the Teletext number that you want to refer to, then press **⏏**.
- 2 When the page number is displayed, press **⏏** to show the Text.

To switch off Teletext:

Press **⏏**.

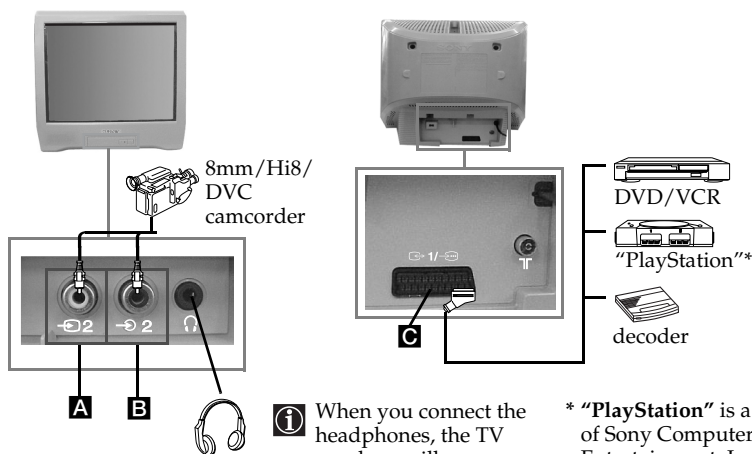
Fasttext

i Fasttext service lets you access pages with one push of a button.

While you are in Teletext mode and Fasttext is broadcast, a colour coded menu appears at the bottom of the teletext page. Press the colour button (red, green, yellow or blue) to access the corresponding page.

Connecting Optional Equipment

i Using the following instructions, you can connect a wide range of optional equipment to your TV set (connecting cables are not supplied).



* "PlayStation" is a product of Sony Computer Entertainment, Inc.
* "PlayStation" is a trademark of Sony Computer Entertainment, Inc.

GB

Connecting a VCR:

To connect a VCR, please refer to the section "Connecting an outdoor aerial and VCR" of this instruction manual. We recommend you connect your VCR using a Scart lead. If you do not have a Scart lead, tune in the VCR test signal to the TV programme number "0" by using the "Manual Programme Preset" option (for details on how to manually programme these presets, see page 14, step a).

Refer to your VCR instruction manual to find out how to find the output channel of your VCR.

Using Optional Equipment

- 1 Connect your equipment to the designated TV socket, as indicated above.
- 2 Switch on the connected equipment.
- 3 To watch the picture of the connected equipment, press repeatedly until the correct input symbol appears on the screen.

Symbol

Input Signals

1

• Audio/video input signal through the Scart connector **C**.

1

• RGB input signal through the Scart connector **C**. This symbol appears only if a RGB source has been connected.

2

• Video input signal through the phono socket **A** and Audio input signal through **B**.

- 4 Press button on the remote control to return to the normal TV picture.

Specifications

TV system:

Depending on your country selection:
B/G/H, D/K

Colour system:

PAL, SECAM
NTSC 3.58, 4.43 (only Video In)

Channel Coverage:

VHF: E2-E12
UHF: E21-E69
CATV: S1-S20
HYPER: S21-S41
D/K: R1-R12, R21-R69

Picture Tube:

Flat Display FD Trinitron

Rear Terminals

 21-pin Scart connector
(CENELEC standard) including
audio/video input, RGB input,
TV audio/video output.

Front Terminals

 2 video input – phono jack
 2 audio input – phono jack
 headphones jack

Sound Output:

1 x 6 W (music power)
1 x 3 W (RMS)

Power Consumption:

- KV-21CT1K: 56 W
- KV-14CT1K: 50 W

Standby Power Consumption:

< 1 W

Dimensions (w x h x d):

- KV-21CT1K: Approx. 497 x 461 x 487 mm
- KV-14CT1K: Approx. 374 x 355 x 420 mm

Weight:

- KV-21CT1K: Approx. 24 kg
- KV-14CT1K: Approx. 11 kg

Accessories supplied:

1 Remote Control (RM-W100)
2 Batteries (IEC designated)
1 Aerial (only for KV-14CT1K)

Other features:

- Teletext, Fasttext, TOPtext
- Sleep Timer
- On Timer

Design and specifications are subject to change without notice.

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Troubleshooting

 Here are some simple solutions to the problems which may affect the picture and sound.

Problem	Solution
No picture (screen is dark) and no sound.	• Check the aerial connection. • Plug the TV in and press the  button on the front of TV. • If the standby indicator  is on, press  button on the remote control.
Poor or no picture (screen is dark), but good sound.	• Using the menu system, select the “Picture Adjustment” menu and select “Reset” to return to the factory settings (see page 10).
No picture or no menu information from equipment connected to the Scart connector.	• Check that the optional equipment is on and press  repeatedly on the remote control until the correct input symbol is displayed on the screen (see page 17).
Good picture, no sound.	• Press the  + button on the remote control. • Check that headphones are not connected.
No colour on colour programmes.	• Using the menu system, select the “Picture Adjustment” menu and select “Reset” to return to factory settings (see page 10).
Distorted picture when changing programmes or selecting teletext.	• Turn off any equipment connected to the Scart connector on the rear of the TV.
Wrong characters appear when viewing teletext.	• Using the menu system, enter the “Language/ Country” option in the “Set Up” menu and select the country in which you operate the TV set. For Cyrillic languages, we recommend to select Russia in the case that your own country does not appear in the list (see page 15).
Picture slanted. (only for KV-21CT1K)	• Using the menu system, select the “Picture Rotation” option in the “Set Up” menu to correct the picture slant (see page 15).
Noisy picture when viewing a TV channel.	• Using the menu system, select the “Manual Programme Preset” menu and adjust Fine Tuning (AFT) to obtain better picture reception (see page 14). • Using the menu system, select the “Intelligent Picture” option in the “Picture” menu and select “On” to reduce the noise in the picture (see page 10).
Remote control does not function.	• Replace the batteries.
The standby indicator  on the TV flashes red.	• Contact your nearest Sony service centre.

 In case of problems, have your TV serviced by qualified personnel. Never open the casing yourself.

SONY®

4-093-927-72(1)



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FD Trinitron Colour Television

Instruction Manual

GB

***KV-21CT1B
KV-14CT1B***

© 2003 Sony Corporation

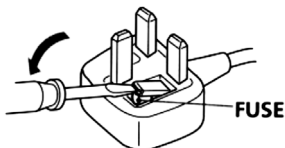
NOTICE FOR CUSTOMERS

A moulded plug complying with BS1363 is fitted to this equipment for your safety and convenience.

Should the fuse in the plug supplied need to be replaced, a 5 AMP fuse approved by ASTA or BSI to BS 1362 (i.e. marked with  or ) must be used.

When an alternative type of plug is used it should be fitted with a 5 AMP FUSE, otherwise the circuit should be protected by a 5 AMP FUSE at the distribution board.

If the plug supplied with this equipment has a detachable fuse cover, be sure to attach the fuse cover after you change the fuse. Never use the plug without the fuse cover. If you should lose the fuse cover, please contact your nearest Sony service centre.



How to replace the fuse

Open the fuse compartment with a blade screwdriver, and replace the fuse.

• IMPORTANT

If the plug supplied is not suitable for the socket outlets in your home, it should be cut off and an appropriate plug fitted in accordance with the following instructions:

The wires in this mains lead are coloured in accordance with the following code:

Blue Neutral

Brown Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red. Do not connect either wire to the earth terminal in the plug which is marked by the letter E or by the safety earth symbol  or coloured green or green and yellow.

WARNING

- To prevent shock hazard, do not insert the plug cut off from the mains lead into a socket outlet. This plug cannot be used and should be destroyed.
- To prevent fire or shock hazard, do not expose the unit to rain or moisture.
- Dangerously high voltages are present inside the set. Do not open the cabinet. Refer servicing to qualified personnel only.

Introduction

Thank you for choosing this Sony FD Trinitron Colour Television.

Before operating the TV, please read this manual thoroughly and retain it for future reference.

Symbols used in the manual:

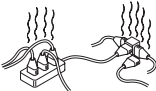
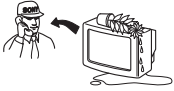
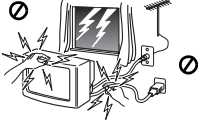
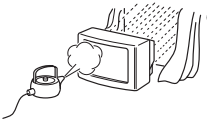
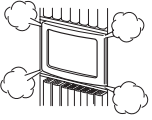
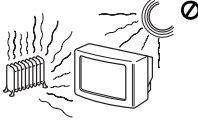
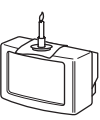
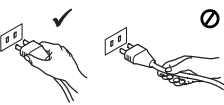
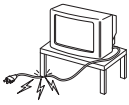
-  Important information
-  Information on a feature.
- 1,2...Sequence of instructions.
-  Shaded buttons on the remote control show you the buttons you have to press to follow the sequence of the instructions.
-  Informs you of the result of instructions.

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Safety Information

 This set is to operate on a 220-240V AC supply only. Take care not to connect too many appliances to the same power socket as this could result in fire or electric shock.	 For environmental and safety reasons, it is recommended that the TV set is not left in standby mode when not in use. Disconnect from the mains.	 Never push objects of any kind into the set as this could result in a fire or electric shock. Never spill liquid of any kind on the set. If any liquid or solid object does fall through, do not operate the TV. Have it checked immediately by qualified personnel.
 Do not open the cabinet and the rear cover of the TV. Refer to qualified service personnel only.	 For your own safety, do not touch any part of the TV, power lead or aerial lead during lightning storms.	 To prevent fire or shock hazard, do not expose the TV to rain or moisture.
 Do not cover the ventilation openings of the TV. For ventilation, leave a space of at least 10cm all around the set.	 Never place the TV in hot, humid or excessively dusty places. Do not install the TV where it may be exposed to mechanical vibrations.	 To prevent fire, keep inflammable objects or naked lights (e.g. candles) away from the TV.
 Clean the screen and cabinet with a soft, lightly dampened cloth. Do not use any type of abrasive pad, alkaline cleaner, scouring powder or solvent, such as alcohol or benzine, or antistatic spray. As a safety precaution, unplug the TV before cleaning it.	 Pull out the power lead by the plug. Do not pull on the power lead itself.	 Take care not to place heavy objects on the power lead as this could result in damage. We recommend you wind any excess lead around the holders provided on the rear of the TV.
 Place the TV on a secure stable stand. Do not allow children to climb on to it. Do not place the TV on its side or face up.	 Unplug the power lead before moving the TV. Avoid uneven surfaces, quick steps or excessive force. If the set has been dropped or damaged, have it checked immediately by qualified service personnel.	 Do not cover the ventilation openings of the TV with items such as curtains or newspapers, etc.

Overview of Remote Control Buttons

Displaying on screen information

Press to display all on-screen indications. Press again to cancel.

Muting the sound

Press to mute TV sound. Press again to restore the sound.

Selecting input source

Press repeatedly until the desired input symbol of the source appears on the TV screen.

This button only works in Teletext mode.

Function A/B associated to this button does not work with this TV.

Selecting channels

Press to select channels. For double-digit programme numbers, enter the second digit within 3 seconds.

or

Press -/-- and then the first and second digit.

If you enter an incorrect first digit, this should be corrected by entering another digit (0-9) and then selecting -/-- button again to enter the programme number of your choice.

On timer

Set TV to switch on automatically.

Sleep timer

Set TV to switch off automatically.

This button does not work on this set.

Adjusting TV volume

Press to adjust the volume of the TV.

This button only works in Teletext mode.

Function ↵ associated to this button does not work with this TV.

Selecting picture mode

Press repeatedly to change the picture mode.

To temporarily switch off TV

Press to temporarily switch off TV (the standby indicator ⏻ on TV lights up). Press again to switch on TV from standby mode.

To save energy we recommend switching off completely when TV is not in use.

⚠ After 15 minutes without a signal and without any button being pressed, the TV switches automatically into standby mode.

Selecting TV mode

Press to switch off teletext or video input.

Back to the channel last watched

Press to watch the last channel selected (watched for at least 5 seconds).

Selecting channels

Press to select the next or previous channel.

Displaying the menu system

Press to display the menu on the TV screen. Press again to remove the menu display from the TV screen.

Menu selection

- ⬆ Scroll Up
- ⬇ Scroll Down
- ⬅ Previous menu or selection
- ➡ Next menu or selection
- ⏹ Confirm your selection

Selecting Teletext

Press to switch on teletext.

Selecting screen format

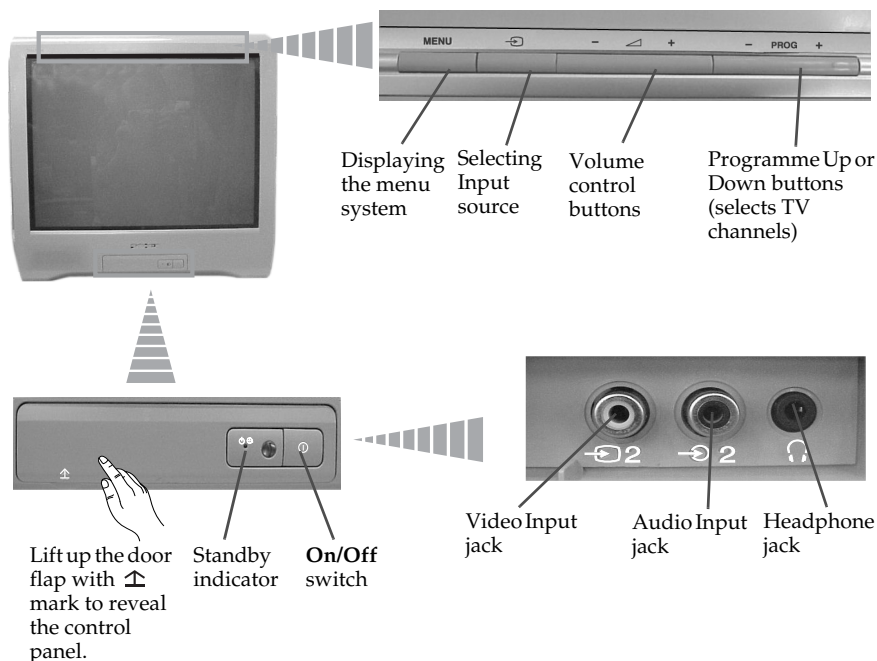
Press to view programmes in 16:9 mode. Press again to return to 4:3 mode.



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i Besides TV functions, all coloured buttons as well as green symbols are also used for Teletext operation. For more details, please refer to "Teletext" section of this instruction manual (see page 16).

Overview of TV Buttons



Inserting Batteries into the Remote Control

- Make sure you insert the supplied batteries using the correct polarities. Always remember to dispose of used batteries in an environmental friendly way.



Connecting an Indoor Aerial (only for KV-14CT1B)

i For a better reception we recommend you connect an external aerial. However, where an external aerial is not available and your local VHF/UHF signal is strong, you can connect the supplied indoor aerial as follows:

1 Insert the aerial into the opening on top of the set until it clicks.



2 Connect the aerial connector to the aerial socket on the rear of the set.

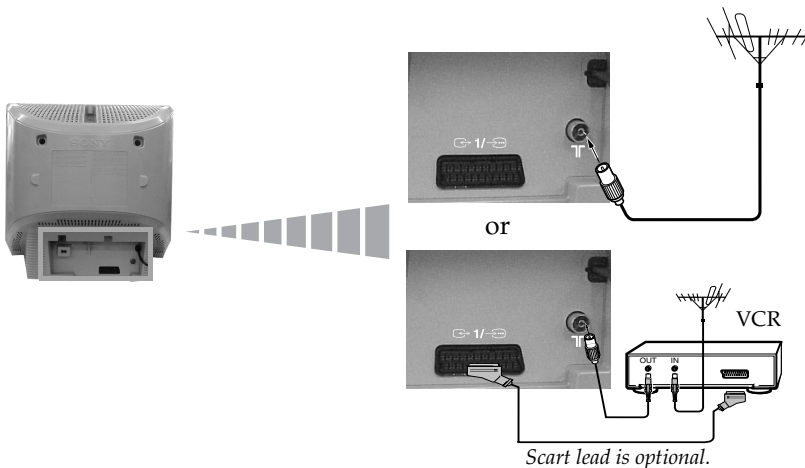


3 After switching on the TV, adjust the aerial for optimum reception.

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Connecting an Outdoor Aerial and VCR

i Connecting cables are not supplied.



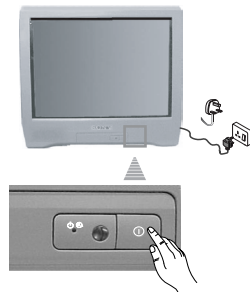
A For more details of VCR connection, please refer to the section "Connecting Optional Equipment" of this instruction manual (see page 17).

Switching On the TV and Automatically Tuning

i The first time you switch on your TV, a sequence of menu screens appear on the TV enabling you to: 1) choose the language of the menu screen, 2) choose the country in which you wish to operate the TV, 3) search and store all available channels (TV Broadcast), 4) change the order in which the channels (TV Broadcast) appear on the screen and 5) adjust the picture slant (only for KV-21CT1B).

However, if you need to change any of these settings at a later date, you can do that by selecting the appropriate option in the **⚙️** (Set Up) or **📺** (Channel Set Up) menu.

- 1** Connect the TV plug to the mains socket (220-240 V AC, 50 Hz). Press **⏻** On/Off button on the TV set to switch on the TV. The first time you switch on the TV, a **Language** menu displays automatically on the TV screen.



- 2** Press **⏮** +/- button on the top control panel to select the language, then press **➡** to confirm your selection. From now on all menus will appear in the selected language.

Language	
🇸🇪 Svenska	
Norsk	
English	
Nederlands	
🇫🇷 Français	
Select language	
Select [-<+] Confirm [->]	

- 3** The **Country** menu appears automatically on the TV screen. Press **⏮** +/- button to select the country in which you will operate the TV set, then press **➡** to confirm your selection.

- i**
- If the country in which you want to use the TV set does not appear in the list, select “-” instead of a country.
 - In order to avoid wrong teletext characters for Cyrillic languages we recommend to select Russia in the case that your own country does not appear in the list.

Country	
🇸🇪 Sverige	
Norge	
-	
Italia	
🇨🇭 Schweiz/Suisse/Svizzera	
Select Country	
Select [-<+] Confirm [->]	

- 4** Ensure the aerial is connected as instructed, then press **➡** to confirm. The TV automatically starts searching and storing all available broadcast channels for you.

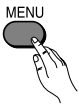
- ⚠️**
- This procedure could take some minutes. Please be patient and do not press any buttons, otherwise automatic tuning will not be completed.
 - If no channels were found during the auto tuning process, a new menu appears automatically on the screen asking you to connect the aerial. Please connect the aerial (see page 7) and press **➡**. The auto tuning process will start again.

Initial Set Up	
First please connect aerial	
Do you want to start automatic tuning?	
Yes	
No	
Select [-<+] Confirm [->] End [MENU]	
Auto Tuning	
No channel found	
Please connect aerial	
OK	
Confirm [->] End [MENU]	

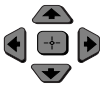
Introducing and Using the Menu System

i Your TV uses an on-screen menu system to guide you through the operations. Use the following buttons on the Remote Control to operate the menu system:

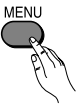
1 Press **MENU** to switch the menu on.



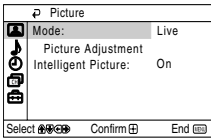
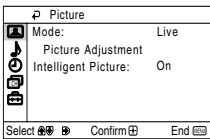
- 2** • To highlight the desired menu or option, press **↓** or **↑**.
• To enter to the selected menu or option, press **➡**.
• To return to the last menu or option, press **⬅**.
• To alter settings of your selected option, press **↓/↑/⬅** or **➡**.
• To confirm and store your selection, press **⏏**.



3 Press **MENU** to remove the menu from the screen.



Picture



The “Picture” menu allows you to alter the picture adjustments.

To do this:

After selecting the item you want to alter, press **➡**, then press **↓/↑/⬅** or **➡** repeatedly to adjust it and finally press **⏏** to store the new adjustment.

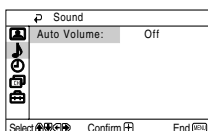
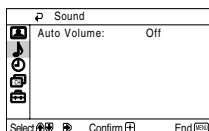
This menu also allows you to customize the picture mode based on the programme you are watching:

Mode	Live (for enhanced picture contrast and sharpness). Movie (for a finely detailed picture). Game (for a picture from game). Personal (for your own custom settings).	
Picture Adjustment	Contrast	Press ↓ or ⬅ to reduce picture contrast. Press ↑ or ➡ to enhance picture contrast.
	Brightness	Press ↓ or ⬅ to darken the picture. Press ↑ or ➡ to brighten the picture.
	Colour	Press ↓ or ⬅ to decrease colour intensity. Press ↑ or ➡ to increase colour intensity.

Hue	Press or to decrease the green tones. Press or to increase the green tones.
Hue can only be adjusted for NTSC colour signal (e.g. USA video tapes).	
Sharpness	Press or to soften the picture. Press or to sharpen the picture.
Reset	Select to reset the picture to the factory preset levels.
Intelligent Picture	On/Off Select to optimize the picture quality. E.g. reduce noise level when signal is weak.

If any changes are made to “Picture Adjustment”, “Mode” will switch automatically to “Personal” and the new setting will be stored as “Personal”.

Sound

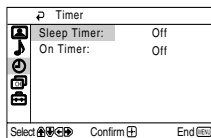
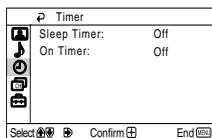


The “Sound” menu allows you to alter the sound adjustments.

GB

Auto Volume	On/Off Volume level of the channels will stay the same, independent of the broadcast signal (e.g. in the case of advertisements).
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Timer



The “Timer” menu allows you to alter the timer adjustments.

Sleep Timer

The “Sleep Timer” option in the “Timer” menu allows you to select a time period for the TV to switch itself automatically into the standby mode.

To do this:

After selecting the option, press , then press  or  to set the time period delay (max. of 1 hour 30 minutes) and finally press  to store.



- While watching the TV, you can press the  button on the remote control to display the time remaining.
- One minute before the TV switches itself into standby mode, “TV will turn off soon” is displayed on the TV screen automatically.

On Timer

The “On Timer” option in the “Timer” menu allows you to select a time period for the TV to switch itself automatically on from standby mode.

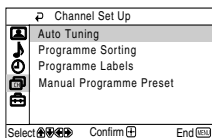
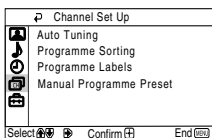
To do this:

After selecting the option, press , then press  or  to set the time period delay (max. of 12 hours) and finally press  to store. Finally press the standby button  on the remote control. After the selected length of time, the TV switches on automatically and “On Timer” will appear on the screen.



- The standby indicator  on the TV set lights up in amber to indicate that “On Timer” is active.
- Any loss of power will cause these settings to be cleared.
- If no buttons are pressed for more than one hour after the TV is turned on using the “On Timer”, the TV automatically goes into standby mode.

Channel Set Up



The “Channel Set Up” menu allows you to preset channels on this TV.

Auto Tuning

The “Auto Tuning” option in the “Channel Set Up” menu allows you to automatically search and store all available TV channels.

To do this:

After selecting the option, press  and then proceed in the same way as in the step 4 of the section “Switching On the TV and Automatically Tuning” (see page 8).

Programme Sorting

The “Programme Sorting” option in the “Channel Set Up” menu allows you to change the order in which the channels (TV Broadcast) appear on the screen.

To do this:

After selecting the option, press  and then proceed in the same way as in step 5b) of the section “Switching On the TV and Automatically Tuning” (see page 9).

GB

Programme Labels

The “Programme Labels” option in the “Channel Set Up” menu allows you to name a channel using up to five characters (letters or numbers).

To do this:

- 1 After selecting the option, press . Press  or  to select the programme number with the channel you wish to name, then press .
- 2 Press . With the first element of the label column highlighted, press  or  to select a letter or number (select “_” for a blank), then press  to confirm this character. Select the other four characters in the same way. Finally press  to store.

continued...

Manual Programme Preset

The "Manual Programme Preset" option in the "Channel Set Up" menu allows you to:

- a) Preset channels or a video input source one by one to the programme order of your choice.

To do this:

- 1 After selecting the "Manual Programme Preset" option, press **➡**. Highlight the **Programme** option and press **➡**. Press **▼** or **▲** to select a programme number on which you want to preset the channel (for VCR, select programme number "0"), then press **➡**.



The following option is only available depending on the country you have selected in the "Language/Country" menu.

- 2 After selecting the **System** option, press **➡**. Press **▼** or **▲** to select the TV Broadcast system (**B/G** for western European countries, **L** for France, **I** for United Kingdom or **D/K** for eastern European countries), then press **↵**.
- 3 After selecting the **Channel** option, press **➡**. Then press **▼** or **▲** to select the channel tuning (**C** for terrestrial channels or **S** for cable channels). Next press **➡**. After that, press the number buttons to directly enter the channel number of the TV Broadcast. If you do not know the channel number, press **▼** or **▲** to search for it. When you tune the desired channel, press **↵** twice to store.

Repeat all the above steps to tune and store more channels.

- b) Normally the automatic fine tuning (AFT) will give the best possible picture, however you can manually fine tune the TV to obtain a better picture if the picture is distorted.

To do this:

While watching the channel (TV Broadcast) you wish to fine tune, select the **AFT** option and press **➡**. Next press **▼** or **▲** to adjust the fine tuning between -15 and +15. Finally press **↵** twice to store.

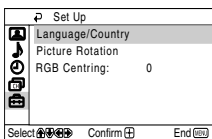
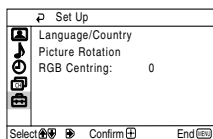
- c) Skip any unwanted programme numbers when they are selected with the PROG +/- button.

To do this:

Highlighting the **Programme** option, press **PROG +/-** to select the programme number you want to skip. When the programme you want to skip appears on the screen, select the **Skip** option and press **➡**. Next press **▼** or **▲** to select **Yes**. Finally press **↵** twice to confirm and store.

*To cancel this function afterwards, select **No** instead of **Yes** in the step above.*

Set Up



The “Set Up” menu allows you to alter various options on this TV.

Language/ Country

The “Language/Country” option in the “Set Up” menu allows you to select the language that the menus are displayed in.

To do this:

After selecting the option, press  and then proceed in the same way as in the step 2 and 3 of the section “Switching On the TV and Automatically Tuning” (see page 8).

Picture Rotation (only for KV-21CT1B)

Because of the earth’s magnetism, the picture might slant. In this case, you can correct the picture slant by using the option “Picture Rotation” in the “Set Up” menu.

To do this:

After selecting the option, press . Press  or  ( or ) to correct any slant of the picture. Finally press  to store.

RGB Centring

When connecting an RGB source, such as a “PlayStation”, you may need to readjust the horizontal position of the picture. In that case, you can readjust it through the “RGB Centring” option in the “Set Up” menu.

To do this:

While watching an RGB source, select the “RGB Centring” option and press . Press  or  to adjust the centre of the picture between -10 and +10. Finally press  to confirm and store.

GB

Teletext

i Teletext is an information service transmitted by most TV stations. The index page of the Teletext service (usually page 100) gives you information on how to use the service. To operate Teletext, use the remote control buttons as indicated below.

A Be sure to use a channel (TV Broadcast) with a strong signal, otherwise Teletext errors may occur.

To switch on Teletext:

After selecting the TV channel which carries the Teletext service you wish to view, press **⏏**.

To select a Teletext page:

Input 3 digits for the page number, using the numbered buttons.

- If you have made a mistake, retype the correct page number.
- If the counter on the screen continues searching, it is because this page is not available. In that case, input another page number.

TELETEXT	
Index	25
Programme	153
News	101
Sport	98
Weather	

To check the contents of a Teletext service:

Press **⏏**.

To access the next or preceding page:

Press **⏏** or **⏏**.

To superimpose teletext on to the TV:

Whilst you are viewing Teletext, press **⏏**. Press it again to cancel Teletext mode.

To freeze a teletext page:

Some Teletext pages have sub-pages which follow on automatically. To stop them, press **⏏**. Press it again to cancel the freeze.

To reveal concealed information (e.g., answer to a quiz):

Press **?**. Press it again to conceal the information.

To enlarge the Teletext display:

Press **⏏**. Each time you press **⏏**, the Teletext display changes as follows: Enlarge upper half → Enlarge lower half → Normal size.

To stand by for a Teletext page while watching a TV program.

- 1 Enter the Teletext number that you want to refer to, then press **⏏**.
- 2 When the page number is displayed, press **⏏** to show the Text.

To switch off Teletext:

Press **⏏**.

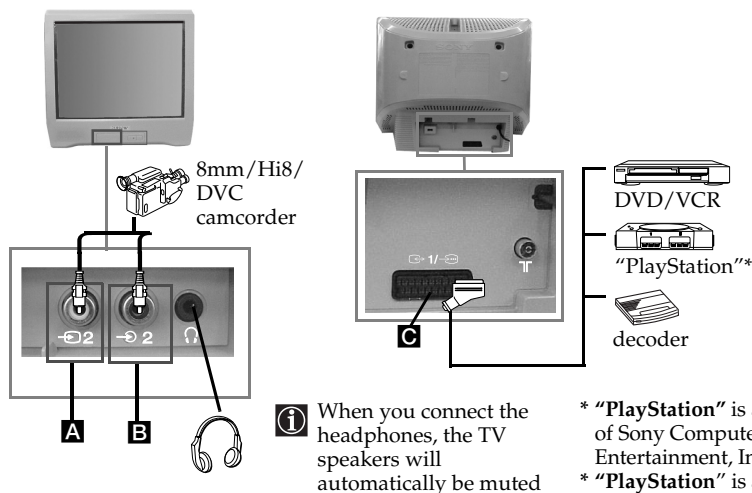
Fasttext

i Fasttext service lets you access pages with one push of a button.

While you are in Teletext mode and Fasttext is broadcast, a colour coded menu appears at the bottom of the teletext page. Press the colour button (red, green, yellow or blue) to access the corresponding page.

Connecting Optional Equipment

i Using the following instructions, you can connect a wide range of optional equipment to your TV set (connecting cables are not supplied).



i When you connect the headphones, the TV speakers will automatically be muted

* "PlayStation" is a product of Sony Computer Entertainment, Inc.
* "PlayStation" is a trademark of Sony Computer Entertainment, Inc.

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Connecting a VCR:

To connect a VCR, please refer to the section "Connecting an outdoor aerial and VCR" of this instruction manual. We recommend you connect your VCR using a Scart lead. If you do not have a Scart lead, tune in the VCR test signal to the TV programme number "0" by using the "Manual Programme Preset" option (for details on how to manually programme these presets, see page 14, step a).

Refer to your VCR instruction manual to find out how to find the output channel of your VCR.

Using Optional Equipment

- 1 Connect your equipment to the designated TV socket, as indicated above.
- 2 Switch on the connected equipment.
- 3 To watch the picture of the connected equipment, press  repeatedly until the correct input symbol appears on the screen.

Symbol

Input Signals

 1

• Audio / video input signal through the Scart connector **C**

 1

• RGB input signal through the Scart connector **C**. This symbol appears only if a RGB source has been connected.

 2

• Video input signal through the phono socket **A** and Audio input signal through **B**.

- 4 Press  button on the remote control to return to the normal TV picture.

Specifications

TV system:

Depending on your country selection:
B/G/H, L, I, D/K

Colour system:

PAL, SECAM
NTSC 3.58, 4.43 (only Video In)

Channel Coverage:

VHF: E2-E12
UHF: E21-E69
CATV: S1-S20
HYPER: S21-S41
L: F2-F10, B-Q, F21-F69
I: UHF B21-B69
D/K: R1-R12, R21-R69

Picture Tube:

Flat Display FD Trinitron

Rear Terminals

 21-pin Scart connector
(CENELEC standard) including
audio/video input, RGB input,
TV audio/video output.

Front Terminals

 2 video input – phono jack
 2 audio input – phono jack
 headphones jack

Sound Output:

1 x 6 W (music power)
1 x 3 W (RMS)

Power Consumption:

- KV-21CT1B: 56 W
- KV-14CT1B: 50 W

Standby Power Consumption:

< 1 W

Dimensions (w x h x d):

- KV-21CT1B: Approx. 497 x 461 x 487 mm
- KV-14CT1B: Approx. 374 x 355 x 420 mm

Weight:

- KV-21CT1B: Approx. 24 kg
- KV-14CT1B: Approx. 11 kg

Accessories supplied:

1 Remote Control (RM-W100)
2 Batteries (IEC designated)
1 Aerial (only for KV-14CT1B)

Other features:

- Teletext, Fasttext, TOPtext
- Sleep Timer
- On Timer

Design and specifications are subject to change without notice.

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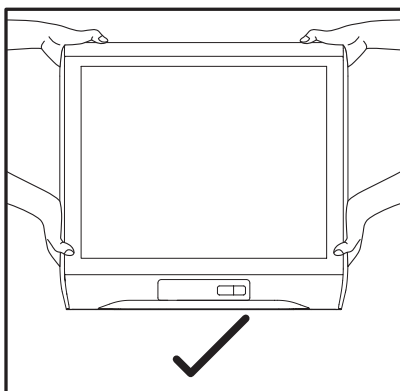
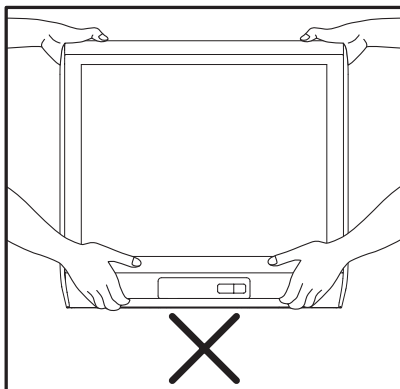
Troubleshooting

 Here are some simple solutions to the problems which may affect the picture and sound.

Problem	Solution
No picture (screen is dark) and no sound.	• Check the aerial connection. • Plug the TV in and press the  button on the front of TV. • If the standby indicator  is on, press  button on the remote control.
Poor or no picture (screen is dark), but good sound.	• Using the menu system, select the "Picture Adjustment" menu and select "Reset" to return to the factory settings (see page 10).
No picture or no menu information from equipment connected to the Scart connector.	• Check that the optional equipment is on and press  repeatedly on the remote control until the correct input symbol is displayed on the screen (see page 17).
Good picture, no sound.	• Press the  + button on the remote control. • Check that headphones are not connected.
No colour on colour programmes.	• Using the menu system, select the "Picture Adjustment" menu and select "Reset" to return to factory settings (see page 10).
Distorted picture when changing programmes or selecting teletext.	• Turn off any equipment connected to the Scart connector on the rear of the TV.
Wrong characters appear when viewing teletext.	• Using the menu system, enter the "Language/Country" option in the "Set Up" menu and select the country in which you operate the TV set. For Cyrillic languages, we recommend to select Russia in the case that your own country does not appear in the list (see page 15).
Picture slanted (only for KV-21CT1B).	• Using the menu system, select the "Picture Rotation" option in the "Set Up" menu to correct the picture slant (see page 15).
Noisy picture when viewing a TV channel.	• Using the menu system, select the "Manual Programme Preset" menu and adjust Fine Tuning (AFT) to obtain better picture reception (see page 14). • Using the menu system, select the "Intelligent Picture" option in the "Picture" menu and select "On" to reduce the noise in the picture (see page 10).
Remote control does not function.	• Replace the batteries.
The standby indicator  on the TV flashes red.	• Contact your nearest Sony service centre.

 In case of problems, have your TV serviced by qualified personnel. Never open the casing yourself.

KV-21CT1B



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