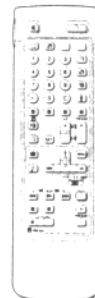
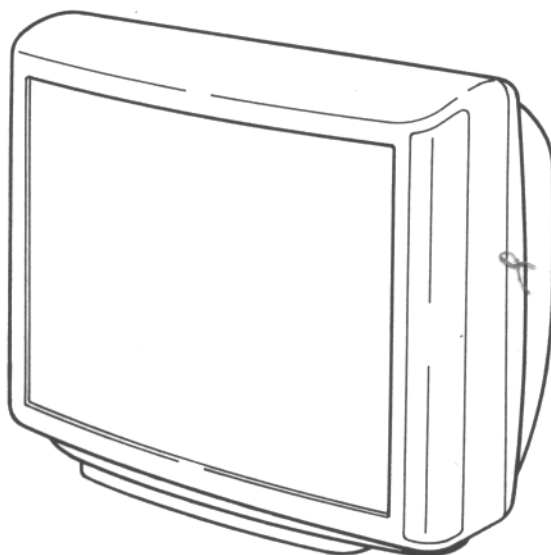


SERVICE MANUAL

AE-2F CHASSIS

| MODEL | COMMANDER | DEST. | CHASSIS NO. |
|------------------|-----------|---------|-------------|
| KV-S2941A | RM-831 | Italian | SCC-G76B-A |
| KV-S2941B | RM-831 | French | SCC-G75B-A |
| KV-S2941D | RM-831 | AEP | SCC-G72B-A |

| MODEL | COMMANDER | DEST. | CHASSIS NO. |
|------------------|-----------|---------|-------------|
| KV-S2941K | RM-831 | OIRT | SCC-G95A-A |
| KV-S2942U | RM-831 | UK | SCC-G88A-A |
| KV-S2943E | RM-831 | Spanish | SCC-G78B-A |



Super Trinitron



TRINITRON® COLOUR TV
SONY®

Specifications

| ITEM MODEL | Television system | Stereo system | Channel coverage | Color system |
|------------|-------------------|---------------------|--|---|
| Italian | B/G/H,D/K | GERMAN Stereo | ITALIA VHF:A-H2 (C) UHF:21-69 PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10,U1-U10 D/K VHF:R01-R12 UHF:R21-R69 | PAL,SECAM NTSC4.43, NTSC3.58 (VIDEO IN) |
| French | B/G/H,D/K L, I | GERMAN Stereo | L VHF:F02-F10 UHF:F21-F69 CABLE:B-Q B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10,U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 D/K VHF:R01-R12 UHF:R21-R69 | PAL,SECAM NTSC4.43, NTSC3.58 (VIDEO IN) |
| AEP | B/G/H,D/K | GERMAN Stereo | PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10,U1-U10 ITALIA VHA:A-H12 (C) UHF:21-69 D/K VHF:R01-R12 UHF:R21-R69 | PAL,SECAM NTSC4.43, NTSC3.58 (VIDEO IN) |
| ORIT | B/G/H,D/K | GERMAN Stereo | B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 D/K VHF:R01-R12 UHF:R21-R60 | PAL,SECAM NTSC4.43, NTSC3.58 (VIDEO IN) |
| UK | I | NICAM Stereo | UHF:B21-B69 | PAL,SECAM NTSC4.43, NTSC3.58 (VIDEO IN) |
| Spanish | B/G/H,D/K | GERMAN/NICAM Stereo | PAL B/G VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10,U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 D/K VHF:R01-R12 UHF:R21-R69 | PAL,SECAM NTSC4.43, NTSC3.58 (VIDEO IN) |

| MODEL | Italian | French | AEP | ORIT | UK | Spanish |
|-------------------|---------|--------|-------|-------|-------|---------|
| Power consumption | 139 Wh | 146 Wh | 155 W | 155 W | 216 W | 155 W |

Picture tube Super Trinitron
Approx. 72 cm (29 inches)
(Approx. 68 cm picture measured diagonally)
110° -deflection

[REAR]

- ⊖ 1 21-pin Euro connector (CENELEC standard)
- Inputs for audio and video signals
 - inputs for RGB
 - outputs of TV video and audio signals
- ⊖ 2/⊕ 2 21-pin Euro connector
 - inputs for audio and video signals
 - inputs for S video
 - outputs for audio and video signals (selectable)
- ⊖ 4/⊕ 4 21-pin Euro connector
 - inputs for audio and video signals
 - inputs for S video
 - outputs for audio and video signals (monitor out)
- ⊖ 2, ⊕ 4 S video inputs
 - 4 pin DIN
- ⊖ Audio inputs (L, R) -phono jacks
- ⊕ S video output - 4 pin DIN
- ⊖ Audio outputs - phono jacks
- ⊖ Audio outputs (variable) - phono jacks
- External speaker terminals: 2 pin
- Woofers terminal : 2-pin

[FRONT]



- ⊖ 3 Video input-phono jack
 - ⊖ Audio input-phono jacks
 - ⊕ 3 S video input 4-pin DIN
 - Headphone jack: Stereo minijack
- Sound output 2x15W Side Speakers (RMS)
2x35W Side Speaker (Music)
- Dimensions incl. speakers Approx. 702x558x540 mm
- Weight Approx. 53.0 kg
- Supplied accessories RM-831 Remote Commander (1)
RM-860 Roller Commander (1)
IEC designation R6 batteries (2)
- Other features Digital comb filter (High resolution)
PIP (Picture-in picture)
Roller Commander
NICAM
FASTTEXT
DNR (Digital Noise Reduction)
100Hz TV Set
Digital Surround
Graphic Equalizer

[RM-831]

| | |
|-----------------------|--|
| Remote control system | infrared control |
| Power requirements | 3V dc 2 batteries IEC designation R6 (size AA) |
| Dimensions | Approx. 65x222x21 mm (w/h/d) |
| Weight | Approx. 157g (Not including Batteries) |

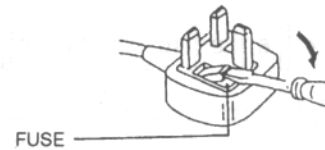
Design and specifications are subject to change without notice.

WARNING KV-S2942U only

A moulded plug complying with BS 1363 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.

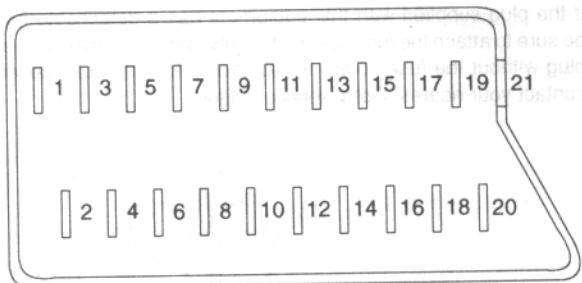
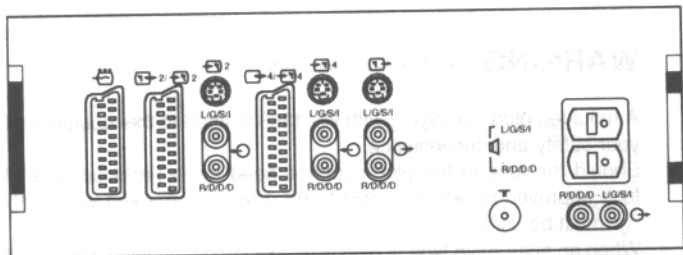
When an alternative type of plug is used it should be fitted with a 5 AMP FUSE at the distribution board.

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 station.



| Model name | KV-S2941A | KV-S2941B | KV-S2941D | KV-S2941K | KV-S2942U | KV-S2943E |
|------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Item | | | | | | |
| Pal Comb | ON | ON | ON | ON | ON | ON |
| PIP | ON | ON | ON | ON | ON | ON |
| RGB Priority | ON | ON | OFF | OFF | OFF | OFF |
| Woofer Box | ON | ON | ON | ON | ON | ON |
| Scart 1 | ON | ON | ON | ON | ON | ON |
| Scart 2 | ON | ON | ON | ON | ON | ON |
| Front in (3) | ON | ON | ON | ON | ON | ON |
| Scart 4 | ON | ON | ON | ON | ON | ON |
| Dyn. Convergence | OFF | OFF | OFF | OFF | OFF | OFF |
| Projector | OFF | OFF | OFF | OFF | OFF | OFF |
| AKB in 16:9 mode | ON | ON | ON | ON | ON | ON |
| Norm B/G | ON | ON | ON | OFF | OFF | ON |
| Norm I | OFF | ON | OFF | OFF | ON | OFF |
| Norm D/K | ON | ON | ON | ON | OFF | ON |
| Norm AUS | OFF | OFF | OFF | OFF | OFF | OFF |
| Norm L | OFF | ON | OFF | OFF | OFF | OFF |
| Norm SAT | OFF | OFF | OFF | OFF | OFF | OFF |
| Norm M | OFF | OFF | OFF | OFF | OFF | OFF |
| Language Preset | Italiano | Francais | Deutsch | English | English | None |

21 pin connector (G1 G2 / G4)



| Pin No | 1 | 2 | Signal | Signal level |
|--------|---|---|------------------------------|--|
| 1 | ○ | ○ | Audio output B (right) | Standard level: 0.5Vrms Output impedance: less than 1kohm* |
| 2 | ○ | ○ | Audio input B (right) | Standard level: 0.5Vrms Input impedance: More than 10kohms* |
| 3 | ○ | ○ | Audio output A (left) | Standard level: 0.5Vrms Output impedance: less than 1kohm* |
| 4 | ○ | ○ | Ground (audio) | |
| 5 | ○ | ○ | Ground (blue) | |
| 6 | ○ | ○ | Audio input A (left) | Standard level: 0.5Vrms Input impedance: More than 10kohms* |
| 7 | ○ | ● | Blue input | 0.7V±3dB, 75ohms, positive |
| 8 | ○ | ○ | Function select (AV control) | High state (9.5—12V): Part mode Low state (0—2V): TV mode Input impedance: More than 10kohms Input capacitance: Less than 2nF |
| 9 | ○ | ○ | Ground (green) | |
| 10 | ○ | ○ | Open | |
| 11 | ○ | ● | Green | Green signal: 0.7V±3dB. 75ohms, positive |
| 12 | ○ | ○ | Open | |
| 13 | ○ | ○ | Ground (red) | |
| 14 | ○ | ○ | Ground (blanking) | |
| 15 | ○ | — | Red input | 0.7V±3dB, 75ohms, positive |
| | — | ○ | (S signal) chroma input | 0.3V±3dB, 75ohms, positive |
| 16 | ○ | ● | Blanking input (Ys signal) | High state (1—3V) Low state (0—0.4V) Input impedance: 75ohms |
| 17 | ○ | ○ | Ground (video output) | |
| 18 | ○ | ○ | Ground (video input) | |
| 19 | ○ | ○ | Video output | 1V±3dB, 75ohms, positive Sync: 0.3V(-3, +10dB) |
| 20 | ○ | — | Video input | 1V±3dB, 75ohms, positive Sync: 0.3V(-3, +10dB) |
| | — | ○ | Video Input/Y (S signal) | 1V±3dB, 75ohms, positive Sync: 0.3V(-3, +10dB) |
| 21 | ○ | ○ | Common ground (plug, shield) | |

○ connected

● unconnected (open)

* At 20 Hz—20kHz

Section

1. G

2. D

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CAUTION

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

WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.

THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK Δ 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 AUCOUCHE 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 TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MARQUE Δ SUR LES VUES EXPLOSÉES ET LES LISTES DE PIÈCES SONT D'UNE IMPORTANCE CRITIQUE PUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

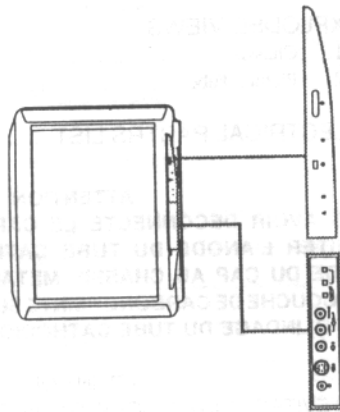
Overview

SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

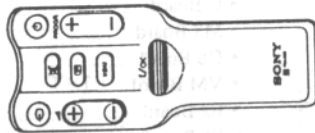
This section briefly describes the buttons and controls on the TV set and on the Remote Commander. For more information, refer to the pages given next to each description.

TV set-front

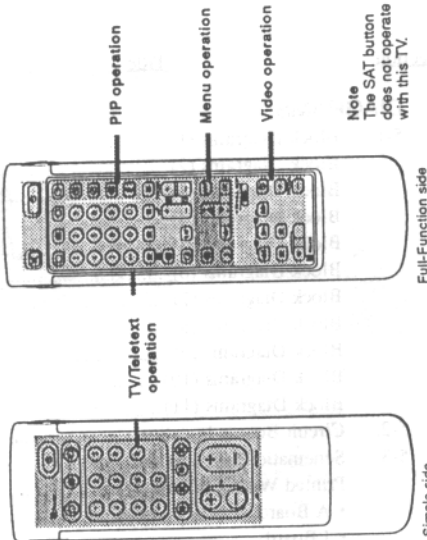


| Symbol | Name | Refer to page |
|----------------|--|---------------|
| h | Main power switch | 13 |
| i | Standby indicator | 13 |
| A-g - B | Stereo A/B indicators | 15 |
| J | Headphones jack | 23 |
| y 3, z 3, p 3, | Input jacks (S video/video/audio) | 23 |
| P-1 -> z | Function selector (Programme/volume/input) | 13 |
| -/+ | Adjustment buttons for function selector | 13 |

Roller Commander RM-860



Remote commander RM-831



PIP (Picture-in-Picture) operation

| Symbol | Name | Refer to page |
|--------|------------------------------|---------------|
| o | PIP on/off button | 18 |
| T | PIP source selector | 18 |
| n | Swap button | 18 |
| m | PIP position changing button | 18 |

Menu operation

| Symbol | Name | Refer to page |
|--------|---|---------------|
| MENU | Menu on/off button | 7 |
| o +/- | Select buttons | 7 |
| OK | OK (confirming) button | 7 |
| ← | Back button | 7 |
| y/OK | Roller Commander: | |
| | Roller to select/confirm menu functions | 7 |

Video operation

| Symbol | Name | Refer to page |
|------------|-----------------------------------|---------------|
| VTR 1/2/3, | Video equipment selector | 25 |
| MDP | Video equipment operation | 25 |
| □ □ □ □ □ | Video equipment operation buttons | |
| ■ ■ ■ ■ ■ | PROGR +/- | |

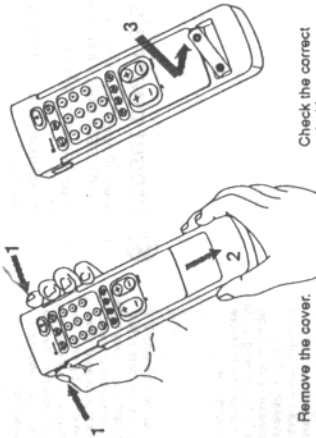
TV/Teletext operation

| Symbol | Name | Refer to page |
|-------------------------|-------------------------------------|---------------|
| u | Muting on/off button | 14 |
| 1 | Standby button | 13 |
| x | TV power on/TV mode selector button | 13 |
| A | Teletext button | 14 |
| z | Input mode selector | 14 |
| h | Output mode selector | 24 |
| 1,2,3,4,5,6,7,8,9 and 0 | Number buttons | 13 |
| -/+ | Double-digit entering button | 13 |
| C | Direct channel entering button | 12 |
| 1 +/- | Volume control button | 13 |
| PROGR +/- | Programme selectors | 13 |
| q r | Teletext page access buttons | 20 |
| n | Picture adjustment button | 15 |
| o | Sound adjustment button | 15 |
| G | On-screen display button | 14 |
| a | Teletext hold button | 20 |
| o | Time display button | 14 |
| ■ ■ ■ ■ ■ | Fastest buttons | 20 |

Getting Started

Step 1 – Preparation

Insert the batteries into the Remote Commanders



Remove the cover.

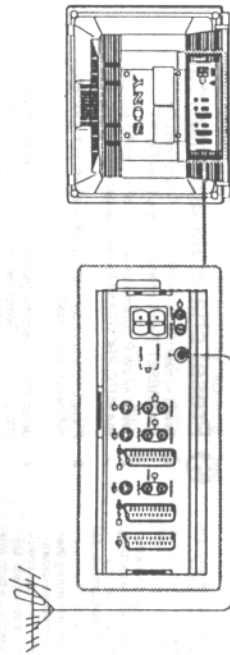
Check the correct polarities.

Refit the outside cover making sure that the Full-Function side is visible to use the menu in Step 3.

Check the correct polarities.

Step 2 – Connection

Connect the aerial



Fit an IEC aerial connector attached to 75-ohm coaxial cable (not supplied) to the IEC socket at the rear of the TV. Make sure to use an aerial cable, which corresponds to the relevant regulations.

Step 3 – Tuning in to TV Stations

Once you have set up the TV, you can choose the language of the menu. Then you should preset the channels (up to 100 channels) by choosing either the automatic or manual method. The automatic method is easier: if you want to preset all receivable channels at once. Use the manual method if you only have a few channels and want to preset channels one by one. The manual method is also convenient for allocating programme numbers to various video input sources.

Before you begin

Check that the Full-Function side of the Remote Commander is visible. Locate Menu operation buttons on the Remote Commander. They are shaded in the illustration at the left.

Easy Menu operation using the Roller Commander

In addition to your double-sided Remote Commander your TV set is supplied with an extra Remote commander. This Roller Commander works with a roller for convenient, fast-access operation of the Menu functions. Move the roller upwards to move the cursor upwards, move the roller downwards to move the cursor downwards, press the roller to confirm a selection. The other buttons on this commander have the same function as the respective buttons on the double-sided Remote Commander.

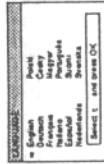
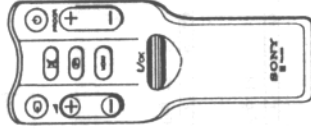


Fig. 1.

1 Choose a language

- 1 Depress h on the TV. The TV will switch on. If the standby indicator on the TV is lit, press x or a number button on the Remote Commander. Press the MENU button. The LANGUAGE menu appears. (See Fig. 1.)



- 3 Select the language you want with o + or s - and press OK.

2 Display the Menu

- Press the - button. The main menu appears. (See Fig. 2.)
- Now, choose one of the following methods
- »Preset Channels Automatically»
 - or
 - »Preset Channels Manually».

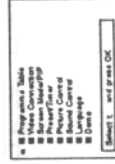
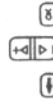


Fig. 2.

To go back to main menu, keep pressing -.

To go back to the normal TV picture Press MENU.

Note on the DEMO function: choose

»Demo» on the main menu. You can see a sequential demonstration on the menu functions. Press MENU to stop the function.

With this method, you can preset all receivable channels at once.

To stop automatic channel presetting Press \leftarrow on the Remote Commander.

Notes
 • After presetting the channels automatically, you can check which channels are preset which programme positions. For details, see programme Table on page 17.

• You can sort the programme positions to have them appear on screen in the order you like. For details, see \rightarrow Sorting Programme Positions on page 10.

Note
 Programme names are automatically taken from teletext if available. If not, please refer to page 11 \rightarrow Captioning a Station name for more information.

Use this method if there are only a few channels in your area to preset or if you want to preset channels manually. You may also allocate programme numbers to various video input sources.

If you have made a mistake
 Press \leftarrow to go back to the previous position.
 Press \leftarrow to go back to the main menu.
 Keep pressing \leftarrow to go back to the normal TV picture Press MENU.

3 Preset channels automatically

- 1 Select \rightarrow PRESET/TIMER \leftarrow with $\circ + \circ s -$ and press OK. The PRESET/TIMER menu appears. (See Fig. 3.)
- 2 Select \rightarrow AUTO Programme \leftarrow with $\circ + \circ s -$ and press OK. The AUTO PROGRAMME menu appears. (See Fig. 4.)
- 3 Press OK repeatedly until the first element of the \rightarrow PROG- number is highlighted.
- 4 Select the programme (number button) from which you want to start presetting. Select the first element of the double-digit number with $\circ + \circ s -$ or the number buttons (e.g. For \rightarrow 04 \leftarrow , select \rightarrow 0 \leftarrow here) and press OK. The second element of \rightarrow PROG- will be highlighted.
- 5 Select the second element of the double-digit number with $\circ + \circ s -$ or the number buttons (e.g. For \rightarrow 04 \leftarrow , select \rightarrow 4 \leftarrow here) (See Fig. 5.) and press OK.
- 6 Press OK. The automatic channel presetting starts. When presetting is finished, the preset menu reappears. All available channels are now stored on successive number buttons.



Fig. 3.

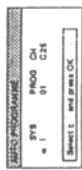


Fig. 4.



Fig. 5.

3 Preset channels manually

- 1 Select \rightarrow PRESET/TIMER \leftarrow with $\circ + \circ s -$ and press OK. The PRESET/TIMER menu appears. (See Fig. 6.)
- 2 Select \rightarrow Manual Programme Preset \leftarrow with $\circ + \circ s -$ and press OK. The MANUAL PROGRAMME PRESET menu appears. (See Fig. 7.)



Fig. 6.

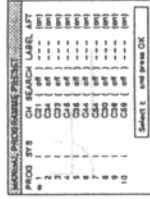


Fig. 7.

- 3 Using $\circ + \circ s -$, select the programme position (number button) to which you want to preset a channel, and press OK.
- 4 Select if necessary, a video input source (EXT) with $\circ + \circ s -$. (See Fig. 8.)
- 5 Then press OK. The CH position will be highlighted. (See Fig. 8.)
- 6 Using $\circ + \circ s -$, select C (to preset a regular channel) or F (to tune in by frequency) and press OK. The first element of the \rightarrow CH- number will be highlighted. If you have selected EXT in step 4, select the video input source with $\circ + \circ s -$. (See Fig. 9.)



Fig. 8.



Fig. 9.

There are two ways to preset channels. If you know the channel number, go to step \rightarrow 7:Manual \leftarrow , or if you don't know the channel number, go to step \rightarrow 7:Search \leftarrow .

7 Manual

- a Select the first element of the \rightarrow CH- number with $\circ + \circ s -$ or the number buttons and press OK. The second element of the \rightarrow CH- number will be highlighted.
- b Select the second element of the number with $\circ + \circ s -$ or the number buttons. The selected number appears. (See Fig. 10.)
- c Press OK. The \rightarrow SEARCH- position is highlighted and the selected channel is now stored. (See Fig. 11.)
- d Press OK until the cursor appears by the next programme position.
- e Repeat steps 3 to 7 to preset other channels.



Fig. 10.



Fig. 11.



Fig. 12.



Fig. 13.

- 7 Search
 - a Press OK repeatedly until the colour of the SEARCH position changes.
 - b Start searching for the channel with $\circ +$ (up) or $\circ -$ (down). The CH number starts counting up or downwards. When a channel is found, it stops. (See Fig. 13.)
 - c Press OK if you want to store this channel. If not, press $\circ + \circ s -$ to continue channel searching.
 - d Press OK until the cursor appears by the next programme position.
 - e Repeat steps 3 to 7 to preset other channels.

If you have made a mistake
 Press \leftarrow to go back to the previous position.
 To go back to the main menu Keep pressing \leftarrow .
 To go back to the normal TV picture Press MENU.

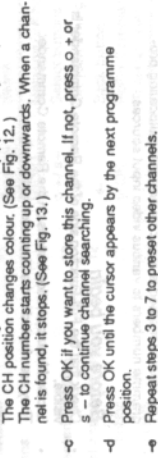
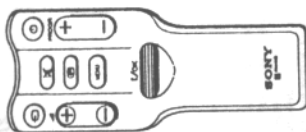


Fig. 13.

Additional Presetting Functions



This section shows you additional presetting functions such as sorting or skipping programme positions, captioning a station name, manual fine-tuning, and using the parental lock.

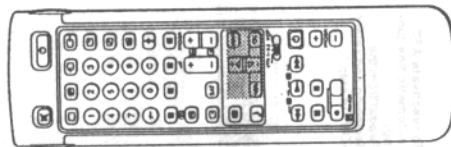
Before you begin

- Check that the Full Function side of the Remote Commander is visible.
- Locate the Menu operation buttons.

Sorting Programme Positions

With this function, you can sort the programme positions to a preferable order.

- 1 Press MENU to display the main menu.
- 2 Select **PRESET/TIMER** with **o + or s -** and press OK. The PRESET/TIMER menu appears.
- 3 Select **PROGRAMME SORTING** with **o + or s -** and press OK. The PROGRAMME SORTING menu appears. (See Fig. 14.)
- 4 Using **o + or s -**, select the programme position which you want to move to another and press OK. The colour of the selected position changes. (See Fig. 15.)
- 5 Using **o + or s -**, select the programme position to which you want to move the channel of the programme position selected in step 4 and press OK. Now the programme positions have been sorted. (See Fig. 16.)
- 6 Repeat steps 4 and 5 to sort other programme positions.



For higher programme positions the display scrolls automatically.

- If you have made a mistake to go back to the previous position:
- To go back to main menu keep pressing **←**.
 - To go back to the normal TV picture Press MENU.

Adjusting and Setting the Programme Menu

Skipping Programme Positions

You can skip unused programme positions when selecting programmes with the **PROGR +/-** buttons. However, the skipped programmes may still be called up when you use the number buttons.

- 1 Press MENU to display the main menu.
- 2 Select **PRESET/TIMER** with **o + or s -** and press OK. The PRESET/TIMER menu appears.
- 3 Select **Manual Programme Preset** with **o + or s -** and press OK. The MANUAL PROGRAMME PRESET menu appears. (See Fig. 18.)
- 4 Using **o + or s -**, select the programme position which you want to skip and press OK. The **SYS-** position changes colour. (See Fig. 19.)
- 5 Press **o + or s -** until **-----** appears in the SYSTEM position. Press OK. (See Fig. 20.)
- 6 When you select programmes using the **PROGR +/-** buttons, the programme position will be skipped.
- 7 Repeat steps 4 to 6 to skip other programme positions.

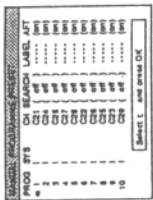


Fig. 18.



Fig. 19.



Fig. 20.

Captioning a Station Name

Programme names are usually automatically taken from Teletext if available. You can also **name** a channel or an input video source using up to five characters (letters or numbers) to be displayed on the TV screen (e.g. BBC1). Using this function, you can easily identify which channel or video source you are watching.

- 1 Press MENU to display the main menu.
- 2 Select **PRESET** with **o + or s -** and press OK. The PRESET menu appears.
- 3 Select **Manual Programme Preset** with **o + or s -** and press OK. The MANUAL PROGRAMME PRESET menu appears. (See Fig. 21.)
- 4 Using **o + or s -**, select the programme position you want to caption and press OK repeatedly until the first element of the LABEL position is highlighted.
- 5 Select a letter or number with **o + or s -** and press OK. The next element will be highlighted. Select other characters in the same way. If you want to leave an element blank, select **-** and press OK. (See Fig. 22.)
- 6 After selecting all the characters, press OK repeatedly until the cursor appears by the next programme position (at the left margin). Now the caption you chose is stored. (See Fig. 23.)
- 7 Repeat steps 5 and 6 to caption names for other channels.

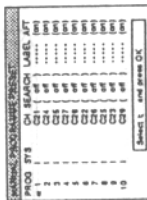


Fig. 21.



Fig. 22.



Fig. 23.

If you have made a mistake Press **←** to go back to the previous position. To go back to main menu keep pressing **←**. To go back to the normal TV picture Press MENU.



Fig. 14.



Fig. 15.

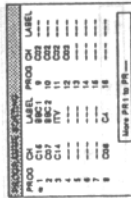


Fig. 16.



Fig. 17.

How to adjust the Picture Rotation

If due to the earth magnetism the picture **slants**, you can use the function **Picture Rotation** to readjust the picture.

- 1 Press MENU to display the main menu.
- 2 Select **PRESET/TIMER** with **o + or s -** and press OK. The PRESET/TIMER menu appears.
- 3 Select **Picture Rotation** with **o + or s -** and press OK. The PICTURE ROTATION menu appears. (See Fig. 17.)
- 4 Press OK. Adjust the picture rotation with **o + or s -** until you have an upright picture. As you press the cursor buttons, the range changes from **-2** to **+2**.
- 5 Press OK to store the adjustment.

Operating Instructions

MANUAL PROGRAMME PRESET

Manual Fine-Tuning

Normally, the AFT (automatic fine-tuning) is already operating. However, if the picture is distorted, you can use the manual fine tuning function to obtain better picture reception.

- 1 Press MENU to display the main menu.
- 2 Select **PRESET/TIMER** with **o + or s -** and press OK. The PRESET/TIMER menu appears.
- 3 Select **Manual Programme Preset** with **o + or s -** and press OK. The MANUAL PROGRAMME PRESET menu appears. (See Fig. 24.)
- 4 Using **o + or s -**, select the programme position corresponding to the channel which you want to manually fine-tune, and press OK repeatedly until the AFT position changes colour.
- 5 Fine-tune the channel with **o + or s -** so that you get the best TV reception. As you press the cursor buttons, the frequency changes from -15 to +15. (See Fig. 25.)
- 6 After fine tuning, press OK.
- 7 The cursor appears beside the next programme position (at the left margin). (See Fig. 26.) Now the fine-tuned level is stored. Repeat steps 4 to 6 to fine-tune other channels.

To reactivate AFT (automatic fine tuning) Repeat from the beginning and select **OK** in step 5.

PARENTAL LOCK

Parental Lock

You can prevent undesirable broadcasts from appearing on the screen. We suggest you use this function to prevent children from watching programmes which you consider unsuitable.

- 1 Press MENU to display the main menu.
- 2 Select **Parental Lock** with **o + or s -** and press OK. The PRESET menu appears.
- 3 Select **Parental Lock** with **o + or s -** and press OK. The PARENTAL LOCK menu appears. (See Fig. 27.)
- 4 Using **o + or s -**, select the programme position you want to block and press OK. The CH and LABEL change colour indicating that this programme is now blocked. (See Fig. 28.)
- 5 Repeat step 4 to block other programme positions.

If you try to select a programme that has been blocked a MESSAGE LOCKED appears on the blank TV screen.

| PROG. # | CH | SEARCH | LABEL | AFT |
|---------|------|--------|-------|-----|
| 1 | CH1 | OFF | OFF | OFF |
| 2 | CH2 | OFF | OFF | OFF |
| 3 | CH3 | OFF | OFF | OFF |
| 4 | CH4 | OFF | OFF | OFF |
| 5 | CH5 | OFF | OFF | OFF |
| 6 | CH6 | OFF | OFF | OFF |
| 7 | CH7 | OFF | OFF | OFF |
| 8 | CH8 | OFF | OFF | OFF |
| 9 | CH9 | OFF | OFF | OFF |
| 10 | CH10 | OFF | OFF | OFF |

CHANNEL 1 and Press OK

Fig. 24.

| 2 | 1 | CH | SEARCH | LABEL | AFT |
|---|---|-----|--------|-------|-----|
| 2 | 1 | CH1 | OFF | OFF | OFF |

Fig. 25.

| 3 | 1 | CH | SEARCH | LABEL | AFT |
|---|---|-----|--------|-------|-----|
| 3 | 1 | CH1 | OFF | OFF | OFF |

Fig. 26.

| PROG. CH | LABEL | PROG. CH | LABEL |
|----------|-------|----------|-------|
| 0 | OFF | 1 | CH1 |
| 1 | CH1 | 2 | CH2 |
| 2 | CH2 | 3 | CH3 |
| 3 | CH3 | 4 | CH4 |
| 4 | CH4 | 5 | CH5 |
| 5 | CH5 | 6 | CH6 |
| 6 | CH6 | 7 | CH7 |
| 7 | CH7 | 8 | CH8 |
| 8 | CH8 | 9 | CH9 |
| 9 | CH9 | 10 | CH10 |

CHANNEL 1 and Press OK

Fig. 27.

| PROG. CH | LABEL | PROG. CH | LABEL |
|----------|-------|----------|-------|
| 1 | CH1 | 2 | CH2 |
| 2 | CH2 | 3 | CH3 |
| 3 | CH3 | 4 | CH4 |

Fig. 28.

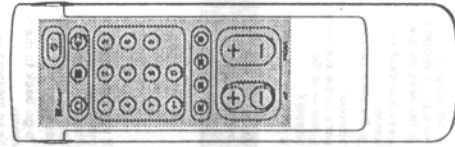
- 1 On the PARENTAL LOCK menu, select the programme position you want to unblock with **o + or s -**.
- 2 Press OK. The CH and LABEL change colour to normal colour indicating that the blocking has been cancelled.

Tuning in a Channel Temporarily

You can tune in a channel temporarily, even when it has not been preset. Use the buttons on the Full-Function side of the Remote Commander.

- 1 Press C on the Remote Commander.
- 2 The indication **C** appears on the screen. Enter the double-digit channel number using the number buttons (e.g. for channel 4, first press 0, then 4). The channel appears. However, the channel will not be stored.

Watching the TV



If no picture appears when you depress h and if the standby indicator on the TV is lit, the TV is in standby mode. Press X or one of the number buttons to switch it on.

This section explains the basic functions you use while watching TV. Most of the operations can be done using the simple side of the Remote Commander.

Switching the TV on and off

Switching on

Depress h on the TV.

Switching off temporarily

Press 1 on the Remote Commander. The TV enters standby mode and the standby indicator on the front of the TV lights up. To switch on again, Press X, PROG +/-, or one of the number buttons on the Remote Commander.

Switching off completely

Depress h on the TV.

Selecting TV Programmes

Press PROG +/- or press number buttons.

To select a double-digit number

Press +/-, then the numbers. For example, if you want to choose 23, press +/-, 2 and 3.

Adjusting the Volume

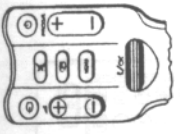
Press 1 +/-.

Operating the TV Using the Buttons on the TV

With the buttons on the TV, you can select programmes, adjust the volume, and select video input sources.

Press **P** → **1** → **2** button repeatedly until the programme number, 1 (for volume), or 2 (for video input picture) appears. Then adjust with the +/- buttons. Press +/- buttons to switch on the TV from the standby mode. Press +/- simultaneously to reset picture and sound controls to the factory preset level (RESET function).

Adjusting and Setting the TV Using the Menu



Watching Teletext or Video Input

- Press **A** to view the teletext.
- Press three number buttons to select a page.
- Press one of the coloured buttons for fasttext operation.
- Press **q** (PAGE +) or **r** (PAGE -) for the next or preceeding page.
- To go back to the normal TV picture, press **x**.

Watching a video input picture

- Press **z** repeatedly until the desired video input appears.
- To go back to the normal TV picture, press **x**.

More Convenient Functions

- Use the Full-Function side of the Remote Commander.
- **Displaying the on screen indications**
Press **G** once to display all the indications. They will disappear after some seconds.
- Press **G** twice to have the programme number and label stay on screen. Press twice again to make indications disappear.

Muting the sound

- Press **u**.
- To resume normal sound, press **u** again.

Displaying the time

- Press **x**. This function is available only when teletext is broadcast.
- To make the time display disappear, press **x** again.

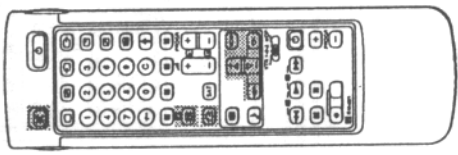
Displaying of the Programme Table

- Press **OK**. A Programme Table will be displayed on the right side of the TV screen (See, Fig. 29).

Selecting of TV programmes

- Press **PROGR +/-** or select the desired programme position using **o + or s -** and press **OK**.

For details of the teletext operation, refer to page 20.
For details of the video input picture, refer to page 24.



To make the Programme Table disappear, Press MENU.

Adjusting the Picture and Sound

Although the picture and sound are adjusted at the factory, you can adjust them to suit your own taste. In addition, you can set the resolution to obtain a higher quality picture or reduce the picture noise. You can also select dual sound (bilingual) programmes when available, adjust the sound for listening with the headphones (J) or individually adjust and store the volume level of each channel (Volume offset). Also you have the possibility to adjust the sound to your individual taste using the Graphic Equalizer and special Sound effects.

- 1 Press **n** (for picture) or **o** (for sound) on the Remote Commander.
or
Press MENU and select +Picture Control- or -Sound Control-, then press **OK**.
The PICTURE CONTROL or SOUND CONTROL menu appears. (See Fig. 29 or Fig. 30).
- 2 Using **o + or s -**, select the item you want to adjust and press **OK**. The selected item changes colour. (See Fig. 31.)
- 3 Adjust the setting with **o + or s -** and press **OK**. The cursor appears beside the next item (at the left margin). (See Fig. 32.)
For the effect of each control, see the table below.
- 4 Repeat steps 2 and 3 to adjust other items.

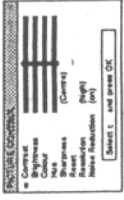


Fig. 30.

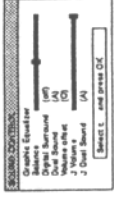


Fig. 31.



Fig. 32.



Fig. 33.

Effect of each control

| PICTURE CONTROL | Effect |
|-----------------|---|
| Contrast | Less ———— Brighter |
| Brightness | Darker ———— Brighter |
| Colour | Less ———— More |
| Hue | Greenish ———— Reddish |
| Sharpness | Min. - Centre - Max. |
| Resolution | Resets picture to the factory preset levels |
| Noise Reduction | High: Obtain a higher picture quality off: Normal off: Reduction of picture noise in case of weak signals |

SOUND CONTROL

| SOUND CONTROL | Effect |
|-------------------|--|
| Graphic Equalizer | (See page 16 for more information) |
| Balance | More left ———— More right |
| Digital Surround | off: Normal Choice between special sound effects: Dome, Hall, Arena, Simulated (gives width to a monaural source) |
| Dual Sound | A: left channel B: right channel, stereo mono The selected mode of the A-G -B indicator on the TV lights up (for NICAM broadcasts see next page) |
| Volume offset | -4 Less 0 More +4 |
| Headphones: | |
| J Volume | Less ———— More |
| J Dual Sound | A: left channel B: right channel stereo mono |

If you have made a mistake to go back to the previous position.
To go back to the normal TV picture Press MENU.

Note:
HUE is only available for NTSC colour system and RESOLUTION is only available for SEC-AM colour system.

Note on LINE OUT
The audio level and the dual sound mode output from the LINE OUT jack on the rear corresponding to the selected DUAL SOUND settings.
When watching video picture You can select DUAL SOUND to change the sound.



Fig. 29.

Graphic Equalizer

Using this function you can individually adjust the sound by cutting and boosting selected frequencies. You can also select between the following modes:

1. Flat → Pop → Rock → Jazz → Vocal → User
2. Select «Sound control» in the Main Menu, then select «Graphic equalizer» using o + or s - and press OK.
3. Press OK. The colour of «Mode» changes. (See Fig. 34.) Select the desired mode with o + or s -, then press OK.
4. If you want to modify a mode, select the desired bar of a frequency band using o + or s - and press OK. The selected bar changes colour. Using o + or s - adjust the level of frequency and press OK. In this way you can adjust all 5 graphic bars.
5. Press MENU to return to the normal TV mode.

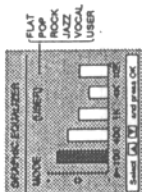


Fig. 34.

Note:
The modifications made in «User» will be stored. All other settings are reset to the factory-set level when you change to another mode.

Selecting Nicam Broadcasts*

This Sony TV has been designed to select Nicam broadcasts when available. Whenever a Nicam broadcast is received, «NICAM» appears briefly on the screen. When the Nicam programme ends, or you switch channels to one without Nicam, the A-g, -B indicators, on the TV will switch off. Nicam programmes can be broadcast in two ways. You may select the sound you want to hear in either of these by first following the instructions explained on page 15.

| Service Being Broadcast | Action | Effect | Indication on the TV A-g, -B |
|---|------------------|--------------------------------------|------------------------------|
| Stereo | Press o + or s - | Stereo Nicam (Mono 2-Channel) mono | |
| Bilingual | press o + or s - | Channel A Nicam Channel B Nicam mono | |
| Press o + or s - again to return to stereo Nicam (mono 2-channel) | | | |
| Press o + or s - again to return to channel A Nicam | | | |

* Depending on availability of service.

Using the Programme Table

On this table, you can see which channel is preset to which programme position. You can also select programmes using this table.

From the main menu, select «Programme Table» with o + or s - and press OK.

The PROGRAMME TABLE menu appears. (See Fig. 35.)

To scroll to higher programme numbers, press o + or s -.

To select a programme using this menu

Select the programme number with o + or s - and press OK.

The selected programme appears.

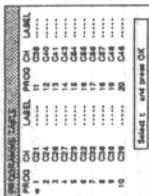


Fig. 35.

Using the Sleep Timer

You can select a time period after which the TV automatically switches into standby mode.

From the main menu, select «Pre-set/Timer» with o + or s - and press OK.

The PRESET/TIMER menu appears.

Using o + or s - select «Timer» and press OK.

The TIMER menu appears. (See Fig. 36.)

Press OK.

The time period option changes colour.

Select the time period with o + or s -.

The time period (in minutes) changes as follows:

10 → 20 → 30 → 40 → 50 → 60 → 70 → 80 → 90

OFF

After selecting the time period, press OK.

The cursor moves back to the left margin and the timer starts counting.

One minute before the TV switches into standby mode, a message is displayed on the screen.

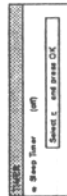


Fig. 36.

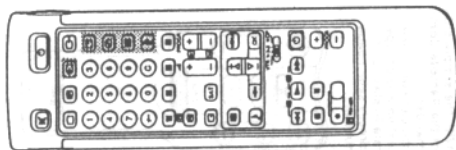


To go back to the normal TV picture Press MENU.

To switch off the timer Select «OFF» in step 5.

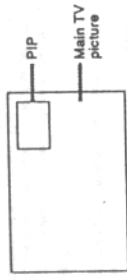
To check the remaining time Press 0.

PIP (Picture-In-Picture)



Note
RGB input source cannot be displayed in PIP.

With this function you can display a «PIP screen» (small picture) within the main TV picture. In this way you can watch or monitor the video output from any connected equipment (for example from a VCR) while watching TV or vice versa. For information about connection of other equipment, refer to page 23.



Switching PIP on and off

Press 0 .
The PIP screen will be displayed. The PIP picture will come from the source chosen when the TV was last used.

To switch PIP off
Press 0 again.

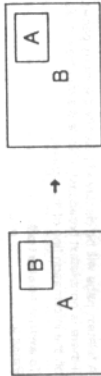
Selecting a PIP source

Press 1 .
The symbol 1 will be displayed at the bottom, left-hand corner of the screen.
Press 2, repeatedly until the desired source is indicated (e.g., TV, AV 1, AV 2, YC2, AV 3, YC3, AV 4, YC 4).

Note
If no video source has been connected, the PIP picture will be noisy.

Swapping screens

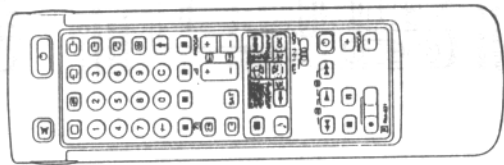
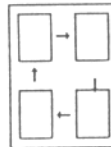
Press 11 .
The main screen will switch the picture with the PIP screen.



Note
If a TV programme is on the PIP screen and a video source on the main picture, and you want to change channels, first press 1 and then the programme buttons or PROG +/-.
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Changing the position of the PIP

Press m, repeatedly to change the position of the PIP screen within the main screen. There are four different positions available.
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Operating Screen Mode / PIP using the Menu

Using the Screen Mode / PIP Menu you have the possibility to change the aspect ratio of the TV display for wide screen effect, operate the PIP mode, scan 9 successive TV channels on the screen (Programme Catching), display 8 successive freeze pictures (Photo mode) or reproduce the main picture image by images (strobe function).

- 1 Press MENU to display the main menu.
- 2 Select «Screen mode/PIP» with Δ + or ∇ – and press OK. The SCREEN MODE/PIP menu appears. (See Fig. 37.)
- a) Changing the Format
Using Δ + or ∇ – select «Screen mode» and press OK. The selected item changes colour. Using Δ + or ∇ – select the desired format (4 : 3 normal ratio or 16 : 9 for wide screen effect) and press OK.
- b) Switching PIP on and off
Using Δ + or ∇ – select «PIP» and press OK. Using Δ + or ∇ – select «on» to display the PIP screen and «off» to switch it off and press OK.
- c) Changing the position of the PIP
Using Δ + or ∇ – select «PIP position» and press OK. Using Δ + or ∇ – repeatedly to change the position of the PIP screen and press OK.

MULTI PIP functions

- a) Programme Catching
Using Δ + or ∇ – select «Programme Catching» and press OK. Now a scan of 9 successive programmes (8 still pictures, 1 live picture where the cursor is positioned) is displayed on the TV screen starting from the programme tuned in. Using Δ + or ∇ – you can move the cursor and update the still pictures. The programme scanning starts again if you select the programme position lower or higher than the 9 displayed ones. (See Fig. 38.)

To select a Programme using the Programme Index
Using Δ + or ∇ – select the desired programme position and press OK. Now the selected programme is displayed and you are back in the normal TV mode.

- b) Photo mode
Using Δ + or ∇ – select «Photo» and press OK. Now the main picture is displayed as a succession of 8 still pictures and a 9th picture which will be live. (See Fig. 39.) Using Δ + or ∇ – the photo mode starts again. Press OK to return to the normal TV mode.
- c) Strobe mode
Using Δ + or ∇ – select «Strobe» and press OK. Now the TV picture is displayed image by image, which gives it the effect of slow motion. (See Fig. 40.) Using Δ + or ∇ – select the speed of the motion (3 different speeds are available). Press OK to return to normal TV mode.

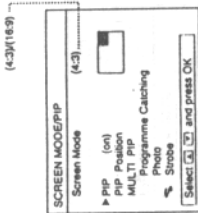


FIG 37.



FIG 38.

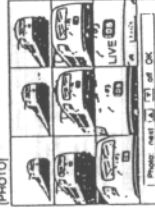
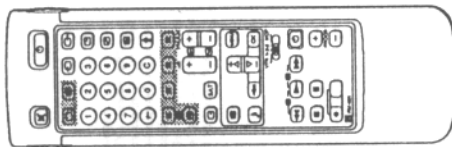


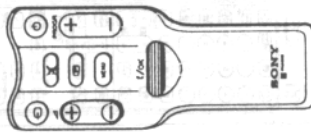
FIG 39.



FIG 40.



Note
Teletext errors may occur if the broadcasting signals are weak.
With the simple side of the Remote Commander you can switch teletext on and off, operate Fastext, and directly select page numbers.



Note
Fastext operation is only possible if the TV station broadcasts Fastext signals.

TV stations broadcast an information service called Teletext via the TV channels. Teletext service allows you to receive various information pages such as weather reports or news at any time you want. For advanced teletext operation, use the buttons on the Full-Function side of the Remote Commander.

Direct Access Functions

Switching Teletext on and off
Select the TV channel which carries the teletext broadcast you want to watch.

- 1 Press \bar{A} to switch on teletext.
- 2 A teletext page will be displayed (usually the index page). If there is no teletext broadcast, "No text available" is displayed on the information line of the screen.
To switch teletext off
Press X.

Selecting a teletext page

With direct page selection use the number buttons to input the three digits of the chosen page number.
If you have made a mistake, type in any three digits. Then re-enter the correct page number.

- 1 With page-catching
Select a teletext page with a page overview (e.g. index page).
- 2 Press OK. "Page catching" will be displayed on the information line. The last digit of the first displayed page number flashes.
- 3 Using 0 + 0 s -, select the desired page and press OK.
The requested page will appear in a few seconds.
Press \bar{A} to return.

Accessing next or preceding page
Press q (PAGE +) or r (PAGE -).
The next or preceding page appears.

Superimposing the teletext display on the TV programme

- Press \bar{A} once in teletext mode or twice in TV mode.
- Press \bar{A} again to resume normal teletext reception.
- Preventing a teletext page from being updated
Press a (HOLD). The HOLD symbol = a - displayed on the information line.
- Press \bar{A} to resume normal teletext reception.

Using Fastext

With Fastext you can access pages with one key stroke. When a Fastext page is broadcast, a colour-coded menu will appear at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue buttons on the Remote Commander.
Press the corresponding coloured button on the Remote Commander which corresponds to the colour-coded menu. The page will be displayed after some seconds.

Using the Teletext Menu

This TV is provided with a menu-guided teletext system. When teletext is switched in, you can use the menu buttons to operate the teletext menu. Select the teletext menu functions in the following way:

- 1 Press MENU. The menu will be superimposed on the teletext display. (See Fig. 41.)
- 2 Using 0 + 0 s -, select the teletext function you want and press OK. (See Fig. 42.)

USER PAGES/PRESET USER PAGES

See page 22 for information about presetting and operating the user pages.

INDEX

The index will give you an overview of the contents of the teletext and the page numbers.

TOP/BOTTOM/FULL

For convenient reading of a teletext page, you can enlarge the teletext display with the ability to scroll up and down. After having selected the function, an information line TOP/BOTTOM/FULL will be displayed. (See Fig. 43)

Press 0 + for "Top" to enlarge the upper half. Keep pressing s - for "Bottom" to enlarge the lower one. Press OK for "Full" to resume the normal size.
Press \bar{A} to resume normal teletext reception.

TEXT CLEAR

After having selected the function, you can watch a TV programme while waiting for a requested teletext page to be displayed. (The symbol changes colour) (See Fig. 44.)
Press \bar{A} to view the captured page.

SUBTITLES

Your teletext service will inform you if a TV programme is subtitled. After having selected the function the subtitles will be displayed.

REVEAL

Sometimes pages contain concealed information, such as answers to a quiz. The reveal option lets you disclose the information. After having selected the function, an information line "REVEAL ON/OFF" will be displayed. (See Fig. 45.)

Using 0 + or s -, select ON to reveal the information or OFF to conceal it again.
Press \bar{A} to resume normal teletext reception.

TIME PAGE

This feature is not available in the U.K.

SUBPAGE

You may want to select a particular teletext page from several subpages which are rotated automatically. After having selected the function, an information line will be displayed.
To select the desired subpage, enter four digits using PROGR +/- or the number buttons. (e.g. enter 0002 for the second page of a sequence).



Fig. 41.



Fig. 42.

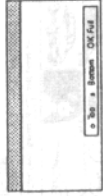


Fig. 43.

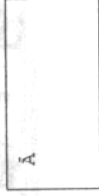


Fig. 44.

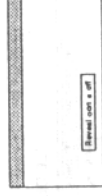
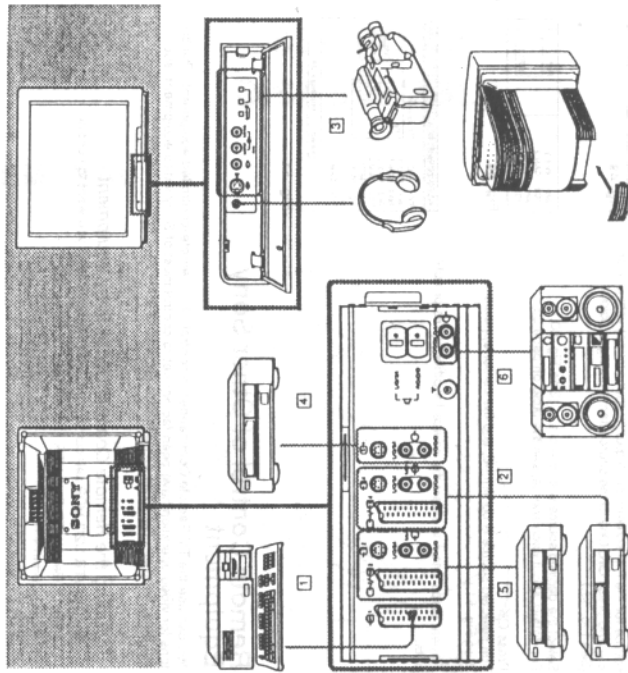


Fig. 45.

Connecting and Operating Optional Equipment

Connecting Optional Equipment

You can connect optional audio-video equipment to this TV such as VTRs, video disc players, and stereo systems.



To connect a VTR
using the E terminal
Connect the aerial
output of the VTR to
the aerial terminal E
of the TV.
We recommend that
you tune in the video
signal to programme
details so that preset
channels manually*
on page 8.

If the picture or the
sound is distorted
move the VTR away
from the TV.

Notes:
After having con-
nected all optional
equipment to the TV,
attach the supplied
cover onto the rear
panel (See illustration
at the right).

S video input (Y/C)

Video signals may be
separated into Y
(luminance or bright-
ness) and C (chromi-
nance) signals. Sepa-
rate signals prevent them
from interfering with
one another, and the
result improves pic-
ture quality (espe-
cially luminance).

This TV is equipped
with 3 S Video input
terminals through which
the signals can be input
directly.

When connecting a
monaural VTR
Connect only the
white jack to both
the TV and VTR.

Acceptable input signal

- 1 Normal audio/video and RGB signal
- 2 Normal audio/video and S video signal
- 3 Normal audio/video and S video signal
- 4 Normal audio/video and S video signal

Available output signal

- 1 Video/audio from TV tuner
- 2 Video/audio from selected source
- 3 No outputs
- 4 Video/audio displayed on TV screen (monitor out)
- 5 S video/audio signal displayed on TV screen (monitor out)
- 6 Audio signal (variable)

User Page Bank System

You can store up to 30 pages in the Teletext page bank system. In this way you have quick access to the pages you watch frequently.

Storing pages

There are 5 banks (A to E) for 5 teletext stations. In each bank you can store 6 preferred pages (1P to 6P).

- 1 Press **A** (if Teletext is not on already) and **MENU** to show the **TELETEXT MENU** display.
- 2 Select **PRESET USER PAGES** with **o + or s -** and press **OK**.
- 3 Select the desired bank with **o + or s -** and press **OK**. The cursor will go to the first position (P1) of the preferred pages.
- 4 Input the three digits of your first preferred page with the number buttons. The cursor will go to the second position.
- 5 Repeat step 4 for the other 5 page numbers you want to preset. If you do not want to preset all 6 page numbers available, press **OK** without inserting any number.
- 6 Select **Allocate Bank** with **o + or s -** and press **OK**.
- 7 Select the programme position for which you have preset pages with **o + or s -** and press **OK**. (See Fig. 46).
- 8 Select the desired bank with **o + or s -** (Banks A to E are available) and press **OK**.
- 9 Repeat steps 3 to 8 for the other 4 banks available.

Displaying User Pages

- 1 Select **MENU**.
- 2 Select **USER PAGES** with **o + or s -** and press **OK**. A table of the stored preferred pages will be displayed. (See Fig. 47).
- 3 Select the desired page with **o + or s -** and press **OK**. The page will be displayed after some seconds.

or

You can use the coloured buttons on the Remote Commander to have quick access to the first four User pages. Page 1 corresponds to the red button, P 2 to the green one, P 3 to the yellow one and P 4 to the blue button.

To select the desired page press the respective coloured button while you are in TV mode. Now the Page number of this teletext page will appear in white at the top in the left-hand corner of the TV screen. When the page number changes colour the page is available. Press the coloured button again to display the page.

If two broadcasting stations use the same Teletext you can preset one bank to 2 different programme positions.

| BANK | P1 | P2 | P3 | P4 | P5 | P6 |
|------|-----|-----|-----|-----|-----|-----|
| A | 200 | 120 | 301 | 500 | 600 | 510 |
| B | 100 | 200 | 300 | 400 | 500 | 600 |
| C | 100 | 200 | 300 | 400 | 500 | 600 |
| D | 100 | 200 | 300 | 400 | 500 | 600 |
| E | 100 | 200 | 300 | 400 | 500 | 600 |

| Always Bank | Bank | Alloc | Unit | Bank |
|-------------|------|-------|------|------|
| 00 | 00 | 00 | 00 | 00 |
| 01 | 01 | 01 | 01 | 01 |
| 02 | 02 | 02 | 02 | 02 |
| 03 | 03 | 03 | 03 | 03 |
| 04 | 04 | 04 | 04 | 04 |
| 05 | 05 | 05 | 05 | 05 |
| 06 | 06 | 06 | 06 | 06 |
| 07 | 07 | 07 | 07 | 07 |
| 08 | 08 | 08 | 08 | 08 |
| 09 | 09 | 09 | 09 | 09 |
| 10 | 10 | 10 | 10 | 10 |
| 11 | 11 | 11 | 11 | 11 |
| 12 | 12 | 12 | 12 | 12 |

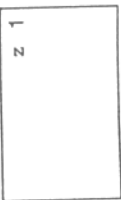
Fig. 46.

| USER PAGES | Page | Bank |
|------------|----------|--------|
| 1 | Page 200 | Bank A |
| 2 | Page 120 | Bank B |
| 3 | Page 301 | Bank C |
| 4 | Page 500 | Bank D |
| 5 | Page 600 | Bank E |
| 6 | Page 510 | Bank A |

Fig. 47.

Selecting input and output

This section explains how to view the video input picture (of the video source connected to your TV), and how to select the output signal using direct access buttons or the menu system.



Selecting input

Press z, repeatedly to select the input source. The symbol of the selected input source will appear. To go back to the normal TV picture Press x.

Input modes

| Symbol | Input signal |
|--------|---|
| z 1 | Audio/Video input through the e 1 connector |
| 1 | RGB input through the e 1 connector |
| z 2 | Audio/Video input through the A 2/y 2 connector |
| y 2 | S video input through the A 2/y 2 or y 2 connector |
| z 3 | Audio/Video input through z 3 and p 3 on the front |
| y 3 | S video input through the y 3 connectors on the front (4-pin connector) |
| z 4 | Audio/Video input through the A 4/y 4 connector |
| y 4 | S video input through the A 4/y 4 or y 4 connector (4-pin connector) |

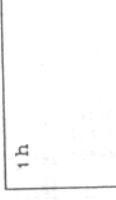
You can also select the input mode using the P → 1 → z and -/+ buttons on the TV. In this case, first select z, and then press -/+ buttons to select the input.

Selecting the output

The A 2/y 2 connector outputs the source input from the other connectors. Press h, repeatedly to select the output. The symbol of the selected output source appears.

Output modes

| Symbol | A 2/y 2 connector outputs |
|--------|--|
| 1 h | The audio/video signal from the e 1 connector |
| 2 h | The audio/video signal from the A 2/y 2 connector |
| 2 u | The audio/S video signal from the A 2/y 2 connector |
| 3 h | The audio/video signal from the z 3 and p 3 connectors |
| 3 u | The audio/S video signal from the y 3 and p 3 connectors |
| 4 h | The audio/video signal from the A 4/y 4 connector |
| 4 u | The audio/S video signal from the A 4/y 4 connector |
| TV h | The audio/video signal from the E aerial terminal |



Checking and selecting the input and output sources using the menu

You can display the menu to see which input sources are selected for the TV screen and PIP screen, and which output source is selected. You can also select them on the menu display.

- 1 Select Video Connections with o + or s - and press OK. The VIDEO CONNECTION menu appears. (See Fig. 48). You can see which source is selected for the TV and PIP input, and for the output. If you want to select the input and output on this menu, go on to the next step.
- 2 Select TV screen (input source for the TV screen), PIP (input source for the PIP screen), or Output (output source) with o + or s - and press OK. One of the source items changes colour. (See Fig. 49).
- 3 Select the desired source with o + or s -. (See Fig. 50). For details about each source, see the table on page 23.

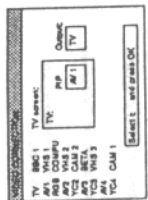


Fig. 48



Fig. 49



Fig. 50

- 4 Press OK. The selected source is confirmed, and the cursor appears. (See Fig. 51).
- 5 Repeat steps 2 to 4 to select the source for other inputs or outputs.

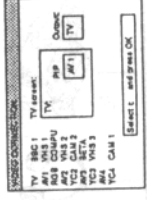


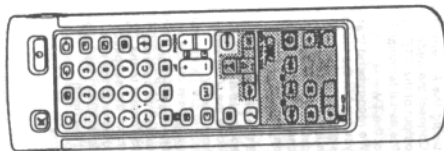
Fig. 51

Remote Control of Other Sony Equipment

You can use the TV Remote Commander to control other remote-controlled equipment. The buttons for video operation have been factory-set to control most of Sony video equipment, such as: Beta, 8mm or VHS VTRs or video disc players.

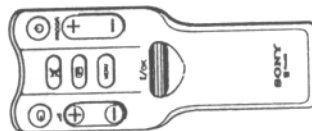
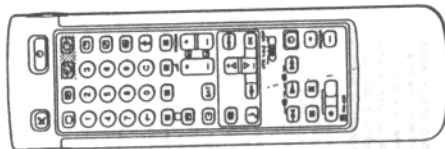
Tuning the Remote Commander to Sony equipment

- 1 Set the VTR 1/2/3 MDP selector according to the equipment you want to control:
 - VTR 1: Beta or ED Beta VTR
 - VTR 2: 8mm VTR
 - VTR 3: VHS VTR
 - MDP: Video disc player
- 2 Use the buttons indicated in the illustration to operate the additional equipment. If your video equipment is furnished with a COMMAND MODE selector set this selector to the same position as the VTR 1/2/3 MDP selector on the TV Remote Commander. If the equipment does not have a certain function, the corresponding button on the Remote Commander will not operate.



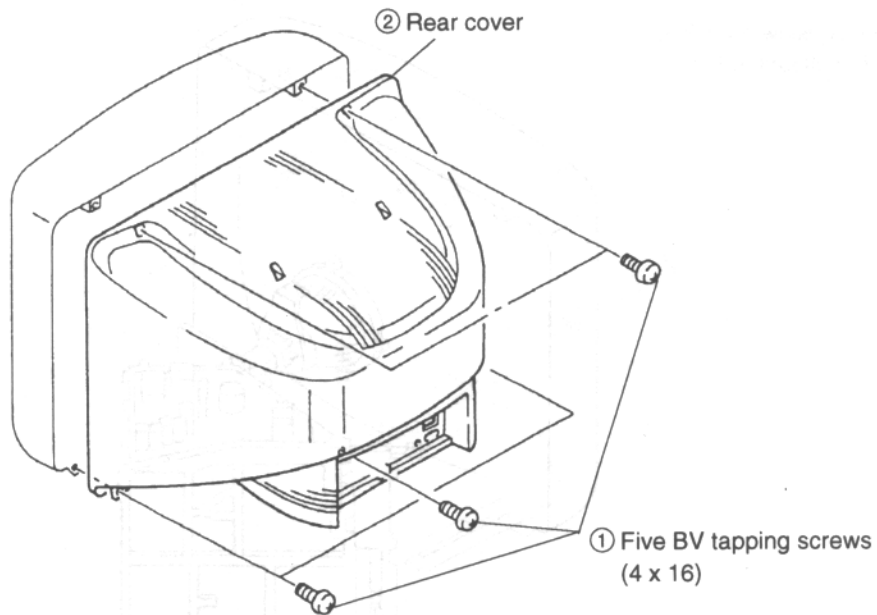
When recording (record) button, make sure to press this button and the one to the right of it simultaneously.

Selecting input with PROG +/- or number buttons. You can press the input sources to the programme positions so that you can select them with PROG +/- or number buttons. * Present channels manually on page 8.



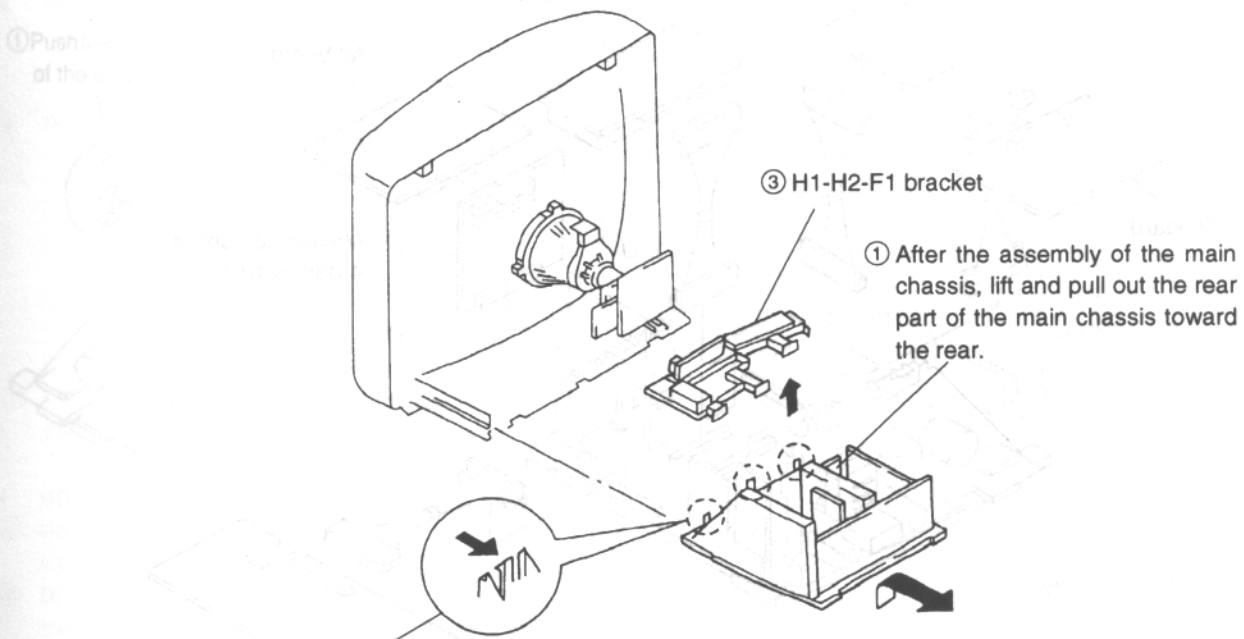
SECTION 2 DISASSEMBLY

2-1. REAR COVER REMOVAL



2-2. CHASSIS ASSY REMOVAL

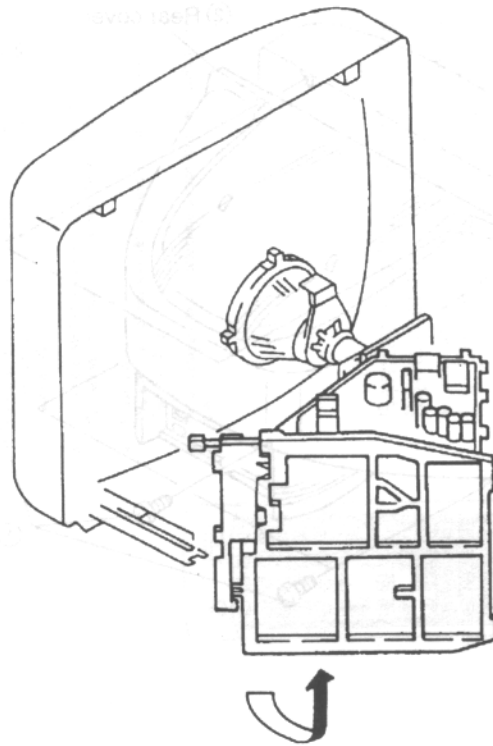
- * Remove the connector bracket and then perform the following servicing.
(refer to 2-3. CHASSIS ASSY REMOVAL.)



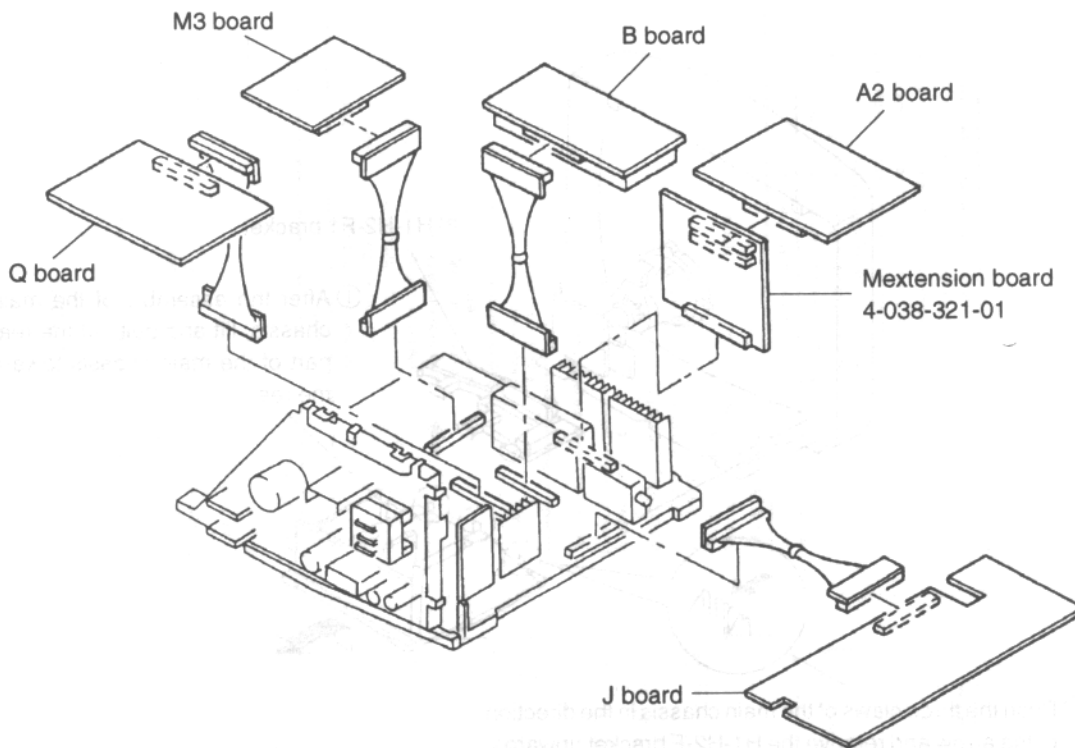
- ② Push the three claws of the main chassis in the direction of the arrow and remove the H1-H2-F bracket upwards.

SECTION 2
DISASSEMBLY

2-3. SERVICE POSITION



2-4. EXTENSION BOARD



2-5. J

2-6. J

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of the

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HOW

① Don't

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anode

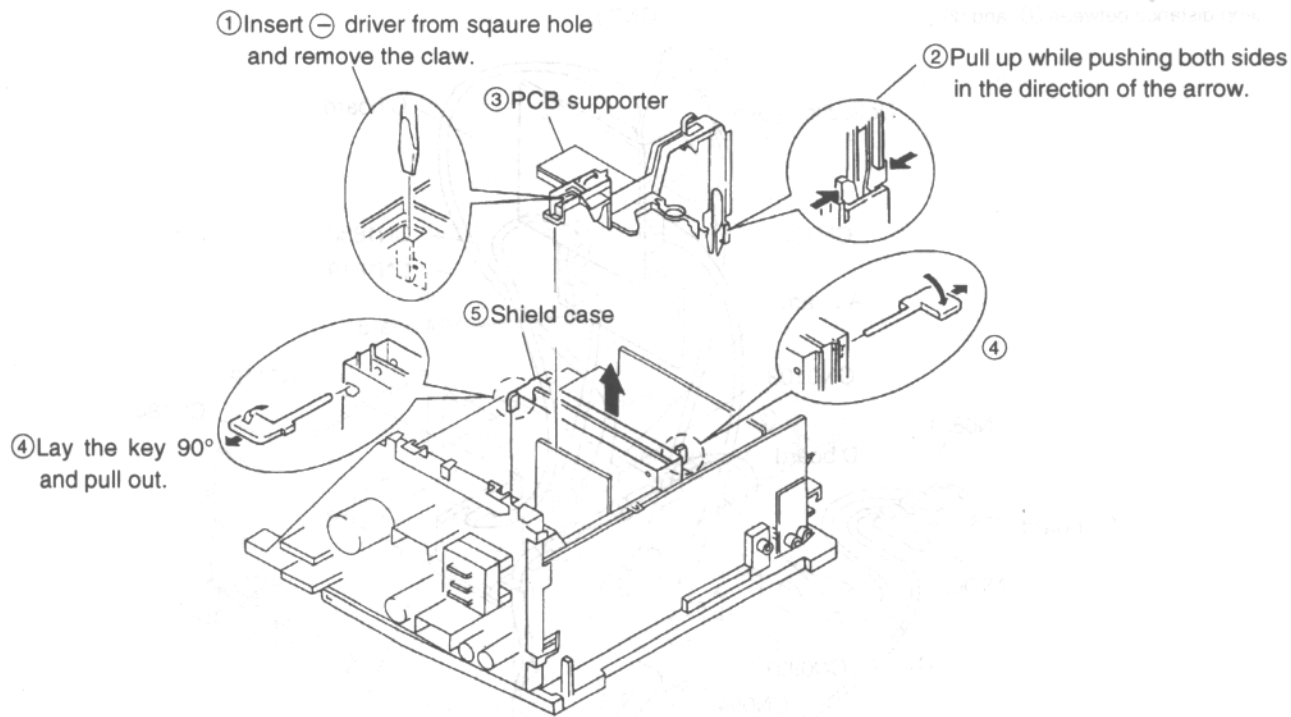
A mat

the ru

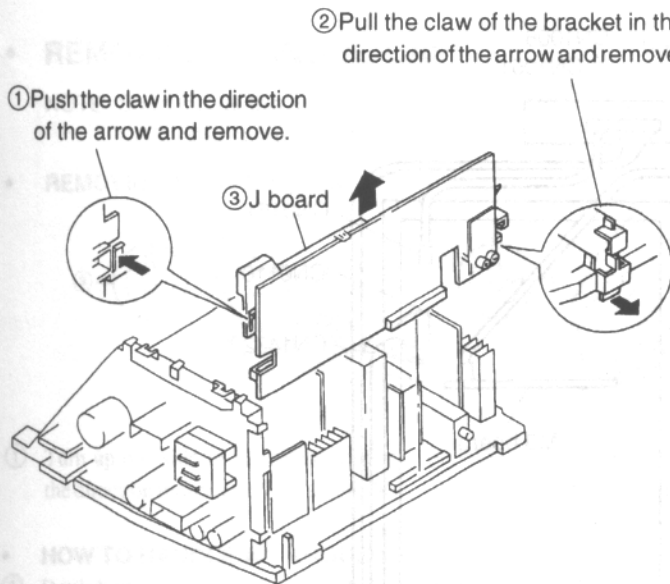
③ Don't

The st

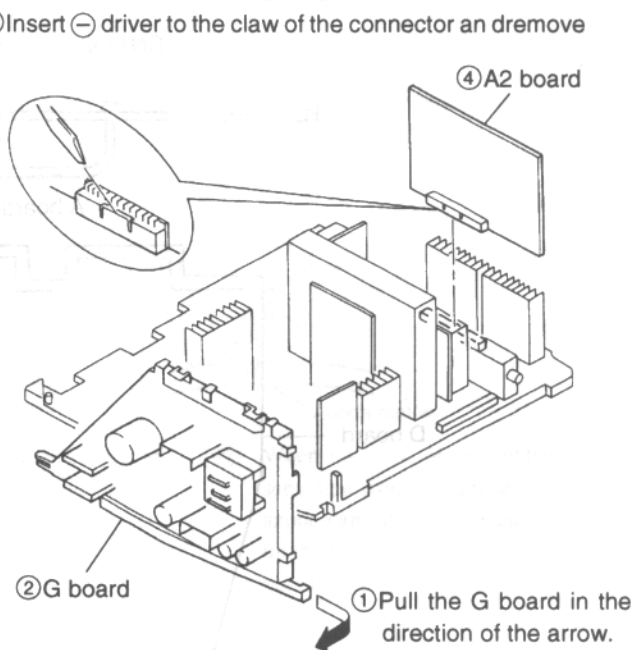
2-5. PCB SUPPORTER AND SHIELD CASE REMOVAL



2-6. J BOARD REMOVAL



2-7. G AND A2 BOARDS REMOVAL

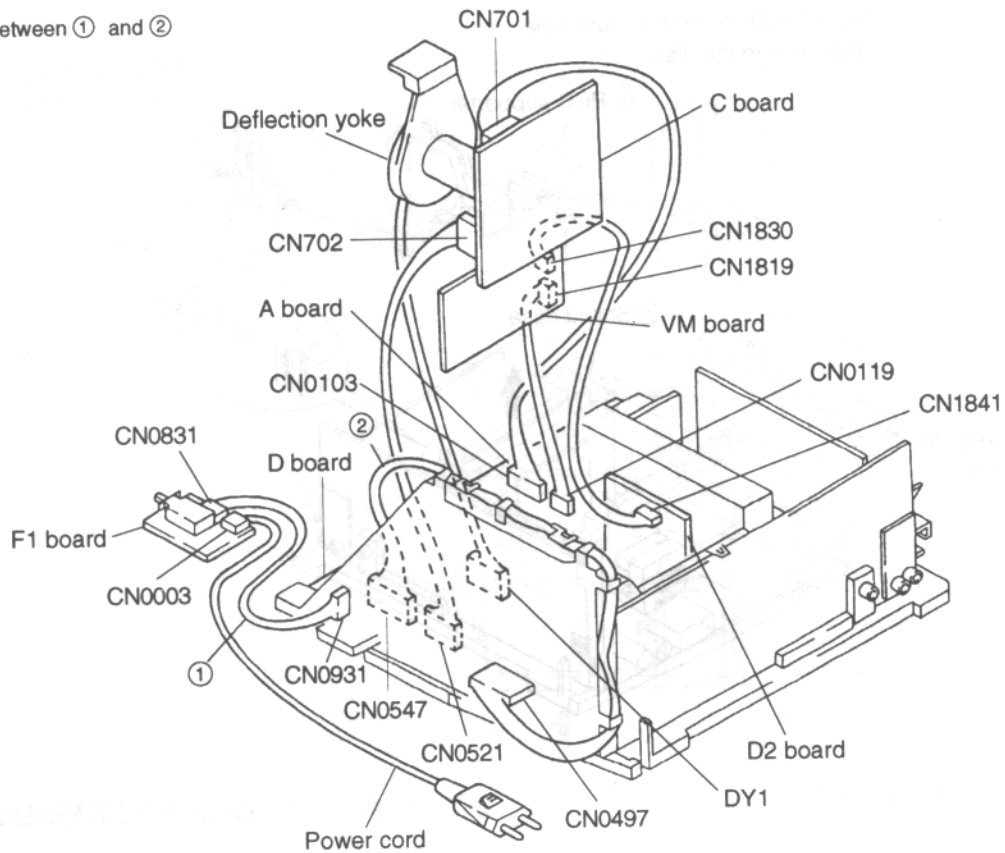


HOW TO

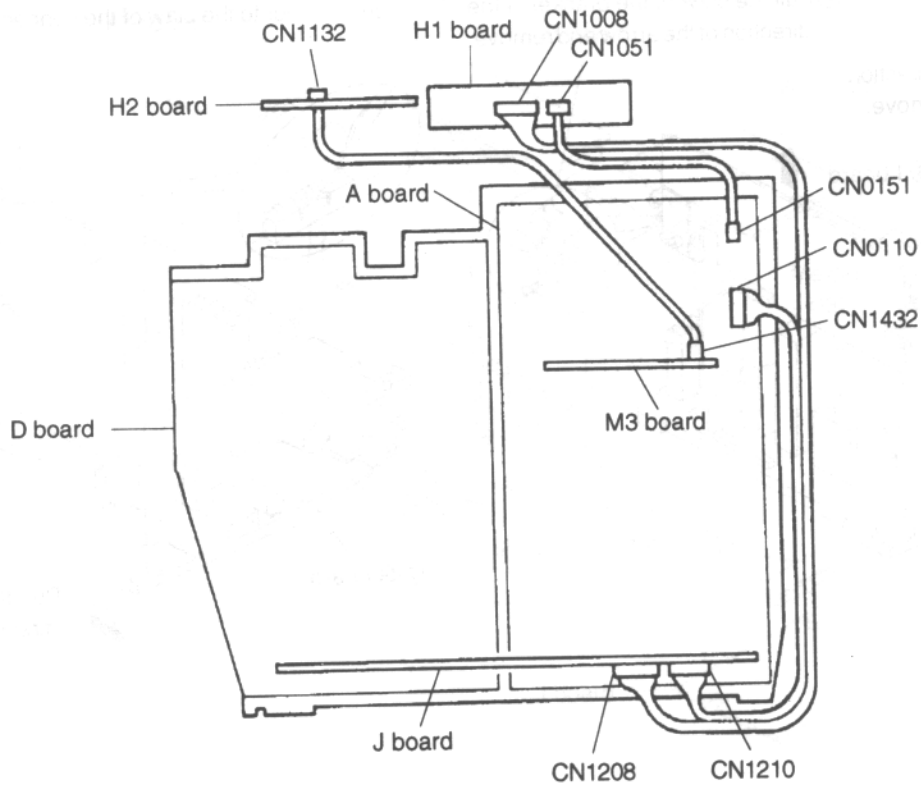
- ① Don't use metal material.
- ② Don't peel anode cap. A metal material is the rubber.
- ③ Don't use sharp tools. The sharp...

2-8-1. WIRE DRESSING

- Keep distance between ① and ②



2-8-2. WIRE DRESSING



2-9. I

Prepar
 (3) Hor

- RI
- NO
- 79
- RE
- 2. T
- 3. T
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- ① Dor
- mat
- ② Dor
- ano
- A n
- the
- ③ Dor
- The