

FD Trinitron  
**WEGA**  
**WIDE** *Colour Television*

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*Operating Instructions* \_\_\_\_\_

**GB**



Before operating the TV, please read the “Safety Information” section of this manual. Retain this manual for future reference.

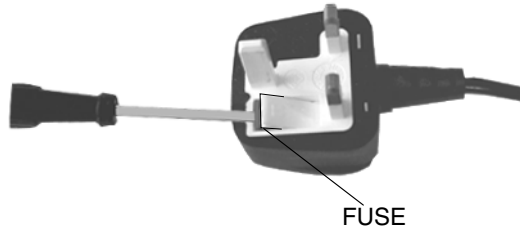
***KV-28CS70U***  
***KV-32CS70U***

## NOTICE

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  $\diamond$  or  $\heartsuit$ ) 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 flat blade screwdriver, and replace the fuse.



## IMPORTANT

If the plug supplied is not suitable for the socket outlet 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  $\perp$  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.

## Thank you for choosing this Sony FD Trinitron Colour Television.

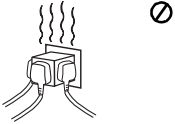
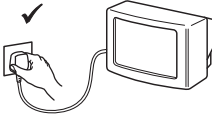
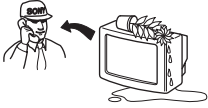

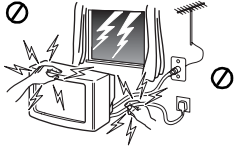
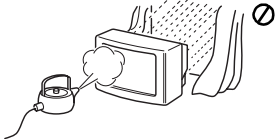
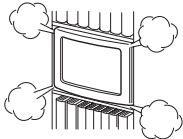
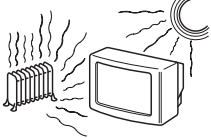
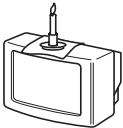
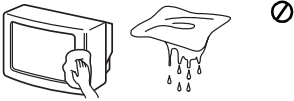
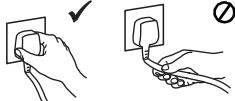
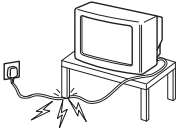
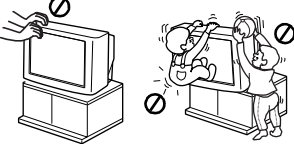

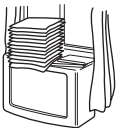
Before operating the TV, please read this manual thoroughly and retain it for future reference.

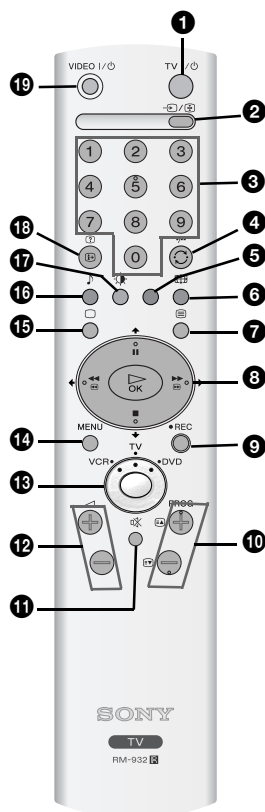
- Symbols used in the manual:
  -  Important information.
  -  Information on a feature.
  - 1,2... Sequence of instructions.
  -  Shaded buttons on the remote control show you the buttons you have to press to follow the sequence of the instructions.
  -  Informs you of the result of instructions.


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# Safety Information

 <p>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.</p>	 <p>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. However, some TVs may have features which require they are left in standby. The instructions in this manual will inform you if this applies.</p>	 <p>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 into the cabinet, do not operate the TV. Have it checked immediately by qualified personnel.</p>
 <p>Do not open the cabinet and the rear cover of the TV. Refer to qualified service personnel only.</p>	 <p>For your own safety, do not touch any part of the TV, power lead or aerial lead during lightning storms.</p>	 <p>To prevent fire or shock hazard, do not expose the TV to rain or moisture.</p>
 <p>Do not cover the ventilation openings of the TV. For ventilation, leave a space of at least 10cm all around the set.</p>	 <p>Never place the TV in hot, humid or excessively dusty places. Do not install the TV where it may be exposed to mechanical vibrations.</p>	 <p>To prevent fire, keep inflammable objects or naked lights (eg candles) away from the TV.</p>
 <p>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.</p>	 <p>Pull out the power lead by the plug. Do not pull on the power lead itself.</p>	 <p>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.</p>
 <p>Place the TV on a secure stable stand. Never attempt to move the TV and stand together - always move the TV and stand separately. Do not place the TV on its side or face up. Do not allow children to climb on to it.</p>	 <p>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.</p>	 <p>Do not cover the ventilation openings of the TV with items such as curtains or newspapers etc.</p>



**1 To temporarily switch off TV:**  
Press this button 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.

**2 Selecting input source:**  
Press this button repeatedly until the desired input symbol of the source appears on the TV screen.

**3 Selecting channels:**  
When Media Selector **13** is set to TV or VCR, press these buttons to select the desired channel. For double-digit numbers, enter the second digit within 2.5 seconds.

**4 a) If Media selector is set to TV:**  
Press this button to watch the last channel selected (provided you watched it for at least 5 seconds).

**b) If Media Selector is set to VCR:**  
Pressing this button enables you to select double digit channels for Sony VCR's: e.g. for channel 23, press **--** button then buttons **2** and **3**.

**5** This button only works in Teletext mode.

**6 Selecting screen format:**  
Press this button repeatedly to change the screen format. For more details refer to 'Auto Format' on page 14.

**7 Selecting Teletext:**  
Press this button to switch on teletext.

**8 a) If Media selector is set to TV:**  
When MENU **14** is switched on, use these buttons to navigate through the menu system. For more details refer to "Using the Menu System" on page 9.

When MENU **14** is switched off, press OK to show a channel overview. Press **↓** or **↑** button to select the channel desired, then press the OK button again to watch the selected channel.

**b) If Media Selector is set to VCR or DVD**  
Use these buttons to control the main functions of your VCR or DVD.


**9 Recording button:**  
When Media Selector **13** is set to VCR, press this button if you wish to record a programme.

**10 Selecting channels:**  
Press this button to select the next or previous broadcast channel.

**11 Muting the Sound:**  
Press this button to mute TV sound. Press again to restore the sound.

**12 Adjusting TV volume:**  
Press this button to adjust the volume of the TV.

**13 Media Selector:**  
As well as operating your TV, this remote control can also operate the main functions of your VCR or DVD. Switch on your VCR or DVD, then press this button to select VCR or DVD. A green light in the Media Selector momentarily indicates your selection.

 Before you can use this remote to operate your VCR or TV, it has to be configured accordingly. For more details please refer to page 20.

**14 Displaying the menu system:**  
Press this button to display the menu on the TV screen. Press again to remove the menu display from the TV screen.


**15 Selecting TV mode:**  
Press this button to switch off teletext or any video input.

**16 Selecting Sound effect:**  
Press this button repeatedly to change the sound effect.

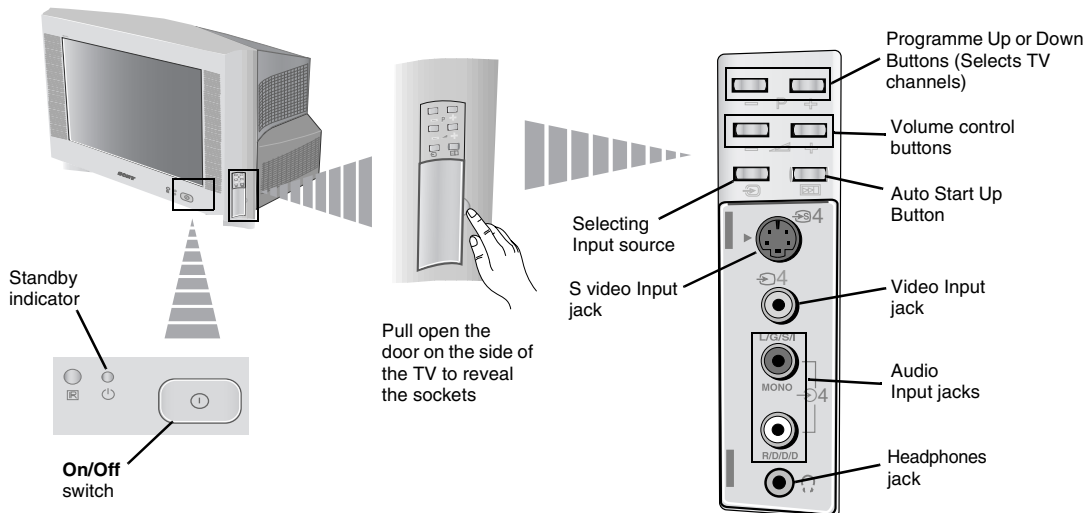
**17 Selecting Picture mode:**  
Press this button repeatedly to change the picture mode.

**18 Displaying on Screen information:**  
Press this button to display all on-screen indications. Press again to cancel.

**19 VCR or DVD on/off (standby):**  
Press this button to temporarily turn off your VCR or DVD.

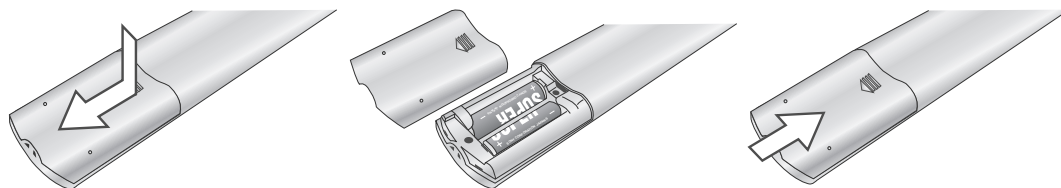
 Besides the TV functions, all coloured and green symbol buttons are also used for Teletext operation. For more details, please refer to "Teletext" section of this instruction manual.

# Overview of TV Buttons



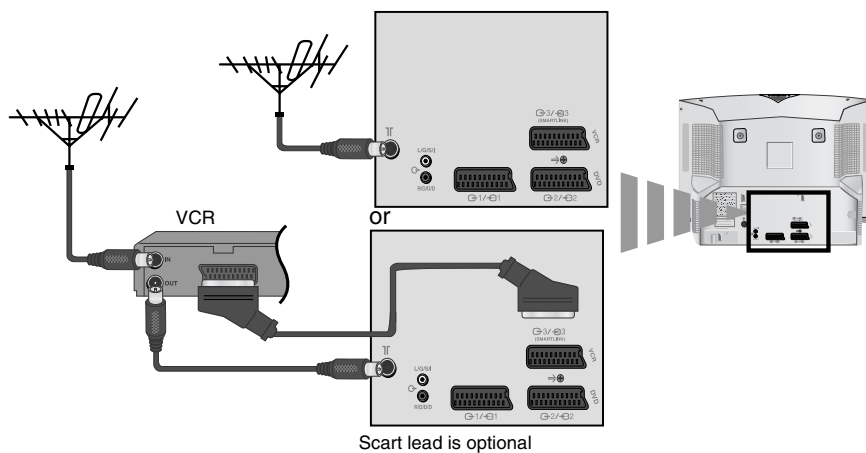
## Inserting Batteries into the Remote Control

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



## Connecting the Aerial and VCR



- ⓘ Connecting cables are not supplied.




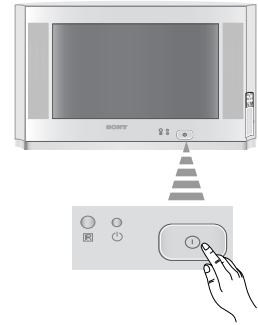
- ⚠ For more details of VCR connection, please refer to the section "Connecting Optional Equipment" of this instruction manual.



# Switching on the TV and Automatically Tuning

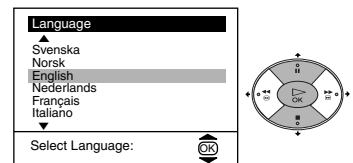
**i** The first time you switch on your TV, a sequence of menu screens appear on the TV enabling you to: 1) choose the language of the menu screen, 2) adjust the picture slant 3) search for and store all available channels (TV Broadcasts) and 4) change the order in which the channels (TV Broadcasts) appear on the screen.

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 menu) or by pressing the Auto Start Up Button  on the TV set.







- 1 Connect the TV plug to the mains socket (220-240V AC, 50Hz). The first time that the TV set is connected, it is usually turned on. If the TV is off, press the  on/off button on the TV set to turn on the TV. The first time you switch on the TV, a **Language** menu appears automatically on the TV screen.

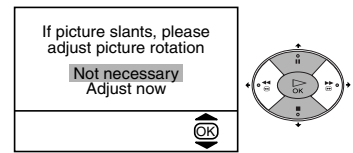


- 2 Press the  or  button on the remote control to select the language, then press the **OK** button to confirm your selection. From now on all the menus will appear in the selected language.

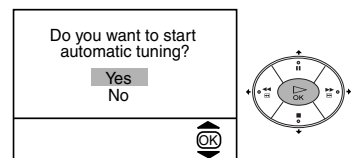


- 3 Because of the earth's magnetism, the picture might slant. The **Picture Rotation** menu allows you to correct the picture slant if it is necessary.

- a) If it is not necessary, press the  or  button to select **Not necessary** and press **OK**.
- b) If it is necessary, press the  or  button to select **Adjust now**, then press **OK** and correct any slant of the picture between -5 and +5 by pressing the  or  button. Finally press **OK** to store.



- 4 The Auto Tuning menu appears on the screen. Press the **OK** button to select **Yes**.



continued...

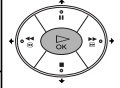
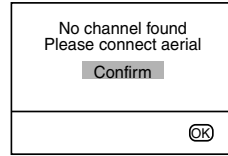
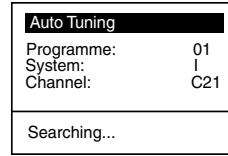
GB

# Switching on the TV and Automatically Tuning

5 The TV starts to automatically search and store all available broadcast channels for you.

**i** This procedure could take some minutes. Please be patient and do not press any buttons, otherwise the automatic tuning will not be completed.

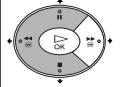
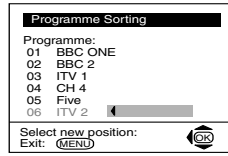
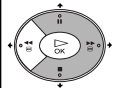
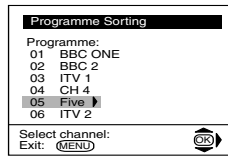
**A** If no channels were found during the auto tuning process then a new menu appears automatically on the screen asking you to connect the aerial. Please connect the aerial (see page 6) and press **OK**. The auto tuning process starts again.



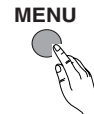
6 **i** After all available channels are captured and stored, the **Programme Sorting** menu appears automatically on the screen enabling you to change the order in which the channels appear on the screen.

a) If you wish to keep the broadcast channels in their tuned order, go to step 7.

- b) If you wish to store the channels in a different order:
- 1 Press the **↓** or **↑** button to select the programme number that has the channel (TV Broadcast) you wish to rearrange, then press the **→** button.
  - 2 Press the **↓** or **↑** button to select the new programme number position for your selected channel (TV Broadcast), then press the **←** button.
  - 3 Repeat steps b)1 and b)2 if you wish to change the order of the other channels.



7 Press the **MENU** button to remove the menu from the screen.



**👍** Your TV is now ready for use.

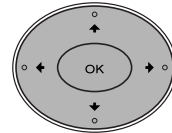


**i** Your TV uses an on-screen menu system to guide you through the operations. Use the following buttons on the Remote Control to operate the menu system:

**1** Press the **MENU** button to switch the first level menu on.



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



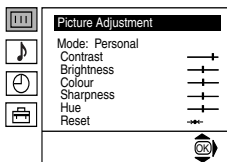
**3** Press the **MENU** button to remove the menu from the screen.



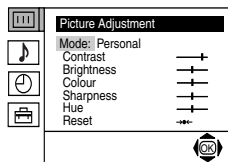
**GB**

## Menu Guide

### Level 1



### Level 2



### Level 3 / Function

#### PICTURE ADJUSTMENT

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

#### To do this:

After selecting the item you want to alter press the **→** button, then repeatedly press the **↓/↑/←** or **→** buttons to make any adjustments and finally press the **OK** button to store.

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

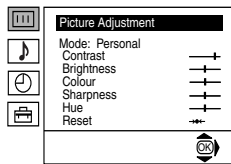
- ↓ **Personal** (for individual settings).
- ↓ **Live** (for live broadcast programmes, DVD and Digital Set Top Box receivers).
- ↓ **Movie** (for films).

- **Brightness**, **Colour** and **Sharpness** can only be altered if “Personal” mode is selected.
- **Hue** is only available for NTSC colour signal (e.g: USA video tapes).
- Select **Reset** and press the **OK** button to return the picture settings to their factory preset levels.

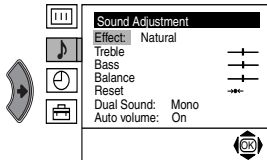
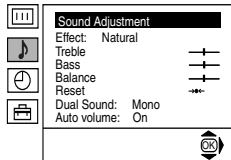
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# Introducing and Using the Menu System

## Level 1



## Level 2



## Level 3 / Function

### SOUND ADJUSTMENT

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

#### To do this:

After selecting the item you want to alter press the **→** button, then repeatedly press the **↓/↑/←** or **→** buttons to make any adjustments and finally press the **OK** button to store.

- Effect** →
- ↓ **Natural:** Enhances clarity, detail and presence of sound by using the “BBE High Definition Sound system”\*.
  - ↓ **Dynamic:** “BBE High Definition Sound system”\* intensifies clarity and presence of sound for better intelligibility and musical realism.
  - ↓ **Dolby\*\*Virtual:** Simulates the sound effect of “Dolby Surround Pro Logic”.
  - ↓ **Off:** Flat response.
- Treble** → ← Less → More
- Bass** → ← Less → More
- Balance** → ← Left → Right
- Reset** Resets the sound to the factory preset levels.
- Dual Sound** →
- For a stereo broadcast:
    - ↓ **Mono.**
    - ↓ **Stereo.**
  - For a bilingual broadcast:
    - ↓ **Mono** (for mono channel if available).
    - ↓ **A** (for channel 1).
    - ↓ **B** (for channel 2).
- Auto Volume** →
- ↓ **Off:** volume level changes according to the broadcast signal.
  - ↓ **On:** volume level of the channels will stay the same, independent of the broadcast signal (e.g. in the case of advertisements).

- If you are listening to the TV through headphones, the “Effect” option is automatically switched to “Off”.
- If you select “Dolby Virtual” in the “Effect” option, the “Auto Volume” option is automatically switched to “Off” and vice versa.

\* The “BBE High Definition Sound system” is manufactured by Sony Corporation under license from BBE Sound, Inc. It is covered by U.S. Patent No. 4,638,258 and No. 4,482,866. The word “BBE” and BBE Symbol are trademarks of BBE Sound, Inc.

\*\*This TV has been designed to create the “Dolby Surround” sound effect by simulating the sound of four speakers with only two speakers, when the broadcast audio signal is Dolby Surround encoded. The sound effect can also be improved by connecting a suitable external amplifier (for details refer to “Connecting to external audio Equipment” on page 19).

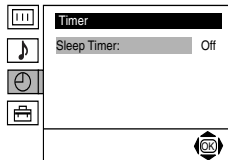
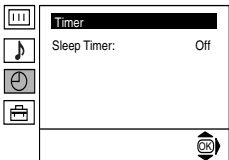
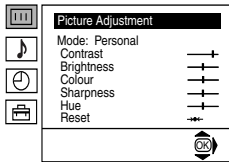
\*\* Manufactured under license from Dolby Laboratories. “Dolby”, “Pro Logic” and the double-D symbol are trademarks of Dolby Laboratories.

continued...

## Level 1

## Level 2

## Level 3 / Function



### SLEEP TIMER

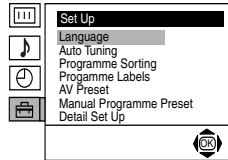
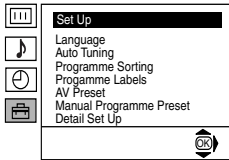
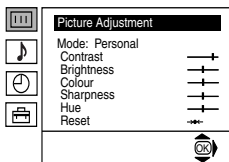
The “Sleep Timer” option in the “Timer” menu allows you to select a time period for the TV to automatically switch itself into the standby mode.

#### To do this:

After selecting the option, press the **➔** button then press the **⏴** or **⏵** button to set the time period delay (max. of 4 hours) and finally press the **OK** button 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, the time remaining is displayed on the TV screen automatically.

**GB**

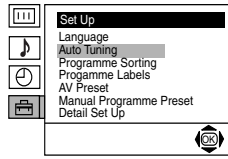
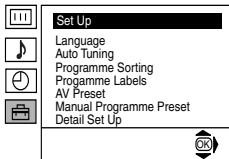
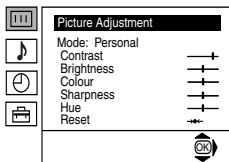


### LANGUAGE

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

#### To do this:

After selecting the option, press the **➔** button then proceed in the same way as in step 2 of the section “Switching On the TV and Automatically Tuning” on page 7.



### AUTO TUNING

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

#### To do this:

After selecting the option, press the **➔** button then proceed in the same way as in TV steps 4 and 5 of the section “Switching On the TV and Automatically Tuning” on page 7 and 8.

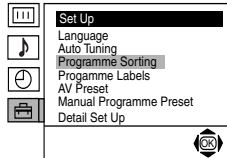
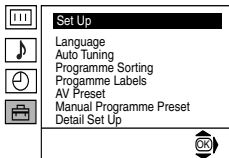
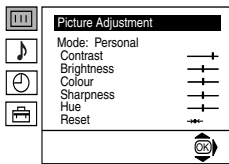
continued...

# Introducing and Using the Menu System

## Level 1

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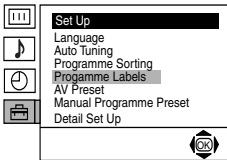
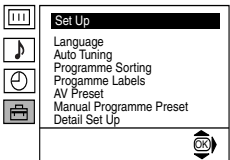
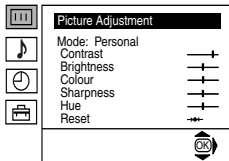


### PROGRAMME SORTING

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

#### To do this:

After selecting the option, press the **➔** button then proceed in the same way as in step 6 b) of the section “Switching On the TV and Automatically Tuning” on page 8.

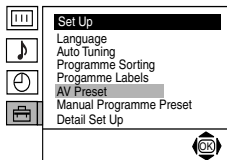
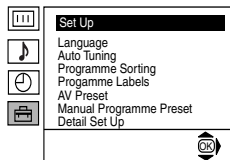
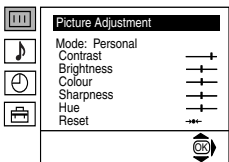


### PROGRAMME LABELS

The “Programme Labels” option in the “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 the **➔** button, then press the **⏴** or **⏵** buttons to select the programme number of the channel you wish to name.
- 2 Press **➔** button. With the first element of the **Label** column highlighted, press **⏴** or **⏵** buttons to select a letter or number (select “\_” for a blank), then press the **➔** button to confirm the character. Select the other four characters in the same way. Finally press the **OK** to store.



### AV PRESET

The “AV Preset” option in the “Set Up” menu allows you to designate a name to the external equipment you have connected to the sockets of this TV.

#### To do this:

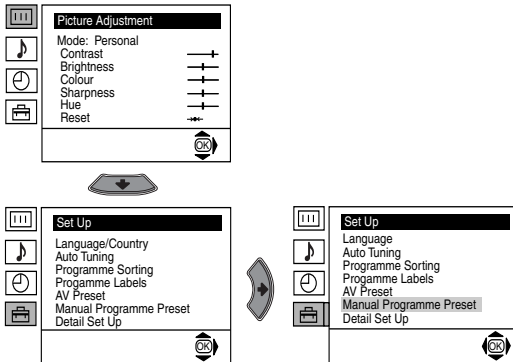
- 1 After selecting the option, press the **➔** button, then press the **⏴** or **⏵** buttons to select the input source you wish to name (**AV1**, **AV2** and **AV3** represent the rear Scart sockets and **AV4** is for the side connectors). Then press the **➔** button to confirm.
- 2 A predefined label automatically appears in the label column:
  - a) If you want to use one of the 6 predefined labels (**CABLE**, **GAME**, **CAM**, **DVD**, **VIDEO** or **SAT**), press the **⏴** or **⏵** buttons to select the desired label, then press **OK** button to store.
  - b) If you want to set a different label, select **Edit** and press **➔** button. Then with the first element highlighted, press the **⏴** or **⏵** buttons to select a letter, number or “\_” for a blank, then press **➔** button to confirm the character. Select the other four characters in the same way. Finally press the **OK** button to store.

continued...

## Level 1

## Level 2

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### MANUAL PROGRAMME PRESET

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

- a) Preset channels or the VCR channel one by one to the programme order of your choice.

#### To do this:

- 1 After selecting the "Manual Programme Preset" option, press the **➔** button then with **Programme** option highlighted press the **➔** button.

Press the **⏴** or **⏵** buttons to select which programme number you want to preset the channel to (for VCR, select programme number "0"). Then press the **◀** button.

- 2 After selecting the **Channel** option, press the **OK** button. Next press the numbered buttons to directly enter the channel number of the TV Broadcast or the VCR channel. If you do not know the channel number, press the **⏴** or **⏵** buttons to search for it. When you have tuned to the desired channel, press the **OK** button twice to store.

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

- b) Label a channel using up to five characters.

#### To do this:

After highlighting the **Programme** option, press the **PROG +/-** button to select the programme number of the channel you wish to name. When the programme you want to name appears on the screen, select the **Label** option and press **➔** button. Next press the **⏴** or **⏵** buttons to select a letter, number or "-" for a blank. Press the **➔** button to confirm the character. Select the other four characters in the same way. After selecting all the characters, press the **OK** button twice to store.

- c) Manually fine tune the TV to obtain a better picture reception if the picture is distorted. Normally the automatic fine tuning (AFT) is in operation, but you can alter it manually.

#### To do this:

Whilst watching the channel (TV Broadcast) you wish to fine tune, select the **AFT** option and press **➔** button. Next press the **⏴** or **⏵** buttons to adjust the fine tuning between -15 and +15. Finally press the **OK** button twice to store.

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

#### To do this:

After highlighting the **Programme** option, press the **PROG +/-** button 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 the **➔** button. Next press the **⏴** or **⏵** buttons to select **Yes**. Finally press the **OK** button twice to confirm and store. To cancel this function later on, select "No" instead of "Yes" in the step above.

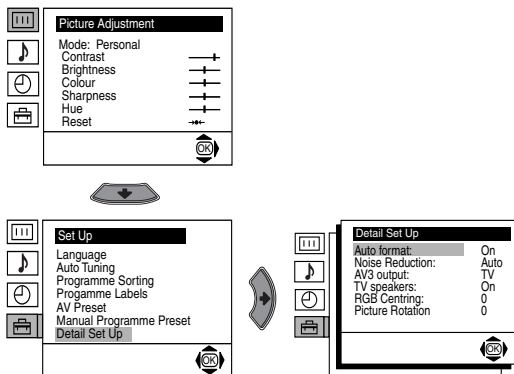
continued...

# Introducing and Using the Menu System

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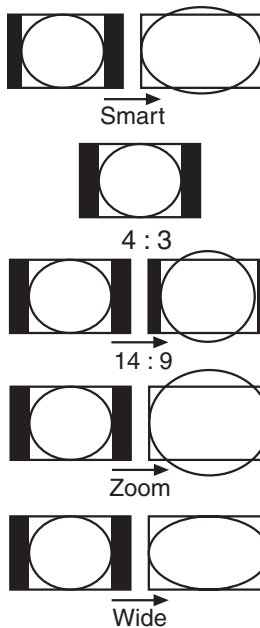
### AUTO FORMAT

The “Auto Format” option in the “Detail Set Up” menu allows you to automatically change the aspect ratio of the screen.

#### To do this:

After selecting the option, press the **▶** button. Then press the **▼** or **▲** buttons to select **On** (if you wish the TV set to automatically switch to the screen format used on the broadcast signal) or **Off** (if you wish to keep your preference). Finally press the **OK** button to store.

**i** Even if you have selected “On” or “Off” in the “Auto Format” option, you can always modify the format of the screen by pressing **⏏** repeatedly on the remote control to select one of the following formats.



**Smart:** Imitation of wide screen effect for 4:3 broadcasts.

**4:3:** Conventional 4:3 picture size, full picture information.

**14:9:** Compromise between 4:3 and 16:9 picture size

**Zoom:** Widescreen format for letterbox movies

**Wide:** For 16:9 broadcast. Full picture information

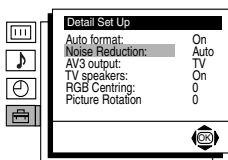
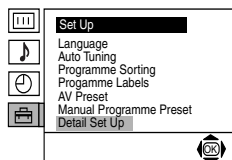
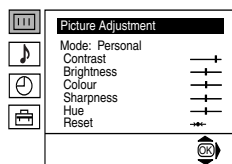
**i** In “Smart”, “Zoom” and “14:9” modes, a part of of the top and bottom of the screen are cut off. Press the **▼** or **▲** buttons to adjust the position of the image on the screen (to read subtitles for example).

continued...

## Level 1

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### NOISE REDUCTION

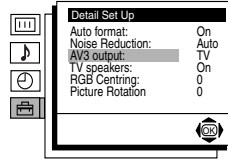
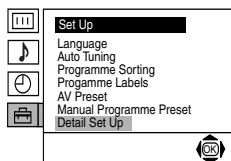
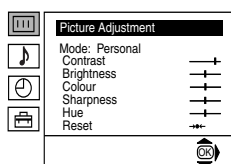
The “Noise Reduction” option in the “Detail Set Up” menu allows you to automatically reduce any picture noise visible in the broadcast signal.

#### To do this:

After selecting the option, press the **➔** button. Then press the **⬇** or **⬆** buttons to select **Auto**. Finally press the **OK** button to confirm and store.

To cancel this function later on, select “Off” instead of “Auto” in the step above.

**GB**



### AV3 OUTPUT

The “AV3 Output” option in the “Detail Set Up” menu allows you to select the source to be output from the Scart connector **➔3/⬅3** so you can record from this Scart any signal coming from the TV or from external equipment connected to Scart connectors **➔1/⬅1** or **➔2/⬅2** or the side connectors **⬅4** or **⬆4** and **⬇4**.



If your VCR supports Smartlink, this procedure is not necessary.

#### To do this:

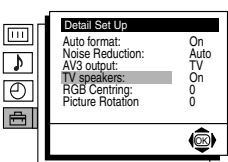
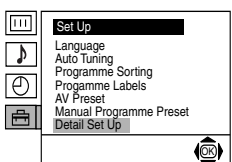
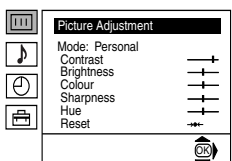
After selecting the option, press the **➔** button. Then press the **⬇** or **⬆** buttons to select the desired output signal: **TV**, **AV1**, **AV2**, **AV4**, **YC4** or **AUTO**.



If you select “AUTO”, the output signal will always be the same one that is displayed on the screen.



If you have connected a decoder to the Scart socket **➔3/⬅3** or to a VCR connected to that Scart socket, please remember to set the “AV3 Output” to “AUTO” or “TV” for correct unscrambling.



### TV SPEAKERS

The “TV Speakers” option in the “Detail Set Up” menu allows you to mute the TV speakers in order to listen to the TV from an external amplifier connected to the audio outputs on the rear of the TV set.

#### To do this:

After selecting the option, press the **➔** button. Then press the **⬇** or **⬆** buttons to select **Off**. Finally press the **OK** button to confirm and store.

To cancel this function later on, select “On” instead of “Off” in the step above.

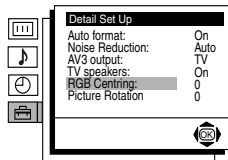
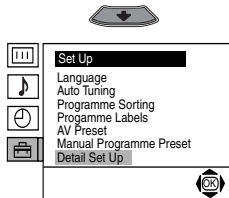
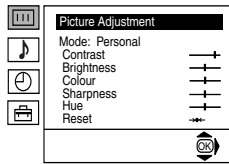
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# Introducing and Using the Menu System

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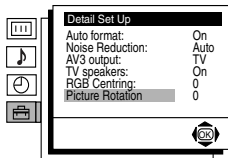
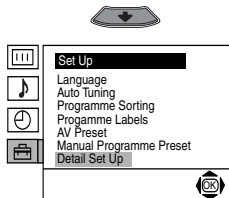
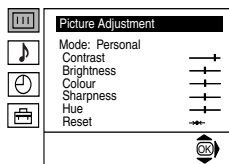


### RGB CENTRING

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 using the “RGB Centring” option in the “Detail Set Up”.

#### To do this:

While watching an RGB source select the “RGB Centring” option and press the **▶** button. Then press the **↓** or **↑** buttons to adjust the centre of the picture between -10 and +10. Finally press the **OK** button to confirm and store.



### PICTURE ROTATION

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

#### To do this:

After selecting the option, press the **▶** button. Then press the **↓** or **↑** buttons to correct any slant of the picture between -5 and +5 and finally press the **OK** button to store.



**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.

**⚠** Teletext errors may occur if you use a channel (TV Broadcast) with a weak signal.

### To Switch on Teletext:

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

### To Select a Teletext page:

Input the 3 digits of 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 the page is not available.

In that case, input another page number.

TELETEXT	
Index	_____
Programme	_____ 25
News	_____ 153
Sport	_____ 101
Weather	_____ 98

### To access the next or preceding page:

Press **PROG +** (**⏏**) or **PROG -** (**⏏**) buttons.

### To superimpose teletext onto the TV:

Whilst you are viewing teletext, press the **⏏** button. Press again to cancel teletext mode.

### To freeze a teletext page:

Press the **⏏**/**⏏** button. Press again to cancel freeze.

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

Press the **⏏**/**?** button. Press again to conceal the information.

### To select a sub page:

A teletext page may consist of several sub pages. In this case the page number that appears on the upper left corner changes colour from yellow to green, and one or more arrows will appear next to the page number. Repeatedly press the **⏏** or **⏏** buttons on the remote control to watch the desired sub page.

### To Switch Off Teletext:

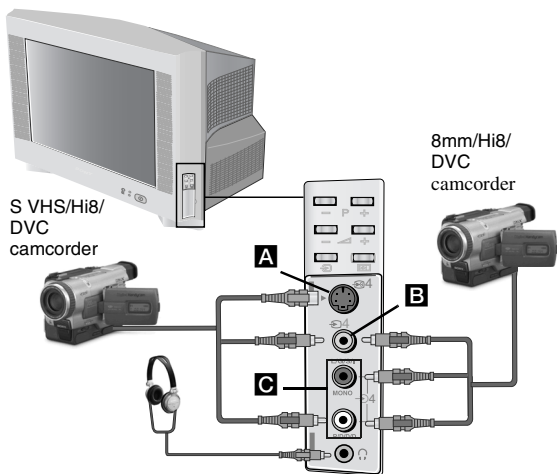
Press **⏏** button.

## Fastext

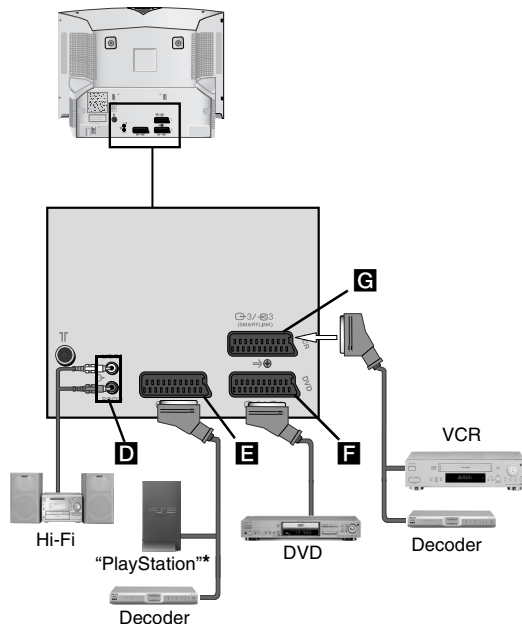
**i** The Fastext service lets you access pages with one button push. While you are in Teletext mode and providing Fastext is broadcast, a colour coded menu appears at the bottom of the teletext page. Press one of the coloured buttons (red, green, yellow or blue) to access the corresponding page.

# Connecting Additional 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.

- A** • To avoid picture distortion, do not connect external equipment to connectors **A** and **B** at the same time.
- F** • Do not connect a Decoder to the Scart connector **F**.
- Games that use a "gun" attachment to point at the screen do not work correctly due to the 100Hz technology used in this television

## Connecting a VCR:

To connect a VCR, please refer to the section "Connecting the 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 of how to manually programme these presets, see page 13, step a). Refer to your VCR instruction manual to find out the output channel of your VCR.

## Connecting a VCR that supports Smartlink:

**i** Smartlink is a direct link between the TV set and the VCR. For more information on Smartlink, please refer to the instruction manual of your VCR.

If you use a VCR that supports Smartlink, please connect the VCR by using a Scart lead to the Scart socket **3** **G**.

continued...

## Connecting to external Audio Equipment:

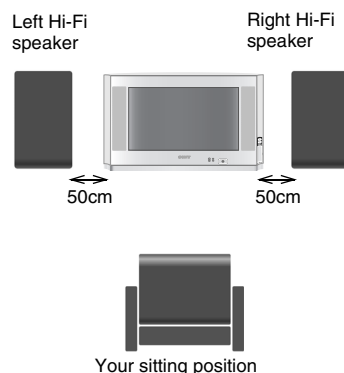
Plug in your Hi-Fi equipment to the audio output sockets **D** if you wish to amplify the audio output from your TV. Next, using the menu system, select the “Set Up” menu. Enter the “Detail Set Up” menu and set “TV Speakers” to “Off”.

**i** The audio level of the external speakers can be modified by pressing the volume buttons on the remote control. Also, treble and bass settings can be modified through the “Sound Adjustment” menu.

## To enjoy “Dolby Virtual” sound effect through your Hi-Fi equipment:


Place the speakers of your equipment in front of your sitting position and besides the TV set, but keeping a distance of 50 cm from each speaker to the TV set.

Then, using the menu system, select the menu “Sound Adjustment”, and select “Dolby Virtual” on the “Effect” option.











**GB**

## Using optional Equipment



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

### Symbol Input Signals

-  1 • Audio/video input signal through the Scart connector **E**.
-  1 • RGB input signal through the Scart connector **E**. This symbol appears only if a RGB source has been connected.
-  2 • Audio/video input signal through the Scart connector **F**.
-  2 • RGB input signal through the Scart connector **F**. This symbol appears only if a RGB source has been connected.
-  3 • Audio/video input signal through the Scart connector **G**.
-  3 • S Video Input signal through the Scart connector **G**. This symbol appears only if a S Video source has been connected.
-  4 • Video input signal through the phono socket **B** and Audio input signal through phono socket **C**.
-  4 • S Video Input signal through the front S Video input jack **A** and Audio signal through phono socket **C**. This symbol appears only if a S Video source has been connected.

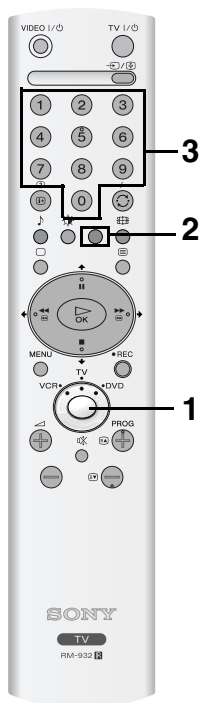
- 4 Press  button on the remote control to return to the normal TV picture.

### For Mono Equipment

Connect the phono plug to the L/G/S/I socket on the side of the TV and select  4 or  4 input signal using the instructions above. Finally, refer to the “Sound Adjustment” section of this manual and select “Dual Sound” “A” on the sound menu screen.

# Remote Control Configuration for VCR/DVD

In its default condition this remote control will operate the basic functions of this Sony TV, Sony DVDs and most Sony VCRs. To control VCRs and DVDs of other manufacturers (and some Sony VCR models), the remote control needs to be configured.



## To do this:


- Before you start, look up the 3 digit code for your brand of DVD or VCR from the list below. On those brands that have more than one code, enter the first code number.
- Sony will endeavour to update the software according to market changes. Therefore, please refer to the code table included with the remote control for latest code set.

**1** Press the Media Selector button on the remote control repeatedly until the required green light (VCR or DVD) is lit.


 If Media Selector is set to TV position, the code numbers will not be stored

**2** Before the green light goes out, press and hold the yellow button for approximately 6 seconds until the green light starts flashing.

**3** Whilst the green light is flashing, enter all three digits of the code allocated to your brand of VCR or DVD using the number buttons on the remote control.

 If your selected code is entered correctly, all three green lights will be lit momentarily.

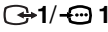

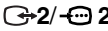

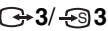






**4** Turn on your VCR or DVD and check that the main functions work.

 • If your device is not working or some of the functions do not work, please check that you entered the correct code or try the next code allocated to your brand.

• The brand codes may be lost if weak batteries are not replaced within a few minutes. To reset your brand of DVD or VCR please repeat the above steps. A small label is added inside the battery door to allow you to record your brand codes.

• Not all brands are covered in this list, and not all models of every brand are included.

VCR Brand List		DVD Brand List	
Brand	Code	Brand	Code
SONY (VHS)	301, 302, 303, 308, 309, 362	SONY	001, 029, 030, 036, 037, 038, 039, 040, 041, 042, 043, 044, 053, 054, 055
SONY (BETA)	303, 307, 310	AKAI	032
SONY (DV)	304, 305, 306	AIWA	021
AIWA	325, 331, 351	DENON	018, 027, 020, 002
AKAI	326, 329, 330	GRUNDIG	009, 028, 023, 024, 016, 003
DAEWOO	342, 343	HITACHI	025, 026, 015, 004, 035
GRUNDIG	358, 355, 360, 361, 320, 351, 366	JVC	006, 017
HITACHI	327, 333, 334	KENWOOD	008
JVC	314, 315, 322, 344, 352, 353, 354, 348, 349	LG	015, 014, 034
LG	332, 338	LOEWE	009, 028, 023, 024, 016, 003
LOEWE	358, 355, 360, 361, 320, 351	MATSUI	013, 016
MATSUI	356, 357	ONKYO	022, 033
ORION	328	PANASONIC	018, 027, 020, 002, 045, 046, 047
PANASONIC	321, 323	PHILIPS	009, 028, 023, 024, 016, 003, 031
PHILIPS	311, 312, 313, 316, 317, 318, 358, 359, 363, 364	PIONEER	004
SAMSUNG	339, 340, 341, 345	SAMSUNG	011, 014
SANYO	335, 336	SANYO	007
SHARP	324	SHARP	019, 027
THOMSON	319, 350, 365	THOMSON	012
TOSHIBA	337	TOSHIBA	003
		YAMAHA	018, 027, 020, 002









<b>TV system</b>	I
<b>Colour System</b>	PAL, SECAM, NTSC 3.58, 4.43 (Video In only)
<b>Channel Coverage</b>	UHF: B21-B69
<b>Picture Tube</b>	Flat display FD Trinitron WIDE 28" (Approx. 71 cm measured diagonally) 32" (Approx. 82 cm measured diagonally)
<b>Rear Terminals</b>	 1  1 21-pin Scart connector (CENELEC standard) including audio/video input, RGB input, TV audio/video output  2  2 21-pin Scart connector (CENELEC standard) including audio/video input, RGB input, monitor audio/video output  3  3 <b>(SMARTLINK)</b> 21-pin Scart connector (CENELEC standard) including audio/video input, S-video input, selectable audio/video output and Smartlink interface  Audio outputs (Left/Right) - phono jacks
<b>Side terminals</b>	 4 S Video input - 4 pin DIN  4 Video input - phono jack  4 Audio input - phono jacks  Headphones jack
<b>Sound Output</b>	2 x 20W (Music Power), 2 x 10W (RMS) Woofer: 30W (Music Power), 15W (RMS)
<b>Power Consumption</b>	KV-28CS70 94W KV-32CS70 102W
<b>Standby Power Consumption</b>	KV-28CS70 0.4W KV-32CS70 0.4W
<b>Dimensions (WxHxD)</b>	KV-28CS70 Approx. 844mm x 517mm x 548mm KV-32CS70 Approx. 933mm x 562mm x 572mm
<b>Weight</b>	KV-28CS70 Approx 43.5Kg KV-32CS70 Approx. 60Kg
<b>Accessories Supplied</b>	1 Remote Control (RM-932), 2 batteries (IEC designated)
<b>Other Features</b>	<ul style="list-style-type: none"> <li>• 100Hz picture</li> <li>• Teletext, Fastext, TOPtext (250 page TEXT memory)</li> <li>• Sleep Timer</li> <li>• Smartlink (direct link between your TV set and a compatible VCR. For more information on Smartlink, please refer to the Instruction Manual of your VCR)</li> <li>• ACI (Auto Channel Installation)</li> <li>• Dolby Virtual</li> <li>• BBE</li> <li>• Autoformat</li> </ul>

**GB**

Design and specifications are subject to change without notice.

# Troubleshooting

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

Problem	Suggested Remedy
No picture (screen is dark), and no sound.	<ul style="list-style-type: none"> <li>• Check the aerial connection.</li> <li>• Plug the TV in and press the  button on the front of the TV.</li> <li>• If the standby indicator  is on press the  button or a numbered button on the remote control.</li> </ul>
Poor or no picture (screen is dark), but good sound.	<ul style="list-style-type: none"> <li>• Using the MENU system, select the "Picture Adjustment" display and select "RESET" to return to the factory settings.</li> </ul>
No picture or menu information from equipment connected to the Scart socket.	<ul style="list-style-type: none"> <li>• Check that the optional equipment is on, and press the  button of the remote control repeatedly until the correct input symbol is displayed on screen.</li> </ul>
Good picture, no sound.	<ul style="list-style-type: none"> <li>• Press the  button on the remote control.</li> <li>• Check that "TV Speakers" is "On" in the "Detail Set Up" menu.</li> <li>• Check the Headphones are not connected.</li> </ul>
No colour on colour programmes.	<ul style="list-style-type: none"> <li>• Using the MENU system, select the "Picture Adjustment" and select "RESET" to return to the factory settings.</li> </ul>
Distorted picture when changing programmes or selecting Teletext.	<ul style="list-style-type: none"> <li>• Turn off any equipment connected to the scart connectors on the rear of the TV.</li> </ul>
Wrong characters appear when viewing teletext.	<ul style="list-style-type: none"> <li>• Using the menu system, display the "Language/Country" menu and select the country in which you are operating the TV set.</li> </ul>
Picture slanted.	<ul style="list-style-type: none"> <li>• Using the menu system, select the "Picture Rotation" option in the "Detail Set Up" menu to correct the picture slant.</li> </ul>
Snowy picture when viewing a TV channel.	<ul style="list-style-type: none"> <li>• Using the menu system, select the "Manual Programme Preset" menu and adjust Fine Tuning (AFT) to obtain better picture reception.</li> <li>• Using the menu system, select the "Noise Reduction" option in the "Detail Set Up" menu and select "Auto" to reduce the noise in the picture.</li> </ul>
No unscrambled picture whilst viewing an unscrambled channel with a decoder connected through the scart connector  3.	<ul style="list-style-type: none"> <li>• Using the menu system, display the "Set Up" menu. Then select the "Detail Set Up" option and set "AV3 Output" to "TV".</li> <li>• Check that the decoder is not connected to the  2 scart socket.</li> </ul>
Remote control does not function.	<ul style="list-style-type: none"> <li>• Replace the batteries.</li> </ul>
The standby indicator  on the TV flashes.	<ul style="list-style-type: none"> <li>• Contact your nearest Sony service centre.</li> </ul>

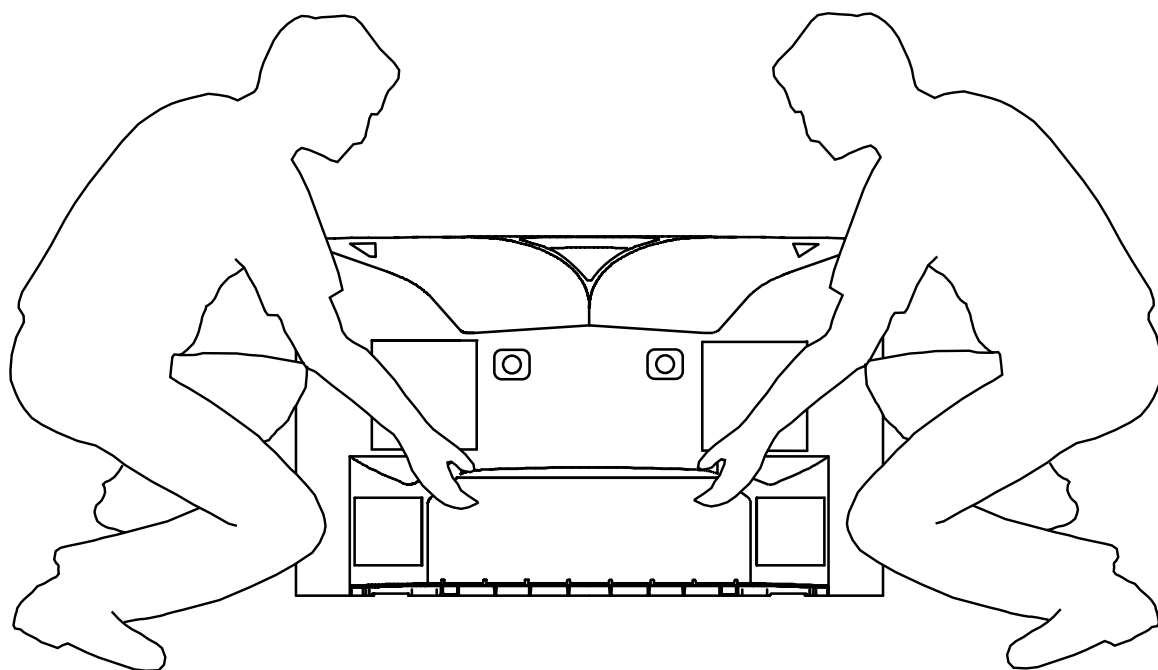
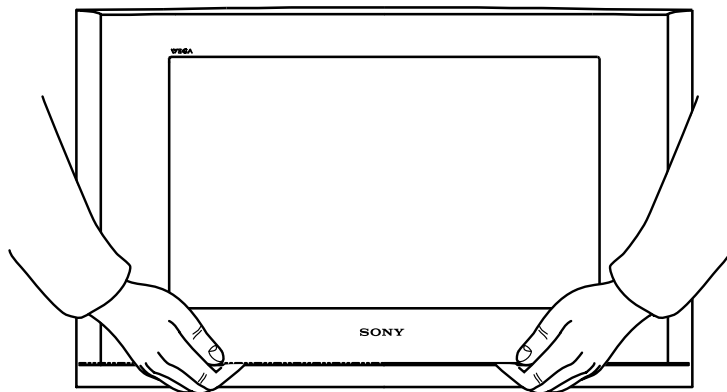
- If you continue to have problems, have your TV serviced by qualified personnel.
- NEVER open the casing yourself.





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KV-28CS70U/KV-32CS70U

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