

# SHARP®

## LC-37GD1E (DISPLAY/DISPLAY/ECRAN)

## TU-37GD1E (AVC SYSTEM/AVC-GERÄT/SYSTÈME AVC)

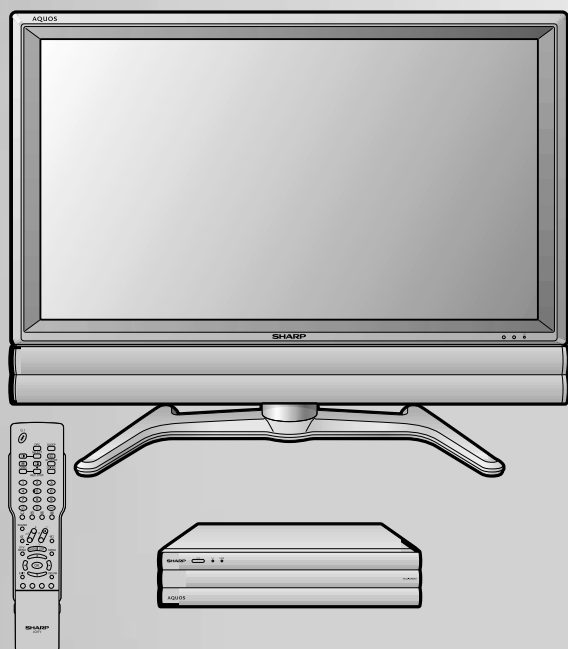
## LC-32GD1E (DISPLAY/DISPLAY/ECRAN)

## TU-32GD1E (AVC SYSTEM/AVC-GERÄT/SYSTÈME AVC)

LCD COLOUR TELEVISION  
LCD-FARBFERNSEHGERÄT  
TÉLÉVISION COULEUR À ÉCRAN  
À CRISTAUX LIQUIDES (LCD)

OPERATION MANUAL  
BEDIENUNGSANLEITUNG  
MODE D'EMPLOI

# AQUOS



VIRTUAL  
DOLBY  
SURROUND  
PRO LOGIC II

1bit  
Technology

PC  
Card

DVB  
Digital Video  
Broadcasting

ENGLISH

DEUTSCH

FRANÇAIS

**LC-37GD1E**  
**TU-37GD1E**

**LC-32GD1E**  
**TU-32GD1E**

**LCD COLOUR TELEVISION**

**ENGLISH**

**OPERATION MANUAL**

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**The factory preset PIN is “1234”.**

**DO NOT turn off the power using MAIN POWER (Ⓢ) on the Display if only the STANDBY/ON indicator (Ⓡ) on the AVC System side lights up green. (See page 45.)**

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# Dear SHARP customer

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Thank you for your purchase of the SHARP LCD colour TV product. To ensure safety and many years of trouble-free operation of your product, please read the Important Safety Precautions carefully before using this product.

## Important Safety Precautions

---

Electricity is used to perform many useful functions, but it can also cause personal injuries and property damage if improperly handled. This product has been engineered and manufactured with the highest priority on safety. However, improper use can result in electric shock and/or fire. In order to prevent potential danger, please observe the following instructions when installing, operating and cleaning the product. To ensure your safety and prolong the service life of your LCD colour TV product, please read the following precautions carefully before using the product.

1. Read instructions—All operating instructions must be read and understood before the product is operated.
2. Keep this manual in a safe place—These safety and operating instructions must be kept in a safe place for future reference.
3. Observe warnings—All warnings on the product and in the instructions must be observed closely.
4. Follow instructions—All operating instructions must be followed.
5. Attachments—Do not use attachments not recommended by the manufacturer. Use of inadequate attachments can result in accidents.
6. Power source—This product must operate on a power source specified on the specification label. If you are not sure of the type of power supply used in your home, consult your dealer or local power company.
7. AC cord protection—The AC cords must be routed properly to prevent people from stepping on them or objects from resting on them. Check the cords at the plugs and product.
8. Overloading—Do not overload AC outlets or extension cords. Overloading can cause fire or electric shock.
9. Entering of objects and liquids—Never insert an object into the product through vents or openings. High voltage flows in the product, and inserting an object can cause electric shock and/or short internal parts. For the same reason, do not spill water or liquid on the product.
10. Servicing—Do not attempt to service the product yourself. Removing covers can expose you to high voltage and other dangerous conditions. Request a qualified service person to perform servicing.
11. Repair—If any of the following conditions occurs, unplug the AC cord from the AC outlet, and request a qualified service person to perform repairs.
  - a. When the AC cord or plug is damaged.
  - b. When a liquid was spilled on the product or when objects have fallen into the product.
  - c. When the product has been exposed to rain or water.
  - d. When the product does not operate properly as described in the operating instructions.  
Do not touch the controls other than those described in the operating instructions. Improper adjustment of controls not described in the instructions can cause damage, which often requires extensive adjustment work by a qualified technician.
  - e. When the product has been dropped or damaged.
  - f. When the product displays an abnormal condition. Any noticeable abnormality in the product indicates that the product needs servicing.
12. Replacement parts—In case the product needs replacement parts, make sure that the service person uses replacement parts specified by the manufacturer, or those with the same characteristics and performance as the original parts. Use of unauthorized parts can result in fire, electric shock and/or other danger.
13. Safety checks—Upon completion of service or repair work, request the service technician to perform safety checks to ensure that the product is in proper operating condition.
14. Wall or ceiling mounting—When mounting the product on a wall or ceiling, be sure to install the product according to the method recommended by the manufacturer.

## Important Safety Precautions

- **Cleaning**—Unplug the AC cord from the AC outlet before cleaning the product. Use a damp cloth to clean the product. Do not use liquid cleaners or aerosol cleaners.



- **Water and moisture**—Do not use the product near water, such as bathtub, washbasin, kitchen sink, laundry tub, swimming pool and in a wet basement.



- **Do not place vases or any other water-filled containers on this product.** The water may spill onto the product causing fire or electric shock.



- **Stand**—Do not place the product on an unstable cart, stand, tripod or table. Doing so can cause the product to fall, resulting in serious personal injuries as well as damage to the product. Use only a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the product. When mounting the product on a wall, be sure to follow the manufacturer's instructions. Use only the mounting hardware recommended by the manufacturer.



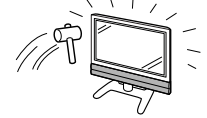
- **When relocating the product** placed on a cart, it must be moved with utmost care. Sudden stops, excessive force and uneven floor surface can cause the product to fall from the cart.



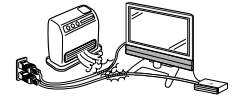
- **Ventilation**—The vents and other openings in the cabinet are designed for ventilation. Do not cover or block these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the product. Do not place the product on a bed, sofa, rug or other similar surface, since they can block ventilation openings. This product is not designed for built-in installation; do not place the product in an enclosed place such as a bookcase or rack, unless proper ventilation is provided or the manufacturer's instructions are followed.



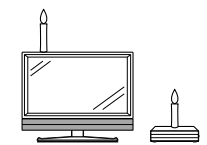
- The LCD panel used in this product is made of glass. Therefore, it can break when the product is dropped or impact applied. If the LCD panel is broken be careful not to be injured by broken glass.



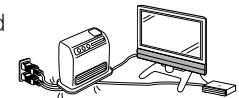
- **Heat sources**—Keep the product away from heat sources such as radiators, heaters, stoves and other heat-generating products (including amplifiers).



- **To prevent fire, never place any type of candle or naked flames on the top or near the TV set.**



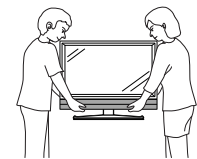
- **To prevent fire or shock hazard, do not place the AC power cord under the TV set or other heavy items.**



The LCD panel is a very high technology product with 3,147,264 thin film transistors, giving you fine picture details. Due to the very large number of pixels, occasionally a few non-active pixels may appear on the screen as a fixed point of blue, green or red. This is within product specifications and does not constitute a fault.

### Precautions when transporting the Display


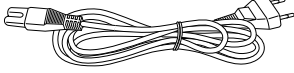
When transporting the Display, never carry it by holding onto the speakers. Be sure to always carry the Display by two people holding it with two hands—one hand on each side of the display.



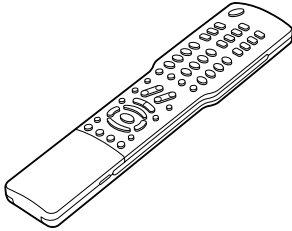

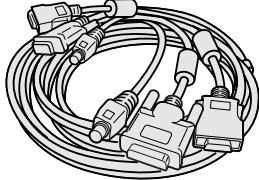
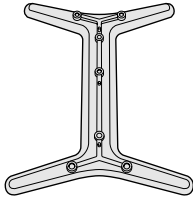



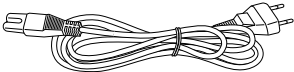
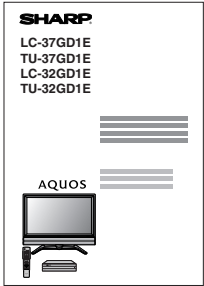
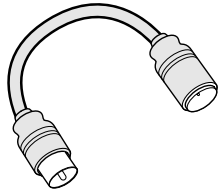
# Supplied accessories

Make sure the following accessories are provided with the product.

## Display: LC-37GD1E/LC-32GD1E

Cable clamp (× 1)	AC cord (× 1)
 <p>Page 8</p>	 <p>Product shape varies in some countries.</p> <p>Page 7</p>

## AVC System: TU-37GD1E/TU-32GD1E

Remote control unit (× 1)	“AAA” size battery (× 2)	System cable (× 1)
 <p>Page 11</p>	 <p>Page 11</p>	 <p>Page 7</p>
Stand unit (for AVC System) (× 1)	AC cord (× 1)	Antenna cable (× 1)
    <p>Stand (× 1) Stand cushion (× 4) Stand spacer (× 4) Stand screw (× 2)</p> <p>Page 10</p>	 <p>Product shape varies in some countries.</p> <p>Page 7</p> <p>Operation manual</p> 	 <p>Page 12</p>

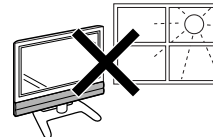
# Preparation

## Where to place the System

"System" means the Display and AVC System. First select the location where to place the System.

### 1 Selecting the location of the System

- Select a place with no direct sunlight and good ventilation.
- The Display and the AVC System are connected by the system cable. (See page 7 for details.)



If you want to keep a longer distance between the Display and AVC System, please purchase the optional system cable AN-07SC2 (about 7 meters). (See page 88.)

System cable

AVC System

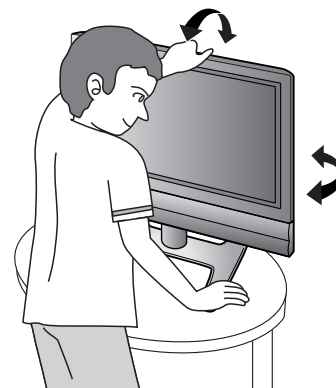
Display

### 2 Setting the System in place

#### Handling the Display



- **When using the TV with the supplied stand attached, do not remove the speaker. Doing so may disturb the balance leading to product damage or personal injury.**
- Do not remove the stand and speaker from the Display unless using an optional bracket to mount it.
- Keep enough space above and behind the Display.
- The Display weighs about 13 kg (LC-32GD1E) and 14.5 kg (LC-37GD1E). Move it with two or more people.
- When you move the Display, hold the portion of the Display, not the speaker.



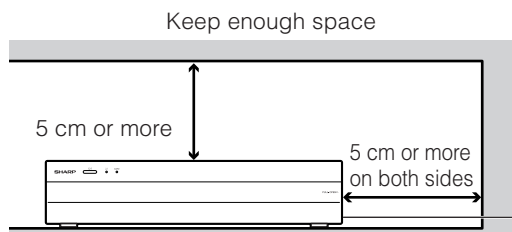
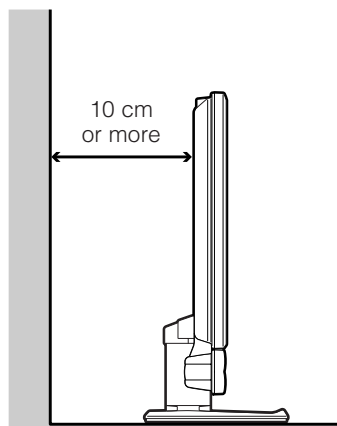
**Adjust the screen with both hands. Put one hand on the Display and tilt the screen while steadying the stand with your other hand.**

You can adjust the screen vertically up to 2 degrees backward, or rotate 10 degrees horizontally.

#### Handling the AVC System



- Do not put a VCR or other device on the AVC System.
- Keep enough space above and on the sides of the AVC System.
- Do not block the ventilation openings on the top and left side, and the exhaust fan on the right side.
- Do not spread a thick cloth beneath the AVC System, or cover it with one, as this can cause overheating and result in malfunction.



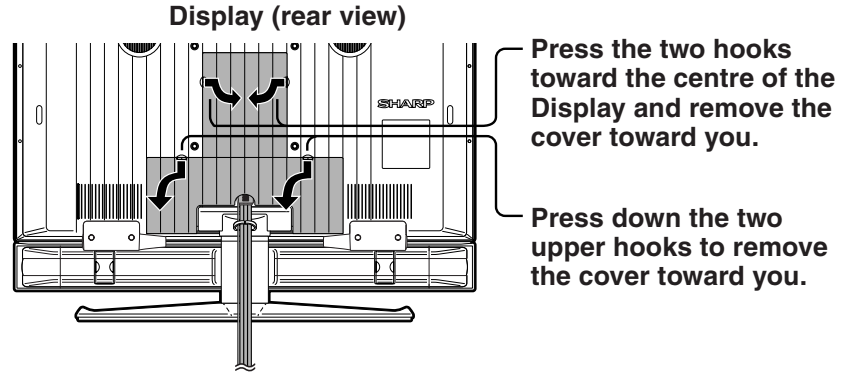
There is an exhaust fan on the right side.



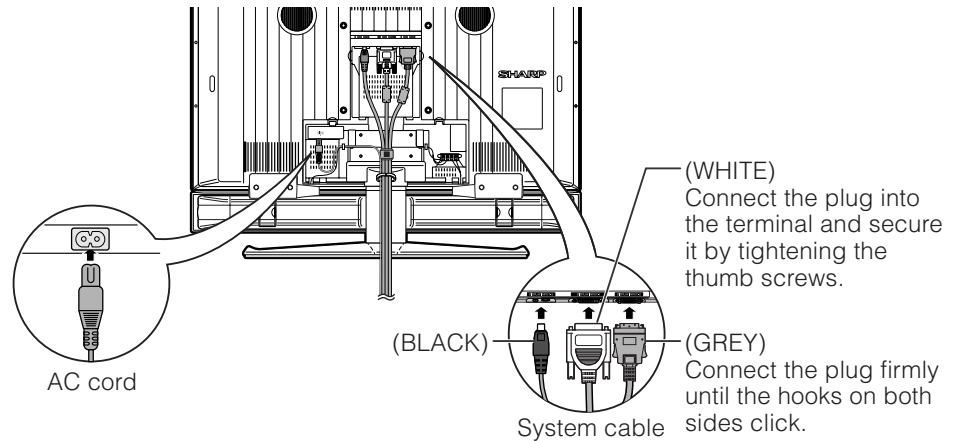
## Setting the System

After putting the Display and the AVC System in place, connect the system cables and AC cords. Use the cable clamps for bundling the cables.

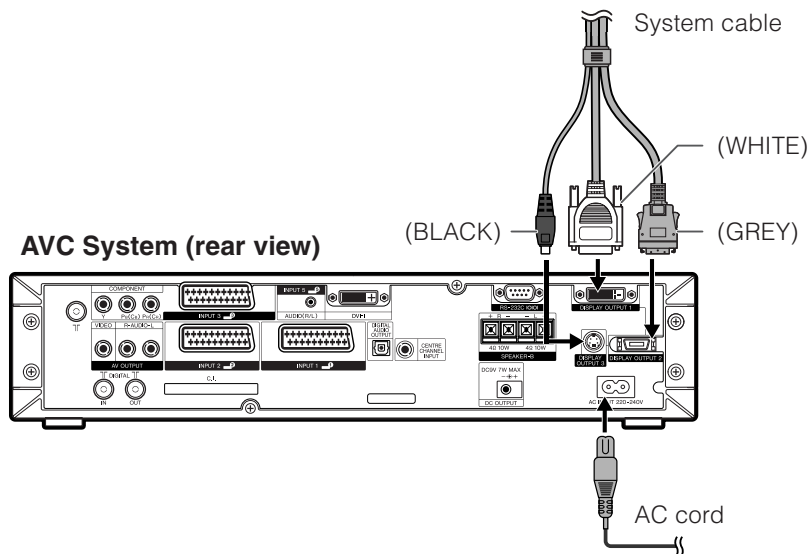
### 1 Removing the terminal cover



### 2 Connecting the system cable and the AC cord to the Display



### 3 Connecting the system cable and the AC cord to the AVC System



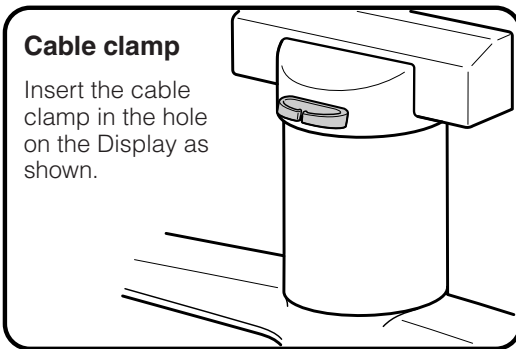
#### CAUTION

- TO PREVENT RISK OF ELECTRIC SHOCK, DO NOT TOUCH UN-INSULATED PARTS OF ANY CABLES WITH THE AC CORD CONNECTED.

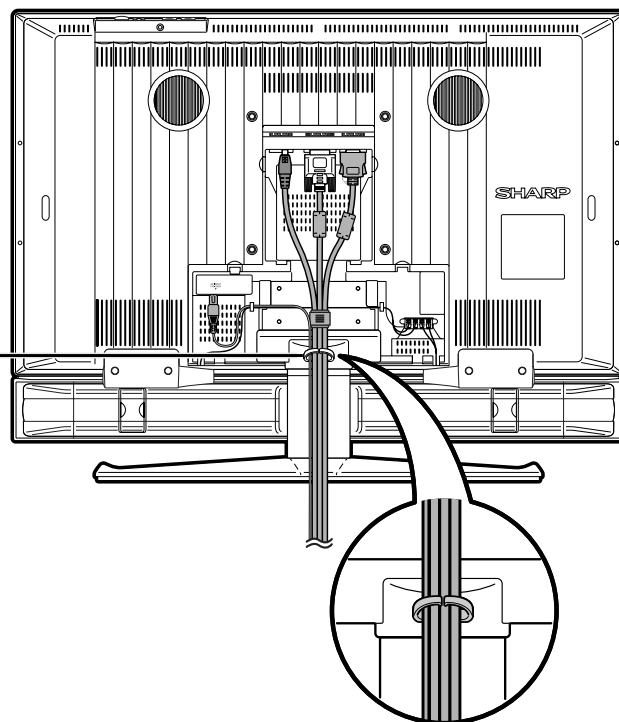


4

Attaching the clamp and bundling the cables with the clamp

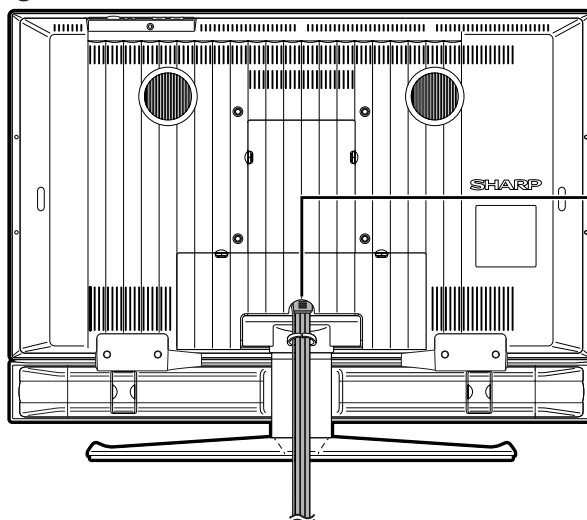


Display (rear view)



5

Closing the terminal cover



Cables come out from the small opening.

## Preparation

### Removing the stand and speaker

#### This unit has detachable type speaker.

You can detach the system speaker when using external speaker.

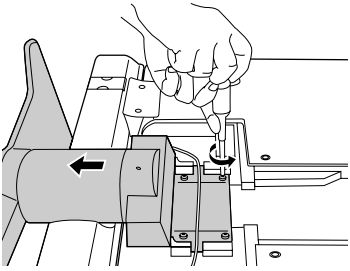
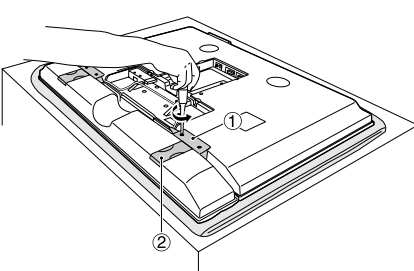
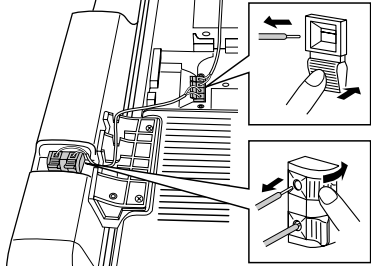
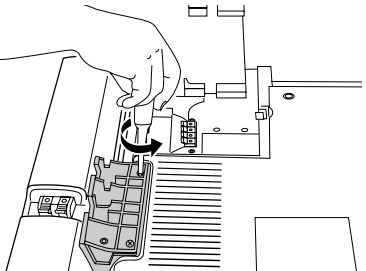
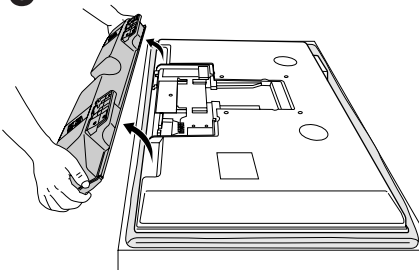
Before removing (or attaching) speaker, unplug the AC cord from the AC outlet and the system cable from the Display.

#### CAUTION

- Do not remove the stand and speaker from the Display unless using an optional bracket to mount it.
- When using the TV with the supplied stand attached, do not remove the speaker. Doing so may disturb the balance leading to product damage or personal injury.

#### Before attaching/removing speaker

- Before performing work make sure to turn off the System.
- Before performing work spread cushioning over the base area to lay the Display on. This will prevent it from being damaged.

<p><b>1</b></p>  <p>Unfasten the screws used to secure the stand in place, and then detach the stand from the Display. (Hold the stand so it will not drop the stand from the edge of the base area.)</p>	<p><b>2</b></p>  <p>① Unfasten the screws used to secure the speaker bracket covers, and then detach them. ② Take off the speaker terminal cover.</p>	<p><b>3</b></p>  <p>Disconnect the cable from the speaker.</p>
<p><b>4</b></p>  <p>Unfasten the screw used to secure the speaker bracket.</p>	<p><b>5</b></p>  <p>Now the speaker can be removed from the Display.</p>	

#### CAUTION

- The speaker terminals on the Display are only for the attached speaker. Do not connect any third party plug or speaker to the terminal.
- Insert the speaker plug completely into the terminal.

#### NOTE

- To attach the speaker and stand, perform the above steps in reverse order.

## Preparation

### Setting the Display on the wall

#### CAUTION

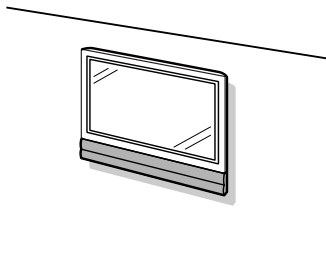
- Installing the LCD Colour TV requires special skill that should only be performed by qualified service personnel. Customers should not attempt to do the work themselves. SHARP bears no responsibility for improper mounting or mounting that results in accident or injury.

#### Using an optional bracket to mount the Display

- You can ask a qualified service personnel about using an optional AN-37AG2 bracket to mount the Display to the wall.
- Carefully read the instructions that come with the bracket before beginning work.

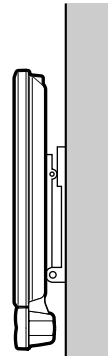
#### Hanging on the wall

AN-37AG2 wall mount bracket. (See the bracket instructions for details.)



#### About setting the Display angle

- Angular mounting is not possible with the speaker attached.
- You can set the Display on the wall up to 20 degrees forward when the speaker is not attached. Do not set the angle outside this range.



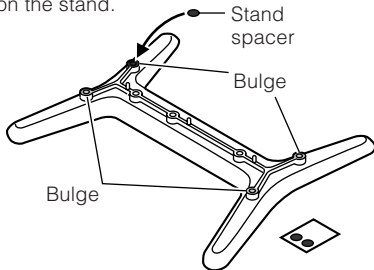
### Setting the AVC System with the stand

#### How to install the AVC System vertically using the stand unit.

- Use the supplied stand unit for installing the AVC System vertically in an upright position.

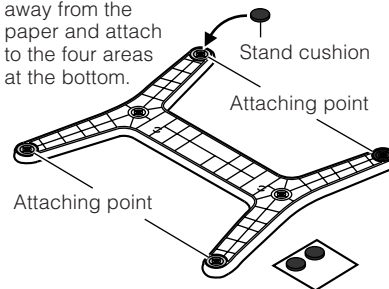
#### 1 Stick each spacer to the stand as shown.

Peel each spacer away from the paper and attach to the four bulging areas on the stand.



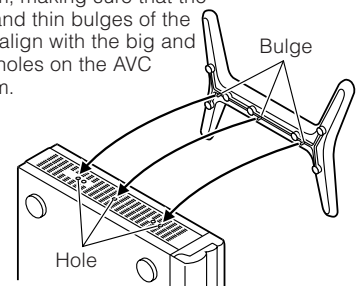
#### 2 Attach each cushion to the stand as shown.

Peel each cushion away from the paper and attach to the four areas at the bottom.

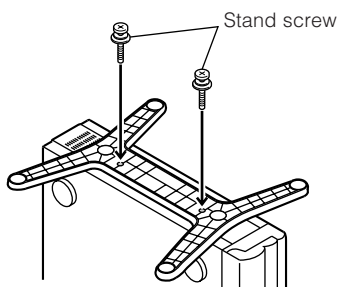


#### 3 Fit the stand to the AVC System.

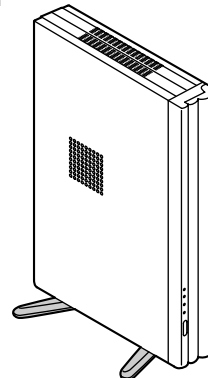
Insert the stand into the AVC System, making sure that the thick and thin bulges of the stand align with the big and small holes on the AVC System.



#### 4 Attach the stand using the stand screws as shown.



#### The AVC System installed vertically with the stand.



#### NOTE

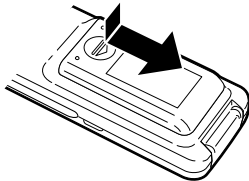
- When mounting the AVC System vertically, always use the supplied stand. Be careful not to block vent holes when standing up directly on the floor or a flat surface as this can result in equipment failure.

## Preparation

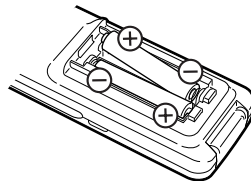
### Inserting the batteries

Before using the System for the first time, insert two “AAA” size batteries (supplied). When the batteries become depleted and the remote control fails to operate, replace the batteries with new “AAA” size batteries.

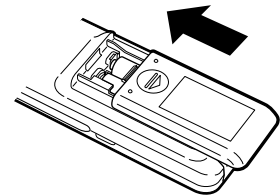
**1** Open the battery cover.



**2** Insert two supplied “AAA” size batteries.



**3** Close the battery cover.



- Place batteries with their terminals corresponding to the (+) and (-) indications in the battery compartment.

### CAUTION

Improper use of batteries can result in chemical leakage or explosion. Be sure to follow the instructions below.

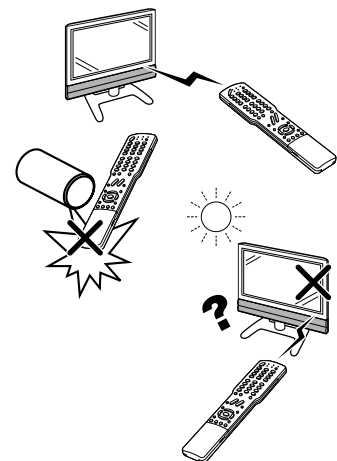
- Place the batteries with their terminals corresponding to the (+) and (-) indications.
- Do not mix batteries of different types. Different types of batteries have different characteristics.
- Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries or cause chemical leakage in old batteries.
- Remove batteries as soon as they have worn out. Chemicals that leak from batteries can cause a rash. If you find any chemical leakage, wipe thoroughly with a cloth.
- The batteries supplied with this product may have a shorter life expectancy due to storage conditions.
- If you will not be using the remote control unit for an extended period of time, remove the batteries from it.

### Using the remote control unit

Use the remote control unit by pointing it towards the remote sensor window. Objects between the remote control unit and sensor window may prevent proper operation.

### Cautions regarding remote control unit

- Do not expose the remote control unit to shock. In addition, do not expose the remote control unit to liquids, and do not place in an area with high humidity.
- Do not install or place the remote control unit under direct sunlight. The heat may cause deformation of the unit.
- The remote control unit may not work properly if the remote sensor window of the Display is under direct sunlight or strong lighting. In such case, change the angle of the lighting or Display, or operate the remote control unit closer to the remote sensor window.



## Preparation

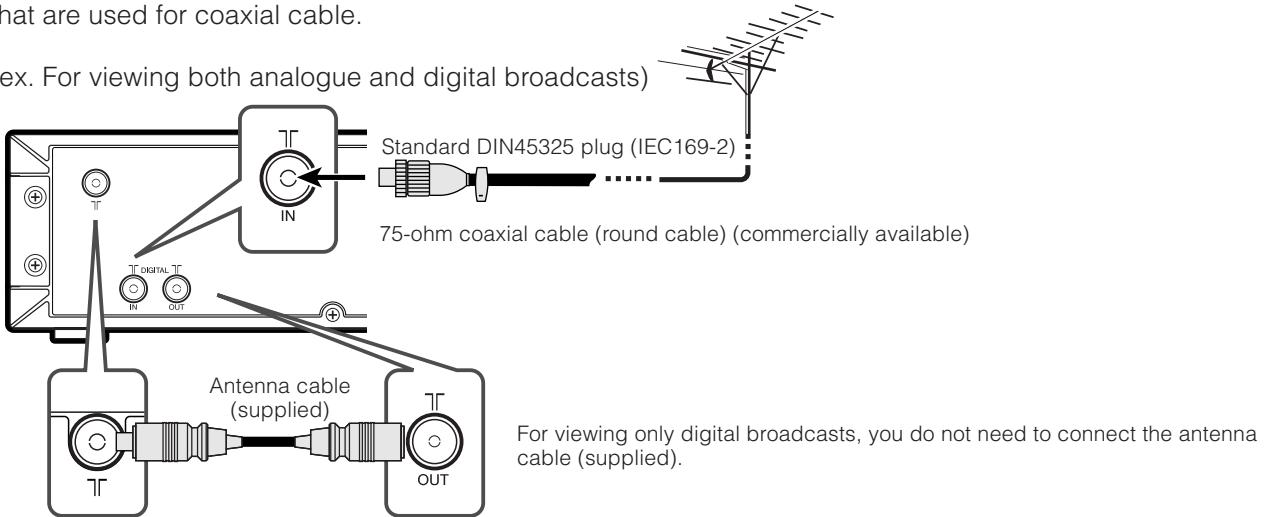
Simple operations for watching a TV programme

### Basic connection

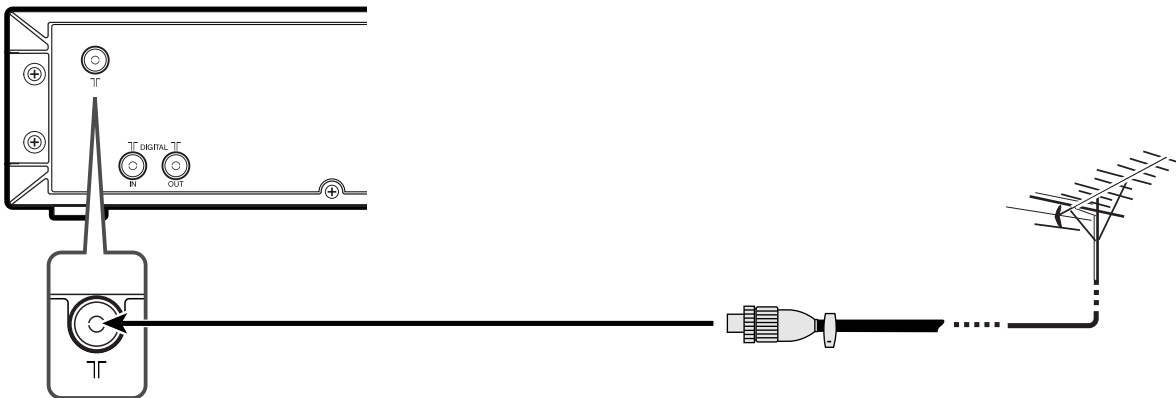
#### Connecting to an antenna

To enjoy a clearer picture, use an outdoor antenna. The following is a brief explanation of the types of connections that are used for coaxial cable.

(ex. For viewing both analogue and digital broadcasts)



(ex. For viewing analogue broadcasts)



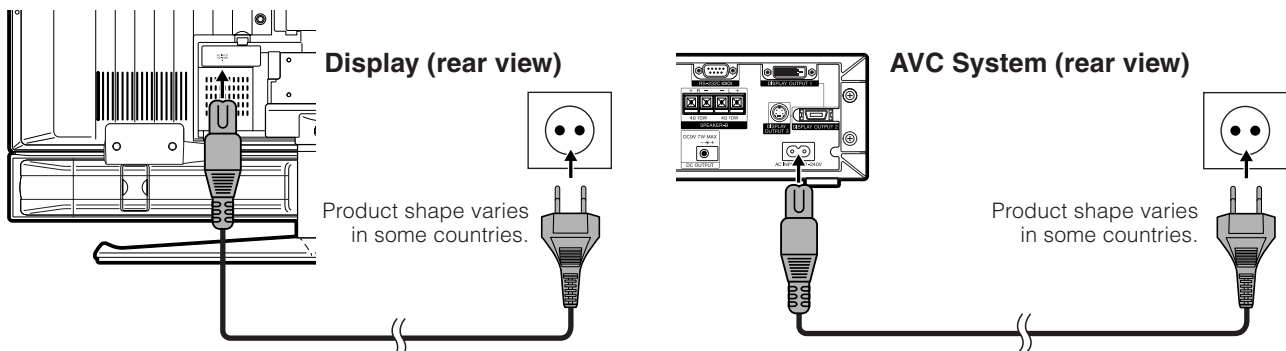
#### Antenna cables—commercially available



If your outdoor antenna uses a 75-ohm coaxial cable with a standard DIN45325 plug (IEC 169-2), plug it into the DIGITAL IN terminal at the rear of the AVC System.

#### Connecting to the power outlet

Before connecting the AC cords, make sure to connect the system cable first.



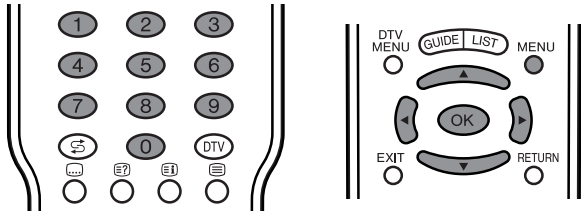
#### NOTE

- Always turn off the main power of Display when connecting the AC cords.
- Disconnect the AC cords from the AC outlet, Display and AVC System if the System will not be used for a long period of time.

## Preparation (Analogue)

### Initial auto installation

When the System powers on for the first time after purchase (see page 19), the initial auto installation is invoked. You can automatically set language, country and channels in successive operations.



#### NOTE

- The initial auto installation functions only once. If the initial auto installation is not completed, (ex: When menu screen disappeared by not operating for a few minutes, when the power shut down, etc.), try Auto Installation from the set up menu. (See page 25.)
- The initial auto installation stops by pressing **RETURN**.

### 1

#### Setting the on-screen display language

- 1 Press **▲/▼/◀/▶** to select the desired language listed on the screen.
- 2 Press **OK** to enter the setting.

##### Language list

Dutch	Italian
English	Portuguese
Finnish	Spanish
French	Swedish
German	Turkish

### 2

#### Setting the country or area

- 1 Press **▲/▼/◀/▶** to select your country or area listed on the screen.
  - 2 Press **OK** to enter the setting.
- The programme auto search starts at the same time.

##### Country list

Austria	Poland
Belgium	Portugal
Denmark	Russia
Finland	Spain
France	Sweden
Germany	Switzerland
Greece	Turkey
Ireland	United Kingdom
Italy	West Europe
Luxembourg	East Europe
Netherlands	
Norway	

After this setting, auto search starts with the following order.

- 1 Programme auto search
- 2 Auto labelling
- 3 Auto sorting
- 4 Preset download

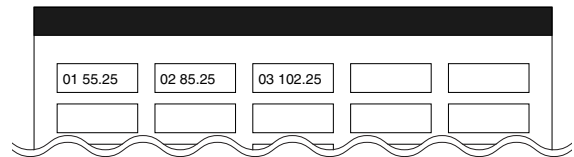
You do not need to do anything during the auto search.

#### NOTE

- The illustrations and on-screen displays in this manual are for explanation purposes and may vary slightly from the actual operations.

#### Automatic channel searching

Channel auto search finds all channels viewable in your area.



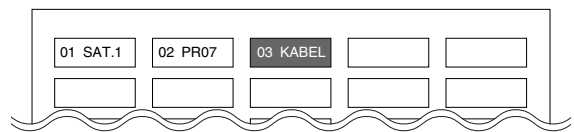
#### NOTE

- If no channel is found, "No programme found." displays. And the auto installation finishes.



#### Automatic channel labelling

After finding TV channels, the System starts naming each TV channel found.



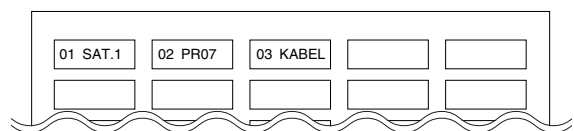
#### NOTE

- The System can only name channels where the channel labelling information is provided. If no channel labelling information is provided the System only displays the channel number, leaving the channel name blank.



#### Automatic channel sorting

When channel auto labelling finishes, the System starts sorting the labelled channels.



#### Preset download

When auto sorting finishes, the System automatically downloads and stores each sorted channel from VCR.

- When a VCR is connected via INPUT 2, the System sends all preset channel information to the VCR. (See page 64.)
- "Auto Installation completed." displays. After that, the screen changes to the auto installation menu.



#### Watching TV

The setup menu disappears and you can watch the programme on channel 1.



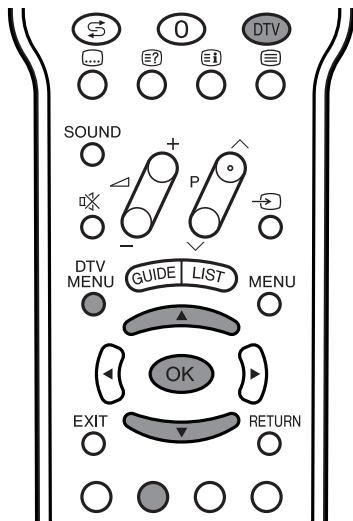
## Preparation (Digital)

Digital Video Broadcasting is a transmission scheme. It is much more than a simple replacement for existing analogue television transmission. DVB provides more stations, clearer picture quality and other services to be displayed on screen. It also allows a range of new features and services including subtitling and multiple audio tracks.

### Virgin mode

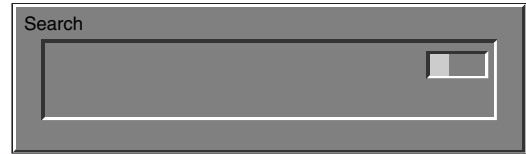
For viewing digital broadcasts, please follow the procedure below to setup.

- In DTV mode, some menu items displayed in black cannot be selected.



5

Press **OK**, and Search finds all the digital broadcasting channels viewable in your area.



- The Search menu disappears and you can watch the programme.

### NOTE

- If you exit DTV mode while Virgin mode is still incomplete, go back to step 1 and try it again.

### Country list

Austria	Netherlands
Belgium	Norway
Denmark	Portugal
Finland	Spain
France	Sweden
Germany	Switzerland
Greece	Turkey
Italy	United Kingdom
Luxembourg	

1

Press **DTV** to switch to the DTV mode.

2

Press **▲/▼** to select the country where you are located.



When you cannot find the country you live in, select the country from the list which shares the same time zone.

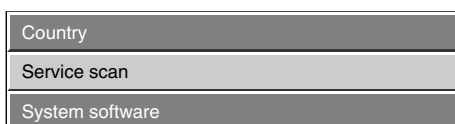
3

Press **OK** to enter the setting.

- Installation screen displays. Press **OK** to go to the next step.

4

Press **▲/▼** to select "Service scan", and then press **OK**.

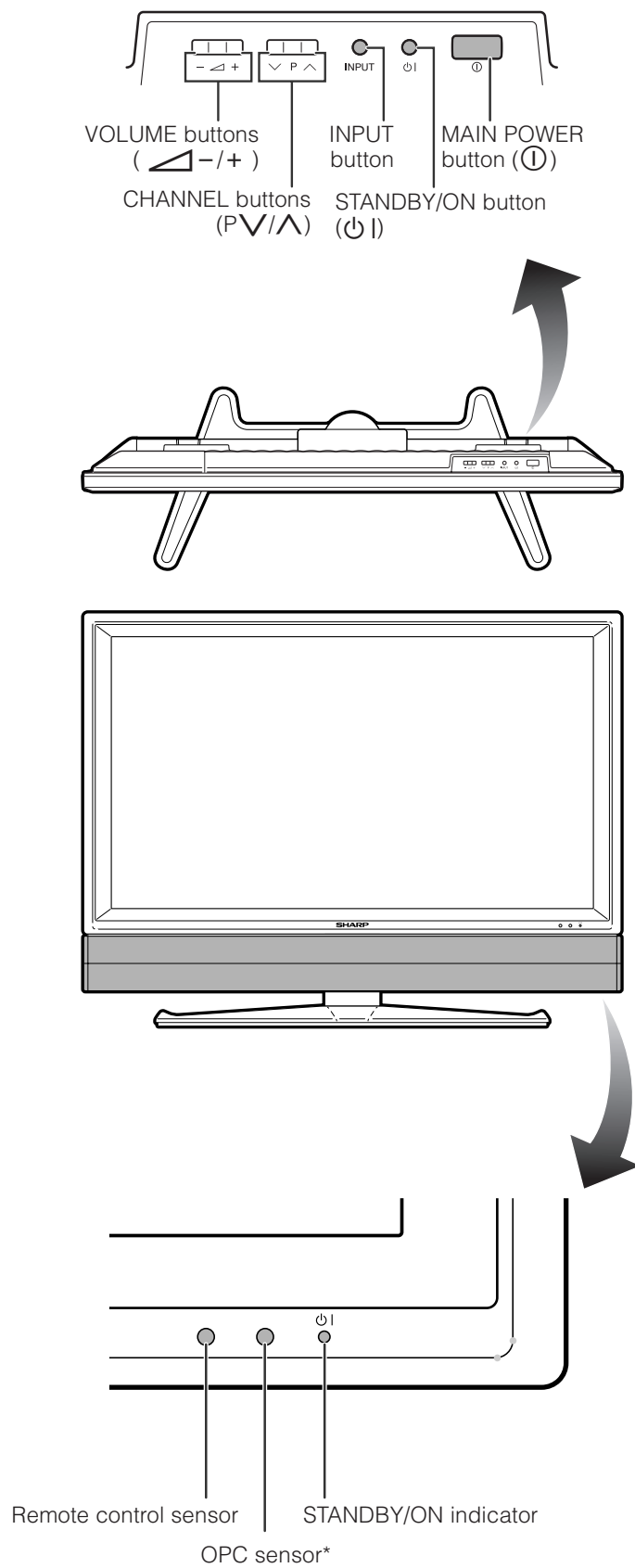


- Search screen displays.



# Part names

## Display

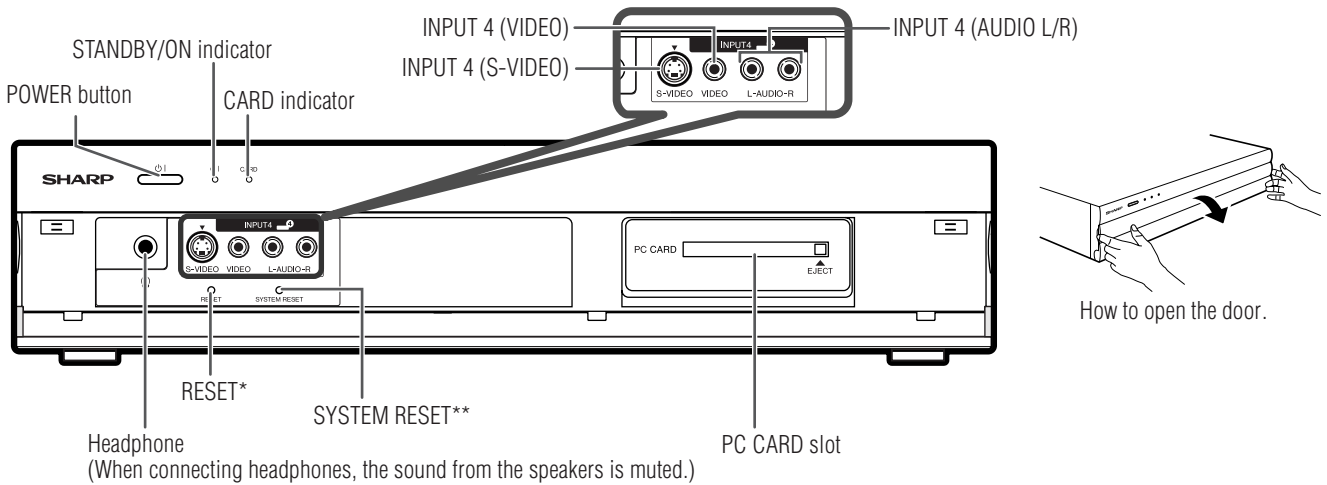


\*OPC: Optical Picture Control  
(See page 47.)

## Part names

### AVC System

#### Front view



\* Press **RESET** if the system cannot return to its original state after performing various operations. This will reset the System as shown below.

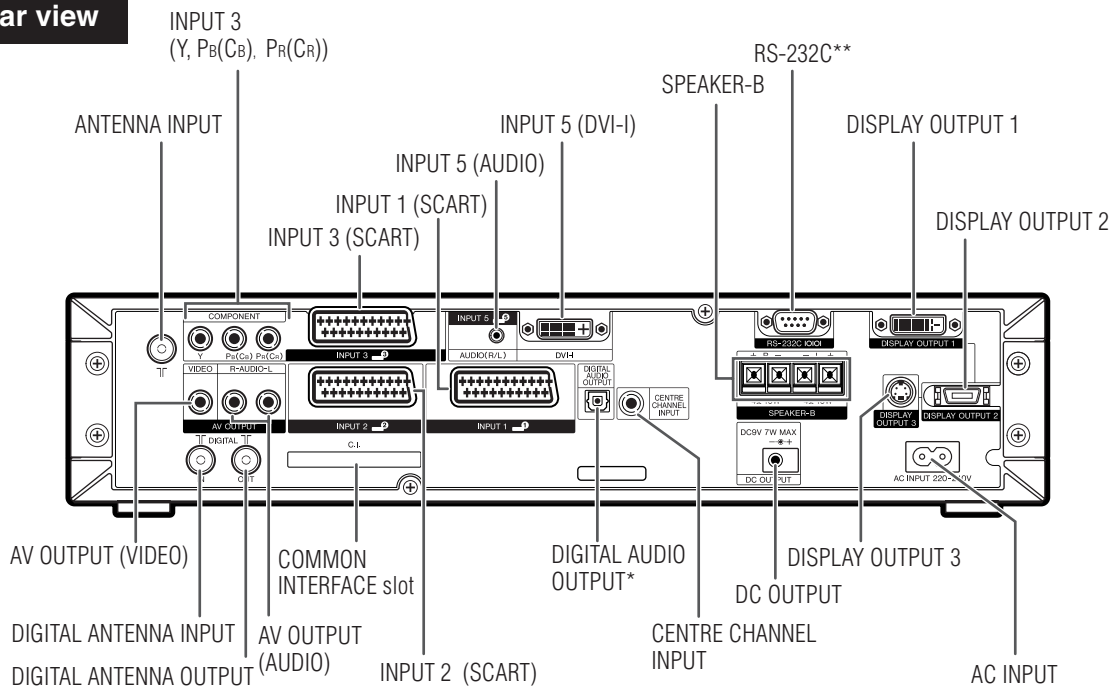
- AV MODE resets to USER.
- Analogue TV channel resets to channel 1.
- Dual screen resets to normal.
- Audio setting initialises.
- Dolby Virtual resets to Off.
- Image position is initialised.
- Still image mode deactivates.
- Teletext mode resets to normal.
- Speaker setting resets to SPEAKER-A.
- Audio Out setting resets to Fixed.
- Centre Channel Input setting resets to Off.
- Audio Only setting resets to Off.

\*\* Press **SYSTEM RESET** if the system does not operate after starting up.

#### NOTE

- Pressing **RESET** will not work if the System is in standby mode (indicator lights red).
- Pressing **RESET** will not delete channel preset and PIN. See page 78 for resetting the PIN when you know it. See page 91 for initialising to the factory preset values when you forget your PIN.

#### Rear view

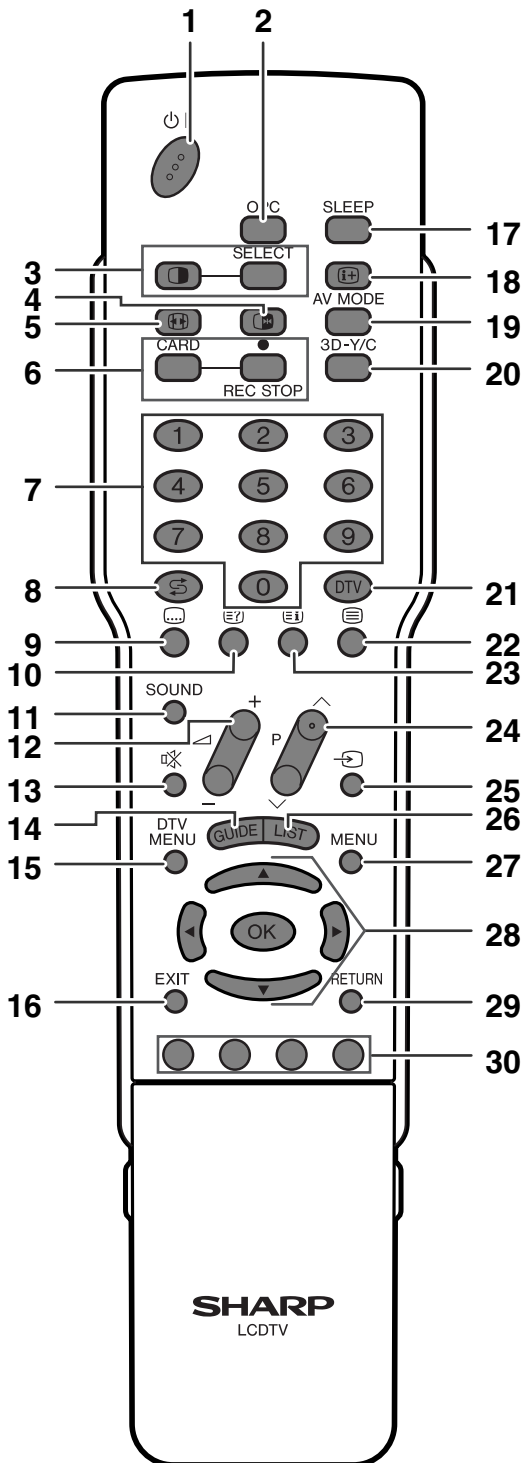


\*Connect a digital audio equipment.

\*\*Provided for command from PC (see pages 85 and 86).

## Part names

### Remote control unit

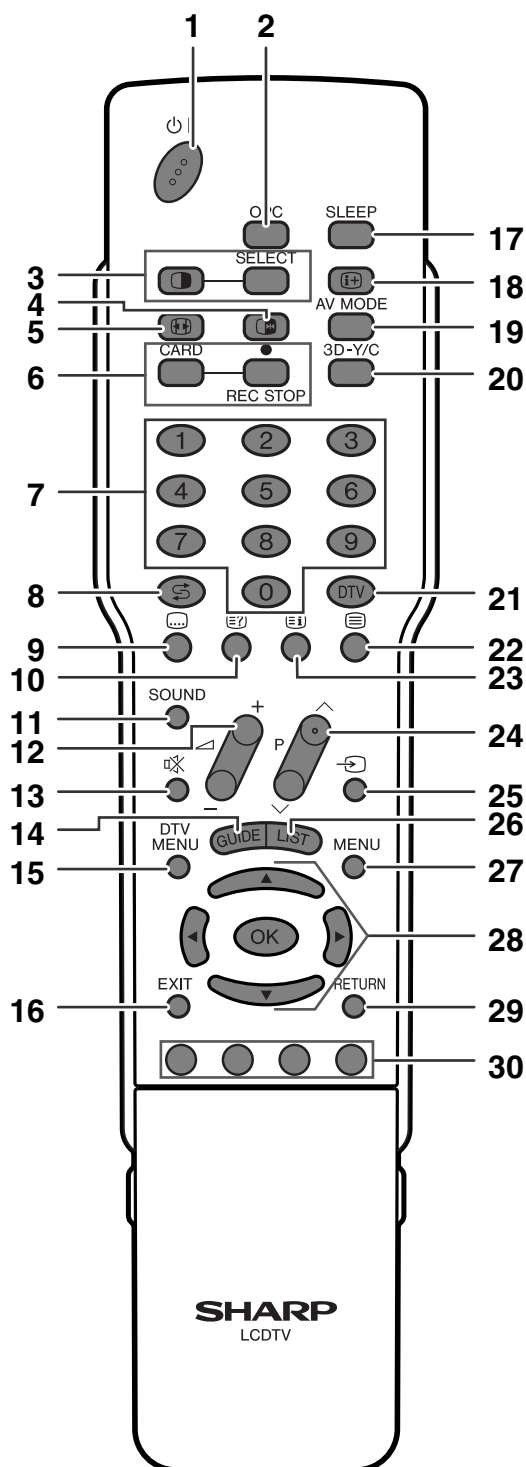


#### NOTE

- When using the remote control unit, point it at the Display.

- 1 **⏻ | (STANDBY/ON)**  
To switch the power on and off. (See page 19.)
- 2 **OPC**  
To switch the Optical Picture Control on and off. (See page 47.)
- 3 **◻ (DUAL screen)**  
Set the dual picture mode. Press ◻ again to return to normal view. (See page 80.)  
**SELECT**  
To select either screen to be active in Dual screen mode.
- 4 **⏸ (FREEZE/HOLD)**  
TV/External input mode: Change the still image mode.  
TELETEXT mode: Freeze a multi-page on screen while other pages are automatically updated. Press ⏸ again to return to the normal image. (See pages 80 and 81.)
- 5 **⏏ (WIDE MODE)**  
TV/External input mode: Change the wide image mode. (See pages 73 and 74.)  
TELETEXT mode: Set the area of magnification. (full/upper half/lower half) (See page 81.)
- 6 **CARD**  
Switch to the card mode.  
Card mode: Press to turn the Card Control Panel on and off. (See page 55.)  
**●/REC STOP**  
Still image: Press to capture a still image to a card after freezing the image from analogue broadcasts or external equipment. (See page 56).  
Motion picture: Press to start/stop recording a motion picture to a card from analogue broadcasts or external equipment. (See page 60).
- 7 **0 - 9**  
TV/DTV/External input mode: Set the channel.  
TELETEXT mode: Set the page.
- 8 **⏮ (Flashback)**  
Press to return to the previous image in normal viewing mode. (See page 20.)
- 9 **⏭ (SUBTITLE for TELETEXT)**  
TV/External input mode: To turn the subtitles on and off. (See page 82.)  
DTV input mode: Display the subtitle selection screen.
- 10 **⏮ (Reveal hidden for TELETEXT)**  
TELETEXT mode: Display hidden characters. (See page 81.)
- 11 **SOUND**  
Select the sound multiplex mode. (See page 21.)
- 12 **⏮ / - / + (VOLUME)**  
Set the volume. (See page 22.)
- 13 **⏮ (MUTE)**  
Mute the sound. (See page 22.)
- 14 **GUIDE**  
DTV input mode: To Display EPG (Electronic Programme Guide) screen.
- 15 **DTV MENU**  
DTV input mode: Display the digital TV menu screen.
- 16 **EXIT**  
Turn off the On Screen Display.
- 17 **SLEEP**  
Set the Sleep timer. (See page 77.)
- 18 **⏏ (DISPLAY INFORMATION)**  
Display the programme information.
- 19 **AV MODE**  
Select a video setting: AV MODE (STANDARD, MOVIE, GAME, USER, DYNAMIC), PC MODE (STANDARD, USER) (See page 72.)
- 20 **3D-Y/C**  
To switch the 3D Y/C function on and off. (See page 50.)

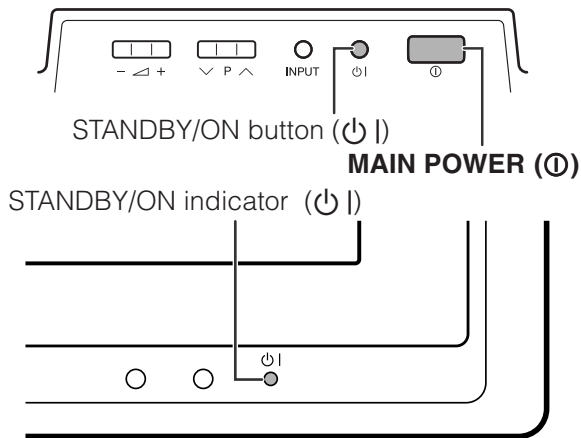
## Part names



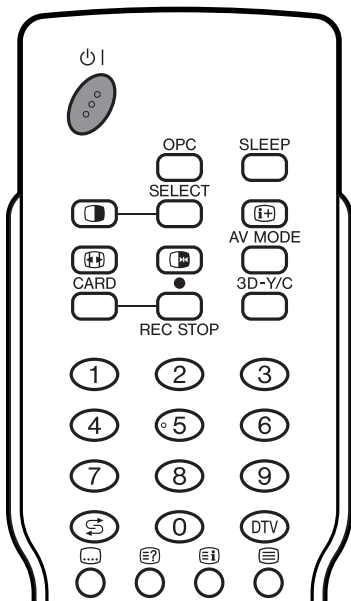
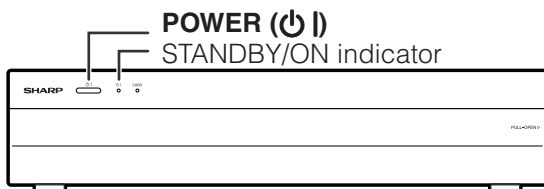
- 21 DTV**  
Switch from the Digital-TV mode and other input source. For example, when viewing an image from INPUT2, press DTV to switch to the Digital-TV mode. Press DTV again to return to INPUT2 screen.
- 22 [TELETEXT]**  
Select the TELETEXT mode. (all TV image, DTV/DATA image, all TEXT image, TV/TEXT image) (See pages 81 and 82.)  
DTV input mode: Select DTV data broadcasting and TELETEXT.
- 23 [TOP Overview for TELETEXT]**  
TELETEXT mode: Display an index page for CEEFAX/FLOF information. TOP Overview for TOP programme. (See page 82.)
- 24 P/V**  
TV/DTV input mode: Select the channel.  
External input mode: Switch to either TV or DTV input mode.  
TELETEXT mode: Select the page. (See page 81.)
- 25 [INPUT SOURCE]**  
Select an input source. (TV, DTV, INPUT 1, INPUT 2, INPUT 3, INPUT 4, INPUT 5, CARD) (See pages 63, 70, 71 and 80.)
- 26 LIST**  
DTV input mode: Display the favourite digital programme list.
- 27 MENU**  
Display the menu screen.
- 28 ▲/▼/◀/▶ (Cursor)**  
Select a desired item on the setting screen.  
Select the programme information area when EPG is displayed.
- OK**  
Execute a command.
- 29 RETURN**  
MENU mode: Return to the previous menu screen.
- 30 Colour (RED/GREEN/YELLOW/BLUE)**  
TELETEXT mode: Select a page. (See page 81.)  
DTV input mode: The coloured buttons are used to select correspondingly to the coloured items in the menu screen.

# Watching TV

## Display



## AVC System



## STANDBY/ON indicator

Off	Power off
Red	The System is in standby mode.
Green	Indicates the side lighting up green is on.*

## CAUTION

\* If only the STANDBY/ON indicator on the AVC System lights up green, this indicates that the System is in Software Download mode (see pages 44 and 45).

**Do not disconnect the AC cords or switch off MAIN POWER (Ⓜ) on the Display under this condition.**

## NOTE

- Check if the system cable is connected properly when display indicator flashes red.

## Turning on the power

Make sure that the system cable is connected before turning on the power.

### 1

Press **MAIN POWER (Ⓜ)** on the Display.

- STANDBY/ON indicator (Green): The System is on. (After a few seconds, programme information appears with sound.)
- STANDBY/ON indicator (Red): The System is in standby. (Go to step 2.)

### 2

Use any of the methods below to power on. Powering on changes the LED from red to green.

- Press the **STANDBY/ON** button (⏻) on the Display.
- Press **POWER (⏻)** on the AVC System.
- Press ⏻ on the remote control.

## NOTE

- The initial auto installation starts when the System powers on for the first time. If the System has been turned on before, the initial auto installation will not be invoked. See page 25 to try Auto installation from the Setup menu.

## Turning off the power

Press ⏻ on the remote control unit or STANDBY/ON button (⏻) on the Display or AVC System.

- The System enters standby mode and the image on the screen disappears.
- Both STANDBY/ON indicators change from green to red.

Press **MAIN POWER (Ⓜ)** on the Display.

- The STANDBY/ON indicator on the Display gradually turns off.
- When the System is turned off by **MAIN POWER (Ⓜ)**, you cannot turn on the power by pressing ⏻ on the remote control.

## NOTE

- If you are not going to use this System for a long period of time, be sure to remove the AC cords from the power outlet.
- Weak electric power is still consumed even when both **MAIN POWER (Ⓜ)** and **POWER (⏻)** are turned off.
- In DTV input mode, if the power is turned off immediately after a setting change from the menu screen, the new setting or channel information may not be memorised.

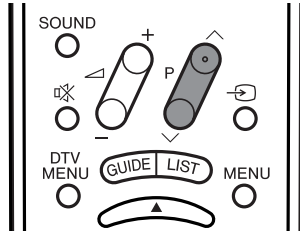
## Watching TV (Analogue)

### Simple button operations for changing channels

You can change channels in several ways.

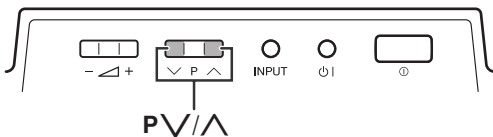
#### Using P $\wedge$ /P $\vee$ on the remote control unit

- Press P $\wedge$  to increase channel number.
- Press P $\vee$  to decrease channel number.



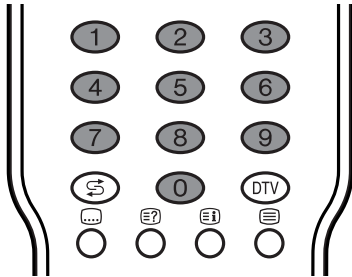
#### NOTE

- P $\vee$ /P $\wedge$  on the Display operates the same as P $\vee$ /P $\wedge$  on the remote control unit.
- In TV input mode, you cannot change the DTV input mode channel, and vice versa.



#### Using 0 – 9 on the remote control unit

Select the channels directly by pressing buttons 0 to 9.



#### EXAMPLE

To select a 1-digit channel (e.g. channel 2):

- Press the **2** button.

To select a 2-digit channel (e.g. channel 12):

- Press **1**, followed by **2**.
- When you enter the channel, a 3-digit input underbar appears in digital TV mode and a 2-digit in analogue TV mode.

Once you input a channel it is set after a few moments if there are no other operations. Or press **OK** to set immediately after input.

#### NOTE

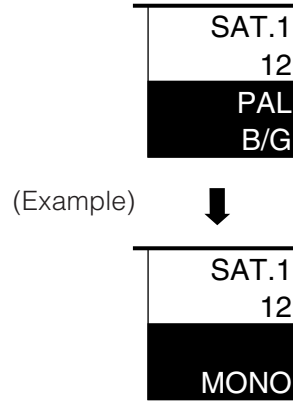
- Complete this procedure within 3 seconds, otherwise the selection will not be made on the 2-digit channel mode.

#### When viewing Teletext information

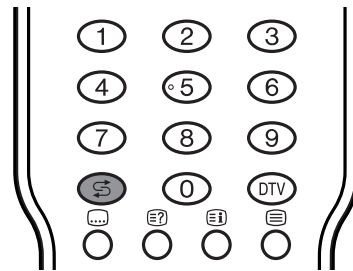
View a page directly which is 3-digit page number from 100 to 899 by pressing buttons **0** to **9**.

#### Channel display

Channel display changes approximately after 3 seconds as shown below.



#### Using Flashback (S) on the remote control unit



Press S to switch the currently tuned channel to the previously tuned channel.

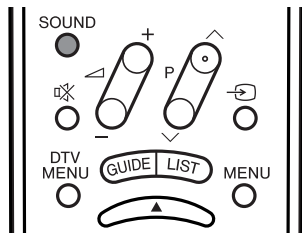
Press S again to switch back to the currently tuned channel.

Press S to toggle between the currently selected input source and the previously selected one.

Press S to return to the previous page in TELETEXT mode.

## Watching TV (Analogue)

### Using SOUND on the remote control unit

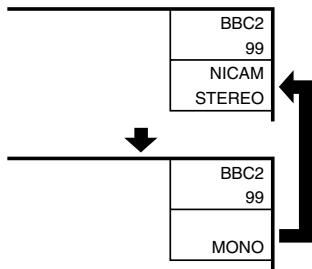


#### In the NICAM TV broadcasts

##### When receiving a stereo signal

Each time you press **SOUND**, the mode switches between NICAM STEREO and MONO.

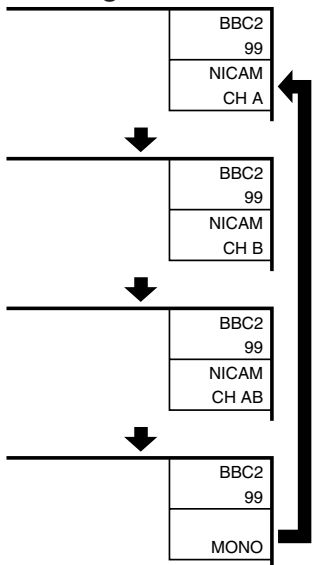
##### Stereo mode



##### When receiving a bilingual signal

Each time you press **SOUND**, the mode switches among NICAM CH A, NICAM CH B, NICAM CH AB and MONO.

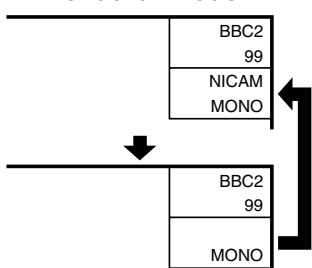
##### Bilingual mode



##### When receiving a monaural signal

Each time you press **SOUND**, the mode switches between NICAM MONO and MONO.

##### Monaural mode

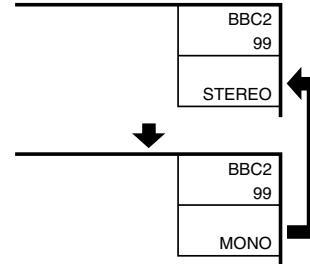


#### In the TV mode of A2 TV broadcasts

##### When receiving a stereo signal

Each time you press **SOUND**, the mode switches between STEREO and MONO.

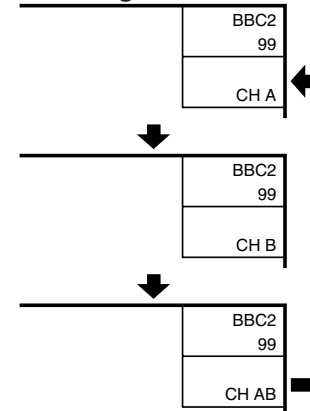
##### Stereo mode



##### When receiving a bilingual signal

Each time you press **SOUND**, the mode switches among CH A, CH B and CH AB.

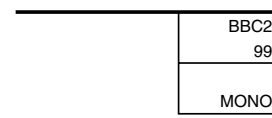
##### Bilingual mode



##### When receiving a monaural signal

When you press **SOUND**, "MONO" displays.

##### Monaural mode



#### NOTE

- When no signal is input, the sound mode will display "MONO".
- "BBC2" and "99" are tentative network name and channel.

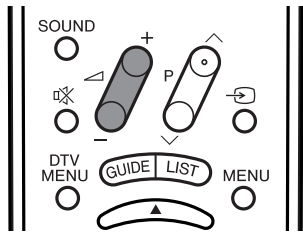
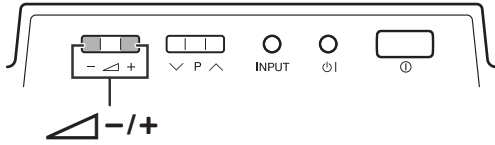


## Watching TV

### Simple button operation for changing volume/sound

#### Changing the volume

You can change the volume on the Display or on the remote control unit.



- To increase the volume, press +.
- To decrease the volume, press -.



#### NOTE

- “TV”, “DTV”, “INPUT1”, “INPUT2”, “INPUT3”, “INPUT4”, “INPUT5” and “CARD” modes can each store volume adjustment values separately.

When “Audio Out” is set to “Variable”, the indicator on the screen changes as shown below.



#### Audio status

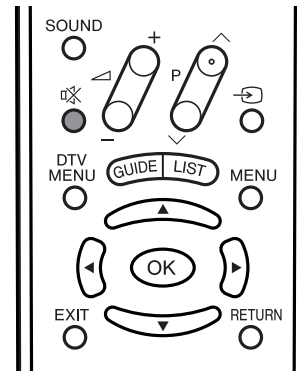
Output device	Audio out	
	Fixed	Variable
Speaker	Variable sound	Mute
AV OUTPUT	Constant as specified	Variable sound

#### NOTE

- See page 77 for details on the audio out function.

### Using on the remote control unit

mutes the current sound output.



1

Press .

- “” has been displayed on the screen for 30 minutes, and the sound is silenced.

Mute



#### NOTE

- Within 30 minutes of pressing , mute can be cancelled by using the methods below.
  - Pressing - / + or can also cancel the mute.
- **Mute will be cancelled after 30 minutes have elapsed. However, the System will not suddenly output a loud sound as the volume level is set to 0 automatically.**

2

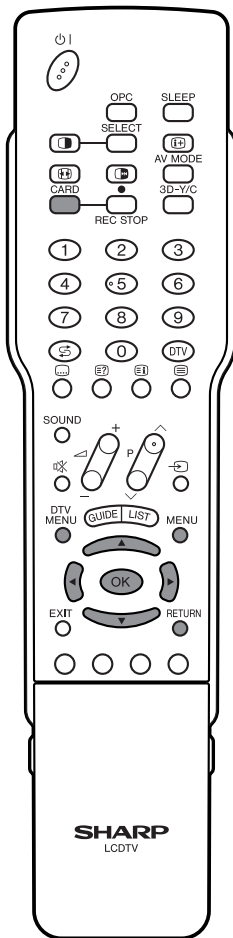
Within 30 minutes, Press again to cancel the mute.

- Before 30 minutes, the volume level returns to the previous setting.
- After 30 minutes, increase the volume level by pressing +.

# Basic adjustment settings (Analogue)

## Menu operation buttons

Use the following buttons on the remote control to operate the menu.



**MENU:** Press to open or close the menu screen.

**▲/▼/◀/▶:** Press to select a desired item on the screen or adjust a selected item.

**OK:** Press to go to the next step or complete the setting.

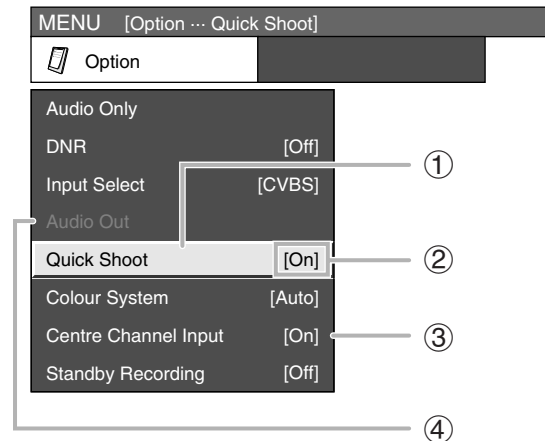
**RETURN:** Press to return to the previous step.

**CARD:** Press to open or close the Card mode screen.

**DTV MENU:** Press to open or close the DTV menu screen.

## On-Screen Display

### Example



- ① Item displayed in yellow
  - This indicates the item currently selected.
  - Press **OK** to go to the adjustment screen for this item.
- ② Item in brackets
  - This indicates the current setting for the item.
- ③ Item displayed in white
  - This indicates an item can be selected.
- ④ Item displayed in grey
  - This indicates the item cannot be selected.
  - \*There are various reasons why items cannot be selected, but the main reasons are as follows:
    1. Nothing is connected to the selected input terminal.
    2. The function is not compatible with the current input signal.

### NOTE

- Menu options differ in the selected input modes, but the operating procedures are the same.
- The screens in the operation manual are for explanation purposes (some are enlarged, others cropped) and may vary slightly from the actual screens.

## Basic adjustment settings (Analogue)

### TV/AV input mode menu items

List of AV menu items to help you with operations



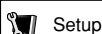
OPC .....	Page 47
Backlight .....	Page 48
Contrast .....	Page 48
Brightness .....	Page 48
Colour .....	Page 48
Tint .....	Page 48
Sharpness .....	Page 48
Advanced	
C.M.S. ....	Page 49
Colour Temp .....	Page 49
Black .....	Page 49
3D-Y/C .....	Page 50
Monochrome .....	Page 50
Film Mode .....	Page 50
I/P Setting .....	Page 50



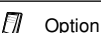
Treble .....	Page 51
Bass .....	Page 51
Balance .....	Page 51
Dolby Virtual .....	Page 51



No Signal Off .....	Page 52
No Operation Off .....	Page 52



Auto Installation .....	Page 25
Programme Setup .....	Pages 25-29
Child Lock .....	Page 78
Input Label .....	Page 71
Speaker Setup .....	Page 68
Position .....	Page 69
WSS .....	Page 72
4:3 Mode .....	Page 72
Rotate .....	Page 76
Language .....	Page 47



Audio Only .....	Page 69
DNR .....	Page 75
Input Select .....	Page 70
Audio Out .....	Page 77
Quick Shoot .....	Page 75
Colour System .....	Page 71
Centre Channel Input .....	Page 79
Standby Recording .....	Page 76

### PC input mode menu items

List of PC menu items to help you with operations



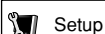
OPC .....	Page 47
Backlight .....	Page 48
Contrast .....	Page 48
Brightness .....	Page 48
Red .....	Page 48
Green .....	Page 48
Blue .....	Page 48
Advanced	
C.M.S. ....	Page 49



Treble .....	Page 51
Bass .....	Page 51
Balance .....	Page 51
Dolby Virtual .....	Page 51



Power Management .....	Page 52
------------------------	---------



Input Label .....	Page 71
Speaker Setup .....	Page 68
Input Signal .....	Page 75
Auto Sync. ....	Page 69
Fine Sync. ....	Page 70
Rotate .....	Page 76
Language .....	Page 47

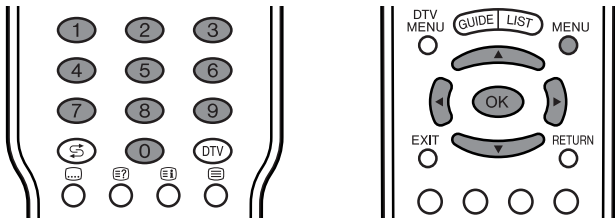


Audio Only .....	Page 69
Input Select .....	Page 70
Audio Out .....	Page 77
Quick Shoot .....	Page 75
Centre Channel Input .....	Page 79
Standby Recording .....	Page 76

## Basic adjustment settings (Analogue)

### Auto installation

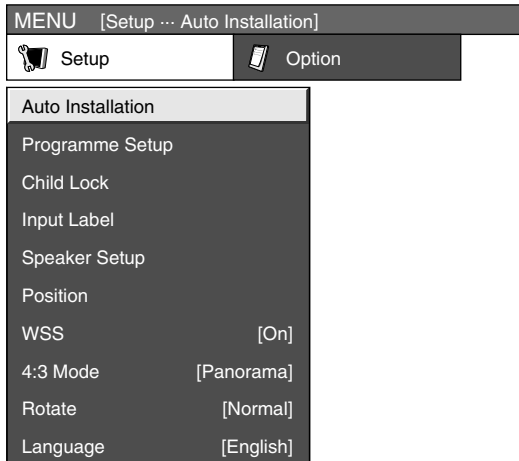
You can run auto installation again, even after setting up the preset channels.



**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Setup".

**3** Press **▲/▼** to select "Auto Installation", and then press **OK**.



**4** If you already set the PIN, enter it here. If not, enter the factory preset PIN "1234".  
• See page 78 for setting PIN.



**5** Press **◀/▶** to select "Yes", and then press **OK**.

**6** You can set language and country the same as in the initial auto installation. Follow steps 1 and 2 on page 13. After this setting, auto search starts with the following order.

- ① Programme auto search
- ② Auto labelling
- ③ Auto sorting
- ④ Preset download

You do not need to do anything during the auto search.

#### NOTE

- Do not turn off the System while the message "Auto Installation completed" is displayed, for the System is saving the data found while the message is displayed.

### Programme setup

You can run the auto installation procedure again at any time, by accessing the Setup menu, then Programme Setup. Channels can be tuned automatically or manually.

#### Auto search

You can also automatically search and download TV channels by performing the procedure below. This is the same function as from programme auto search to preset download in auto installation.

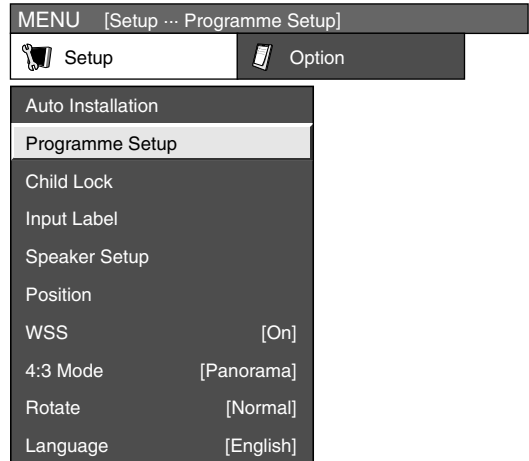
**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Setup".

**3** Press **▲/▼** to select "Programme Setup", and then press **OK**.

If you already set the PIN, enter it here. If not, enter the factory preset PIN "1234".

- See page 78 for setting PIN.



**4** Press **▲/▼** to select "Auto Search", and then press **OK**.

**5** Press **◀/▶** to select "Yes", and then press **OK**.

- Auto search starts with the following order.

- ① Programme auto search
- ② Auto labelling
- ③ Auto sorting
- ④ Preset download

#### NOTE

- See page 13 for details.
- Do not turn off the System while the message "Programme set-up completed" is displayed, for the System is saving the data found while the message is displayed.

## Basic adjustment settings (Analogue)

### Manual setting for each channel

You can set some channel items manually. They are Fine (TV frequency), Colour sys., Sound sys., Label (Network name), Skip, Decoder, Lock (Child Lock) and Booster.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Setup".

**3** Press **▲/▼** to select "Programme Setup", and then press **OK**.  
If you already set the PIN, enter it here. If not, enter the factory preset PIN "1234".  
• See page 78 for setting PIN.

**4** Press **▲/▼** to select "Manual Adjust", and then press **OK**.

**5** Press **◀/▶** to select "Yes", and then press **OK**.

### Programme Setup "Manual Adjust" menu

01 SAT.1	02 PR07	03 KABEL		
Next				

### NOTE

- When you exit Programme Setup "Manual" menu, preset download automatically runs if you change information on that menu.

You can select one of the following settings.

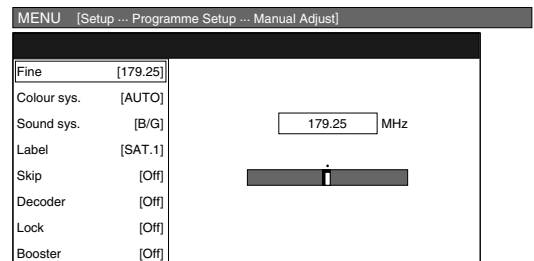
- ① Fine
- ② Colour system (See page 27.)
- ③ Sound system (See page 27.)
- ④ Label (See page 27.)
- ⑤ Skip (See page 28.)
- ⑥ Decoder (See page 28.)
- ⑦ Lock (See page 28.)
- ⑧ Booster (See page 28.)

### Fine tuning

**1** Press **▲/▼/◀/▶** to select the channel you want to edit, and then press **OK**.  
• The selected channel information displays.

**2** Press **▲/▼** to select "Fine", and then press **OK**.

**3** Press **◀/▶** to adjust the frequency, and then press **OK**.  
• Adjust while checking the background picture as a reference.



- Instead of the above, you can also set by directly entering the frequency number of the channel with **0 - 9**.

### EXAMPLE

- 179.25 MHz: Press **1** → **7** → **9** → **2** → **5**.
- 49.25 MHz: Press **4** → **9** → **2** → **5** → **OK**.

## Basic adjustment settings (Analogue)

### Manual setting for each channel (continued)

#### Colour system

- 1 Press **▲/▼/◀/▶** to select the channel you want to edit, and then press **OK**.
  - The selected channel information displays.

- 2 Press **▲/▼** to select "Colour sys.", and then press **OK**.
  - Receivable colour systems are listed.

#### Colour system menu

MENU [Setup --- Programme Setup --- Manual Adjust]	
Fine	[179.25]
Colour sys.	[AUTO]
Sound sys.	[B/G]
Label	[SAT.1]
Skip	[Off]
Decoder	[Off]
Lock	[Off]
Booster	[Off]

AUTO
PAL
SECAM
NTSC 4.43
PAL-60

- 3 Press **▲/▼** to select the optimum colour system, and then press **OK**.

#### Sound system (Broadcasting system)

- 1 Press **▲/▼/◀/▶** to select the channel you want to edit, and then press **OK**.
  - The selected channel information displays.

- 2 Press **▲/▼** to select "Sound sys.", and then press **OK**.
  - Receivable sound systems (Broadcasting systems) are listed.

#### Sound system menu

Fine	[179.25]
Colour sys.	[AUTO]
Sound sys.	[B/G]
Label	[SAT.1]
Skip	[Off]
Decoder	[Off]
Lock	[Off]
Booster	[Off]

B/G
D/K
I
L
L'

- 3 Press **▲/▼** to select the optimum sound system, and then press **OK**.

#### NOTE

- Check the colour system (see above) if the sound output is not right.

#### Labelling channels

When a TV channel sends its Network Name, the auto installation detects the information and assigns a name to it. However, you can change individual channel names.

- 1 Press **▲/▼/◀/▶** to select the channel you want to edit, and then press **OK**.
  - The selected channel information displays.

- 2 Press **▲/▼** to select "Label", and then press **OK**.
  - Alphabets and numbers are listed.

#### Labelling menu

Fine	[179.25]
Colour sys.	[AUTO]
Sound sys.	[B/G]
Label	[SAT.1]
Skip	[Off]
Decoder	[Off]
Lock	[Off]
Booster	[Off]

[A]	B	C	D	E	F	G	H	I	J	CLEAR
K	L	M	N	O	P	Q	R	S	T	BACK
U	V	W	X	Y	Z	+	-	.	_	
0	1	2	3	4	5	6	7	8	9	END

- 3 Press **▲/▼/◀/▶** to select each character of the new name for the channel, and then press **OK**.

- 4 Repeat the above until the name is fully spelt out.
  - The name can be 5 characters or less.

## Basic adjustment settings (Analogue)

### Manual setting for each channel (continued)

#### Skipping channels

Channels with "Skip" set to "On" are passed over when using **P▲/P▼** even if selected while watching the image from the TV.

- 1 Press **▲/▼/◀/▶** to select the channel you want to edit, and then press **OK**.
  - The selected channel information displays.

- 2 Press **▲/▼** to select "Skip", and then press **OK**.
  - Skip menu displays.

#### Skip menu

MENU [Setup ... Programme Setup ... Manual Adjust]	
Fine	[179.25]
Colour sys.	[AUTO]
Sound sys.	[B/G]
Label	[SAT.1]
Skip	[Off]
Decoder	[Off]
Lock	[Off]
Booster	[Off]

- 3 Press **▲/▼** to set "Skip" to "On", and then press **OK**.

#### Setting the decoder

When connecting a decoder to the unit, you need to assign the terminal input.

- 1 Press **▲/▼/◀/▶** to select the channel you want to edit, and then press **OK**.
  - The selected channel information displays.

- 2 Press **▲/▼** to select "Decoder", and then press **OK**.
  - Terminal inputs information displays.

#### Decoder menu

Fine	[179.25]
Colour sys.	[AUTO]
Sound sys.	[B/G]
Label	[SAT.1]
Skip	[Off]
Decoder	[Off]
Lock	[Off]
Booster	[Off]

- 3 Press **▲/▼** to set "Decoder" to "INPUT1", "INPUT2" or "INPUT3", and then press **OK**.

#### NOTE

- "Off" is factory preset value.
- "INPUT1" is the recommended selection.

#### Setting the child lock

You can block the viewing of any channel.

- 1 Press **▲/▼/◀/▶** to select the channel you want to edit, and then press **OK**.
  - The selected channel information displays.

- 2 Press **▲/▼** to select "Lock", and then press **OK**.
  - Child lock menu displays.

#### Lock menu

Fine	[179.25]
Colour sys.	[AUTO]
Sound sys.	[B/G]
Label	[SAT.1]
Skip	[Off]
Decoder	[Off]
Lock	[Off]
Booster	[Off]

- 3 Press **▲/▼** to set "Lock" to "On", and then press **OK**.

#### NOTE

- See page 78 for setting PIN.
- When "Lock" is set to "On" for a channel, "Child lock has been activated." displays, and the image and sound of the channel is blocked.
- When pressing **OK** while "Child lock has been activated." displays, PIN input menu will display. Inputting the correct PIN lifts the child lock temporarily until the power is turned off.

#### Setting the booster

Picture quality may improve in regions with weak signal strength using this function.

- 1 Press **▲/▼/◀/▶** to select the channel you want to edit, and then press **OK**.

- 2 Press **▲/▼** to select "Booster", and then press **OK**.
  - Booster menu displays.

#### Booster Menu

Fine	[179.25]
Colour sys.	[AUTO]
Sound sys.	[B/G]
Label	[SAT.1]
Skip	[Off]
Decoder	[Off]
Lock	[Off]
Booster	[Off]

- 3 Press **▲/▼** to set "Booster" to "On", and then press **OK**.

#### NOTE

- If signal strength is strong enough for the selected channel, the effect is negligible and may produce instability. In such case, select "Off".



## Basic adjustment settings (Analogue)

### Sort

Channel positions can be sorted freely.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Setup".

**3** Press **▲/▼** to select "Programme Setup", and then press **OK**.  
If you already set the PIN, enter it here. If not, enter the factory preset PIN "1234".  
• See page 78 for setting PIN.

**4** Press **▲/▼** to select "Sort", and then press **OK**.

**5** Press **◀/▶** to select "Yes", and then press **OK**.

**6** Press **▲/▼/◀/▶** to select the channel you want to move, and then press **OK**.

**7** Move it to the desired position by pressing **▲/▼/◀/▶**, and then press **OK**.

**8** Repeat the steps 6 and 7 until all desired channels are sorted.

#### Sort menus

01 SAT.1				
01 SAT.1	02 KABEL	03	04	05
06				
Next				



01 SAT.1 ↔ 02 KABEL				
01 SAT.1	02 KABEL			
Next				



01 KABEL				
01 KABEL	02 SAT.1			
Next				

### Erase Programme

The individual programme can be erased.

**1** Repeat steps 1 to 3 in **Sort**.

**2** Press **▲/▼** to select "Erase Programme", and then press **OK**.

**3** Press **◀/▶** to select "Yes", and then press **OK**.

**4** Press **▲/▼/◀/▶** to select the channel you want to erase, and then press **OK**.  
• A message screen pops up.

**5** Press **◀/▶** to select "Yes", and then press **OK** to erase the selected programme. All the subsequent programmes move up.

**6** Repeat the step 5 until all desired channels are erased.

#### Erase programme menus

01 SAT.1				
01 SAT.1	02 Pro7	03 KABEL	04	05
06	07	08	09	10
11	12	13	14	15
16	17	18	19	20
Next				



02 Pro7				
01 SAT.1	02 Pro7	03 KABEL	04	05
06	07	08	09	10
11	12	13	14	15
16	17	18	19	20
Next				



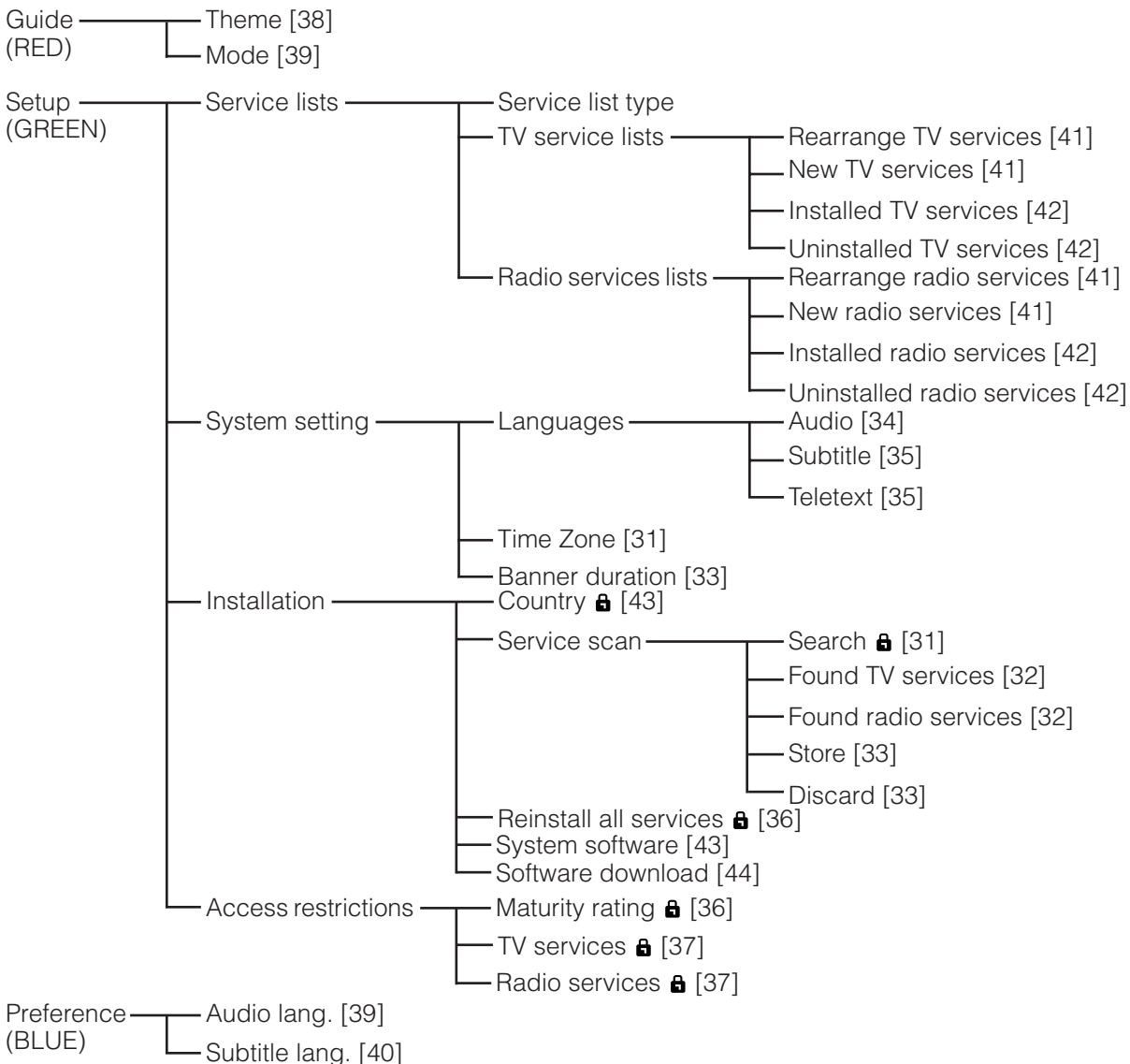
02 KABEL				
01 SAT.1	02 KABEL	03	04	05
06	07	08	09	10
11	12	13	14	15
16	17	18	19	20
Next				

# Basic adjustment settings (Digital)

## DTV input mode menu items

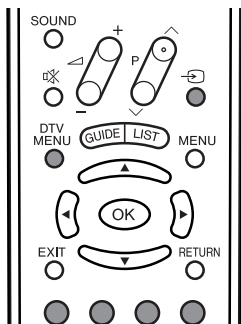
### List of DTV menu items to help you with operations.

Numbers within brackets indicate the page where the topic is explained.



### NOTE

- mark indicates in some cases PIN input may be required.
- The illustrations and on-screen displays in this manual are for explanation purposes and may vary slightly from the actual operations.



### Selecting DTV mode

Press **DTV MENU** to directly display DTV menu screen.  
Press to access DTV mode.

### About colour buttons

Press **DTV MENU** to display the DTV Menu screen.



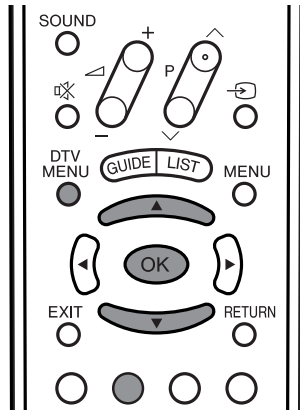
Simply press colour button (**RED/GREEN/BLUE**) to directly display desired DTV menu.

Guide: RED button  
Setup: GREEN button  
Preference: BLUE button

## Basic adjustment settings (Digital)

### Time Zone

Select the time zone where your TV is installed.



- 1 Press **DTV MENU** to display the DTV Menu screen.



- 2 Press the **GREEN** button to display the Setup menu.

- 3 Press **▲/▼** to select "System setting", and then press **OK**.

- 4 Press **▲/▼** to select "Time Zone", and then press **OK**.

- 5 Press **▲/▼** to select the Time Zone where you are located, and then press **OK**.



### Search

You can also search and download TV channels while keeping the original channel information by performing the procedure below.

- 1 Press **DTV MENU** to display the DTV Menu screen.

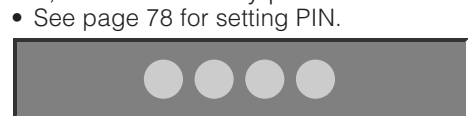
- 2 Press the **GREEN** button to display the Setup menu.

- 3 Press **▲/▼** to select "Installation", and then press **OK**.

- 4 Press **▲/▼** to select "Service scan", and then press **OK**.

- 5 Press **▲/▼** to select "Search", and then press **OK**.

- 6 If you already set the PIN, enter it here. If not, enter the factory preset PIN "1234".



- This window may remain blank for a short period until services are found.

- 7 After "Search" is finished, press **OK** and "Store".

### NOTE

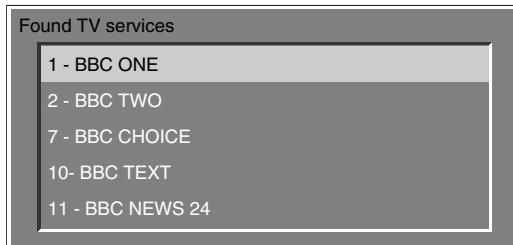
- If you only perform "Search", you will not be able to watch programmes that were found. To watch programmes found by "Search", you have to perform "Store". For details about "Store" see page 33.

## Basic adjustment settings (Digital)

### Found TV services

The Found TV services function is used to see which new TV services were found after performing a search or after Reinstalling all services.

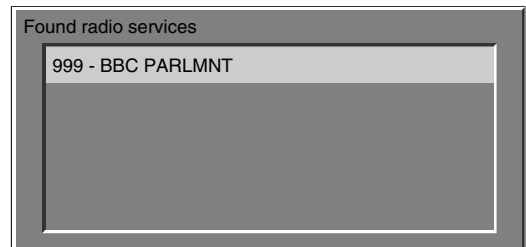
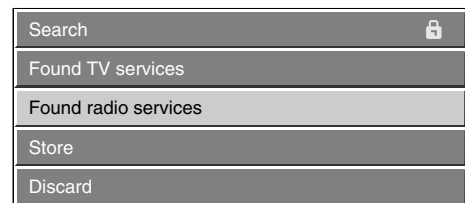
- 1 Press **DTV MENU** to display the DTV Menu screen.
- 2 Press the **GREEN** button to display the Setup menu.
- 3 Press **▲/▼** to select "Installation", and then press **OK**.
- 4 Press **▲/▼** to select "Service scan", and then press **OK**.
- 5 Press **▲/▼** to select "Found TV services", and then press **OK**.



### Found radio services

The Found radio services function is used to see which new radio services were found after performing a search or after Reinstalling all services.

- 1 Press **DTV MENU** to display the DTV Menu screen.
- 2 Press the **GREEN** button to display the Setup menu.
- 3 Press **▲/▼** to select "Installation", and then press **OK**.
- 4 Press **▲/▼** to select "Service scan", and then press **OK**.
- 5 Press **▲/▼** to select "Found radio services", and then press **OK**.



## Basic adjustment settings (Digital)

### Store

Store all found services.

#### NOTE

- This item can only be selected after performing “Search” or “Reinstall all services”.

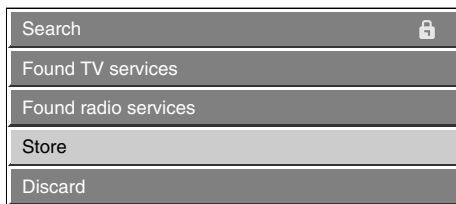
**1** Press **DTV MENU** to display the DTV Menu screen.

**2** Press **GREEN** button to display the Setup menu.

**3** Press **▲/▼** to select “Installation”, and then press **OK**.

**4** Press **▲/▼** to select “Service scan”, and then press **OK**.

**5** Press **▲/▼** to select “Store”, and then press **OK**.



**6** Press **◀/▶** to select “Yes”, and then press **OK**.

### Discard

Discard all services stored.

#### NOTE

- This item can only be selected after performing “Search” or “Reinstall all services”.

**1** Press **DTV MENU** to display the DTV Menu screen.

**2** Press **GREEN** button to display the Setup menu.

**3** Press **▲/▼** to select “Installation”, and then press **OK**.

**4** Press **▲/▼** to select “Service scan”, and then press **OK**.

**5** Press **▲/▼** to select “Discard”, and then press **OK**.

**6** Press **◀/▶** to select “Yes”, and then press **OK**.

### Banner duration

You can set the time (in seconds) to display the banner.

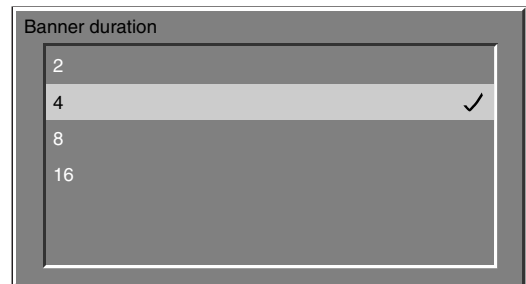
**1** Press **DTV MENU** to display the DTV Menu screen.

**2** Press the **GREEN** button to display the Setup menu.

**3** Press **▲/▼** to select “System setting”, and then press **OK**.

**4** Press **▲/▼** to select “Banner duration”, and then press **OK**.

**5** Press **▲/▼** to select the desired time, and then press **OK**.

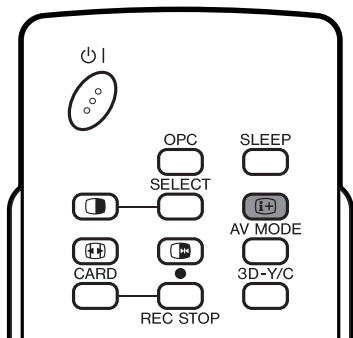


- Unit: seconds

## Basic adjustment settings (Digital)

### Info banner

You can see the info banner while you are watching a programme.



1 Press **i+**.

1	BBC ONE	14:47
Health & Sport		
Current affairs	13:30-13:45	Min. left: 0

- The banner display time will vary depending on its setting.

2 While the info banner is displaying, press **i+** again to display the detailed programme information.

3 Press **i+** to turn off the info banner and the detailed programme information.

### NOTE

- The info banner displays each time you change the channel.
- Some programmes do not contain any detailed programme information.
- It may take a few moments to download the info banner data.

### Audio

Select the default audio language for all services.

1 Press **DTV MENU** to display the DTV Menu screen.

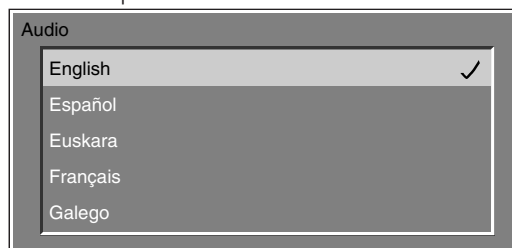
2 Press the **GREEN** button to display the Setup menu.

3 Press **▲/▼** to select “System setting”, and then press **OK**.

4 Press **▲/▼** to select “Languages”, and then press **OK**.

5 Press **▲/▼** to select “Audio”, and then press **OK**.

6 Press **▲/▼** to select the desired language, and then press **OK**.



- Languages listed may be different for each programme.
- For details about the language list see page 35.

## Basic adjustment settings (Digital)

### Subtitle

Select the default subtitle language for all services.

**1** Press **DTV MENU** to display the DTV Menu screen.

**2** Press the **GREEN** button to display the Setup menu.

**3** Press **▲/▼** to select “System setting”, and then press **OK**.

**4** Press **▲/▼** to select “Languages”, and then press **OK**.

**5** Press **▲/▼** to select “Subtitle”, and then press **OK**.

**6** Press **▲/▼** to select the desired language, and then press **OK**.



- Languages listed may be different for each programme.
- If you select “None”, no subtitles will be displayed.

### Teletext

Select the default teletext language for all services.

**1** Press **DTV MENU** to display the DTV Menu screen.

**2** Press the **GREEN** button to display the Setup menu.

**3** Press **▲/▼** to select “System setting”, and then press **OK**.

**4** Press **▲/▼** to select “Languages”, and then press **OK**.

**5** Press **▲/▼** to select “Teletext”, and then press **OK**.

**6** Press **▲/▼** to select the desired language, and then press **OK**.



- Languages listed in the list differ to each programme.

### Language list

Basque	Greek
Catalan	Italian
Croatian	Norwegian
Czech	Polish
Danish	Portuguese
Dutch	Russian
English	Serbian
Finnish	Slovak
French	Spanish
Gaelic	Swedish
Gallegan	Turkish
German	Welsh



## Basic adjustment settings (Digital)

### Reinstall all services

Cancel all channel information then download and install again.

**1** Press **DTV MENU** to display the DTV Menu screen.

**2** Press the **GREEN** button to display the Setup menu.

**3** Press **▲/▼** to select "Installation", and then press **OK**.

**4** Press **▲/▼** to select "Reinstall all services", and then press **OK**.  
If you already set the PIN, enter it here. If not, enter the factory preset PIN "1234".  
• See page 78 for setting PIN.

**5** Press **◀/▶** to select "Yes", and then press **OK**.



**6** After "Reinstall all services" is finished, press **OK** and "Store".

- If you only perform "Reinstall all services", you will not be able to watch programmes that were found. To watch programmes found by "Reinstall all services", you have to perform "Store". For details about "Store" see page 33.

### Access restrictions

Allows you to set the PIN to limit viewing certain services and protect certain settings from being accidentally changed.

#### Maturity rating

This function allows TV and Radio services to be restricted. It prevents children from watching violent or sexual scenes that may be harmful.

**1** Press **DTV MENU** to display the DTV Menu screen.

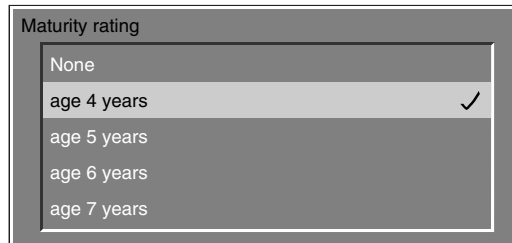
**2** Press the **GREEN** button to display the Setup menu.

**3** Press **▲/▼** to select "Access restrictions", and then press **OK**.

**4** Press **▲/▼** to select "Maturity rating", and then press **OK**.

If you already set the PIN, enter it here. If not, enter the factory preset PIN "1234".  
• See page 78 for setting PIN.

**5** Press **▲/▼** to select the rating you want to set, and then press **OK**.



#### NOTE

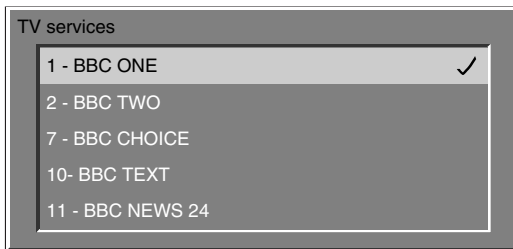
- Universal viewing and Parental approval preferable only work in France.
- X-rated only works in Spain.
- For details about rating see page 90.

## Basic adjustment settings (Digital)

### TV services

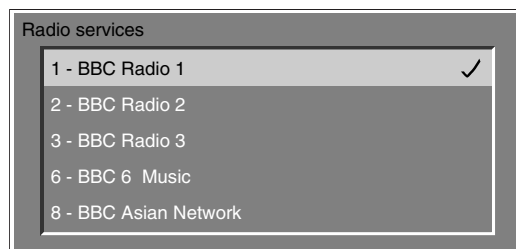
Use this function to restrict certain TV services for viewing.

- 1 Press **DTV MENU** to display the DTV Menu screen.
- 2 Press the **GREEN** button to display the Setup menu.
- 3 Press **▲/▼** to select "Access restrictions", and then press **OK**.
- 4 Press **▲/▼** to select "TV services", and then press **OK**.  
If you already set the PIN, enter it here. If not, enter the factory preset PIN "1234".
  - See page 78 for setting PIN.
- 5 Press **▲/▼** to select the TV services you want to restrict, then press **◀/▶** to select the programme, and then press **OK**.



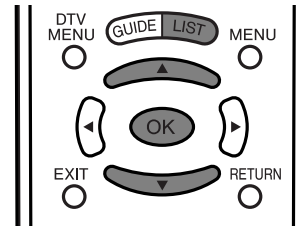
### Radio services

To perform "Radio services", select "Radio services" instead of "TV services" in step 4 above and follow the same step 5 as explained in "TV services".



### Selecting programme

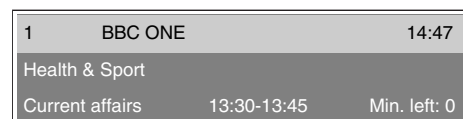
You can select a programme from the Preset list.



- 1 Press **LIST**.
- 2 Press **▲/▼** to select the desired programme, and then press **OK**.



- Data is broadcast along with the regular TV programme.



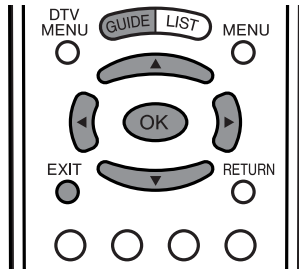
### NOTE

- When the DTV menu screen is displayed, the Preset list will not appear. In such case, press **DTV MENU** to turn off the DTV menu screen.

## Basic adjustment settings (Digital)

### Using EPG (Electronic Programme Guide)

You can select a programme from EPG while reading the programme information on the screen.



1

Press **GUIDE**.

		Now		Next
1	BBC ONE	Trading Treasures	13:45	Passport To The Sun
2	BBC TWO	Anthony Ant	13:45	UGetMe
7	BBC CHOICE	Newsround	13:45	House Invaders
10	BBC TEXT	Mona the Vampire	13:45	Neighbours
11	BBC NEW ...	BBC News	14:00	BBC World News
12	BBC ...	Home Affairs Committee	14:00	Home Affairs Committee
997	ZDFinfo...	Gesundheit & Sport	14:00	Info aus den Ländern
999	ZDFok...	National Geographic	14:00	Streit um Drei
999	ZDF	Discovery	14:00	Heute - Sport

Theme Mode

2

Press **▲/▼/◀/▶** to select a desired programme, and then press **OK**.

- Information of the selected programme is displayed on the banner.

#### NOTE

- Press **EXIT** to return to the normal screen from EPG screen without selecting a programme. You cannot return to the normal screen by pressing **GUIDE**.

### Setting the theme

You can categorise the programmes for easy channel selection.

1

Press **GUIDE** to display the EPG screen.

		Now		Next
1	BBC ONE	Trading Treasures	13:45	Passport To The Sun
2	BBC TWO	Anthony Ant	13:45	UGetMe
7	BBC CHOICE	Newsround	13:45	House Invaders
10	BBC TEXT	Mona the Vampire	13:45	Neighbours
11	BBC NEW ...	BBC News	14:00	BBC World News
12	BBC ...	Home Affairs Committee	14:00	Home Affairs Committee
997	ZDFinfo...	Gesundheit & Sport	14:00	Info aus den Ländern
999	ZDFok...	National Geographic	14:00	Streit um Drei
999	ZDF	Discovery	14:00	Heute - Sport

Theme Mode

2

Press **RED** button to display the Theme screen.

3

Press **▲/▼** to select the desired category, then press **◀/▶** to activate and then, press **OK**.

- You can select multiple categories.

General	✓
Movie	✓
News	
Entertainment	
Sports	



		Now		Next
1	BBC ONE	Trading Treasures	13:45	Passport To The Sun
2	BBC TWO	Anthony Ant	13:45	UGetMe
7	BBC CHOICE	Newsround	13:45	House Invaders
10	BBC TEXT	Mona the Vampire	13:45	Neighbours
11	BBC NEW ...	BBC News	14:00	BBC World News
12	BBC ...	Home Affairs Committee	14:00	Home Affairs Committee
997	ZDFinfo...	Gesundheit & Sport	14:00	Info aus den Ländern
999	ZDFok...	National Geographic	14:00	Streit um Drei
999	ZDF	Discovery	14:00	Heute - Sport

Theme Mode

- The categorised programmes are displayed in blue.

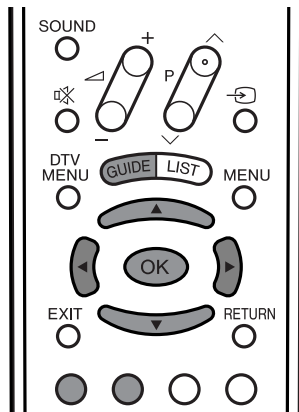
#### NOTE

- If no services are found or received, the theme screen will not appear.

## Basic adjustment settings (Digital)

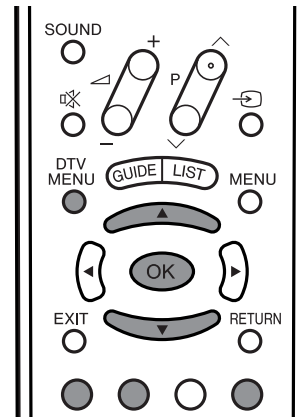
### Mode

You can choose between TV and radio mode.



### Audio language

You can select the preferred audio language from the list.



1

Press **GUIDE**.

		Now		Next
1	BBC ONE	Trading Treasures	13:45	Passport To The Sun
2	BBC TWO	Anthony Ant	13:45	UGetMe
7	BBC CHOICE	Newsround	13:45	House Invaders
10	BBC TEXT	Mona the Vampire	13:45	Neighbours
11	BBC NEW...	BBC News	14:00	BBC World News
12	BBC ...	Home Affairs Committee	14:00	Home Affairs Committee
997	ZDFInfo...	Gesun dheit & Sport	14:00	Info aus den Landern
999	ZDFok...	National Geographic	14:00	Streit um Drei
999	ZDF	Discovery	14:00	Heute - Sport

Theme Mode

1

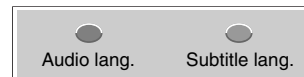
Press **DTV MENU** to display the DTV Menu screen.

2

Press the **BLUE** button to display the Preference menu.

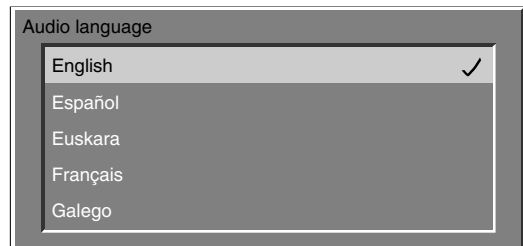
3

Press the **RED** button to display the Audio language screen.



4

Press **▲/▼** to select the desired language, and then press **OK**.



- Languages listed may be different for each programme.
- This setting is disabled if the channel is changed or the programme is finished.
- For details about the language list see page 35.

2

Press the **GREEN** button to change to radio mode.

		Now		Next
999	BBC...	House of Commons	13:45	House of Lords

Theme Mode

- Each time you press the **GREEN** button, the mode will change between TV and radio.
- When caution appears in radio mode screen, press **EXIT** to turn it off.

## Basic adjustment settings (Digital)

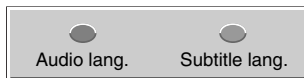
### Subtitle language

You can select the preferred subtitle language from the list.

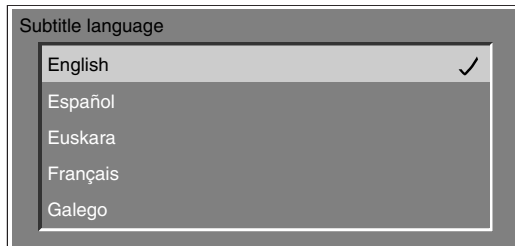
**1** Press **DTV MENU** to display the DTV Menu screen.

**2** Press the **BLUE** button to display the Preference menu.

**3** Press the **GREEN** button to display the Subtitle language screen.



**4** Press **▲/▼** to select the desired language, and then press **OK**.



- Languages listed may be different for each programme.
- If you select “None”, no subtitles will be displayed.
- This setting is disabled if the channel is changed or the programme is finished.
- For details about the language list see page 35.

### Service list type

You can select the original service list or a user-defined list.

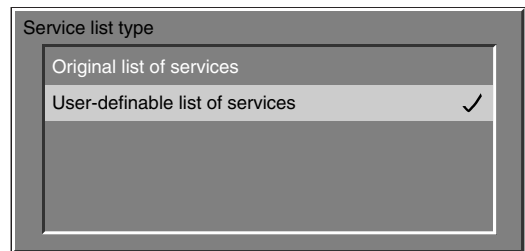
**1** Press **DTV MENU** to display the DTV Menu screen.

**2** Press the **GREEN** button to display the Setup menu.

**3** Press **▲/▼** to select “Service lists”, and then press **OK**.

**4** Press **▲/▼** to select “Service list type”, and then press **OK**.

**5** Press **▲/▼** to select “Original list of services” or “User-definable list of services”, and then press **OK**.



Selected item	Description
<b>Original list of services</b>	Original setting.
<b>User-definable list of services</b>	The setting user made is enabled.

#### NOTE

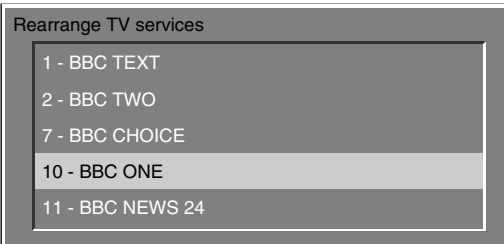
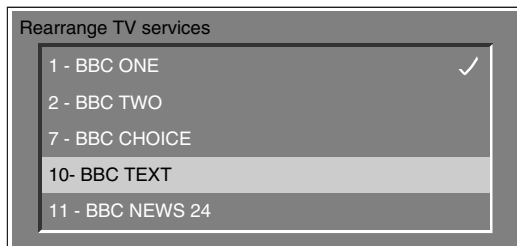
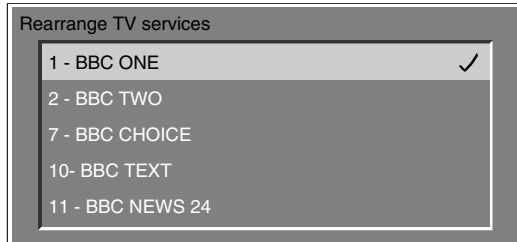
- When “Original list of services” is selected, the settings for “TV service lists” and “Radio service lists” are disabled and you cannot select “TV service lists”, “Radio service lists” and “Access restrictions” in the menu screen.

## Basic adjustment settings (Digital)

### Rearrange TV services

Channel positions can be sorted freely.

- 1 Press **DTV MENU** to display the DTV Menu screen.
- 2 Press the **GREEN** button to display the Setup menu.
- 3 Press **▲/▼** to select "Service lists", and then press **OK**.
- 4 Press **▲/▼** to select "TV service lists", and then press **OK**.
- 5 Press **▲/▼** to select the "Rearrange TV services", and then press **OK**.
- 6 Press **▲/▼** to select the channel you want to move and press **◀/▶** to select the item.
- 7 Move it to the desired position by pressing **▲/▼**, and then press **◀/▶**.
- 8 Repeat the steps 6 and 7 until all desired channels are arranged.



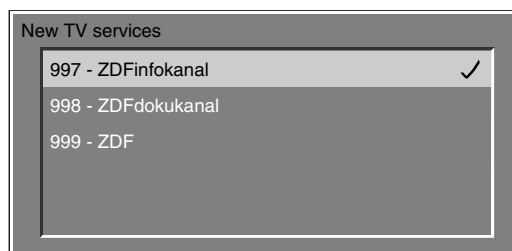
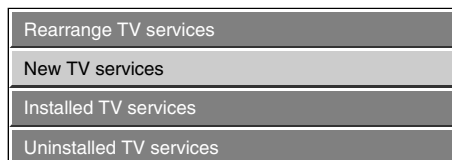
### Rearrange radio services

To perform "Rearrange radio services", select "Radio service lists" instead of "TV service lists" in step 4 above and follow the same steps 5 to 8 as explained in "Rearrange TV services".

### New TV services

Displays a list with all new installed TV services.

- 1 Repeat steps 1 to 3 in **Rearrange TV Services**.
- 2 Press **▲/▼** to select "TV service lists", and then press **OK**.
- 3 Press **▲/▼** to select the "New TV services", and then press **OK**.



- The services found by search are listed.

### New radio services

To perform "New radio services", select "New radio services" instead of "New TV services" in step 2 above and follow the same step 3 as explained in "New TV services".

## Basic adjustment settings (Digital)

### Installed TV services

You can confirm the installed services and delete the unwanted services from the TV service list.

**1** Press **DTV MENU** to display the DTV Menu screen.

**2** Press the **GREEN** button to display the Setup menu.

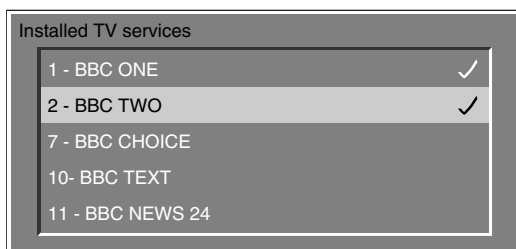
**3** Press **▲/▼** to select "Service lists", and then press **OK**.

**4** Press **▲/▼** to select "TV service lists", and then press **OK**.

**5** Press **▲/▼** to select the "Installed TV services", and then press **OK**.

**6** Press **▲/▼** to select the channel you want to delete from the list, then press **◀/▶** to select the item, and then press **OK**.

- The channel you deleted is moved to Uninstalled TV service list.



### Installed radio services

To perform "Installed radio services", select "Radio service lists" instead of "TV service lists" in step 4 above and follow the same steps 5 and 6 as explained in "Installed TV services".

### Uninstalled TV services

You can confirm the uninstalled services and put the services back to the TV service list.

**1** Press **DTV MENU** to display the DTV Menu screen.

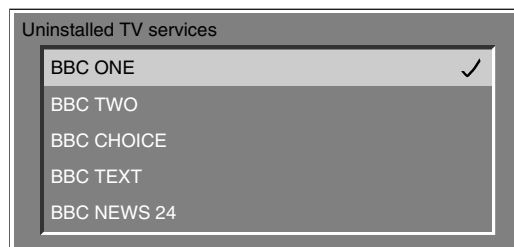
**2** Press the **GREEN** button to display the Setup menu.

**3** Press **▲/▼** to select "Service lists", and then press **OK**.

**4** Press **▲/▼** to select "TV service lists", and then press **OK**.

**5** Press **▲/▼** to select the "Uninstalled TV services", and then press **OK**.

**6** Press **▲/▼** to select the channel you want to put to the installed TV services list, then press **◀/▶** to select the item, and then press **OK**.



### Uninstalled radio services

To perform "Uninstalled radio services", select "Radio service lists" instead of "TV service lists" in step 4 above and follow the same steps 5 and 6 as explained in "Uninstalled TV services".

## Basic adjustment settings (Digital)

### Country

Select the country where you are located.

**1** Press **DTV MENU** to display the DTV Menu screen.

**2** Press the **GREEN** button to display the Setup menu.

**3** Press **▲/▼** to select "Installation", and then press **OK**.

**4** Press **▲/▼** to select "Country", and then press **OK**.  
If you already set the PIN, enter it here. If not, enter the factory preset PIN "1234".  
• See page 78 for setting PIN.

**5** Press **▲/▼** to select the country where you are located, and then press **OK**.



#### NOTE

The following information is supported by selecting country:

- The logical channel numbering.
- The frequency band to be scanned during service scan.
- The maturity rating settings to be used.
- The time zone to be used.
- The daylight saving time period to be used.

### System software

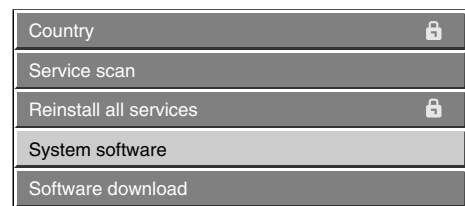
Displays System Software version information.

**1** Press **DTV MENU** to display the DTV Menu screen.

**2** Press the **GREEN** button to display the Setup menu.

**3** Press **▲/▼** to select "Installation", and then press **OK**.

**4** Press **▲/▼** to select "System software", and then press **OK**.



#### Example



- The version number may be different dependent on the installed software.



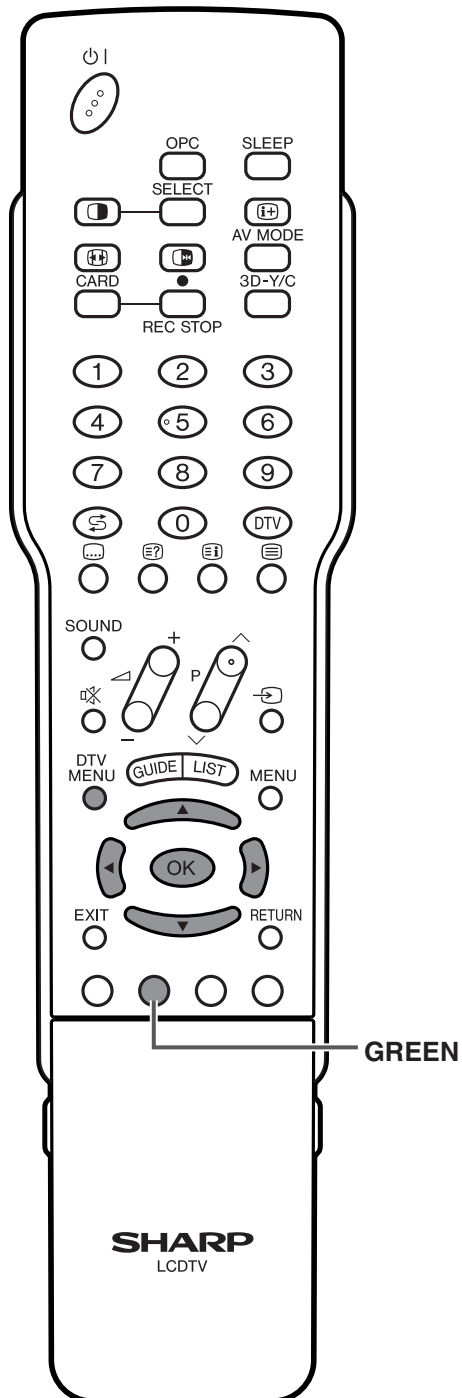
## Basic adjustment settings (Digital)

### Using Over Air Download function

The software for controlling the built-in DTV decoder can be upgraded when necessary. In Great Britain this can be achieved via an Over Air Download. To make use of this function it needs to be enabled in the "Setup" menu.

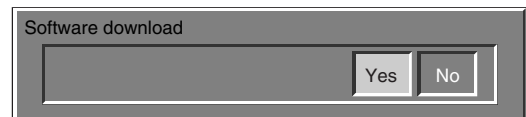
#### Preparation

- If the user would like to make use of this facility, it is necessary to set the "Software download" function to "Yes".



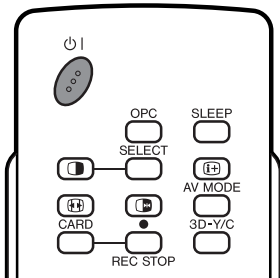
### Enabling Software download

- 1 Press **DTV MENU** while the TV set is receiving a digital TV programme. DTV MENU screen appears.
- 2 Press the **GREEN** button to display the Setup menu.
- 3 Press **▲/▼** to select "Installation", and then press **OK**.
- 4 Press **▲/▼** to select "Software download", and then press **OK**.
- 5 To enable the "Over Air Download", press **◀/▶** to select "Yes" and then press **OK**.



## Basic adjustment settings (Digital)

### Performing Over Air Download



Use the **POWER** button on the remote control to enter standby mode.

#### Preparation

- Please confirm the current system software version and note it down. This is available via the “System software” option. See page 43.

1

The Update Information for the “Over Air Download” automatically appears while you are viewing a DTV program, when a new version is available. (The forwarded schedule changes the Update Information display.)

2

A confirmation message for the Update Information appears.



The message shows the time of software update.

- Confirm the update time and note it down.
- You can start software update immediately when no information on the update time is provided.



Selected item	Description
<b>Ask again later</b>	Use this option to perform the download at a more convenient time. The options will appear again when the power is next turned on with DTV input mode selected.
<b>Accept this software</b>	Performs a download this time.
<b>Reject this software</b>	Does not download this software version.

#### NOTE

- If you select “Ask again later” the same message appears each time when the power is turned on with DTV input mode selected.
- We recommend that you select “Accept this software” and perform the update.
- If you select “Reject this software” and press **OK**, this version update will not be available again for download. (Update Information for this version will not appear again.) However, the “Over Air Download” notification will automatically appear again when a new version of software becomes available.

Select from the available options you choose and confirm by pressing **OK**.

3

With “Accept this software” selected in step 2, the screen now shows the time of next software update.



- Press **OK** to return to normal screen.

4

After the setting is complete, the System will automatically execute Software Download while you are away.

#### NOTE

- If the message prompts you to turn the System off once and then on to start the update, press **POWER** to enter standby and press **POWER** again to turn back on.
- After the power on the screen automatically switches to the download channel and download screen opens.

#### CAUTION

- Do not use **MAIN POWER** (Ⓢ) on the Display to turn the System off or disconnect the AC cords when the software update is programmed. Doing so may cause the update to fail. If problem arises ask a qualified service personnel until the software update period expires.

#### NOTE

- The software update may take about 30 minutes, but may take longer (up to 1 hour) depending on the signal status. While updating, you can switch to TV or external input mode or enter standby mode using **POWER** on the remote control unit.

#### If Software Download starts while you are watching analogue TV broadcasts:

- The screen alerts you and the update will start automatically.
- To cancel the download, switch to the DTV mode and follow the messages displayed on screen.

#### If Software Download starts while you are watching DTV broadcasts:

- A confirmation message appears and the update will start by following the messages displayed on screen.
- To cancel the download, select “No”, and then press **OK**.

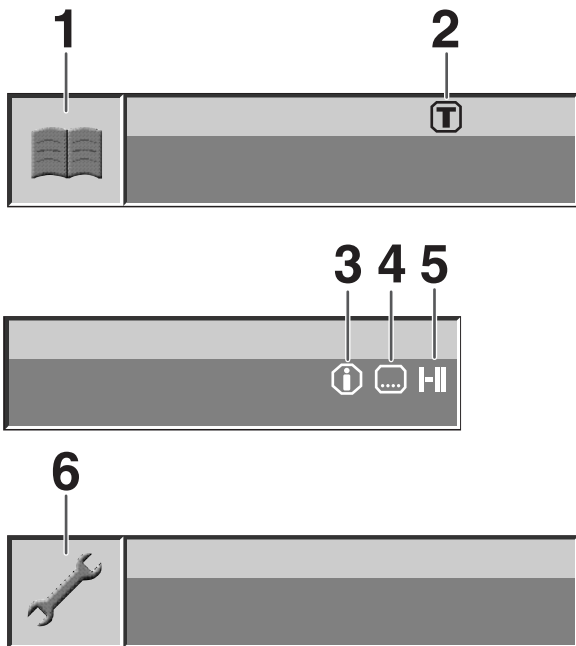
5

To confirm that the update was successful start the System Software (see page 43) and check the version number .

**DO NOT turn off the power using MAIN POWER (Ⓢ) on the Display while software update is in progress. This may lead to serious damage.**

## Basic adjustment settings (Digital)

### Icons

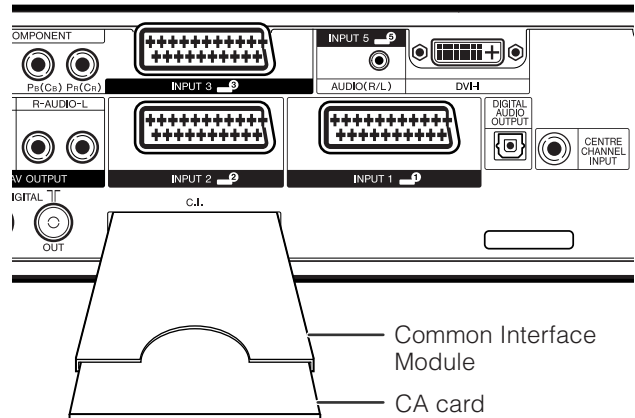


- 1 General EPG icon.
- 2 Indicates that at least one theme is selected.
- 3 Indicates that additional event information is available.
- 4 Indicates that at least one subtitle language is available.
- 5 Indicates that at least two audio languages are available.
- 6 General setup menu icon.

### Common Interface

A single DVB Common Interface (CI) will be implemented to allow adoption of a Conditional Access (CA) system by means of a plug-in CA module. Scrambled Broadcasting service can be routed via the CA system.

If the CA system on the CI module requires a smart-card reader, this reader shall be part of the CI module.



When the compatible CA card is inserted, you can view the programme without any operations.

When the compatible card is not inserted:

- ① Select the programme which needs the compatible CA card.
  - The caution screen appears
- ② Insert the compatible CA card.
  - The caution screen disappears and you can view the programme.

CA system supported by

Crypto Works  
MediaGuard  
VIAccess  
Conax  
Nagra Vision  
Irdeto

### NOTE

- To view paid TV broadcasting, you need to make a contract with a service provider. Please contact a service provider for details.
- The Common Interface Module and the CA card are neither supplied nor optional accessories.

# Basic adjustment settings (Analogue/Digital)

## Language setting for on-screen display

You can also select a language from setup menu. Select from among 10 languages: English, German, French, Italian, Spanish, Dutch, Swedish, Portuguese, Finnish and Turkish.

- 1** Press **MENU** and the MENU screen displays.
- 2** Press **◀/▶** to select "Setup".
- 3** Press **▲/▼** to select "Language", and then press **OK**.
- 4** Press **▲/▼/◀/▶** to select the desired language listed on the screen, and then press **OK**.

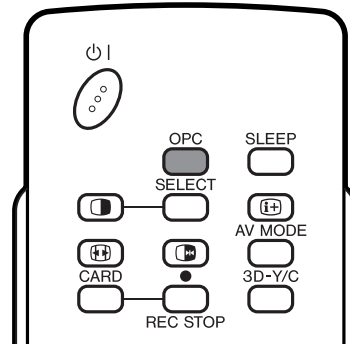
### Language list

Dutch	Italian
English	Portuguese
Finnish	Spanish
French	Swedish
German	Turkish

## OPC setting

Automatically adjusts the brightness of the screen.

### Using OPC on the remote control unit



Press **OPC** to switch the Optical Picture Control on and off.

### Using OPC on the menu screen

- 1** Press **MENU** and the MENU screen displays.
- 2** Press **◀/▶** to select "Picture".
- 3** Press **▲/▼** to select "OPC".
- 4** Press **◀/▶** to select "On".

### NOTE

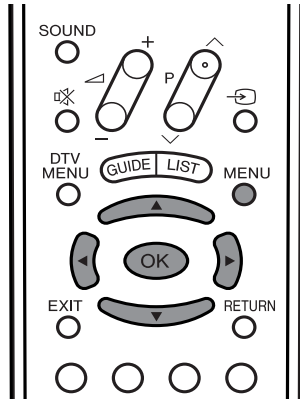
- When set to "On", the System senses the surrounding light and automatically adjusts the backlight brightness. Make sure no object obstructs the OPC sensor, which could affect its ability to sense surrounding light.

Selected item	Description
<b>Off</b>	The brightness is fixed at the value set in "Backlight" (see page 48).
<b>On</b>	Automatically adjusts

## Basic adjustment settings (Analogue/Digital)

### Picture adjustments

Adjust the picture to your preference with the following picture settings.



1

Press **MENU** and the MENU screen displays.

2

Press **◀/▶** to select "Picture".

3

Press **▲/▼** to select a specific adjustment item.

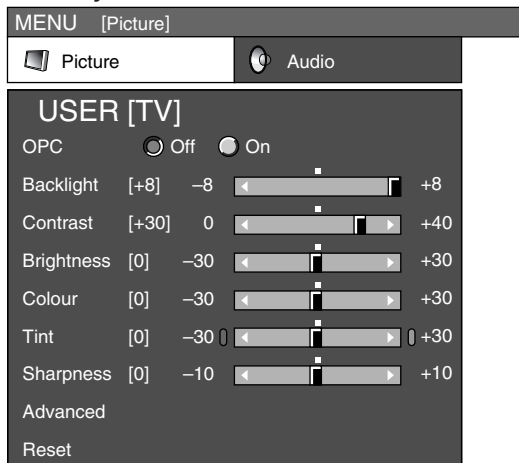
4

Press **◀/▶** to adjust the item to your desired position.

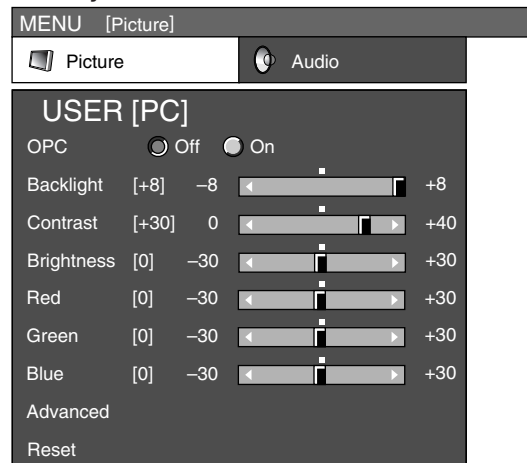
#### NOTE

- For resetting all adjustment items to the factory preset values, press **▲/▼** to select "Reset", and then press **OK**.

### Adjustments items for AV source



### Adjustments items for PC source



Selected item	◀button	▶button
<b>Backlight</b>	The screen dims	The screen brightens
<b>Contrast</b>	For less contrast	For more contrast
<b>Brightness</b>	For less brightness	For more brightness
<b>Colour</b>	For less colour intensity	For more colour intensity
<b>Tint</b>	Skin tones become purplish	Skin tones become greenish
<b>Sharpness</b>	For less sharpness	For more sharpness

#### NOTE

- Select "Advanced" and then press **OK** to set "C.M.S-Hue", "C.M.S-Saturation", "C.M.S-Value", "Colour Temp", "Black", "3D-Y/C", "Monochrome", "Film Mode" or "I/P Setting". See pages 49 and 50.

Selected item	◀button	▶button
<b>Backlight</b>	The screen dims	The screen brightens
<b>Contrast</b>	For less contrast	For more contrast
<b>Brightness</b>	For less brightness	For more brightness
<b>Red</b>	For weaker red	For stronger red
<b>Green</b>	For weaker green	For stronger green
<b>Blue</b>	For weaker blue	For stronger blue

#### NOTE

- Select "Advanced" and then press **OK** to set "C.M.S-Hue", "C.M.S-Saturation" and "C.M.S-Value".

## Basic adjustment settings (Analogue/Digital)

### C.M.S. (Colour Management System)

Colour tone is managed using the six-colour adjustment setting.

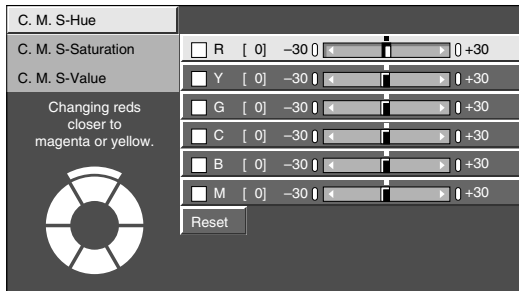
**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Picture".

**3** Press **▲/▼** to select "Advanced", and then press **OK**.

**4** Press **▲/▼** to select "C.M.S.-Hue", and then press **OK**.

**5** Press **▲/▼** to select a specific adjustment item.



- You can select "C.M.S-Saturation" or "C.M.S-Value" here instead of selecting "C.M.S-Hue".

**6** Press **◀/▶** to adjust the item to your desired position.

#### NOTE

- For resetting all adjustment items to the factory preset values, press **▲/▼** to select "Reset", and then press **OK**.

Selected item	Description
<b>C.M.S-Hue</b>	This is a standard to adjust the colour either more reddish or more bluish in tone.
<b>C.M.S-Saturation</b>	Increases or decreases the saturation of a selected colour
<b>C.M.S-Value</b>	A higher value makes the image brighter. A lower value makes the image darker.

### Colour temperature

Adjusts the colour temperature to give the best white image.

**1** Repeat steps 1 to 3 in **C.M.S. (Colour Management System)**.

**2** Press **▲/▼** to select "Colour Temp", and then press **OK**.

**3** Press **▲/▼** to select the desired level, and then press **OK**.

Selected item	Description
<b>High</b>	White with bluish tone ↑↓ White with reddish tone
<b>Mid-High</b>	
<b>Mid</b>	
<b>Mid-Low</b>	
<b>Low</b>	

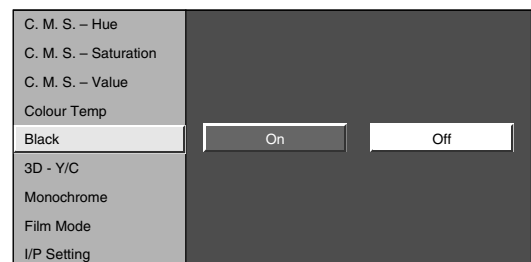
### Black

For easier viewing, change the viewing depth by selecting a level for automatically adjusting the dark portion of an image.

**1** Repeat steps 1 to 3 in **C.M.S. (Colour Management System)**.

**2** Press **▲/▼** to select "Black", and then press **OK**.

**3** Press **▲/▼** to select "On", and then press **OK**.



Selected item	Description
<b>Off</b>	No adjustment
<b>On</b>	For high detail in black portions

## Basic adjustment settings (Analogue/Digital)

### 3D-Y/C

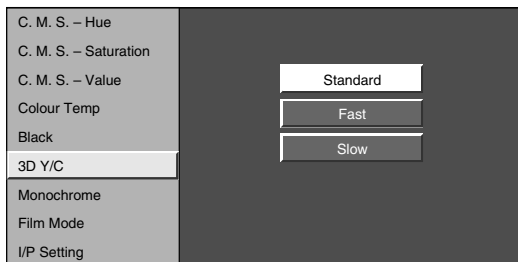
Provides high quality images with minimal dot crawl and cross colour noise.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Picture".

**3** Press **▲/▼** to select "Advanced", and then press **OK**.

**4** Press **▲/▼** to select "3D-Y/C", and then press **OK**.



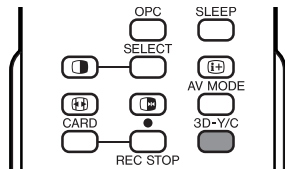
**5** Press **▲/▼** to select the desired level, and then press **OK**.

Selected item	Description
<b>Standard</b>	Normal adjustment
<b>Fast</b>	For movie image
<b>Slow</b>	For still image

#### NOTE

- "3D-Y/C" is not selectable depending on the input signal type.

### Activating 3D-Y/C on the remote control unit



Press **3D-Y/C** to switch the 3D-Y/C function on and off.

#### NOTE

- "3D-Y/C" is set to "On" when the System is turned back on.
- 3D-Y/C may not operate depending on the input signal type.

### Monochrome

For viewing a video in monochrome.

**1** Repeat steps 1 to 3 in **3D-Y/C**.

**2** Press **▲/▼** to select "Monochrome", and then press **OK**.

**3** Press **◀/▶** to select "On", and then press **OK**.

#### NOTE

- When Monochrome is set to "On", the menu screen in DTV mode displays in monochrome.

### Film mode

Automatically detects a film-based source (originally encoded at 24/25 frames/second, depending on the vertical frequency), analyses it then recreates each still film frame for high-definition picture quality.

**1** Repeat steps 1 to 3 in **3D-Y/C**.

**2** Press **▲/▼** to select "Film Mode", and then press **OK**.

- Some items may be greyed out. They are not selectable.

**3** Press **◀/▶** to select "On", and then press **OK**.

### I/P setting

Adjusting the image and input signal can give you a more beautiful picture.

**1** Repeat steps 1 to 3 in **3D-Y/C**.

**2** Press **▲/▼** to select "I/P Setting", and then press **OK**.

- Some items may be greyed out. They are not selectable.

**3** Press **◀/▶** to select "Interlace" or "Progressive", and then press **OK**.

#### NOTE

- The I/P Setting is set to Progressive when Film Mode is "On".

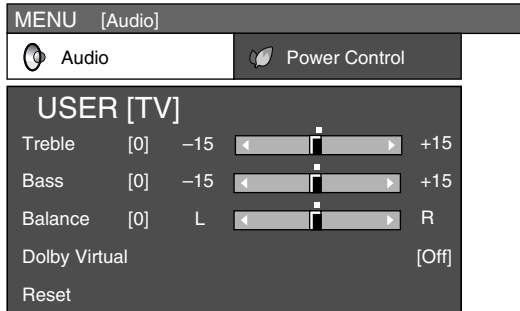
## Basic adjustment settings (Analogue/Digital)

### Audio adjustment

You can adjust the sound quality to your preference with the following settings.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Audio".



**3** Press **▲/▼** to select a specific adjustment item.

**4** Press **◀/▶** to adjust the item to your desired position.

Selected item	◀ button	▶ button
<b>Treble</b>	For weaker treble	For stronger treble
<b>Bass</b>	For weaker bass	For stronger bass
<b>Balance</b>	Decrease audio from the right speaker	Decrease audio from the left speaker

#### NOTE

- For resetting all adjustment items to factory preset values, press **▲/▼** to select "Reset", press **OK**, press **◀/▶** to select "Yes", and then press **OK**.
- Audio menu items are greyed out when Audio output is variable or when headphones are in use.
- Balance is greyed out when Dolby Virtual is set to "On".

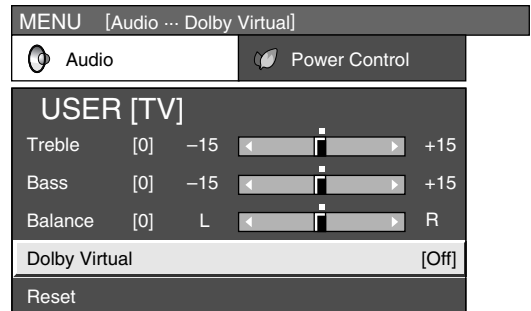
### Dolby Virtual

You can also produce Dolby Virtual effects from the "Audio" setting.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Audio".

**3** Press **▲/▼** to select "Dolby Virtual", and then press **OK**.



**4** Press **◀/▶** to select "On", and then press **OK**.

#### NOTE

- Audio menu items are greyed out when Audio output is variable or when headphones are in use.
- External Audio Bypass is greyed out when Dolby Virtual is set to "On".
- Balance is greyed out when Dolby Virtual is set to "On".
- For some discs, setup may be required on your DVD. In this case, please refer to the operation manual of your DVD player.
- You may not get the Dolby Virtual Surround effect if you adjust "Treble" or "Bass" setting.



## Basic adjustment settings (Analogue/Digital)

### Power control

Power control setting allows you to save energy.

#### Power control for AV source

##### No Signal off

When set to "Enable", the power will automatically shut down if no signal inputs for 15 minutes.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Power control".  
• Power control menu displays.

**3** Press **▲/▼** to select "No Signal Off", and then press **OK**.

**4** Press **◀/▶** to select "Enable", and then press **OK**.  
• Five minutes before the power shuts down, remaining time displays every minute.

#### NOTE

- "Disable" is factory preset value.
- When a TV programme finishes, and the AVC System receives signal input, this function may not operate.

##### No Operation off

When set to "Enable", the power will automatically shut down if there is no operation for 3 hours.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Power control".  
• Power control menu displays.

**3** Press **▲/▼** to select "No Operation Off", and then press **OK**.

**4** Press **◀/▶** to select "Enable", and then press **OK**.  
• Five minutes before the power shuts down, remaining time displays every minute.

#### NOTE

- "Disable" is factory preset value.

### Power control for PC source

Power control setting allows you to save energy.

#### Power management

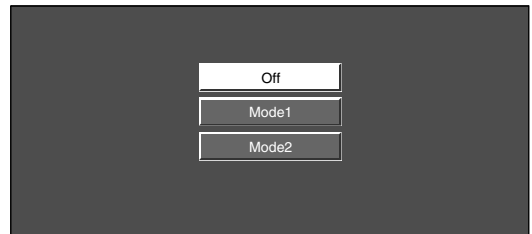
When set, the power will automatically shut down.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Power control".  
• Power control menu displays.

**3** Press **▲/▼** to select "Power Management", and then press **OK**.

**4** Press **▲/▼** to select "Mode1" or "Mode2", and then press **OK**.



Selected item	Description
<b>Off</b>	<ul style="list-style-type: none"> <li>• No power management</li> <li>• Factory preset value.</li> </ul>
<b>Mode1</b>	<ul style="list-style-type: none"> <li>• If no signal inputs for 8 minutes, the power shuts down.</li> <li>• Even if you start using the PC and the signal inputs again, the System stays off.</li> <li>• The System turns on again by pressing STANDBY/ON button on the Display or <b>⏻</b> on the remote control unit. (See page 19.)</li> </ul>
<b>Mode2</b>	<ul style="list-style-type: none"> <li>• If no signal inputs for 8 seconds, the power shuts down.</li> <li>• When you start using the PC and the signal inputs again, the System turns on.</li> <li>• The System turns on again by pressing STANDBY/ON button on the Display or <b>⏻</b> on the remote control unit. (See page 19.)</li> </ul>

# Using memory card

## Important notes on using memory cards

- Sharp cannot be held responsible for misuse of the LCD TV set, any troubles during use, or other problems, or any damages arising out of the use of the LCD TV set, except for those cases for which Sharp is liable by law.
- If you or other people misuse the LCD TV set, or the LCD TV set is affected by static electricity or electrical noise, the recorded data may be in danger of being changed or lost.
- If you are making an important recording, run a test in advance to ensure that the recording would be performed correctly in terms of picture or sound quality.
- Sharp cannot be held responsible nor make any compensations even if pictures or sound cannot be recorded correctly because of any troubles when using the LCD TV set.

### Copyright

Note:

For U.K.

- Recording and playback of any material may require consent. Please refer particularly to the provisions of the Copyright Act 1956, the Dramatic and Musical Performers Protection ACT 1958, the Performers Protection Acts 1963 and 1972 and to any subsequent statutory enactments and orders.

For Europe

- Audio-visual material may consist of copyrighted works which must not be recorded without the authority of the owner of the copyright.

Please refer to relevant law in your country.

Duplicating images and music by copying and/or editing from videocassettes and/or TV programmes that are subject to copyrights is only permitted when the edited or copied versions are used for personal pleasure. With the exception of cases when the user personally is the owner of the copyrights of the object in question or when specific and written permission has been obtained from the owner(s) of the object in question, the user is not permitted to make copies and/or duplications and/or edited versions as this constitutes a violation of the copyright laws, possibly exposing the user to demands for compensation for damages. Therefore, be sure to strictly observe the existing copyright laws.

In addition when using image data that includes third parties, since the use of such images without prior permission may constitute an intrusion on the privacy of third parties, be sure to refrain from such usage.

## The recording formats

<b>Still picture</b>	<b>Recording/Playback file format</b>	JPEG (DCF compliant)
	<b>Size of a captured still picture</b>	640 × 480 dots
<b>Motion picture</b>	<b>Recording file format</b>	SP/LP... ASF (Motion Picture: MPEG-4 compliant, Sound: WMA-compliant) EP..... ASF (Motion Picture: MPEG-4 compliant, Sound: G.726-compliant)
	<b>Size of a recorded motion picture/number of frames</b>	SP ... Size: 320 × 240 dots, Frame: approx. 25 frames/sec (50 Hz) LP ... Size: 320 × 240 dots, Frame: approx. 25 frames/sec (50 Hz) EP ... Size: 320 × 240 dots, Frame: approx. 12.5 frames/sec (50 Hz)
	<b>Playback file format</b>	ASF (Motion Picture: MPEG-4 compliant, Sound: WMA-compliant) ASF (Motion Picture: MPEG-4 compliant, Sound: G.726-compliant)

\* Motion picture files and still image files recorded, stored or edited with other devices may not play back correctly.

## Approximate number of recordable pictures/time

Still pictures

	Picture size	Memory card	
		32MB	128MB
<b>Recordable Pictures</b>	640 × 480	Approx. 300 pictures	Approx. 1000 pictures

\* Recordable numbers may vary depending on the receiving condition of the LCD TV set and/or content of images.

Motion pictures

	Picture size	Recording mode	Memory card capacity	
			256MB	5GB
<b>Recordable time</b>	320 × 240	SP	Approx. 10 min.	Approx. 4h
	320 × 240	LP	Approx. 30 min.	Approx. 10h
	320 × 240	EP	Approx. 1h	Approx. 25h

- Recordable time may vary depending on receiving condition of the LCD TV set or content of images.
- The maximum amount of data you can record on a memory card is 1,000 pictures in total including still and motion pictures.
- Files in excess of 4GB and files exceeding 12 hours of recording time cannot be recorded and/or played back.

## Using memory card

You can use memory cards (commercially available) for recording and playing back pictures.

- Please use an appropriate PC card adapter (commercially available) for each memory card.
- Following memory cards are available. (Note that names for memory cards vary depending on manufacturers.)

Memory card name	Storage capacity
SD Memory Card	512 MB or less
mini SD™ Card	32 MB or less
CompactFlash	2 GB or less
MultiMediaCard	128 MB or less
SmartMedia	128 MB or less
Memory Stick	128 MB or less
Memory Stick PRO	1 GB or less
Microdrive	2 GB or less
xD Picture Card	128 MB or less
PC Card Hard Disk	5 GB or less

\* Each memory card name is a trademark.

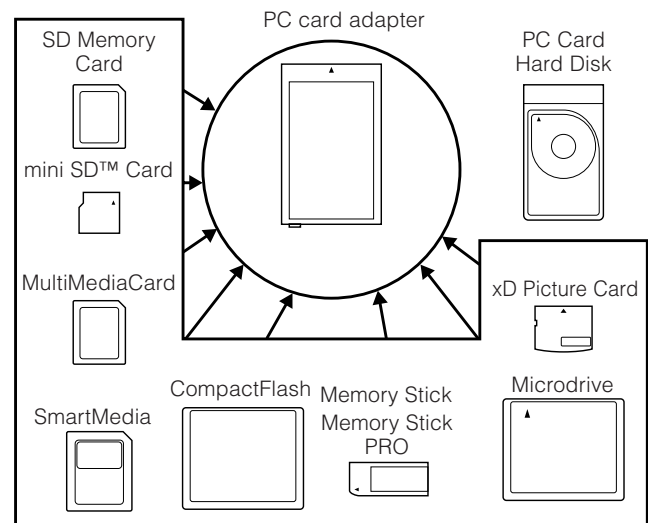
\* The capacity of memory card is approximate. The capacity varies depending on the manufacturer.

- To read picture files recorded with digital cameras, use the PC card adapter recommended by the corresponding manufacturer. (The names for PC card adapters vary depending on manufacturers.)
- For directions for use of digital cameras or PC card adapters, please refer to the operation manual provided for each product.
- Depending on the card or adapter used, normal operation may not be possible.

You can playback DCF compliant JPEG pictures captured with other devices in the card playback mode.

- DCF (Design rule for Camera File system) is a standard of the Japan Electronics and Information Technology Industries Association (JEITA). This standard specifies the image file format used for images shot with a digital camera.
- Some motion pictures recorded with other devices may not be played back correctly.

## Commercially available memory cards

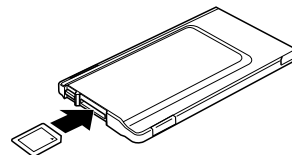


- Please use an appropriate PC card adapter (commercially available) for each memory card.

## Preparing a memory card

Insert a memory card (commercially available) into a PC card adapter (commercially available).

Example:  
Inserting the SD memory card into a PC card adapter.



### Notes on using memory cards and PC card adapter

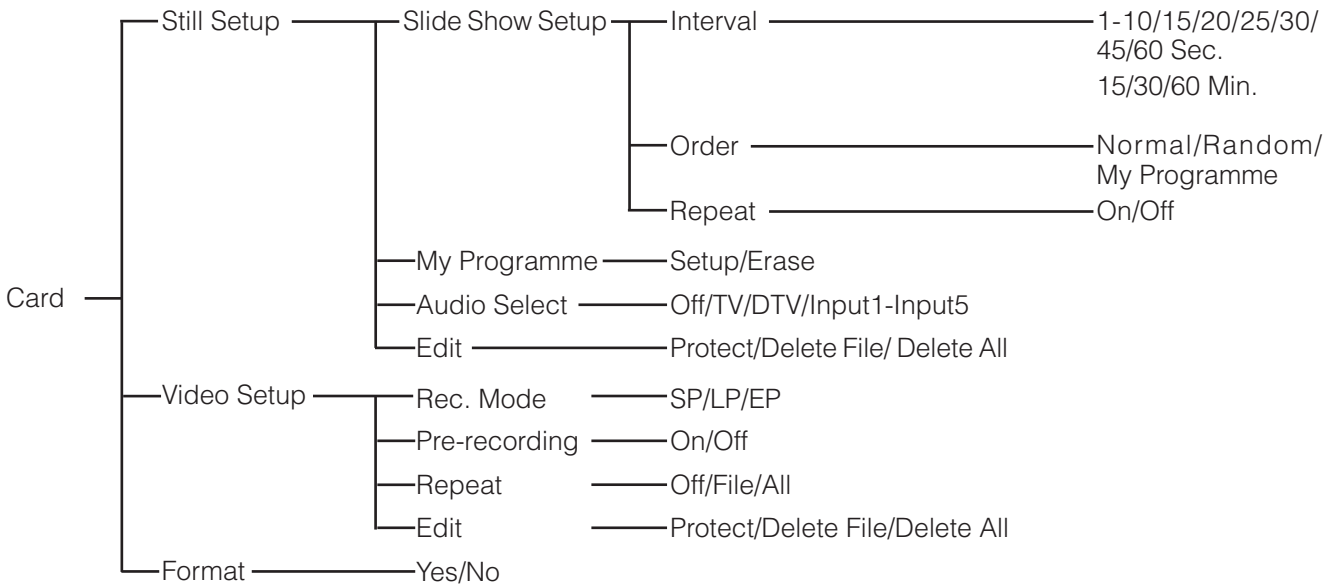
Please note the following when using memory cards and PC card adapters to avoid corruption of data or malfunction of the LCD TV set.

- If you use memory cards other than those shown above, recording or playing back pictures are not guaranteed.
- Some PC card adapters have restrictions of memory card capacity. Refer to the relevant operation manual for such restrictions.
- Some pictures which have been created, modified, or copied on your PC may not be played back.
- Please be sure to turn off the LCD TV set when you insert or remove a PC card adapter.
- Do not bend, drop or apply a shock to memory cards or PC card adapters.
- Keep memory cards or PC card adapters away from heat, water or direct sunlight.
- Do not dismantle or modify memory cards or PC card adapters.
- Refer to the appropriate operation manuals for details on using or keeping memory cards or PC card adapters.
- Do not turn the LCD TV set off while a memory card is in operation (e.g. playing back, recording or displaying a slideshow).
- The recorded data may be erased or changed due to incorrect operation, the influence of static electricity and electrical noise, therefore be sure to back-up the data regularly.
- Be sure to back-up important files using other media such as a PC.

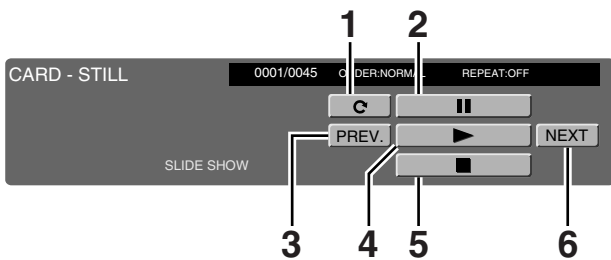
## Using memory card

### Card Setup mode menu items

Press the **CARD** button first to access following items.

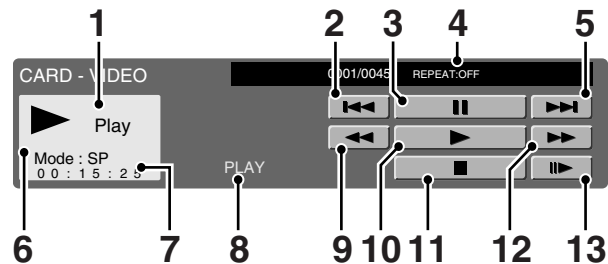


### Slide show operation panel



- 1 Rotate the image
- 2 Pause
- 3 Go to previous image
- 4 Start slide show
- 5 Stop slide show
- 6 Go to next image

### Motion picture operation panel



- 1 Action
- 2 Go back to the beginning of the file
- 3 Pause
- 4 Repeat playback setting
- 5 Go to the beginning of the next file
- 6 Recording mode
- 7 Counter
- 8 Current action
- 9 Reverse
- 10 Playback
- 11 Stop
- 12 Fast forward
- 13 Slow playback

### Precautions when playing back PC image data on the LCD TV

#### Recording formats of image data:

When recording image data on the LCD TV, the recording formats are as follows.

- When recording motion pictures: The SD\_VIDEO folder is created and the data is stored in. When playing the card, the SD\_VIDEO recording format is recognised.
- When recording still pictures: The DCIM folder is created and the data is stored in. When playing the card, the DCIM recording format is recognised.

#### When playing the card, record PC data in a recording format the LCD TV can recognise.

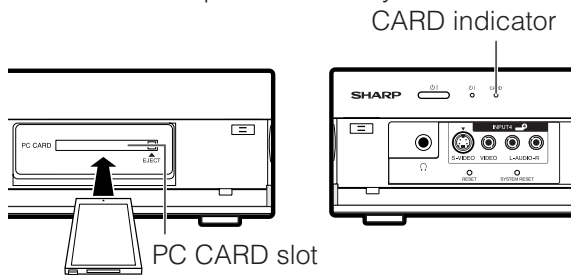
1. When copying motion pictures from a PC to a card recorded with the LCD TV, only play these pictures after placing them in the SD\_VIDEO folder.
2. When copying still pictures from a PC to a card recorded with the LCD TV, only play these pictures after placing them in the DCIM folder.
3. When using a new card for copying motion pictures, first format the card and create an SD\_VIDEO folder before placing the data in the folder for playback.
4. When using a new card for copying still pictures, first format the card and create a DCIM folder before placing the data in the folder for playback.

**When creating, revising, or copying images using your PC, the edited images may not playback correctly.**

## Using memory card

### Inserting a PC card adapter

- Press in the EJECT button if it is popped out.
- Insert a memory card to a PC card adapter beforehand. (See page 54.)
- Insert the PC adapter card slowly.



- CARD indicator lights up green when the card is inserted.

#### NOTE

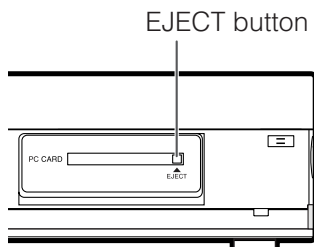
- When “Card is not inserted” is displayed, eject the PC card adapter, and then insert the PC card adapter slowly all the way to the end.
- When over a thousand files are in a card, it takes several minutes to load. (approx. 5 minutes.)
- Even if the green light is on, you can not record on a card right after you inserted it.
- Make sure the CARD indicator lights green when you take out a card. Never take out a card when the CARD indicator lights red. This may damage the card.

### Ejecting the card

- Make sure the card indicator lights up green.

1

- Press **EJECT** button.
- EJECT button is popped up.



2

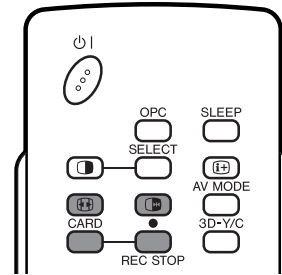
- Press **EJECT** button again.
- PC card adapter itself pops up.

3

- Take out the PC card adapter.

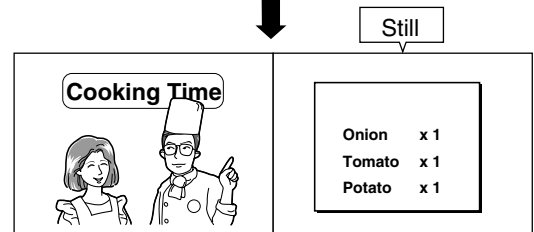
### Recording a still image

You can record a still image on the card.



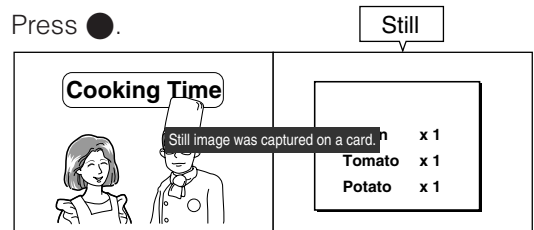
1

Press **CARD**.



2

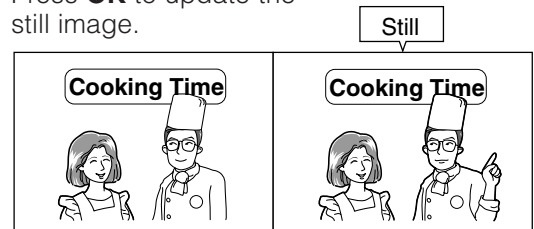
Press **OK**.



- “Still image was captured on a card.” displays.
- Recording may fail depending on the input signal type or card memory status.

3

Press **OK** to update the still image.



#### NOTE

**Broadcasting types or input signals not available for recording:**

- ① DTV broadcasting
- ② COMPONENT input
- ③ RGB input
- ④ Copy guarded signal
- ⑤ DVI-I input

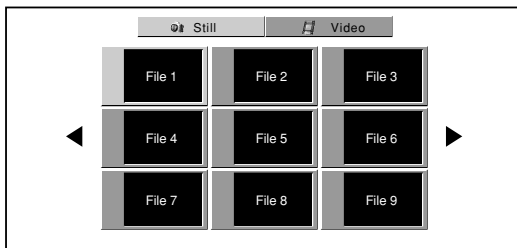
## Using memory card

### Selecting Still mode

- 1 Press **CARD** and the card mode screen displays.
- 2 Press **◀/▶** to select "Still", and then press **OK**.
  - When in CARD mode, press **0-9** or **↻** to switch either TV or AV input mode.

### Displaying a still image

- 1 Press **CARD** and the card mode screen displays.
- 2 Press **◀/▶** to select "Still" and press **OK**.
- 3 Press **▲/▼/◀/▶** to select a file you want to display, and then press **OK**.

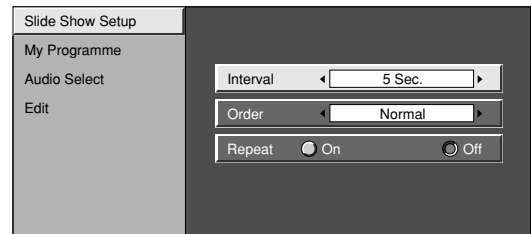


- To display the files that are in the previous or next page, select **◀/▶** on the index screen and press **OK**.
- When viewing a still image, by pressing **⏏** the image size changes. Normal – Full. This function does not work when displaying the index screen.

### Setting Slide Show

You can adjust the interval, order and repeat settings.

- 1 Press **CARD** and the card mode screen displays.
- 2 Press **MENU** and the MENU screen displays.
- 3 Press **◀/▶** to select "Card".
- 4 Press **▲/▼** to select "Still Setup", and then press **OK**.
- 5 Press **▲/▼** to select "Slide Show Setup" and then press **OK**.



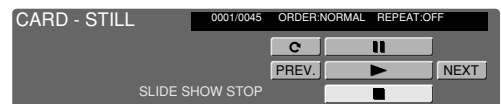
- 6 Press **▲/▼/◀/▶** to select the desired slide show setting, and then press **OK**.

Selected item	Description
<b>Interval</b>	Set the frame interval for a slideshow.
<b>Order</b>	Set the frame order for a slideshow. See My Programme for details.
<b>Repeat</b>	If set to "On", the slideshow will play again after showing the last frame.

### Displaying slide show

- 1 Repeat steps 1 to 3 in **Displaying a still image**.

- The operation panel displays.



- 2 Press **▲/▼/◀/▶** to select **▶**, and then press **OK**.

- Slide show starts.
- Operate slide show with the operation panel appears on the screen.
- To turn off the operation panel, press **CARD** on the remote control.
- Press **||** to pause the slideshow, and press **■** to return to the index screen.

### NOTE

- See page 55 for operation panel function.
- You cannot rotate the image during slide show. Stop slide show to rotate the image.

## Using memory card

### My Programme

You can select up to thirty-two pictures and specify the order for displaying in slide show.

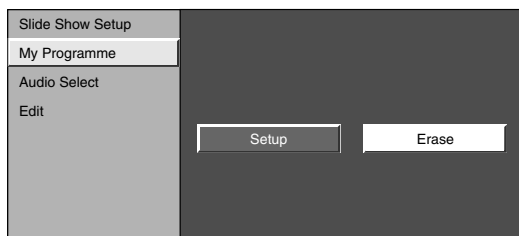
**1** Press **CARD** and the card mode screen displays.

**2** Press **MENU** and the MENU screen displays.

**3** Press **◀/▶** to select "Card".

**4** Press **▲/▼** to select "Still Setup", and then press **OK**.

**5** Press **▲/▼** to select "My Programme", and then press **OK**.



**6** Press **◀/▶** to select "Setup", and then press **OK**.

**7** Press **▲/▼/◀/▶** to select the files, and then press **OK**.

**8** Repeats the operation in step 7. (You can select up to 32 files.)

**9** After selecting all the files you want, press **RETURN** to return to MENU.

### To cancel My Programme setting

**1** Select "Erase" at step 6 in **My Programme** and then press **OK**.

**2** Press **◀/▶** to select "Yes", and then press **OK**.

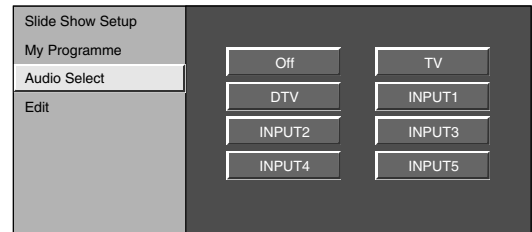
- All the registered numbers are cleared.

### Audio Select

You can enjoy the audio from TV or other external equipment during the still image playback.

**1** Repeat steps 1 to 4 in **My Programme**.

**2** Press **▲/▼** to select "Audio Select", and then press **OK**.



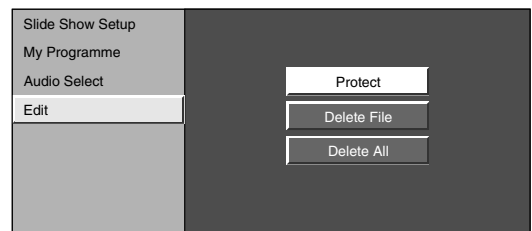
**3** Press **▲/▼/◀/▶** to select the desired sound output, and then press **OK**.

### Protecting/unprotecting still image files

You can protect any file you do not want to delete.

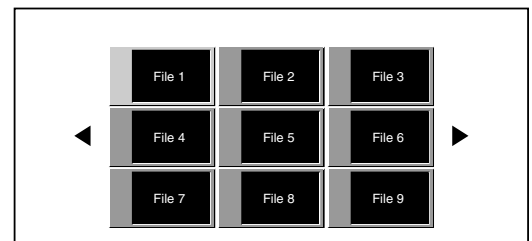
**1** Repeat steps 1 to 4 in **My Programme**.

**2** Press **▲/▼** to select "Edit", and then press **OK**.



**3** Press **▲/▼** to select "Protect", and then press **OK**.

- The list of still image files displays.



**4** Press **▲/▼/◀/▶** to select the file you want to protect, and then press **OK**.

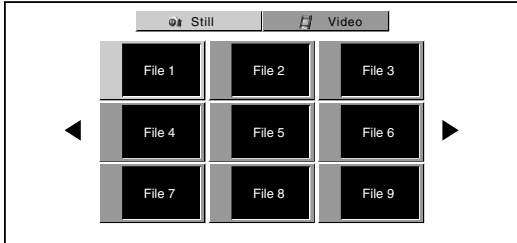
- Protect mark (🔒) displays.
- Select the file with a protect mark and press **OK** to unprotect it.

### NOTE

- You cannot delete a protected file on the card.

## Using memory card

### Deleting a still image file

- 1 Press **CARD** and the card mode screen displays.
- 2 Press **MENU** and the MENU screen displays.
- 3 Press **◀/▶** to select "Card".
- 4 Press **▲/▼** to select "Still Setup", and then press **OK**.
- 5 Press **▲/▼** to select "Edit", and then press **OK**.
- 6 Press **▲/▼** to select "Delete File", and then press **OK**.
- 7 Press **▲/▼/◀/▶** to select the file you want to delete, and then press **OK**.  

- 8 Press **◀/▶** to select "Yes", and then press **OK**.
- 9 Repeat the operations in steps 7 and 8 above.
- 10 After deleting the images you no longer need, press **RETURN** to return to MENU.

#### NOTE

- You cannot delete a protected file on the card.
- Do not turn off the power or take out a card when deleting a file. The card may malfunction.

### Deleting all still image files

- 1 Select "Delete All" instead of "Delete File" in step 6 in **Deleting a still image file**.  

- 2 Press **◀/▶** to select "Yes", and then press **OK**.

#### NOTE

- You cannot delete a protected file on the card.
- Do not turn off the power or take out a card when deleting a file. The card may malfunction.



## Using memory card

### Recording a motion picture

Use this setting to record images you are currently watching.

Record with the settings made in “Rec. Mode” and “Pre-recording”.

- 1 Press **●** to start recording.
  - CARD indicator lights up red.
  - Recording information displays in the lower right corner of the screen.

- 2 Press **●** to stop recording.

#### NOTE

**Broadcasting types or input signals not available for recording:**

- ① DTV broadcasting
- ② COMPONENT input
- ③ RGB input
- ④ Copy guarded signal
- ⑤ DVI-I input

### To display the remaining record time.

Press **i+** while not recording.

- Remaining record time displays in the lower right corner of the screen.

#### NOTE

- Do not press ① on the display while recording. Recording cannot finish properly and may damage the file.
- Recording stops if you press **⏻** on the remote control while recording.
- When card has no capacity for recording, “Card is full” displays and stops recording.
- You cannot change the channel or switch the input source while recording.

### Selecting Video mode

- 1 Press **CARD** and the card mode screen displays.

- 2 Press **◀/▶** to select “Video”, and then press **OK**.
  - When in CARD mode, press **0-9** or **↔** to switch either TV or AV input mode.

### Displaying a motion picture

- 1 Press **CARD** and the card mode screen displays.

- 2 Press **◀/▶** to select “Video”, and then press **OK**.

- 3 Press **▲/▼/◀/▶** to select the file you want to play, and then press **OK**.
  - Video playback starts.



- 4 Press **CARD** again to display the operation panel.

- See page 55 for the operation panel information.
- When viewing a motion picture, by pressing **Ⓜ** the picture size changes. Small – Medium – Large.

### Rec. Mode

Use this setting for recording images you are currently watching. You can select the recording mode (picture quality) for a motion picture.

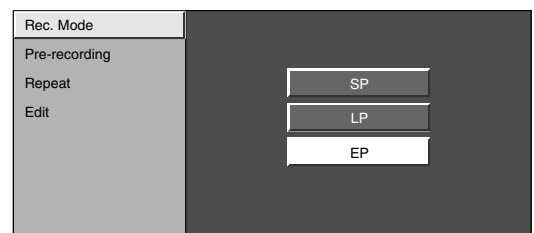
- 1 Press **CARD** and the card mode screen displays.

- 2 Press **MENU** and the MENU screen displays.

- 3 Press **◀/▶** to select “Card”.

- 4 Press **▲/▼** to select “Video Setup” and then press **OK**.

- 5 Press **▲/▼** to select “Rec. Mode”, and then press **OK**.



- 6 Press **▲/▼** to select the desired mode, and then press **OK**.

## Using memory card

### Pre-recording

You can record the picture slightly before the point where you pressed the record button, enabling you to record just the scene you wanted.

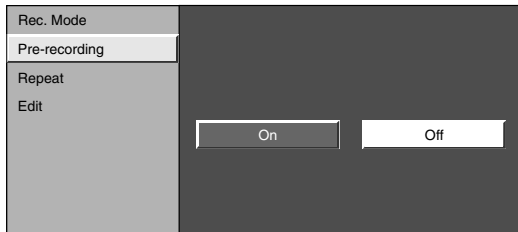
**1** Press **CARD** and the card mode screen displays.

**2** Press **MENU** and the MENU screen displays.

**3** Press **◀/▶** to select "Card".

**4** Press **▲/▼** to select "Video Setup" and then press **OK**.

**5** Press **▲/▼** to select "Pre-recording", and then press **OK**.



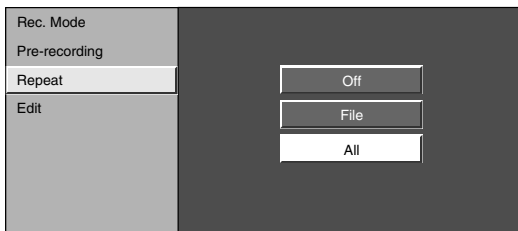
**6** Press **◀/▶** to select "On", and then press **OK**.

### Repeat

You can specify one file or all files to replay repeatedly.

**1** Repeat steps 1 to 4 in **Pre-recording**.

**2** Press **▲/▼** to select "Repeat", and then press **OK**.



**3** Press **▲/▼** to select desired setting, and then press **OK**.

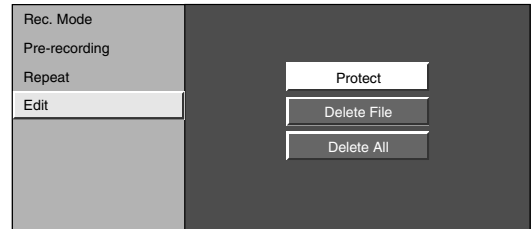
Selected item	Description
<b>Off</b>	No playback or repeat.
<b>File</b>	Plays back and repeats one file.
<b>All</b>	Plays back all movie files on the card then repeats.

### Protecting/unprotecting motion picture files

You can protect any file you do not want to delete.

**1** Repeat steps 1 to 4 in **Pre-recording**.

**2** Press **▲/▼** to select "Edit", and then press **OK**.



**3** Press **▲/▼** to select "Protect", and then press **OK**.

**4** Press **▲/▼/◀/▶** to select the file you want to protect, and then press **OK**.

- Protect mark (🔒) displays.
- Select the file with a protect mark and press **OK** to unprotect it.

**5** Repeat the operation in step 4.

**6** After setting the files you want to protect, press **RETURN** to return to MENU.

## Using memory card

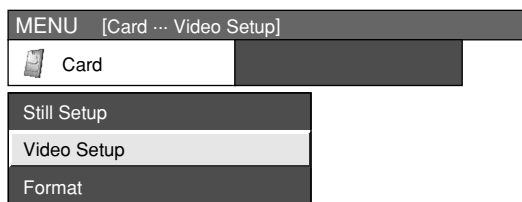
### Deleting a motion picture file

1 Press **CARD** and the card mode screen displays.

2 Press **MENU** and the MENU screen displays.

3 Press **◀/▶** to select "Card".

4 Press **▲/▼** to select "Video Setup", and then press **OK**.



5 Press **▲/▼** to select "Edit", and then press **OK**.

6 Press **▲/▼** to select "Delete File", and then press **OK**.



7 Press **▲/▼/◀/▶** to select the file you want to delete, and then press **OK**.

8 Press **◀/▶** to select "Yes", and then press **OK**.

9 Repeat the operations in steps 7 and 8 above.

10 After deleting the images you no longer need, press **RETURN** to return to MENU.

#### NOTE

- You cannot delete a protected file on the card.
- Do not turn off the power or take out a card when deleting a file. The card may malfunction.

### Deleting all motion picture files

1 Press **CARD** and the card mode screen displays.

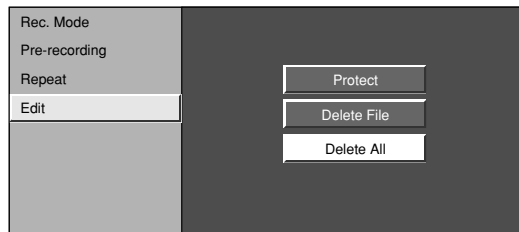
2 Press **MENU** and the MENU screen displays.

3 Press **◀/▶** to select "Card".

4 Press **▲/▼** to select "Video Setup", and then press **OK**.

5 Press **▲/▼** to select "Edit", and then press **OK**.

6 Press **▲/▼** to select "Delete All", and then press **OK**.



7 Press **◀/▶** to select "Yes", and then press **OK**.

#### NOTE

- You cannot delete a protected file on the card.
- Do not turn off the power or take out a card when deleting a file. The card may malfunction.

### Format

1 Press **CARD** and the card mode screen displays.

2 Press **MENU** and the MENU screen displays.

3 Press **◀/▶** to select "Card".


4 Press **▲/▼** to select "Format" and then press **OK**.

5 Press **◀/▶** to select "Yes", and then press **OK**.

#### NOTE

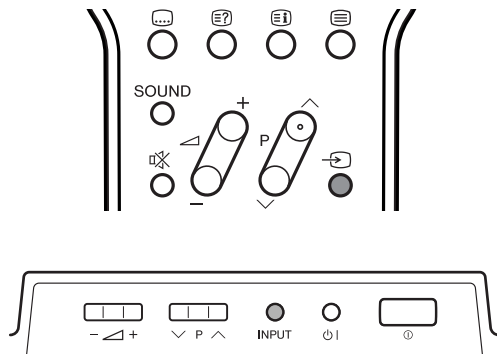
- Formatting a card deletes all files including the ones which set to protect.

# Using external equipment

You can connect many types of external equipment to your System, like a decoder, VCR, DVD player, PC, game console and camcorder. To view external source images, select the input source from  on the remote control unit or **INPUT** on the Display.

## Displaying an external equipment image


Explanation here is for the setting when connecting DVD to INPUT3 terminal.



### CAUTION


- To protect all equipment, always turn off the AVC System before connecting to a decoder, VCR, DVD player, PC, game console, camcorder or other external equipment.

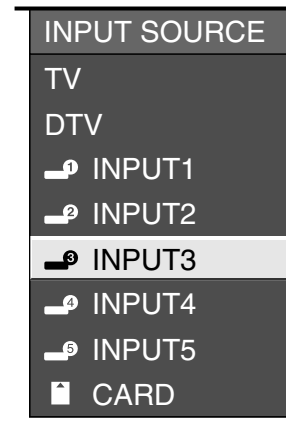
### NOTE

- See pages 64 to 68 for external equipment connection.
- Please refer to the relevant operation manual (DVD player, PC, etc.) carefully before making connections.
- Each time  is pressed, the input source toggles.
- If the image does not come in clearly, you may need to change the input signal type setting on the "Input Select" menu.
- Refer to your external equipment operation manual for the signal type.

## Displaying a DVD image (Example)

1

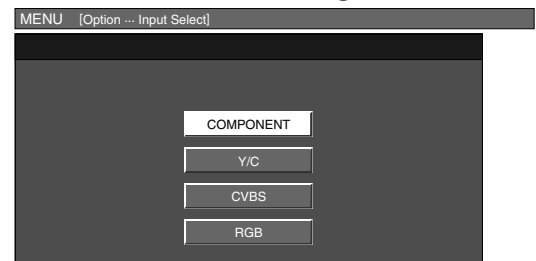
To watch a DVD image, select "INPUT3" from "INPUT SOURCE" menu using  on the remote control unit or **INPUT** on the Display.



2

Select the desired signal type on "Input Select" in the "Option" menu. (See page 70.)

### For INPUT3 signal



The setting is stored and can be selected on the "INPUT SOURCE" menu.

## Using external equipment

### Connecting a decoder

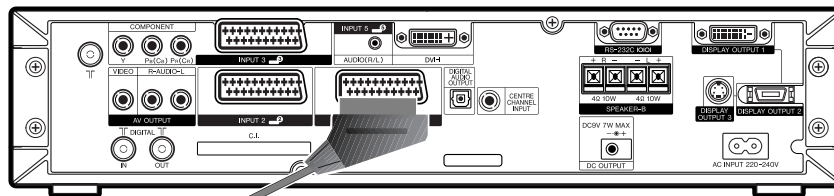
You can use the INPUT 1 terminal when connecting a decoder and other audiovisual equipment.

#### NOTE

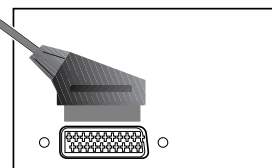
- In cases when the decoder needs to receive signal from the System, make sure to set “Decoder” to “INPUT1” in the Programme Setup “Manual” menu. (See page 28.)

To watch an image from this input terminal, you need to select the input source (see page 63) and the input signal type (see page 70).

#### AVC System (rear view)



SCART cable  
(commercially available)



Decoder

### Connecting a VCR

You can use the INPUT 2 terminal when connecting a VCR and other audiovisual equipment.

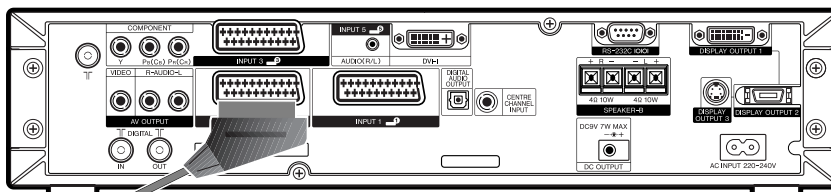
If your VCR supports TV-VCR advanced “AV Link” systems (see page 65), you can connect the VCR to the INPUT 2 terminal on the AVC System using the fully-wired SCART cable.

#### NOTE

- TV-VCR advanced “AV Link” systems may not be compatible with some external sources.
- It is recommended to connect to the INPUT 2 terminal when using a decoder for ground wave signal input with a VCR. If INPUT 2 signals are preset in auto installation or programme setup, make sure to set “Decoder” to “INPUT2” in the Programme Setup “Manual” menu. (See page 28.)

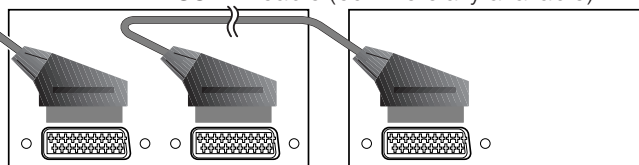
To watch an image from this input terminal, you need to select the input source (see page 63) and the input signal type (see page 70).

#### AVC System (rear view)



SCART cable  
(commercially available)

SCART cable (commercially available)



VCR

Decoder

## Using external equipment

### Using AV Link function

This System incorporates four typical AV Link functions for smooth connections between AVC System and other audiovisual equipment.

#### NOTE

- Only works when the audiovisual equipment is connected to the INPUT 2 terminal on the AVC System with AV Link via a fully wired SCART.

#### One Touch Play

While the System is in standby mode, it automatically turns on and plays back the image from the audiovisual source (e.g. VCR, DVD).

#### System Standby

When the connected audiovisual equipment (e.g. VCR, DVD) enters standby mode, so does the System.

#### WYSIWYR (What You See Is What You Record)

When the remote control unit of the connected VCR has the WYSIWYR button, you can automatically start recording by pressing the WYSIWYR button.

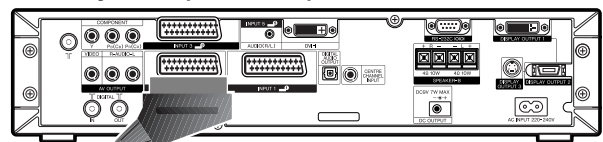
#### Preset Download

Automatically transfers the channel preset information from the tuner on the System to the one on the connected audiovisual equipment (e.g. VCR) via the INPUT 2 terminal.

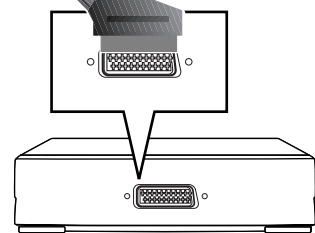
#### NOTE

- Refer to operation manuals of each external equipment for the details.

#### AVC System (rear view)



SCART cable  
(commercially available)



VCR

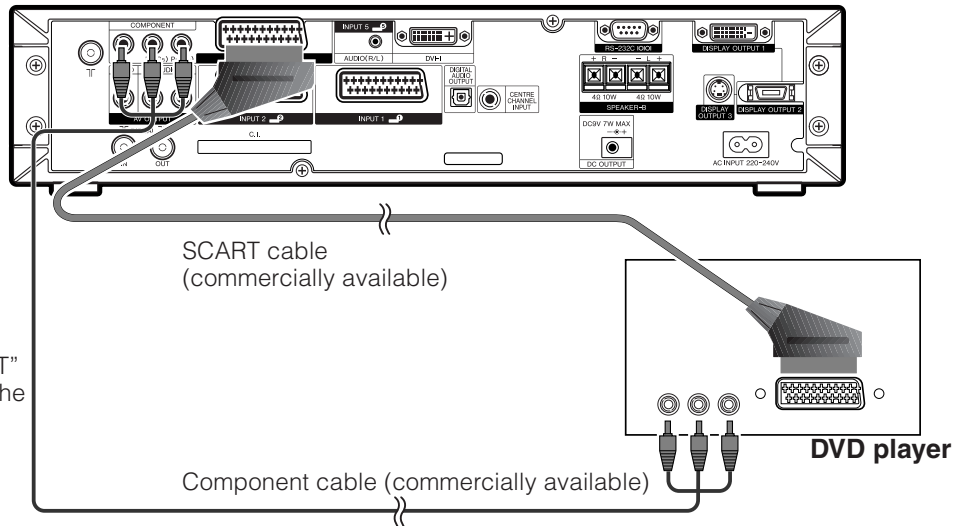
## Using external equipment

### Connecting a DVD player

You can use the INPUT 3 terminal when connecting to a DVD player and other audiovisual equipment.

To watch an image from this input terminal, you need to select the input source (see page 63) and the input signal type (see page 70).

#### AVC System (rear view)



### Connecting a game console or camcorder

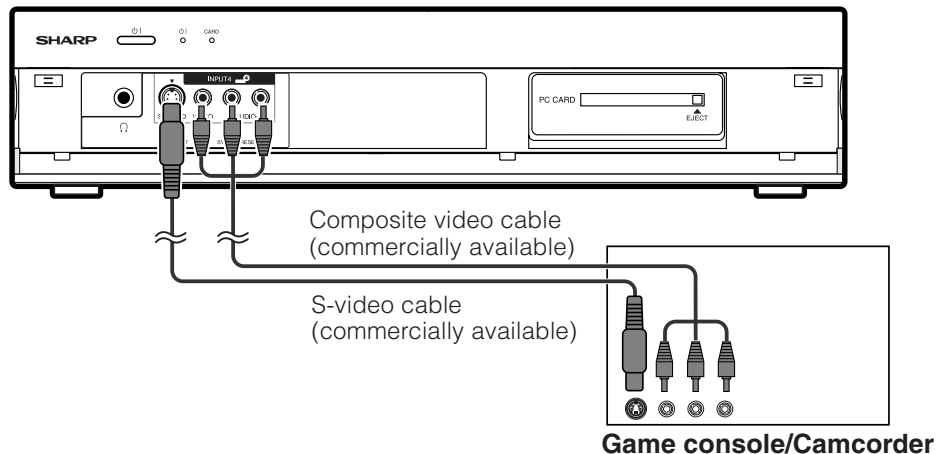
A game console, camcorder and some other audiovisual equipment are conveniently connected using the INPUT 4 terminals.

#### NOTE

- The S-video terminal has priority over the video terminals.
- You can also connect the game console to INPUT 1 or 3 terminals to enjoy clearer picture.

To watch an image from this input terminal, you need to select the input source (see page 63) and the input signal type (see page 70).

#### AVC System (front view)



## Using external equipment

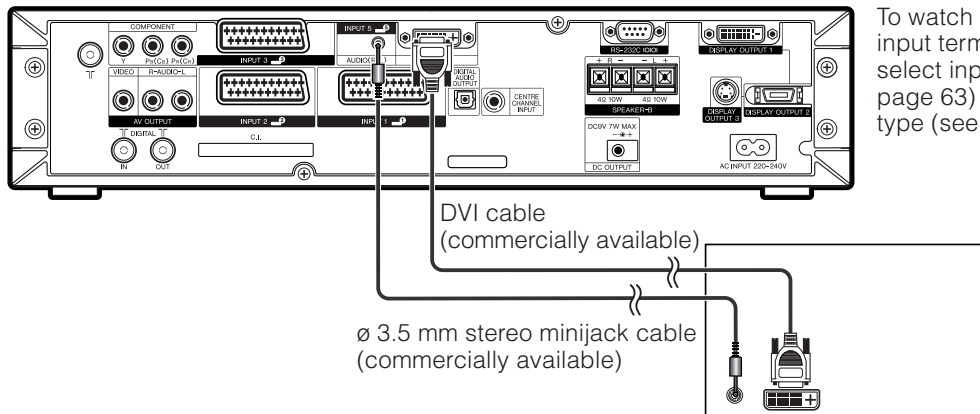
### Connecting a PC

Use the INPUT5 terminals to connect a PC.

#### NOTE

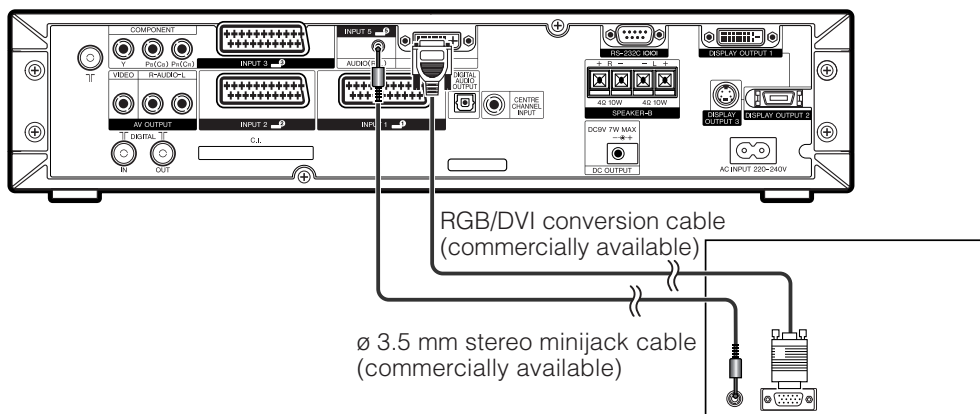
- The PC input terminals are DDC1/2B-compatible.
- Refer to page 84 for a list of PC signals compatible with the System.

#### AVC System (rear view)



To watch the image from this input terminal, you need to select input source (see page 63) and input signal type (see page 70).

PC



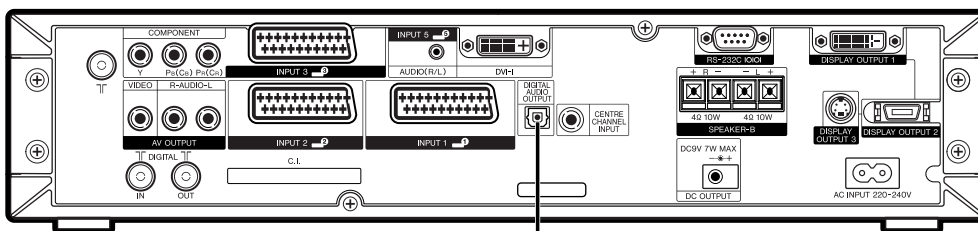
PC

#### NOTE

- Macintosh adaptor may be required for use for some Macintosh computers.
- When connecting to a PC, the correct input signal type is automatically detected. (See page 75.) If the PC image does not come in clearly, you may need to set the Auto Sync. adjustment in the "Setup" menu. (See page 69.)

### Using Digital Audio Output

It is possible to output audio through the DIGITAL AUDIO OUTPUT terminal. PCM audio outputs from the terminal.



To optical digital input of external audio devices

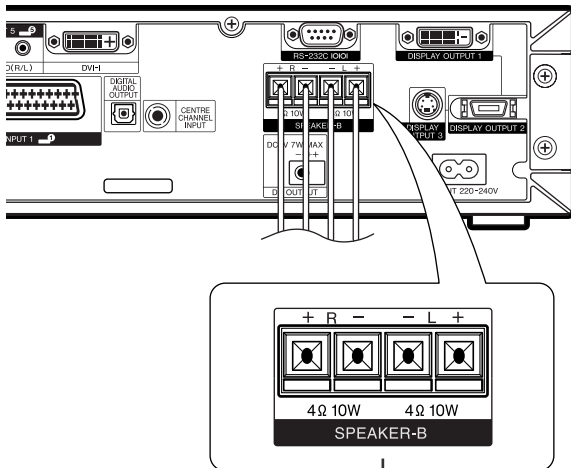


## Using external equipment


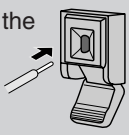
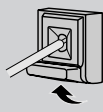
### Speaker Setup

#### Connecting external speakers

##### Rear view



#### How to connect the speaker cable

- ① Push down the tab. 
- ② Insert the end of the cable. 
- ③ Lift the tab back up. 

When using external speakers

- Change the speaker setting to “SPEAKER-B”.

Make sure to connect the speaker terminal and cable polarity (+, -) properly

- The speaker terminal has plus (+) and minus (-) polarity.
- Plus is red and minus is black.
- The cables are also divided into plus and minus.
- When connecting the left/right speakers, be sure to connect the plus/minus terminals with the correct cables.

#### NOTE

- Unplug the AC cord from the AC outlet before installing the speakers.

#### CAUTION

- Make sure external speakers have 4 ohm and 10 watt specifications.
- Connect the plus/minus terminals with the correct cables. Incorrect connection may cause a short.

### Selecting speakers

You can output audio using the supplied speakers or other external speakers.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select “Setup”.
- 3 Press **▲/▼** to select “Speaker Setup”, and then press **OK**.
- 4 Press **▲/▼** to select “Speaker”, and then press **OK**.
- 5 Press **◀/▶** to select “SPEAKER-A” or “SPEAKER-B”, and then press **OK**.

Selected item	Description
<b>SPEAKER-A</b>	Speaker connected to the Display.
<b>SPEAKER-B</b>	Speaker connected to the AVC System.

### External Audio Bypass

External Audio Bypass automatically optimises the audio quality to suit internal (supplied) speakers.

- 1 Repeat steps 1 to 3 in **Selecting speakers** above.
- 2 Press **▲/▼** to select “External Audio Bypass”, and then press **OK**.
- 3 Press **◀/▶** to select “Yes” or “No”, and then press **OK**.

Selected item	Description
<b>No</b>	Sets the optimum audio for the internal (supplied) speakers.
<b>Yes</b>	When you are using your own speakers, output the original sound without using External Audio Bypass.

#### NOTE

- External Audio Bypass is greyed out when Dolby Virtual is set to “On”.
- External Audio Bypass is greyed out when Centre Channel Input is set to “On”.
- When using external speakers (SPEAKER-B), make sure to set “External Audio Bypass” to “Yes”.
- When Dolby Virtual is on, External Audio Bypass automatically sets to “Yes”.

# Useful adjustment settings

## Image position (for TV/AV input mode)

For adjusting a picture's horizontal and vertical position.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Setup".

**3** Press **▲/▼** to select "Position", and then press **OK**.

**4** Press **▲/▼** to select "H-Pos." or "V-Pos.".



**5** Press **◀/▶** to adjust the item to your desired position.

### NOTE

- For resetting all adjustment items to the factory preset values, press **▲/▼** to select "Reset", and then press **OK**.
- **Adjustments are stored separately according to input source.**
- This function is available for AV input mode and TV tuner mode.

Selected item	Description
<b>H-Pos.</b>	Centres the image by moving it to the left or right.
<b>V-Pos.</b>	Centres the image by moving it up or down.

## Audio only

When listening to music from a music programme, you can set the Liquid Crystal display off and enjoy audio only.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Option".

**3** Press **▲/▼** to select "Audio Only", and then press **OK**.

**4** Press **◀/▶** to select "On", and then press **OK**.

Selected item	Description
<b>On</b>	Audio is output without screen image.
<b>Off</b>	Both screen images and audio are output.

## Auto Sync. adjustment (PC input mode only)

For automatically adjusting the PC image.

**1** Press **MENU** and the MENU screen displays.

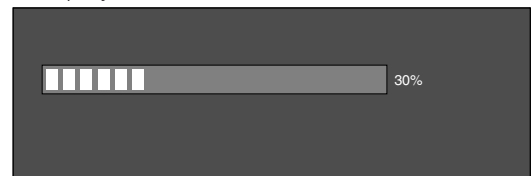
**2** Press **◀/▶** to select "Setup".

- Setup menu displays.

**3** Press **▲/▼** to select "Auto Sync.", and then press **OK**.

**4** Press **◀/▶** to select "Yes", and then press **OK**.

- Auto Sync. starts and "Adjusting the image" displays.



### NOTE

- When Auto Sync. is successful, "Auto Sync completed successfully" displays. If not, Auto Sync. failed.
- Auto Sync. may fail even if "Auto Sync completed successfully" displays.
- Auto Sync. is likely to succeed when an input PC image has wide vertical stripes (ex. pattern with high contrast stripes, or cross-hatched). It may fail when an input PC image is solid (low contrast).
- Be sure to connect the PC to the AVC System and switch it on before starting Auto Sync.

## Useful adjustment settings

### Fine Sync. adjustment (PC input mode only)

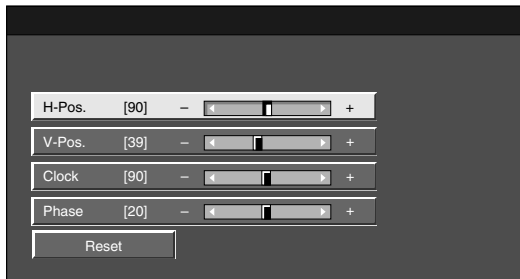
Ordinarily you can easily adjust the picture as necessary to change image position using Auto Sync. In some cases, however, manual adjustment is needed to optimise the image.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Setup".

**3** Press **▲/▼** to select "Fine Sync.", and then press **OK**.

**4** Press **▲/▼** to select the specific adjustment item.



**5** Press **◀/▶** to adjust the item to your desired position.

#### NOTE

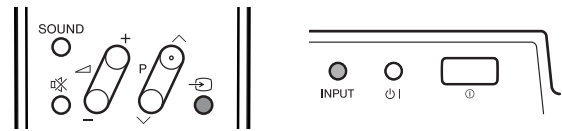
- For resetting all adjustment items to the factory preset values, press **▲/▼** to select "Reset", and then press **OK**.

Selected item	Description
<b>H-Pos.</b>	Centres the image by moving it to the left or right.
<b>V-Pos.</b>	Centres the image by moving it to the up or down.
<b>Clock</b>	Adjusts when the image flickers with vertical stripes.
<b>Phase</b>	Adjusts when characters have low contrast or when the image flickers.

### Input Select

#### Selecting input source

Can use for selecting the input source.



**1** Press **→** on the remote control unit or **INPUT** on the Display.

**2** Press **→** on the remote control unit or **INPUT** on the Display to select the input source.

- An image from the selected source automatically displays.
- You can also select the input source by pressing **▲/▼**.

#### Selecting input signal type

For setting the signal type of external equipment.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Option".

**3** Press **▲/▼** to select "Input Select", and then press **OK**.

**4** Press **▲/▼/◀/▶** to select a signal type you want to set, and then press **OK**.

- If the selected signal type is incorrect, an image does not display or no colour image displays.

Input type	Signal type
<b>INPUT 1</b>	CVBS, RGB
<b>INPUT 2</b>	Y/C, CVBS
<b>INPUT 3</b>	COMPONENT, Y/C, CVBS, RGB
<b>INPUT 4</b>	AUTO, S-Video, Video
<b>INPUT 5</b>	PC analogue, PC digital, AV analogue, AV digital

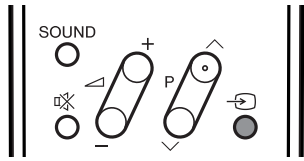
#### NOTE

- If no (colour) image displays, try to change the other signal type.
- Check the operation manual of the external equipment for the signal type.

## Useful adjustment settings

### Input Label

You can assign each input source a label you like.

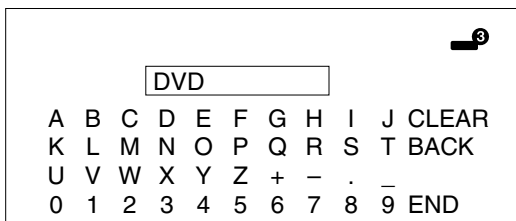


**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Setup".

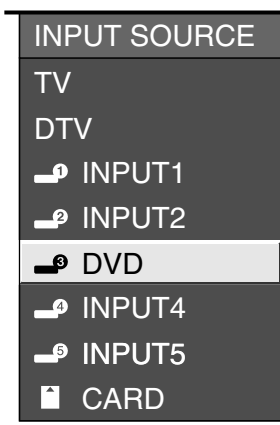
**3** Press **▲/▼** to select "Input Label", and then press **OK**.

**4** Press **▲/▼/◀/▶** to select each character of the new name for the channel, and then press **OK**.



**5** Repeat the above until the name is fully spelt out, and then press **OK**.

- The name can be 6 characters or less.



(Example)

#### NOTE

- You cannot change labels if the INPUT SOURCE is TV, DTV or CARD.

### Colour system setting (for TV/AV input mode)

You can change the colour system to one that is compatible with the image on the screen.

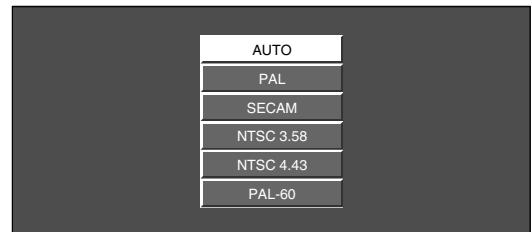
**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Option".

**3** Press **▲/▼** to select "Colour System", and then press **OK**.

**4** Press **▲/▼** to select a compatible video signal system of your equipment, and then press **OK**.

- Some items may be greyed out. They are not selectable.



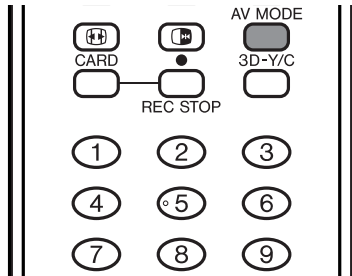
#### NOTE

- Factory preset value is "AUTO".
- If "AUTO" is selected, colour system for each channel is automatically set. If an image does not display clearly, select another colour system (e.g. PAL, NTSC 4.43).
- This function is available for AV input mode and TV tuner mode.

## Useful adjustment settings

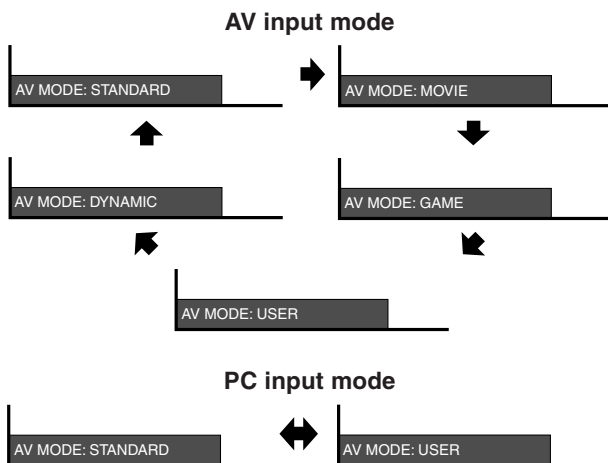
### AV mode selection

AV mode gives you five viewing options to choose from to best match the system environment, which can vary due to factors like room-brightness, type of programme watched or the type of image input from external equipment.



- 1 Press **AV MODE**.
  - Present AV mode displays.

- 2 Press **AV MODE** again before the mode displayed on the screen disappears.
  - The mode changes as shown below.



Selected item	Description
<b>STANDARD</b>	For a highly defined image in a normally bright room
<b>MOVIE</b>	For a movie
<b>GAME</b>	Lowers image brightness for easier viewing.
<b>USER</b>	Allows the user to customise settings as desired. You can set the mode for each input source.
<b>DYNAMIC</b>	For a clear-cut image emphasising high contrast for sports viewing

#### NOTE

- You can select a different AV MODE item for each input mode. (For example, select STANDARD for TV input and DYNAMIC for VIDEO input.)

### Wide screen signalling (WSS) (for TV/AV input mode)

WSS allows a television to switch automatically among the different screen formats.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select “Setup”.
- 3 Press **▲/▼** to select “WSS”, and then press **OK**.
- 4 Press **◀/▶** to select “On” or “Off”, and then press **OK**.

#### NOTE

- Try to set WIDE mode if an image does not switch to the correct screen format. When the broadcast signal contains no WSS information, the function will not work even if enabled.
- This function is available for AV input mode and TV tuner mode.

### Picture aspect ratio (for TV/AV input mode)

The WSS signal has 4:3 auto-switching that allows you to select between Normal and Panorama.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select “Setup”.
- 3 Press **▲/▼** to select “4:3 Mode”, and then press **OK**.
- 4 Press **◀/▶** to select “Normal” or “Panorama”, and then press **OK**.

#### WSS signal 4:3 screen

##### 4:3 mode “Normal”

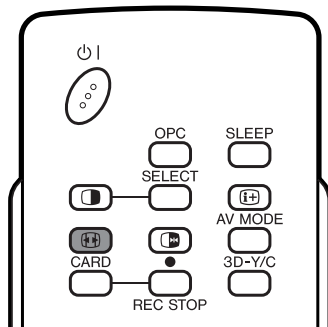


##### 4:3 mode “Panorama”



Selected item	Description
<b>Normal</b>	Normal range keeping 4:3 or 16:9 aspect ratio
<b>Panorama</b>	Wide image without side bars

## Useful adjustment settings



### WIDE MODE

Normal  
Zoom 14:9  
Panorama  
Full  
Cinema 16:9  
Cinema 14:9

## WIDE mode (for TV/AV input mode)

### Manual Selection

1

Press

- The WIDE MODE menu displays.
- The menu lists the wide mode options selectable for the type of video signal currently received.

2

Press or while the WIDE MODE menu displays on the screen.

- As you toggle down the options, each is immediately reflected on the Display. No need to press **OK**.

### Auto Selection

If you set "WSS" and "4:3 Mode" in the Setup menu on page 72, the optimum WIDE mode is automatically chosen for every broadcast containing the WSS information.

#### "WSS" menu

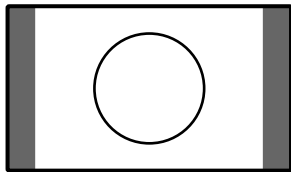
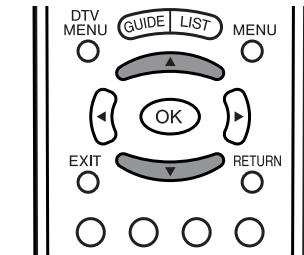
To enable Auto Selection, set "WSS" in the Setup menu to "On". (See page 72.)

#### "4:3 Mode" menu

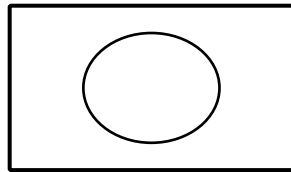
To set the type of the wide screen, select "Normal" or "Panorama" in the 4:3 Mode menu. (See page 72.)

#### NOTE

- If the broadcast signal contains no WSS information, Auto Selection will not function even when the WSS option is enabled.
- This function is available for AV input mode and TV tuner mode.
- Depending on the selected screen size, upper and lower part of an image might be cut in DTV mode.

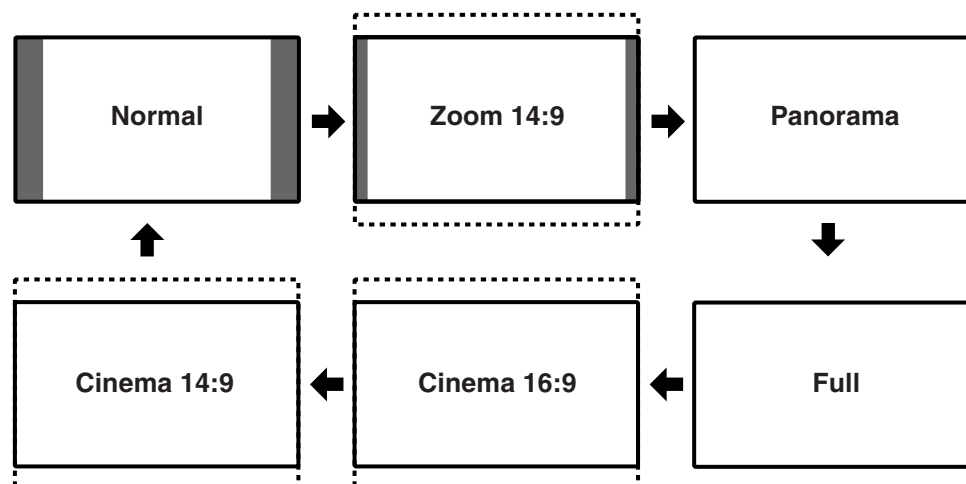


4:3 Mode set to "Normal"

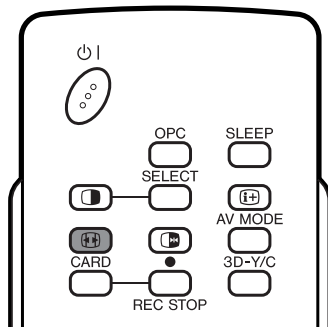


4:3 Mode set to "Panorama"

Selected item	Description
<b>Normal</b>	For 4:3 "standard" pictures. A side bar appears on each side.
<b>Zoom 14:9</b>	For 14:9 letterbox pictures. A thin side bar appears on each side, and you may also see bars on the top and bottom with some programmes.
<b>Panorama</b>	In this mode the picture is progressively stretched toward each side of the screen.
<b>Full</b>	For 16:9 squeeze pictures.
<b>Cinema 16:9</b>	For 16:9 letterbox pictures. Bars may appear on the top and bottom with some programmes.
<b>Cinema 14:9</b>	For 14:9 letterbox pictures. Bars may appear on the top and bottom with some programmes.

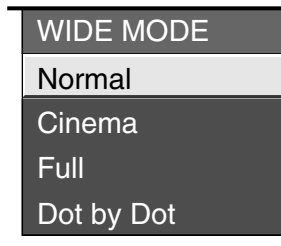


## Useful adjustment settings



### EXAMPLE

**Input signal  
(640 × 480)**



### WIDE mode (for PC input mode)

You can select the screen size.

#### NOTE

- Connect the PC before making adjustments. (See page 67.)
- Selectable screen size may vary with input signal type.

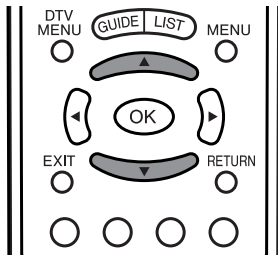
**1**

Press .

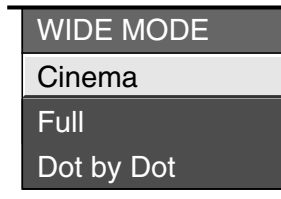
- The WIDE MODE menu displays.

**2**

Press or to select a desired item on the menu.



**Input signal  
(1024 × 768)**



### EXAMPLE

Screen size images.

Input Signal	Normal	Cinema	Full	Dot by Dot
 640 × 480	 Keeps the original aspect ratio in a full screen display.	 Keeps the original aspect ratio in a full screen display. The top and bottom of the image is slightly cropped.	 An image fully fills the screen.	 Detects the resolution of the signal and displays an image with the same number of pixels on the screen.

Input Signal	Normal	Cinema	Full	Dot by Dot
 1024 × 768	 Keeps the original aspect ratio in a full screen display.	 Keeps the original aspect ratio in a full screen display. The top and bottom of the image is slightly cropped.	 An image fully fills the screen.	 Detects the resolution of the signal and displays an image with the same number of pixels on the screen.

## Useful adjustment settings

### Input signal (PC input mode only)

- Some input signals may have to be registered manually to display properly.
- The pairs of input signals (resolutions) in the list below are not distinguishable when received. In such case, you have to set the correct signal manually. After setting once, it will display when the same signal (resolution) is input again.

640×400	720×400
640×480	848×480
1024×768	1280×768

#### NOTE

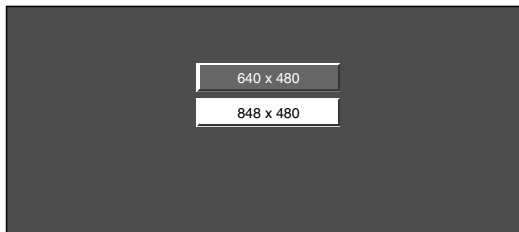
- You can only select the “Input Signal” on the Setup menu when receiving one of the 6 input signals listed above.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select “Setup”.  
• Setup menu displays.

**3** Press **▲/▼** to select “Input Signal” and then press **OK**.

**4** Press **▲/▼** to select the desired input signal on the display.



(Example)

### DNR (Digital Noise Reduction)

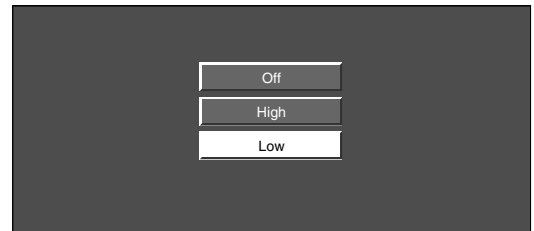
Produces a clearer video image.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select “Option”.

**3** Press **▲/▼** to select “DNR”, and then press **OK**.  
• Some items may be greyed out. They are not selectable.

**4** Press **▲/▼** to select the desired level, and then press **OK**.



### Quick Shoot

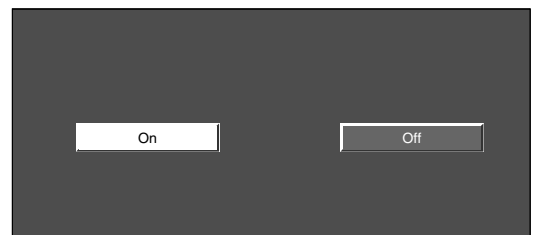
Improves LCD response when viewing fast-moving images. The effect is greater at low room temperatures (at or below 15°C/59°F).

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select “Option”.

**3** Press **▲/▼** to select “Quick Shoot”, and then press **OK**.

**4** Press **◀/▶** to select “On”, and then press **OK**.



#### NOTE

- Quick Shoot may cause image noise. If this occurs turn the function “Off”.



## Useful adjustment settings

### Rotate

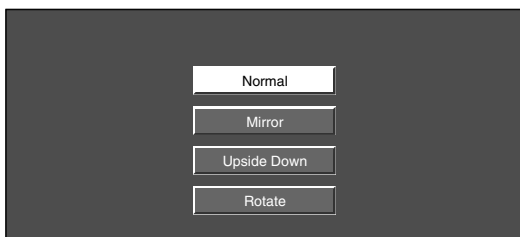
You can set the orientation of the picture.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Setup".

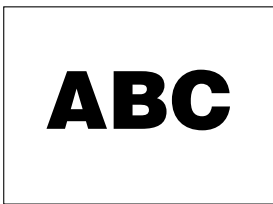
**3** Press **▲/▼** to select "Rotate", and then press **OK**.

**4** Press **▲/▼** to select the desired mode, and then press **OK**.



[Normal]: normal image.

[Mirror]: mirror image.



[Upside Down]: upside down image.

[Rotate]: rotated image.



### Standby Recording

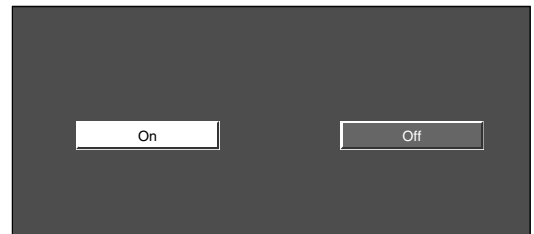
Even when the System is in the standby mode, you can record to external recording equipment (VCR or DVD player) connected to AV OUTPUT or SCART terminals using this function.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Option".

**3** Press **▲/▼** to select "Standby Recording", and then press **OK**.

**4** Press **◀/▶** to select "On", and then press **OK**.



Selected item	Description
On	AV signals output from the System even in the standby mode.
Off	No AV signals output from the System in the standby mode.

#### NOTE

- Standby Recording is automatically set to "Off" when the System is turned back on.

## Useful adjustment settings

### Audio out

Allows you to select what controls the audio output.

#### NOTE

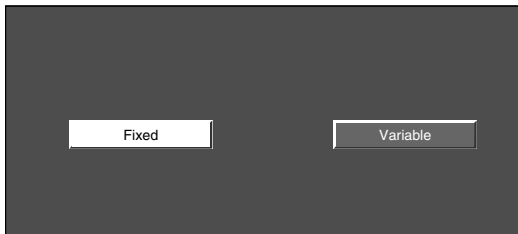
- This setting is available only in TV input mode.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Option".

**3** Press **▲/▼** to select "Audio Out", and then press **OK**.

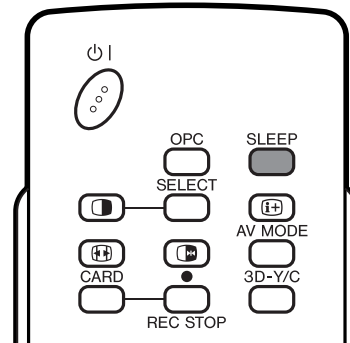
**4** Press **◀/▶** to select "Fixed" or "Variable", and then press **OK**.



Selected item	Description
<b>Fixed</b>	<ul style="list-style-type: none"> <li>Sound via speakers is adjusted with <math>\triangle</math> -/+ on the remote control unit or the Display.</li> <li>Sound via the AV OUTPUT terminal is not adjustable and constantly outputs.</li> </ul>
<b>Variable</b>	<ul style="list-style-type: none"> <li>Sound via the AV OUTPUT terminal is adjusted with <math>\triangle</math> -/+ on the remote control unit or the Display.</li> <li>Sound via speakers is muted.</li> </ul>

### Sleep timer

Allows you to set a time when the TV automatically switches to standby.



**1** Press **SLEEP**.

- Remaining time displays when sleep timer has been set.

Sleep Timer: Remain 2 hr. 00 min.

**2** Each time you press **SLEEP**, the remaining time switches as shown below.

- When the time has been set, countdown automatically starts.
- Five minutes before the preset of time expires, the remaining time displays each minute.

0 hr. 30 min. → 1 hr. 00 min. → 1 hr. 30 min.  
 ↑ ↓  
 Off ← 2 hr. 30 min. ← 2 hr. 00 min.

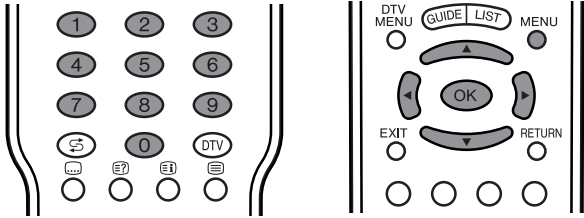
#### NOTE

- Select "Off" by pressing **SLEEP** to cancel the sleep timer.

## Useful adjustment settings

### PIN setting for child lock (for TV/DTV/AV input mode)

Allows you to use a PIN to protect certain settings from being accidentally changed.



#### Changing a PIN

You can change the factory preset PIN “1234” to another 4-digit number you like.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select “Setup”.

**3** Press **▲/▼** to select “Child Lock”, and then press **OK**.

**4** If you already set the PIN, enter it here. If not, enter the factory preset PIN “1234”.

**5** Press **▲/▼** to select “Change PIN”, and then press **OK**.

**6** Enter the 4-digit number as a PIN using **0 – 9**.

**7**

Enter the same 4-digit number as in step 6 to confirm.

- “The system PIN has been changed successfully” displays.

#### NOTE

- To view a locked channel (Lock setting in Programme Setup “Manual” is set to “On”), you must enter a PIN. (See page 28.) When you select a locked channel, a PIN prompt message pops up. Press **OK** to display the PIN input window.

#### Resetting the PIN

Allows you to reset your PIN.

**1**

Press **MENU** and the MENU screen displays.

**2**

Press **◀/▶** to select “Setup”.

**3**

Press **▲/▼** to select “Child Lock”, and then press **OK**.

**4**

If you already set the PIN, enter it here. If not, enter the factory preset PIN “1234”.

**5**

Press **▲/▼** to select “Reset”, and then press **OK**.

**6**

Press **◀/▶** to select “Yes”, and then press **OK**.

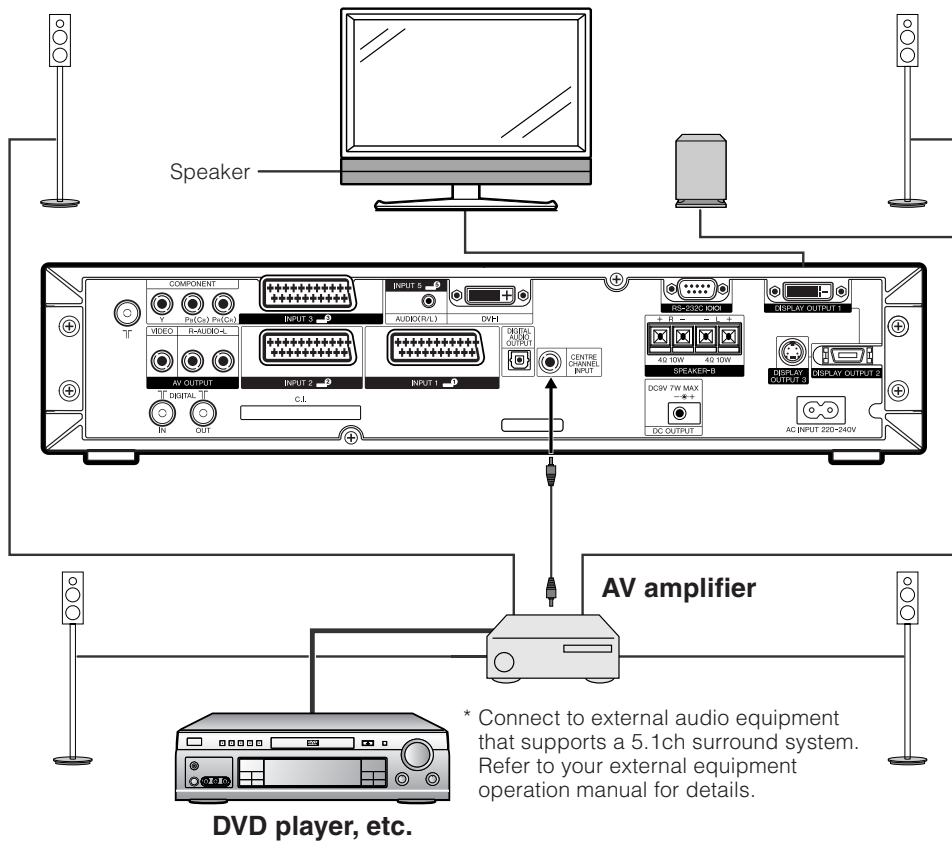
#### NOTE

- **As a precautionary measure, make a note of your PIN and keep it in a familiar place. If you lose or forget your PIN, initialise the System to return all settings except for the TV channel settings to factory preset values. (See page 91.)**
- This function is available for AV input mode and TV tuner mode.

## Useful adjustment settings

### Centre Channel Input

You can use the speaker as the centre speaker when using a 5.1ch surround system.



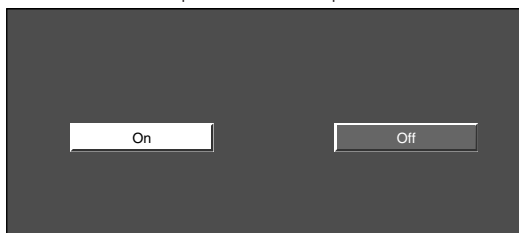
**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "Option", and then press **OK**.

**3** Press **▲/▼** to select "Centre Channel Input", and then press **OK**.

**4** Press **◀/▶** to select "On", and then press **OK**.

- Only the sound from the Centre Channel Input terminal is output from the speaker.



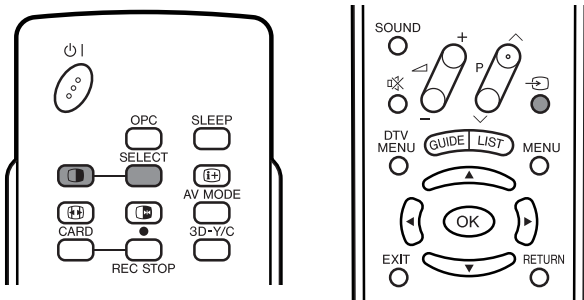
# Useful features

## Dual screen functions

Allows you to display two pictures on the screen at one time.

### Dual screen

You can display two pictures except when inputting from a INPUT 5 terminal and card.



1


Press .

- Dual screen displays and a selected input source image displays.




2

Press **SELECT** to set either screen to be active.

- “” displays on the active screen, which has sound output.

3

Press  to select another input source on the active screen.

- A selected image displays.

4

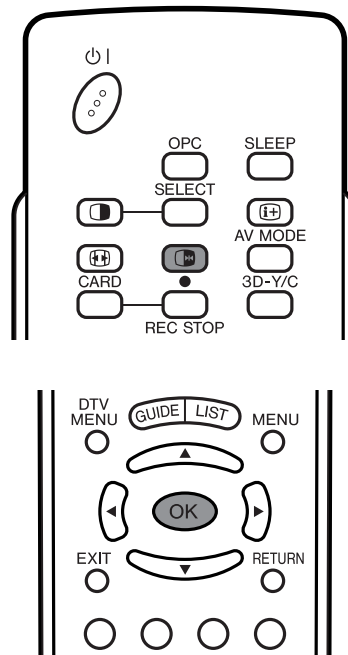
Press  to exit dual screen.

### NOTE


- This function does not work under the following input conditions:
  - ① INPUT 5 mode,
  - ② CARD mode,
  - ③ Two pictures from the same source (e.g. INPUT 1 and INPUT 1),
  - ④ Two pictures with different vertical frequency (e.g. PAL and PAL-60),
  - ⑤ HDTV signal source (480P/1080i/720P) is input on the right side screen display.
- When this function is not available, “No dual screen display available.” will display.
- Signals from DTV source cannot be displayed on the right side screen.


## Picture and still image

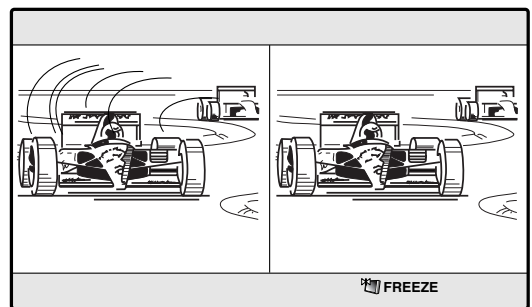
You can freeze a motion picture on the display.



1

Press .

- A moving image displays on the left screen and a still image displays on the right screen. The still image is one frame captured from a moving image at the moment you press .



2

Update the still image by pressing **OK**.

- Each time you press **OK**, the image on the right screen updates.

3

Press  to exit still image.

### NOTE

- This function does not work in INPUT 5 and CARD mode.
- When this function is not available, “No still image display available.” will display.
- Frozen image can be recorded on a PC card (see page 56).
- The still image automatically goes out after 30 minutes.


## Useful features

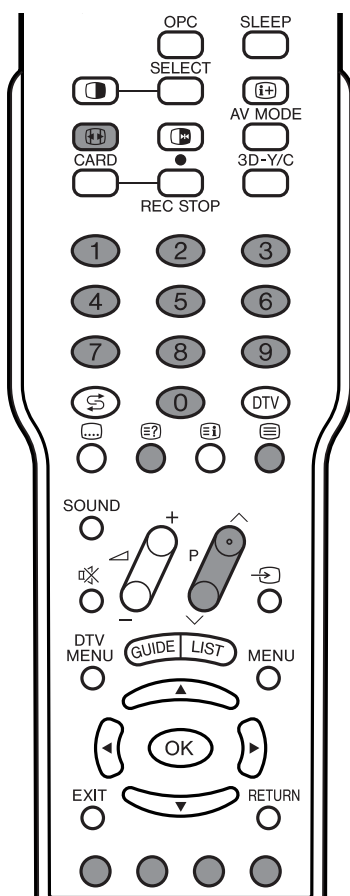
### Teletext function

#### What is Teletext?




Teletext broadcasts pages of information and entertainment to specially equipped television sets. Your System receives Teletext signals broadcast by a TV network, and decodes them into graphical format for viewing. News, weather and sports information, stock exchange prices and programme previews are among the many services available.

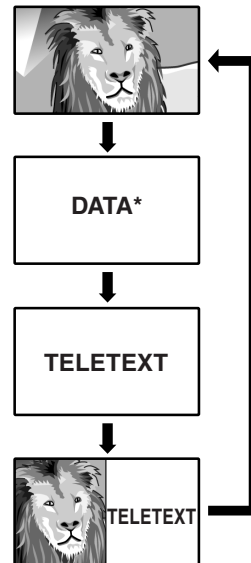
#### Teletext mode

Teletext is turned on/off with  on the remote control unit. You can operate your System in Teletext mode directly by inputting commands with the remote control unit.





#### Turning on and off Teletext

- 1** Select a TV channel or external input source providing the Teletext programme.
- 2** Press  to display the Teletext.
- 3** Press  again to display the Teletext on the right screen and normal image on the left screen.
  - Each time you press , the screen switches as shown upper right.
  - If you select a programme with no Teletext signal, "No Teletext available." displays.
  - The same message displays during dual screen or other modes if no Teletext signal is available.



\* May appear in DTV input mode.

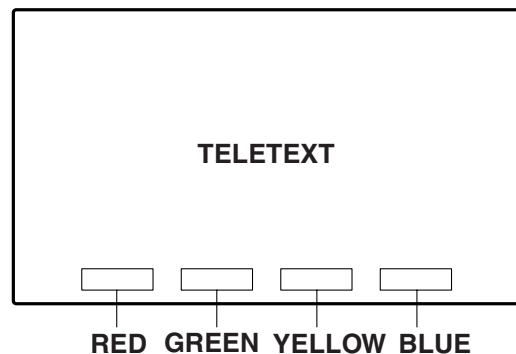
#### When viewing the Teletext information

- Press **P**  to increase the page number.
- Press **P**  to decrease the page number.

#### Button functions

##### Colour (RED/GREEN/YELLOW/BLUE):

You can select a group or block of pages displayed in the coloured brackets at the bottom of the screen by pressing the corresponding **Colour (RED/GREEN/YELLOW/BLUE)** on the remote control unit.

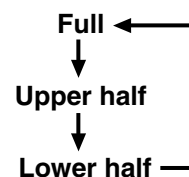


##### 0 - 9:


Directly select any page from 100 to 899 by using **0 - 9**.

##### :

Each time you press , the TELETEXT image switches as shown below.




##### :

To reveal hidden information such as an answer to a quiz, press .

- Press  again to hide the information.

##### :

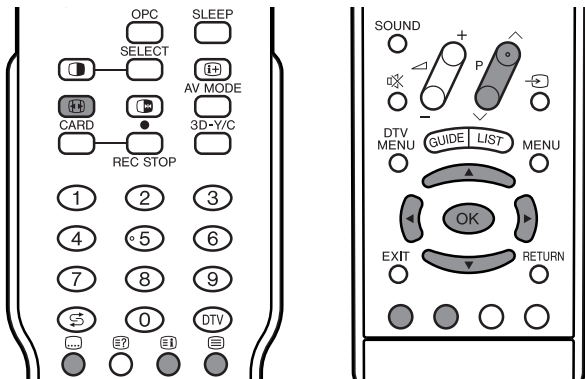
To stop updating Teletext pages automatically, press .

- Press  again to release the hold mode.

## Useful features

### Displaying Subtitle

You can display several subtitles as they are transmitted.



- 1 Press to display the subtitle.
  - Subtitle is updated by the information sent by the broadcasting station.
  - To stop updating Subtitle automatically, press .

- 2 Press to exit the subtitle screen.

#### NOTE

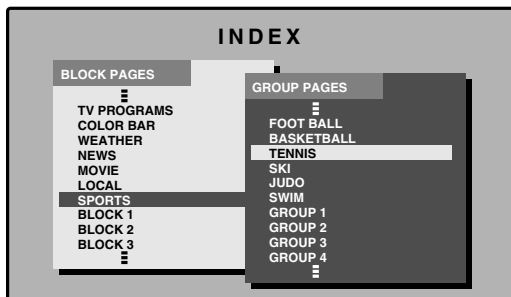
- Subtitle will not be displayed when the service does not contain the subtitle information.

### Displaying TOP Overview

When receiving TOP Teletext, you can read a TOP text overview.

- 1 Press to display Teletext.
- 2 Press to display the TOP Overview as shown below.

#### TOP Overview screen



- 3 Select the desired block or group by using .
- 4 Press **OK** to display the selected block or group pages.
- 5 Press to exit the TOP Overview screen.

### Time display

You can display the time information included in the DTV and Teletext broadcasts.

#### NOTE

- Skip step 1 if receiving DTV broadcasts.

- 1 Select a TV channel providing Teletext information. (The time information is automatically captured.)

- 2 Press . The channel display will appear on the Display.

- 3 Press again within the three-second interval the channel display is on the screen. Time information will display on the lower left of the screen for about three seconds.


- 4 Even when you change the TV channel, you can display the time information with steps 2 – 3 above.

#### NOTE

- The time display cannot be stored once the power is turned off. When you turn on the power, perform steps 1 – 4 again.
- If acquired successfully the time information will appear in the upper-right corner of the screen by pressing **MENU**.
- The information acquired from DTV broadcasts is also determined by the values you set in “Time Zone” (page 31) and the Daylight Saving Time information included in the “Country” setting (page 43).

# Appendix

## Troubleshooting

Problem	Possible Solution
<ul style="list-style-type: none"> <li>No power.</li> </ul>	<ul style="list-style-type: none"> <li>Make sure the Display and the AVC System are connected correctly. (See page 7.)</li> <li>Check if you pressed  on the remote control unit. (See page 19.) If the indicator on the Display lights up red, press .</li> <li>Is the AC cord disconnected? (See page 12.)</li> <li>Has the main power been turned on? (See page 19.)</li> </ul>
<ul style="list-style-type: none"> <li>Unit cannot be operated.</li> </ul>	<ul style="list-style-type: none"> <li>External influences such as lightning, static electricity, etc., may cause improper operation. In this case, operate the unit after first turning the power off the Display and the AVC System, or unplugging the AC cord and re-plugging it in after 1 or 2 minutes.</li> </ul>
<ul style="list-style-type: none"> <li>Remote control unit does not operate.</li> </ul>	<ul style="list-style-type: none"> <li>Are batteries inserted with polarity (+, -) aligned? (See page 11.)</li> <li>Are batteries worn out? (Replace with new batteries.)</li> <li>Are you using it under strong or fluorescent lighting?</li> <li>Is a fluorescent light illuminated to remote control sensor?</li> </ul>
<ul style="list-style-type: none"> <li>Picture is cut off.</li> </ul>	<ul style="list-style-type: none"> <li>Is the image position correct? (See page 69.)</li> <li>Are screen mode adjustments such as picture size made correctly? (See pages 73 to 76.)</li> </ul>
<ul style="list-style-type: none"> <li>Strange colour, light colour, or dark, or colour misalignment.</li> </ul>	<ul style="list-style-type: none"> <li>Adjust the picture tone. (See pages 48 to 50 and 75.)</li> <li>Is the room too bright? The picture may look dark in a room that is too bright.</li> <li>Check the colour system setting. (See pages 27 and 71.)</li> <li>Check the input signal setting. (See page 70.)</li> </ul>
<ul style="list-style-type: none"> <li>Power is suddenly turned off.</li> </ul>	<ul style="list-style-type: none"> <li>The unit's internal temperature has increased. Remove any objects blocking vent or clean.</li> <li>Check the power control setting. (See page 52.)</li> <li>Is sleep timer set? (See page 77.)</li> </ul>
<ul style="list-style-type: none"> <li>No picture.</li> </ul>	<ul style="list-style-type: none"> <li>Is connection to other components correct? (See pages 63 to 67.)</li> <li>Has input signal setup been done correctly after connection? (See page 70.)</li> <li>Is the correct input selected? (See page 70.)</li> <li>Is a non-compatible signal being input? (See page 84.)</li> <li>Is picture adjustment correct? (See pages 48 to 50.)</li> <li>Is the antenna connected properly? (See page 12.)</li> <li>Is "On" selected in "Audio Only"? (See page 69.)</li> </ul>
<ul style="list-style-type: none"> <li>No sound.</li> </ul>	<ul style="list-style-type: none"> <li>Is the volume too low? (See page 22.)</li> <li>Is "Variable" selected in "Audio Out"? (See page 77.)</li> <li>Is the speaker connected properly?</li> <li>Is correct speaker output ("SPEAKER-A" or "SPEAKER-B") selected in "Speaker"? (See page 68.)</li> <li>Is "On" selected in "Centre Channel Input"? (See page 79.)</li> <li>Make sure that headphones are not connected. (See page 16.)</li> </ul>
<ul style="list-style-type: none"> <li>The DTV menu screen is displayed in monochrome and hard to select the item.</li> </ul>	<ul style="list-style-type: none"> <li>Check if "Monochrome" is set to "On". If so, set it to "Off". (See page 50.)</li> </ul>

### Cautions regarding use in high and low temperature environments

- When the unit is used in a low temperature space (e.g. room, office), the picture may leave trails or appear slightly delayed. This is not a malfunction, and the unit will recover when the temperature returns to normal.
- Do not leave the unit in a hot or cold location. Also, do not leave the unit in a location exposed to direct sunlight or near a heater, as this may cause the cabinet to deform and the LCD panel to malfunction.

Storage temperature: -20°C to +60°C (-4°F to +140°F).



## Appendix

### PC compatibility chart

PC/MAC	Resolution		Horizontal Frequency	Vertical Frequency	VESA Standard
PC	VGA	640 x 400	31.5 kHz	60 Hz	
			37.9 kHz	85 Hz	O
		720 x 400	31.5 kHz	60 Hz	
			37.9 kHz	85 Hz	O
		640 x 480	31.5 kHz	60 Hz	O
			37.9 kHz	72 Hz	O
	37.5 kHz		75 Hz	O	
			43.3 kHz	85 Hz	O
	WVGA	848 x 480	31.5 kHz	60 Hz	
	SVGA	800 x 600	35.1 kHz	56 Hz	O
			37.9 kHz	60 Hz	O
			48.1 kHz	72 Hz	O
			46.9 kHz	75 Hz	O
			53.7 kHz	85 Hz	O
	XGA	1024 x 768	48.4 kHz	60 Hz	O
			56.5 kHz	70 Hz	O
			60.0 kHz	75 Hz	O
68.7 kHz			85 Hz	O	
WXGA	1280 x 720	45.0 kHz	60 Hz		
	1280 x 768	48.1 kHz	60 Hz		
	1366 x 768	48.4 kHz	60 Hz		
SXGA	1280 x 1024	64.0 kHz	60 Hz	O	
MAC13"	VGA	640 x 480	34.9 kHz	67 Hz	
MAC16"	SVGA	832 x 624	49.7 kHz	75 Hz	
MAC19"	XGA	1024 x 768	60.2 kHz	75 Hz	

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 DDC is a registered trademark of Video Electronics Standards Association.  
 Power Management is a registered trademark of Sun Microsystems, Inc.  
 VGA and XGA are registered trademarks of International Business Machines Co., Inc.

**RS-232C port specifications**

**PC Control of the System**

- When a program is set, the display can be controlled from the PC using the RS-232C terminal. The input signal (PC/video) can be selected, the volume can be adjusted and various other adjustments and settings can be made, enabling automatic programmed playing.
- Attach an RS-232C cable cross-type (commercially available) to the supplied Din/D-sub RS-232C for the connections.

**NOTE**

- This operation system should be used by a person who is accustomed to using PCs.

**Communication conditions**

Set the RS-232C communications settings on the PC to match the display's communications conditions. The display's communications settings are as follows:

<b>Baud rate:</b>	9,600 bps
<b>Data length:</b>	8 bits
<b>Parity bit:</b>	None
<b>Stop bit:</b>	1 bit
<b>Flow control:</b>	None

**Communication procedure**

Send the control commands from the PC via the RS-232C connector. The Display operates according to the received command and sends a response message to the PC. Do not send multiple commands at the same time. Wait until the PC receives the OK response before sending the next command.

**Command format**

Eight ASCII codes + CR



**Parameter**

Input the parameter values, aligning left, and fill with blank(s) for the remainder. (Be sure that four values are input for the parameter.)  
When the input parameter is not within an adjustable range, "ERR" returns. (Refer to "Response code format".)  
No problem to input any numerical value for "x" on the table.

0			
0	0	0	9
-	3	0	
1	0	0	
0	0	5	5

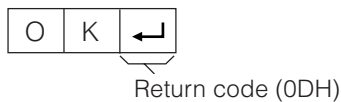
When "?" is input for some commands, the present setting value responds.

?			
?	?	?	?

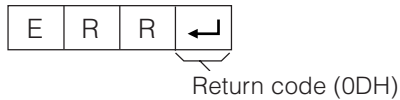
## Appendix

### Response code format

Normal response



Problem response (communication error or incorrect command)



### Commands

CONTROL ITEM	COMMAND	PARAMETER	CONTROL CONTENTS
POWER SETTING	P O W R	0 _ _ _	POWER OFF (STANDBY)
INPUT SELECTION A	I T G D	x _ _ _	INPUT SWITCHING (TOGGLE)
	I T V D	x _ _ _	TV (CHANNEL FIXED)
	I D T V	x _ _ _	DTV (CHANNEL FIXED)
	I A V D	* _ _ _	INPUT1 - 5 (1 - 5)
	I C R D	x _ _ _	CARD
CHANNEL	D C C H	* * _ _	TV DIRECT CHANNEL (1 - 99)
	C H U P	x _ _ _	CHANNEL UP
	C H D W	x _ _ _	CHANNEL DOWN
	D T V D	* * * _	DTV DIRECT CHANNEL (1 - 999)
	D T U P	x _ _ _	DTV CHANNEL UP
	D T D W	x _ _ _	DTV CHANNEL DOWN
INPUT SELECTION B	I N P 1	0 _ _ _	INPUT1 (CVBS)
	I N P 1	1 _ _ _	INPUT1 (RGB)
	I N P 2	0 _ _ _	INPUT2 (CVBS)
	I N P 2	1 _ _ _	INPUT2 (Y/C)
	I N P 3	0 _ _ _	INPUT3 (CVBS)
	I N P 3	1 _ _ _	INPUT3 (Y/C)
	I N P 3	2 _ _ _	INPUT3 (RGB)
	I N P 3	3 _ _ _	INPUT3 (COMPONENT)
	I N P 4	0 _ _ _	INPUT4 (AUTO)
	I N P 4	1 _ _ _	INPUT4 (S-VIDEO)
	I N P 4	2 _ _ _	INPUT4 (VIDEO)
	I N P 5	0 _ _ _	Digital PC
	I N P 5	1 _ _ _	Analogue PC
	I N P 5	2 _ _ _	Digital AV
I N P 5	3 _ _ _	Analogue AV	
AV MODE SELECTION	A V M D	0 _ _ _	TOGGLE
	A V M D	1 _ _ _	STANDARD
	A V M D	2 _ _ _	MOVIE
	A V M D	3 _ _ _	GAME
	A V M D	4 _ _ _	USER
	A V M D	5 _ _ _	DYNAMIC
VOLUME	V O L M	* * _ _	VOLUME (0 - 60)

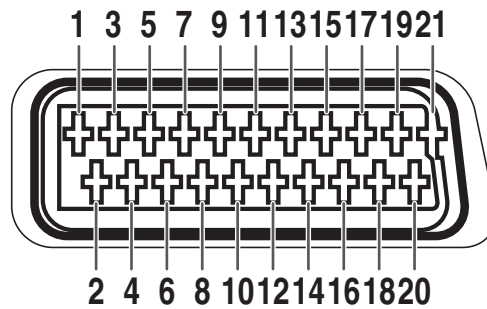
CONTROL ITEM	COMMAND	PARAMETER	CONTROL CONTENTS
POSITION	H P O S	* * * _	H-POSITION (AV) (-10 - +10)
	H P O S	* * * _	H-POSITION (PC) (0 - 180)
	V P O S	* * * _	V-POSITION (AV) (-20 - +20)
	V P O S	* * * _	V-POSITION (PC) (0 - 100)
	C L C K	* * * _	CLOCK (0 - 180)
	P H S E	* * * _	PHASE (0 - 40)
WIDE MODE	W I D E	0 _ _ _	TOGGLE (AV)
	W I D E	1 _ _ _	NORMAL (AV)
	W I D E	2 _ _ _	ZOOM 14:9 (AV)
	W I D E	3 _ _ _	PANORAMA (AV)
	W I D E	4 _ _ _	FULL (AV)
	W I D E	5 _ _ _	CINEMA 16:9 (AV)
	W I D E	6 _ _ _	CINEMA 14:9 (AV)
	W I D E	7 _ _ _	NORMAL (PC)
	W I D E	8 _ _ _	CINEMA (PC)
	W I D E	9 _ _ _	FULL (PC)
MUTE	M U T E	0 _ _ _	TOGGLE
	M U T E	1 _ _ _	MUTE
	M U T E	2 _ _ _	MUTE OFF
DOLBY VIRTUAL	A C D V	0 _ _ _	TOGGLE
	A C D V	1 _ _ _	ON
	A C D V	2 _ _ _	OFF
DUAL SCREEN	T W I N	0 _ _ _	DUAL SCREEN OFF
	T W I N	1 _ _ _	DUAL SCREEN ON
AUDIO CHANGE	A C H A	x _ _ _	TOGGLE
SLEEP TIMER	O F T M	0 _ _ _	OFF
	O F T M	1 _ _ _	SLEEP TIMER 30 MIN
	O F T M	2 _ _ _	SLEEP TIMER 1 HOUR
	O F T M	3 _ _ _	SLEEP TIMER 1 HOUR 30 MIN
	O F T M	4 _ _ _	SLEEP TIMER 2 HOUR
	O F T M	5 _ _ _	SLEEP TIMER 2 HOUR 30 MIN
TEXT	T E X T	0 _ _ _	TEXT OFF
	T E X T	1 _ _ _	TEXT ON (TOGGLE)
	D C P G	* * * _	DIRECT PAGE JUMP (100 - 899)

#### NOTE

- If an underbar (\_) appears in the parameter column, enter a space.
- If an asterisk (\*) appears, enter a value in the range indicated in brackets under CONTROL CONTENTS.

## Connecting pin assignments for SCART

Various audio and video devices may be connected via the SCART terminals.



### SCART (INPUT 1)

- |  |                        |                                      |
|--|------------------------|--------------------------------------|
| 1. Audio right output (TV Monitor out) | 8. Audio-video control | 15. Red input                        |
| 2. Audio right input                   | 9. Earth for green     | 16. Red/Green/Blue control           |
| 3. Audio left output (TV Monitor out)  | 10. Not used           | 17. Earth for video                  |
| 4. Common earth for audio              | 11. Green input        | 18. Earth for Red/Green/Blue control |
| 5. Earth for blue                      | 12. Not used           | 19. Video output (TV Monitor out)    |
| 6. Audio left input                    | 13. Earth for red      | 20. Video input                      |
| 7. Blue input                          | 14. Not used           | 21. Plug shield                      |

### SCART (INPUT 2)

- |                           |                        |                               |
|---------------------------|------------------------|-------------------------------|
| 1. Audio right output     | 8. Audio-video control | 15. Chroma S-Video input      |
| 2. Audio right input      | 9. Earth               | 16. Not used                  |
| 3. Audio left output      | 10. AV LINK control    | 17. Earth for video           |
| 4. Common earth for audio | 11. Not used           | 18. Earth                     |
| 5. Earth                  | 12. Not used           | 19. TV Monitor output         |
| 6. Audio left input       | 13. Earth              | 20. Video input/S-video input |
| 7. Not used               | 14. Not used           | 21. Plug shield               |

### SCART (INPUT 3)

- |                           |                        |                                    |
|---------------------------|------------------------|------------------------------------|
| 1. Audio right output     | 8. Audio-video control | 15. Red input/Chroma S-Video input |
| 2. Audio right input      | 9. Earth               | 16. Red/Green/Blue control         |
| 3. Audio left output      | 10. Not used           | 17. Earth for video                |
| 4. Common earth for audio | 11. Green input        | 18. Earth                          |
| 5. Earth                  | 12. Not used           | 19. TV Monitor output              |
| 6. Audio left input       | 13. Earth              | 20. Video input/S-video input      |
| 7. Blue input             | 14. Not used           | 21. Plug shield                    |

**Specifications**

Item		32" LCD COLOUR TV, Model:LC-32GD1E (Display) TU-32GD1E (AVC System)	37" LCD COLOUR TV, Model:LC-37GD1E (Display) TU-37GD1E (AVC System)	
LCD panel		32" Advanced Super View & BLACK TFT LCD	37" Advanced Super View & BLACK TFT LCD	
Number of dots		3,147,264 dots (1366 × 768 × 3 dots)		
Video Colour System		PAL/SECAM/NTSC 3.58/NTSC 4.43/PAL 60		
TV Function	TV-Standard	Analogue	CCIR (B/G, I, D/K, L, L')	
		Digital	DVB-T (2K/8K OFDM)	
	Receiving Channel	VHF/UHF	E2-E69ch, F2-F10ch, I21-I69ch, IR A-IR Jch, (Digital: E5-E69ch)	
		CATV	Hyper-band, S1-S41ch	
	TV-Tuning System	Auto Preset 99 ch, Auto Label, Auto Sort		
STEREO/BILINGUAL		NICAM/A2		
Brightness		450 cd/m <sup>2</sup>		
Backlight life		60,000 hours (at Backlight Standard position)		
Viewing angles		H : 170° V : 170°		
Audio amplifier		10W × 2		
Speakers		Ø 8 cm 2pcs, Ø 2.5 cm 2pcs		
Terminals	AVC System	Rear	ANTENNA IN	UHF/VHF 75 Ω Din type (Analogue)
			ANTENNA IN	UHF/VHF 75 Ω Din type (Digital)
			ANTENNA OUT	UHF/VHF 75 Ω Din type
			INPUT 1	SCART (AV input, RGB input, TV output)
			INPUT 2	SCART (AV input/output, Y/C input, AV Link)
			INPUT 3	SCART (AV input/output, Y/C input, RGB input), RCA pin (Component input)
			INPUT 5	Ø 3.5 mm jack (Audio input), DVI-I (DVI-I input)
			AV OUTPUT	RCA pin (AV output [Audio: Variable/Fixed])
			DC OUTPUT	DC9V 7W MAX
			SPEAKER-B	External speaker output terminal (L and R)
			CENTRE CHANNEL INPUT	RCA pin (Audio input)
			Digital-AUDIO OUTPUT	Square type optical digital audio connector (S/PDIF)
			C. I. (Common Interface)	EN50221, R206001
			RS-232C	D-sub 9pin male connector
			Front	INPUT 4
Headphones	Ø 3.5mm jack (Audio output)			
PC Card slot	PC Card Type II (PC Card Adapter)			
OSD language		English/German/French/Italian/Spanish/Dutch/Swedish/Portuguese/Finnish/Turkish		
Power Requirement		AC 220-240 V, 50 Hz		
Power Consumption	AVC System	45 W (0.55 W Standby)		
	Display	117 W (0.3 W Standby) (Method IEC60107)	157 W (0.3 W Standby) (Method IEC60107)	
Weight	AVC System	7.1 kg (w/o stand), 7.3 kg (with stand)		
	Display	13 kg (Display only), 16.5 kg (with Display and speakers), 21 kg (with Display, speakers and stand)	14.5 kg (Display only), 18.5 kg (with Display and speakers), 23 kg (with Display, speakers and stand)	
Accessories		Operation manual, Remote control unit (× 1), System cable (× 1), AC cord (× 2), "AAA" size battery (× 2), AVC system stand unit (× 1), Cable clamp (× 1), Antenna cable (× 1)		

- As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

**Optional accessories**

The listed optional accessories are available for the LCD colour TV. Please purchase them at your nearest shop.

- Additional optional accessories may be available in near future. When purchasing, please read the newest catalogue for compatibility and check the availability.

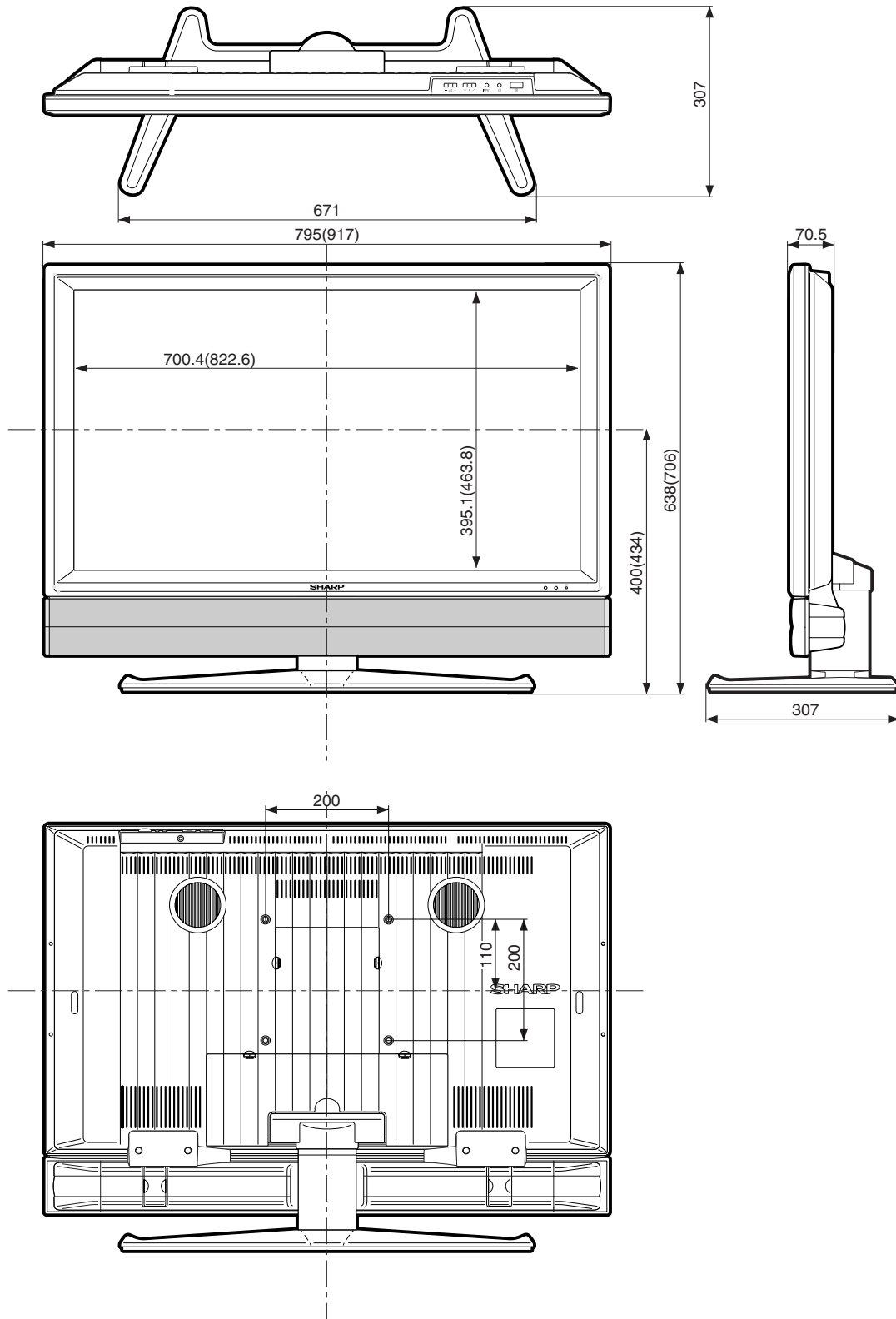
No.	Part name	Part number
1	Wall mount bracket	AN-37AG2
2	System cable (7 meters)	AN-07SC2

# Dimensional drawings

## Display

Unit: mm

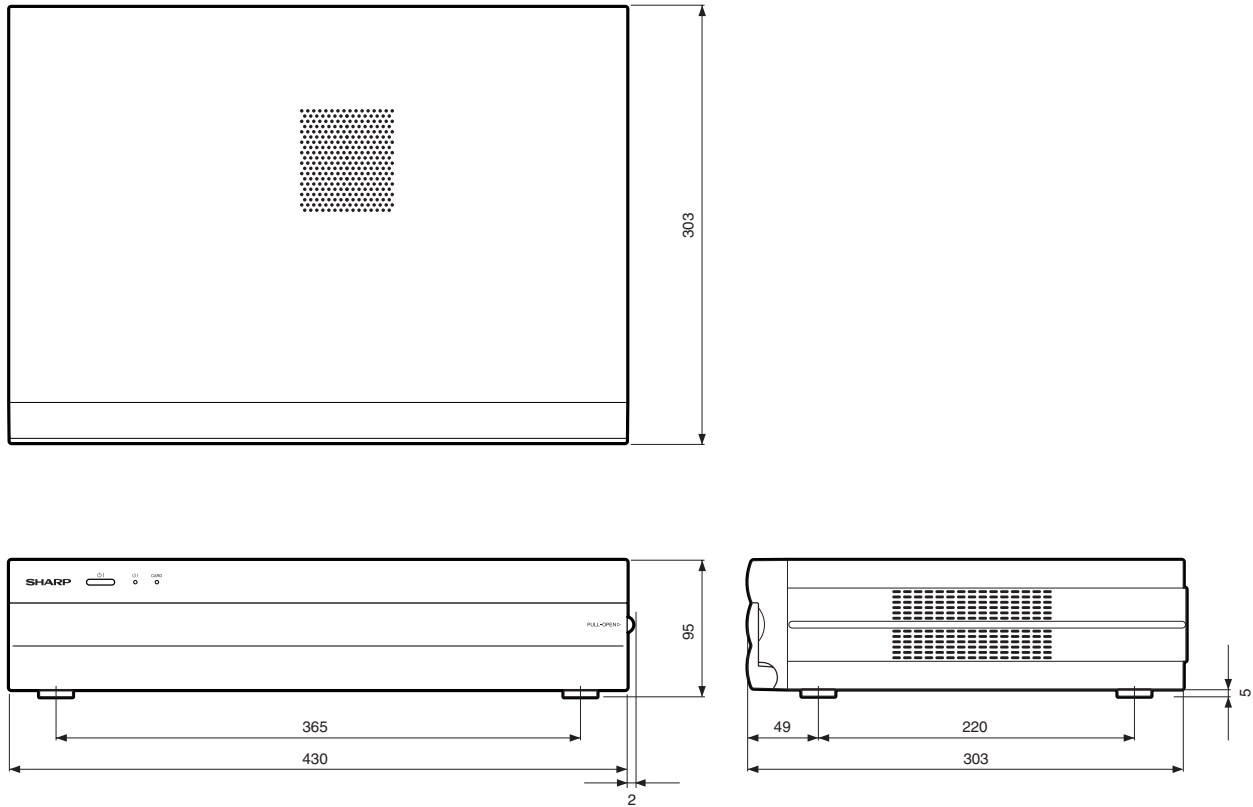
**NOTE** • Figures within parentheses are unique to LC-37GD1E model.



## Dimensional drawings

### AVC System

Unit: mm



### Maturity rating

Rating	AGE														
	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Universal viewing	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parental approval preferable	✓	✓	✓	✓	✓	—	—	—	—	—	—	—	—	—	—
X-rated	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Rating	Universal viewing	Parental approval preferable	X-rated
Universal viewing	—	—	—
Parental approval preferable	✓	—	—
X-rated	✓	✓	—

## Information for Customers on environmentally friendly disposal of this SHARP product

If this product cannot be used any more, it should be disposed of in a legally correct and environmentally sound way.

**DO NOT DISPOSE OF THIS PRODUCT WITH YOUR HOUSEHOLD WASTE  
OR MIXED WITH OTHER WASTES! YOU MIGHT ENDANGER THE ENVIRONMENT!**

Sharp Corporation is committed to protecting the environment and conserving energy. Our goal is to minimize the environmental impact of our products by continually implementing and improving product technologies, designs, and customer information aimed at environmental conservation.

### (1) For our customers in Belgium, The Netherlands, Sweden, and Switzerland

SHARP takes part in the respective national recycling systems for electronic equipment, which have been founded on the base of the environmental laws in these countries.

Please see here details on the respective countries.

Country	Recycling Information for that Country
Sweden	Please use the Swedish electronics recycling system called "ELRETUR", and see the website at <a href="http://www.el-kretsen.se">http://www.el-kretsen.se</a>
The Netherlands	Please use the Dutch electronics recycling system called "ICT-Milieu". and see the website at <a href="http://www.nederlandict.nl/index.php">http://www.nederlandict.nl/index.php</a>
Belgium	Please use the Belgian electronics recycling system called "Recupel". and see the website at <a href="http://www.recupel.be">http://www.recupel.be</a>
Switzerland	Please use the Swiss electronics recycling system called "SWICO". and see the website at <a href="http://www.swico.ch">http://www.swico.ch</a>

### (2) For our customers in United Kingdom, Germany, France, and Italy

Please contact your local authorities for collection and recycling facilities, or contact a recycling service company, which is licensed for the recycling of electronic equipment.

#### HOW TO SET THE FACTORY PRESETS

Turn off the Display by pressing **MAIN POWER**.

Press and hold down **RESET** on the AVC System and press **MAIN POWER** on the Display to turn on the System.

All setting items (except TV channel) return to the factory presetting.

#### NOTE

- Running the factory presetting operation also reset the PIN to the factory preset "1234".

You can run the Auto Installation again by using the following steps.

- 1 Turn on the power of the Display and the AVC System.
- 2 Press **MENU**. (Make sure the menu screen displays.)
- 3 Press **◀/▶** to select "Setup".
- 4 Press **▲/▼** to select "Auto Installation", and then press **OK**.
- 5 The PIN setting screen displays, you need to enter the factory preset PIN "1234".
- 6 Press **◀/▶** to select "Yes", and then press **OK**.



The PIN is

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#### NOTE

- As a precautionary measure, make a note of your PIN above, scissor it from this manual, and keep it in a familiar place.



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