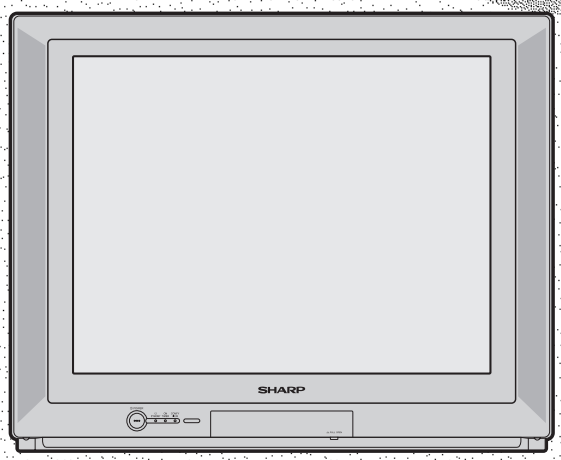
SHARP®

COLOUR TELEVISION

MODEL

CX68RF5

OPERATION MANUAL



Please read this operation manual carefully before using the colour television.

SHARP

WARRANTY

Consumer Electronic Products

Congratulations on Your Purchase!

This Sharp product is warranted against faults in materials and manufacture for a period of twelve (12) months from the date of original purchase.

If service is required during the warranty period, please contact your nearest Sharp Approved Service Centre. These repairs would be carried out at no charge to the owner, subject to the conditions specified herein.

The owner is responsible for any transportation and insurance costs if the product has to be returned for repair.

This warranty does not extend to accessories or defects or injuries caused by or resulting from causes not attributable to faulty parts or the manufacture of the product, including but not limited to, defect or injury caused by or resulting from misuse, abuse, neglect, accidental damage, improper voltage, liquid spillage, vermin infestation, software, or any alterations made to the product which are not authorised by Sharp.

Please retain your sales documentation, as this should be produced to validate a warranty claim.

This warranty is in addition to and in no way limits, varies or excludes any express and implied rights and remedies under any relevant legislation in the country of sale.

IMPORTANT
DO NOT RETURN THIS DOCUMENT TO SHARP

For your reference, please enter the particulars of your purchase below and retain, with your purchase documentation.

Model No. _____

Serial No. _____

Date of Purchase _____

Retailer _____

FOR LOCATION ENQUIRIES WITHIN
AUSTRALIA
REGARDING YOUR LOCAL
SHARP APPROVED SERVICE CENTRE
VISIT OUR WEBSITE AT
www.sharp.net.au
OR CALL SHARP CUSTOMER CARE
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(LOCAL CALL COST APPLY WITHIN AUSTRALIA)

SHARP CORPORATION OF AUSTRALIA PTY. LIMITED
ABN 40 003 039 405
1 Huntingwood Drive
Huntingwood NSW 2148

FOR LOCATION ENQUIRIES WITHIN
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CONTACT YOUR SELLING DEALER/RETAILER
OR CALL
SHARP CUSTOMER SERVICES
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SHARP CORPORATION OF NEW ZEALAND LIMITED
59 Hugo Johnston Drive
Penrose, Auckland

IMPORTANT NOTICE: This warranty applies only to products sold in Australia & New Zealand

SHARP®
SHARP CORPORATION

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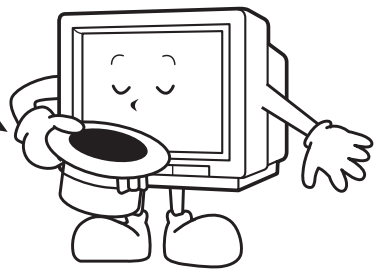
Dear SHARP Customer

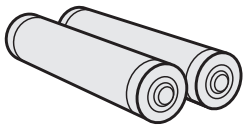
Thank you for buying SHARP's Colour Television. We hope you will have many years of enjoyment from this television set. To ensure proper operation, please read this manual carefully, and keep it in a safe place for future reference.



Accessories

The following accessories are included with this television.

Remote control



Size-AA batteries

Operation manual

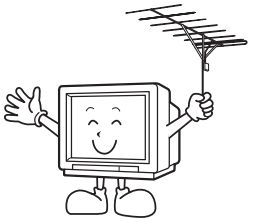
FM Radio antenna

Easy setup

To use your TV set, perform the easy setup procedure below.

The mark indicates the page numbers with more detailed information.

1



Connect the antenna.

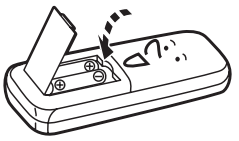
- See 47 to connect the antenna.

2

Connect any video equipment.

- See 47, 48 to connect video equipment.
- See the operation manual of your video equipment when connecting to the TV set.

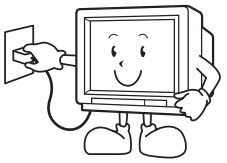
3



Insert the batteries into the remote control.

- Use the two batteries included with the TV.
- See 6.

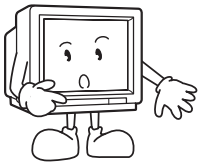
4



Insert the AC plug to the power outlet.

- If you will not use the TV set for a considerable length of time, as a safety precaution, unplug the cord from the outlet.

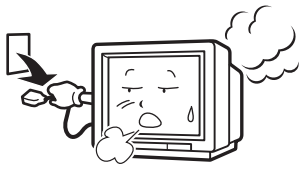
5



Tune the channels.

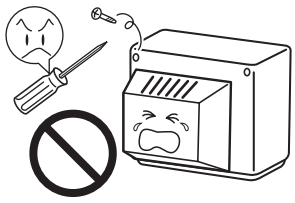
- Use the buttons on the TV.
- See 15, 16.

Safety precautions



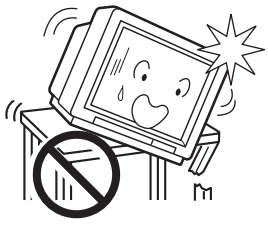
Damage

Turn off the power and unplug the power cord from the wall outlet immediately if the TV set begins to make any unusual noises or gives off smoke or an unusual smell. Then call your dealer for service.



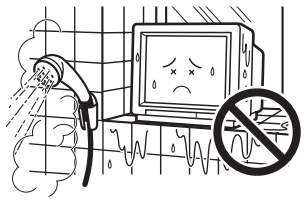
Servicing

To reduce the risk of electric shock, do not remove the back of the cabinet. This TV set contains dangerous voltage.



Unstable surface and shocks

Do not place this TV set on an unstable cart, stand, shelf, or table. The TV set may fall, causing serious injury to a child or adult, and serious damage to the set.
Sharp recommends securing the TV set to a stable surface or wall to prevent the set from falling due to sudden shocks or impact.

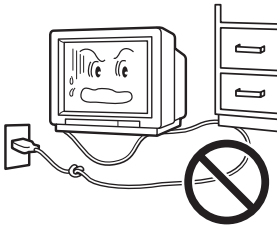


Water

To prevent fire or electrical shock, do not place the TV set near a bathroom, swimming pool or other area where it may become wet.

Moisture

To prevent electrical shock, do not use the TV set in an excessively damp place.

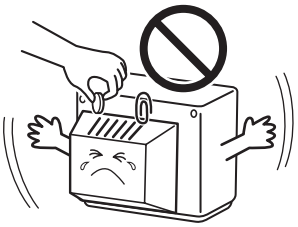


Power-cord protection

To prevent electrical shock, do not subject the AC power cord to damage by bending or twisting it, or by placing heavy items on top of it and do not place the AC power cord under the TV set. If the AC power cord becomes damaged, unplug it from the wall outlet immediately and call your dealer for service.

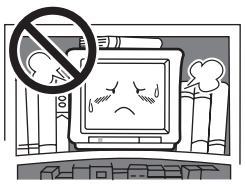
Liquid entry

Do not place a flower vase or anything else containing liquid on the TV set, as liquid spilt on the TV set can cause electrical shock or failure.



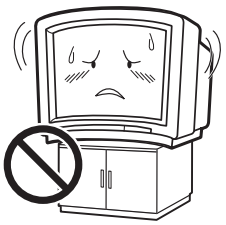
Object entry

Never insert or drop any metallic or inflammable objects into the ventilation openings of the TV set, as this can cause fire, electrical shock, or electrical failure.



Ventilation

Do do not place this TV set in a confined area, such as on a bookshelf or in a built-in case. Leave adequate space behind the TV for proper ventilation.



TV Set position

Do place the TV set onto an even stand, table or track which size is bigger than the TV set.
If the TV set is put onto a smaller size or uneven stand, table or track may cause the TV cabinet distort.
Do not put or insert anything between TV set and the stand, table or track.

Uneven surface and excessive force

Television equipment and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the equipment and cart combination to overturn.

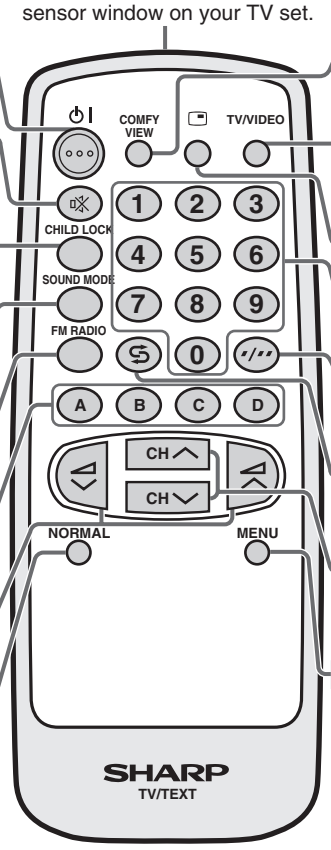
Fire prevention

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

Part names

The mark indicates the page numbers with more detailed information.

Remote control



8 — Turns the TV on or to Standby mode.

10 — Mutes the sound and restores sound to previous level.

CHILD LOCK **29** — For directly enter to CHILD LOCK menu.

SOUND MODE **11** — Switches between MOVIE, MUSIC, NEWS and CUSTOM.

FM RADIO **44** — Switches between TV mode and FM RADIO mode.

Colour buttons **43** — Operate the Favourite Channel.

8 — Adjusts the volume. Used for MENU setup.

NORMAL **21** — Resets all settings.

27 **COMFY VIEW** — Switches between OFF, DARK, MID and LIGHT.

11 **TV/VIDEO** — Switches between TV broadcasts and A/V input programmes.

10 — Displays the clock, timer and channel settings on the screen.

8 **Number** buttons

8 — Switches between one- or two-digit mode channel selection.

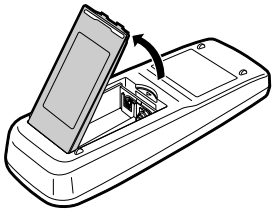
11 — Returns to previously viewed channel.

8 **CH** / **CH** — Selects the channel. Used for MENU setup.

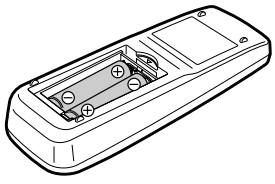
12-13 **MENU** — Calls the MENU screen.

Installing batteries in the remote control unit

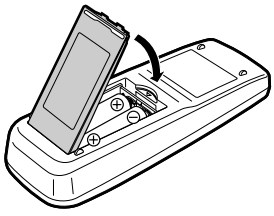
1 With your thumbnail, pull up at the slit to open the battery cover.



2 Insert two batteries (size AA).



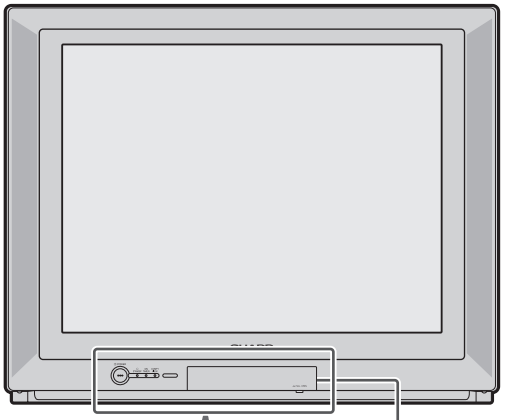
3 Replace the battery cover.



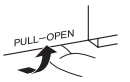
NOTE

- Be sure to match the battery ⊕/⊖ terminals with the ⊕/⊖ marks inside the compartment.
- Remove the batteries if weak or if the unit is not in use for long periods.
- Do not mix old and new batteries.
- Incorrect installation of the batteries may damage the remote control.

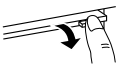
TV set



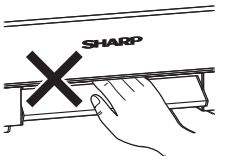
To open the door
Using the projection located under the “PULL-OPEN” indication, pull and lift the door open.



To close the door
Using the projection, lower the door until closed.



Caution:
- When opening or closing the door, do not insert your fingers into the gap between the door and front panel. This may result in an injury.



Bottom

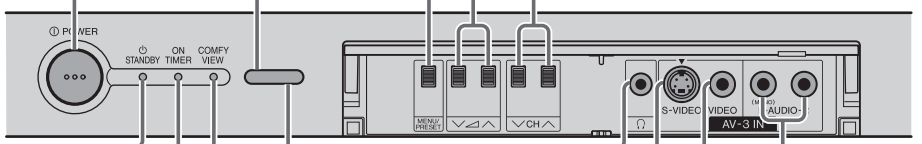
12 MENU/PRESET
MENU/PRESET button
Used for MENU setup.
Tunes the channels.

8 ⏻ POWER
⏻ POWER switch
Turns the main power on and off.

8 ◿^ / ◿v
Volume up/down button
Adjust the volume.
Make adjustments in PRESET.

6 **Infrared sensor window**
Receives the infrared wave from the remote control.

8 CH ^ / CH v
Channel up/down button
Select the channels.
Tune or set the channels.



27 **COMFY VIEW sensor**
Room brightness sensor.

27 **COMFY VIEW indicator**
Lights up red when the COMFY VIEW is set to DARK, MID or LIGHT.

35 **ON TIMER indicator**
Lights up red when the On Timer is set.

8 **⏻ STANDBY indicator**
Power can be turned on by the remote control when the indicator is lit red.

48 **Audio input terminals (AV-3)**
Connects to a camcorder, video game, etc.

48 **Video input terminal (AV-3)**
Connects to a camcorder, video game, etc.

48 **S-Video input terminal (SAV3)**
Connects to a camcorder, video game, etc.

9 **Headphone jack (∩)**
Used to listen to the audio with headphone.
(When using headphone, see **9** .)

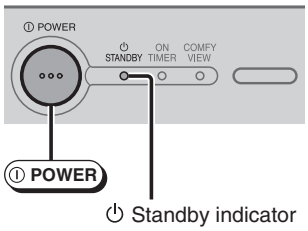
NOTE • Minimal electric power remains consumed if the TV is in standby mode.

Watching TV

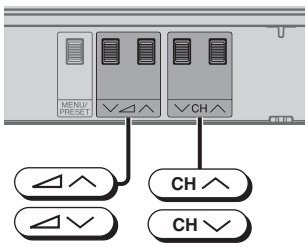
Watching a TV programme

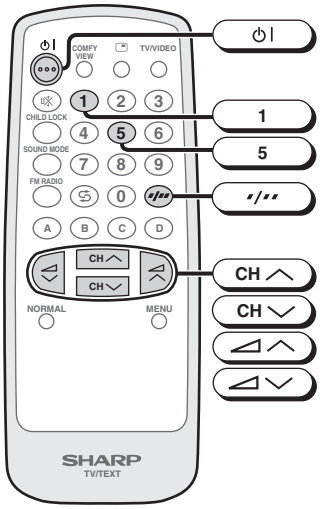
Simple operations for watching a TV programme.

TV Set



Behind the door





1 Turn on power.

- When the ⏻ Standby indicator is off, press ⏻POWER.
- When the ⏻ Standby indicator is red, press ⏻ I on the remote control. The ⏻ Standby indicator changes to green and a picture appears.

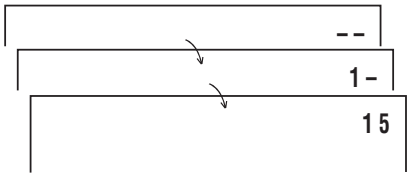
2 Select channel.

With CH ∧ / CH ∨

- Press CH ∧ and channels change as shown below.
  1 → 2 → ... → 98 → 99 → AV1 (or SAV1) → AV2 (or COMPONENT) → AV3 (or SAV3) → 0 → 1 → 2 ...
- Press CH ∨ and channels change as shown below.
  1 → 0 → AV3 (or SAV3) → AV2 (or COMPONENT) → AV1 (or SAV1) → 99 → 98 → ... → 2 → 1 → 0 ...

With the number buttons (on remote control)

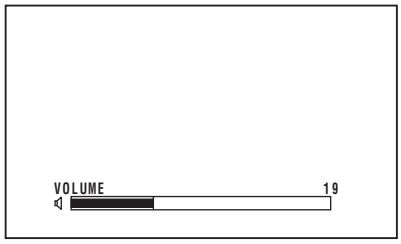
- To select a one-digit channel, such as 5, press 5.
  If "5-" is indicated, press -/-- to select one-digit input, and then press 5 again.
- To select a two-digit channel, such as 15, press -/-- to select the two-digit input. Press 1, and then press 5.



3 Adjust volume using

◁ ∧ / ◁ ∨.

- The volume bar disappears approximately five seconds after the volume has been adjusted.



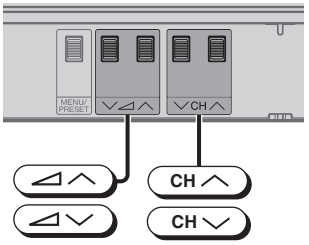
NOTE

- When the ⏻ Standby indicator is red, either CH ∧ / CH ∨ on the TV can be pressed to turn on the power.
- The channel number is displayed in green for channels tuned by auto tuning and displayed in yellow for channels tuned using fine tuning.
- When the ⏻ Standby indicator is red, the TV is in Standby mode and power is still supplied to the TV. If you will not watch TV for a while, turn off the main power by pressing ⏻POWER on the TV set. Also, if you will not be at home for a considerable length of time, unplug the cord from the outlet.
- The AV1 (or SAV1), AV2 (or COMPONENT) and AV3 (or SAV3) input channels can be selected using TV/VIDEO.
- Channels that have been skipped cannot be selected by CH ∧ / CH ∨. See 18.
- The on-screen displays in this manual may differ from their actual appearance.

Operating the TV buttons

Simple operation of the TV set.

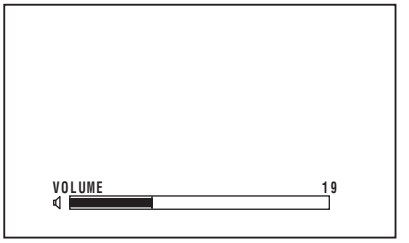
Behind the door



Using ◿^ / ◿v

Press ◿^ to increase volume.

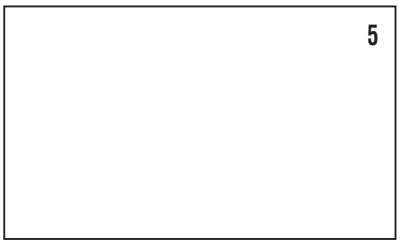
Press ◿v to decrease volume.



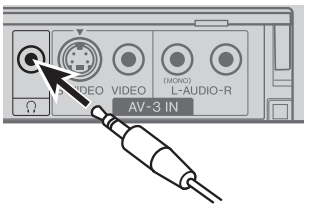
Using CH^ / CHv

Press CH^ to increase channel number.

Press CHv to decrease channel number.



Behind the door



Using headphone

Insert headphone plug into headphone jack to listen to audio with headphone.

• The audio from the speakers is turned off.

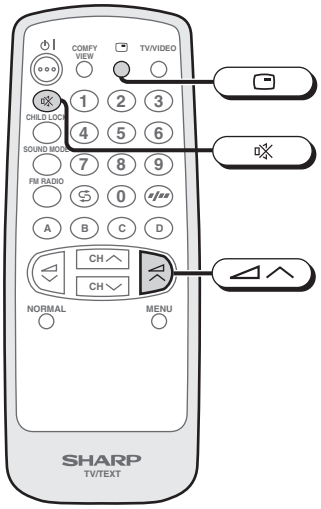
NOTE

- Select an appropriate volume so as not to injure your hearing.
- To avoid injuring your hearing, do not put on the headphone before plugging them into the headphone jack and before the power is turned on.
- The proper impedance for the headphone is 32 ohms.
- Remove the headphone plug from the jack when not using the headphone.

Useful features

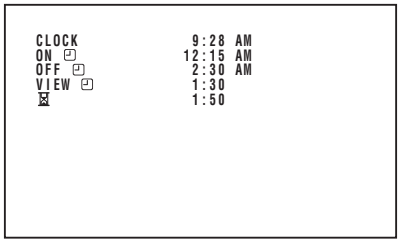
Clock/Timer/Channel display

Displays the clock, the timer, the current channel number and other settings on the screen.



1 **Press** ( ).

- The clock and the time on the On timer, Off timer, View timer and the remaining time of the Reminder appears on the screen.



2 **Press** ( ) **again.**

- The channel number appear on the screen.

3 **Press** ( ) **once again.**

- The display disappears.

Mute

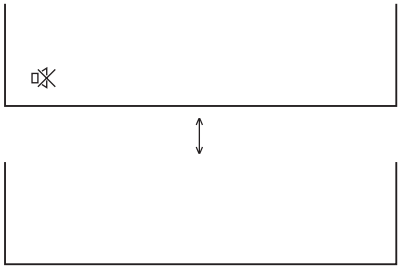
Silences the sound.

1 **Press** ( ).

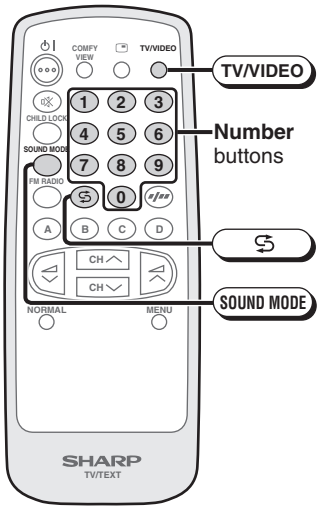
- "🔇" appears on the screen, and the sound is silenced.

2 **Press** ( ) **again.**

- The volume returns to its previous level.



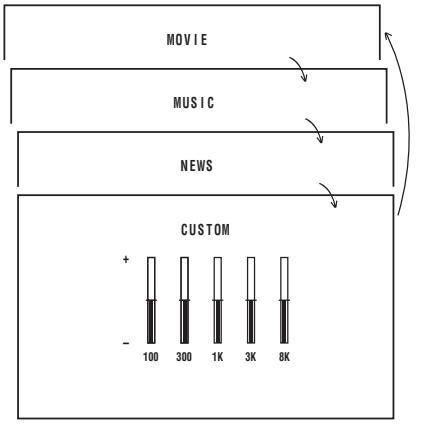
NOTE • Mute will be cancelled if the ( ) is pressed at any time.



Sound mode

Each time you press the SOUND MODE, the mode switches between MOVIE, MUSIC, NEWS and CUSTOM.

MOVIE: Movie mode
MUSIC: Music mode
NEWS: News mode
CUSTOM: Custom mode



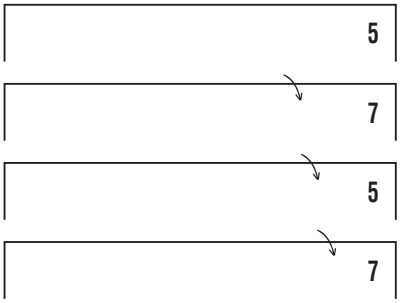
Channel recall

Switches back to the channel you were watching just before the current channel.

Press ⇆.

- The channel previously viewed returns to the screen.

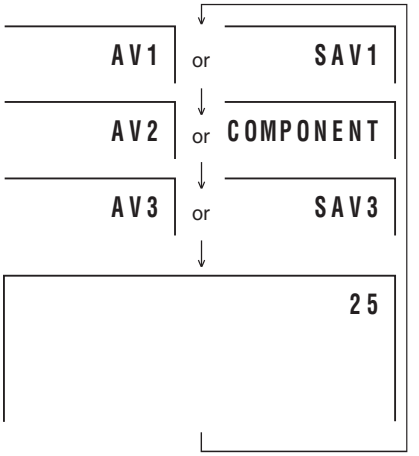
Example:
After switching from channel 5 to channel 7, ⇆ is pressed, the channel will change to channel 5. Press ⇆ again to return to channel 7.



TV/Video selection

Switches between TV broadcasts and AV input programmes.

Each time you press the TV/VIDEO, the input switches between AV1 (or SAV1), AV2 (or COMPONENT), AV3 (or SAV3) and TV programme.

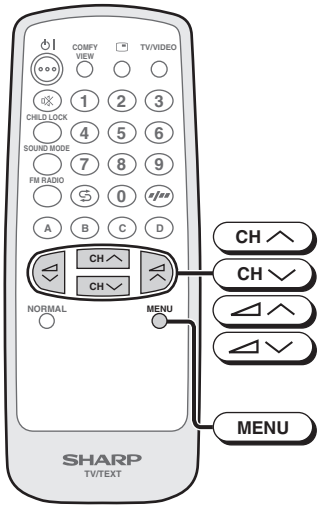


NOTE • The SOUND MODE display can be adjusted using the EQUALIZER menu. See 24.

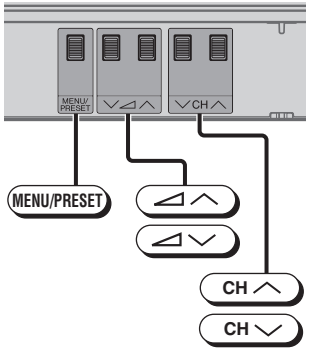
Selecting menu items

This TV set allows you to adjust the picture and sound, and set the channels and other features using the On-screen display with the remote control or from the TV set. Select the desired menu item by following the steps below and then refer to the indicated page for details.

Remote control

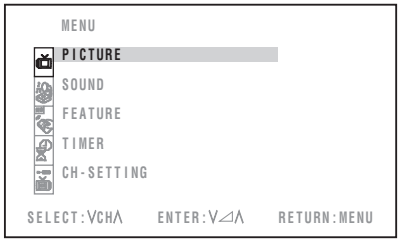


Behind the door



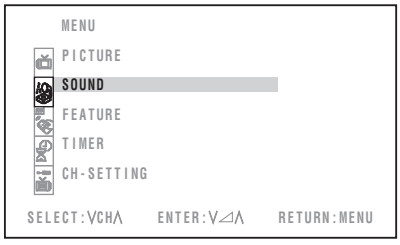
Selecting a menu item

1 **Press MENU / MENU/PRESET to call MENU screen.**



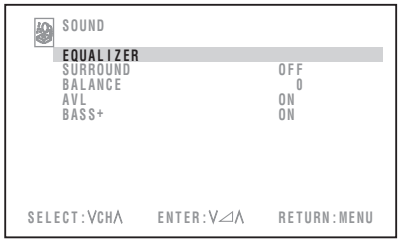
2 **Press CH ^ / CH v to select desired menu item.**

- The selected item is highlighted with purple bar.



3 **Press ◿^ / ◿v to enter.**

- The corresponding menu screen will appear.

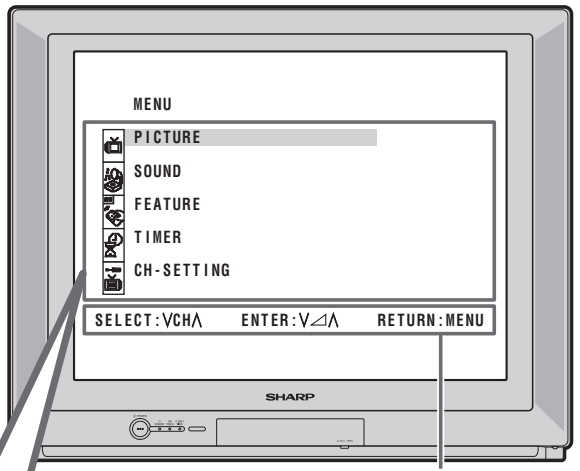


4 **Press MENU / MENU/PRESET until normal screen appears.**

NOTE

- If you press MENU/PRESET on TV set for more than two seconds, the LANGUAGE mode screen will appear instead of the MENU screen. To display the MENU screen, press MENU/PRESET until the normal screen appears, then press the button again. See 14 .
- The procedures for setting and selecting the menu items on the following pages are described using the buttons on the remote control. These procedures can also be performed using the corresponding buttons on the TV set.

Menu item



PICTURE menu..... 21 – 22

PICTURE	
VIDEO MODE	DYNAMIC
CONTRAST	60
COLOUR	+ 6
BRIGHTNESS	0
TINT	0
SHARPNESS	+ 6
PICTURE NR	OFF
WHITE TEMP	◆ □ □ ◇

SELECT:VCH∧ ADJUST:V◿∧ RETURN:MENU

SOUND menu..... 23 – 24

SOUND	
EQUALIZER	
SURROUND	OFF
BALANCE	0
AVL	ON
BASS+	ON

SELECT:VCH∧ ENTER:V◿∧ RETURN:MENU

FEATURE menu..... 25 – 32

FEATURE	
BLUE BACK	OFF
AUTO SELECT	OFF
COMFY VIEW	OFF
16:9 MODE	OFF
CHILD LOCK	
DEMO	OFF

SELECT:VCH∧ ADJUST:V◿∧ RETURN:MENU

TIMER menu..... 33 – 42

TIMER	
CLOCK	--:-- AM
DAY	SUN
ON ⏎	--:-- AM
STATUS	ONCE
POSITION	--
VOLUME	--
OFF ⏎	--:-- AM
☒	--:--
VIEW ⏎	
BEEP REMINDER	OFF

SELECT:VCH∧ ADJUST:0-9,V◿∧ RETURN:MENU

CH-SETTING menu..... 17 – 20

CH-SETTING	
POSITION	12
POSITION NAME	
COLOUR-SYSTEM	AUTO
SOUND-SYSTEM	AUTO
SKIP	OFF
AUTO	
MANUAL	168.25MHz
SORT	
LANGUAGE	ENGLISH

SELECT:VCH∧ ADJUST:V◿∧ RETURN:MENU

NOTE

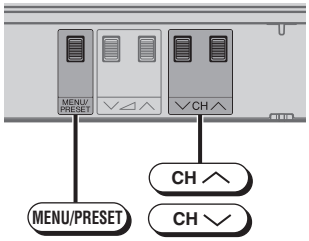
- The on-screen displays in this manual may differ from their actual appearance.

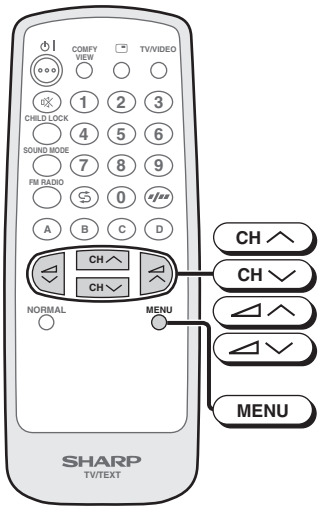
Settings and adjustments

On-screen display language selection

The on-screen display language can be set to English, Chinese, French, Malay or Arabic.

Behind the door





TV set

1 **Press (MENU/PRESET) for more than two seconds during normal screen.**

- The language select mode appears.

NOTE

- In order to enter to language select mode, press (MENU/PRESET) during normal screen.

2 **Press (CH ∧) / (CH ∨) to select desired language.**

- Pressing (MENU/PRESET) changes the screen as shown below.

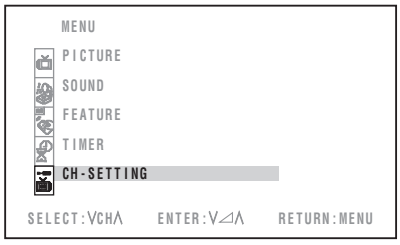
→Language ⟶ AUTO ⟶ MANUAL
Normal screen ←

3 **Press (MENU/PRESET) until normal screen appears.**

Using MENU screen

1 **Press (MENU) to call MENU screen.**

2 **Press (CH ∧) / (CH ∨) to select "CH-SETTING".**

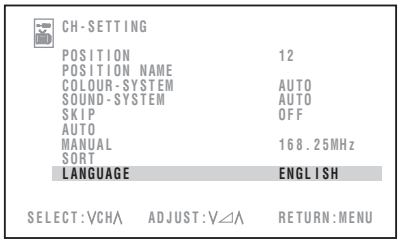


3 **Press (⊿ ∧) / (⊿ ∨) to display CH-SETTING menu.**

4 **Press (CH ∧) / (CH ∨) to select "LANGUAGE".**

5 **Press (⊿ ∧) / (⊿ ∨) to select the desired language.**

→ ENGLISH ⟷ 中文 ⟷ FRANCAIS
↳ العربية ⟷ MELAYU ←

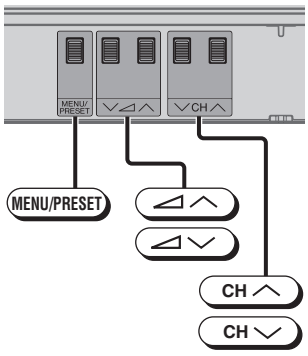


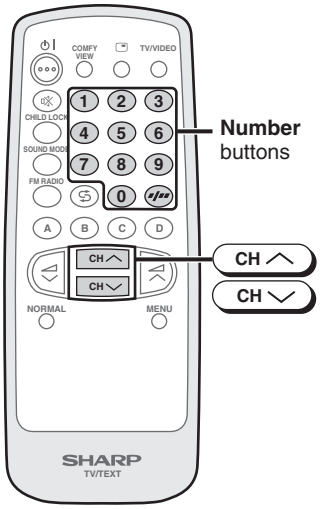
6 **Press (MENU) until normal screen appears.**

Manual channel tuning

Enables manual channel tuning to a desired TV station. (e.g. tuning the TV to a VCR, tuning in an additional TV station.)
NOTE: This TV is already tuned into 2, 7, 9, 10 and 28.

Behind the door





1 **Press (MENU/PRESET) for more than two seconds during normal screen.**

- The language select mode appears.

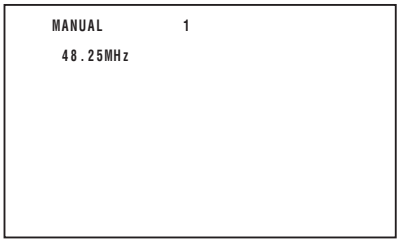
NOTE

- In order to enter to language select mode, press (MENU/PRESET) during normal screen.

2 **Press (MENU/PRESET) twice to display MANUAL mode screen.**

- Pressing (MENU/PRESET) changes the screen as shown below.

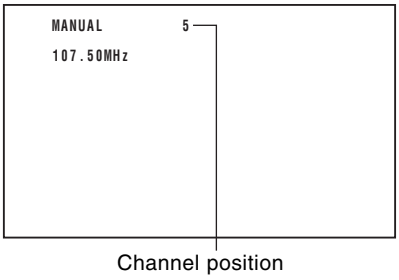
Language → AUTO → MANUAL → Normal screen



3 **Press (CH ∧) / (CH ∨) or number buttons to select channel position.**

4 **Press (◿∧) / (◿∨) on TV set to locate channel you wish to preset to current channel position.**

- Search is initiated and when a TV signal is received during the search, the search stops.



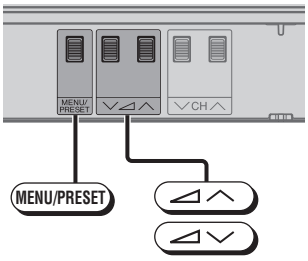
5 **Repeat steps 3 and 4 above, to preset channel positions for other broadcasts.**

6 **Press (MENU/PRESET) again to display normal screen.**

Auto channel tuning

Automatically tunes in and presets receivable TV stations, using consecutive channels numbers (e.g. 2, 7, 9, 10 will be stored as 1, 2, 3, 4).

Behind the door



1 **Press MENU/PRESET for more than two seconds during normal screen.**

- The language select mode appears.

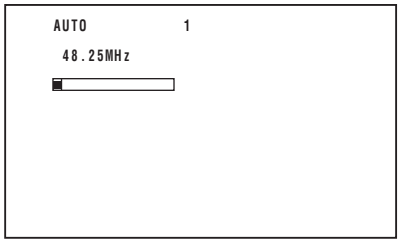
NOTE

- In order to enter to language select mode, press MENU/PRESET during normal screen.

2 **Press MENU/PRESET again to display AUTO mode screen.**

- Pressing MENU/PRESET changes the screen as shown below.

Language → AUTO → MANUAL → Normal screen



3 **Press ⊿∧ / ⊿∨ on TV set.**

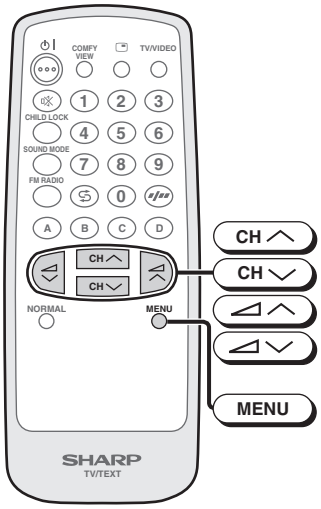
- All the TV stations in your area that can be received by the TV set are automatically preset between channels 1 to 99.
- The screen shows whatever is on channel 1 when auto channel preset is finished.

NOTE

- AUTO PRESET stores all receivable channels including those which may be very weak and not clearly visible. To preset only those channels designated for the local viewing region, use MANUAL PRESET. See 15.
- Unused channels are automatically skipped.

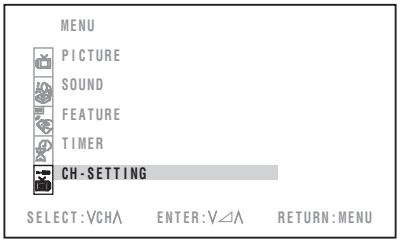
Channel setting

Enables individual channel setting.



1 Press MENU to call MENU screen.

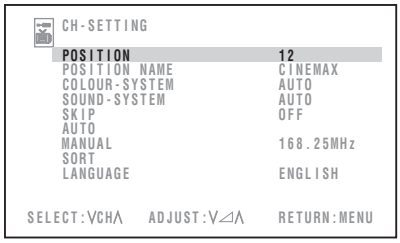
2 Press CH ∧ / CH ∨ to select "CH-SETTING".



3 Press ⊿∧ / ⊿∨ to display CH-SETTING menu.

4 Press CH ∧ / CH ∨ to select desired setting.

5 Each time you press ⊿∧ / ⊿∨, setting for individual items changes as follows:



POSITION

• The channel position changes to the higher or lower number.

POSITION NAME

• To enter the name of the channel. Maximum 7 alphanumeric can be input.
e.g. CINEMAX

• Press CH ∧ / CH ∨ : To select a desired alphanumeric.

(" " (space character) ↔ A ← ... → Z ↔ 0 ← ... → 9 ↔ + ↔ – ↔ • ↔ /)

• Press ⊿∧ / ⊿∨ : To select the previous/next alphanumeric.

• To exit press ⊿∧ / ⊿∨ until input cursor disappear.

• If the wrong alphanumeric is entered, select " " (space character) to clear.

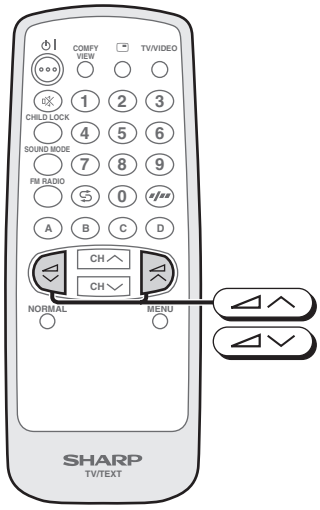
COLOUR-SYSTEM

AUTO ↔ PAL ↔ SECAM
↔ N358 ↔ N443

(continue)

NOTE • Switching COLOUR-SYSTEM:
Set the system to "AUTO" for normal TV reception. The AUTO mode automatically detects the receiving signal system and changes the reception system of the TV set. When the picture is not stable, switching to an appropriate system may improve the picture quality.

Channel setting (continued)



SOUND-SYSTEM

AUTO ⟷ B/G
↕
M ⟷ D/K ⟷ I

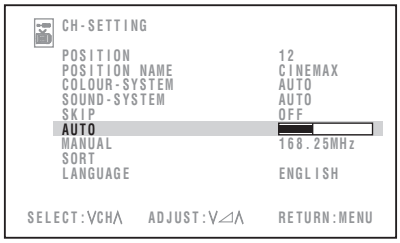
SKIP

ON ⟷ OFF

When set “SKIP” to “ON”, the channel number are set to SKIP. To turn off SKIP, press the number buttons to select the desired channel and then set “SKIP” to “OFF”.

AUTO

- Press ⊿∧ / ⊿∨ and Auto Channel Tuning is started. Auto tuning bar will shown during Auto Search only. (Please see page **16** for details on Auto Channel Tuning.)



MANUAL (FINE tuning)

(i) Each time ⊿∧ / ⊿∨ is pressed, the frequency changes to allow fine tuning and the colour of channel number changes to yellow to indicate fine tuning.

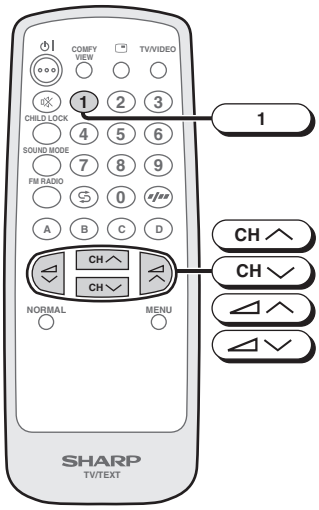
(ii) Press ⊿∧ / ⊿∨ for more than 2 seconds, the “Manual Channel Tuning” will start. If a signal is found, the Manual Channel Tuning will stop searching.

(continue)

NOTE

- Switching SOUND-SYSTEM:
  Set the system to “AUTO” for normal TV reception. The AUTO mode automatically detects the receiving signal system and changes the reception system of the TV set. When the sound is not stable, switching to an appropriate system may improve the sound quality.
- In a weak reception area, or under bad reception conditions, you can change the frequency for fine tuning.
- When using FINE tuning, the channel number changes from green to yellow.
- To return the channel to its original frequency setting, follow the manual channel tuning procedure. See **15**.

Channel setting (continued)

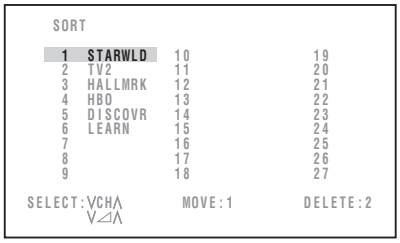


SORT

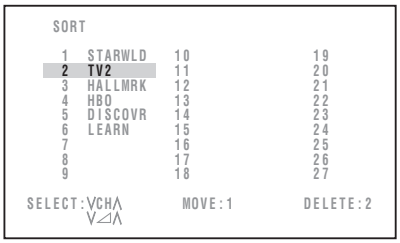
• To sort the program numbers according to your preference.

Moving a program
TV2 (at program number 2) to program number 5

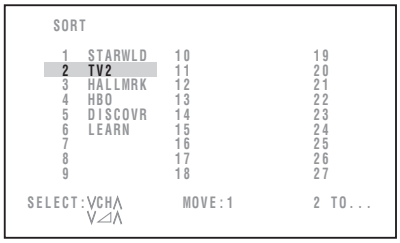
1. When you press CH / CH in **step 5** on page 17, SORT menu will be displayed.



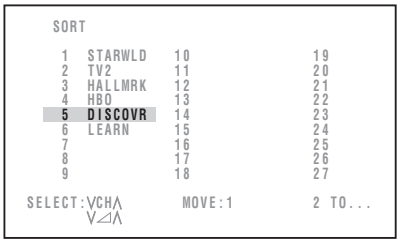
2. Press CH / CH or ⊿ / ⊿ to select program number 2 (e.g. TV2) to be moved.



3. Press 1, and program number 2 (e.g. TV2) will be set as program to be moved.

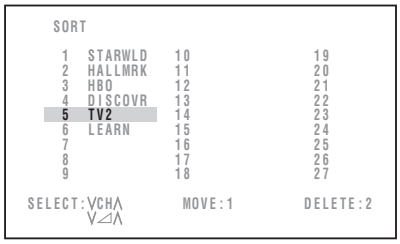


4. Press CH / CH or ⊿ / ⊿ to select program number 5 (e.g. DISCOVR).



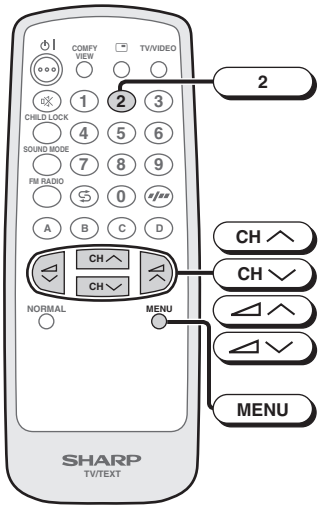
5. Press 1 again, TV2 will be moved to program number 5. The programs in program number 3 to 5 will be shifted up 1 position.

• TV will tune to program number 5 having TV2 program.



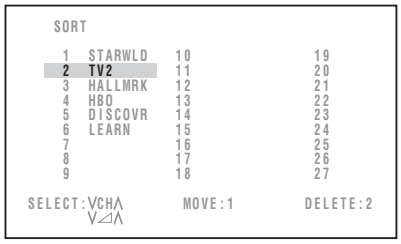
(continue)

Channel setting (continued)

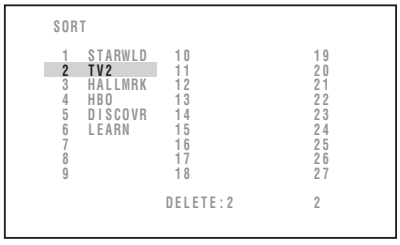


Deleting a program
(Delete TV2 at program number 2)

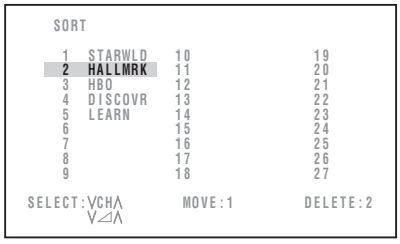
1. Repeat **step 1** on page 19.
2. Press CH ∧ / CH ∨ or ◁∧ / ◁∨ to select program number 2 (e.g. TV2) to be deleted.



3. Press 2 and program number 2 (e.g. TV2) will be set as program to be deleted.

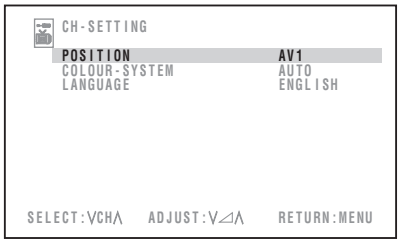


4. Press 2 again, program number 2 (e.g. TV2) will be deleted. The programs in program number 3 to 99 will be shifted up 1 position.
   - TV will tune to program number 2 having HALLMRK program.



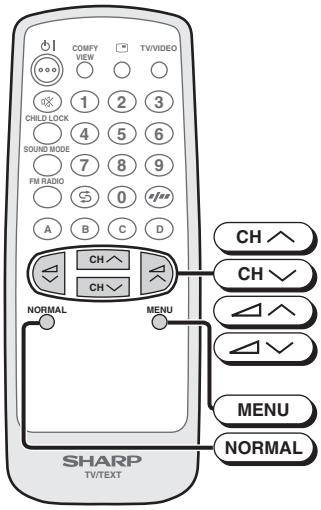
6 **Press MENU until normal screen appears.**

- When you select AV1, AV2 or AV3 for the channel position, the CH-SETTING menu changes as shown on the right and the colour mode changes in the following order:



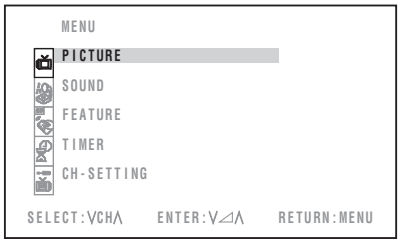
→ AUTO ⟷ PAL ⟷ SECAM ⟷ N443 ⟷ N358 ←

Picture adjustment



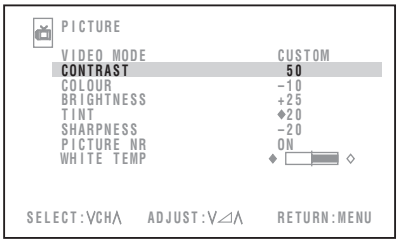
1 Press MENU to call MENU screen.

2 Press CH ∧ / CH ∨ to select "PICTURE".



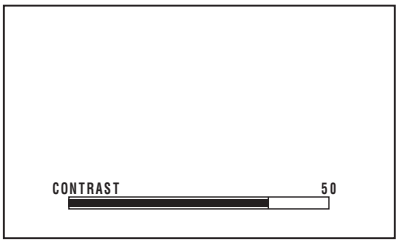
3 Press ◿∧ / ◿∨ to display PICTURE menu.

4 Press CH ∧ / CH ∨ to select adjustment items.



5 Adjust using ◿∧ / ◿∨.

- Wait for approximately five seconds to return to PICTURE menu.



6 Repeat steps 4 and 5 above to adjust other items.

7 Press MENU until normal screen appears.

- Pressing NORMAL while a PICTURE selection is displayed, only the selected mode is reset to the standard (factory-setting) position.
- Pressing NORMAL while a PICTURE menu screen is displayed will reset all the items of PICTURE menu to the standard (factory-setting) position
- Pressing NORMAL will reset all the items of PICTURE menu and SOUND menu to the standard (factory-setting) position.

(continue)

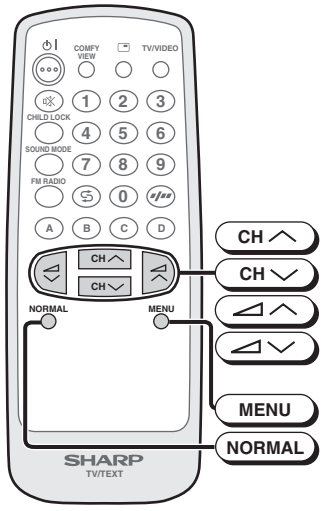
Picture adjustment (continued)

The following table lists the adjustment items shown in the PICTURE menu and how they change as you press ◿ / ◿.

Selected item	Press ◿		Press ◿
VIDEO MODE	DYNAMIC ⟷ STANDARD ⟷ SOFT ⟷ CUSTOM		
CONTRAST	To decrease contrast		To increase contrast
COLOUR	For less colour intensity		For more colour intensity
BRIGHTNESS	For less brightness		For more brightness
TINT	To move tint toward red		To move tint toward green
SHARPNESS	For less sharpness		For more sharpness
PICTURE NR		ON ⟷ OFF	(see note below)
WHITE TEMP	To more reddish background		To more bluish background

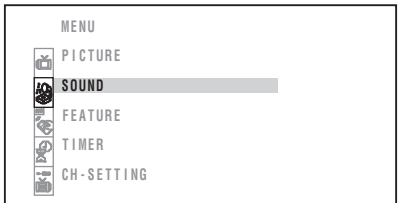
- TINT can only be selected and adjusted when receiving NTSC broadcasts.
- Picture Noise Reduction
  Noise might be generated on images when playing deteriorated video tapes or when receiving broadcasts with relatively weak signals. In these cases, set PICTURE NR to “ON” to reduce the noise. However, when receiving good images without noise, you can get better image quality by turning OFF this feature.
- WHITE TEMP can only be adjusted on PICTURE menu.
- If any items is adjusted, VIDEO MODE will automatically change to CUSTOM.

Sound adjustment



1 Press MENU to call MENU screen.

2 Press CH ∧ / CH ∨ to select "SOUND".

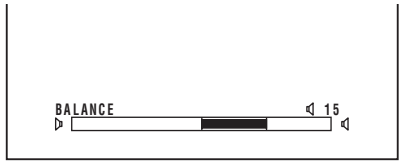


3 Press ◿∧ / ◿∨ to display SOUND menu.

4 Press CH ∧ / CH ∨ to select adjustment items.

5 Adjust using ◿∧ / ◿∨.

- Wait for approximately five seconds to return to SOUND menu.



6 Repeat steps 4 and 5 above to adjust other items.

7 Press MENU until normal screen appears.

- Pressing NORMAL while a SOUND selection is displayed, only the selected mode is reset to the standard (factory-setting) position.
- Pressing NORMAL while the SOUND menu screen is displayed will reset all the items of SOUND menu to the standard (factory-setting) position.
- Pressing NORMAL will reset all the items of PICTURE menu and SOUND menu to the standard (factory-setting) position.

The following table lists the adjustment items shown in the SOUND menu and how they change as you press ◿∧ / ◿∨.

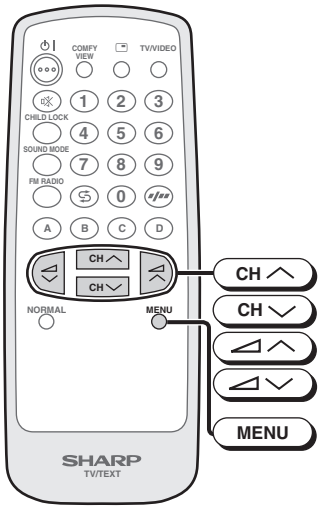
Selected item	Press ◿∨		Press ◿∧
EQUALIZER	(Refer with page 24 for details on Equalizer)		
SURROUND*1	(Please see note below)		
BALANCE	To shift balance toward left	◀ ▶	To shift balance toward right
AVL*2	The AVL is ON	ON ⟷ OFF	The AVL is OFF
BASS+	The BASS+ is ON	ON ⟷ OFF	The BASS+ is OFF

- AVL is advised to be set to "ON" when compact disk (CD) is being playback.

*1: SURROUND mode can be set to "OFF" or "ESS" during receiving sound signal is stereo.
SURROUND mode can be set to "OFF" or "EPS" during receiving sound signal is monaural.

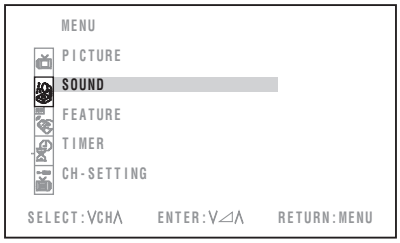
*2: Please see 51 for details on Definition of Terms.

Equalizer



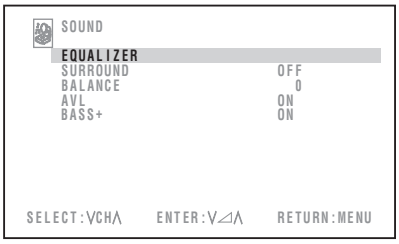
1 Press MENU to call MENU screen.

2 Press CH ∧ / CH ∨ to select "SOUND".



3 Press ⊿∧ / ⊿∨ to display SOUND menu.

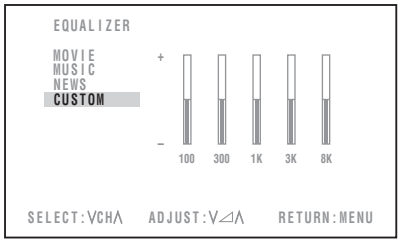
4 Press CH ∧ / CH ∨ to select "EQUALIZER".



5 Press ⊿∧ / ⊿∨ to display EQUALIZER menu.

6 Press CH ∧ / CH ∨ to select "MOVIE", "MUSIC", "NEWS" or "CUSTOM".

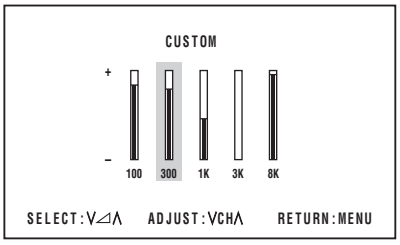
- When "MOVIE", "MUSIC" or "NEWS" is adjusted, EQUALIZER will automatic change to "CUSTOM" mode.



7 Press ⊿∧ / ⊿∨ to display CUSTOM screen.

8 Press ⊿∧ / ⊿∨ to select EQUALIZER bar.

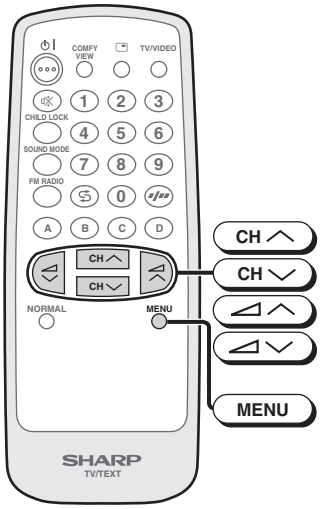
9 Press CH ∧ / CH ∨ to adjust higher or lower.



10 Press MENU until normal screen appears.

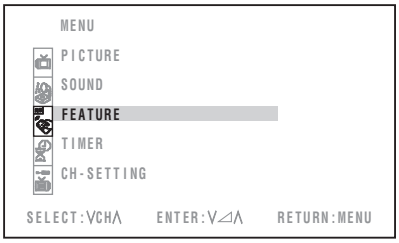
Blue screen

Automatically turns the screen blue if a broadcast signal is not received.



1 Press MENU to call MENU screen.

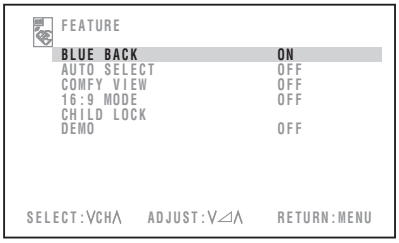
2 Press CH ∧ / CH ∨ to select “FEATURE ”.



3 Press ◿∧ / ◿∨ to display FEATURE menu.

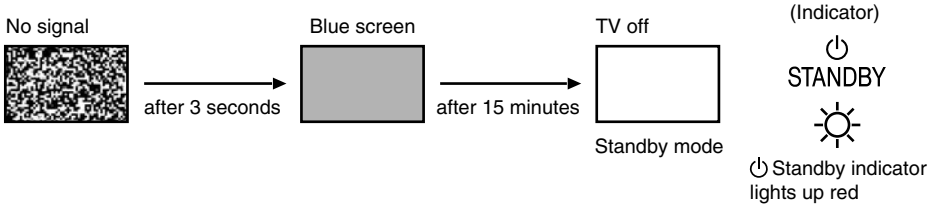
4 Press CH ∧ / CH ∨ to select “BLUE BACK”.

5 Press ◿∧ / ◿∨ to select “ON” or “OFF”.



6 Press MENU until normal screen appears.

When BLUE BACK is set to “ON”

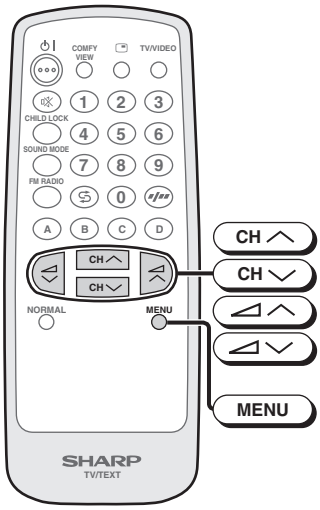


NOTE

- Poor reception due to weak signals and too much noise may activate BLUE BACK, despite the presence of a broadcast signal. To continue watching TV under these conditions, switch “BLUE BACK” to “OFF”.
- When Off timer is set, the OFF TIMER setting has priority over BLUE BACK.

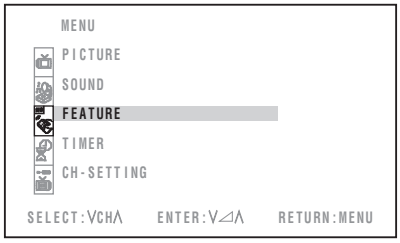
Auto select

When video equipment, such as a video game system or camcorder, is connected to the front (AV-3 IN) terminals, this TV set automatically selects the input mode (AV3).



1 Press MENU to call MENU screen.

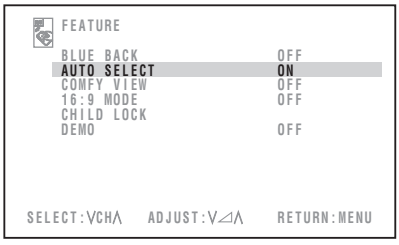
2 Press CH ∧ / CH ∨ to select "FEATURE".



3 Press ◿∧ / ◿∨ to display FEATURE menu.

4 Press CH ∧ / CH ∨ to select "AUTO SELECT".

5 Press ◿∧ / ◿∨ to select "ON" or "OFF".



6 Press MENU until normal screen appears.

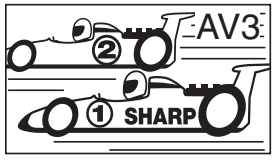
To use the Auto Select function, confirm the following:

- The TV set is turned on. (The ⏻ Standby indicator lights up green.)
- The video equipment, such as a video game system or camcorder, is connected to the front (AV-3 IN) terminals.

Example

Connect the video equipment to the front (AV-3 IN) terminals.

Input mode (AV3) is automatically selected.

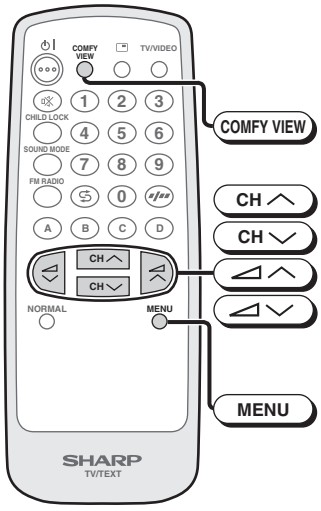


NOTE

- If the video equipment is connected to the rear terminals on the TV set, the video mode will not be automatically selected.
- When the power on the video equipment is turned off, the input mode (AV3) is still selected. Use the remote control to return to a TV channel.

Comfy view

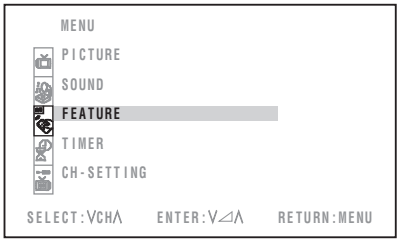
The TV set will automatically adjust the contrast according to the environment brightness. User may select own preference by select COMFY VIEW to "OFF", "DARK", "MID" or "LIGHT".



Using MENU screen

1 **Press MENU to call MENU screen.**

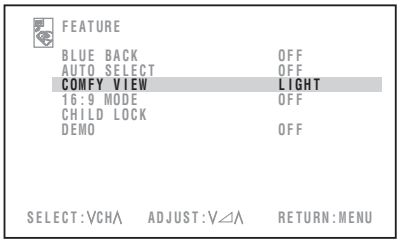
2 **Press CH ∧ / CH ∨ to select "FEATURE".**



3 **Press ◿∧ / ◿∨ to display FEATURE menu.**

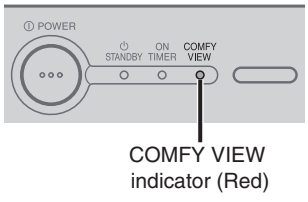
4 **Press CH ∧ / CH ∨ to select "COMFY VIEW".**

5 **Press ◿∧ / ◿∨ to select "OFF", "DARK", "MID" or "LIGHT".**



- When COMFY VIEW is set to "OFF", the COMFY VIEW indicator on the TV set is turn off.
- When COMFY VIEW is set to "DARK", "MID" or "LIGHT", the COMFY VIEW indicator on the TV set lights up in red.

TV Set

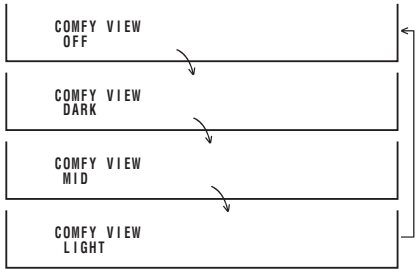


6 **Press MENU until normal screen appears.**

Using Remote Control

1 **Press COMFY VIEW directly enter to the COMFY VIEW mode screen.**

2 **Each time you press COMFY VIEW, the mode switches between "OFF", "DARK", "MID" or "LIGHT".**

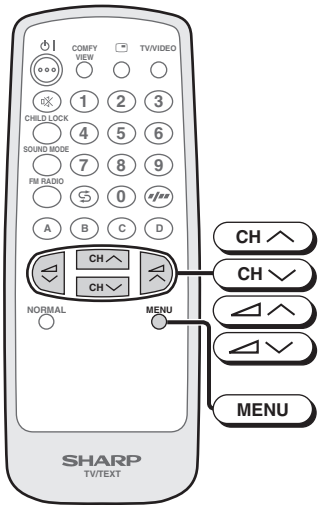


- When COMFY VIEW is set to "OFF", the COMFY VIEW indicator on the TV set is turn off.
- When COMFY VIEW is set to "DARK", "MID" or "LIGHT", the COMFY VIEW indicator on the TV set lights up in red.

3 **The COMFY VIEW mode screen disappear approximately five seconds.**

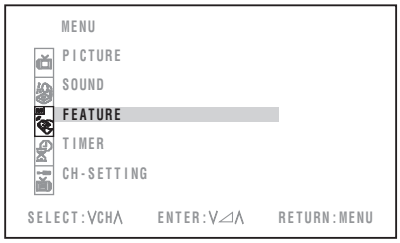
16:9 mode

Selects the width of the picture.



1 Press MENU to call MENU screen.

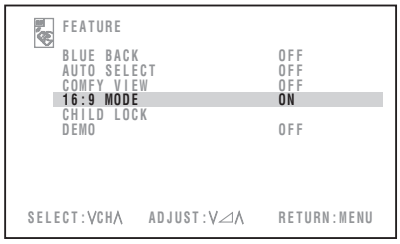
2 Press CH ∧ / CH ∨ to select “FEATURE”.

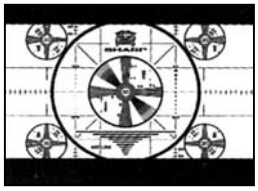
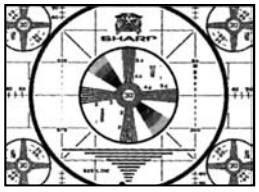
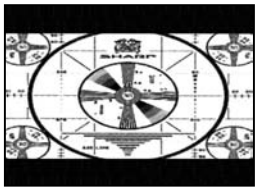


3 Press ◿∧ / ◿∨ to display FEATURE menu.

4 Press CH ∧ / CH ∨ to select “16:9 MODE”.

5 Press ◿∧ / ◿∨ to select “ON” or “OFF”.

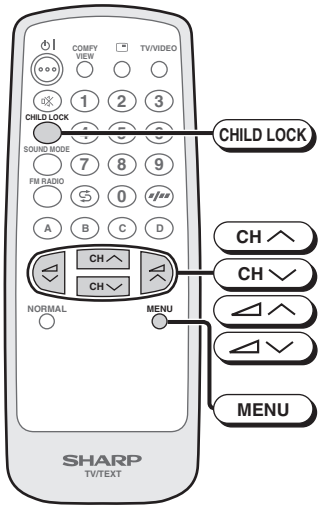


Format of signal Input	Mode set to “OFF”	Mode set to “ON”
16:9 format signal		
4:3 format signal		

6 Press MENU until normal screen appears.

Child lock

Preventing children from watching TV or certain channels.

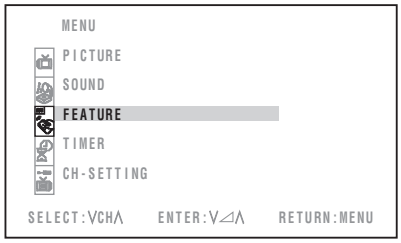


Setting the CHILD LOCK mode (For the first time)

1 **Press MENU to call MENU screen.**

NOTE

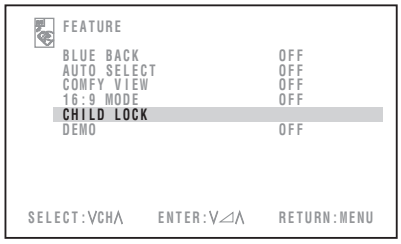
- Press CHILD LOCK will enter directly to CHILD LOCK menu.



2 **Press CH ^ / CH v to select "FEATURE".**

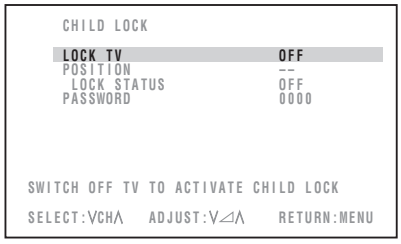
3 **Press ⊿ ^ / ⊿ v to display FEATURE menu.**

4 **Press CH ^ / CH v to select "CHILD LOCK".**



5 **Press ⊿ ^ / ⊿ v to display CHILD LOCK menu.**

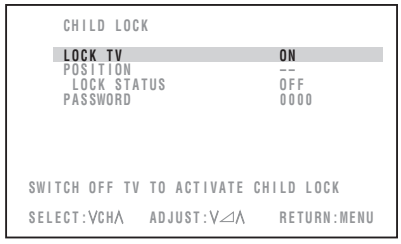
6 **Press CH ^ / CH v to select desired individual setting as follow:**



LOCK TV

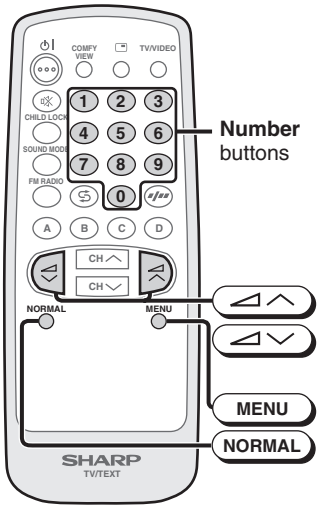
Press ⊿ ^ / ⊿ v to select "LOCK TV" to "ON" or "OFF".

- ON
  LOCK TV will lock the entire TV for viewing.
  (Please see page 31 for details on "To turn OFF or to change setting of CHILD LOCK mode".)
- OFF
  LOCK TV is deactivated.



(continue)

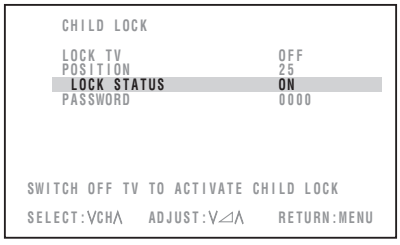
Child lock (continued)



POSITION/LOCK STATUS

(i) Press ⊿^ / ⊿v or **Number** buttons (0~9) to set the position.
(e.g. 25)

(ii) Press ⊿^ / ⊿v to select “LOCK STATUS” to “ON” or “OFF”.

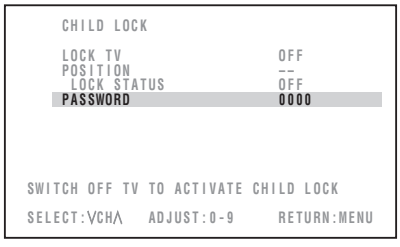


- ON: Channel position set above (e.g. 25) will be locked. You may not able to view the channel position set above. (Please see page 31 for details on “To turn OFF or to change setting of CHILD LOCK mode”.)
- OFF: Channel position set above (e.g. 25) will not be locked.

PASSWORD

Enter 4 digits PASSWORD using **Number** buttons (0~9) on the remote control.
(For example: 0000).

- Press NORMAL to reset the entered number to “0000”.



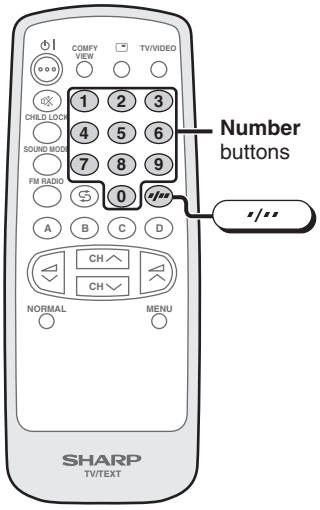
7 **Press MENU until normal screen appears.**

- The CHILD LOCK mode will be activated after the TV is turned off and on again.

(continue)

NOTE • If you forget your PASSWORD, please input “2398” to enter, then change to new PASSWORD. To change to new PASSWORD, please see **PASSWORD** above.

Child lock (continued)



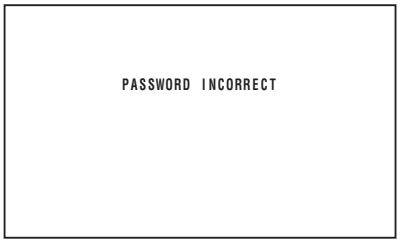
To turn OFF or to change setting of CHILD LOCK mode

1 **While "CHILD LOCK ON" screen appear.**

2 **Enter 4 digits PASSWORD using Number buttons (0~9) on the remote control. (For example: 0000)**

- Press -/-- to clear the entered number.

- If the wrong PASSWORD is entered, "PASSWORD INCORRECT" screen will appear. Input the PASSWORD again in this case.

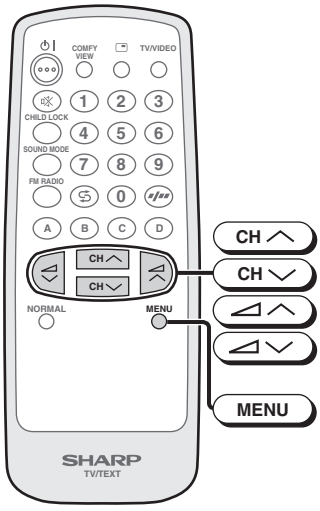


NOTE

- If you forget your password, please input "2398" to to enter, then change to new PASSWORD. To change to new PASSWORD, please see **PASSWORD** on **30**.
- The PASSWORD is shared for CHILD LOCK and VIEW TIMER.

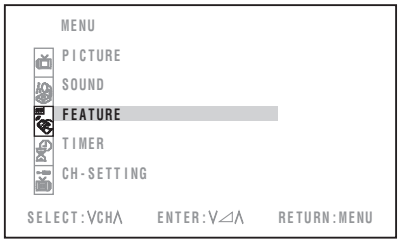
Demo

To learn more about TV set.



1 Press MENU to call MENU screen.

2 Press CH ∧ / CH ∨ to select “FEATURE”.



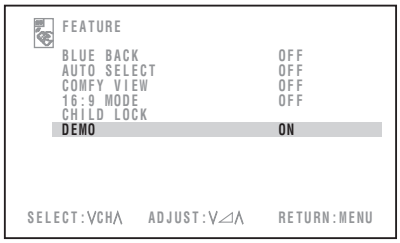
3 Press ◿∧ / ◿∨ to displa y FEATURE menu.

4 Press CH ∧ / CH ∨ to select “DEMO”.

5 Press ◿∧ / ◿∨ to select “ON” or “OFF”.

“ON”: Turn ON demonstration.

“OFF”: Turn OFF demonstration.



During demonstration is showing:

① Press any button on remote control once will pause the demonstration for approximately 1 minute.

② Press any button again will exit the demo mode temporary and return back to TV mode.

③ If no button is pressed within 1 minute the demonstration will be automatically restarted.

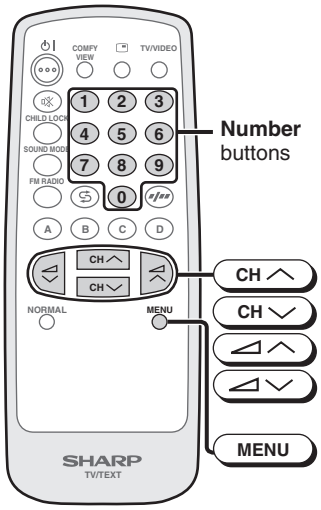
④ Set DEMO to “OFF” for turning OFF the demonstration.

6 Press MENU until normal screen appears.

NOTE • You are advised to change the setting in MENU after the DEMO is turn “OFF”.

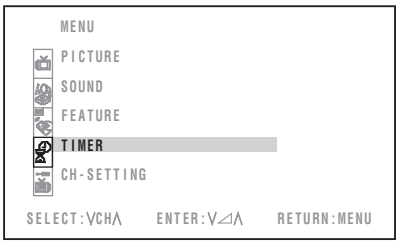
Clock

This is a real time clock and must be set before On Timer and Off Timer can be used. If clock is not set, On Timer and Off Timer cannot be set.



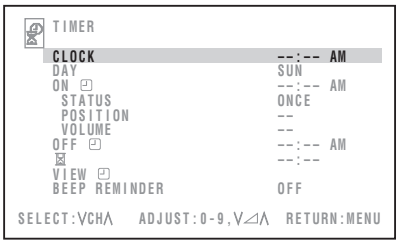
1 Press MENU to call MENU screen.

2 Press CH ∧ / CH ∨ to select "TIMER".



3 Press ⊿∧ / ⊿∨ to display TIMER menu.

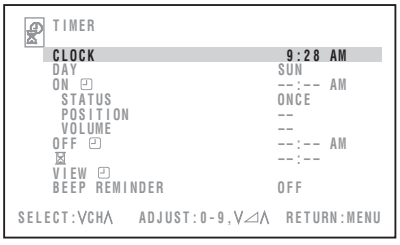
4 Press CH ∧ / CH ∨ to select "CLOCK".



5 Press Number buttons (0~9) to set clock.

Press ⊿∧ / ⊿∨ to select "AM" or "PM".

- As soon as the clock is entered, the clock starts running.



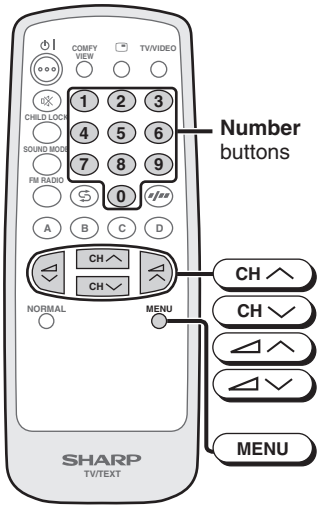
6 Press MENU until normal screen appears.

NOTE

- CLOCK can be set from 12:00 AM until 12:00 PM.
  For example: 11:59 AM → 12:00 PM → ... 12:59 PM → 1:00 PM → ... 11:59 PM → 12:00 AM ...
- This real time clock is not synchronized with the time from Teletext.
- If 0 is pressed for the 1st digit, the "0" will not appear after entering the 4th digit.
  Example: "09:28 AM" → "9:28 AM"
- To cancel the clock setting, press NORMAL when "CLOCK" is highlighted so as to set the clock to "– – : – –".

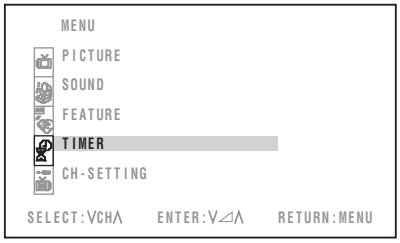
Day

This function allow to set the day.



1 Press MENU to call MENU screen.

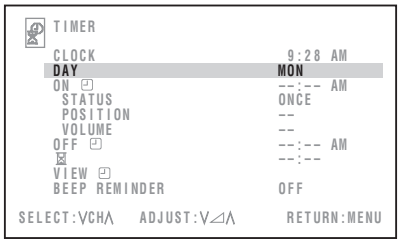
2 Press CH ∧ / CH ∨ to select "TIMER".



3 Press ◿∧ / ◿∨ to display TIMER menu.

4 Press CH ∧ / CH ∨ to select "DAY".

5 Press ◿∧ / ◿∨ to set DAY.



- DAY is useful for On Timer only.
- When real time clock changes from 11:59 PM to 12:00 AM, DAY will be updated automatically.
- If the On Timer "STATUS" matches the DAY, the TV will turns power on when the On Timer has been reached.
- DAY does not function if the real time clock has not been set.
- DAY can be select in the following order:

SUN ⇄ MON ⇄ TUE ⇄ WED ⇄ THU ⇄ FRI ⇄ SAT ⇄ SUN

6 Press MENU until normal screen appears.

On timer

Automatically turns power on when preset time on a specific day has been reached.

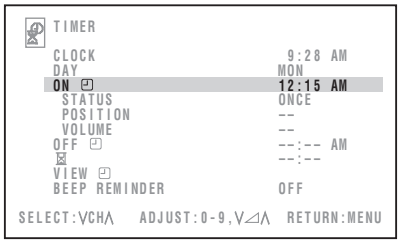
1 Repeat steps 1 ~ 2 above.

2 Press ◿∧ / ◿∨ to display TIMER menu.

3 Press CH ∧ / CH ∨ to select "ON ⏎".

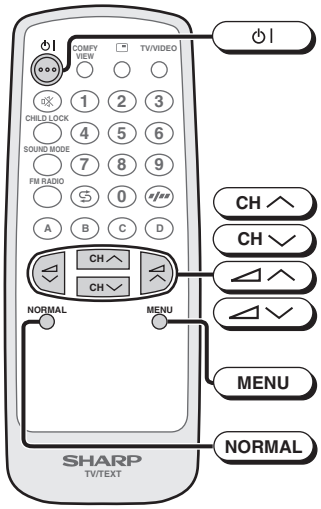
4 Press Number buttons (0~9) to set time for TV to turn on.

Press ◿∧ / ◿∨ to select "AM" or "PM".



(continue)

On timer (continued)



5 **Press CH ∧ / CH ∨ to select "STATUS".**

6 **Press ◿∧ / ◿∨ to set the status.**

- STATUS can be select in the following order:

ONCE → MON → TUE → WED → THU → DAILY → SUN → SAT → FRI → ONCE

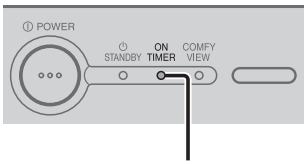
```
TIMER
CLOCK                 9:28 AM
DAY                   MON
ON                    12:15 AM
 STATUS               DAILY
 POSITION             --
 VOLUME               --
OFF                   --:-- AM
                      --:--
VIEW
BEEP REMINDER         OFF
SELECT:VCH∧   ADJUST:V◿∧   RETURN:MENU
```

7 **Press CH ∧ / CH ∨ to select "POSITION".**

8 **Press ◿∧ / ◿∨ to set the position. (e.g. 78)**

```
TIMER
CLOCK                 9:28 AM
DAY                   MON
ON                    12:15 AM
 STATUS               DAILY
 POSITION             78
 VOLUME               --
OFF                   --:-- AM
                      --:--
VIEW
BEEP REMINDER         OFF
SELECT:VCH∧   ADJUST:V◿∧   RETURN:MENU
```

TV Set



ON TIMER indicator (Red)

9 **Press CH ∧ / CH ∨ to select "VOLUME".**

10 **Press ◿∧ / ◿∨ to set volume.**

11 **Press MENU until normal screen appears.**

```
TIMER
CLOCK                 9:28 AM
DAY                   MON
ON                    12:15 AM
 STATUS               DAILY
 POSITION             78
 VOLUME               23
OFF                   --:-- AM
                      --:--
VIEW
BEEP REMINDER         OFF
SELECT:VCH∧   ADJUST:V◿∧   RETURN:MENU
```

12 **Press ⏻| to put TV set into Standby mode.**

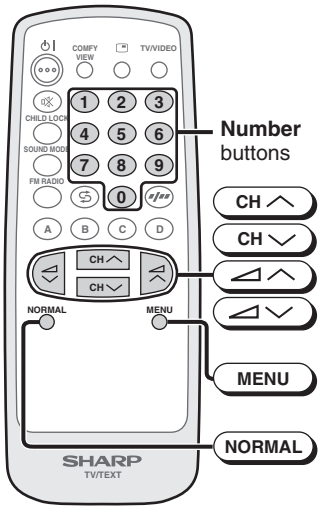
- The ON TIMER indicator lights up Red.
- When On Timer has been reached on the desired day, the power turns on and a picture appears on the screen.
- The On Timer speaker volume gradually increases from zero to the preset volume.

NOTE

- On Timer can be set from 12.00 AM until 12:00 PM.
  For example: 11:59 AM → 12:00 PM → ...12:59 PM → 1:00 PM → ...11:59 PM → 12:00 AM ...
- If CLOCK is not set, On Timer cannot be functioned.
- If 0 is pressed for the 1st digit, the "0" will not appear after entering the 4th digit.
  Example: "09:28 AM → "9:28 AM"
- To cancel the timer setting, press NORMAL when "ON ⏎" is highlighted so as to set the timer to "– – : – –".
- The On timer is cancelled if the power is turned off using ⏻POWER on the TV set.
- If the TV set is turned on by the On timer, then the TV set will be automatically turned off in two hours if no buttons are pressed on the TV set or remote control.

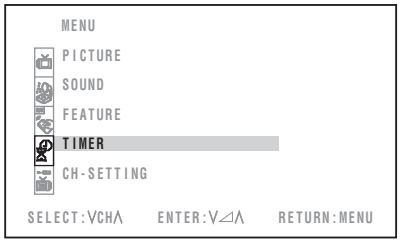
Off timer

Automatically switches the TV to standby mode when preset time has been reached.



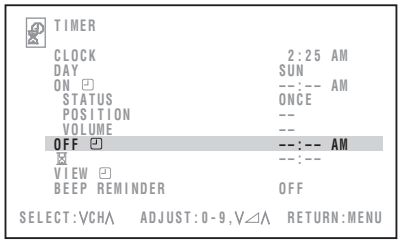
1 Press MENU to call MENU screen.

2 Press CH ∧ / CH ∨ to select "TIMER".



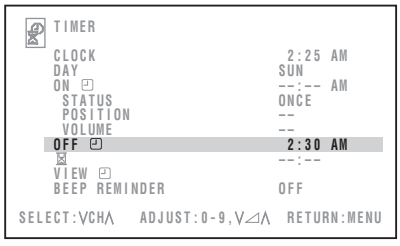
3 Press ◿∧ / ◿∨ to display TIMER menu.

4 Press CH ∧ / CH ∨ to select "OFF ⏎ ".



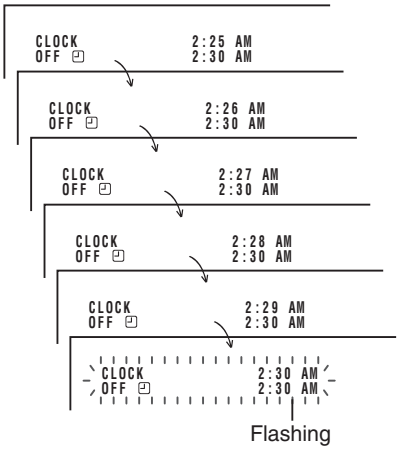
5 Press Number buttons (0~9) to set time for TV to turn off.

Press ◿∧ / ◿∨ to select "AM" or "PM".



6 Press MENU until normal screen appears.

- Five minutes before the OFF TIMER is expires, the CLOCK and the OFF TIMER appears on the screen for several seconds.
- A flashing display of the CLOCK and the OFF TIMER will appears during the last few seconds.
- When the OFF TIMER has reached, the TV set enters the Standby mode.

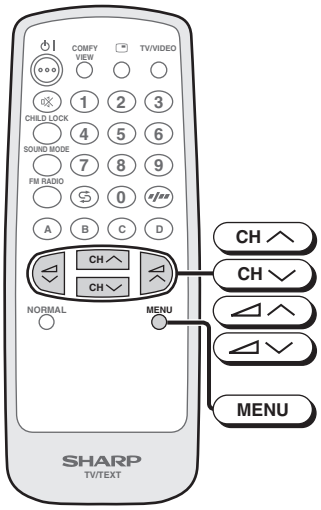


NOTE

- Off Timer can be set from 12:00 AM to 12:00 PM.
  For example: 11:59 AM → 12:00 PM → ...12:59 PM → 1:00 PM → ...11:59 PM → 12:00 AM ...
- If CLOCK is not set, Off Timer cannot be set.
- If 0 is pressed for the 1st digit, the "0" will not appear after entering the 4th digit.
  Example: "09:28 AM" → "9:28 AM"
- To cancel the timer setting, press NORMAL when "OFF ⏎" is highlighted so as to set the timer to "– – : – –".
- The Off Timer is cancelled if the power is turned off or set to the Standby mode using ⏻ on the remote control or POWER on the TV set, or if the power is otherwise interrupted.

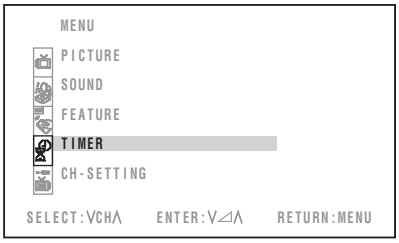
Reminder on-screen timer

Lets you know when a preset time has passed by showing a reminder OSD. Reminder also works when the TV is in standby mode.



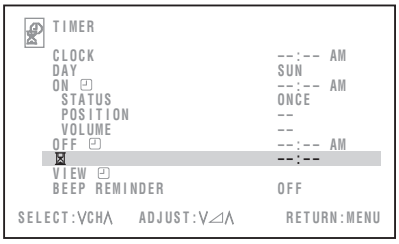
1 Press MENU to call MENU screen.

2 Press CH ∧ / CH ∨ to select "TIMER".



3 Press ⊿∧ / ⊿∨ to display TIMER menu.

4 Press CH ∧ / CH ∨ to select "⧖".

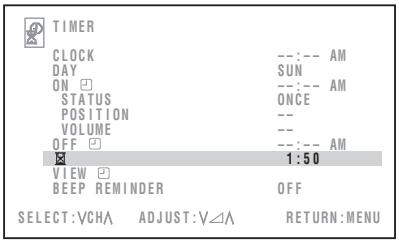


5 Press ⊿∧ / ⊿∨ to set time.

- The Timer can be set in 10 minute intervals.
- The timer can be select in the following order:

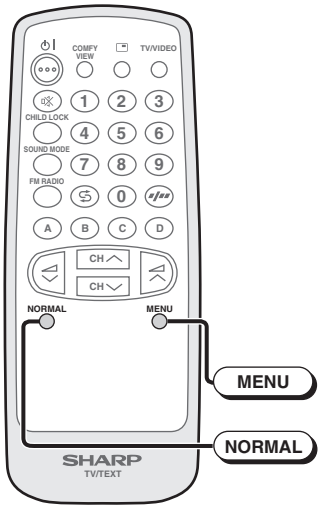
−−:−− ↔ 0:10 ↔ 0:20 ↔ 12:50

- Maximum time that can be preset is 12 hours and 50 minutes.
- The right example shows that the Reminder will be activated after one hour and 50 minutes.



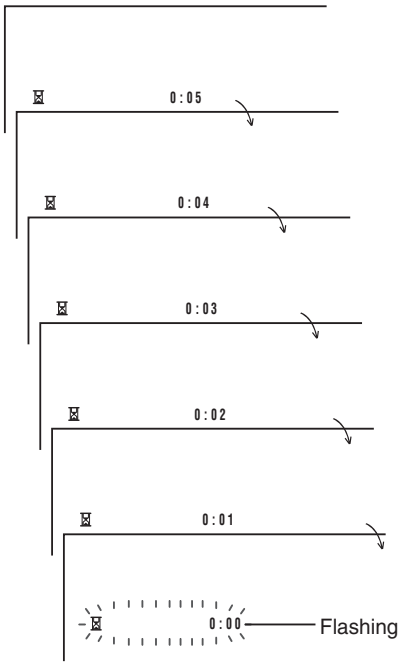
(continue)

Reminder on-screen timer (continued)



6 **Press MENU until normal screen appears.**

- Five minutes before the preset length of time expires (in the example, after one hour and 45 minutes) and each minute thereafter, the remaining time appears on the screen for several seconds with the beeping sound.
  (When BEEP REMINDER is set to "ON")
- When the preset length of time has passed, "⧖ 0:00" flashes in red with the beeping sound.
  (When BEEP REMINDER is set to "ON")

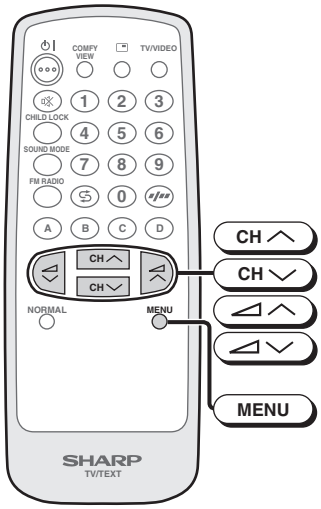


NOTE

- This function also works in the Standby mode. Power is automatically turned on five minutes before the preset length of time expires. The TV set automatically returns to the Standby mode approximately 1 minute after the timer expired if no buttons are pressed on the TV set or remote control.
- The Reminder is cancelled if ⏻POWER on the TV set is pressed or if the power is otherwise interrupted.
- To cancel the timer setting, press NORMAL when "⧖" is highlighted so as to set the timer to "– – : – –".

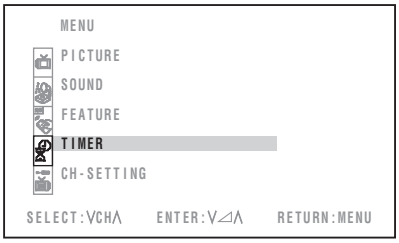
View timer

It is a function of limiting TV viewing time for children by muting sound and video when View Timer has passed.



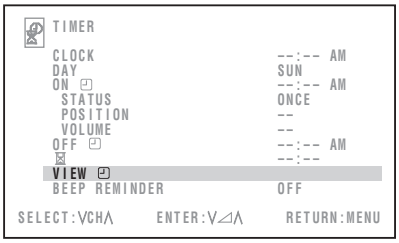
1 Press MENU to call MENU screen.

2 Press CH ∧ / CH ∨ to select "TIMER".

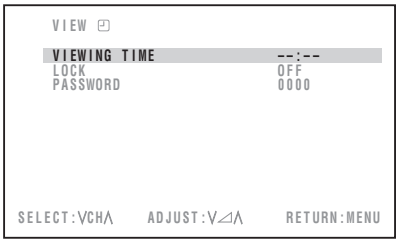


3 Press ◿∧ / ◿∨ to display TIMER menu.

4 Press CH ∧ / CH ∨ to select "VIEW ⏎".



5 Press ◿∧ / ◿∨ to display VIEW ⏎ menu.



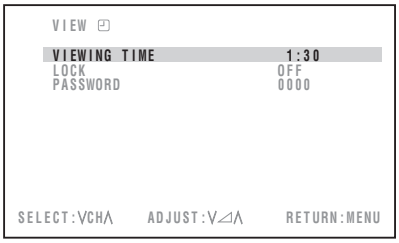
6 Press CH ∧ / CH ∨ to select "VIEWING TIME".

7 Press ◿∧ / ◿∨ to set the time.

- The timer can be set in 30 minute intervals.
- The timer can be select in the following order:

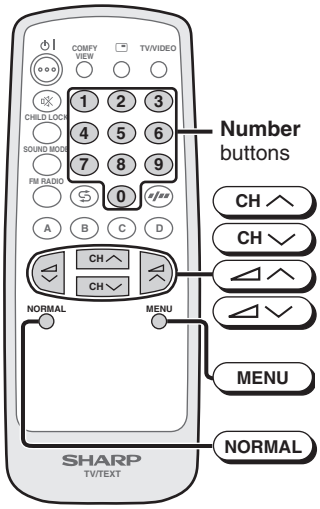
––:–– ↔ 0:30 ↔ 1:00 ← ..... → 10:00

- As soon as the time is entered, the timer starts to count down.
- It is reset to "– –:– –" when view timer has expired.



(continue)

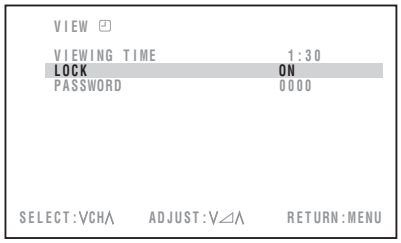
View timer (continued)



8 **Press CH / CH to select "LOCK".**

9 **Press / to select "ON" or "OFF".**

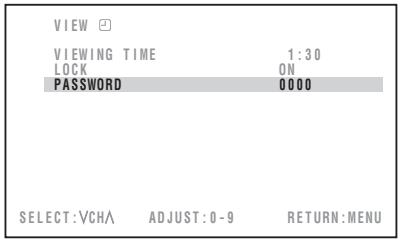
- ON: To lock the TV after View Timer has expired. (Please see page 41 for details on "To watch the TV programme again".)
- OFF: LOCK is deactivated.



10 **Press CH / CH to select "PASSWORD".**

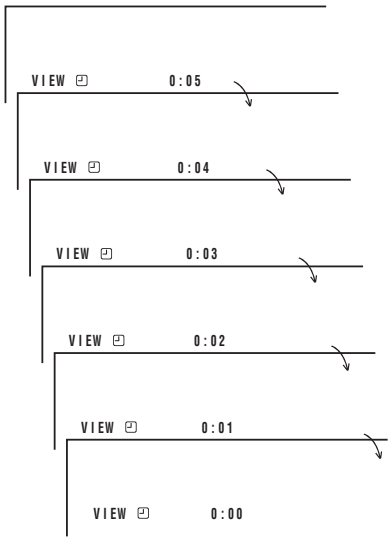
11 **Enter 4 digits PASSWORD using Number buttons (0~9) on the remote control. (For example: 0000)**

- Press NORMAL to reset the entered number to "0000".



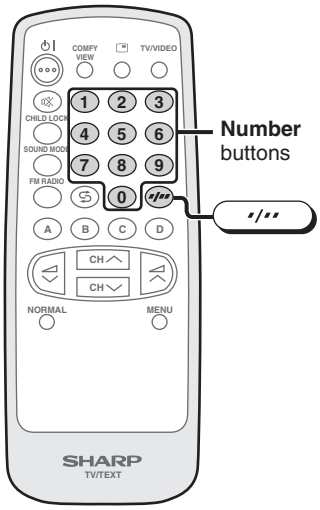
12 **Press MENU until normal screen appears.**

- For every 30 minute interval, the remaining time will be displayed for 4 seconds with the beeping sound. (When BEEP REMINDER is set to "ON")
- Five minutes before the preset length of time expires (in the example, after 1 hours and 25 minutes), the remaining time will be displayed every minute with the beeping sound. (When BEEP REMINDER is set to "ON")
- "0:00" will be displayed for 10 seconds just before VIEWING TIME is complete with the beeping sound. (When BEEP REMINDER is set to "ON")
- When the viewing time has passed, the TV set enters the standby mode.



(continue)

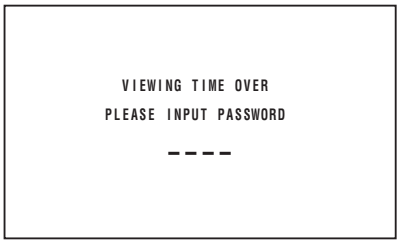
View timer (continued)



To watch the TV programme again (when the viewing time has passed)

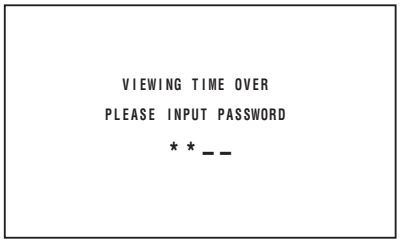
1 **Turn on power.**

- "VIEWING TIME OVER" will appear. If you do nothing, the TV will turn off in approximately 30 seconds.

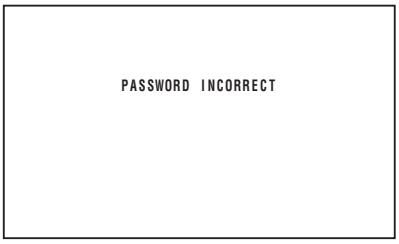


2 **Enter 4 digits PASSWORD using Number buttons (0~9) on the remote control.**
(For example: 0000)

- Press -/-- to clear the entered number.



- When you choose the correct PASSWORD, the VIEWING TIME is cancelled.
  If the wrong PASSWORD is entered, "PASSWORD INCORRECT" screen will appear for approximately 5 seconds.
  Repeat **step 2** to input the PASSWORD again.

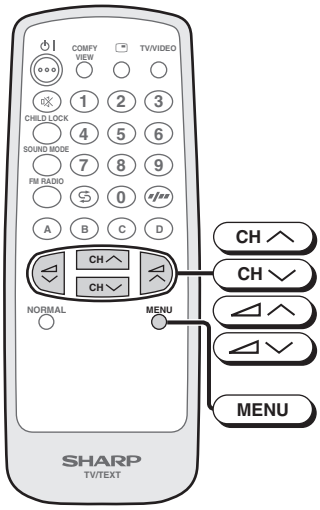


NOTE

- If you forget your PASSWORD, please input "2398" to enter, then repeat **steps 10** and **11** on 40 to change to new PASSWORD.
- The PASSWORD is shared for CHILD LOCK and VIEW TIMER.

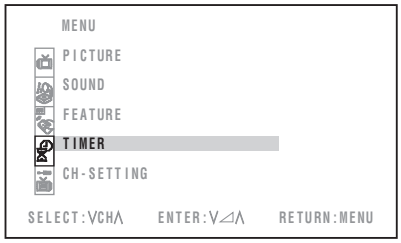
Beep reminder

It is a function to alert with beeping sound that the Reminder and View Timer are expiring soon with the remaining time OSD displays.



1 Press MENU to call MENU screen.

2 Press CH ∧ / CH ∨ to select "TIMER".

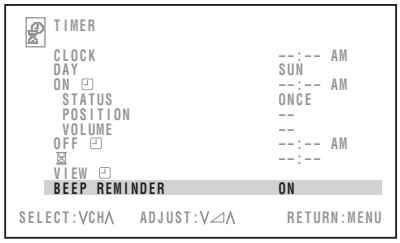


3 Press ◿∧ / ◿∨ to display TIMER menu.

4 Press CH ∧ / CH ∨ to select "BEEP REMINDER".

5 Press ◿∧ / ◿∨ to select "ON" or "OFF".

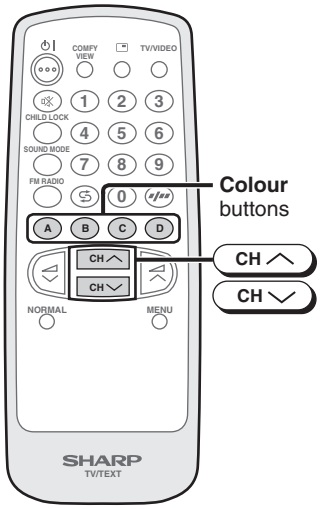
- ON: To alert users with beeping sound that the timer are expiring soon.
- OFF: The beeping sound is off.



6 Press MENU until normal screen appears.

Favourite channels

The colour buttons can be used to select up to four favourite channels.



1 **Press CH / CH to select your favourite channel. (e.g. Channel 12)**

2 **Press A, for example, until channel number turns white.**

- The display will disappear after three seconds, and then the selected channel is preset.

12
Displayed in green or yellow

3 **To watch favourite channel, press A.**

- The preset favourite channel will be displayed. (e.g. Channel 12)

12
Turns to white

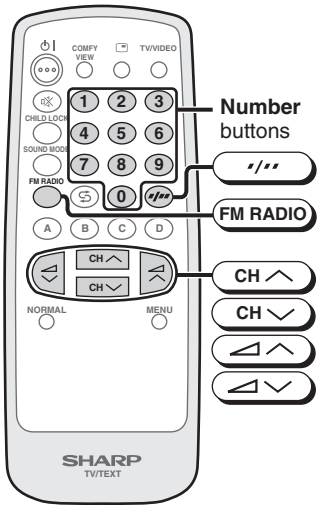
4 **To preset another favourite channel, repeat steps 1 and 2 above.**

- To change a preset favourite channel, repeat steps 1 and 2 above.

12

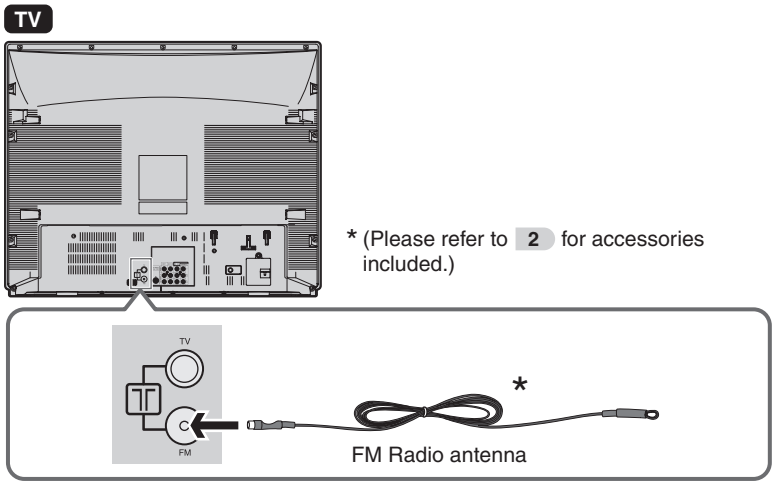
FM radio

Allow users to listen FM Radio from the TV speakers.



Connecting a FM Radio Antenna

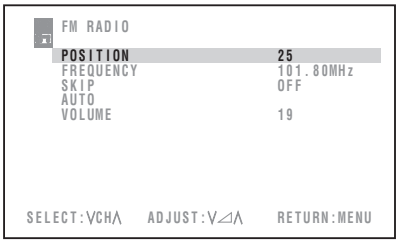
To listen FM Radio on TV set, plug FM antenna into FM antenna jack at the rear of the TV.



* (Please refer to 2 for accessories included.)

1 **Press FM RADIO to display FM Radio setting menu.**

2 **Press CH ∧ / CH ∨ to select desired setting.**



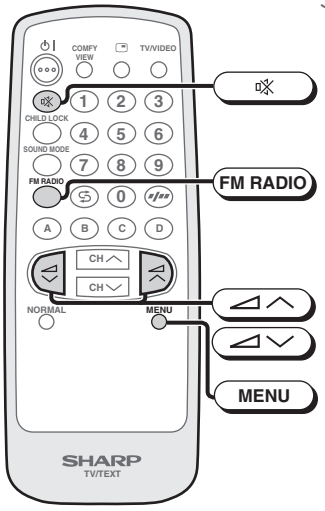
3 **Each time you press ◿∧ / ◿∨, setting for individual items changes as follows:**

POSITION

- The radio channel position will be increased or decreased.
- The radio channel position also can be selected using **Number** buttons (0~9).
- Press •/•• to select a one -digit channel (such as “5”) or to select a two-digit channel. (such as “15”)

(continue)

FM radio (continued)



FREQUENCY

- If ⊿∧ / ⊿∨ is pressed less than 2 seconds, FREQUENCY will be changed by step 50 KHz.
- If ⊿∧ / ⊿∨ is pressed more than 2 seconds, MANUAL tuning will be started.

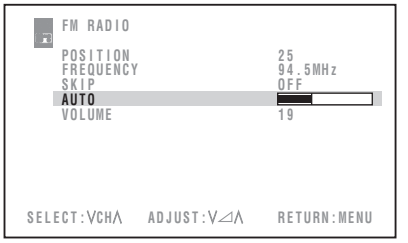
SKIP

ON ⟷ OFF

When set “SKIP” to “ON”, the radio channel position are set to SKIP. To turn off SKIP, press the number buttons to select the desired radio channel position and then set “SKIP” to “OFF”.

AUTO

- When ⊿∧ / ⊿∨ is pressed, Auto tuning bar will appear and Auto Tuning start.
- While the Auto tuning is completed, Auto tuning bar will disappear and back to POSITION 1.



VOLUME

- ⊿∧ : To increase the volume.
  ⊿∨ : To decrease the volume.
- If 🔇 is pressed, “🔇” will appears on FM Radio setting menu and the sound is silenced.

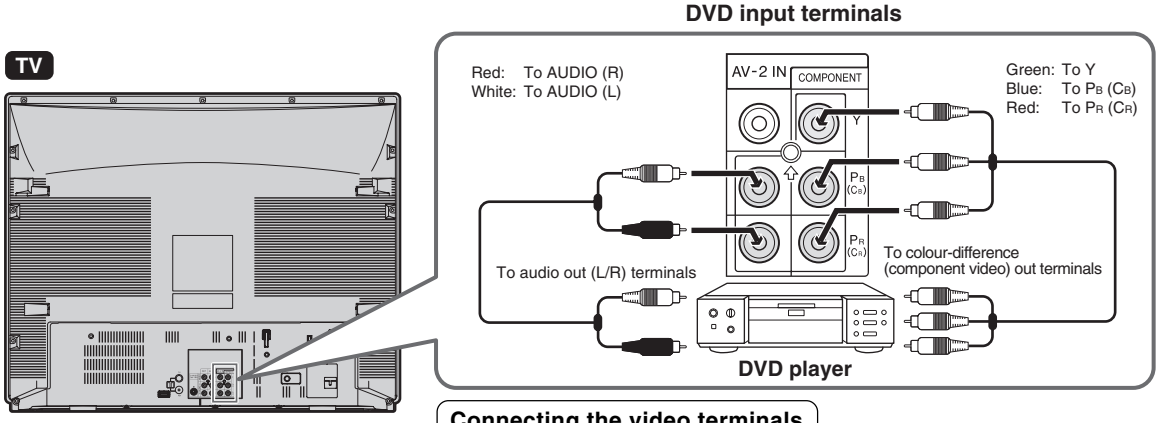
4 **Press MENU / FM RADIO to return back to TV mode.**

NOTE
- You may hear the mixed sound from both speaker (Audio L & Audio R), but not as stereo sound.
- FM Radio not functioning
  (i) When TV is power off
  (ii) During Auto Preset/Manual Preset/Fine Preset mode
  (iii) When LOCK TV is active
  (iv) When VIEW TIMER locking
  (v) During CHILD LOCK is active

Connections

Connecting to a DVD player

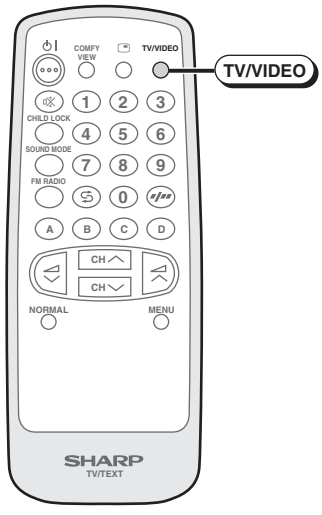
The DVD input terminals (COMPONENT-IN) on the rear of the TV can be used to input high-quality images from a DVD player.



Connecting the video terminals

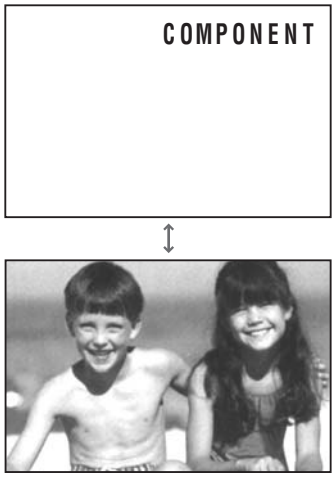
DVD input terminals		DVD player
COMPONENT-IN VIDEO	Y	Y or Y/Y
	$P_B(C_B)$	$P_B(C_B)$ or B-Y/Pb
	$P_R(C_R)$	$P_R(C_R)$ or R-Y/Pr

Watching DVD Playback



1 **Press (TV/VIDEO) to select "COMPONENT", DVD input screen.**

2 **Turn on the DVD player and begin playback.**

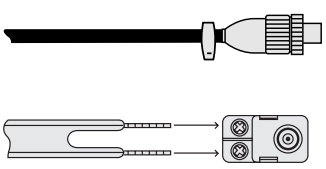


NOTE

- When connecting the TV to a DVD player via the Component-in terminals, the video and audio from the DVD player cannot be output through the Audio/Video out terminals on the TV.
- Please refer to the operation manual of your DVD player for more information.
- Be sure to fully insert the plugs of the connecting cables into the terminals on the TV set and video equipment. Failure to do so may result in noise.
- Before connecting the cables, turn off the power of the TV set and video equipment.
- Always remove the cables from the terminals by the plugs and not the cables themselves.

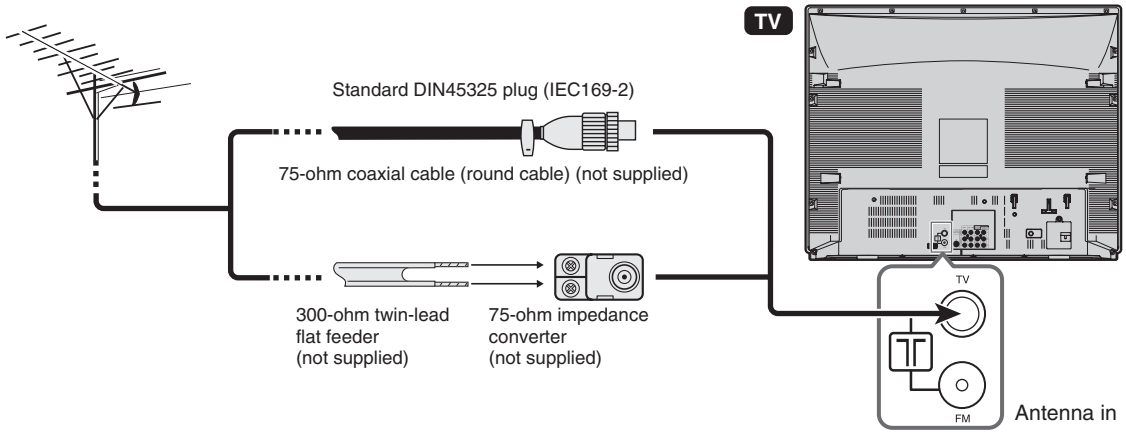
Connecting to an antenna

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 and feeder cables.



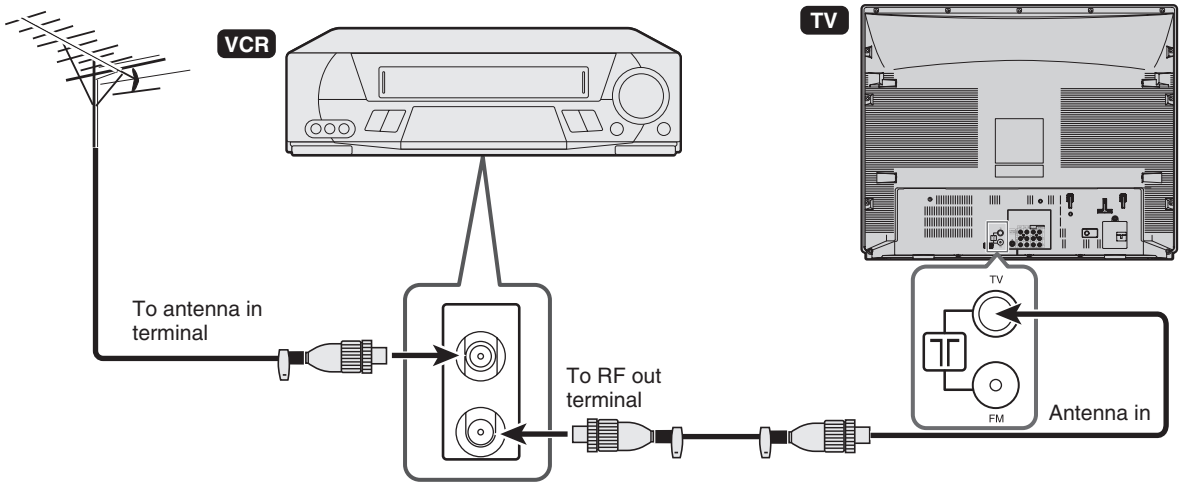
If your outdoor antenna uses a 75-ohm coaxial cable with a standard DIN45325 plug (IEC 169-2), plug it into the antenna jack at the rear of the set.

If your outdoor antenna uses a 300-ohm twin-lead flat feeder, connect a 300-ohm to 75-ohm impedance converter and plug it into the antenna jack at the rear of the set.



Connecting to an antenna via a VCR

You can also connect the TV set to the tuner on a VCR using the connection shown below.



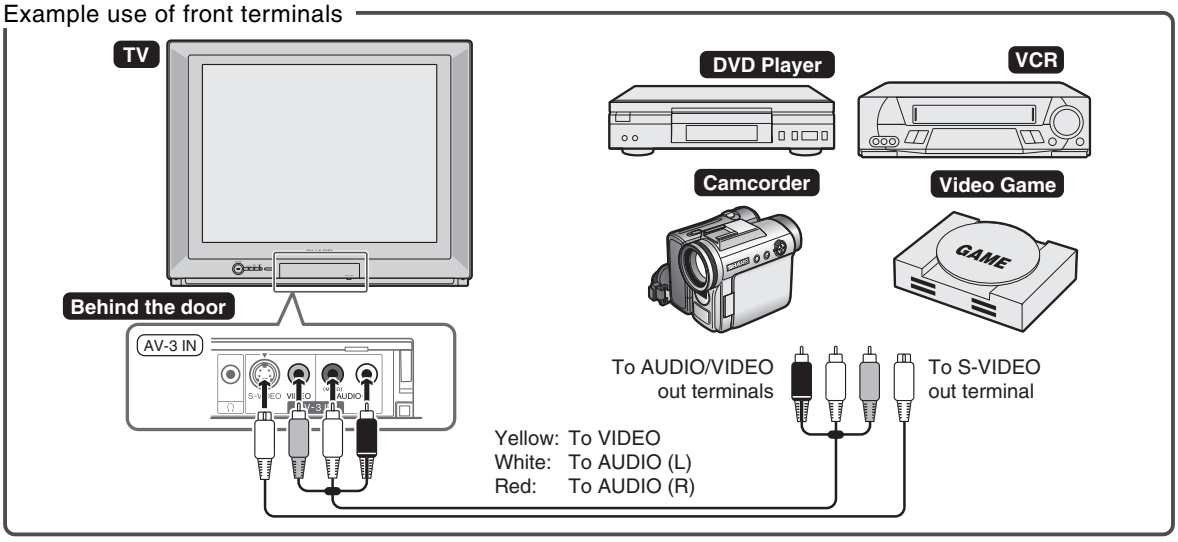
NOTE

- When using the RF terminal connection, set the TV to channel zero to make initial adjustments for the VCR.
- Turn off the power on the TV set and the VCR being connected before making the above connections. Be sure the cord plugs are fully inserted in the connection terminals.
- See the operation manual of your VCR for connection details.

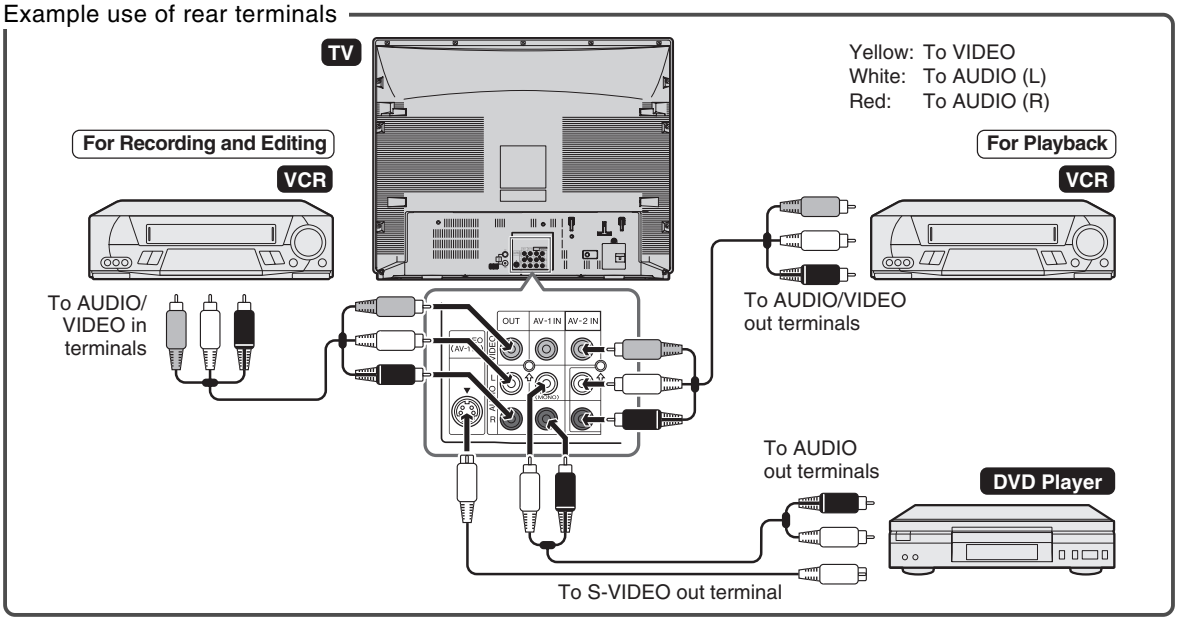
Connecting to video equipment

Enjoy playback from a video disc player, VCR or other video equipment by connecting them to this TV set using the Audio/Video in terminals.

Example use of front terminals



Example use of rear terminals



NOTE

- The S-Video Terminal has the priority over the AV terminal.
- The S-Video Terminal and Audio (L-R) terminals must be connected to playback DVD.
- SAV1 (S-Video 1) and AV1 cannot be use or plug in at the same time, blur picture might be appear. (SAV3 (S-Video 3) and AV3 as well)
- Turn off the power on the TV set and the VCR being connected before making the above connections. Be sure the cord plugs are fully inserted in the connection terminals.
- For playback of monaural audio, connect the external source to the audio input left terminal on the front or rear of the TV set (MONO) to hear the same sound from both speakers.
- The audiovisual cords required to connect the TV set with video equipment may differ from those shown in the above diagram. See the operation manual of your video equipment for connection details.
- The above recording and editing connections are for intended solely for personal use and not for the illegal copying of audiovisual material protected by copyright laws.

Troubleshooting

The following problems do not always indicate a hardware failure. Therefore, please use the troubleshooting guide below before calling for repair service.

If, after following the guide none of the remedies work, unplug the TV set and call for service.

Quick Service Check List / Problems Possible Causes/Remedies	Remote control does not work.	Bars on screen	Picture distorted.	Picture rolls vertically.	No colour	Poor reception on some channels	Picture weak.	Picture lines or streaks	Picture ghosting	Picture blurred.	Sound OK, picture poor.	Picture OK, sound poor.	No picture or sound
Try a new channel to check for possible station trouble.			●	●	●	●	●	●	●	●	●	●	●
TV not plugged in. Outlet power OFF.	●												●
⏻ **POWER** switch of TV not ON.	●												●
Antenna not connected to terminal at the back of the TV set.					●	●	●		●		●		●
If outside antenna is used, check for broken wires.		●	●	●	●	●	●	●	●	●	●		●
Check for local interference.		●		●		●		●	●		●	●	
Turn OFF using the ⏻ **POWER** switch, then turn ON again after a minute.	●												●
Adjust COLOUR control.					●		●				●		
Check batteries in the remote control.	●												
Try fine tuning to correct.			●		●		●			●	●		
Contrast setting in picture mode might be all the way to the minus side. Press the **NORMAL** button on the remote control to correct.											●		●
Increase the volume.												●	●

NOTE • This unit is equipped with a microprocessor. Its performance could be adversely affected by external electrical noise or interference. If this should happen, unplug the unit and plug it in again after a few minutes.

Specifications

MODEL			CX68RF5
Receiving System			
	TV Broadcasts/ VCR Playback		PAL-I PAL-B/G PAL-D/K SECAM-B/G SECAM D/K, K1 NTSC-M (NTSC standard)
	VCR Playback		NTSC 4.43/5.5 MHz/60 Hz NTSC 4.43/6.0 MHz/60 Hz NTSC 4.43/6.5 MHz/60 Hz NTSC 4.43/5.5 MHz/50 Hz NTSC 4.43/6.0 MHz/50 Hz NTSC 4.43/6.5 MHz/50 Hz NTSC 3.58/5.5 MHz NTSC 3.58/6.0 MHz NTSC 3.58/6.5 MHz SECAM-I (6.0 MHz)
	VCR Playback (Using Video-in terminals)		SECAM-L (French SECAM)
	Laserdisc Player Playback (Using RF-in terminals)		PAL 5.5 MHz/60 Hz PAL 6.0 MHz/60 Hz PAL 6.5 MHz/60 Hz NTSC 3.58/4.5 MHz/50 Hz
	VCR Playback (Using S-Video in terminal)		S-VIDEO NTSC 3.58 MHz S-VIDEO NTSC 4.43 MHz S-VIDEO PAL S-VIDEO SECAM S-VIDEO SECAM-L
	Special VCR and VDP Playback		Video-in 50/60 Hz S-Video in 50/60 Hz
Reception Channels			
	PAL-B/G SECAM-B/G	VHF	AU0-AU12 ch
		UHF	E21–E69 ch
	PAL-D/K SECAM-D/K, K1	VHF	C1–C12 ch, R1–R12 ch
		UHF	C13–C57 ch, R21–R69 ch
	PAL-I	VHF	B–J ch
		UHF	21–69 ch (Hong Kong)
	NTSC	VHF	2–13 ch (U.S.), 1–12 ch (Japan)
		UHF	14–69 ch (U.S.), 13–62 ch (Japan)
	CATV		S1–S20 ch, S21–S41 ch (Hyper)
Receiving Frequency			44.25 MHz – 863.25 MHz
Receiving Frequency for FM Radio			87.50 MHz – 108.00 MHz
Channel Tuning			100-Channel Electronic Tuner with Full Auto Tuning System
Picture Tube			68cm Flat CRT
Terminals			Audio/video input × 3 (front × 1, rear × 2) , DVD input (COMPONENT-IN) × 1 (rear), Audio/video output × 1 (rear) , Headphone jack × 1 (front) , S-video input × 2 (front × 1, rear × 1), FM input × 1 (rear)
Sound Output			20 W (Front speaker × 2)
Power Source			AC 220 – 240V, 50Hz
Power Consumption			135 W
Dimensions			722 (W) × 582 (H) × 495 (D) mm
Weight			43.5 kg (Approx.)

NOTE

- Design and specifications are subject to change without notice.
- Receiving system: These receiving systems, encompassing all currently available technology, include those with planned broadcast, videotape and laserdisc hardware and software.
- Reception channels: Some examples of the main receivable channels are shown above.

Definition of Terms

Extended Pseudo Stereo (EPS)

The Incredible Mono module (I-Mono) generates two channels from one mono input signal. When the sound of the mono input signal is processed, the listener gets the impression that the sound is essentially a stereo signal.

Extended Spatial Stereo (ESS)

The listener gets the impression of a sound reproduced by two virtual speakers, positioned at a larger distance between each other than between the actual speakers. So, the stereo image is expanded by this widening sound effect.

AVL

The AVL reduces the audio input signal in the MAIN channel (L, R) to a selectable maximum output level if it exceeds this level at the input of the stage.

Note

Note

Note