



**OWNER'S MANUAL**

**REMOTE CONTROL  
COLOR TV/MONITOR**

**ST-21XS2S**

**ST-21YS2S**

**ST-21YS2BS**

**ST-21YS22**

**ST-21YS22B**

**ST-21KS2**

**ST-21KS2K**

**ST-21KS22**

**ST-21KS22K**

**ST-21SF1**

**ST-21SF1K**

**ST-21VF1S**

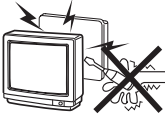
**ST-21VF1KS**

**ST-21MS22**

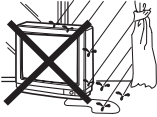
**ST-21MS22T**

**ST-21MS22B**

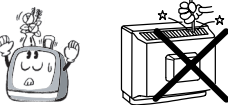
# Safety Precautions



To prevent electrical shock, do not remove the back cover. This unit is fully transistorized and does not contain user-serviceable components. Report any problems to qualified service personnel.



To reduce the risk of fire or electrical shock, do not expose this appliance to rain or other moisture.



No objects filled with liquids such as vases, shall be placed on this appliance. Do not drop or push objects into the television cabinet slots or openings.



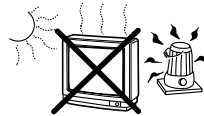
When playing TV video games, do not use intense brightness and/or contrast settings over an extended period of time. This may leave a permanent image of the playing field on the picture screen.



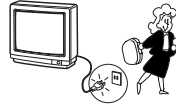
Do not block the ventilation holes in the back cover. Adequate ventilation is essential to prevent failure of electrical components.



No naked flame sources, such as lighted candles, should be placed on the apparatus.



Avoid exposing the television receiver to direct sunlight and other source of the heat. Do not stand the television receiver directly on other products which give off heat. E.g. video cassette players, audio amplifiers.



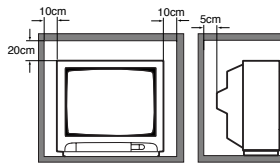
Even if your TV is turn off and the power cord is plugged in, there is still connection to the AC power source (mains). Unplug the TV set before moving it or if you are not going to use it for several days.



Do not squash power supply cord under the television receiver.



Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious personal injury and serious damage to the product.



If the television is to be built into a compartment or similarly enclosed, the minimum distances must be maintained. Heat build-up can reduce the service life of your television, and can also be dangerous.

Please read and keep these instructions.

## UNPACKING

Treat the TV as a precise piece of equipment that requires careful handling. Keep the shipping carton until you are sure the TV has not been damaged. Report any damage to the place of purchase.

Check to find the following items:

- ◆ Remote Control
- ◆ Two AA Batteries

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## FEATURES

- 181-channel frequency synthesizer tuner
- Cable ready
- Plug & Play (Automatic Setting Up Channels)
- Automatic channel search with manual skip
- Digital picture controls with on-screen display
- Picture mode (Personal/Dynamic/Natural/Eco/Game) Selection
- Audio/Video inputs
- Monitor output
- On/Off timers
- Channel recall
- Mute key
- Automatic power shut-off

## CARE AND CLEANING

The surface of the cabinet can be damaged if not properly maintained. Many common household aerosol sprays, cleaning agents, solvents and polishes will cause permanent damage to the fine surface.

- 1. Unplug the power cord before cleaning the Television.**
- 2.** Clean the screen with a soft cloth dampened with glass cleaner or warm water.
- 3.** Clean the cabinet with a soft cloth dampened with a mild household detergent and warm water. Dry thoroughly.

**Note:** *NEVER spray liquids on the screen because they can run down and drip onto the chassis. This may cause component failure not covered under Warranty.*

## SPECIFICATIONS

### Picture Tube Size (measured diagonally)

#### All Models:

(21-inch) – 510 mm viewing screen

#### Television System: NTSC

#### 181 Channel Tuning System:

VHF Channels 2-13  
UHF Channels 14-69  
Cable TV (CATV) 1, 14 -125  
Automatic Fine Tuning on  
VHF and Cable Channels

#### Speakers:

**Model ST-21YS2/S/BS, ST-21KS2/K,  
ST-21SF1/K, ST-21VF1/S/KS,  
ST-21YS22/B, ST-21KS22/K,  
ST-21MS22/T/B:** 5 x 9 cm, 2 pcs.  
**Model ST-21XS2S:** 5 x 9 cm, 2 pcs.

#### Sound output:

**Model ST-21XS2S:** 10 W + 10 W (RMS)  
**Model ST-21YS2/S/BS, ST-21KS2/K,  
ST-21SF1/K, ST-21VF1/S/KS,  
ST-21YS22/B, ST-21KS22/K,  
ST-21MS22/T/B:** 5.0 W + 5.0 W (RMS)

#### Antenna Input:

VHF/UHF/CATV 75 ohms  
Unbalanced

#### A/V Input Jacks:

**Model ST-21XS2S, ST-21YS2/S/BS,  
ST-21KS2/K, ST-21VF1/S/KS,  
ST-21YS22/B, ST-21KS22/K,  
ST-21MS22/T/B:**

- ◆ Video Input (2)
- ◆ DVD Input (Y, CB, CR) (1)
- ◆ Audio Input (R/L-2)  
... (RCA Connectors)

#### Model ST-21SF1/K:

- ◆ Video Input (1)
- ◆ DVD Input (Y, CB, CR) (1)
- ◆ Audio Input (R/L-1)  
... (RCA Connectors)

#### Monitor Output Jacks:

Video Output (1)  
Audio Output (R/L-1)  
... (RCA Connectors)

### Remote Control Transmitter

Numbered Channel Selection,  
Channel Scanning Up/Down,  
Volume Up/Down, Mute, Power,  
Recall, Display, Sleep, Menu,  
Image, Surround, TV/AV.

#### Power Requirement:

127-240 V AC, 50/60 Hz

#### Dimensions (WxHxD)

##### Model ST-21XS2S:

654 mm x 467 mm x 335 mm  
(25.8 in x 18.4 in x 13.2 in)

##### Model ST-21YS2/S/BS:

598 mm x 465 mm x 396 mm  
(23.5 in x 18.3 in x 15.6 in)

##### Model ST-21YS22/B:

598 mm x 465 mm x 328 mm  
(23.5 in x 18.3 in x 12.9 in)

##### Model ST-21KS2/K, ST-21KS22/K:

580 mm x 465 mm x 326 mm  
(22.8 in x 18.3 in x 12.8 in)

##### Model ST-21SF1/K:

570 mm x 460 mm x 465 mm  
(22.4 in x 18.1 in x 18.3 in)

##### Model ST-21VF1/S/KS:

580 mm x 460 mm x 468 mm  
(22.8 in x 18.1 in x 18.4 in)

##### Model ST-21MS22/T/B:

580 mm x 465 mm x 328 mm  
(22.8 in x 18.3 in x 12.9 in)

#### Weight (Approximate)

**Model ST-21XS2S:** 19.6Kg (43.2 Lb)

**Model ST-21YS2/S/BS:** 20.1Kg (44.3 Lb)

**Model ST-21KS2/K:** 19.7Kg (43.4 Lb)

**Model ST-21SF1/K:** 19.8Kg (43.6 Lb)

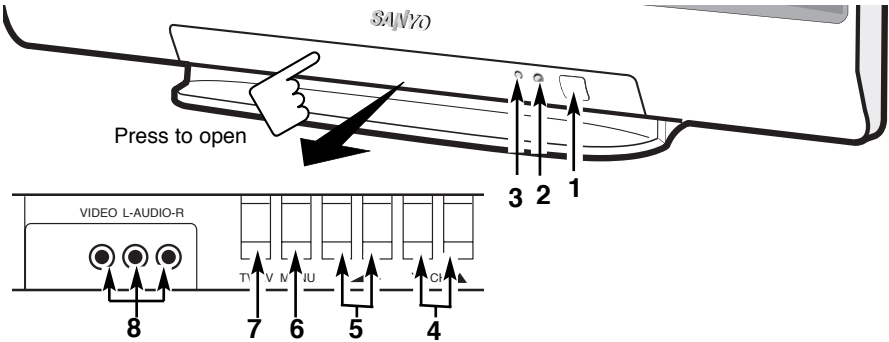
**Model ST-21VF1/S/KS:** 20.5Kg (45.2 Lb)

**Model ST-21YS22/B:** 18.0Kg (39.6 Lb)

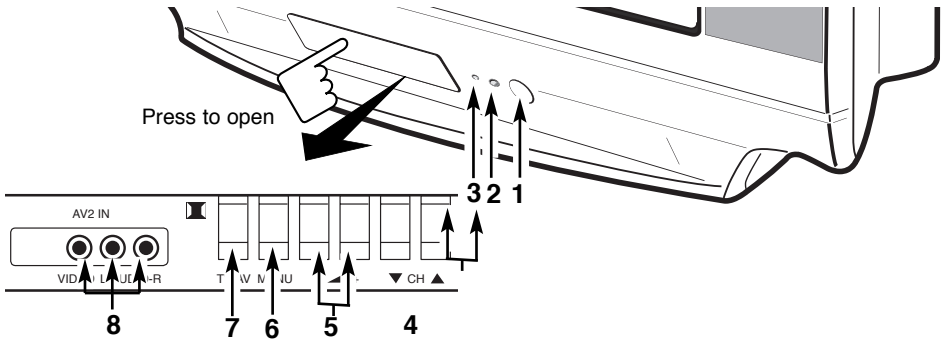
**Model ST-21MS22/T/B, ST-21KS22/K**  
: 17.9Kg (39.4 Lb)

# FRONT CONTROL PANEL

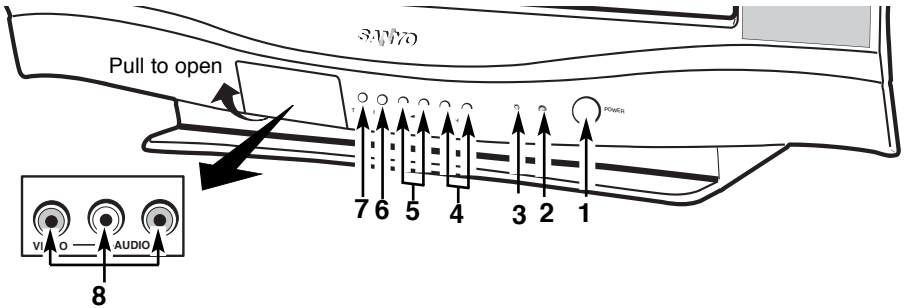
## Model ST-21XS2S



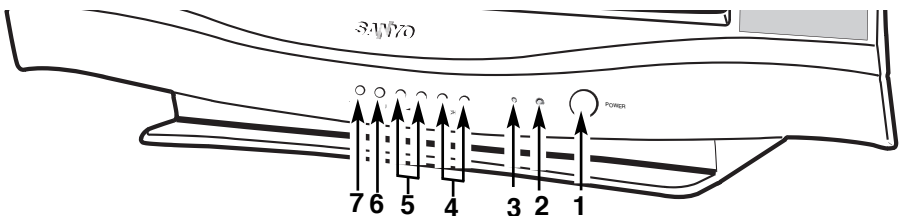
## Model ST-21YS2S, ST-21YS2BS, ST-21YS22, ST-21YS22B



## Model ST-21KS2, ST-21KS2K, ST-21KS22, ST-21KS22K

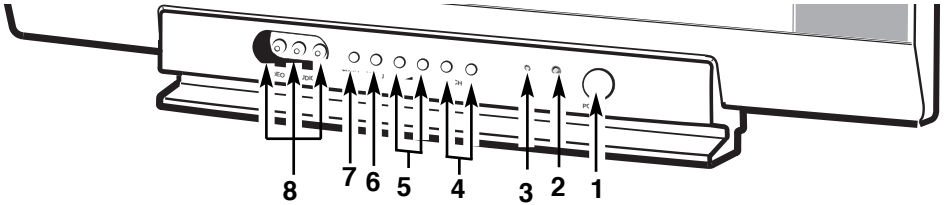


## Model ST-21SF1, ST-21SF1K

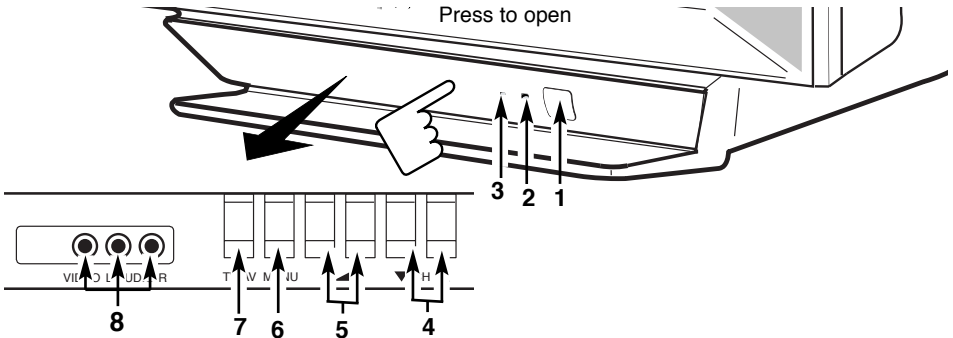


# FRONT CONTROL PANEL

Model ST-21VF1S, ST-21VF1KS

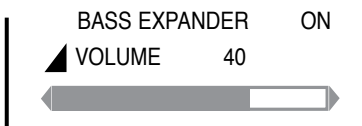


Model ST-21MS22, ST-21MS22T, ST-21MS22B



## OPERATING CONTROL FUNCTIONS

- 1. MAIN POWER Switch**  
Press to turn on the TV. Then the power indicator lights and the TV is ready for remote operation.
- 2. Remote Sensor**  
Receives the infrared control signals from the hand held remote control unit. Point the remote control toward here.
- 3. POWER Indicator**
- 4. CHANNEL Scanning ▼ / ▲ Keys**  
Press ▼ (down) or ▲ (up) to scan through the channels in memory.
- 5. VOLUME -/+ Keys**  
Press to adjust the volume level. The volume level indicator will appear on the screen.
- 6. MENU Key**  
Use this key along with the Channel ▼ / ▲ keys and the **VOLUME -/+** keys to adjust the features in the on-screen menu.
- 7. TV/AV Key**  
Press to select the program mode: **TV** or **AV1** or **AV1(DVD)** or **AV2**.  
*Note: In model ST-21SF1 / ST-21SF1K This button used to select mode: TV or AV1 or AV1(DVD).*
- 8. Front AUDIO/VIDEO INPUT Jacks**  
Connect to the audio/video output jacks of your external video equipment (such as camcorder or VCR, etc.) to these jacks. (See page 24-26.)



*Note: Model ST-21SF1 / ST-21SF1K is not equipped with Front AV2 input terminal.*

# REMOTE CONTROL

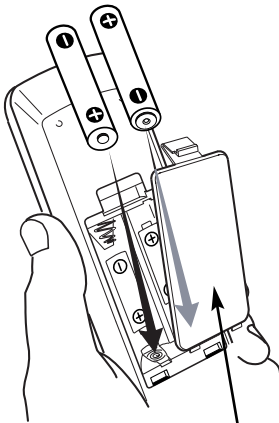
The remote control uses an invisible (infrared) light beam to operate the TV. Objects between the TV and the remote can block this light beam. Therefore, for correct operation the remote control must be pointed directly at the front of the TV with no obstructions.

## INSTALLING BATTERIES

The remote control requires two “AA” batteries (supplied).

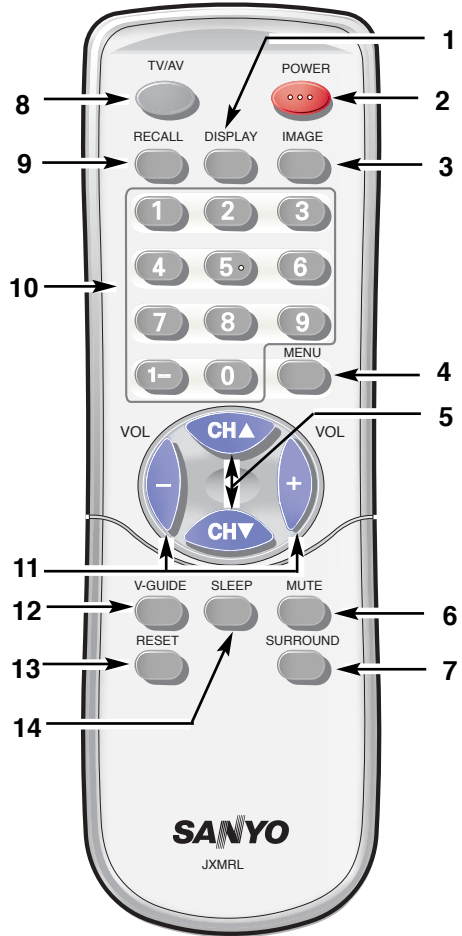
- Remove the battery compartment cover.
- Install batteries to match the “+” and “-” marks inside case. Incorrectly installed batteries can damage the remote control.
- Replace the battery cover.

Remove the batteries if the remote control will not be used for a month or more. Weak batteries may leak and cause damage. (Normal battery life is roughly six months.)



Battery Cover

Point at the Front of TV



Do not expose batteries (battery pack or batteries installed) to excessive heat such as sunshine, fire or the like.



## REMOTE CONTROL KEYS OPERATION

### 1. DISPLAY Key

Press once to display the channel number, off-time, on-timer or on-channel number by on-timer on the screen for 5 seconds  
Press again to remove the display.  
(See page 22.)

This button also used to select the Colour System in AV Mode (See page 23.)

### 2. POWER Key

Press to turn the TV On and Off.  
While the power indicator lights, the remote operation is available.

### 3. IMAGE Key

Press to select the picture mode:  
PERSONAL, DYNAMIC,  
NATURAL, ECO or GAME. (See page 18.)

### 4. MENU Key

Use this key with the ▲/▼ and -/+ keys to adjust the features of the on-screen menu system.  
(See pages 13-17.)

### 5. CHANNEL SCANNING (▲/▼) Keys

Press ▲ (up) or ▼ (down) to scan through the channels in memory.

### 6. MUTE Key

Press once to turn off volume.  
Press again to restore volume.



### 7. SURROUND Key

Press this key to get surround sound.

### 8. TV/AV Key

Press to select the program mode:  
TV or AV1 or AV1(DVD) or AV2.  
(See pages 24-26.)

*Note: In model ST-21SF1, ST-21SF1K  
This button used to select mode: TV  
or AV1 or AV1(DVD).*

### 9. RECALL Key

Use this key to recall the last selected channel.

### 10. NUMBER Keys

Press to directly select channels.  
Two keys must be pressed.

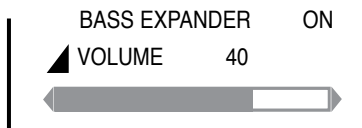
**For channels 1 through 9**, press "0" first, then the number.

**For channels 10 through 99**, press the two numbers in sequence.

**For channels 100 through 125**, press "1--" key to display  $\text{C}1 \text{ --}$ , then press the other two numbers in sequence.

### 11. VOLUME -/+ Keys

Press to adjust the volume level. The volume indicator will appear on the screen.



### 12. V-GUIDE Key

This key could not be operated.

### 13. RESET Key

Press this key to reset the TV to factory settings. (See page 23.)

### 14. SLEEP Key

Use this key to set off-timer, on timer, on-channel number by on-timer. (See page 19-20.)

## CONNECTING THE ANTENNA OR CABLE

To obtain the best possible picture, use a quality antenna system. Inspect your antenna system for loose connections, broken wires, cracked insulation or other potential problems. These conditions can cause poor reception.

### AUTOMATIC POWER SHUT-OFF

The TV will switch off automatically after 10 minutes if a signal is not being received. (This feature is not active while the **AV** mode is selected.)

### CONNECT YOUR ANTENNA OR CABLE

Identify the type of antenna and antenna wire you have, then follow the diagram shown on page 11.

### VCR CONNECTION

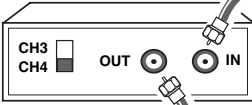
The antenna signal must be connected to your VCR antenna input. With connect the VCR output to the television. Refer to the VCR owner's manual for details.

**Note:** *The VCR can be connected to your TV using the A/V jacks.  
(See pages 11, 24-26 for Using the Audio Video Jacks.)*

**CABLE (CATV) SYSTEM**

**ANTENNA OPTIONS**

**BACK OF CABLE BOX (IF NEEDED)**



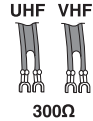
**COMBO UHF/VHF**



**COMBO UHF/VHF**



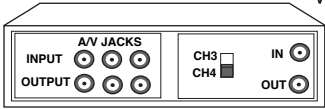
**ADAPTER**



**MIXER**



**BACK OF VCR**



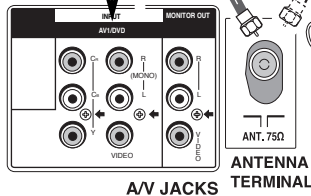
**WITH VCR  
CONNECT TO VCR**

**WITHOUT VCR  
CONNECT DIRECTLY  
TO TV**

**OR SINGLE-POLE  
INDOOR ANTENNA  
WITHOUT ADAPTER  
TO TV**

**CONNECT TO TV  
TO USE TV TUNER**

**CONNECT TO TV  
TO USE VIDEO MODE**



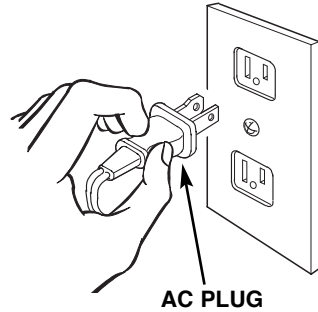
**BACK OF TV**

# PLUG IN THE POWER CORD

Plug the power cord into a convenient wall outlet that has standard house power of 230 volts ac, 50/60 Hz.

**CAUTION:** To prevent electric shock, insert the AC PLUG fully into the outlet.

**Note:** As a safety precaution, unplug or turn off the TV with the **MAIN POWER** switch on the TV front panel when you plan to be away for an extended period of time.



# TURN ON THE TV

Press the **POWER** key.

**Note:** The TV will switch off automatically after 10 minutes if a signal is not being received. (This feature is not active while the **AV** mode is selected.)

# PLUG & PLAY (Automatic setting up channels)

This TV set provides a self-automatic tuning and sorting system function called “**Plug & Play**”. It automatically begins searching and storing of all available channels when switching-on the TV set for the first time.

## Let's start !

**1** Connect power cord of the TV set to a wall outlet, and turn on the TV set by pressing the **Mains ON/OFF** button. Self-automatic tuning system will be started.

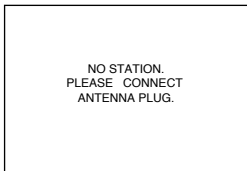
After completing this procedure, the lowest available programme position is selected and the ending messages on the screen.

**Note:** The Plug & Play can be cancelled at any time by pressing the **MENU** button.

**2** Press any of the control buttons to make the ending message disappear. (Or will automatically return to normal TV display after 10 seconds.)

**This procedure only appears at the first switch-on time.**

■ If no TV stations are found, the display shown below will appear. Please check if the antenna is connected properly.



If it isn't connected properly, connect antenna and Automatic Tuning will be reset.

# ON-SCREEN MENU SYSTEM

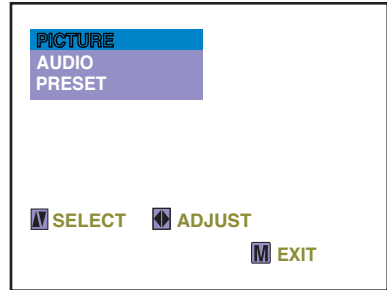
The On-Screen Menu System allows the viewer to program television features to their personal preference. Adjustments can be made by using the keys either on the TV front panel (see pages 6 and 7) or on the remote control (see pages 8 and 9). Read this page for information on selecting menus.

The system has 3 different modes:

**PICTURE** — COLOR, BRIGHTNESS, CONTRAST, TINT, SHARPNESS and WHITE TONE

**AUDIO** — BASS, TREBLE, BALANCE, BASS EXPANDER ON/OFF and SURROUND ON/OFF.

**PRESET** — ANTENNA, SEARCH, CHANNEL, SKIP and MEMORY



**Main Menu**

## GENERAL OPERATION

To open the Main Menu, press **MENU** on the remote control or on the TV front panel.

You will notice that **PICTURE** is in yellow and is indicated by the blue background. The blue background let you know which mode you have selected. To select another mode, use the **CHANNEL ▲** (up) or **CHANNEL ▼** (down) key.

After making your selection, press the **VOLUME –** or **VOLUME +** key to enter to each adjustment menu. Now use the **VOLUME –** or **VOLUME +** key to make adjustments to your selection.

If you wait too long to make selection, the menu will disappear (usually after 15 seconds). Just press **MENU** twice to return to where you were. Now you can finish your selections.

Once you have completed your selections and you want to clear the menu from the screen, press **MENU** or wait for about 15 seconds.

# CHANNEL SETUP MENU

Your TV can receive 181 channels: Off-Air VHF 2-13 and UHF 14-69 or Cable 1-125. The available channels are stored in the channel scanning memory in this TV. Make sure that your antenna is connected to the TV before setting the Antenna Mode or resetting the Channel Search.

## SETTING THE ANTENNA MODE

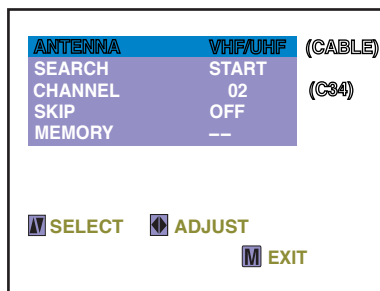
- 1 Press **MENU**. The Main Menu will appear. (See page 13.)
- 2 Press the **CHANNEL ▲** (up) or **▼** (down) key to select **PRESET**; then press the **VOLUME +** or **-** key.
- 3 Press the **CHANNEL ▲** (up) or **▼** (down) key to select **ANTENNA**.
- 4 Use the **VOLUME +** or **-** key to select **VHF/UHF** or **CABLE**.

Select either **VHF/UHF** (VHF channels 2-13 and UHF channels 14-69), or **CABLE** (channels 1-125). The Cable indicator **C** appears with the channel number. (For example: C 34.)



Select **CHANNEL** and press **VOLUME**

**+ or -**

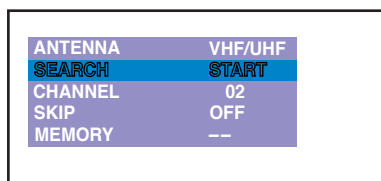


Select Antenna mode

## RESETTING CHANNEL SEARCH

You can automatically program the tuning system of this TV to scan only the channels available in your area. Then when you press one of the **CHANNEL SCANNING (▲/▼)** keys, the TV will select only those channels.

- 1 Press **MENU**. The Main Menu will appear. (See page 13.)
- 2 Press the **CHANNEL ▲** (up) or **▼** (down) key to select **CHANNEL**; then press the **VOLUME +** or **-** key.
- 3 Press the **CHANNEL ▲** (up) or **▼** (down) key to select **SEARCH**.
- 4 Use the **VOLUME +** or **-** key to select **START**.



Starting automatic channel search

The TV will begin searching through the channels. After the search is completed, the lowest available channel will be selected.

**Note:** If additional channels become available (you move to another city or cable is installed), perform another channel search.

# SKIPPING CHANNELS

When there is a channel you do not use, Channel 4 for example, by setting the SKIP Channel function it is possible to jump over this channel, when you are selecting a channel using the **CHANNEL** ▲ (up) or ▼ (down) key.

**For example, to set channel “4” as Skip channel ;**

- 1 Press **MENU**. The Main Menu will appear. (See page 13.)
- 2 Press the **CHANNEL** ▲ (up) or ▼ (down) key to select **PRESET**, then press the **VOLUME +** or **-** key.
- 3 Press the **CHANNEL** ▲ (up) or ▼ (down) key to select **CHANNEL**.
- 4 Select channel that you want to skip with the **VOLUME +** or **-** key, (for this example is channel “4”).  
For cable channels above 99, press and hold the **1** key until **C1** == appears. Then press the other two digits.
- 5 Select **SKIP** by pressing the **CHANNEL** ▲ (up) or ▼ (down) key.
- 6 Press the **VOLUME +** or **-** key to set **SKIP** to **ON**. To cancel Skip Channel function, set to **OFF**.
- 7 Select **MEMORY** by pressing the **CHANNEL** ▲ (up) or ▼ (down) key.
- 8 Press the **VOLUME +** or **-** key to memorize.
- 9 Press **MENU** key to exit.

ANTENNA	VHF/UHF
SEARCH	START
<b>CHANNEL</b>	<b>02</b>
SKIP	OFF
MEMORY	--

Select **CHANNEL** that you want to **SKIP**



ANTENNA	VHF/UHF
SEARCH	START
<b>CHANNEL</b>	<b>04</b>
SKIP	OFF
MEMORY	--

Select **SKIP** by pressing **CHANNEL** ▲ (up) or ▼ (down) key



ANTENNA	VHF/UHF
SEARCH	START
CHANNEL	04
<b>SKIP</b>	<b>ON</b> (OFF)
MEMORY	--

Select **MEMORY** by pressing **CHANNEL** ▲ (up) or ▼ (down) key



ANTENNA	VHF/UHF
SEARCH	START
CHANNEL	04
SKIP	ON
<b>MEMORY</b>	<b>--</b>

Press **Volume +** or **-** key to memorize



ANTENNA	VHF/UHF
SEARCH	START
CHANNEL	04
SKIP	ON
<b>MEMORY</b>	<b>OK</b>

# PICTURE ADJUSTMENT MENU

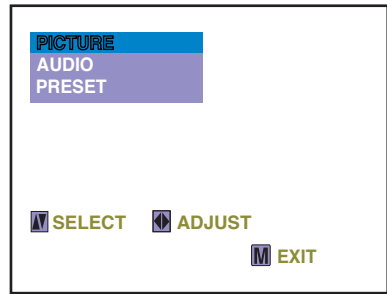
This feature is used to adjust the color, brightness, contrast, tint, sharpness and white tone to your personal preferences.

## PICTURE ADJUSTMENTS

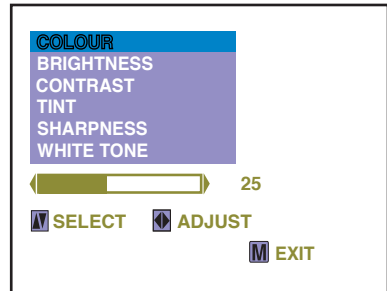
- 1 Press **MENU**. The Main Menu will appear. (See page 13.)
- 2 Press the **CHANNEL ▲** (up) or **▼** (down) key to select **PICTURE**.
- 3 Press **VOLUME +** or **-** key. The Manual Adjustment menu will appear.
- 4 Press the **CHANNEL ▲** (up) or **▼** (down) key to select the control you want to adjust.
- 5 Use the **VOLUME +** or **-** key to adjust the control.

Use the chart below as a guide when you make adjustments.

- 6 Press **MENU** key to exit.



Select **PICTURE** and press Menu



Picture adjustment menu

PICTURE ADJUSTMENTS		- KEY	+ KEY
<b>COLOR</b>	Adjusts color intensity	Lighter	Deeper
<b>BRIGHTNESS</b>	Adjusts picture brightness	Darker	Brighter
<b>CONTRAST</b>	Adjusts picture contrast	Lighter	Deeper
<b>TINT</b>	Adjusts color tints	Reddish	Greenish
<b>SHARPNESS</b>	Adjusts picture detail	Softer	Crisper
<b>WHITE TONE</b>	Adjusts white balance	Reddish	Bluish

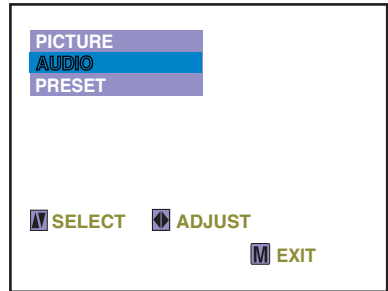


# AUDIO ADJUSTMENT MENU

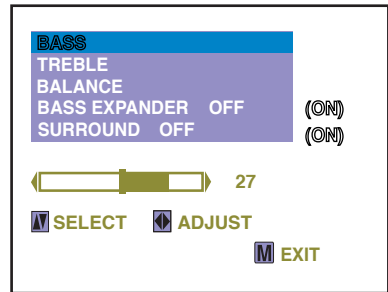
This feature uses the on-screen menu system to adjust the audio controls: Bass, Treble, Balance, Bass Expander on or off, Surround on or off and Stereo stereo or mono (this feature available in AV mode only).

## AUDIO ADJUSTMENTS

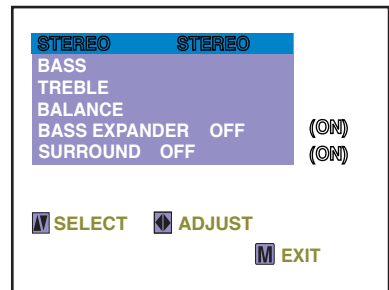
- 1 Press **MENU**. The Main Menu will appear. (See page 13.)
- 2 Press the **CHANNEL ▲** (up) or **▼** (down) key to select **AUDIO**.
- 3 Press **VOLUME +** or **-** key. The Audio Adjustment menu will appear.
- 4 Press the **CHANNEL ▲** (up) or **▼** (down) key to select the control you want to adjust.
- 5 Use the **VOLUME +** or **-** key to make adjustments.
- 6 Press **MENU** key to exit.



Select AUDIO



Audio adjustment menu in TV mode



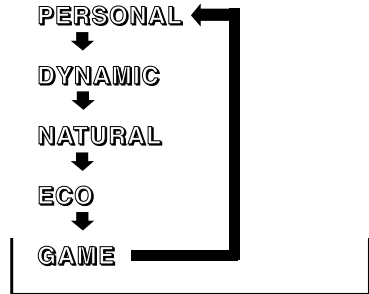
Audio adjustment menu in AV mode

# SELECTING THE PICTURE MODE

- Press the **IMAGE** key on the remote control to select the picture mode: **PERSONAL**, **DYNAMIC**, **NATURAL**, **ECO** or **GAME**.

Use the chart below as a guide when you select the picture mode.

- Press the **IMAGE** key once to check the picture mode.



**Note:** If, while **DYNAMIC**, **NATURAL**, **ECO** or **GAME** mode is selected, the **Color**, **Brightness**, **Contrast**, **Sharpness**, **Tint** or **White tone** control is readjusted by using the **Picture Adjustment** menu, the picture mode will automatically change to **PERSONAL**.

PICTURE MODE	Picture Adjustment Settings
<b>PERSONAL</b>	for your preference as adjusted with Picture adjustment menu.
<b>DYNAMIC</b>	for high color, contrast and brightness picture settings suitable for viewing an ordinary TV program in a brightly lit room.
<b>NATURAL</b>	for normal viewing with factory settings.
<b>ECO</b>	for low color, contrast and brightness picture settings suitable for viewing movies in a dimly lit room. This mode is economical of the TV power consumption.
<b>GAME</b>	This mode is gentle on the eyes. Perfect for TV game due to subdued color and soft contrast.

# TIMER SETTING

## OFF TIMER SETTING

The OFF Timer will switch off the TV automatically. Use your remote control to set the Off Timer.

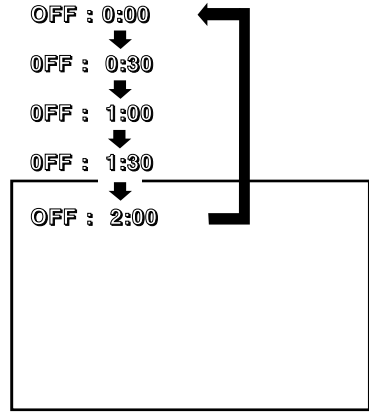
- 1 Press the **SLEEP** key until the desired time delay appears.
- 2 Press the **VOLUME +** or **-** key to select the time period.

### CANCELLING THE SLEEP TIMER

- Press the **SLEEP** key, then select **OFF:0:00** by pressing **VOLUME +** or **-** key.

#### Note:

- Press the **SLEEP** key once to check the remaining time.
- Just one minute before switching off the TV, **OFF 0:01** will be display on the screen.
- The **OFF TIMER** cancels when the TV set is turned off or if a power failure occurs.



## ON TIMER SETTING

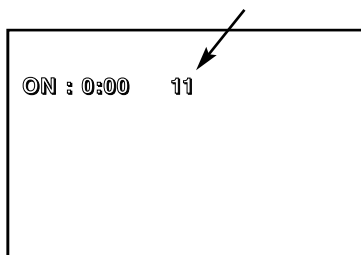
When the ON TIMER is set, TV will automatically be switched on to the selected Channel number when the specified time has elapsed.

- 1 Press the **SLEEP** key twice.
- 2 Press the **VOLUME +** or - key to select the time period. The set time will be increased or decreased by 10 minutes each time when the **VOLUME +** or - key is pressed ; the maximum time which can be set is 24 hours.
- 3 Use Number key function to insert Channel number for when the TV set is switched on by ON TIMER. (see page 9.)

### Note:

- If no operation is performed after the TV has been switched on by the ON TIMER, such as if you are not at home, the TV will be automatically switched off after approximately 2 hours
- If the TV is already switched on when the time set for the ON TIMER has been reached, only the Channel number will be changed to the set Channel number.
- Cancelling ON TIMER. To cancel the ON TIMER, press the **VOLUME +** or - key to set it to **ON 0:00** while the ON TIMER screen is shown. Switching off the TV by pressing the **Mains Power Switch** will also cancel the ON TIMER settings.

Channel number for when TV is switched on by ON TIMER.




(ON TIMER Setting Mode)

# SETTING OF THE PRIVATE POSITION

Private position is used to restrict of channel positions that you do not want others to watch. Any position can be set as the Private position.

## HOW TO SET PRIVATE POSITION

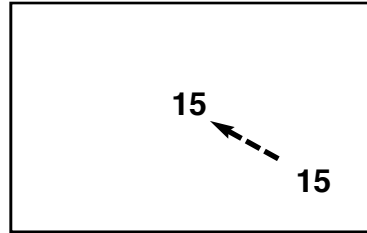
For example, to set the channel “15” as the private position.

- 1 Select channel “15”.
- 2 Press and hold the **DISPLAY** key for more than 2 seconds.
- 3 Press **MENU** key.
- 4 The picture will disappear, and “  15” will be display on the screen.

The private position setting is now completed.



Press and hold **DISPLAY** key



Press **MENU** key to active it



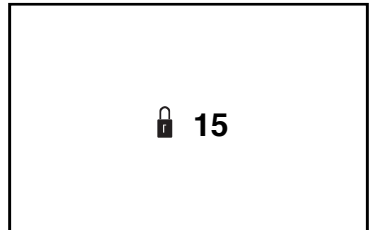
## TO VIEW A CHANNEL ON PRIVATE POSITION

- 1 Select private position (In this case channel “15”).
- 2 Press and hold the **DISPLAY** key for more than 2 seconds.
- 3 Press the **DISPLAY** key once again for watching a TV programme.

**Note:** The position “15” is still in the private position.



Press and hold **DISPLAY** key



Press **DISPLAY** key to watch it



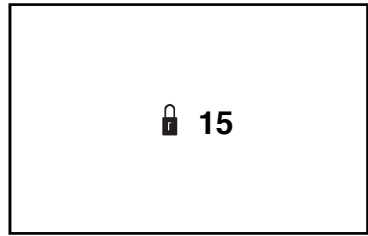
## CANCELLING THE PRIVATE POSITION

- 1 Select private position (In this case channel "15").
- 2 Press and hold the **DISPLAY** key for more than 2 seconds.
- 3 Press the **MENU** key once again for watching a TV programme.

The private position is now cancelled.



Press and hold **DISPLAY** key

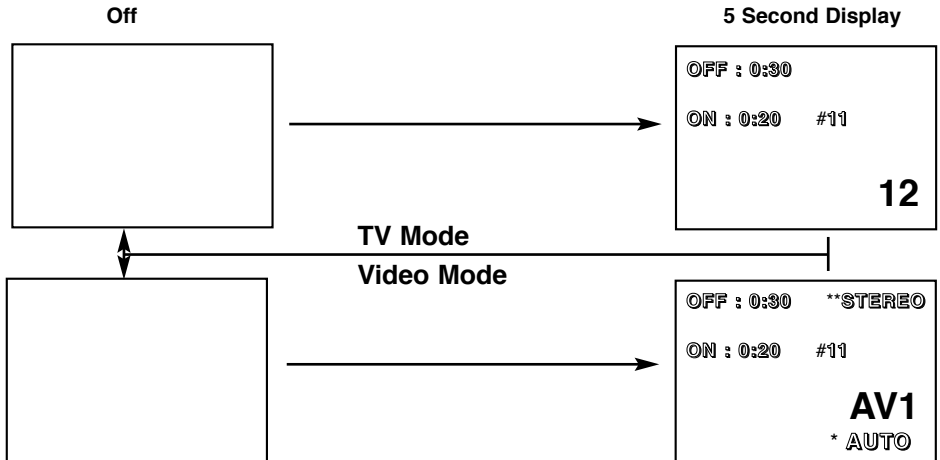


Press **MENU** key to watch it



## CHECKING THE CHANNEL NUMBER, OFF-TIMER OR ON-TIMER

To check the channel number, time or sleep timer, press the **DISPLAY** key on the remote control. Press the **DISPLAY** key once for about 5 second display. Press the **DISPLAY** key again to clear the screen.



\* The Colour System appear in AV mode only (AUTO, PAL, NTSC, NTSC4.43). Press the **DISPLAY** key repeatedly select a suitable colour system in AV Mode (see page 23).

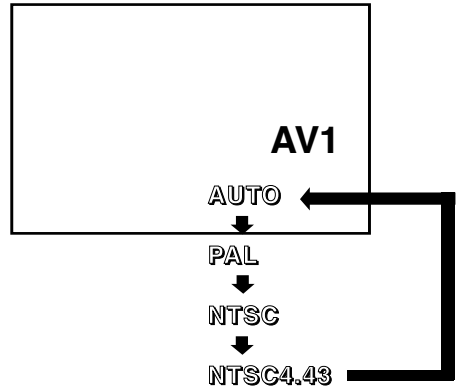
# Channel number for when TV is switched on by ON TIMER.

\*\* Select "STEREO or MONO" channel of the audio channel in the TV set with the AUDIO menu setting in AV mode.

# SELECTING THE COLOUR SYSTEM IN AV MODE

Depending on the type of video tape or connected AV equipment being used, it may be necessary to select colour system. In this case, press the **DISPLAY** key and select a suitable colour system.

Each time the **DISPLAY** key is pressed, colour system is changed as follow;



## RESETTING THE TV

This feature automatically resets the television to factory settings. If your adjustments have been changed or your personal preferences are not satisfactory, just press **RESET** key on the remote control twice. This feature will automatically reset:

- Video Mode to TV
- Antenna Mode to VHF/UHF
- Channel Memory (Clear all channels)
- Picture Adjustments in **PERSONAL** mode: Color, Contrast, Brightness, Sharpness and Tint to factory settings
- Clock and On/Off/Sleep Timers (Clear)
- Plug & Play (Returned to the state where it does not perform.)



If desired, personal settings can be made

again using the menu options.

# USING THE AUDIO/VIDEO INPUT JACKS

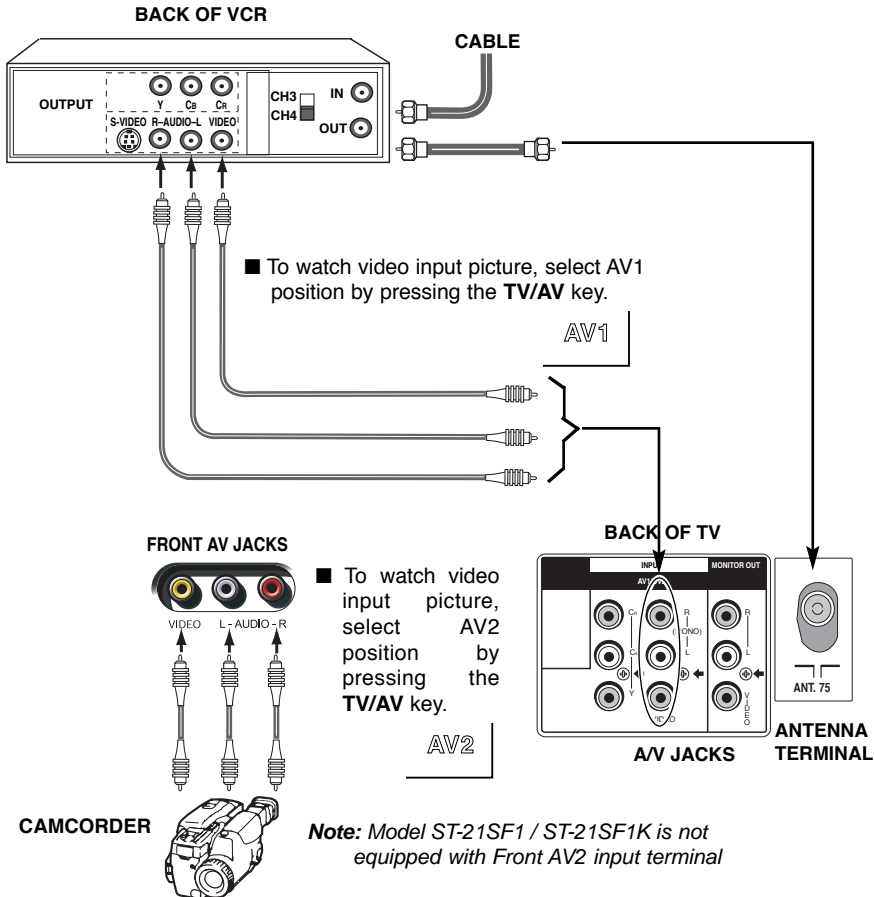
You can connect your VCR, camcorder, video game, stereo system, etc. directly to the TV using the Audio and Video jacks. Be sure to switch off TV and external equipment before connecting cables. Make sure all cable connectors are fully seated on the jacks to avoid possible signal loss and audio hum. (Cables are not supplied.)

## CONNECTING AUDIO VIDEO INPUT JACKS

- Connect the video output from the external equipment to the TV's video input jack.
- **Stereo (R/L) audio:** Connect the right and left audio output from the external equipment to the TV's right and left audio input jacks. Then select "STEREO" channel of the audio channel in the TV set with the AUDIO menu setting in AV mode.

If the external audio signal is a monaural one in this connection, please use "Mono to Stereo Adapter" (not supplied) and connect to TV set. **Note:** AV stereo in AV mode always fixed on "STEREO" channel

- **Mono (single jack) audio:** Connect the audio output from the external equipment to the TV's left (L) audio input jack.

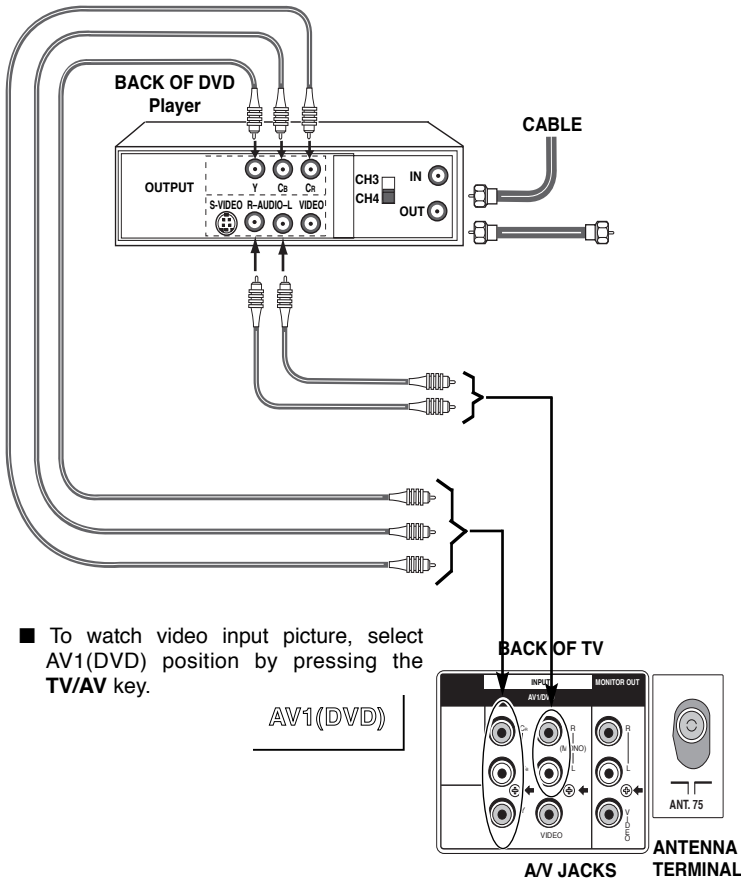




# USING THE DVD INPUT JACKS

## CONNECTING TO a DVD PLAYER WITH AV1(DVD) VIDEO COMPONENT INPUT TERMINAL (Y, Cb or Cr)

Connect the component output terminal on your DVD player to the component video input terminal of this product. (NOTE: When a signal of Y,Cb,Cr/Y,Pb,Pr is received, the output signal from monitor output terminal will be corresponding but without colour (black and white image).)






# HELPFUL HINTS - Problems/Solutions

BEFORE REQUESTING SERVICE CHECK THE FOLLOWING CHART.

**Problem:**                      **Check these Conditions:**                      **Try these solutions:**

TV turns off automatically.	<ul style="list-style-type: none"> <li>● TV will automatically switch off. (See pages 10, 19 and 20.)</li> <li>● Power surge protection feature.</li> </ul>	<ul style="list-style-type: none"> <li>● Press <b>POWER</b> key.</li> <li>● Turn off the TV with the <b>MAIN POWER</b> switch momentarily.</li> </ul>
No picture or poor picture	<ul style="list-style-type: none"> <li>● Check antenna connections.</li> <li>● May be station trouble.</li> <li>● Possible interference from household appliance.</li> <li>● Brightness or Contrast misadjusted</li> </ul>	<ul style="list-style-type: none"> <li>● Adjust antenna.</li> <li>● Try a different channel.</li> <li>● Press <b>IMAGE</b> key to select <b>NATURAL</b> picture mode. (See page 18.)</li> </ul>
Poor color or no color	<ul style="list-style-type: none"> <li>● Check if program is in color.</li> <li>● Check antenna connections.</li> <li>● May be station trouble.</li> <li>● Color or Tint misadjusted.</li> </ul>	<ul style="list-style-type: none"> <li>● Try a different channel.</li> <li>● Adjust antenna.</li> <li>● Press <b>IMAGE</b> key to select <b>NATURAL</b> picture mode. (See page 18.)</li> </ul>
Blue screen with AV1 / AV1(DVD / AV2 displayed.	<ul style="list-style-type: none"> <li>● Check A/V connections.</li> <li>● Check external equipment.</li> </ul>	<ul style="list-style-type: none"> <li>● Press <b>TV/AV</b> key.</li> <li>● Switch on external equipment.</li> </ul>
Black screen with  and Channel number displayed.	<ul style="list-style-type: none"> <li>● Check to see if channel is set as the Private Position.</li> </ul>	<ul style="list-style-type: none"> <li>● See Setting of the Private Position (See pages 21-22.)</li> </ul>
No sound or poor sound.	<ul style="list-style-type: none"> <li>● May be station trouble.</li> <li>● <b>MUTE</b> may be on.</li> <li>● Check A/V connections.</li> </ul>	<ul style="list-style-type: none"> <li>● Try a different channel.</li> <li>● Press <b>MUTE</b> key.</li> <li>● Press <b>VOLUME +</b> key.</li> </ul>
No Cable channels above number 13.	<ul style="list-style-type: none"> <li>● Cable channel Indicator <b>C</b> should appear next to channel number.</li> </ul>	<ul style="list-style-type: none"> <li>● Select <b>CABLE</b> signal and reset channel search. (See page 14.)</li> </ul>
No UHF channels, VHF OK.	<ul style="list-style-type: none"> <li>● Cable channel Indicator <b>C</b> should <b>not</b> appear next to channel number.</li> </ul>	<ul style="list-style-type: none"> <li>● Select <b>VHF/UHF</b> signal and reset channel search. (See page 14.)</li> </ul>
Cannot select or scan some channels.	<ul style="list-style-type: none"> <li>● Channel may be removed from memory.</li> <li>● Check antenna connections.</li> </ul>	<ul style="list-style-type: none"> <li>● Skip channel to memory manually. (See page 15.)</li> </ul>
Remote Control will not work.	<ul style="list-style-type: none"> <li>● Check batteries.</li> <li>● Check if TV set is plugged in.</li> </ul>	<ul style="list-style-type: none"> <li>● Replace batteries.</li> <li>● Aim remote towards front of TV.</li> </ul>
Cabinet makes popping sound.	<ul style="list-style-type: none"> <li>● This is a normal condition during warm-up and cool down of the plastic cabinet parts.</li> </ul>	
Colour Spot On The CRT	<ul style="list-style-type: none"> <li>● Keep away your TV set from magnetic source, then turn-off your TV set and disconnect TV's power cord from AC outlet, keep this condition about more than 60 minutes and turn-on again your TV set if time is reach. If colour spot is not disappear after this solution have done, please contact your local dealer.</li> </ul>	



## Authorized SANYO Service Centers

### AUTHORIZED SERVICE CENTERS



TEL NO.



FAX NO.

#### **SANYO Service Center**

Basement, Solid House Building 2285 Don Chino Roces, Avenue, Ext. Makati City (632) 892-1493 (632) 892-1260

#### **Quezon City Branch**

137-A Roosevelt Ave., SFD, Quezon City (02) 374-1349  
(02) 414-9647

#### **Dagupan Branch**

No.3 Pinkies Bldg., Zamora cor. Gomez St., Dagupan City, Pangasinan (075) 522-0254 (075) 522-0254

#### **San Fernando Branch**

Cher-Hil Subd., Mac Arthur Highway San Fernando City, Pampanga (045) 860-4252 (045) 860-4252

#### **San Pablo Branch**

175 C Bgy. San Rafael San pablo City, Laguna (049) 562-0666 (049) 562-0666

#### **Naga Branch**

Door No. 8, Bldg. 1, Puritan Land Devt. Corp. Roxas Ave. Naga City (054) 472-3650 (054)811-1601

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#### **Iloilo Branch**

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#### **Tacloban Branch**

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#### **Davao Branch**

San Josua Realty Bldg. Km 7, Lanang. Davao City (082) 300-6586 (082) 300-8381

#### **Cagayan De Oro Branch**

Door 1 True Value Bldg., Lapasan St., Cagayan De Oro City (088)231-4628 (08822)724-482

# SANYO

**SANYO PHILIPPINES INC.  
MAKATI CITY, PHILIPPINES**