Digital LCoS Projection TV

Operating Instructions



IMPORTANT SAFEGUARDS



CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance(servicing) instructions in the literature accompanying the appliance.

WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

CAUTION:

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

NOTE TO CATV SYSTEM INSTALLER:

THIS REMINDER IS PROVIDED TO CALL THE CATV SYSTEM INSTALLER'S ATTENTION TO SECTION 820-40 OF THE NEC, WHICH PROVIDES GUIDELINES FOR PROPER GROUNDING, AND IN PARTICULAR, SPECIFIES THAT THE CABLE GROUND SHALL BE CONNECTED TO THE GROUNDING SYSTEM OF THE BUILDING, AS CLOSE TO THE POINT OF CABLE ENTRY AS PRACTICAL.

FCC Compliance Statement:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantees that interference will not occur in a particular installation. If this equipment dose cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

Only shielded interface cable should be used.

Finally, any changes or modifications to the equipment by the user not expressly approved by the grantee or manufacturer could void the users authority to operate such equipment.

IMPORTANT SAFETY INSTRUCTIONS

Please read the following safeguards before using your TV and retain the this manual for future reference. Always follow all warnings and instructions.

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings.
 Install in accordance with the manufacturer's instructions.
 For proper ventilation, separate the product from the wall, and keep a distance of more than 10cm(4").
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15) The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus

PORTABLE CART WARNING



IMPORTANT SAFETY INSTRUCTIONS

Important Warranty Information Regarding Television Format Viewing

Standard screen format televisions (4:3, the aspect ratio of the screen width to height) are primarily designed to view standard format full-motion video. The images displayed on them should primarily be in the standard 4:3 ratio format and constantly moving. Displaying stationary graphics and images on screen, such as the dark top and bottom letterbox bars (wide screen pictures), should be limited to no more than 15% of the total television viewing per week.

Wide screen format televisions (16:9, the aspect ratio of the screen width to height) are primarily designed to view wide screen format full-motion video. The images displayed on them should primarily be in the wide screen 16:9 ratio format, or expanded to fill the screen if your model offers this feature, and constantly moving. Displaying stationary graphics and images on screen, such as the dark side-bars on non-expanded standard format television video and programming, should be limited to no more than 15% of the total television viewing per week.

Additionally, viewing other stationary images and text such as stock market reports, video game displays, station logos, web sites or computer graphics and patterns, should be limited as described above for all televisions. Displaying any stationary images that exceed the above guidelines can cause uneven aging of display panel that leave subtle, but permanent burned-in ghost images in the television picture. To avoid this, vary the programming and images, and primarily display full screen moving images, not stationary patterns or dark bars.

On television models that offer picture sizing features, use these controls to view the different formats as a full screen picture.

Be careful in the selection and duration of television formats used for viewing. Uneven display panel aging as a result of format selection and use, as well as other burned-in images, is not covered by your limited warranty.

Features

· Integrated wide screen high definition HD TV

LCos(Liquid Crystal on Silicon) Technology

LCoS TV enables a smooth continuous and natural color image. Visible pixelization, known as 'screen-door effect', is virtually eliminated at normal viewing distances LCoS, because the cell structure of the panels features very little space between the individual pixels.

HDMI(High Definition) connectable

HDMI terminal used to directly receive digital signals and video signals from PC or other devices is supported, providing clearer pictures.

HDMI input definitions: 720 x 480i, 720 x 480p, 1280 x 720p, 1920 x 1080i + PC input definition

Direct connection to PC

Since it can be directly connected to a PC without additional peripherals and used as a high definition monitor, it will be preferable especially when you play a game or prepare presentations.

PC input definition: 640x480@[Vertical frequency] 60Hz, 73Hz, 75Hz

800x600@[Vertical frequency]56Hz, 60Hz, 70Hz, 72Hz, 75Hz

1024x768@[Vertical frequency]60Hz, 70Hz, 75Hz

1280x720[Vertical frequency]60Hz

SRS Trusurround XT

Even two speakers can realize 3-D sound effect and sound tones can be freely adjusted using equalizer function.

DVD direct connection/high definition receiver

Direct connection to DVD player supports higher resolution pictures and with connection to high definition receiver, you can view digital broadcasting(various component input: 480i, 480p, 720p, 1080i).

· Various additional functions

Still picture function, selectable screen ratio, picture in picture and more functions are supported additionally.

Ultra lighted and slim design

The state-of-the-art technology produces this ultra slim and light-weighted design of 27kg and 380mm.

TRADEMARK & LABEL LICENSE NOTICE



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DOLBY DIGITAL



This product is manufactured with the permission of Dolby Laboratories. 'Dolby' and 'D' mark are owned by Dolby Laboratories

This use's manual presents cautions and directions to avoid accidents.

After reading this manual, use this product safely.

Once you read it, keep this manual for reference in the future.

It may cause a fire or physical injuries unless warnings and cautions for electric device are kept.

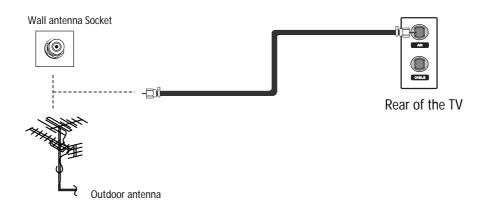
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Connecting Antennas and Cable TV

Analog and Digital TV Signals provided on antenna.

 ${\bf 1}$. Connect the antenna lead to "AIR" terminal on the rear panel of your TV.



2. Select "CHANNEL->Auto Memorizing".

Execute the "Auto Memorizing" by selecting "Air Only".

(refer to page 33)

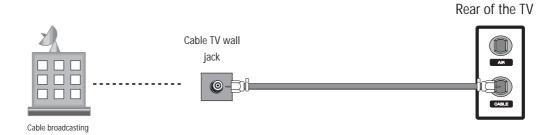




Connecting Antennas and Cable TV

Analog and Digital TV signals provided on cable.

 $\label{eq:local_local_local_local} \textbf{1.} \quad \text{Connect the incoming cable to the "CABLE" terminal on the rear panel of your TV.}$



2. Select "CHANNEL->Auto Memorizing".

Execute the "Auto Memorizing" by selecting "Cable Only".

(refer to page 33)

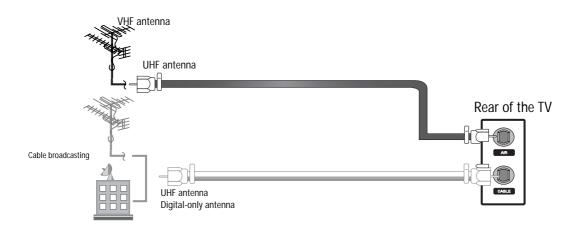




Connecting Antennas and Cable TV

Analog and Digital TV signals provided on Cable and Antenna

 $1. \ \, \text{Connect the antenna lead to the "Air" terminal and the incoming cable to the "Cable" terminal.}$



2. Select "CHANNEL->Auto Memorizing".

Execute the "Auto Memorizing" by selecting
"Air + Cable".

(refer to page 33)





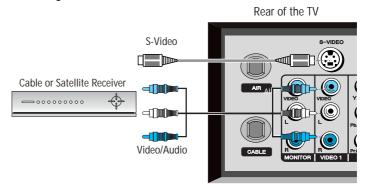
Connecting a Cable & Satellite Receiver

Cable & Satellite Receiver

If you want to view cable broadcastings, you have to sign up with your local cable broadcasting company, and connect the cable broadcasting receiver and the TV set as instructed in the following.



- 1. Connect the TV set and the cable receiver or Satellite STB.
 - · Get the AV connecting cable ready.
 - Using the connecting cable, connect the output of the cable broadcasting receiver to the VIDEO or S-VIDEO, as shown in the following picture.
 - When connecting to the receiver, connect the terminals to the matching colored ones.



2. Turn on the power of the TV and the Receiver.



Connecting a Cable & Satellite Receiver

3. Select the Input.

Press the [TV/VIDEO] button on the TV remote control to select VIDEO or S-VIDEO.







Connecting a DVD Player

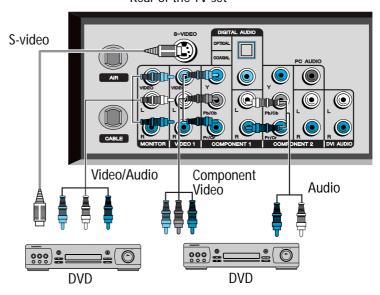
DVD

- Component input is set to suit 480i,480p,720p,1080i modes,which are all DVD formats.
- In general the DVD video output Y,Pb/Cb,Pr/Cr are connected to the component input terminals in the back of the TV set,and the DVD audio (left,right)terminals are connected to the audio input terminals,as shown in the picture on the right.



- 1. Connect the TV set and the DVD player.
 - A. Get the components connecting cables and AV connecting cables ready.
 - B. Using the connecting cables, connect the DVD output to the COMPONENT, VIDEO or S-VIDEO of the TV as shown in the picture below.
 - C. When connecting, connect the terminals to the matching colored ones.

Rear of the TV set



2. Turn on the power on of the TV set and the DVD player.



Connecting a DVD Player

- 3. Select the Input.
 - A. Press the [TV/VIDEO] button on the TV remote control to select either COMPONENT, VIDEO or S-VIDEO.





NOTE!!

- The DVD player's output terminal marks, such as y/cb/cr, may be marked as y/b-y/r-y, y/cb/cr, or y/pb/pr, depending on the model of the DVD equipment.
- The following is how you connect the DVD to the TV set, according to the DVD output marks. Y←→Y Cb ←→Pb, B-Y, Cr ←→Pr, R-Y
- Regarding the output of DVD, it can be played in either video, S-video, or component video, and each model has different output methods. So, when you purchase your DVD, please confirm on this.
- If the screen comes out small when you play DVD, please press the screen size button on the remote control, and select the function that controls the screen.

Connecting a VCR

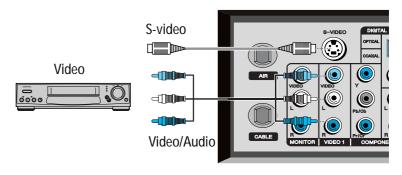
VCR

By connecting TV and VCR, you can record TV programs. Details about TV program recording can be found from the VCR user instruction.

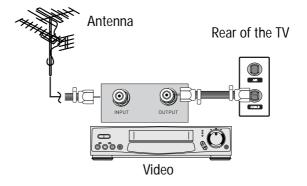


- 1. Connect the TV with the VCR video input.
 - A. Get the AV connecting cable ready.
 - B. Using the connecting cable, connect the VCR output to the VIDEO or S-VIDEO terminal on the TV, as shown in the picture below.
 - C. When connecting, connect the terminals to the matching colored ones.

Rear of the TV



- 2. Connect the TV and VCR with antenna input.
 - A. Select either switch #3 or #4, which can be found on the back of the VCR player. (match the TV channel to this, too)
 - B. Using the connecting cable, connect the VCR antenna output and the TV antenna input, as shown in the picture below.



Connecting a VCR

 $\boldsymbol{3}.$ Turn on the power of the TV and the VCR .



4. Select the input.



Press the [TV/VIDEO] button on the TV remote control to select either VIDEO or S-VIDEO.





PREV OPEN/CLOSE NEXT

NOTE!!

- When connecting the video, S-video terminal offers better quality video than the regular video terminals does.
- When connecting the regular video terminals ,connect the three colored AV connecting cables (video, audio left and right) to TV, and when connecting with the S-video terminals, connect the left and right audio terminals the same way. You only need to connect the video terminal with a separate S-Video connecting cable (purchased separately).

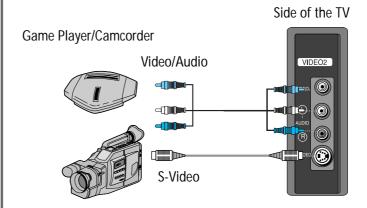
Connecting a Camcorder

CAMCORDER/ GAME PLAYER

You can view what you have recorded with your camcorder, or play games by connecting your game player to the set.



- ${f 1}$. Connect the TV and camcorder/game player.
 - A. Get the AV connecting cable ready.
 - B. Using the connecting cable, connect the output terminals of the camcorder/ game player to the VIDEO 1 on the TV set.
 - C. When connecting, connect the terminals to the matching colored ones.



2. Turn on the power of the TV and camcorder/game player.



Connecting a Camcorder

3. Select the input.

TV/VIDEO

Press the [TV/VIDEO] button on the TV remote control, and select VIDEO 1 or 2.



4. Select the function of your choice.

You can select the function of your choice through the camcorder/game player.

NOTE!!

- When connecting your camcorder/game player,S-video terminal offers better quality video than the regular video terminal does.
- When connecting the regula r video terminal,connect three colored AV connecting cable (video,audio left and right)to the TV set,and when connecting with S-video terminal,connect the left and right terminal the same way,except for the video terminal, which should be connected with a separate S-video connecting cable (sold separately)



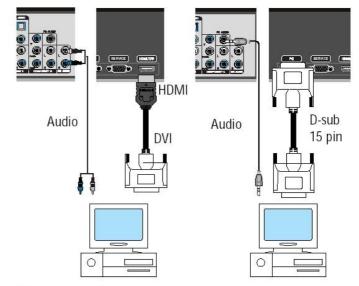
Connecting a PC

How to connect with the computer.

Regarding the PC resolution this TV supports, please refer to the back of the front cover ("What 's good about this product.")
Before connecting your TV to your PC, make sure to change the PC resolution and vertical frequency.



- 1. First, set the PC resolution and vertical frequency.
 - Put the cursor on the background of your PC monitor, and click the right button of your mouse and select the properties.
 - From the properties, select the settings, and modify to set the resolution and the vertical frequency that this TV supports.
- We recommend XGA60 hz for the optimal setting.
- 2. Connect the PC and the TV (15 pin D-sub or HDMI/DVI)
 - Get the PC connecting cable, or HDMI/DVI connecting cable, and audio connecting cables (left and right). (Connecting cables are sold separately)
 - Using the connecting cables, connect the PC output to the HDMI terminals of your PC or TV, as shown in the following picture.



* PC Input Resolution.

Classification.	Resolution		Startenary concentration	
	Н	٧	Vertical Frequency	Horizontal Frequency (kHz)
	640	480	60	31.5
VGA	640	480	73	37.9
	640	480	75	37.5
SVGA	800	600	56	35.2
	800	600	60	37.9
	800	600	72	48.1
	800	600	75	46.9
	1024	768	60	48.4
XGA	1024	768	70	56.5
	1024	768	75	60.0

The optimal resolution for TV is SGA60Hz or XGA60Hz.

)

Connecting a PC

3. Turn on the power of the TV.



4. Select the input.



- Press the [MULTIMEDIA] button on your TV remote control to select either PC or HDMI input.
- Every time you press the [MULTIMEDIA] button on the remote control, the input changes to the next turn



5. Now, you are ready to enjoy the PC contents in big TV screen.

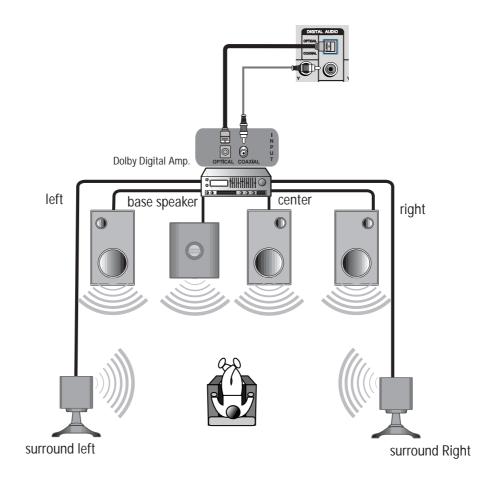
NOTE!!

- Go to the PC properties display settingsadvanced - monitor, and set the screen refresh frequency at 60 Hz.
- HDMI input can receive only the digital signals.
- Depending on some graphic cards, you may not see anything on the screen when you connect HDMI. When this happens, reboot your PC and you will have the screen. Not like HDMI/HDMI connecting cable, in case of DVI/HDMI connecting cables, the audio signals will not be transmitted.
- Therefore, in such cases, you have to input the audio signals into the DVI audio signal terminal, which is located on the left of the PC input terminal.



Connecting to Dolby Digital Amp

If you connect the Dolby Digital Amp to the digital audio output terminal, you can enjoy a much enhanced sound quality. (Dolby digital will play only when you receive the digital broadcasting contents.)



NOTE!!

Regarding the digital audio play formats, Dolby digital or PCM are available.



This product is manufactured under the authorization of Dolby Laboratories. Dolby, DOLBY, and double D marks are the trade marks of Dolby Laboratories.

Preperation

Names of the parts.

Front of the Main Front, side, Rear.

The organizing parts of the main body and the same named key on the remote control have the same functions.

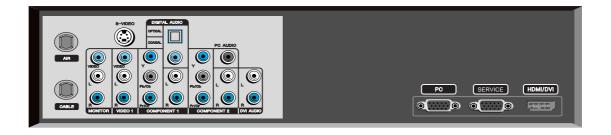
Front



side



Rear

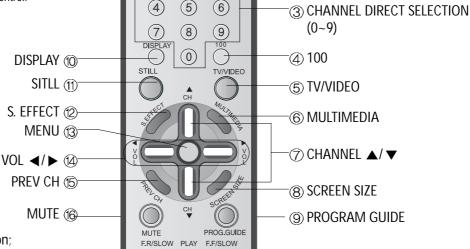


Function of each button

NOTE!!

Use AAA type 1.5V batteries (two batteries) When replacing the batteries, make sure both of the two batteries are new.

You can use the batteries for about a year, but it depends on how frequently you used the remote control.



(2)

(3)

Button Function;

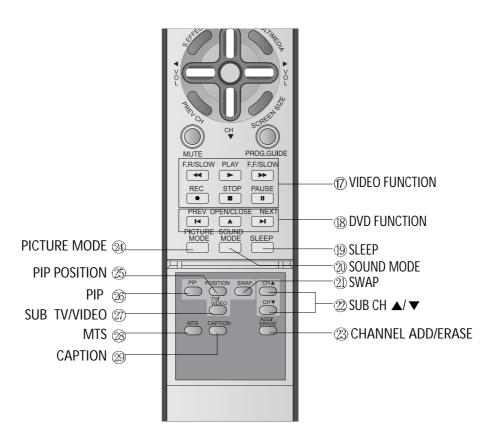
- ① Power button: You can use this to turn the power on or off. When the remote control is set to respond to a specific VCR or cable broadcasting receiver, you can turn the power of the VCR or cable broadcasting receiver on or off depending on the mode of the remote control.
- Selection button: You select the product you want to operate with your remote control.
 - TV button: You can operate the TV with your remote control.
 - Video/DVD button: You can operate VCR or DVD with your remote control.
 - Digital Receiver:You can operate the digital broadcasting receiver with your remote control.
 - Cable button: you can operate the cable broadcasting receiver with your remote control.
- ③ Channel Direct Selection Button: You use this to select the channel directly.
- ④ 100 button; You use this button when you set the cable broadcasting channel, whose number is over 100.
- ⑤ TV/VIDEO Button : You use this when you use external input of the VCR main body. (TV, VIDEO1, VIDEO 2,S-VIDEO1,S-VIDEO2,Component 1, Component 2, HDMI, PC)

6 Multi Media:You use this when you use external input of the PC.(HDMI $\begin{tabular}{ll} \leftarrow \rightarrow \end{tabular}$ PC)

1 POWER

② SELECTION PRODUCT

- ⑦ Channel ▲/ ▼: You use this to change the select channel.
- Screen size button; You can change the size of the screen to the appropriate size.
- Program Guide Button: You use this button to change to the broadcasting guide screen.
- Confirm button: Press this button, and you can see the information on the current channel.
- ① Still button; You use this when you temporarily stop the broadcasting screen.Press one more time to continue the screen play.
- ② S.EFFECT: You use this when you set the speaker to your taste (3D mono,stereo)
- Menu button; You can use this button to have the menu display on the screen, or to get outof the menu display mode.
- ® Previous Channel Button; This button will move you back to the previous channel that you'd been watching.
- (f) Mute Button: This button stops the audio. Press one more time gently, and you will get the sound back.



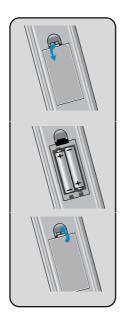
Button Function;

- $\widehat{\mathcal{D}}$ Video Function Button: Use this when you play or record video tapes.
- ® DVD function button; Use this to change, and close/open the DVD player.
- Sound Mode Button: Use this to select the audio mode you
 want among the designated audio modes in order to control
 the audio quality.
- ② SWAP Button: Use this to switch the position of the main and sub screens.
- SUB CH ▲/▼Button: button:Use this to change the selected channel for the sub screen, or to change the sub channel of the digital channel when you have simultaneous screen mode.
- Channel Add/Erase button: You can remember the currently viewing broadcasting channel, or to remove the channel that you don't want to be among memorized channels.

- Picture Mode Button: Use this button to select the mode you want from the designated screen modes in order to adjust the screen quality.
- PIP position button; You can change the position of the sub screen with this button.
- ② PIP button: Use this when you want to change from regular screen to the simultaneous screen mode, or to set the size of the sub screen.
- ② TV/VIDEO Button; You can use this button when you change the input mode of the sub screen.
- MTS Button: You can use this to support the audio. The consumer can select either the stereo, audio multiplex, or mono mode to listen to the audio.
- ② Caption Button: You can use this button to change the English caption screen settings.

How to change batteries.

- Press the handle on the remote control cover, and push towards the front.
- 2. Put the batteries in as instructed, according to the +/- marks inside the remote control.
- 3. Put the cover back in, and press to

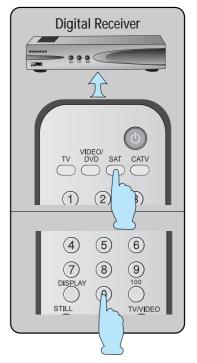


- When the product comes out of the factory, the remote control is set ready to use to operate the TV set.
- When you change batteries, the previously set codes will be all erased. So, you have to reset the codes.
- When you change batteries, use alkaline batteries only, for smooth operation.

How to set to operate equipments from other companies.

- Connect the power code of the external devices you plan to use to the plug, and the power has to be turned off.
- 2. Press the product selection button (video/DVD, digital receiver, cable)until the red light blinks.(example:In case of the digital receiver, press the digital receiver button)
- 3. Direct the remote control towards the receiving slot of the external device, and press 3 digits of setting code using the number keys.
- 4. When the power of the external device is on, you are ready to use.
 - * It will be convenient for you if you write down the codes of the set devices.

Digital Receiver	Video	Cable Broadcasting



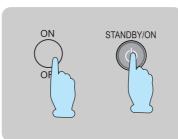
Remote Control Setting Code					
VCR		DVD		Cable	
Brand	Code	Brand Code		Brand	Code
				Digita	I Receiver

 $^{^{\}star}$ Depending on the manufacturer's code, the code may not have been set, or operate.

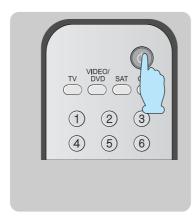
Turning on the Television

The button with the same name as the part in the main body functions the same.

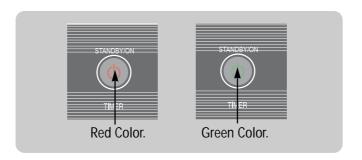
1. Press the MAIN POWER button on the main body.



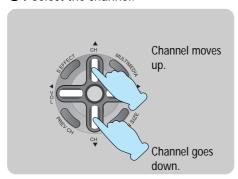
- The red light will be turned on at the standby part on the front of the main body.
- Press the "ON/OFF" button.
 - Press the "ON/OFF" button on the rear bottom of the unit.
 - The LED of the unit turns on "red colour".
- Press the STANDBY/ON button.
- The LED of the unit turns on "green" colour and the TV turns on.
- 2. Press the [POWER] button on the remote control.



- Red light will blink on the standby part.
 Then, the screen will gradually brighten up, until you get the screen with the audio.
 While this is happening, the power button does not work. Once the process is complete, a green light comes on at the standby part.
- When the TV is on the standby status, you cannot turn the power on even if you press the power button which is on the front of the TV)
- Due to the special characteristic of the projection TV, it takes a while from the moment you turn the power on until you get the screen. But this doesn't mean the TV is broken. You just have to wait a little.
- If you press the main power button, and the green light blinks in the standby part, but you don't get any screen or audio within twenty seconds, this could be the case when the TV has been turned off abnormally,due to a blackout, or because you have pressed the main power button to turn the TV off. But that doesn't mean something is wrong with the TV. If you wait a little more(within thirty seconds), you will get both the screen and the audio.

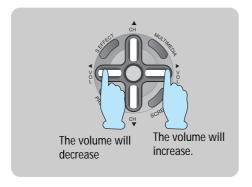


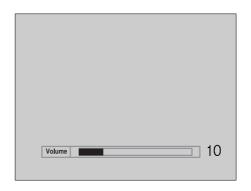
3. Select the channel.



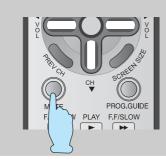


4. Control the volume.





▶If you want to stop the sound suddenly,



- It's convenient to use when the telephone rings or you have a guest.
- The 'mute' sign will appear on the screen, and the audio will stop.
- Press one more time, and you will get the sound back.

NOTE!!

- When you hear a "Tac" sound from the main body, that means the cabinet is compressing due to the change in interior temperature. But as long as you don't have any problem with the screen or the audio, the set is not broken.

How to turn off the TV.

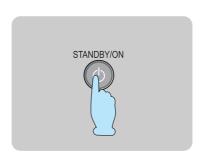
When the TV is turned off in an abnormal way, the light source will be affected, resulting in shortened durability. Please read the related information carefully, and make sure to turn the TV off the right way.

1. Press the [POWER] button on the remote control.



- About five seconds after the screen and the audio goes off, orange colored light willblink on the standby part. When the light blinks,it doesn't mean something is wrong with your set.It blinks while the light source lamp is cooling down after you turn the power off. While this is happening, the power button won't work. Within fifteen seconds, red light will come on, and the set will go into a standby mode.
- * If you turn the power off but immediately press the power button on again, the screen will come back without any delay.

2. When the red light comes on at the standby part, that means the TV has been turned off in the right way.



- Unless you don't watch the TV for a prolonged time, please leave the main power switch of the main body turned on. When you don't watch the TV for a prolonged time, press the main power button, while the main body and the standby part have red lights on. If you turn the main power source off in an abnormal way, you could cause damage to the light source lamp.

Press the MAIN POWER button on the main body.

Only when you press the main power button on the main body can the buttons on the remote control and the main body function. When you turn off the main power button, the remote control and the main body won't work.

When you press the channel buttons.

Using the number keys, please select two digits when you select a channel.
(Example:If you want to watch channel 3: Press the number 0 key and the number 3 key. If you press number 3 key only, it takes a long time to have that channel selected.

If you want to turn off the sound suddenly,

Press the Mute button.

If you press the Mute button one more time, the sound will come out again.

(Example:Use this button when the telephone rings or you have a guest while watching TV)

A "Tac "sound during or after you watch the TV.

The reason why you hear the "Tac 'sound from the main body is because the cabinet is compressing due to the change in the interior temperature.But if you don't have any problem with the screen or audio, that noise does not indicate the set is broken.

How to confirm the status of the television operation.

If you press "confirm" button, the information about the currently watching channel and input signals will display on the screen.

LED Operation Status Indication.

With the LED indications, you can check the operation status of the product.

*When it is not working properly,it will re -try three times automatically in order to turn on the TV again •: Blink •: OFF

Product Status Timer Power Standby Red Orange Gr		1	Classification	Remark	
		Orange	Green		
	•			Standby	Normal Power-Off status.
				Preparing to turn the lamp on	This is the case where the system is waiting for the lamp light to be turned on.
Normal		(In general situation)	If you wait a little, you will get the screen and the audio. During this time, the power button will not work.		
			•	Preparing to turn the lamp on (When the lamp has been turned off in an abnormal way)	This happens when the lamp could not have been cooled down normally due to a sudden blackout while operating,or the main power switch (on the front of the product)had been accidentally pressed when you turned the power off in the previous session. If you wait a little you will get the video and the audio.
			•	Power source is on	This is the status where the power source is normally turned on.
•		•		Lamp is being cooled down	this is the status where the lamp is cooling down after the power of the product has been turned off. Within about fifteen seconds, it will turn into a standby mode. Until it reaches the standby mode, you will not get any screen even if you press the power button on the remote control. (Caution) During this time, all the buttons on the remote control won 'twork.
		•		Remote Control Reception	While you input and receive with your remote control, the light will be turned on.
	① Twice		0	Defected Lamp.	Turn off the main power button, and then turn it on again. If LED remains the same, repeat 3-4 times. If you don't get the screen even after you tried this repeatedly, and the light does not come on at the lamp, replace with a new lamp, or contact the service center.
	♠ three times		•	Defected Cooling Fan	Turn off the main power button, and turn it on again. If LED remains the same, contact the service center.
			0	Defected Color Wheel	After checking to see if the lamp cover is opened,turn the light on again. If LED remains the same,contact the service center.
	four times		0	Defected Lamp Cover	After checking to see if the lamp cover is opened, turn the light on again. If LED remains the same, contact the service center.
	Timer	Red Red Twice	Red Orange Red Orange Three times Three times	Red Orange Green Red Orange Green On O	Red Orange Green Standby Preparing to turn the lamp on (In general situation) Preparing to turn the lamp on (When the lamp has been turned off in an abnormal way) Power source is on Power source is on Lamp is being cooled down Remote Control Reception Preparing to turn the lamp on (When the lamp has been turned off in an abnormal way) Power source is on Defected Lamp. Preparing to turn the lamp on (When the lamp on (When the lamp has been turned off in an abnormal way) Power source is on Defected Control Reception Preparing to turn the lamp on (When

To View the Basic Functions

Confirm the channel.

It will show you the information of the currently watching program.

1. You can check the channel information.



To view the basic function menu



PICTURE you can select and adjust regarding the video, such as the screen mode and screen size.



SOUND you can select and adjust the audio, such as the audio mode, stereo sound, digital audio, etc.



CHANNEL you can select and set the channel related information, such as setting the channel and automatic channel selection, etc.



SETUP you can set additional functions, such as the caption screen and simultaneous screen.



TIME you can set the information regarding the current time and the time settings.

1. The display will appear as follows.



2. If you use the buttons and select the me nu you want, the sub-menu will display.

Input Signal Selection

Antenna1 Input

Can receive Analogue broadcasting as well as Digital broadcasting.



• Select it according to connection status of Antenna1 and Antenna2. Refer to How to setup the cable and antenna.



Select 'MENU → CHANNEL'.



Select 'channel'



2. Select 'CHANNEL → Air or Cable'



Analogue Broadcast: Air, Cable



Select according to connection status





Press [MENU] to exit.

Basi

Input Signal Selection

NOTE!!

- * 1 Antenna;
 - Select it if DTV broadcasting is received from general/cable broadcasting antenna.
- * 2 Antenna:

Select it if DTV broadcasting antenna and general/cable broadcasting antenna are different.

- [1 Antenna] it searches general/cable, DTV, general/cable in antenna input.
- [2 Antennas] Antenna1 Input searches analogue general/cable and Antenna2 Input searches DTV general/cable
- In case there is no digital signal in antenna cable to antenna 2 input or no antenna cable is connected, 1 Antenna should be selected.
- If DTV antenna is additionally prepared, it should be connected to antenna 2 input terminal.
- If antenna connection is changed, make sure to set auto channel memory.
- If channel setting stops during auto channel setting, auto channel setting may not be complete.
- If channel setting keeps on during auto channel setting, channel setting for all broadcasting stations is automatically continued.

Auto Memorizing Setting

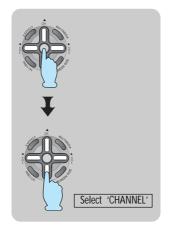
Auto Memorizing Setting

It searches available channels and memorizes them. Once this menu is set, a user can conveniently select a channel by using channel (▲/▼) buttons.



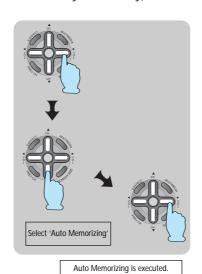
- ▶ Run this menu when most channels are broadcasted.
- ▶ If you're moved out, you'll have to set it again.

Select 'Menu → Channel'.





2. Select Auto Memorizing and Antenna connection.(Air + Cable, Air Only, Cable only)



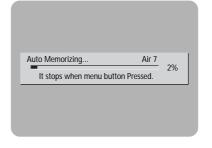






* Press the [MENU] at any time to interrupt the momorizing process.

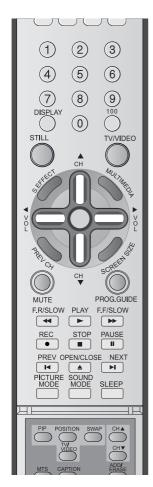




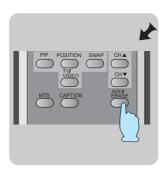
Auto Memorizing Setting

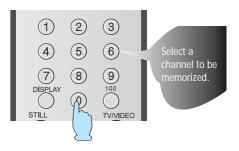
Channel Memory/Erase

You can add any channel that was not added due to weak signal or erase one unfavorable channels from memory.



Check whether channels are properly added/erased by using (▼/▲) buttons. 1. Add a channel.

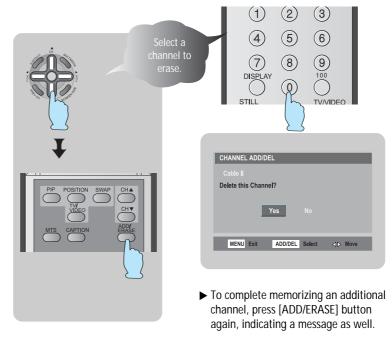






➤ To complete memorizing an additional channel, press [ADD/ERASE] button again, indicating a message as well.

2. Erase a channel already memorized.



Fine-Tune

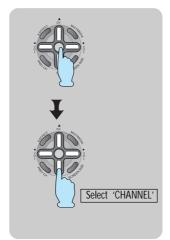
Fine-Tune

It optimizes reception status once there are dotted lines or stripes or unstable status is continued.



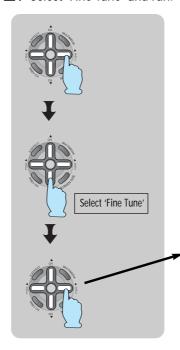
First select the channel to be tuned. Then, select 'MENU

CHANNEL'.





2. Select 'Fine Tune' and run.





 Stop pressing where the current screen is optimal.

NOTE!!

- FineTune is unavailable for digital broadcasting.

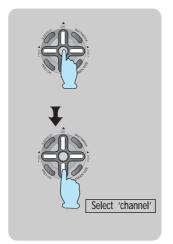
Signal Strength

Signal Strength

Broadcasting signal strength is indicated so that optimal antennal direction is to be selected.

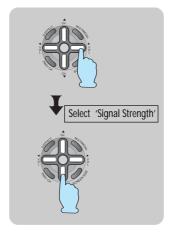


1. Select 'MENU \rightarrow CHANNEL'.





2. Select 'Signal Strength' and check the current strength.





NOTE!!

- This function is unavailable for analogue broadcasting.

Viewing External Devices

TV/VIDEO

For how to connect TV, VCR and Camcorder, see p.7~19.

Use the remote control to switch between external devices such as a VCR, DVD, Settop Box or the TV source.

- 1. Turn on the external devices.
- $2. \ \mathsf{Press}[\mathsf{TV/VIDEO}] \ \mathsf{button}, \ \mathsf{then} \ \mathsf{source} \ \mathsf{list} \ \mathsf{menu} \ \mathsf{appears}.$



 ${\bf 3.} \ {\sf Select} \ {\sf an external input of connection terminal}.$



Basic

Viewing External Devices

PC/HDMI

For how to connect TV and DVD, see p.7-19.

- ► HDMI input definitions 720x480i, 720x480p, 1280x720p, 1920x1080i + PC input definition
- ${\bf 1}$. Turn on the external devices which output PC or HDMI.
- $2.\,\mathsf{Press}$ [MULTIMEDIA] button, then it toggles between PC and HDMI .
- ${\bf 3.}\ \ {\rm It\ can\ be\ also\ ,\ selected\ by\ the\ [TV/VIDEO]\ button.}$

