

REAR PROJECTION TELEVISION

INSTRUCTION MANUAL

GB43HD10



HDTV Monitor

Please read this manual carefully before operation.

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※The OSD and figures shown in this manual may be somewhat different from the actual situation.

BEFORE OPERATION

Thank you for purchasing the APEX Projection TV. Before operating your projection TV, please read all these safety and operation instructions completely and then keep for future reference.

PRODUCT REGISTRATION

Please fill out the product registration card (packed separately) and return it immediately. Returning the card allows us to contact you if needed.

PRODUCT INFORMATION

Keep your sales receipt to obtain warranty parts and service and for proof of purchase. Attach it here and record the serial model numbers in case you need them. These numbers are located on the product.

Model No. GB43HD10

Serial No. _____

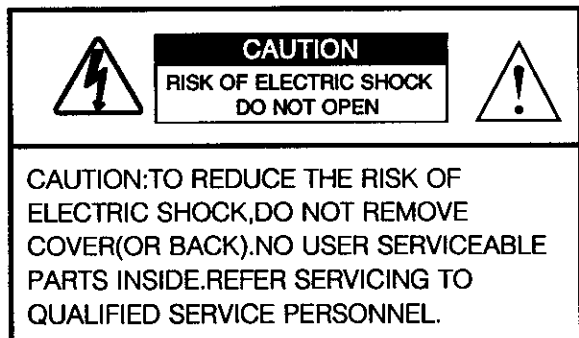
Purchase Date: _____

Dealer/Address/Phone: _____

Safety Precautions

WARNING:

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



This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury. DO NOT TRY TO SERVICE THIS PRODUCT YOURSELF.



This symbol indicates important instructions accompanying the symbol.

CAUTIONS:

Using video games or any external accessory with fixed images for extended periods of time can cause them to be permanently imprinted on the picture tube (or projection TV picture tubes). Also, some network/program logos, phone numbers, etc. may cause similar damage. This damage is not covered by your warranty.

NOTE TO CABLE INSTALLER IN USA:

This reminder is provided to call your attention to Article 820-40 of the NEC that 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.

CAUTIONS:

To prevent electric shock, match wide blade of plug to wide slot, fully insert.

FCC Regulations state that unauthorized changes or modifications to this equipment may void the user's authority to operate it.

BEFORE OPERATION (continued)

Important Safety Instructions

CAUTION

PLEASE READ THESE INSTRUCTIONS, KEEP THESE INSTRUCTIONS
AND HEED ALL WARNINGS.
FOLLOW ALL INSTRUCTIONS.

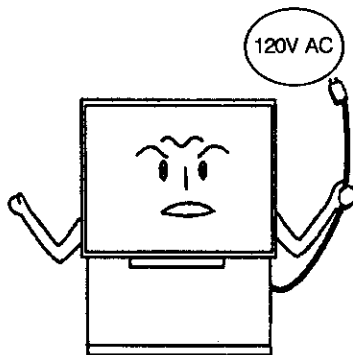
Electrical energy can perform many useful functions. This projection TV has been engineered and manufactured to assure your personal safety. However improper use can result in potential electrical shock or fire hazards. In order not to defeat the safe guards incorporated in this projection TV, observe the following basic rules for antenna/projection TV installation, use and servicing. All operation and use instructions should be followed.

Do not remove the cabinet cover. This may expose you to dangerous voltages. Refer all servicing to qualified service personnel.

BEFORE OPERATION (continued)

Precautions

Power Sources—The projection TV should be operated only from the type of power source indicated on the projection TV or as indicated in the Operation Manual. If you are not sure of the type of power supply in your home, consult your sales person or your local power company. For projection TV designed to operate from battery power, or other sources, refer to the operating instructions.

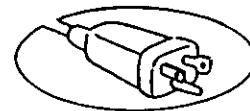


Grounding or Polarization—Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

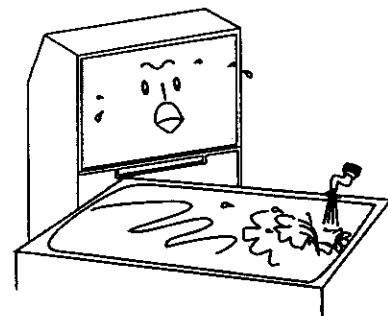


Wide blade
Lame large
Cuchilla ancha

Alternate Warnings—A three wire grounding type plug—a plug having a third (grounding) pin. This plug will only fit into grounding type power outlet.



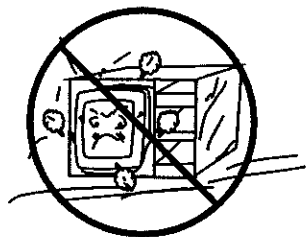
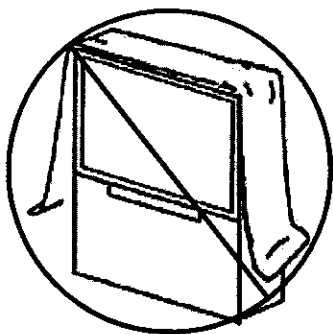
Water and Moisture Warnings—Do not use the projection TV near water—for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like. The projection TV shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the projection TV.



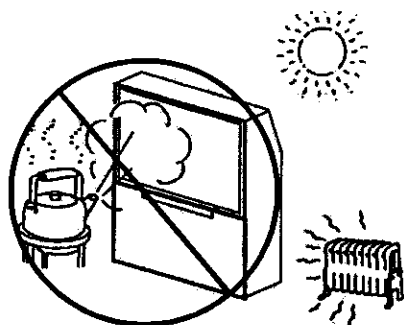
Ventilation—Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the projection TV and to protect it from overheating, and these openings must not be blocked or covered. This projection TV should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

BEFORE OPERATION (continued)

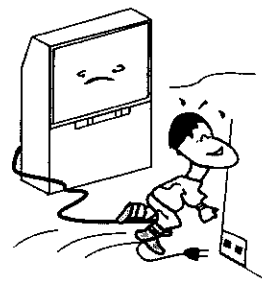
Precautions (continued)



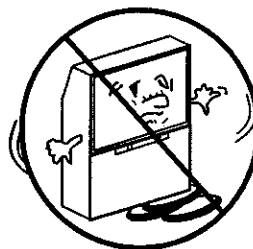
Heat—Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.



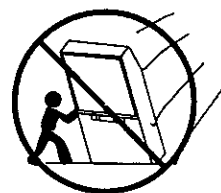
Power-Cord Protection—Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.



Accessories—Do not place the projection TV on an unstable cart, stand, tripod, bracket, or table. The projection TV may fall, causing serious injury to a child or adult, and serious damage to the projection TV. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or accessory recommended by the manufacturer, or sold with the projection TV, and should use a mounting accessory recommended by the manufacturer.



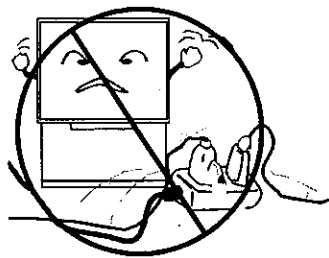
A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the projection TV and cart combination to overturn.



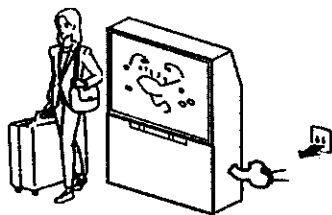
BEFORE OPERATION (continued)

Precautions (continued)

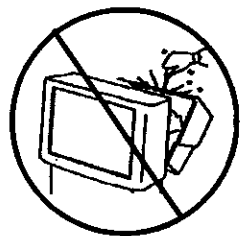
Overloading—Do not overload wall outlets, extension cords or integral convenience receptacles as this can result in fire or electric shock.



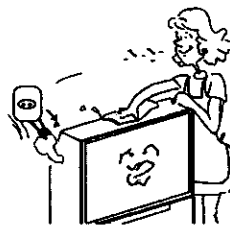
Lightning—For added protection for this projection TV during lightning storms, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power line surges.



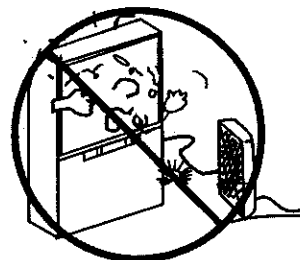
Object and Liquid Entry—Never push objects of any kind into the projection TV through openings as they may touch dangerous voltage points or shortout parts that could result in a fire or electric shock. Never spill liquid of any kind on the projection TV.



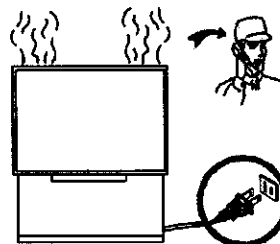
Cleaning—Unplug the projection TV from the wall outlet before cleaning or polishing it. Do not use liquid cleaners or aerosol cleaners. Use a dry cloth for cleaning the exterior of the projection TV.



Attachments—Do not use attachments not recommended by the product manufacturer as they may cause hazards or electric shock.



If a snapping or popping sound from a projection TV is heard continuously or frequently while the projection TV is operated, unplug the projection TV and consult your dealer or service technician. It is normal for some projection TV to make occasional snapping or popping sounds, particularly when being turned on or off.

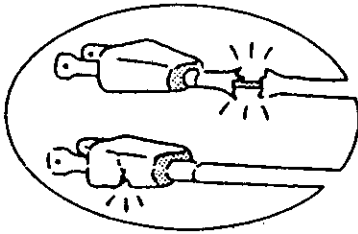


BEFORE OPERATION (continued)

Precautions (continued)

Damage Requiring Service—Unplug the projection TV from the wall outlet and refer servicing to qualified service personnel under the following conditions:

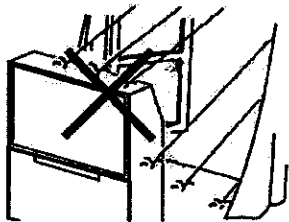
- a. If the power cord or plug is damaged or frayed.



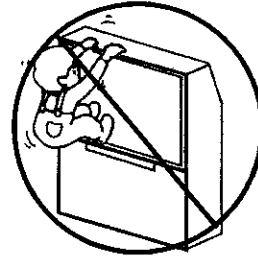
- b. If liquid has been spilled or objects have fallen into the projection TV.



- c. If the projection TV has been exposed to rain or water.



- d. If the projection TV has been subject to excessive shock by being dropped, or the cabinet has been damaged.

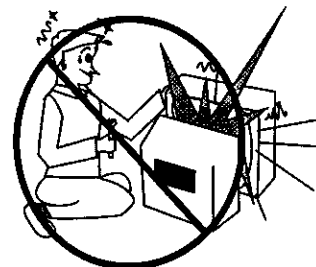


- e. If the projection TV does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the projection TV to its normal operation.

- f. When the projection TV exhibits a distinct change in performance—this indicates a need for service.



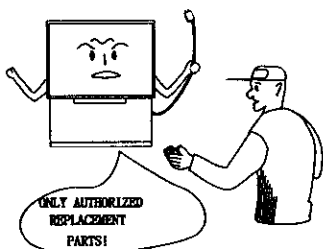
Servicing—Do not attempt to service the projection TV yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.



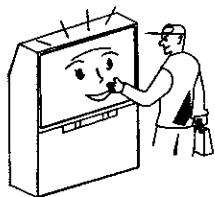
BEFORE OPERATION (continued)

Precautions (continued)

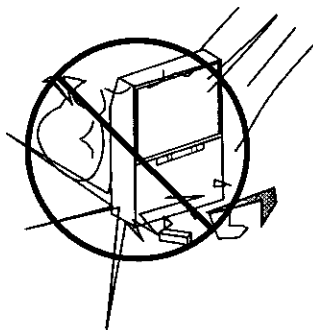
Replacement Parts—When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock, or other hazards.



Safety Check—Upon completion of any service or repairs to the projection TV, ask the service technician to perform routine safety checks to determine that the projection TV is in proper operating condition.



When the projection TV reaches the end of its useful life, improper disposal could result in a picture tube implosion. Ask a qualified service technician to dispose of the projection TV.



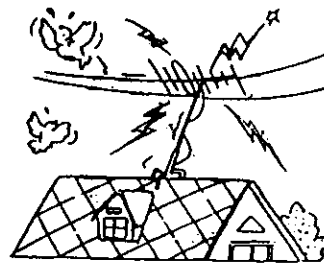
ANTENNA

Outdoor Antenna Grounding—if an outdoor antenna is installed, follow the precautions below.

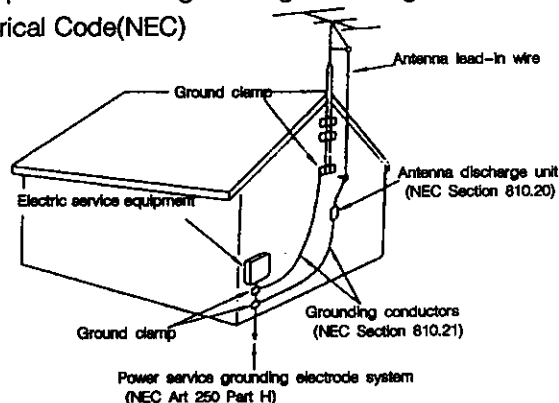
An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can come in contact with such power lines or circuits.

WHEN INSTALLING AN OUTDOOR ANTENNA SYSTEM, EXTREME CARE SHOULD BE TAKEN TO KEEP FROM CONTACTING SUCH POWER LINES OR CIRCUITS AS CONTACT WITH THEM IS ALMOST INVARIABLY FATAL

Be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code in USA and Section 54 of the Canadian Electrical Code (ANSI/NFPA 70) in Canada provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.



Example of antenna grounding according to National Electrical Code (NEC)



BEFORE OPERATION (continued)

FCC Warning

Class B Computing Device

Information to User

This equipment has been tested and found to comply with the limits for a class B digital device pursuant to part 15 of 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 guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or TV 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:

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

The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the US Government Printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

FCC Warning

The user is cautioned that changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

NOTE: In order for an installation of the product to maintain compliance with the limits for a Class B device, shielded cables must be used.

Introducing the APEX Projection TV

Presenting the APEX Projection TV

Features

Some of features that you will enjoy with your new projection TV include:

- **HDTV Monitor:** Enables you to receive the 1080i, 720p, 480p and 480i digital TV formats. By using the YPbPr1/YPbPr2 IN jacks, you can connect a DTV (digital television) receiver to view DTV programs.
- **SMART FOCUS:**
Press SMART FOCUS to electronically optimize the picture.
- **3D Y/C Comb Filter**
- **Film Mode:** Using the 3:2 Pulldown technology, the Film Mode feature allows you to obtain a smooth picture movement when playing back movies or other video sources on film.
- **Channel Browsing:** Allows you to view and choose channels from nine programs.
- **Dual Tuner PIP:** Allows you to watch two programs at the same time.
- **Auto Volume Control (AVC):** Equalizes volume levels so there is consistent output between programs and commercials.
- **MTS/SAP Sound System:** Enjoy stereo, bilingual and mono programs.
- **BBE Sound Enhancement:** This function can characterize the sound, and generate a natural like playback sound.
- **DBE Sound Enhancement:** You can make bass richer by boosting low frequency.
- **Component Video Inputs:** Offers the best video quality for DVD (480p, 480i) and digital set-top box (1080i, 720p, 480p, 480i) connections.
- **S VIDEO Inputs:** Provides a high-quality image for connected equipment.
- **FAVORITE:** This key allows you to quickly shift the TV to the set channel or AV program.
- **On/off Timer:** Turn on/off your projection TV to a specific channel number at the specified time.
- **Trilingual Graphical OSD (English/French/Spanish)**
- **User Convergence Adjustment:** Allows you to adjust convergence.
- **V-Chip Function:** V-Chip technology allows parents to block unsuitable programming for younger viewers.
- **CCD function:** Allow you to select from three closed caption modes (for programs that are broadcast with closed captioning).

Using this manual

We recommend that you carefully review the contents of the following three section in the order shown to ensure that you fully understand the operation of your new projection TV.

1 Installing and Connecting the Projection TV

This section guides you through your initial setup. It shows you how to install your projection TV, to connect your new components and to connect the antenna and cable.

2 Using the Feature

This section shows you how to begin using your new projection TV. It also shows you how to use your remote control.

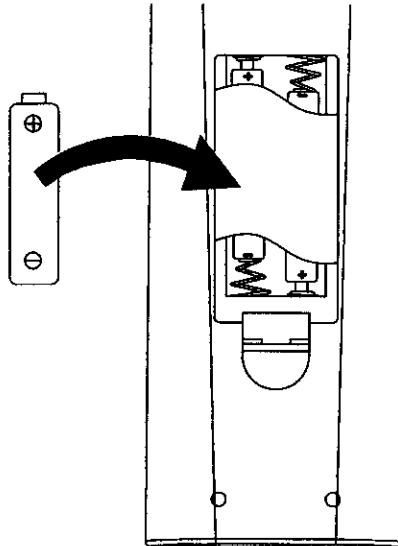
3 Using the menus

This section teaches you how to access on-screen menus and adjust your projection TV settings.

Installing and Connecting the Projection TV

Inserting Batteries into the Remote Control

Insert two batteries by matching the \oplus and \ominus on the batteries to the diagram inside the battery compartment.



Notes:

1. Alkaline batteries are recommended for longer life.
2. Always replace both batteries at the same time.
3. Do not expose batteries to fire or break them open.
4. To avoid battery leakage, remove batteries from the remote control when it is not to be used for a long period of time or the batteries are exhausted.
5. Your remote control can be programmed to operate most video equipment. (See "Programming the Remote Control" on page 40.)

Carrying the Projection TV

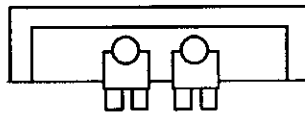
Carrying the projection TV requires 2 or more people.

The projection TV is equipped with casters for easy movement on a hard surface.

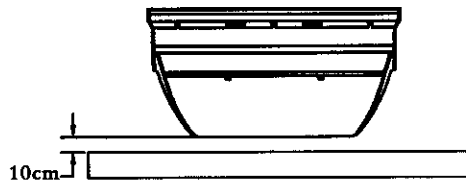
Please move your projection TV using the casters.

Installing the Projection TV

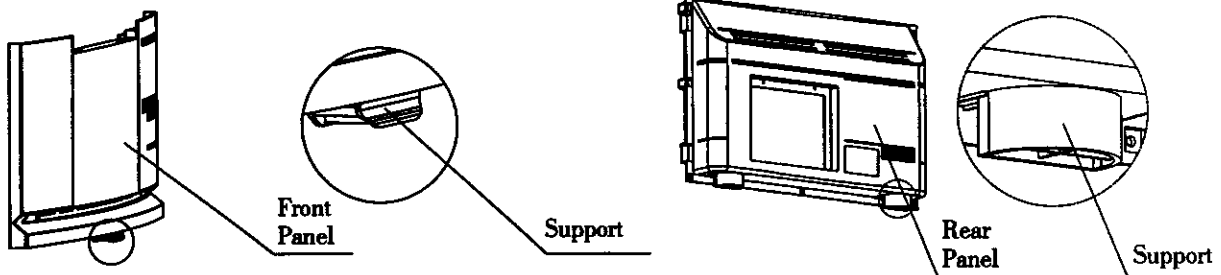
- Please read the "Safety Precautions " and "Specifications and Accessories " completely before installation.
- It is recommended to watch projection TV in soft and indirect light and face center of the screen for optimum watching effect.
- Allow enough space (at least 10cm) between the projection TV and the wall for proper ventilation.
- Avoid excessively warm or wet locations to prevent possible damage to the cabinet or components.



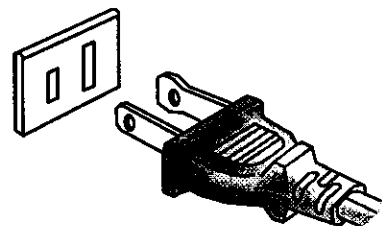
Keep proper watching distance.



- To prevent the projection TV from toppling, there is supports under front panel and rear panel of the projection TV. Please contact with your dealer if there is no such supports when you first open the packing carton.



- After installation, plug the projection TV in the supply socket.



Connector Types

You may find it necessary to use some of the following connector types during set up.

Coaxial cable

Standard TV cable and antenna cable

Plug Type

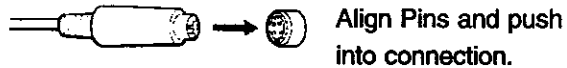


Screw-on Type



S Video cable

High quality video cable for enhanced picture quality



Audio/Video cable



Video – Yellow

Audio(Left) – White

Audio(Right) – Red

Some DVD Players are equipped with the following three video connectors:

Y – Green

P_b(C_b or B-Y)– Blue

P_r(C_r or R-Y) – Red

Front-set AV IN terminal

SMART POWER

S-VIDEO VIDEO AUDIO LAMINO

VIDEO IN

TUNING MENU VOL- VOL+ CH- CH+

STANDBY

POWER

POWER-ON indicator (Green)

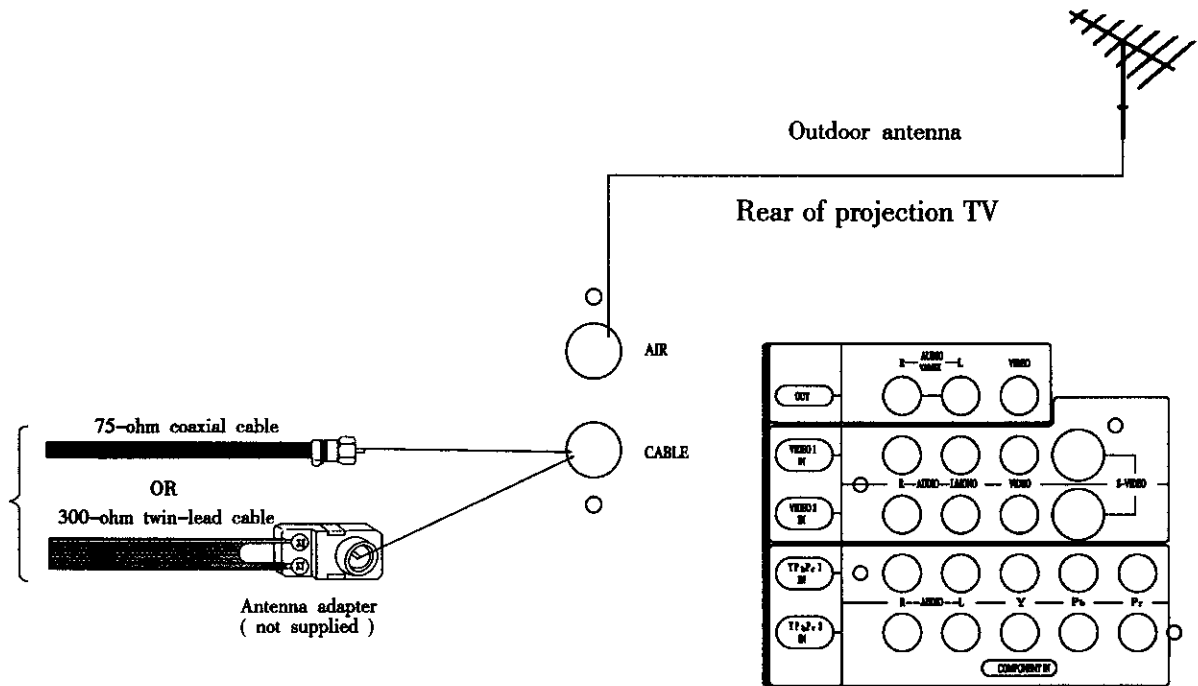
STANDBY indicator (Off)

REMOTE indicator (flicker)

※ The front panel allows you to do the basic operations without using the remote control. Similar functions on the front panel please refer to the use of the remote control.

Connecting the Antenna

An outdoor antenna or Cable is recommended for the best reception. The antenna type and its location differ dependent on local conditions.

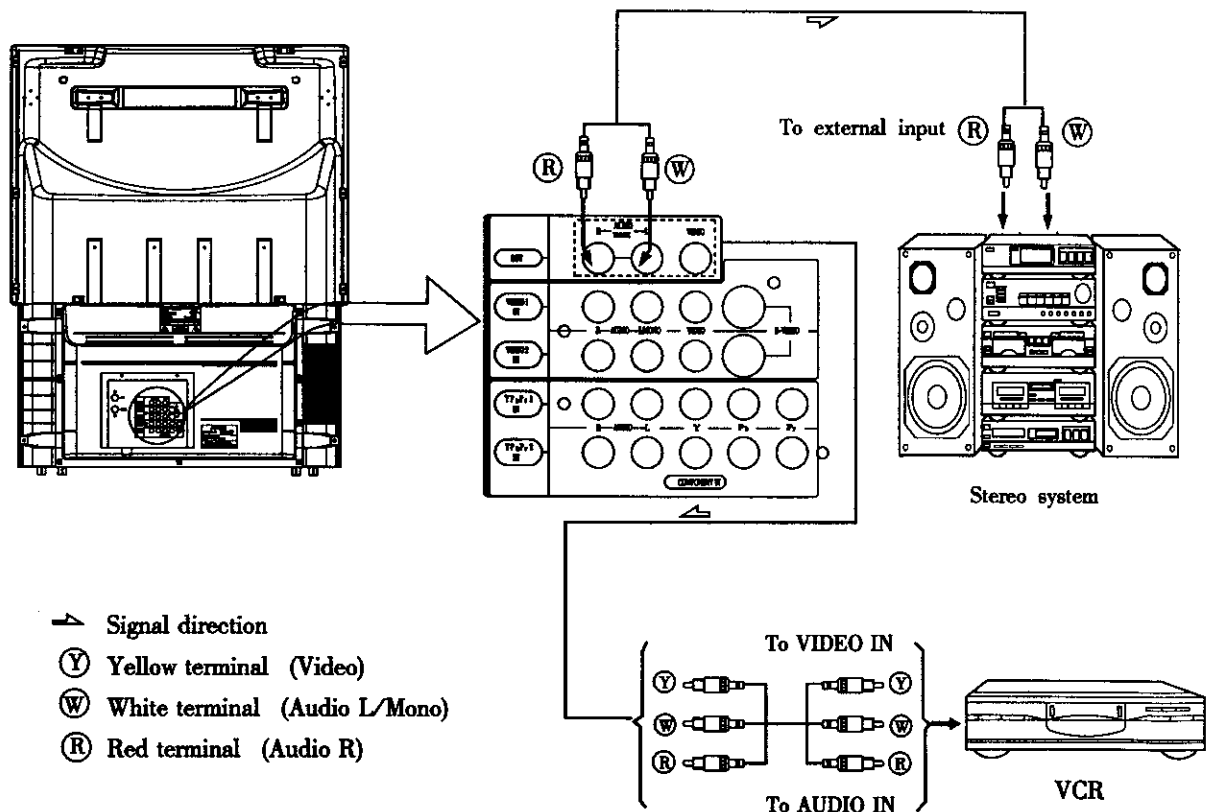


- ※ It is recommended that a 75 Ω coaxial cable be used in order to eliminate possible interference and noise which may occur due to nearby radio transmissions.
- ※ When using a 300 Ω twin-lead feeder, connect it to a 300 Ω /75 Ω converter and insert the converter into the projection TV's CABLE IN terminal.
- ※ Connect an outdoor antenna referring to the above figure. Set up a lightning arrester and check it regularly when an outdoor antenna is used.
- ※ The antenna cable should not be tied together with other wiring.
- ※ The two RF jacks allow you to switch signal between Cable and Air input.

Connecting an AV Receiver

Please turn off the power supply of the projection TV and external equipment before connection. Read the operation manuals of the external audio/video equipment that will be connected to the projection TV completely.

You can connect a stereo system to the MONITOR OUT terminals on the projection TV to enjoy a high quality sound, or connect a VCR to the projection TV to record programs. The MONITOR OUT terminals output the audio and video signals being monitored on the projection TV (main picture).



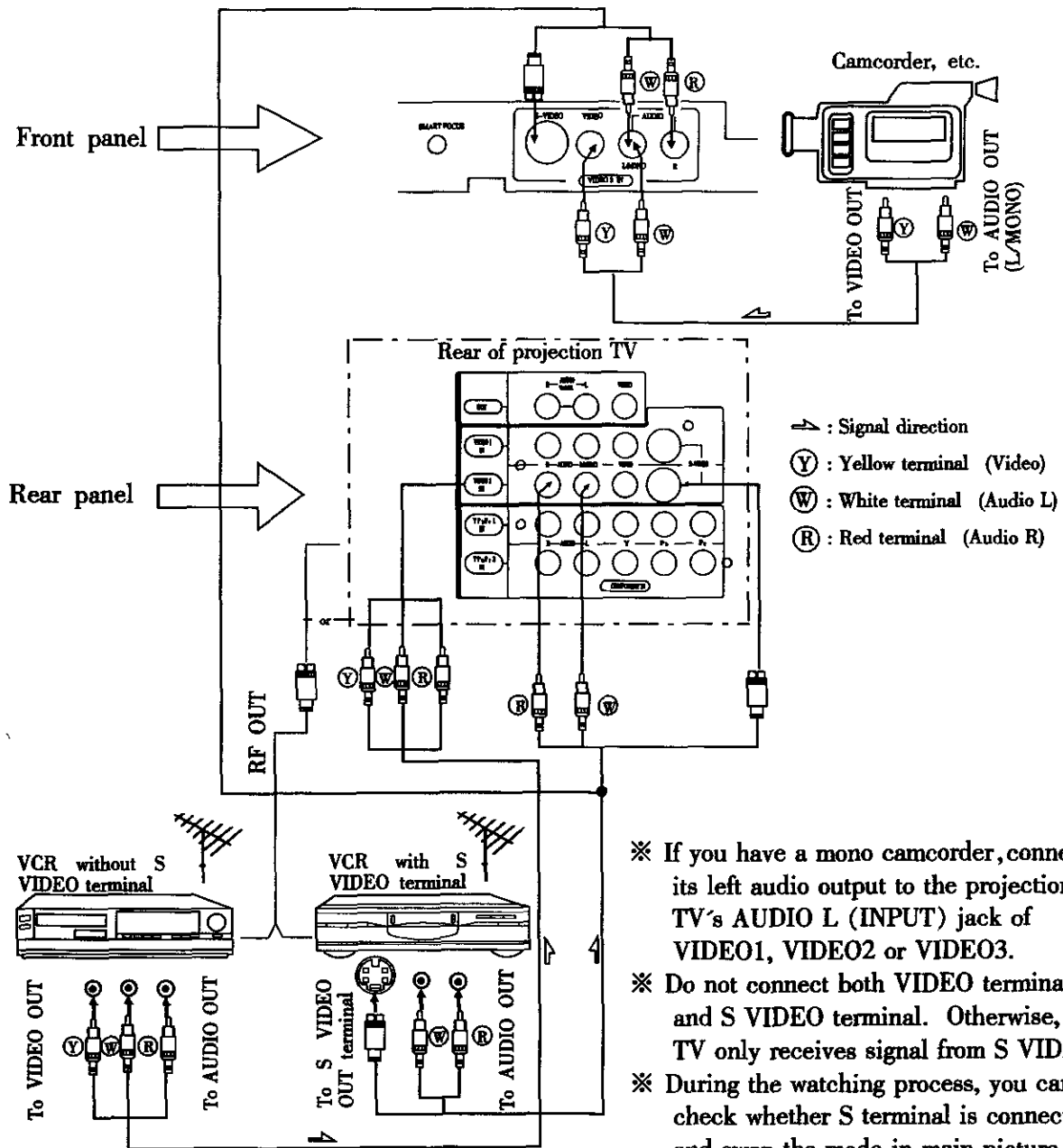
※ MONITOR OUT is not available when the signal is coming from YP_bP_r of the main picture.

Connecting a VCR or Camcorder

Disconnect all power before making any connections.

You can connect video equipment such as VCR or camcorder to the projection TV and enjoy a high quality picture.

If your video equipment has a S VIDEO OUT terminal, connect it to the S VIDEO IN terminal of the projection TV. If not, connect it to the VIDEO IN terminal.



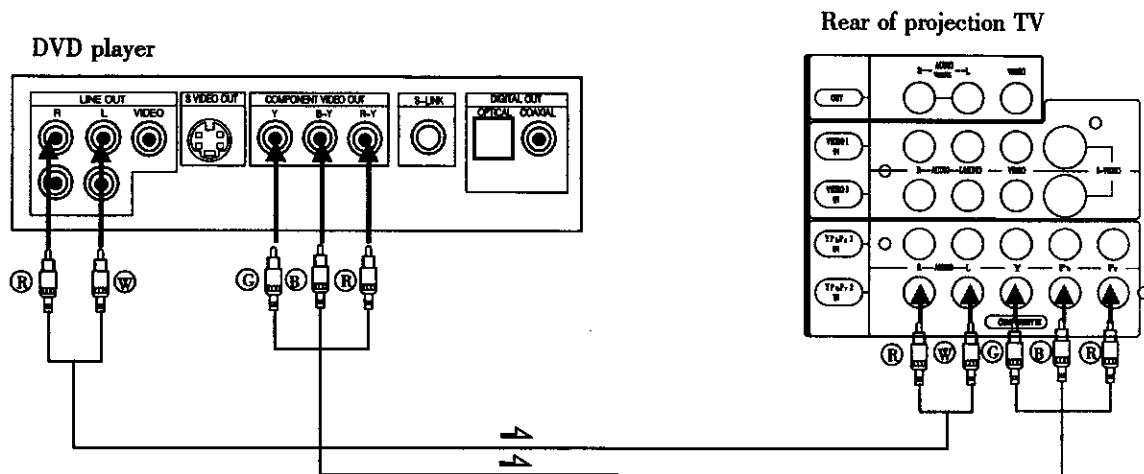
- ※ If you have a mono camcorder, connect its left audio output to the projection TV's AUDIO L (INPUT) jack of VIDEO1, VIDEO2 or VIDEO3.
- ※ Do not connect both VIDEO terminal and S VIDEO terminal. Otherwise, the TV only receives signal from S VIDEO.
- ※ During the watching process, you can check whether S terminal is connected and swap the mode in main picture. This can not be done in sub-picture.

Connecting a DVD Player with Component Video Connectors

Your DVD player has component (Y, B-Y, and R-Y) jacks.

Disconnect all power before making any connections.

- 1 Using three separate component video cables, connect the DVD player's Y, B-Y and R-Y jacks to the YP_bP_r1 or YP_bP_r2 jacks on the projection TV.
- 2 Using an audio cable, connect the DVD player's Audio OUT jacks to the projection TV's YP_bP_r1 or YP_bP_r2 AUDIO IN jacks.
- 3 Switch to YP_bP_r1 or YP_bP_r2 mode by pressing the VIDEO button.

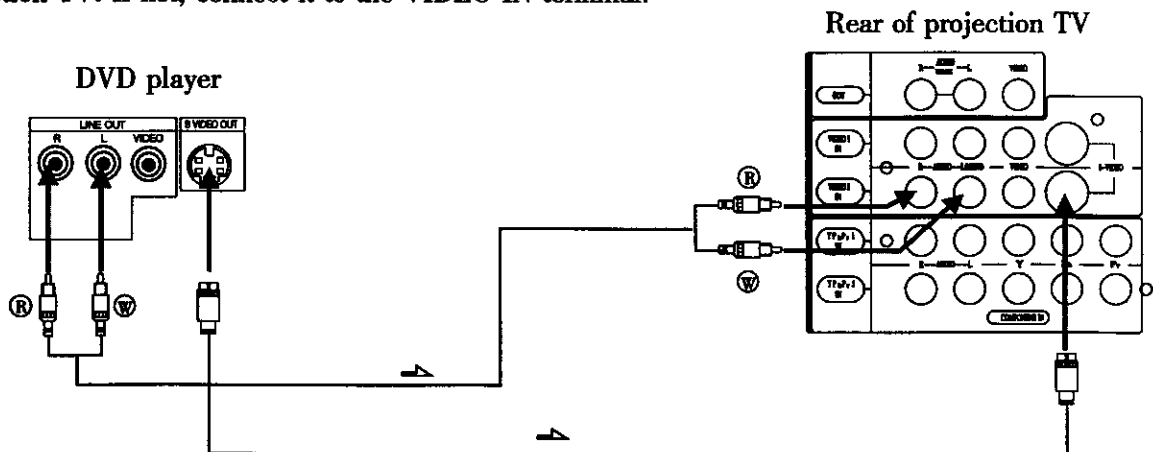


Connecting a DVD Player with A/V Connectors

Your DVD player does not have component (Y, P_b and P_r) jacks.

Disconnect all power before making any connections.

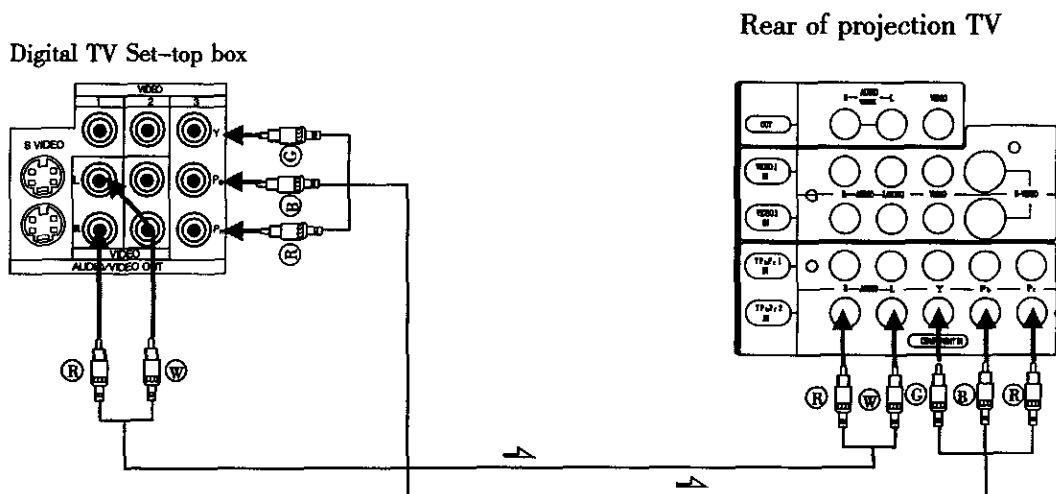
If your video equipment has an S VIDEO OUT terminal, connect it to the S VIDEO IN terminal of the projection TV. If not, connect it to the VIDEO IN terminal.



Connecting a Digital TV Receiver

Disconnect all power before making any connections.

- 1 Using three separate component video cables, connect the digital TV set-top box's Y, P_b and P_r jacks to the YP_bP_r1 or YP_bP_r2 jacks on the projection TV.
- 2 Using an audio cable, connect the Digital TV Set-top box's Audio OUT jacks to the projection TV's YP_bP_r1 or YP_bP_r2 AUDIO IN jacks.
- 3 Press VIDEO to switch to YP_bP_r1 or YP_bP_r2 mode.



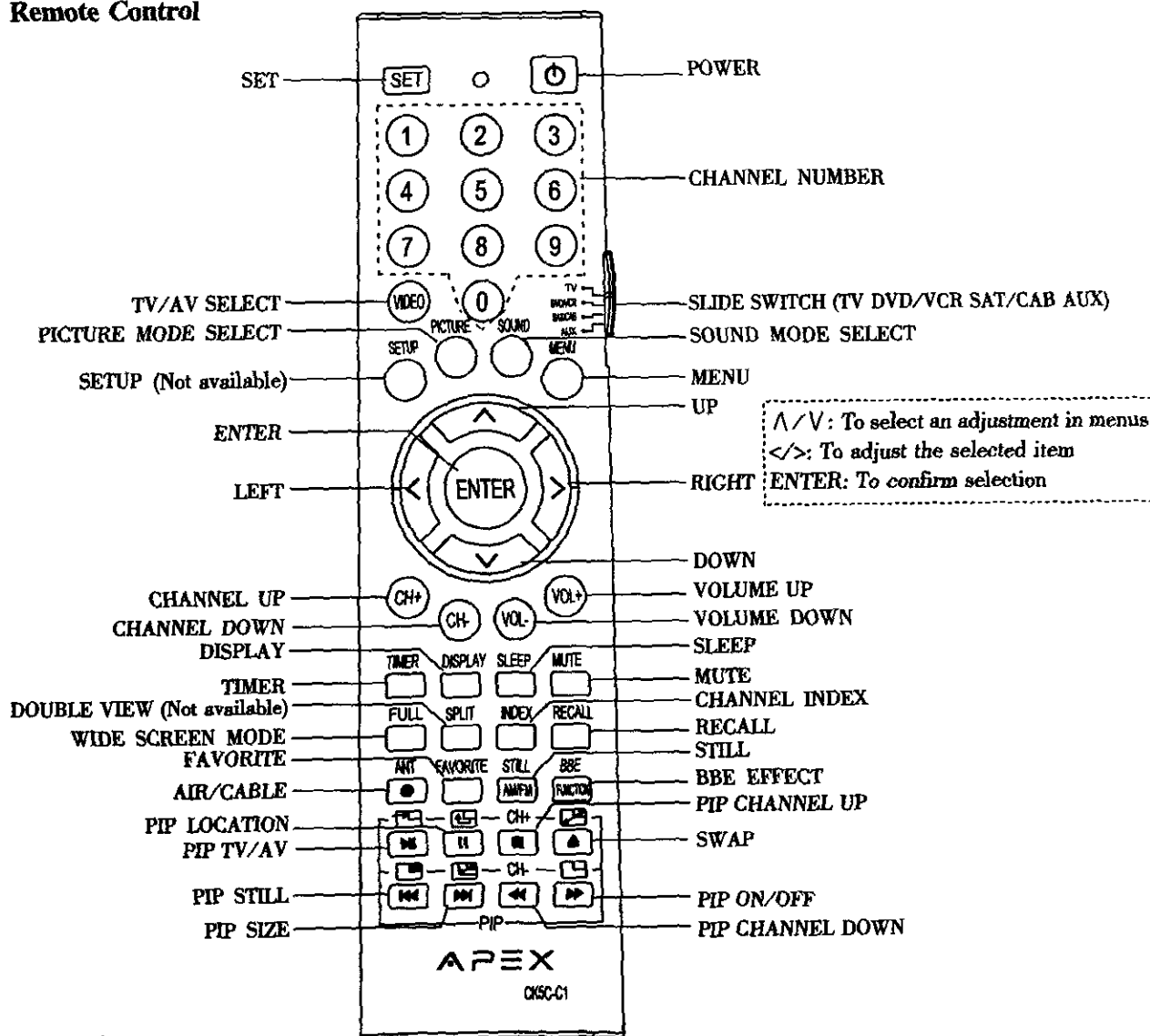
※This projection TV is not compatible with digital TV receivers configured with RGB or VGA output connectors.

※If your digital TV set-top box has both VIDEO OUT and S VIDEO OUT terminals, you can also connect them to the corresponding IN terminal of the projection TV.

Using the Features

Using the Remote Control



Remote Control





- ※ Instructions in this manual are written for the remote control. Similar controls are also found on the projection TV console.
- ※ The button design and specifications of the remote control are subject to change without notice.
- ※ Many TV features can be accessed directly through the remote control. **Before operation, set the slide switch on the remote control to the TV position.**
- ※ Press **SMART FOCUS** (on the front terminal) to start automatic convergence adjustment.

Powering on/off

Power on

Plug in to the power outlet, the projection TV will be in STANDBY mode. Press  or CH+/- on the remote control, or  or CH+/- on the front panel to turn on the projection TV. The indicator will become green.

Standby

Press  on the front panel or  on the remote control after the projection TV works normally, it will enter into STANDBY mode.

Power off

To turn off the projection TV completely, unplug the power cable.

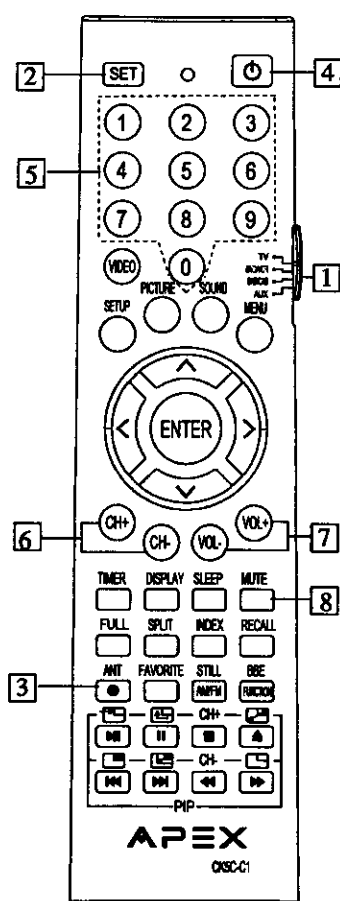
※ The indicator flickers when receiving the signal emitted by the remote control.

Auto off without signal reception

When a channel has no signal (e.g. the TV station fails to send signals) and blue background appears, the projection TV will automatically enter into STANDBY mode if no button is pressed about 15 minutes.

※ The function of Auto-off without signal does not function in the VIDEO, S VIDEO, YPbP, mode.

Watching the TV



1 SLIDE SWITCH(TV, DVD/VCR, SAT/CAB, AUX)

When you want to use the remote control, first set the TV, DVD/VCR, SAT/CAB, AUX switch to the desired position. Please refer to P40-49.

2 SET(FUNCTION)

This key allows you to set operating mode of the remote control. If the remote control does not work, re-set the operation mode. Please refer to P40-49.

3 ANT(Antenna)

Press ANT first to display the current antenna mode. Press repeatedly to change between the Cable and Air input.

4 POWER

Turns on or off the projection TV.

5 0-9

Use for direct channel selection.

To enter a three-digit channel number when "Antenna" is set to "Cable", press the three buttons you want sequentially.

※ It is invalid if you enter channel number more than 69 (or less than 2) in the Air mode or more than 125 (or less than 1) in the Cable mode.

※ The channel number is red when entered by direct channel selection and the channel is set to "Skip ON".

※ The projection TV will return to the TV mode if you press valid Channel Number in the VIDEO mode.

※ To choose a one-digit or two-digit channel number, the TV will shift to the selected channel in 3 seconds after the corresponding number is entered.

6 CH +/-

Press to scan through the channels (+ up or - down).

7 VOL +/-

Press to adjust the volume (+ up or - down).

8 MUTE

During watching projection TV program, press MUTE to eliminate sound. Press it again to restore sound.

※ Pressing VOL+ can also cancel the MUTE function.

※ Pressing VOL- can decrease the volume in the MUTE mode, but not cancel the MUTE mode.

9 RECALL

Press to alternate or jump back and forth between two channels or sources. The projection TV will jump between the current channel and the last channel selected.

10 STILL

Press STILL repeatedly and the picture switches between the still and moving modes.

※ STILL is not available in YP_bP₁ or YP_bP₂.

11 DISPLAY

Press to display the current program status, such as the channel, sound system, antenna system and current time (if set). To turn off display, press it again.

12 PICTURE

Press repeatedly to scroll through the following available video modes:

→ Movie → Normal → Sports → User →

Movie: Suitable for watching movie

Normal: Suitable for watching ordinary program

Sports: Suitable for watching sports program

User: User-set picture mode

13 SOUND

Press repeatedly to directly choose one of four different sound modes that best suits the program you are watching.

→ News → Hall → Music → User →

News: News/dialogue

Hall: Hall audio effect

Music: Concert hall audio effect

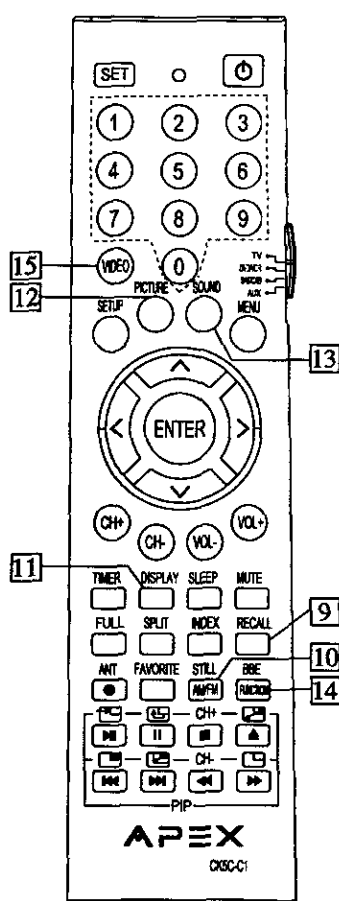
User: User-set sound mode

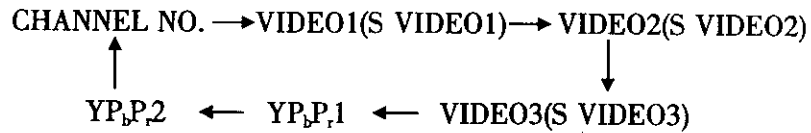
14 BBE

Press to turn on or off the BBE effect mode.

15 VIDEO

Press repeatedly to select projection TV signal sources shown as the follows:

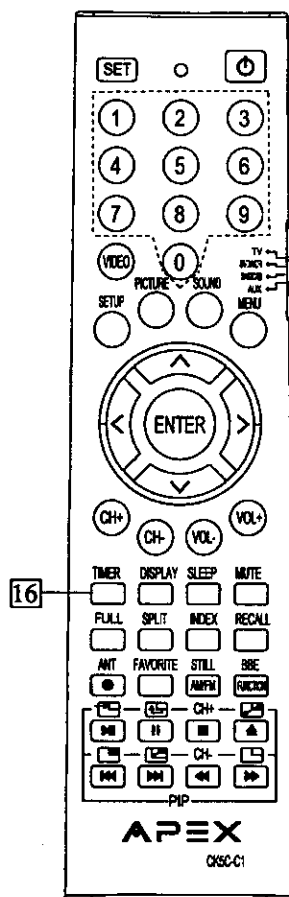




CHANNEL NO.	AirCable Signal
VIDEO1	VIDEO1 Signal
S VIDEO1	S VIDEO Signal IN 1
VIDEO2	VIDEO2 Signal
S VIDEO2	S VIDEO Signal IN 2
VIDEO3	Side AV Signal
S VIDEO3	Side S VIDEO Signal IN
YP _b P _r 1	DVD Component Signal and DTV Signal IN 1
YP _b P _r 2	DVD Component Signal and DTV Signal IN 2

※ Press VIDEO to skip the related VIDEO (VIDEO1, VIDEO2 and VIDEO3) if inserting the related S VIDEO.

※ To watch component signal and DTV signal, switch to YP_bP_r1 or YP_bP_r2 channel.



16 TIMER

You may use this function to watch the desired program at the preset time and turn on/off your projection TV at the preset time.

Call up the item to be adjusted by pressing \wedge/\vee and adjust it by \lt/\gt .

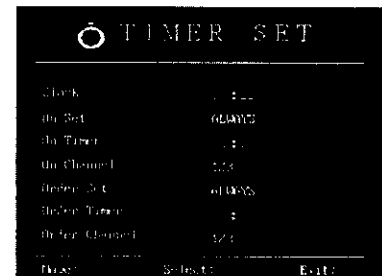
※ The other items in TIMER SET menu can only available after you finish Clock setting.

※ “On Set” and “Order Set” can set to OFF/ONCE/ALWAYS respectively. Your setting is one-time after your projection TV is set to ONCE, and last forever after set to ALWAYS unless you pull out the supply plug.


※ “On Timer” and “On Channel” are not available when “On Set” is set to OFF.

“Order Timer” and “Order Channel” are not available when “Order Set” is set to OFF.

※ The timer setting will be cancelled automatically after pulling out the supply plug of the projection TV.

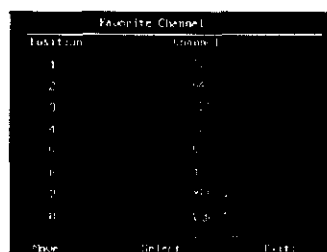


17 SLEEP

Press  repeatedly until the projection TV displays the time in minutes (0,15, 30, 60, 90, or 120) that you want the projection TV to remain on before shutting off automatically. Cancel by pressing until SLEEP 0 appears. While the Sleep feature is set, press once to view the remaining time.

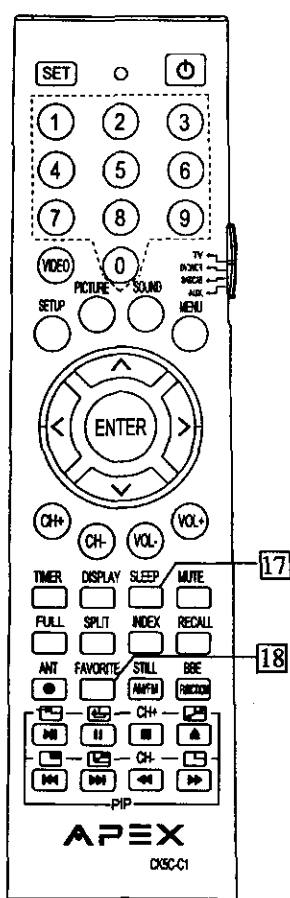
18 FAVORITE

1. Press  to access the Favorite Channel menu.




2. Use \wedge/\vee to select position.
3. Press \lt/\gt to select a channel number you want to set. On Position 1-6, you may set number of channels the TV can receive (1-125 in Cable mode, or 2-69 in Air). On Position 7-8, you may select video programs among VIDEO1(S VIDEO1)→VIDEO2(S VIDEO2) →VIDEO3(S VIDEO3)→YP_P1→YP_P2.
4. After setting, press ENTER to confirm. The whole TV screen will shift to the selected channel.

For example, use \wedge/\vee to select Position 7. Then use \lt/\gt to choose YP_P2 among VIDEO1(S VIDEO1)→VIDEO2(S VIDEO2)→...→YP_P2. Press ENTER to confirm. The program from YP_P2 will be displayed on the whole screen.



19 INDEX: Using Browsing Channel Function

 Key allows you to select and watch nine programs at the same time.

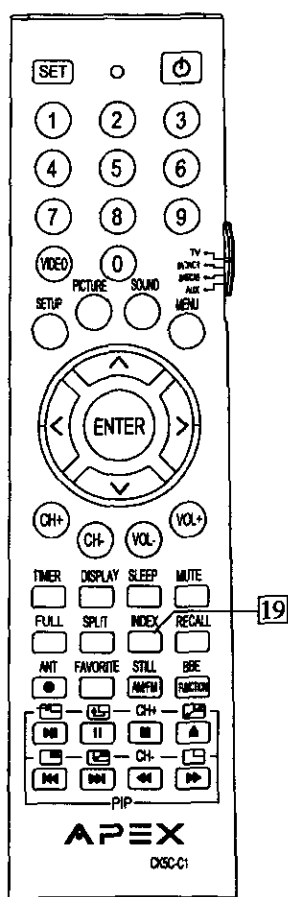
1 Press  on the remote control to browse channel and press it again to exit.

The first nine receivable channels will appear one after another.



2 When the channel becomes moving picture and channel number is yellow, press \langle / \rangle , the selected channel will enlarge for normal viewing.

3 At the receiving interval of the first nine channel and second nine channel, press \wedge / \vee to select the channel that you wish to view. The selected channel becomes moving picture and channel number is yellow, press \langle / \rangle , the selected channel will enlarge for normal viewing.

※ Browsing Channel will not function when “Parental Lock” is set to ON or in AV mode.



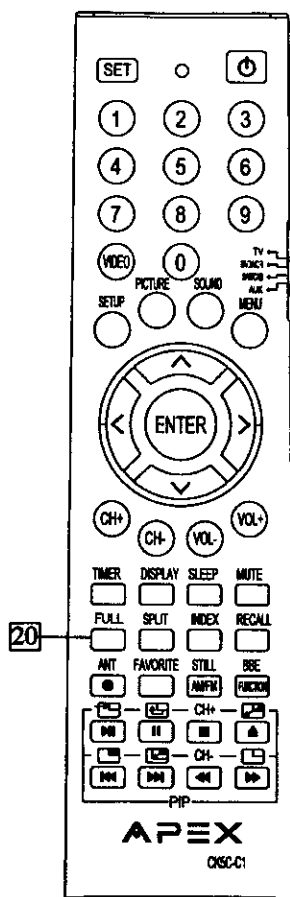
20 FULL

 Key lets you watch 16:9 signal in 16:9 aspect ratio.
Press  repeatedly to toggle through the following settings.



FULL: using for 4:3 signal
ZOOM: using for 16:9 signal

※ The Full key functions only when 480P signal is received in YP_bP_r mode.



Watching PIP

1 PIP ON/OFF

Press to turn on or off PIP function.

2 PIP LOCATION

Press to change the position of the sub-picture. The position of the sub-picture will change in the order of lower right, lower left, upper left and upper right corner of the screen.

3 PIP SIZE

Press to adjust the size of the sub-picture. The sub-picture will change between SMALL SIZE and BIG SIZE cyclically by pressing it repeatedly.

4 SWAP

Press to switch between the main and sub-picture.

5 PIP VIDEO

Press to switch between different video modes.

※ YPbP,1 and YPbP,2 are not available in PIP.

6 PIP CH+

Press to select a upper channel number for PIP.

※ You can only select the programs that are auto-searched and stored by pressing PIP CH+.

7 PIP CH-


Press to select a lower channel number for PIP.

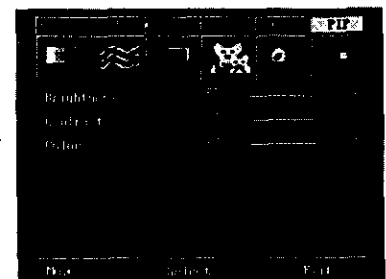
※ You can only select the programs that are auto-searched and stored by pressing PIP CH- .

8 PIP STILL

Press to make PIP picture still, and press it again to make the picture movable.

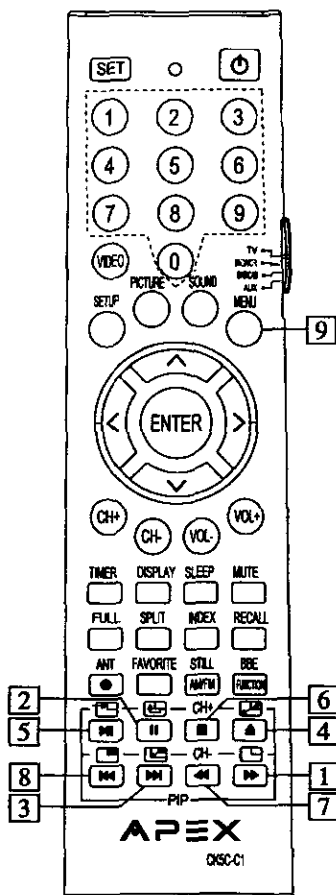
9 PIP Quality Adjustment Menu

When PIP is set to ON, press  to display the following menu:



Press Δ/∇ to highlight the desired item and press \leftarrow/\rightarrow to adjust.

※ PIP is not available in YPbP, mode.



Watching the Digital TV

When you have connected the DTV receiver, you can enjoy digital TV programs. This projection TV is capable of receiving the 1080i, 720p, 480p and 480i digital TV formats.


※ This projection TV is not capable of displaying a native 720p format signal. When a 720p format signal is received, it makes down-conversion.

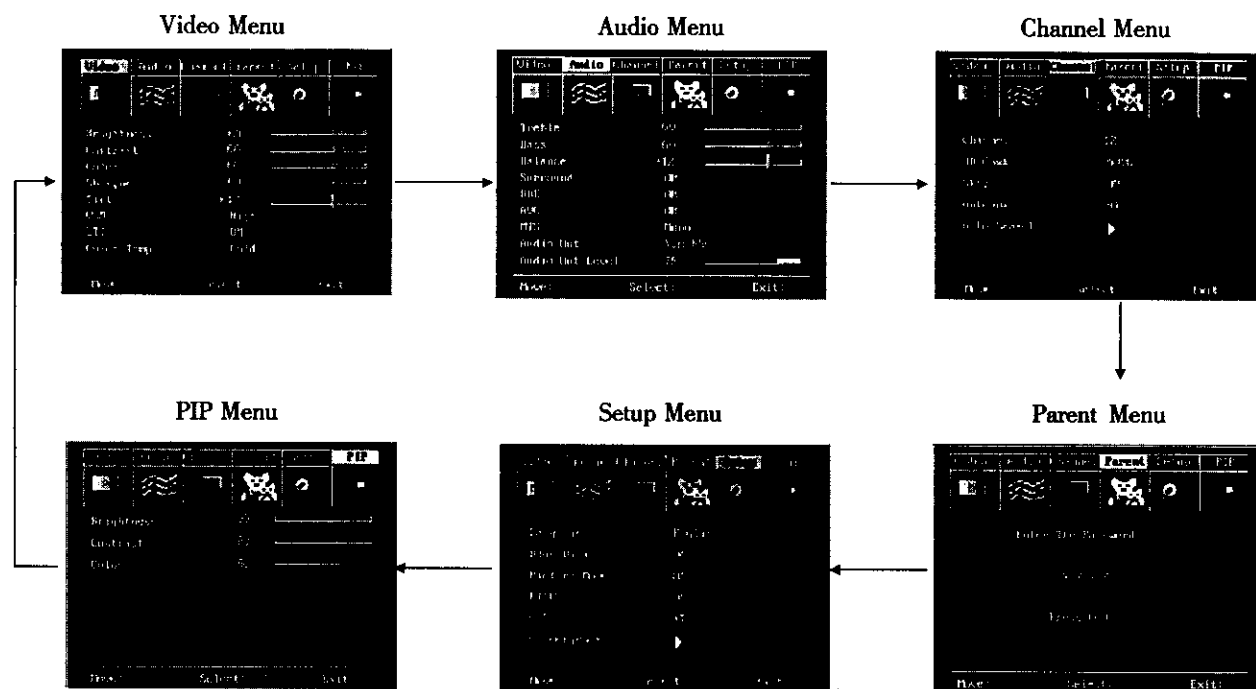
Using Component VIDEO IN

- 1** Connect the DTV receiver to YP_bP_r1 or YP_bP_r2 on the projection TV (for detail, see page 19).
- 2** Press VIDEO to select YP_bP_r1 or YP_bP_r2.
- 3** Select a digital channel on the DTV receiver. For detail, see the Operation Manual of the DTV receiver.
- 4** Adjust the volume of the projection TV as necessary.

Using the Menus

Overview

Many functions are realized through menu operation. Press  will display the following menus and press again to exit.



Press $\langle \rangle$ to select a menu. After selecting a menu, press \wedge / \vee to highlight the desired item and press $\langle \rangle$ to adjust.

- ※ Items with the mark of “▶” indicate that there is a sub-menu (except Auto Search).
- ※ PIP menu will not available if PIP doesn't turn on.
- ※ Because of different anticopy technology used by different disc, poor picture could possibly appear. You may try to use Video or S Video Input to get normal picture.

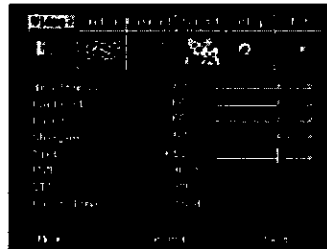
- ※ When an item in MENU is displayed as grey, it means that the item is not available or cannot be adjusted.

Using the Video Menu

Press **MENU** to enter Video menu.

Press **^/V** to highlight the item to be adjusted.

Press **</>** to adjust parameters.



Item	Adjustment Effect	
	-	+
Brightness	Darker	Brighter
Contrast	Lower	Higher
Color	Lighter	Deeper
Sharpness	Lower	Higher
Tint	More Purple	More Green

VSM: Velocity Scan Modulation Low/High/OFF

Sharpness picture definition to give a sharp and clear edge.

LTI: Luminance Transience Improvement ON/OFF.

※ "Sharpness" doesn't work when LTI is OFF.

Color Temp: Color Temperature Adjust Normal/ Cold/ Warm

You can select Cold, Normal or Warm that best suits the program you are watching.

Cold: Select to give the white colors a blue tint.

Normal: Select to give the white colors a neutral tint.

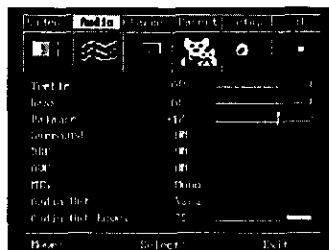
Warm: Select to give the white colors a red tint(NTSC-Standard).

Using the Audio Menu

Press MENU and </> to enter Audio menu.

Press ^/V to highlight the item to be adjusted.

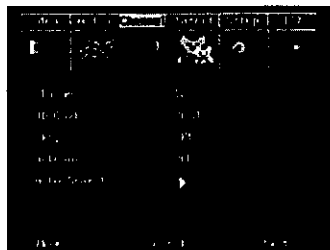
Press </> to adjust parameters.



Item	Adjustment Effect	
	<	>
Treble	Decrease	Increase
Bass	Decrease	Increase
Balance	Increase left speaker	Increase right speaker
Surround	ON/OFF	
DBE	ON/OFF	
AVC	Auto volume control ON/OFF	
MTS	<p>Stereo: Select for stereo reception when viewing a program broadcast in stereo.</p> <p>SAP: select to automatically switch the projection TV to second audio programs when a signal is received. (If no SAP signal is present, the projection TV remains in Stereo mode.)</p> <p>Mono: Select mono reception.</p> <p>※ You can not make selection when receiving Mono signal.</p> <p>※ MTS can not be selected in VIDEO mode and has only Stereo mode.</p>	
Audio Out	When Audio out is set to Fixed, Audio out level display 100.	
Audio Out Level	When Audio out is set to Variable, Audio out level display current number and can be adjusted.	

Using the Channel Menu

Press MENU and </> to enter Channel Menu.



Channel: Press </> to select the channel you want to adjust.

3D Comb: 3D YC comb filter ON/AUTO/OFF

AUTO: The projection TV will be checked automatically once every 8 seconds by the built-in 3D YC comb filter. If mode changes, the 3D COMB function will be automatically set to ON or OFF, then next checking process will start.

ON/OFF: Customer ON or OFF 3D comb.

※ 3D Comb is invalid for monochromatic signal. You are recommended to set 3D Comb to OFF when receiving monochromatic, weak or nonstandard signal (For example VCR) to obtain better picture.

※ After auto search, the 3D COMB function will be set to AUTO. It is recommended to re-set the function according to quality of the signal received to obtain optimum picture.

※ When the 3D COMB function changes among ON, OFF and AUTO, picture may fluctuate.

Skip: ON/OFF

Skip ON Enable you to skip undesirable program by pressing </>.

Skip OFF Enable you add or resume the skipped channel.

※ The channel number is red when "Skip" is ON, and green when "Skip" is OFF.

Antenna: Air/Cable Allows you to select antenna input mode.

Auto Search: The projection TV will auto-search and save channels automatically. The channel without program will be skipped. The skipped channel won't be displayed by pressing CH+/CH- or using Channel Index function.

Pressing </> or MENU stops auto-searching.

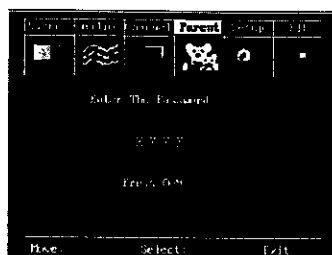
※ When "Antenna" is set to the "Air" mode, the projection TV will auto search from channel number 2 to 69, and when set to the "Cable" mode, it will search from 1 to 125.

※ You need to auto-search again if you change the antenna mode.

Using the Parent Menu

You may prevent children from watching programs not suitable for them, such as sexual or violence program.

Press MENU and </> to enter Parent Menu.



Four-digit password is required. The factory default password is "6688".

The old password is invalid after change.

If you forget your password, see "Lost password" on page 50.

The next menu will turn on after you enter correct password.



Parent Lock: ON/OFF

Parent lock is OFF, No programs are blocked from viewing.

No Rating: Block/Unblock

No Rating is block. Blocks all programs and movies that are broadcast without a rating.

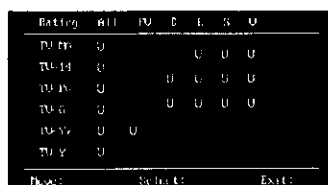
No Rating is unblock. Allows programs and movies that are broadcast without a rating.

Ext Source: Block/Unblock

Rating options sub-menu

Press ^/V to highlight one of the items, and press </> to display U or B on the screen. A "U" indicates a rating which is unblocked and a "B" indicates a rating which is blocked.

TV Guidelines: Press ENTER to enter TV Guidelines sub-menu.



TV-Y :All children

TV-Y7:Directed to older children

TV-G:General Audience

TV-PG:Parental Guidance suggested

TV-14:Parents Strongly Cautioned

TV-MA :Mature Audience only

FV:Fantasy Violence

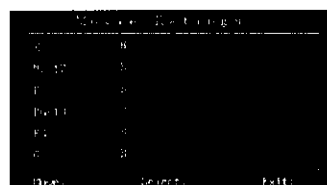
D:Suggestive Dialogue

L:Strong Language

S:Sexual situations

V:Violence

Movie Ratings: Press </> to enter Movie Ratings sub-menu.



G: All children and General Audience

PG: Parental Guidance suggested

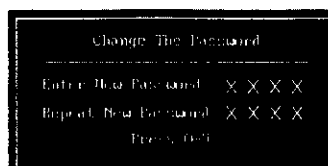
PG-13: Parental Guidance for children under 13

R: Restricted viewing, Parental guidance is suggested for children under 17

NC-17 and X: No one 17 and under allowed

Change the Password sub-menu:

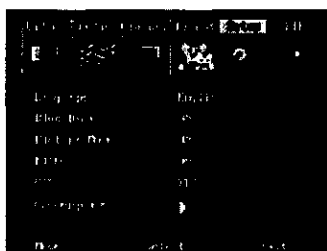
Press ENTER to enter Change the Password sub-menu.



※ PIP's V CHIP and rating options are set once you set those of main picture.

※ V CHIP is not available in YP_P mode.

Using the Setup Menu



Press MENU and </> to enter Setup menu.

Press \wedge / \vee to highlight the item to be adjusted.

Press </> to adjust parameters.

Language: You can switch the languages for the On-Screen-Display to English, French or Spanish.

Blue Back: Blue back ON/OFF

If “Blue Back” is set to ON, the projection TV will display a soft blue background and “No Signal” when no signal is received.

If “Blue Back” is set to OFF, and noise signal will be displayed on the screen when there is no TV signal mode.

※ “Blue Back” is available for TV. In other modes (VIDEO, S VIDEO and YPbPr), the screen background becomes black without signal reception and display “No Signal”.

Picture move: Picture move ON/OFF.

Every 20 minutes, picture will move slightly to prevent after-image to the greatest extent.

FILM: FILM mode ON/OFF.

Recommended for 24 frame-per-second films.

※ Only in the VIDEO, S VIDEO and 480i modes, FILM is activated. In other modes, the function does not work.

CCD:

- "OFF" Turns off closed caption.
 - "CC1,CC2,CC3,CC4" Displays a printed version of the dialog or sound effects of a program. (Should be set to CC1 for most programs).
 - "T1,T2,T3,T4" Display network/station information presented using either half of the whole screen (if available). For closed captioning, set to CC1.
 - "XDS" (eXtended Data Service) Display a network name, program name, program length, and time of the show if the broadcast offers this service.
- ※ If OSD appears on the screen, there is no CCD display.
 ※ CCD function is not available in PIP and YP_bP_r.

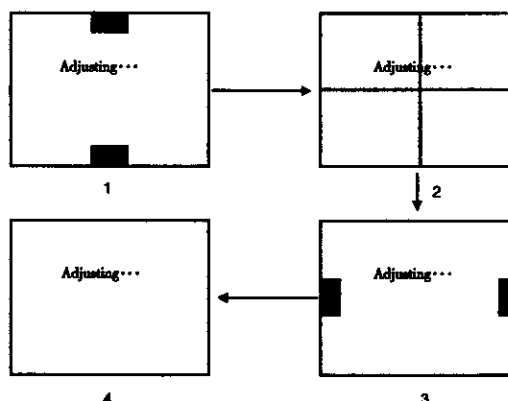
Convergence Adjustment

The picture may blur because of magnetic field on the Earth if you change the location or direction of the projection TV (due to poor convergence of three projection tubes). Press SMART FOCUS to adjust convergence automatically. And you could adjust convergence manually too.

- ※ Unshielded speakers or other metallic objects can cause picture distortion if placed close to the projection TV.

Automatic convergence adjustment

Press SMART FOCUS to start automatic convergence adjustment. The following pictures will appear.



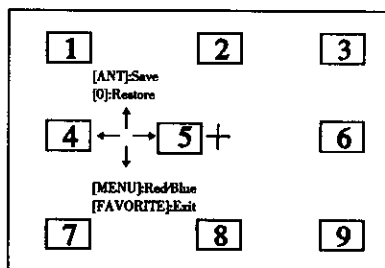
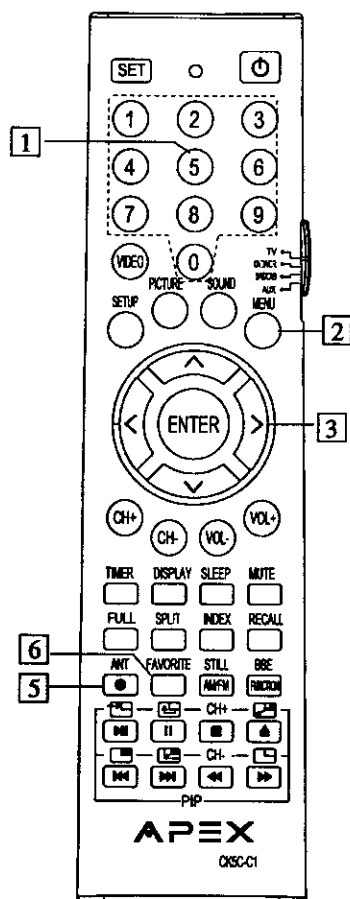
The projection TV will auto return to normal viewing picture mode after adjusting.

- ※ If convergence deviates too much, SMART FOCUS can not perform convergence correction.
- ※ When CCD activates, SMART FOCUS doesn't function.

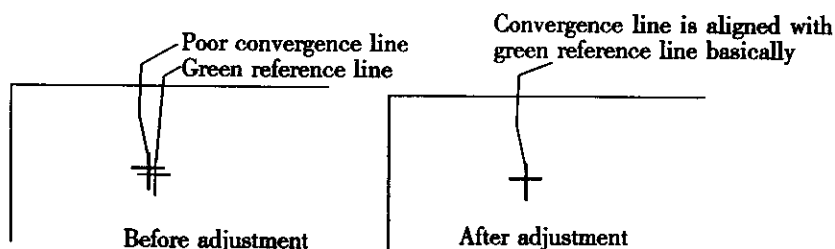
Manual convergence adjustment

Press Δ/V to highlight the item of Convergence in Setup Menu, and press ENTER to enter convergence adjustment mode.

- 1 Press "5" first to select the center point on the screen to be adjusted shown as the following figure.



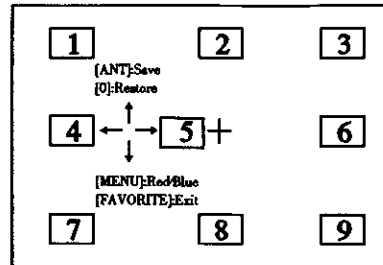
- 2 Press MENU to select red or blue convergence adjustment. When four arrows on the lower left corner become red, it indicates red convergence is ready for adjustment, and when they become blue, it indicates blue convergence is ready for adjustment.
- 3 Press Δ/V to adjust cross cursor vertically, and $</>$ to adjust horizontally so that the red and blue cross cursor is lined with the green one, and the cross cursor becomes white.



※ When "MAX" is displayed on the screen, it indicates that the adjustment is maximum.

- 4 After completion of above adjustment, press "1", "2", "3", "4", "6", "7", "8", or "9" to adjust the other points on the screen. Repeat Step 2 and 3 to align the red or blue cross cursor with the green one.

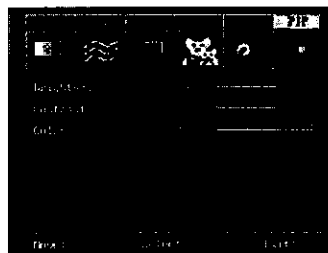
※ To obtain better convergence, it is recommended to adjust points in the order of 5→2→4→6→8→1→3→7→9.



- [5] To save the adjusted data, press ANT.
 If you are not satisfactory with the adjustment result, do not press ANT to save the data. Press “0” to load the factory-set data in order to resume the previous status.
- [6] Press FAVORITE to exit convergence adjustment mode.

Using the PIP Menu

Press MENU and </> to enter PIP Menu.



Press ^/V to highlight the item to be adjusted.
 Press </> to adjust parameters.

※ With PIP OFF, these items can not be accessed.

Other Information

Programming the Remote Control

1. To select the device you want to control

Set the TV, DVD/VCR, SAT/CAB, AUX switch to the desired position to control the related device.

2. To set the slide switch

Set Slide Switch to	Device to Control
TV position	TV
DVD/VCR position	DVD Player, VCR, CD Player or LD Player
SAT/CAB position	Satellite Receiver or Cable Converter
AUX position	TV, DVD Player, VCR, CD Player, LD Player, Satellite Receiver, Cable Converter or Audio Amplifier

3. To program the remote control

1) Refer to the Brand Code Table to find the code number that corresponding to the brand name of the device you want to control.

2) Set the TV, DVD/VCR, SAT/CAB, AUX switch to the desired position.

3) Press and hold the SET key for about 3 seconds until the LED indicator on the remote control turns on. Then release the key.

4) Use the 0-9 keys to enter three-digit code number for your device. If the right code number was entered, the LED blinks three times. If you enter a code not listed below, or you press any other keys than STANDBY and ENTER, the LED turns off.

4. To search codes

1) Set the TV, DVD/VCR, SAT/CAB, switch to the desired position.

2) Press and hold the SET key for 3 seconds until the LED indicator on the remote control turns on. Then release the key.

3) Press the STANDBY key and code search begins. Use the \wedge or \vee key to search codes upwards or downwards.

4) Each time you press the \wedge or \vee key, the code number for the STANDBY key increases or decreases by 1; or the code number automatically increases or decreases by 1 per 3 seconds.

5) If the desired code number is found, press the ENTER key to save the current searched code number for your device. Then LED blinks three times to exit from search. If the remote control searches codes to the end or returns to the beginning, or you press any other key, LED blinks rapidly eight times and search stops.

5. To check the current code number

1) Set the TV, DVD/VCR, SAT/CAB, AUX switch to the desired position.

2) Press and hold the SET key for 3 seconds until the LED indicator on the remote control turns on. Then release the key.

3) Press the ENTER key.

4) You may read the code number according to the LED display status as follows.

Code Number			LED Display Status (2 sec. time interval between every two digits)		
First-digit	Second-digit	Third-digit	First-digit	Second-digit	Third-digit
0	0	0	Blinks rapidly once	Blinks rapidly once	Blinks rapidly once
1	0	6	Blinks once	Blinks rapidly once	Blinks six times
1	5	0	Blinks once	Blinks five times	Blinks rapidly once

6. To use the REC key

With the slide switch set to the DVD/VCR position, the REC key functions only when it is pressed twice (or even times) continuously.

※ If there is no operation within 20 seconds in the steps 3, 4 and 5, the remote control will automatically exit from the appropriate operation.

Brand Code Table**TV**

Brand	Code Number
APEX	157,158,159,160,161,162
ChangHong	157,158,159,160,161,162
Admiral	001,119
Adventura	120
Aiko	011
Akai	002
Alleron	036
Amtron	030
Anam National	030,133,134,135,154
AOC	003,004,005,136
Audiovox	030
Bell & Howell	001,068,115
Belcor	003
Bradford	030
Brokwood	003
Candle	003,005,006,120
Celebrity	002
Citizen	003,005,006,011,030,084,120,121
Colortyme	003,005,007,139
Concerto	003,005
Contec/Cony	008,009,030
Craig	030
Curtis Mathes	000,003,005,010,084,115
Daewoo	004,005,011,012,098,099,132,141
Daytron	005
Dimensia	000
Dumont	110
Electroband	002
Electrohome	013,014,015,154
Emerson	008,016,017,018,019,020,021,022,023,024,025,026,027,028,029,030,031,032,033,034,035,036,037,096,115,121,122,145,154

Other Information

Fisher	038,039,040,115,123
Fujitsu	036
Funai	036
GE	000,015,041,042,043,072,116,117,118,124,147,154
Goldstar	004,008,013,014,044,045,046,113
Gibralter	110
Grundy	036
Hitachi	008,009,047,048,049,103,104,105,106,107,108,109,122,137,138
Infinity	050
Janeil	120
JBL	050
JC Penney	000,004,006,015,041,042,046,051,052,059,072,084,124,140
JCB	002
JVC	008,009,042,048,053,054,114,125
Kawasho	002
Kenwood	013,014
Kloss Novabeam	055,056,120,126
KTV	057,121
Loewe	050
Logik	068,151
LXI	000,038,050,058,059,060,115,124
Magnavox	006,013,050,055,056,061,062,063,069,073,100,101,102,126,127,152
Majestic	068
Marants	050
Marantz	050,064
Megatron	047
Memorex	003,067,068,115,151
MGA	004,013,014,015,040,065,067
Midland	042,110,124
Minutz	041
Mitsubishi	004,013,014,015,040,065,066,067,097
Montgomery Ward	068
Motorola	119,154
MTC	004,084
NAD	058,059,128
NEC	004,070,014,139,154
Nikko	011

Other Information

NTC	011
Optimus	128
Optonica	077,119
Orion	027,145
Panasonic	042,050,148,150,154
Philco	006,008,013,055,056,061,063,069,126,127,152,154
Philips	006,008,013,055,056,061,062,071,072,073,154
Pioneer	074,075,122,128,149
Portland	011
Price Club	084
Prism	042
Proscan	000,124
Proton	008,076,129
Pulsar	110
Quasar	042,057,148
Radio Shack	000,038,077,115
RCA	000,078,079,080,081,082,124,130,132,141,142
Realistic	038,077,115
Runco	110
Samsung	010,012,014,083,084,140,143
Sansui	145
Sanyo	038,039,065,085,123
Scott	017,027,036
Sears	009,014,036,038,039,040,054,058,059,086,087,123,124,131
Sharp	022,077,088,089,090,091,095,119
Signature	001,068,151
Simpson	006
Sony	002,144,153
Soundesign	006,036
Squareview	131
Supre-Macy	120
Supreme	002
Sylvania	055,056,061,062,063,069,073,092,126,127,152
Symphonic	131,155
Tandy	119
Tatung	122
Technics	042
Teknika	009,011,062,067,068,084,151
Tera	129

Other Information

Toshiba	038,058,059,084,086,140
Universal	041,072
Victor	054,125
Viking	120
Wards	001,017,041,055,056,061,062,068,069,072,073,077,093,094,127,155
Zenith	110,111,112,146,151

DVD Player

Brand	Code Number
APEX	362,363,364,365,366,367,368,369,370,435,436,437
ChangHong	362,363,364,365,366,367,368,369,370,435,436,437
Aiwa	351
Hitachi	352
JVC	348,353
Magnavox	347
Mitsubishi	346
Panasonic	354,361
Philips	347,355,356,357
Pioneer	345,350
Proscan	349
RCA	349
Sanyo	358
Sony	344,359,360
Toshiba	343

VCR

Brand	Code Number
APEX	438
Admiral	415
Aiwa	382,427,428
Akai	392,421
Amstrad	382
ASA	399
Audio Dynamics	376,416
Audiovox	418
Broksonic	417,419
Bush	381
Calix	418
Candle	378,418

Brand	Code Number
Canon	403,404
Capeheart	391
Carver	385
CCE	421
Citizen	378,379,418,421
Craig	373,379,418
Curtis Mathes	374,378,403,414
Daewoo	391,405,419,421,422
Daytron	391
DBX	376,416
Dimensia	425
Dynatech	382

Other Information

Brand	Code Number
Electrohome	372,418,423
Electroponic	418
Emerson	372,380,382,387,417,418,419,423
Fisher	371,373,382,383,393
Funai	419
GE	374,379,403,414
Go Video	401,402,429
Goldstar	378,418,421
Goodmans	381
Gradiente	420
Grundig	399
Harley Davidson	420
Harman Kardon	406
Hinari	381
Hitachi	382,384,389,392
Instant Replay	426
JC Penney	375,376,379,389,392,403,406,416,418
Jensen	384,392
JVC	375,376,378,392,394,400,416
Kenwood	375,376,378,392,394,400,416
Kodak	418
Lloyd	382,420
Logik	381
LXI	418,430,431,432,433,434
Magnavox	385,386,399,403
Marantz	375,376,378,385,399,403,416
Marta	418
MEI	403
Memorex	373,382,403,415,418,420
MGA	372,387,398,423
Minolta	384,389
Mitsubishi	372,374,387,394,398,400,423
Motorola	415
MTC	382,420
Mutitech	379,381,382,420

Brand	Code Number
NEC	375,376,378,392,394,400,406,416
Nikko	418
olympus	424
Optimus	415,418
Optonica	388
Panasonic	377,390,403,407,408
Pentax	378,384,389
Perdio	382
Philco	385,386,403
Philips	385,388,399,403
Pilot	418
Pioneer	376,384,394,400,416
Portland	391
Proscan	374,414
Quasar	396,397,403
Radio Shack	371,372,373,383,388,415,418,420,423
Radix	418
Randex	418
RCA	374,379,384,389,407,414
Realistic	382,383,388,403,415,418,420,423
Ricoh	411
Salora	398
Samsung	379,405
Sanky	415
Sansui	376,392,394,395
Sanyo	373
SBR	399
Schneider	381
Scott	380,387,417,419
Sears	371,373,383,384,389,393,418
Sharp	372,378,423
Shintom	381
Sony	409,410,411,412,413
STS	389
Sylvania	382,385,386,387,398,403,420

Other Information

Brand	Code Number
Symphonic	382,420
Tandy	382
Tashiko	382,418
Tatung	375,392,395
Teac	375,382,392,420
Technics	390,403
Teknika	382,403,418,420
Toshiba	380,383,384,387,398,405
Totevision	379,418

Brand	Code Number
Vector Research	376,406
Victor	376,400
Videosonic	379
Video Concepts	376
Wards	372,373,379,380,381,382,384,388,389,403,415,418,420,423
XR-1000	420
Yamaha	375,376,378,392,406
Zenith	412,413

Cable Converter

Brand	Code Number
ChangHong	500
ABC	508,509,510,511
General Instrument	525
hamiln	541,542,545,546,547
Hytex	508
Jerrold	506,510,511,512,513,520,525,548,549,550
Movie Time	515
NSC	515
Oak	501,508,516
Panasonic	502,507,544
Philips	514
Pioneer	503,504,517
RCA	524
Scientific Atlantic	504,505,518,519
StarCom	511
Tocom	509,512
TV86	515
United Artists	508
Viewstar	514,515
Zenith	504,521,522,523

Satellite Receiver

Brand	Code Number
GE	528,531,532
General Electric	526
Hitachi	534,535
Hughes	537,538
JVC	533
Magnavox	536
Panasonic	543
Philips	536
Proscan	528,531,532
RCA	528,531,532,540
Sony	529,539
Toshiba	527,530

CD Player

Brand	Device Code	Brand	Device Code
ADC	317	Luxman	332
ADO	318	Marantz	308,333
Aiwa	300,319	MCS	334
Akai	320	Mitsubishi	335
Denon	322	NEC	307
Dynatech	301	Onkyo	309
Emerson	302	Panasonic	310
Fisher	303,325,326	Pioneer	311
GE	327	RCA	312,324
Hitachi	304	Sears	321
Inkel	328	Sony	313,323
JVC	305,329	Technics	314
Kenwood	306,330,331	Yamaha	315,316

LD Player


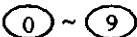
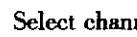




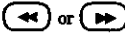




Brand	Code Number
Magnavox	336
Panasonic	340,341
Pioneer	342
Sony	337,338,339

Audio Amplifier







Brand	Code Number
ChangHong	700,701
Aiwa	702
Carver	709
Fisher	709
JVC	706,712
Magnavox	708
Memorex	704
Panasonic	710
Pioneer	703,704
Proton	708
Quasar	710
RCA	707,713
Sony	702,705
Techniques	710
Toshiba	711
Victor	706

Operating Other Components with Your Projeciton TV Remote Control


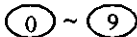
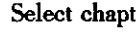







Operating a VCR

Press	To
	Power on the VCR
 ~ 	Select channels directly
	Change channels
	
	Play video tape
	Stop
 or 	Search forward or backward
	Pause
 and 	Record at the same time

Operating a laser disc player

Press	To
	Power on the laser disc player
	Search chapters forward or backward
	
	Play disc
	Stop
	Pause

Operating a DVD player

Press	To
	Power on the DVD player
 ~ 	Select chapters directly
	Search chapters forward or backward
	
	Play DVD
	Stop
	Pause
	Move the cursor in the menu
	Display the DVD menu

※ When operating your non-TV AV equipment with the remote control, refer to operation instructions of your original remote.

Troubleshooting

Before calling service personnel, please check the following chart for a possible cause to the trouble you are experiencing.

Symptom	Check these things
No power supply	<ul style="list-style-type: none"> • Make sure the power cord is plugged in.
Poor color/tint	<ul style="list-style-type: none"> • Adjust the Brightness, Contrast, Color, sharpness and Tint in the Video menu.
Spots appear on the screen.	<ul style="list-style-type: none"> • Move the projection TV away from noise sources such as cars, neon signs, or hairdryers.
Stripes appear on the screen.	<ul style="list-style-type: none"> • Move the projection TV away from other TV set, personal computers and video games.
Double or triple images	<ul style="list-style-type: none"> • Check the convergence of the projection TV set.
Snowy picture	<ul style="list-style-type: none"> • Check the antenna/cable connections. • Adjust the antenna.
Abnormal color or no picture	<ul style="list-style-type: none"> • May be due to improper fast power-on. Power off the projection TV, then power it on again.
The remote control does not work.	<ul style="list-style-type: none"> • Set the TV switch to the desired position on the remote control when operating your projection TV. • Check the orientation of the batteries. • Batteries could be weak. Replace the batteries .
Lost password	<ul style="list-style-type: none"> • In the password screen, enter the following master password: 1225, then you can enter a new password.
Cannot receive Digital channels	<ul style="list-style-type: none"> • Check the connections between the DTV receiver and the projection TV (see page 19). • Check your local listing to find out if you can receive digital broadcasts in your area.
Channel Index does not display all available channels	<ul style="list-style-type: none"> • Use Auto Search in the Channel Menu to add receivable TV channels that are not presently in TV memory(see page 33).
Poor convergence	<ul style="list-style-type: none"> • Press SMART FOCUS and auto adjustment begins. • Access the Setup menu and manually adjust convergence.

Specifications and Accessories

Projection system	3 picture tubes, 3 lenses, horizontal in-line system
Picture tube	7-inch high-brightness monochrome tubes
Rated voltage	AC: 120V~ 60Hz
Rated power consumption	~280W
Dimensions	~940mm(w)×1190mm (h)×560mm(d)
Weight	~61kg
Projection screen (Effective screen size)	~876mm(w)×656mm(h)
Channel coverage	VHF 2~13 UHF 14~69 CABLE TV: MID BAND(A-5~A-1, A-I) SUPER BAND (J~W) HYPER BAND (W+1 ~ W+28) ULTRA BAND (W+29 ~ W+84)
Channel preset	181
Television system	NTSC, American TV Standard
Number of inputs/outputs	<p>MONITOR OUT: 1 Video: 1V_{p-p}, 75 ohms unbalanced, sync negative Audio: 500 mV_{rms} at the maximum volume setting(Variable) 500 mV_{rms} (Fixed) Impedance : 1 kilohm</p> <p>Video(IN): 3 1V_{p-p}, 75 ohms unbalanced, sync negative S Video(IN): 3 Y: 1V_{p-p}, 75 ohms unbalanced, sync negative C: 0.286V_{p-p} (Burst signal), 75 ohms Audio(IN): 5 500mV_{rms}(100% modulation) Impedance: 47 kilohms Component Video (IN): 2 Y: 1V_{p-p}, 75 ohms unbalanced, sync negative (Y, P_b, P_r) P_b: 0.7V_{p-p}, 75 ohms P_r: 0.7V_{p-p}, 75 ohms</p>
Antenna input	75Ω(unbalanced)
Audio output	≥15W+15W(THD=7%)
Accessories supplied	Operation manual Universal remote control AAA alkaline batteries (2) Versatile wheel pads:4

Designs and specifications are subject to change without notice.

Packing List

No.	Parts	Quantities	Remarks
1	Projection TV Receiver	1	
2	Universal Remote Control	1	
3	Operation Manual	1	
4	AAA Alkaline Batteries	2	
5	Versatile Wheel Pads	4	

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