PLASMA DISPLAY SYSTEM

PRO-1120HD
PRO-920HD

ELITE

Register Your Product on www.pioneerelectronics.com

Operating 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.
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.

Note to CATV system installer.
This reminder is provided to call the CATV system installer's 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.
WARNING: This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electric appliances such as radios and televisions, use shielded cables and connectors for connections.

FEDERAL COMMUNICATIONS COMMISSION DECLARATION OF CONFORMITY

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Product Name: Plasma Display System
(Plasma Display)
(Media Receiver)

Model Number: PRO-1120HD  PRO-920HD
(PRO-505PU) (PRO-435PU)
(PRO-R05U) (PRO-R05U)

Product Category: Class B Personal Computers & Peripherals

Responsible Party Name: PIONEER ELECTRONICS (USA), INC., Customer Support Div.
Address: P.O. BOX 1760, LONG BEACH, CA., 90801-1760 U.S.A.
Phone: (800) 421-1625

IMPORTANT NOTICE: The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

[For Canadian model]
This Class B digital apparatus complies with Canadian ICES-003.

WARNING: Be sure to plug this equipment into a grounding-type AC outlet.
Thank you for buying this Pioneer product.

Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.

In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However the method of connecting and operating the unit is the same.

**01 Important User Guidance Information**

**02 Safety Precautions**

**03 Operational Precautions**

**04 Supplied Accessories**

Plasma Display ................................................................. 11
Media Receiver ..................................................................... 11

**05 Part Names**

Plasma Display ................................................................. 12
Media Receiver ..................................................................... 12
Remote control unit .......................................................... 14

**06 Preparation**

Installing the Plasma Display ........................................... 15
Installing the Media Receiver ............................................ 16
Installing the Media Receiver vertically ............................ 16
Connecting the system cable ............................................. 18
Routing cables .................................................................... 19
Preparing the remote control unit .................................... 20
Inserting batteries ............................................................. 20
Cautions regarding batteries ............................................. 20
Allowed operation range of the remote control unit .......... 20
Cautions regarding the remote control unit ................. 20

Cable connections for watching digital and/or conventional TV channels .......................................... 21
Connecting VHF/UHF antennas and a Cable Converter ........................................................................... 21

Cable connections for watching digital TV channels over air (VHF/UHF) ........................................... 21
Connecting VHF/UHF antennas ........................................ 21
Switching between antenna A and B .............................. 22
Inserting the cable card ...................................................... 22
Connecting the power cord .............................................. 23

**07 Basic Operations**

Turning on the power (Standby) ....................................... 24
Turning off the power (Standby) ....................................... 24
Watching TV channels ...................................................... 25
Selecting the antenna ....................................................... 25
Changing channels ........................................................ 25
Changing the volume and sound .................................... 26
Viewing a channel banner .............................................. 26
Using the POD service .................................................... 27
Changing the language ................................................... 27
Setting MTS/SAP mode ................................................... 27
Using the multiscreen functions ................................. 28
Splitting the screen ....................................................... 28
Freezing images ............................................................ 29

**08 Menu Setup**

Menu configuration ....................................................... 30
AV mode menus ............................................................ 30
PC mode menus ........................................................... 30
Menu operations ........................................................... 30

**09 Tuner Setup**

Setting up TV channels ............................................... 31
Using Auto Channel Preset ........................................... 31
Setting for skipping unwanted channels ..................... 31
Setting up TV channels manually ............................... 31
Naming TV channels ..................................................... 32
Checking signal strength ............................................. 32
Checking the Cable Card ID .......................................... 32
Enabling data acquisition ........................................... 32

Parental Control .......................................................... 33
Changing the password ............................................... 33
Clearing the password .................................................. 34
Activating the Parental Control ................................... 34

Setting the voluntary movie rating system (MPAA) .... 34
Setting the TV ratings .................................................... 35
Setting the TV Parental Guidelines (TV Guidelines) .... 35
Blocking Not Rated TV programs ................................. 35
Canadian rating systems ............................................ 36
Setting Canadian English ratings .............................. 36
Setting Canadian French ratings ............................... 37
Temporarily deactivating the Parental Control .......... 37
Setting your favorite channels .................................... 37
Setting up closed captions ......................................... 37
Activating the closed caption ...................................... 38

Selecting the type of conventional closed captions ...... 38
Selecting digital closed captions ................................. 38
Selecting digital closed caption parameters ............... 38
Clock Setting ............................................................. 39
In order to obtain maximum enjoyment from this Pioneer PureVision PRO-1120HD/PRO-920HD Plasma Display System, please first read this information carefully.

With the Pioneer PureVision PRO-1120HD/PRO-920HD, you can be assured of a high quality Plasma Display System with long-life and high reliability. To achieve images of exceptional quality, this Pioneer Plasma Display System incorporates state-of-the-art design and construction, as well as very precise and highly advanced technology.

The Pioneer PureVision PRO-1120HD/PRO-920HD incorporates the latest in color filter technology – 1st Surface Pure Color Filter. This improves the color / picture reproduction of these models as compared to previous models. It also eliminates the need for a physical glass panel to be placed in front of the plasma panel, which furthers Pioneer’s continued goal of reducing environmental waste in consumer electronics, now during the manufacturing process and in the future during the recycling process.

Over the course of its lifetime, the luminosity of the Pioneer PRO-1120HD/PRO-920HD Plasma Display System will diminish very slowly, such as with all phosphor-based screens (for example, a traditional tube-type television). To enjoy beautiful and bright images on your Pioneer Plasma Display System for many years to come, please carefully read and follow the usage guidelines below.

Usage guidelines

All phosphor-based screens (including conventional tube-type televisions) can be affected by displaying static images for a prolonged period. Plasma Display Systems are no exception to this rule. After-image and permanent effects on the screen can be avoided by taking some basic precautions. By following the recommendations listed below, you can ensure longer and satisfactory results from your plasma:

- Whenever possible, avoid frequently displaying the same image or virtually still moving pictures (e.g. closed-captioned images or video game images which have static portions).
- Avoid viewing the On Screen Display for extended periods, from a DVD player, VCR, and all other components.
- Do not leave the same picture freeze-framed or paused continuously over a long period of time, when using the still picture mode from a TV, VCR, DVD player or any other component.
- Images which have both very bright areas and very dark areas side by side should not be displayed for a prolonged period of time.
- When playing a game, the “GAME” mode setting within “AV Selection” is strongly recommended. However, please limit its use to less than 2 hours at a time.
- After playing a game, or displaying a PC image or any still image, it is best to view a normal moving picture in the “WIDE” or “FULL” screen setting for over 3 times longer than the previous still/moving image.
- After using the Plasma Display System, always switch the display to “STANDBY” mode.

Installation guidelines

The Pioneer PureVision PRO-1120HD/PRO-920HD Plasma Display System incorporates a very thin design. To ensure safety, please take the proper measures to mount or install the Plasma Display, in order to prevent the unit from tipping over in the event of vibration or accidental movement.

This product should be installed by using only parts and accessories designed by PIONEER. Use of accessories other than the PIONEER stand or installation bracket may result in instability, and could cause injury. For custom installation, please consult the dealer where the unit was purchased. To ensure correct installation, experienced and qualified experts must install the unit. PIONEER will not be held responsible for accident or damage caused by the use of parts and accessories manufactured by other companies.

To avoid malfunction and overheating when installing, make sure that the vents on the main unit are not blocked. To ensure proper heat emission:

- Distance the unit slightly from other equipment, walls, etc.
- Do not fit the unit inside narrow spaces where ventilation is poor.
- Do not cover with a cloth, etc.
- Clean the vents on the sides and rear of the unit to remove dust build-up by using a vacuum cleaner set to its lowest suction setting.
- Do not place the product on a carpet or blanket.
- Do not leave the product tilted over except the case of vertical installation of the Media Receiver.
- Do not reverse the product.

Using the unit without proper ventilation may cause the internal temperature to rise, and could result in possible malfunction. When the surrounding or internal temperature exceeds a certain degree, the display will automatically power off in order to cool the internal electronics and prevent a hazardous occurrence.

Malfunction can be caused by many factors: inappropriate installation site, improper assembly/installation/mounting, improper operation of or modifications made to this product. However, PIONEER cannot be held responsible for accidents or malfunction caused by the above.

NOTE

The following are typical effects and characteristics of a phosphor-based matrix display and as such, are not covered by the manufacturer’s limited warranties:

- Permanent residual images upon the phosphors of the panel.
- The existence of a minute number of inactive light cells.
- Panel generated sounds, examples: Fan motor noise, and electrical circuit humming / glass panel buzzing
## Important User Guidance Information

### CAUTION

**Panel sticking and after-image lag**
- Displaying the same images such as still images for a long time may cause after-image lagging. This may occur in the following two cases.

1. **After-image lagging due to remaining electric load**
   When image patterns with very high peak luminance are displayed more than 1 minute, after-image lagging may occur due to the remaining electric load. The after-images remaining on the screen will disappear when moving images are displayed. The time for the after-images to disappear depends on the luminance of the still images and the time they had been displayed.

2. **After-image (lag image) due to burning**
   Avoid displaying the same image on the Plasma Display continuously over a long period of time. If the same image is displayed continuously for several hours, or for shorter periods of time over several days, a permanent after-image may remain on the screen due to burning of the fluorescent materials. Such images may become less noticeable if moving images are later displayed, but they will not disappear completely.
   - The Energy save function can be set to help prevent damage from screen burning (see page 44).

**About operations through i.LINK**
PIONEER shall not always assure normal video/audio recording or playback when a D-VHS is operated through i.LINK.

### CAUTION

**DO NOT PLACE THIS PRODUCT ON AN UNSTABLE CART, STAND, TRIPOD, BRACKET, OR TABLE. THE PRODUCT MAY FALL, CAUSING SERIOUS PERSONAL INJURY AND SERIOUS DAMAGE TO THE PRODUCT. USE ONLY WITH A CART, STAND, TRIPOD, BRACKET, OR TABLE RECOMMENDED BY THE MANUFACTURER, OR SOLD WITH THE PRODUCT. FOLLOW THE MANUFACTURER'S INSTRUCTIONS WHEN INSTALLING THE PRODUCT AND USE MOUNTING ACCESSORIES RECOMMENDED BY THE MANUFACTURER. A PRODUCT AND CART COMBINATION SHOULD BE MOVED WITH THE CARE. QUICK STOPS, EXCESSIVE FORCE, AND UNEVEN SURFACES MAY CAUSE THE PRODUCT AND CART COMBINATION TO OVERTURN.**
Electricity is used to perform many useful functions, but it can also cause personal injuries and property damage if improperly handled. This product has been engineered and manufactured with the highest priority on safety. However, improper use can result in electric shock and/or fire. In order to prevent potential danger, please observe the following instructions when installing, operating and cleaning the product. To ensure your safety and prolong the service life of your product, please read the following precautions carefully before using the product.

1. Read instructions—All operating instructions must be read and understood before the product is operated.
2. Keep this manual in a safe place—These safety and operating instructions must be kept in a safe place for future reference.
3. Observe warnings—All warnings on the product and in the instructions must be observed closely.
4. Follow instructions—All operating instructions must be followed.
5. Cleaning—Unplug the power cord from the AC outlet before cleaning the product. Use a damp cloth to clean the product. Do not use liquid cleaners or aerosol cleaners.
6. Attachments—Do not use attachments not recommended by the manufacturer. Use of inadequate attachments can result in accidents.
7. Water and moisture—Do not use the product near water, such as bathtub, washbasin, kitchen sink and laundry tub, swimming pool and in a wet basement.
8. Stand—Do not place the product on an unstable cart, stand, tripod or table. Placing the product on an unstable base can cause the product to fall, resulting in serious personal injuries as well as damage to the product. Use only a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the product. When mounting the product on a wall, be sure to follow the manufacturer’s instructions. Use only the mounting hardware recommended by the manufacturer.
9. When relocating the product placed on a cart, it must be moved with utmost care. Sudden stops, excessive force and uneven floor surface can cause the product to fall from the cart.
10. Ventilation—The vents and other openings in the cabinet are designed for ventilation. Do not cover or block these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the product. Do not place the product on a bed, sofa, rug or other similar surface, since they can block ventilation openings. This product is not designed for built-in installation; do not place the product in an enclosed place such as a bookcase or rack, unless proper ventilation is provided or the manufacturer’s instructions are followed.
11. Power source—This product must operate on a power source specified on the specification label. If you are not sure of the type of power supply used in your home, consult your dealer or local power company.
12. Power cord protection—The power cords must be routed properly to prevent people from stepping on them or objects from resting on them. Check the cords at the plugs and product.
13. The plasma Display used in this product is made of glass. Therefore, it can break when the product is dropped or applied with impact. Be careful not to be injured by broken glass pieces in case the plasma Display breaks.
14. Overloading—Do not overload AC outlets or extension cords. Overloading can cause fire or electric shock.
15. Entering of objects and liquids—Never insert an object into the product through vents or openings. High voltage flows in the product, and inserting an object can cause electric shock and/or short internal parts. For the same reason, do not spill water or liquid on the product.
16. Servicing—Do not attempt to service the product yourself. Removing covers can expose you to high voltage and other dangerous conditions. Request a qualified service person to perform servicing.
17. Repair—If any of the following conditions occurs, unplug the power cord from the AC outlet, and request a qualified service person to perform repairs.
   a. When the power cord or plug is damaged.
   b. When a liquid was spilled on the product or when objects have fallen into the product.
   c. When the product has been exposed to rain or water.
   d. When the product does not operate properly as described in the operating instructions.
   e. When the product has been dropped or damaged.
   f. When the product displays a noticeable abnormality in the product indicates that the product needs servicing.
18. Replacement parts—in case the product needs replacement parts, make sure that the service person uses replacement parts specified by the manufacturer, or those with the same characteristics and performance as the original parts. Use of unauthorized parts can result in fire, electric shock and/or other danger.
19. Safety checks—Upon completion of service or repair work, request the service technician to perform safety checks to ensure that the product is in proper operating condition.
20. Wall or ceiling mounting—When mounting the product on a wall or ceiling, be sure to install the product according to the method recommended by the manufacturer.
21. Heat sources—Keep the product away from heat sources such as radiators, heaters, stoves and other heat-generating products (including amplifiers).
22. Unplug the power cord from the AC outlet before installing the speakers.
23. Never expose the screen of the Plasma Display to strong impact, for example, by hitting it. The screen may be broken, resulting in fire or personal injury.
24. Do not expose the Plasma Display to direct sunlight for a long period of time. The optical characteristics of the front protection panel changes, resulting in discoloration or warp.
25. The Plasma Display weighs about 32.8 kg (73.3 lbs.) for the PRO-505PU and about 28.8 kg (63.1 lbs.) for the PRO-435PU. Because it has small depth and is unstable, unpack, carry, and install the product with one more person at least and use the handles.
Safety Precautions

Installation Precautions
Observe the following precautions when installing with any items such as the optional stand.

When using the optional stand, brackets, or equivalent items
• Ask your dealer to perform the installation.
• Be sure to use the supplied bolts.
• For details, see the instruction manual that comes with the optional stand (or equivalent items).

When using other items
• Consult your dealer.
• The following six mounting holes can be used for the installation:

CAUTION
• Be sure to use four or more mounting holes symmetrical to the vertical and horizontal median lines.
• Use M8 screws, which go 12 to 18 mm (0.5 to 0.7 inches) in depth from the mounting surface of the Plasma Display. See the side view above.
• Be careful not to block the ventilation opening at the rear of the Plasma Display.
• Be sure to install the Plasma Display on a flat surface because it contains glass.
• The screw holes other than the above are to be used only for the specified products. Never use them for mounting non-specified products.
• Do not mount or remove the Plasma Display to or from the stand, with speakers attached.

NOTE
• It is strongly recommended to use the optional PIONEER mounting products.
• PIONEER shall not be liable for any personal injury or product damage that results from the use of mounting items other than the optional PIONEER products.
PIONEER bears no responsibility for any damages arising from incorrect use of the product by you or other people, malfunctions when in use, other product related problems, and use of the product except in cases where the company must be liable.

**Plasma Display protection function**
When still images (such as photos and computer images) stay on the screen for an extended period of time, the screen will be slightly dimmed. This is because the protection function of the Plasma Display automatically adjusts the brightness to protect the screen when detecting still images; so this does not designate malfunction. The screen is dimmed when a still image is detected for about three minutes.

**Infrared rays**
The Plasma Display releases infrared rays because of its characteristics. Depending on how the Plasma Display is in use, the remote controls of nearby equipment may be adversely affected or wireless headphones using infrared rays are interfered by noise. If this is the case, place that equipment at a location where its remote control sensor is not affected.

**Radio interference**
While this product meets the required specifications, it emits a small amount of noise. If you place such equipment as an AM radio, personal computer, and VCR close to this product, that equipment may be interfered. If this happens, place that equipment far enough from this product.

**Fan motor noise**
When ambient temperature of the Media Receiver becomes high, the rotation speed of the cooling fan motor increases. This may make you feel that the fan motor is noisy at such an occasion. The fan motor keeps running until the power cord of the Media Receiver is removed from a wall outlet.

**Do not attach such items as labels and tape to the product.**
- This may result in the discoloration or scratch of the cabinet.

**When not using the product for a long period of time**
- If you do not use the product for a long period of time, the functions of the product may be adversely affected. Switch on and run the product occasionally.

**Condensation**
- Condensation may take place on the surface or inside of the product when the product is rapidly moved from a cold place to a warm place or just after a heater is switched on in winter morning, for example. When condensation takes place, do not switch on the product and wait until condensation disappears. Using the product with condensation may result in malfunction.

**Cleaning the screen**
- When cleaning the screen of this product, gently wipe it with a soft dry cloth; the supplied cleaning cloth or other similar cloths (e.g., cotton and flannel). If you use a hard cloth or rub the screen hard, the surface of the screen will be scratched.
- If you clean the surface of the screen with a wet cloth, water droplets on the surface may enter into the product, resulting in malfunction.

**Cleaning the cabinet**
- When cleaning the cabinet of this product, gently wipe it with a soft dry cloth; the supplied cleaning cloth or other similar cloths (e.g., cotton and flannel). If you use a hard cloth or rub the cabinet hard, the surface of the cabinet will be scratched.
- The cabinet of this product is mostly composed of plastic. Do not use chemicals such as benzine or thinner to clean the cabinet. Using these chemicals may result in quality deterioration or coating removal.
- Do not expose the product to volatile gas or fluid such as pesticide. Do not make the product contact with rubber or vinyl products for a long period of time. The effect of plasticizer in the plastic may result in quality deterioration or coating removal.
- If you clean the surface of the cabinet with a wet cloth, water droplets on the surface may enter into the product, resulting in malfunction.

**Handles at the rear of the Plasma Display**
- Do not remove the handles from the rear of the Plasma Display.
- When moving the Plasma Display, ask another person for help and use the handles attached to the rear of the Plasma Display. Do not move the Plasma Display by holding only a single handle. Use the handles as shown.
- Do not use the handles to hang the product when installing or carrying the product, for example. Do not use the handles for the purpose of preventing the product from tilting over.
Supplied Accessories

Plasma Display

- Power cord (2 m/6.6 feet)
- Cleaning cloth
- Speed clamp x 3
- Bead band x 3
- Warranty card

Media Receiver

- Power cord (2 m/6.6 feet)
- Remote control unit
- System cable (3 m/9.8 feet)
- AA size battery x 2 (Alkaline battery)
- Stand
- Screw x 4 (for stand)
- Screw hole cap x 4
- VCR controller (1.8 m/5.9 feet)
- Operating Instructions
- Instruction guide

**NOTE**
- Always use the power cord supplied with the Plasma Display and the one supplied with the Media Receiver for each respective unit.
**05 Part Names**

### Plasma Display

**Front view**

1. \( \bigcirc \) button
2. STANDBY indicator
   - Lights red when the unit is standby mode. (page 24)
3. POWER ON indicator
   - Lights green when the Plasma Display is operating. (page 24)
4. Remote control sensor
5. STANDBY/ON button
6. INPUT button
7. VOLUME +/– buttons
8. CHANNEL +/– buttons

**Rear view**

9. SYSTEM CABLE terminal (BLACK)
10. SYSTEM CABLE terminal (WHITE)
11. SPEAKER (right/left) terminals
12. AC INLET terminal

The terminals have faced downward.

### Media Receiver

**Front view**

1. POWER button
2. POWER ON indicator
3. STANDBY indicator
4. REC TIMER indicator
5. DATA ACQUISITION indicator
6. INPUT 4 terminals
   - (COMPONENT VIDEO: Y, \( C_b/P_b \), \( C_r/P_r \))
7. INPUT 4 terminal (S-VIDEO)
8. INPUT 4 terminal (VIDEO)
9. INPUT 4 terminals (AUDIO)
10. PC INPUT terminal (AUDIO)
11. PC INPUT terminal (ANALOG RGB)

Pull this section to open the door.
Part Names

Rear view

1. CONTROL IN terminal
2. CONTROL OUT terminal
3. VCR CONTROL terminal
4. ANTENNA B IN terminal
5. ANTENNA/CABLE A IN terminal
6. INPUT 2 terminal (VIDEO)
7. INPUT 2 terminals (AUDIO)
8. i.LINK terminals
9. Cable CARD slot
10. INPUT 1 terminals (AUDIO)
11. DIGITAL OUT terminal (OPTICAL)
12. INPUT 1 terminals (COMPONENT VIDEO: Y, Cb/Pb, Cr/Pr)
13. AC IN terminal
14. RS-232C terminal (used for factory setup)
15. ANTENNA B OUT terminal
16. INPUT 2 terminal (S-VIDEO)
17. MONITOR OUT terminal (S-VIDEO)
18. MONITOR OUT terminal (VIDEO)
19. MONITOR OUT terminals (AUDIO)
20. INPUT 1 terminal (VIDEO)
21. INPUT 1 terminal (S-VIDEO)
22. INPUT 3 terminals (AUDIO)
23. INPUT 3 terminals (COMPONENT VIDEO: Y, Cb/Pb, Cr/Pr)
24. HDMI terminals (INPUT1/INPUT3)
25. SYSTEM CABLE terminal (WHITE)
26. SYSTEM CABLE terminal (BLACK)
Remote control unit

With the mode switch set to TV

1 **TV**: Turns on the power to the Plasma Display or places it into standby mode.
2 Transmission confirmation LED
3 **INPUT**: Selects an input source of the Plasma Display. (INPUT 1, INPUT 2, INPUT 3, INPUT 4, PC, i.LINK)
4 **(dot)**: Enters a dot.
5 **CH RETURN**: Returns to the previous channel.
6 **CH +/-**: Selects the channel.
7 **RETURN**: Returns to the previous menu screen.
8 **+/−/↑/↓**: Selects a desired item on the menu screen.
9 **DTV INFO**: Shows more information on DTV programs.
10 **SPLIT**: Switches the screen mode among 2-screen, picture-in-picture, and single-screen.
11 **FREEZE**: Freezes a frame from a moving image. Press again to cancel the function.
12 **SWAP**: Switches between the two screens when in the 2-screen or picture-in-picture mode.
13 **SHIFT**: Moves the location of the small screen when in the picture-in-picture mode.
14 When pressed, all buttons on the remote control unit will light. The lighting will turn off if no operations are performed within about 5 seconds. This button is used for performing operations in dark places.
15 **ANT**: Selects the antenna (A, B). See pages 21 and 22 for details.
16 **MTS**: Selects the MTS/SAP.
17 **0 – 9**: Selects the channel.
18 **CH ENTER**: Executes a channel number.
19 **VOL +/-**: Sets the volume.
20 **MUTING**: Mutes the sound.
21 **HOME MENU**: Displays the menu screen.
22 **ENTER**: Executes a command.
23 **FAVORITE CH (A, B, C, D)**: Selects any of the four preset channels. See page 37 for details to set the FAVORITE CH. While watching, you can toggle the set channels by pressing A, B, C and D.
24 **SCREEN SIZE**: Selects the screen size.
25 **DISPLAY**: Displays the channel information.
26 **AV SELECTION**: Selects audio and video settings. (AV mode: STANDARD, DYNAMIC, MOVIE, GAME, USER. PC mode: STANDARD, USER.)
27 **SLEEP**: Sets the sleep timer.

**NOTE**
- When using the remote control unit, point it at the Plasma Display.
- See pages 62 to 68 for operating buttons not listed on this page.
Installing the Plasma Display

Locating
- Avoid direct sunlight. Maintain adequate ventilation.
- The length of the system cable used to connect the Plasma Display and the Media Receiver is about 3 m (9.8 feet).
- Because the Plasma Display is heavy, be sure to have someone help you when moving it.

**CAUTION**
- If you place anything on the top of the Media Receiver it will not receive enough ventilation and will not operate properly.

**NOTE**
- Allow enough space around the upper and back parts when installing to ensure ventilation around the backside.

Using the optional PIONEER stand
For details on installation, refer to the instruction manual supplied with the stand.

**CAUTION**
- This product may be used only with model PDK-1012 stand. Use with other stands may result in instability causing possible injury.

Using the optional PIONEER speakers
For details on installation, refer to the instruction manual supplied with the speaker.

**CAUTION**

Operating Environment
Operating environment temperature and humidity: +0°C to +40°C (+32°F to +104°F); less than 85% RH (cooling vents not blocked).
Avoid installing at the following locations:
- Under direct exposure to sunlight
- Under strong artificial light
- In high humidity
- Poorly ventilated
Installing the Media Receiver

Plasma Display

<table>
<thead>
<tr>
<th>Media Receiver (vertical installation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(horizontal installation)</td>
</tr>
</tbody>
</table>

System cable (approx. 3 m/9.8 feet)

⚠️ CAUTION
- Do not place a VCR or any other device on the top of the Media Receiver.
- When installing, allow enough space on the sides and above the Media Receiver.
- Do not block the side cooling vents or the rear ventilation fan opening of the Media Receiver.

1. Insert the stand into the side of the Media Receiver.

![Inserting the stand](image)

2. Secure the stand with the supplied screws.

![Securing the stand](image)

Installing the Media Receiver vertically

You can use the supplied stand to install the Media Receiver vertically.

Over 10 cm (3 15/16 inches)

Over 5 cm (2 inches)

Over 5 cm (2 inches)

Over 10 cm (3 15/16 inches)
3. **Remove the shock absorbing pads.**

![Shock absorbing pad]

Keep the shock absorbing pads and screws. They are required when you place the Media Receiver in the horizontal position.

4. **Plug the screw holes using the supplied caps.**

![Remove the separation sheet.]

**CAUTION**

- When you have installed the Media Receiver vertically, be sure to use the supplied stand. If you place the unit directly on the floor, the cooling vents will be blocked, resulting in mechanical failure.
Connecting the system cable

Connecting the system cable to the Plasma Display

Plasma Display (rear view)

For details on optional PIONEER speaker installation, refer to the instruction manual that came with the speaker.

System cable

Connecting the system cable to the Media Receiver

Media Receiver (rear view)

⚠️ CAUTION

- THESE SPEAKER TERMINALS CAN BE APPLIED WITH HAZARDOUS VOLTAGE WHEN YOU CONNECT OR DISCONNECT THE SPEAKER CABLES. TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT TOUCH UNINSULATED PARTS BEFORE DISCONNECTING THE POWER CORD.
Routing cables
Speed clamps and bead bands are supplied for bunching cables. Once properly bunched, follow the steps below to route the cables.

When the speakers are installed on the sides

(overview diagram showing cable routing)

*Cable binder
Using the cable binders supplied with the stand, put the speaker and system cables together so that the cables are invisible from the front. At that time be careful not to apply any force to the connection sections of the cables.

Attaching speed clamps to the main unit
Attach the speed clamps using the 4 holes marked with ▲ below, depending on your routing system.

Attaching and removing speed clamps
Insert [1] into an appropriate hole on the rear of the Plasma Display and snap [2] into the back of [1] to lock the clamp. Speed clamps are designed to be difficult to undo once in place. Please attach them carefully. Use pliers to twist the clamp 90°, pulling outward. The clamp may deteriorate over time and become damaged if removed.
Preparing the remote control unit

Inserting batteries
1. Open the battery cover.

2. Insert the supplied two AA size batteries.

3. Close the battery cover.

• The battery polarities must correspond with the (+) and (–) indicators in the battery compartment.

Cautions regarding batteries
• The remote control unit cannot operate the system if the batteries in the unit are empty. When this happens, replace the batteries with new ones.
• Do not use manganese batteries. When you replace the batteries, use alkaline ones.
• Do not mix batteries of different types. Different types of batteries have different characteristics.
• Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries or cause chemical leakage in old batteries.
• Do not leave dead batteries in the remote control unit; chemical leakage will occur. If you find any chemical leakage, wipe thoroughly with a cloth.
• The batteries supplied with this product may have a shorter life expectancy due to storage conditions.
• If you will not use the remote control unit for an extended period of time, remove the batteries from it.

CAUTION
• WHEN DISPOSING OF USED BATTERIES, BE SURE TO COMPLY WITH GOVERNMENT REGULATIONS AND ENVIRONMENTAL PROTECTION GUIDELINES THAT APPLY IN YOUR COUNTRY OR AREA.

Allowed operation range of the remote control unit
Operate the remote control unit while pointing it toward the remote control sensor located at the bottom right of the front panel of the Plasma Display. The distance from the remote control sensor must be within 7 m (23 feet) and the angle relative to the sensor must be within 30 degrees in the right or left direction.

Cautions regarding the remote control unit
• Do not expose the remote control unit to shock, liquid, or high humidity.
• Do not place the remote control unit under direct sunlight; the unit may deform.
• The remote control unit may not work properly if the remote sensor window of the Plasma Display is under direct sunlight or strong lighting. In such case, change the angle of the lighting or Plasma Display, or operate the remote control unit closer to the remote sensor window.
• When any obstacle exists between the remote control unit and the remote control sensor, the remote control unit may not function.
• As the batteries become empty, the remote control unit can function within a shorter distance from the remote control sensor. Replace the batteries with new ones if necessary.
• The Plasma Display emits very weak infrared rays from its screen. If you place such equipment operated through infrared remote control as a VCR nearby, that equipment may not receive commands from its remote control unit properly or entirely. If this is the case, place that equipment at a location far enough from the Plasma Display.
• Depending on the installation environment, infrared rays from the Plasma Display may not allow this system to properly receive commands from the remote control unit or may shorten allowable distances between the remote control unit and the remote control sensor. The strength of infrared rays emitted from the screen differs, depending on images displayed on the screen.
Cable connections for watching digital and/or conventional TV channels

This system is equipped with two terminals for inputting TV broadcasting signals: ANTENNA/CABLE A IN and ANTENNA B. The ANTENNA/CABLE A IN terminal accepts both digital and conventional TV broadcasting signals while the ANTENNA B terminal accepts only conventional TV broadcasting signals. When using a cable TV to watch digital and/or conventional TV channels, connect to the ANTENNA/CABLE A IN terminal as shown. In addition, you may connect an antenna to the ANTENNA B terminal as shown; use an outdoor antenna to enjoy clearer pictures. If your outdoor uses a 75-ohm coaxial cable with an F-type connector, plug it into the antenna terminal at the rear of the Media Receiver.

Connecting VHF/UHF antennas and a Cable Converter

Cable connections for watching digital TV channels over air (VHF/UHF)

If using VHF and UHF antennas to watch digital TV channels, connect the coaxial cables as shown.

Connecting VHF/UHF antennas

NOTE

- Be sure to connect coaxial cables as shown above. Signal reception may fail if not properly connected.
Switching between antenna A and B

To watch broadcasts via the two antennas, you can select it by pressing **ANT** on the remote control unit.

- While watching a broadcast, press **ANT** to view the image received from the other antenna.
- Pressing **ANT** while watching in the 2-screen mode (TV image and video image) with TV selected will display the TV image of the other antenna.
- Pressing **ANT** while watching in the 2-screen mode with two TV images displayed will not have any effect.
- Pressing **ANT** while watching in the 2-screen mode with two video images displayed will switch the selected screen to a TV image.

Inserting the cable card

The Media Receiver is equipped with a slot for inserting a cable card. When you are watching digital and/or High Definition TV channels over cable, the card allows you to use the POD service provided by the cable TV company; the POD stands for Point of Deployment. This service presents various types of useful information, using HTML text.

1. Confirm that the ANTENNA/CABLE A IN terminal has been connected with the coaxial cable from the Cable Converter. See page 21.
2. Hold the tab of the slot cover on the rear of the Media Receiver, and remove the cover while releasing the tab’s latch.
3. Insert the specified cable card into the Cable CARD slot as far as it goes.

**NOTE**

- Be sure to insert only the specified cable card.
- Do not insert a PCMCIA card.
Connecting the power cord

Connect the power cord after all component connections have been completed.

**CAUTION**

- Use only the supplied power cord.
- Be sure to use the specified power supply voltage; neglecting this can result in fire or electric shock.
- For the Plasma Display System, a three-core power cord with a ground terminal is used for efficiency protection. Always connect the power cord to a three-pronged outlet and make sure that the cord is properly grounded.

**NOTE**

- Always turn off the power of the Plasma Display and Media Receiver when connecting the power cords.
- Disconnect the power cord from the power outlet when the Plasma Display System is not going to be used for a long period of time.
**Basic Operations**

### Turning on the power (Standby)

1. Press on the Plasma Display if the STANDBY indicator is off.
   - The STANDBY indicator on the Plasma Display lights up red.
2. Confirm that the STANDBY indicators light up red, and then press TV on the remote control unit or STANDBY/ON on the Plasma Display or POWER on the Media Receiver to turn the system on.
   - The POWER ON indicators on the Plasma Display and Media Receiver light up green.

#### NOTE
- In this manual, “system” means the Plasma Display Panel and Media Receiver.

### Turning off the power (Standby)

1. Press TV on the remote control unit or STANDBY/ON on the Plasma Display or POWER on the Media Receiver.
   - The system enters the standby mode and the image on the screen disappears.
   - Both STANDBY indicators light up red.
   - It is recommended to place the system into the standby mode by pressing TV on the remote control unit. This allows the system to automatically receive digital TV program information in the standby mode.

#### NOTE
- If you are not going to use this system for a long period of time, press on the Plasma Display and remove the power cord from the power outlet.

### Plasma Display/Media Receiver status indicators

<table>
<thead>
<tr>
<th>Indicator Status</th>
<th>System Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER ON</td>
<td>Power to the Plasma Display and Media Receiver is off. Or the power cords have been disconnected.</td>
</tr>
<tr>
<td>STANDBY</td>
<td>Power to the system is on.</td>
</tr>
<tr>
<td>Media Receiver POWER ON</td>
<td>The system is in the standby mode.</td>
</tr>
<tr>
<td>STANDBY</td>
<td>The power cord has been disconnected from the Media Receiver.</td>
</tr>
<tr>
<td>Flashing</td>
<td>Power to the Plasma Display is off. Or the power cord has been disconnected from the Plasma Display.</td>
</tr>
</tbody>
</table>

For other than the above, see “Troubleshooting” on page 69.
Watching TV channels

Unless you set up TV channels that you can watch under the current conditions, you cannot tune in those channels. For the procedure, see “Setting up TV channels” on page 31.

NOTE
- When watching a digital TV program, you may see emergency alert messages scrolling at the top of the screen. Those messages are broadcasted by TV stations as necessary when in emergency situations.

Selecting the antenna

After confirming that the Mode switch on the remote control unit has been set to “TV”, press ANT on the remote control unit to select antenna A or B.
- Make this selection depending on the connections to the antenna input terminals on the Media Receiver (page 21).

Changing channels

To increase the channel number, press CH + on the remote control unit. To decrease the channel number, press CH –.
- CHANNEL +/- on the Plasma Display operates the same as CH +/- on the remote control unit.
- Press CH RETURN to switch the currently tuned channel to the previously tuned channel.
- Press CH RETURN again to restore the currently tuned channel.

Using 0 – 9 and • (dot) on the remote control unit

Select channels directly by pressing buttons 0 to 9. To select subchannels, also use the • (dot) button.

EXAMPLE
- To select channel 5 (1-digit channel), press 5.
- To select channel 25 (2-digit channel), press 2 then 5.
- To select channel 125 (3-digit channel), press 1, 2, then 5.
- To select subchannel 10.01, press 1, 0, • (dot), 0, then 1.
- To select subchannel 10.001 (for the cable TV), press 1, 0, • (dot), 0, 0, then 1.

NOTE
- After entering a channel or subchannel number, you may press CH ENTER to tune in the channel more quickly.
- Each time you change a channel, such a channel banner appears that shows information about the currently selected channel. To clear the channel banner, press DTV INFO. For more information about the channel banner, see “Viewing a channel banner” on page 26.
Changing the volume and sound
To increase the volume, press VOL + on the remote control unit. To decrease the volume, press VOL –.
• VOLUME +/– on the Plasma Display operates the same as VOL +/– on the remote control unit.
• To mute the sound output, press MUTING. “XML” appears on the screen. To quit muting, press MUTING again. Pressing VOL + also quits muting.

Viewing a channel banner
While watching a digital TV program, pressing DTV INFO causes the following banner to appear. Pressing DTV INFO again causes the banner to disappear.

Plasma Display

Volume adjustment

Muting

NOTE
• The above information is not displayed if not included in broadcast signals.
• If “XML” is shown at the bottom right of the channel banner containing program description, press ▼ to scroll the program description.
Basic Operations

Using the POD service
If you have watched digital and/or High Definition TV channels over cable, you can use the POD service provided by the cable TV company. This service presents various types of useful information, using HTML text.

Press HOME MENU, 9, 9, then 9 to view the POD display.

NOTE
• If you have enabled data acquisition using the menu, POD information is automatically acquired even when the system is in the standby mode. See page 32.

Changing the language
If you have selected a digital TV program that provides multi-language services, you can switch among the languages by pressing MTS on the remote control unit.

Each time you press MTS, the language switches.

NOTE
• Switchable languages differ depending on the current broadcast.
• If the language selected through language setting is available when the channel or program is changed, you will hear that language.

Setting MTS/SAP mode
When watching conventional TV programs, you may enjoy stereo sound and/or Secondary Audio Programs (SAP), using the Multi-channel Television Sound (MTS) function.

• Stereo broadcasts
You can enjoy, for example, sports, shows, and concerts in dynamic stereo sound.

• SAP broadcasts
MAIN sound: The normal program soundtrack (either in mono or stereo).
SAP sound: Listen to second language, supplementary commentary and other information. (SAP is mono sound.)

NOTE
• Conventional TV channels in this manual designate TV channels that are received through the conventional VHF/UHF frequencies or conventional cable TV channels.
• When stereo sound is difficult to hear, you may manually switch to the MONO mode to obtain clearer sound.
• Once the MONO mode is selected, the Plasma Display System sound remains mono even if the system receives a stereo broadcast. You must reselect the STEREO mode if you want to hear stereo sound again.
• Selecting MTS while the input source is INPUT 1 to 4 or PC does not change the type of sound. In this case, sound is determined by the video source.

Each time you press MTS, MTS toggles as shown below.

NOTE
• In each of the MTS/SAP modes selected using the MTS button, the display changes depending on broadcasting signals being received.
Using the multiscreen functions

Splitting the screen

Use the following procedure to select the 2-screen or picture-in-picture mode.

1  Press SPLIT to select the display mode.
   • Each time you press SPLIT, the display mode is switched among 2-screen, picture-in-picture, and single-screen.
Basic Operations

• In 2-screen or picture-in-picture mode, press SWAP to switch the position of the 2 screens shown. Left screen is the active screen which will be indicated by “✓”. The user is allowed to operate picture and sound.

• In 2-screen mode, press SCREEN SIZE to change the size of the left screen.
• In picture-in-picture mode, press SHIFT to move the position of the small screen in anti-clockwise.

2 To select the desired input source, press the appropriate input source button.
• If watching TV programs, press CH +/- to change the channel.

NOTE
• The multiscreen function cannot display images from the same input source at the same time. If you make such an attempt, a warning message appears.
• When you press HOME MENU or DTV INFO, the single-screen mode is restored and the corresponding menu is displayed.
• When the two screens show the same analog broadcasting coming through antenna A and B, the picture quality may differ between the two screens.

Freezing images
Use the following procedure to capture and freeze one frame from a moving image that you are watching.

1 Press FREEZE.
• A still image appears on the right screen while a moving image is shown on the left screen.
2 Press FREEZE again to cancel the function.

NOTE
• With the screen split, any image cannot be frozen.
• When this function is not available, a warning message appears.
Menu configuration

AV mode menus

<table>
<thead>
<tr>
<th>Home Menu</th>
<th>Item</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picture</td>
<td>AV Selection</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Contrast</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Brightness</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Color</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Tint</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Sharpness</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Pro Adjust</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Reset</td>
<td>41</td>
</tr>
<tr>
<td>Sound</td>
<td>Treble</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Bass</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Balance</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Reset</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>FOCUS</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Front Surround</td>
<td>43</td>
</tr>
<tr>
<td>Power Control</td>
<td>Energy Save</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>No Signal off</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>No Operation off</td>
<td>44</td>
</tr>
<tr>
<td>Sleep Timer</td>
<td>—</td>
<td>40</td>
</tr>
<tr>
<td>Option</td>
<td>Position</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Side Mask</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>HDMI Input</td>
<td>51, 52</td>
</tr>
<tr>
<td></td>
<td>Monitor Out</td>
<td>52, 53</td>
</tr>
<tr>
<td></td>
<td>Digital Audio Out</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Language</td>
<td>47</td>
</tr>
<tr>
<td>Tuner Setup</td>
<td>Channel Setup</td>
<td>31, 32</td>
</tr>
<tr>
<td></td>
<td>Parental Control</td>
<td>33–37</td>
</tr>
<tr>
<td></td>
<td>Favorites</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Closed Captions</td>
<td>37–39</td>
</tr>
<tr>
<td></td>
<td>Recorder Setup</td>
<td>56–57</td>
</tr>
<tr>
<td></td>
<td>Clock</td>
<td>39</td>
</tr>
<tr>
<td>Timers</td>
<td>—</td>
<td>48, 49</td>
</tr>
</tbody>
</table>

PC mode menus

<table>
<thead>
<tr>
<th>Home Menu</th>
<th>Item</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picture</td>
<td>AV Selection</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Contrast</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Brightness</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Red</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Green</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Blue</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Reset</td>
<td>41</td>
</tr>
<tr>
<td>Sound</td>
<td>Treble</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Bass</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Balance</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Reset</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>FOCUS</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Front Surround</td>
<td>43</td>
</tr>
<tr>
<td>Power Control</td>
<td>Energy Save</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Power Management</td>
<td>44</td>
</tr>
<tr>
<td>Sleep Timer</td>
<td>—</td>
<td>40</td>
</tr>
<tr>
<td>Option</td>
<td>Auto Setup</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Manual Setup</td>
<td>45</td>
</tr>
</tbody>
</table>

Menu operations

The following describes the typical procedure for setting up the menus. For the actual procedures, see the appropriate pages that describe individual functions.

1. Press HOME MENU.
2. Press ↑/↓ to select a menu item, and then press ENTER.
3. Repeat step 2 until you access the desired submenu item.
   • The number of menu layers differs depending on menu items.
   • If you select “Tuner Setup” or “Timers”, a menu bar appears at the bottom of the screen. To select a submenu item on the bar, press ←/→ instead of ↑/↓.
4. Press ←/→ to select an option (or parameter), and then press ENTER.
   • For some menu items, press ↑/↓ instead of ←/→.
5. Press HOME MENU to exit the menu.

NOTE

• You can return to the upper menu levels by pressing RETURN.
Setting up TV channels
This section describes how to search and set up TV channels that you can watch under the current conditions. Unless you set up TV channels using Auto Channel Preset, you may not be able to tune in those channels.

Using Auto Channel Preset
Auto Channel Preset automatically searches and sets up TV channels.

1. Press HOME MENU.
2. Select “Tuner Setup”. (↑/↓ then ENTER)
3. Select “Channel Setup”. (←/→ then ENTER)
4. Select “Ant. A” or “Ant. B”. (↑/↓ then ENTER)
5. Select “Auto Channel Preset”. (←/→ then ENTER)
6. Select “Air” or “Cable”. (←/→ then ENTER)

- Channel search automatically starts.

7. After Auto Channel Preset has been finished, press HOME MENU to exit the menu.

NOTE
- When using the Cable Converter, you may need to manually add Cable Converter output channels.

Setting for skipping unwanted channels
From among TV channels searched and set up using Auto Channel Preset, you can select channels to be skipped when CH +/- are operated.

1. Press HOME MENU.
2. Select “Tuner Setup”. (↑/↓ then ENTER)
3. Select “Channel Setup”. (←/→ then ENTER)
4. Select “Ant. A” or “Ant. B”. (↑/↓ then ENTER)
5. Select “Channel Keep/Skip”. (←/→ then ENTER)
6. Select a channel to be skipped. (↑/↓ then ENTER)

- For the skipped channel, a check mark disappears.

7. Press HOME MENU to exit the menu.

NOTE
- To restore skipped channels, use the above procedure except that you select a skipped channel in step 6.
- When using the Cable Converter, you may need to manually add Cable Converter output channels.

Setting up TV channels manually
This section describes how to manually set up TV channels that have not been set up by Auto Channel Preset.

1. Press HOME MENU.
2. Select “Tuner Setup”. (↑/↓ then ENTER)
3. Select “Channel Setup”. (←/→ then ENTER)
4. Select “Ant. A” or “Ant. B”. (↑/↓ then ENTER)
5. Select “Add Channel”. (←/→ then ENTER)
6. Select a channel number to be added. (↑/↓ then ENTER)

- You can also use buttons 0 – 9 to enter a channel number.

- After ENTER has been pressed, a confirmation screen appears.

7. Press A to complete the setup processing.
8. Press HOME MENU to exit the menu.
Naming TV channels
You can name TV channels that you have set up for antenna B. This may help you easily identify the channels during selections.

1 Press HOME MENU.
2 Select “Tuner Setup”. (↑/↓ then ENTER)
3 Select “Channel Setup”. (←/→ then ENTER)
4 Select “Ant. B”. (↑/↓ then ENTER)
5 Select “Name Channel”. (↑/↓ then ENTER)
6 Select a channel. (↑/↓ then ENTER)
   • You can also use buttons 0 – 9 to enter a channel number.

7 Enter up to 7 alphanumeric characters using ↑/↓, →/←, and ENTER.
   • To clear the last character, press B.

8 Press A.
9 Press HOME MENU to exit the menu.

Checking signal strength
When you have selected antenna A, you can check the current channel’s signal strength. You may use this function when receiving a channel through a VHF/UHF antenna.

1 Press HOME MENU.
2 Select “Tuner Setup”. (↑/↓ then ENTER)
3 Select “Channel Setup”. (←/→ then ENTER)
4 Select “Ant. A”. (↑/↓ then ENTER)
5 Select “Signal Strength”. (↑/↓ then ENTER)

   • Adjust the direction of the antenna so that the current signal strength reaches as close to the maximum signal strength as possible.
6 Press HOME MENU to exit the menu.

Checking the Cable Card ID
The Media Receiver has a slot for a cable card that is used for managing your information by the cable TV company. The following procedure allows you to check your Cable Card ID and the Host ID.

1 Press HOME MENU.
2 Select “Tuner Setup”. (↑/↓ then ENTER)
3 Select “Channel Setup”. (←/→ then ENTER)
4 Select “POD ID”. (←/→)
   • The Host ID and Cable Card ID appear.
5 Press HOME MENU to exit the menu.

Enabling data acquisition
Use this function to enable the system to automatically acquire information about digital TV programs even when in the standby mode.

1 Press HOME MENU.
2 Select “Tuner Setup”. (↑/↓ then ENTER)
3 Select “Channel Setup”. (←/→ then ENTER)
4 Select “Data Acqu”. (←/→ then ENTER)
5 Select “Enabled”. (←/→ then ENTER)
6 Press HOME MENU to exit the menu.

   • The DATA ACQUISITION indicator on the front of the Media Receiver lights while data is being acquired.
Parental Control
With the Parental Control, parents can prevent their children from watching inappropriate TV programs, VCR or DVD contents. When an attempt is made to watch a program (or content) blocked by parents, the Plasma Display shows nothing but a message. The Parental Control functions for both conventional and digital TV channels.

In the U.S. three rating systems have been provided: the TV ratings, TV Parental Guidelines, and movie ratings. Movie ratings are provided by the Motion Picture Association of America (MPAA) and are used for original movies not edited for television.

For the rating system in Canada, see pages 36 and 37.

Voluntary movie rating system (MPAA)

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>General audiences. All ages admitted.</td>
</tr>
<tr>
<td>PG</td>
<td>Parental guidance suggested. Some material may not be suitable for children.</td>
</tr>
<tr>
<td>PG-13</td>
<td>Parents strongly cautioned. Some material may be inappropriate for children under 13.</td>
</tr>
<tr>
<td>R</td>
<td>Restricted. Under 17 requires accompanying parent or adult guardian (age varies in some jurisdictions).</td>
</tr>
<tr>
<td>NC-17</td>
<td>No one 17 and under admitted.</td>
</tr>
<tr>
<td>Adult</td>
<td>A rating that has now been superseded by NC-17.</td>
</tr>
<tr>
<td>NR</td>
<td>Not rated.</td>
</tr>
</tbody>
</table>

TV Parental Guidelines

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
<th>FV</th>
<th>V</th>
<th>S</th>
<th>L</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV-Y</td>
<td>(All children)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV-7</td>
<td>(Directed to older children)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV-G</td>
<td>(General audience)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV-PG</td>
<td>(Parental guidance suggested)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>TV-14</td>
<td>(Parents strongly cautioned)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>TV-MA</td>
<td>(Mature audience only)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

X: Content rating can be set.

Changing the password
Using a password prevents other persons from changing Parental Control settings. A default password (1234) has been set before shipment. Use the following procedure to change the password.

1. Press HOME MENU.
2. Select “Tuner Setup”. (↑/↓ then ENTER)
3. Select “Parental Control”. (←/→ then ENTER)
4. Select “Password”. (↑/↓ then ENTER)
5. Select “Change Password”. (↑/↓ then ENTER)
6. Enter the current 4-digit password, using buttons 0 – 9.
7. Enter a 4-digit password to be newly set, using buttons 0 – 9.
8. Enter the same password that you have entered in step 7.
    • A confirmation screen appears.
9. Press A.
10. Press HOME MENU to exit the menu.

NOTE

• Take a note of the newly set password and keep it handy.
Clearing the password
Use the following procedure to clear the password.

1. Press HOME MENU.
2. Select “Tuner Setup”. (↑/↓ then ENTER)
3. Select “Parental Control”. (←/→ then ENTER)
4. Select “Password”. (↑/↓ then ENTER)
5. Select “Clear Password”. (↑/↓ then ENTER)
6. Enter the current 4-digit password, using buttons 0 – 9. 
   • A confirmation screen appears.
7. Press A.
8. Press HOME MENU to exit the menu.

NOTE
• The above procedure will reset the password to the factory default (1234).

Activating the Parental Control
1. Press HOME MENU.
2. Select “Tuner Setup”. (↑/↓ then ENTER)
3. Select “Parental Control”. (←/→ then ENTER)
4. Select “Status”. (↑/↓ then ENTER)
5. Select “On”. (↑/↓ then ENTER)
   • The password entry screen appears. Enter your 4-digit password using buttons 0 – 9.
6. Press HOME MENU to exit the menu.

NOTE
• If you select “Off” in step 5, then select “Reset on Startup” or “Don’t Reset”. With “Reset on Startup” selected, the Parental Control is automatically activated when the power to the system is turned off and on. With “Don’t Reset” selected, the Parental Control remains off when the power to the system is off and on.

We suggest you write down your password so you don’t forget it.

If you forget the password
When the message “Enter your Password” is displayed in step 6 under “Clearing the password”, press the ENTER button on the remote control unit and hold it down for 3 seconds or longer. The password reverts to “1234”.

Setting the voluntary movie rating system (MPAA)
1. Press HOME MENU.
2. Select “Tuner Setup”. (↑/↓ then ENTER)
3. Select “Parental Control”. (←/→ then ENTER)
4. Select “MPAA Ratings”. (↑/↓ then ENTER)
5. Select the desired rating and change the setting. (↑/↓ then ENTER)
6. Press HOME MENU to exit the menu.

• The password entry screen appears. Enter your 4-digit password using buttons 0 – 9.
• Each time you press ENTER, the setting is switched.
• A lock icon appears beside the blocked rating.
• All the ratings have been unblocked before shipment.

NOTE
• Blocking a rating causes more severe ratings to be automatically blocked as well. Likewise, unblocking a rating causes less severe ratings to be automatically unblocked.
Setting the TV ratings

1. Press HOME MENU.
2. Select “Tuner Setup”. (↑/↓ then ENTER)
3. Select “Parental Control”. (←/→ then ENTER)
4. Select “TV Ratings”. (↑/↓ then ENTER)
5. Select the desired rating and change the setting. (↑/↓ then ENTER)

- The password entry screen appears. Enter your 4-digit password using buttons 0 – 9.
- Each time you press ENTER, the setting is switched.
- A lock icon appears beside the blocked rating.
- All the ratings have been unblocked before shipment.

6. Press HOME MENU to exit the menu.

**NOTE**
- Blocking a rating causes more severe ratings to be automatically blocked as well. Likewise, unblocking a rating causes less severe ratings to be automatically unblocked.

Setting the TV Parental Guidelines (TV Guidelines)

1. Press HOME MENU.
2. Select “Tuner Setup”. (↑/↓ then ENTER)
3. Select “Parental Control”. (←/→ then ENTER)
4. Select “TV Parental Guidelines”. (↑/↓ then ENTER)
5. Select the desired rating and change the setting. (↑/↓ then ENTER)

- The password entry screen appears. Enter your 4-digit password using buttons 0 – 9.
- Each time you press ENTER, the setting is switched.
- A lock icon appears beside the blocked rating.
- All the ratings have been unblocked before shipment.

6. Press HOME MENU to exit the menu.

**NOTE**
- Blocking a rating causes more severe ratings to be automatically blocked as well. Likewise, unblocking a rating causes less severe ratings to be automatically unblocked.

Blocking Not Rated TV programs

Use the following procedure to block TV programs whose rating information is unavailable.

1. Press HOME MENU.
2. Select “Tuner Setup”. (↑/↓ then ENTER)
3. Select “Parental Control”. (←/→ then ENTER)
4. Select “Unavailable Ratings”. (↑/↓ then ENTER)
5. Select “Block” or “Don’t Block”. (↑/↓ then ENTER)

- The password entry screen appears. Enter your 4-digit password using buttons 0 – 9.
- The factory default is “Don’t Block”.

6. Press HOME MENU to exit the menu.
### Canadian rating systems
In Canada you can choose the Canadian English ratings or the Canadian French ratings. These ratings are based on the Canadian Radio-Television and Telecommunications Commission (CRTC) policy.

#### Canadian English ratings
<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>Exempt: Includes news, sports, documentaries and other information programming; talk shows, music videos, and variety programming.</td>
</tr>
<tr>
<td>C</td>
<td>Children: Intended for younger children under the age of 8 years. Pays careful attention to themes that could threaten their sense of security and well-being.</td>
</tr>
<tr>
<td>C8+</td>
<td>Children over 8 years old: Contains no portrayal of violence as the preferred, acceptable, or only way to resolve conflict; nor encourage children to imitate dangerous acts which they may see on the screen.</td>
</tr>
<tr>
<td>G</td>
<td>General: Considered acceptable for all age groups. Appropriate viewing for the entire family, contains very little violence, physical, verbal or emotional.</td>
</tr>
</tbody>
</table>

#### Canadian French ratings
<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>Exempt programming.</td>
</tr>
<tr>
<td>G</td>
<td>General: All ages and children, contains minimal direct violence, but may be integrated into the plot in a humorous or unrealistic manner.</td>
</tr>
<tr>
<td>8ans+</td>
<td>General but inadvisable for young children: May be viewed by a wide public audience, but could contain scenes disturbing to children under eight who cannot distinguish between imaginary and real situations. Recommended for viewing with parent.</td>
</tr>
</tbody>
</table>

#### Setting Canadian English ratings
1. Press **HOME MENU**.
2. Select “Tuner Setup”. (↑/↓ then ENTER)
3. Select “Parental Control”. (←/→ then ENTER)
4. Select “Canadian English Ratings”. (↑/↓ then ENTER)
5. Select the desired rating and change the setting. (↑/↓ then ENTER)
6. Press **HOME MENU** to exit the menu.

- The password entry screen appears. Enter your 4-digit password using buttons **0 – 9**.
- Each time you press **ENTER**, the setting is switched.
- A lock icon appears beside the blocked rating.
- All the ratings have been unblocked before shipment.
**Setting Canadian French ratings**

1. Press **HOME MENU**.
2. Select “Tuner Setup”. (✓/✓ then ENTER)
3. Select “Parental Control”. (✓/✓ then ENTER)
4. Select “Canadian French Ratings”. (✓/✓ then ENTER)
5. Select the desired rating and change the setting. (✓/✓ then ENTER)

- The password entry screen appears. Enter your 4-digit password using buttons 0 – 9.
- Each time you press ENTER, the setting is switched.
- A lock icon appears beside the blocked rating.
- All the ratings have been unblocked before shipment.

6. Press **HOME MENU** to exit the menu.

**Temporarily deactivating the Parental Control**

When the Parental Control is working and censors a blocked TV program (or content), the Plasma Display shows nothing but a message.

The method for temporarily deactivating the Parental Control differs, depending on the currently selected input source.

**Antenna A, antenna B, or i.LINK:**

Press ENTER and then enter your 4-digit password.

- The password entry screen stays only for one minute. After the screen disappears, pressing ENTER causes it to appear again.

**Input 1 – 4:**

Enter your 4-digit password. You need not press ENTER first, pressing ENTER causes the password entry screen to disappear.

- The above password entry screen will also be shown during 2-screen mode, picture-in-picture, and while freezing an image.
- The password entry screen stays only for one minute. After the screen disappears, pressing ENTER causes it to appear again.

**Setting your favorite channels**

Set up to 10 TV channels to each of the four color buttons on the remote control unit (40 channels in total). You can then quickly select from only your favorite channels.

1. Press **HOME MENU**.
2. Select “Tuner Setup”. (✓/✓ then ENTER)
3. Select “Favorites”. (✓/✓ then ENTER)
4. Select a color button (A, B, C, D). (✓/✓ then ENTER)
5. Select a TV channel to be registered. (✓/✓ then ENTER)

- A star appears beside the favorite channels currently selected.
- To register another TV channel under the same color button, repeat step 5. To register another TV channel under a different color button, repeat steps 4 and 5.

6. Press **HOME MENU** to exit the menu.

**Setting up closed captions**

Your Plasma Display System is equipped with an internal closed caption decoder. Closed caption allows you to view conversations, narration, and sound effects in TV programs and home videos as subtitles on your Plasma Display screen.

You may enjoy digital closed captions when watching digital TV programs. Digital closed captions allow you to change parameters such as fonts and colors.

- Not all programs and videos offer closed caption. Please look for the “[CC]” symbol to ensure that captions will be shown.

- A star appears beside the favorite channels currently selected.
- To register another TV channel under the same color button, repeat step 5. To register another TV channel under a different color button, repeat steps 4 and 5.

6. Press **HOME MENU** to exit the menu.
Activating the closed caption

1 Press HOME MENU.
2 Select “Tuner Setup”. (↑/↓ then ENTER)
3 Select “Closed Captions”. (←/→ then ENTER)
4 Select “Status”. (↑/↓ then ENTER)
5 Select “On” or “On If Mute”. (↑/↓ then ENTER)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Does not show closed captions. (factory default)</td>
</tr>
<tr>
<td>On</td>
<td>Always shows closed captions.</td>
</tr>
<tr>
<td>On If Mute</td>
<td>Shows closed captions only while sound is being muted.</td>
</tr>
</tbody>
</table>

6 Press HOME MENU to exit the menu.

NOTE
• For MONITOR OUT, only conventional closed caption signals are output; digital closed caption signals are not output.

Selecting the type of conventional closed captions

Select the type of conventional closed captions that you will watch after tuning to a conventional TV channel. This selection also becomes effective when a selected digital TV program provides only conventional closed captions.
• “CC1”, “CC2”, “CC3”, or “CC4” displays subtitles of TV dramas and news programs while allowing a full view of the picture.
• “Text1”, “Text2”, “Text3”, or “Text4” superimposes on the picture other information (e.g. TV guide, weather) that is independent of the TV in progress.

1 Press HOME MENU.
2 Select “Tuner Setup”. (↑/↓ then ENTER)
3 Select “Closed Captions”. (←/→ then ENTER)
4 Select “Analog Settings”. (↑/↓ then ENTER)
5 Select the desired closed caption. (↑/↓ then ENTER)

<table>
<thead>
<tr>
<th>Analog Settings</th>
<th>CC1</th>
<th>CC2</th>
<th>CC3</th>
<th>CC4</th>
<th>Text1</th>
<th>Text2</th>
<th>Text3</th>
<th>Text4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>On</td>
<td>On</td>
<td>Off</td>
<td>Off</td>
<td>On If Mute</td>
<td>On If Mute</td>
<td>On If Mute</td>
<td>On If Mute</td>
</tr>
</tbody>
</table>

* The factory default is “CC1”.
6 Press HOME MENU to exit the menu.

Selecting digital closed captions

Use the following procedure to select digital closed captions.

1 Press HOME MENU.
2 Select “Tuner Setup”. (↑/↓ then ENTER)
3 Select “Closed Captions”. (↑/↓ then ENTER)
4 Select “Digital Settings”. (↑/↓ then ENTER)
5 Select “Digital Service”. (↑/↓ then ENTER)
6 Select the desired closed caption. (↑/↓ then ENTER)

<table>
<thead>
<tr>
<th>Digital Settings</th>
<th>Service 1</th>
<th>Service 2</th>
<th>Service 3</th>
<th>Service 4</th>
<th>Service 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>Service 1</td>
<td>Service 2</td>
<td>Service 3</td>
<td>Service 4</td>
<td>Service 5</td>
</tr>
</tbody>
</table>

* The factory default is “Service 1”.
7 Press HOME MENU to exit the menu.

NOTE
• The Primary Caption Service is usually offered for Service 1, and the Secondary Language Service is usually offered for Service 2 if these services are available.

Selecting digital closed caption parameters

Use the following procedure to change such parameters of digital closed captions as font size, font type, foreground and background colors.

1 Press HOME MENU.
2 Select “Tuner Setup”. (↑/↓ then ENTER)
3 Select “Closed Captions”. (↑/↓ then ENTER)
4 Select “Digital Settings”. (↑/↓ then ENTER)
5 Select “Font Size”, “Font”, or any other item. (↑/↓ then ENTER)
6 Select the desired parameter. (↑/↓ then ENTER)

<table>
<thead>
<tr>
<th>Digital Settings</th>
<th>Font Size</th>
<th>Font</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>Standard</td>
<td>Large</td>
</tr>
</tbody>
</table>

7 Repeat steps 5 and 6 as necessary. (↑, ↑/↓)
8 Press HOME MENU to exit the menu.
The following table shows the parameters selectable for each item.

<table>
<thead>
<tr>
<th>Item Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Font Size</strong></td>
</tr>
<tr>
<td>Auto/ Large/ Standard/ Small</td>
</tr>
<tr>
<td><strong>Font</strong></td>
</tr>
<tr>
<td>Auto/ Font 1/ Font 2/ Font 3/ Font 4/ Font 5/ Font 6/ Font 7</td>
</tr>
<tr>
<td><strong>Font Color</strong></td>
</tr>
<tr>
<td>Auto/ Black/ White/ Red/ Green/ Blue/ Yellow/ Magenta/ Cyan</td>
</tr>
<tr>
<td><strong>Font Opacity</strong></td>
</tr>
<tr>
<td>Auto/ Solid/ Transparent/ Translucent/ Flashing</td>
</tr>
<tr>
<td><strong>Background Color</strong></td>
</tr>
<tr>
<td>Auto/ Black/ White/ Red/ Green/ Blue/ Yellow/ Magenta/ Cyan</td>
</tr>
<tr>
<td><strong>Background Opacity</strong></td>
</tr>
<tr>
<td>Auto/ Solid/ Transparent/ Translucent</td>
</tr>
</tbody>
</table>

1. Font 1 (monospaced with serifs)/ Font 2 (proportionally spaced with serifs)/ Font 3 (monospaced without serifs)/ Font 4 (proportionally spaced without serifs)/ Font 5 (casual font)/ Font 6 (cursive font)/ Font 7 (small capitals font)

With “Auto” selected, parameters specified by the provider are used; if not specified by the provider, the bolded default parameters are used. If you select parameters other than “Auto”, the selected parameters are used regardless of provider’s specifications.

**Clock Setting**

With “Auto Set” selected for Clock Setting, the system acquires and sets time information automatically. You can also manually set the correct time. If you disconnect the power cord from the power outlet or power blackout occurs, the set time is cleared.

1. Press **HOME MENU**.
2. Select “Tuner Setup”. (↑/↓ then ENTER)
3. Select “Clock”. (←/→ then ENTER)
4. Select “Time Zone”. (↑/↓ then ENTER)
5. Select a time zone for your area. (↑/↓ then ENTER)
6. Select “D.S.T.” (↑, ↑/↓, then ENTER)

7. Select “Applies” or “Does Not Apply”. (↑/↓ then ENTER)
   - Make this selection, depending on whether summer time is employed in your area.

8. Select “Auto/Manual Set”. (↑, ↑/↓, then ENTER)
9. Select “Auto Set” or “Manual Set”. (↑/↓ then ENTER)
10. If you select “Auto Set”, select an antenna (A or B) and a channel number using ↑/↓.

8. **NOTE**
   - When the time has not been set, the REC TIMER indicator on the front of the Media Receiver blinks.
   - When the time has not yet been set, you cannot view channel banner information, use auto channel select, and preset TV programs for recording.

11. Press **HOME MENU** to exit the menu.
You can use the menu to change the options.

1. Press HOME MENU.
2. Select “Picture”. (↑/↓ then ENTER)
3. Select “AV Selection”. (↑/↓ then ENTER)
4. Select the desired option. (↑/↓ then ENTER)

**AV Selection**

Select from the five viewing options, depending on the current environment (e.g., room brightness), the type of the current TV program, or the type of images input from external equipment.

1. Press AV SELECTION.
   - The current AV Selection mode appears.
2. Press AV SELECTION again before the displayed mode disappears.
   - For AV source, the mode is switched in the order: STANDARD, DYNAMIC, MOVIE, GAME, then USER.
   - For PC source, the mode is switched between STANDARD and USER.

**Sleep Timer**

When the selected time elapses, the Sleep Timer automatically places the system into the standby mode.

Press SLEEP to select the desired time.
- The timer starts counting.
- Each time you press SLEEP, the selection is switched as below:

   30 → 60 → 90
   (cancel) → Off → 120 (minutes)

- The factory default is “Off”.

**NOTE**

- To cancel the Sleep Timer, select “Off” by pressing SLEEP.
- Five minutes before the selected time elapses, the remaining time appears every minute.

You can also use the menu to set the Sleep Timer.

1. Press HOME MENU.
2. Select “Sleep Timer”. (↑/↓ then ENTER)
3. Select the desired time. (↑/↓ then ENTER)
4. Press HOME MENU to exit the menu.

---

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>STANDARD</td>
<td>For a highly defined image in a normally bright room</td>
</tr>
<tr>
<td>DYNAMIC</td>
<td>For a very sharp image with the maximum contrast This mode does not allow manual image quality adjustment.</td>
</tr>
<tr>
<td>MOVIE</td>
<td>For a movie</td>
</tr>
<tr>
<td>GAME</td>
<td>Lowers image brightness for easier viewing.</td>
</tr>
<tr>
<td>USER</td>
<td>Allows the user to customize settings as desired. You can set the mode for each input source.</td>
</tr>
</tbody>
</table>

**For PC source**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>STANDARD</td>
<td>For a highly defined image in a normally bright room</td>
</tr>
<tr>
<td>USER</td>
<td>Allows the user to customize settings as desired. You can set the mode for each input source.</td>
</tr>
</tbody>
</table>

5. Press HOME MENU to exit the menu.
Picture adjustments
Adjust the picture to your preference for the chosen AV Selection option (except DYNAMIC).

1. Press HOME MENU.
2. Select “Picture”. (↑/↓ then ENTER)
3. Select an item to be adjusted. (↑/↓ then ENTER)

For PC source, the following screen appears:

4. Select the desired level. (←/→ then ENTER)

- When an adjustment screen is in display, you can also change an item to be adjusted, by pressing ↑/↓.
5. Press HOME MENU to exit the menu.

For AV source

<table>
<thead>
<tr>
<th>Item</th>
<th>← button</th>
<th>→ button</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contrast</td>
<td>For less contrast</td>
<td>For more contrast</td>
</tr>
<tr>
<td>Brightness</td>
<td>For less brightness</td>
<td>For more brightness</td>
</tr>
<tr>
<td>Color</td>
<td>For less color intensity</td>
<td>For more color intensity</td>
</tr>
<tr>
<td>Tint</td>
<td>Skin tones become purplish</td>
<td>Skin tones become greenish</td>
</tr>
<tr>
<td>Sharpness</td>
<td>For less sharpness</td>
<td>For more sharpness</td>
</tr>
</tbody>
</table>

For PC source

<table>
<thead>
<tr>
<th>Item</th>
<th>← button</th>
<th>→ button</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contrast</td>
<td>For less contrast</td>
<td>For more contrast</td>
</tr>
<tr>
<td>Brightness</td>
<td>For less brightness</td>
<td>For more brightness</td>
</tr>
<tr>
<td>Red</td>
<td>For weaker red</td>
<td>For stronger red</td>
</tr>
<tr>
<td>Green</td>
<td>For weaker green</td>
<td>For stronger green</td>
</tr>
<tr>
<td>Blue</td>
<td>For weaker blue</td>
<td>For stronger blue</td>
</tr>
</tbody>
</table>

**NOTE**
- To make settings for “PureCinema”, “Color Temp”, “MPEG NR”, “DNR”, “CTI”, and “DRE”, select “Pro Adjust” in step 3, and then press ENTER. For the subsequent procedures, see “Pro Adjust”.
- To restore the factory defaults for all the items, press ↑/↓ to select “Reset” in step 3, and then press ENTER. A confirmation screen appears; Press ↑/↓ to select “Yes”, and then press ENTER.

Pro Adjust
This system provides various advanced functions for optimizing the picture quality.

1. Press HOME MENU.
2. Select “Picture”. (↑/↓ then ENTER)
3. Select “Pro Adjust”. (↑/↓ then ENTER)
4. Select an item to be adjusted. (↑/↓ then ENTER)
   - You can select “PureCinema”, “Color Temp”, “MPEG NR”, “DNR”, “CTI”, or “DRE”.
5. Select the desired parameter. (↑/↓ then ENTER)
   - For the selectable parameters, see the table.

**PureCinema**
Automatically detects a film-based source (originally encoded at 24 frames/second), analyzes it, then recreates each still film frame for high-definition picture quality.

<table>
<thead>
<tr>
<th>Selection</th>
<th>Off</th>
<th>Deactivates the PureCinema.</th>
<th>Deactivates the PureCinema.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>Produces smooth and vivid moving images (film specific) by automatically detecting recorded image information when displaying DVD or 1080i HDTV images (e.g., movies) having 24 frames per second.</td>
<td>Produces smooth and vivid moving images (film specific) by automatically detecting recorded image information when displaying DVD or 1080i HDTV images (e.g., movies) having 24 frames per second.</td>
<td></td>
</tr>
<tr>
<td>ADV</td>
<td>Produces smooth and quality moving images (as shown on theater screens) by converting to 72 Hz when displaying DVD images (e.g., movies) having 24 frames per second.</td>
<td>Produces smooth and quality moving images (as shown on theater screens) by converting to 72 Hz when displaying DVD images (e.g., movies) having 24 frames per second.</td>
<td></td>
</tr>
</tbody>
</table>

**Remark**
You cannot select “Standard” when 480p or 720p signals are being input.
Adjustments and Settings

Color Temp
Adjusts the color temperature, resulting in a better white balance.

<table>
<thead>
<tr>
<th>Selections</th>
<th>High</th>
<th>White with bluish tone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid-High</td>
<td></td>
<td>Intermediate tone between High and Mid</td>
</tr>
<tr>
<td>Mid</td>
<td></td>
<td>Natural tone</td>
</tr>
<tr>
<td>Mid-Low</td>
<td></td>
<td>Intermediate tone between High and Low</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>White with reddish tone</td>
</tr>
<tr>
<td>Manual</td>
<td></td>
<td>Allows you to manually adjust the color temperature. Use the following procedure.</td>
</tr>
</tbody>
</table>

1. Select “Manual”, and then press and hold ENTER for more than three seconds to display the manual adjustment screen.
2. Select an item to be adjusted. (↑/↓ then ENTER)
3. Select the desired level. (←/→ then ENTER)

<table>
<thead>
<tr>
<th>Item</th>
<th>← button</th>
<th>→ button</th>
</tr>
</thead>
<tbody>
<tr>
<td>R High</td>
<td>For weaker red</td>
<td>For stronger red</td>
</tr>
<tr>
<td>G High</td>
<td>For weaker green</td>
<td>For stronger green</td>
</tr>
<tr>
<td>B High</td>
<td>For weaker blue</td>
<td>For stronger blue</td>
</tr>
<tr>
<td>R Low</td>
<td>For weaker red</td>
<td>For stronger red</td>
</tr>
<tr>
<td>G Low</td>
<td>For weaker green</td>
<td>For stronger green</td>
</tr>
<tr>
<td>B Low</td>
<td>For weaker blue</td>
<td>For stronger blue</td>
</tr>
</tbody>
</table>

- To perform adjustment for another item, press RETURN, and then repeat steps 2 and 3.
- You may press ↑/↓ to immediately change an item to be adjusted.
4. Press HOME MENU to exit the menu.

MPEG NR
Eliminates mosquito noise from video images when a digital TV channel is watched or a DVD is played, resulting in noise-free images.

<table>
<thead>
<tr>
<th>Selections</th>
<th>Off</th>
<th>Deactivates the MPEG NR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td></td>
<td>Enhanced MPEG NR</td>
</tr>
<tr>
<td>Mid</td>
<td></td>
<td>Standard MPEG NR</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>Moderate MPEG NR</td>
</tr>
</tbody>
</table>

DNR
Eliminates video noise for clean crisp images. The DNR stands for Digital Noise Reduction.

<table>
<thead>
<tr>
<th>Selections</th>
<th>Off</th>
<th>Deactivates the DNR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td></td>
<td>Enhanced DNR</td>
</tr>
<tr>
<td>Mid</td>
<td></td>
<td>Standard DNR</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>Moderate DNR</td>
</tr>
</tbody>
</table>

CTI
Provides images with clearer color contours. The CTI stands for Color Transient Improvement.

<table>
<thead>
<tr>
<th>Selections</th>
<th>Off</th>
<th>Deactivates the CTI.</th>
</tr>
</thead>
<tbody>
<tr>
<td>On</td>
<td></td>
<td>Activates the CTI.</td>
</tr>
</tbody>
</table>

DRE
Adjusts dark and bright portions on images so that the contrast between brightness and darkness becomes clearer.

<table>
<thead>
<tr>
<th>Selections</th>
<th>Off</th>
<th>Deactivates the DRE.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td></td>
<td>Enhanced DRE</td>
</tr>
<tr>
<td>Mid</td>
<td></td>
<td>Standard DRE</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>Moderate DRE</td>
</tr>
</tbody>
</table>

Color Management
Adjusts the hue for each basic color. Use the following procedure.

1. Select an item to be adjusted. (↑/↓ then ENTER)
2. Select the desired level. (←/→)

<table>
<thead>
<tr>
<th>Item</th>
<th>← button</th>
<th>→ button</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>Closer to magenta</td>
<td>Closer to yellow</td>
</tr>
<tr>
<td>Yellow</td>
<td>Closer to red</td>
<td>Closer to green</td>
</tr>
<tr>
<td>Green</td>
<td>Closer to yellow</td>
<td>Closer to cyan</td>
</tr>
<tr>
<td>Cyan</td>
<td>Closer to green</td>
<td>Closer to blue</td>
</tr>
<tr>
<td>Blue</td>
<td>Closer to cyan</td>
<td>Closer to magenta</td>
</tr>
<tr>
<td>Magenta</td>
<td>Closer to blue</td>
<td>Closer to red</td>
</tr>
</tbody>
</table>

- To perform adjustment for another item, press RETURN, and then repeat steps 1 and 2.
- You may press ↑/↓ to immediately change an item to be adjusted.
3. Press HOME MENU to exit the menu.
**Adjustments and Settings**

### Sound adjustments
Adjust the sound to your preference for the chosen AV Selection option. See page 40.

1. Press **HOME MENU**.
2. Select “Sound”. (↑/↓ then **ENTER**)
3. Select an item to be adjusted. (↑/↓)
4. Select the desired level. (↑/↓)

#### Sound [STANDARD]
- **Treble**: for weaker treble — for stronger treble
- **Bass**: for weaker bass — for stronger bass
- **Balance**: decreases audio from the right speaker — decreases audio from the left speaker

#### FOCUS
This shifts the sound coming direction (sound images) upward and produces clear sound contours.

1. Press **HOME MENU**.
2. Select “Sound”. (↑/↓ then **ENTER**)
3. Select “FOCUS”. (↑/↓)
4. Select the desired parameter. (↑/↓)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Deactivates the FOCUS.</td>
</tr>
<tr>
<td>(factory default)</td>
<td></td>
</tr>
<tr>
<td>On</td>
<td>Activates the FOCUS.</td>
</tr>
</tbody>
</table>

5. Press **HOME MENU** to exit the menu.

#### Front Surround
This provides three-dimensional sound effects and/or deep, rich bass.

1. Press **HOME MENU**.
2. Select “Sound”. (↑/↓ then **ENTER**)
3. Select “Front Surround”. (↑/↓)
4. Select the desired parameter. (↑/↓)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Deactivates both the SRS and TruBass.</td>
</tr>
<tr>
<td>SRS</td>
<td>Reproduces highly effective three-dimensional sound.</td>
</tr>
<tr>
<td>(factory default)</td>
<td></td>
</tr>
<tr>
<td>TruBass</td>
<td>Provides deep, rich bass using a new technology.</td>
</tr>
<tr>
<td>TruBass + SRS</td>
<td>Provides both TruBass and SRS effects.</td>
</tr>
</tbody>
</table>

5. Press **HOME MENU** to exit the menu.

#### NOTE
- To restore the factory defaults for all the items, press ↑/↓ to select “Reset” in step 3, and then press **ENTER**. A confirmation screen appears. Press ↑/↓ to select “Yes”, and then press **ENTER**.

- (WOW) designates a status where the FOCUS is on and TruBass + SRS has been selected for Front Surround.
- **SRS** is a trademark of SRS Labs, Inc.
- **WOW** technology is incorporated under license from SRS Labs, Inc.
Power Control
Power Control provides convenient functions for power saving.

Energy Save
You can save power consumption by decreasing the picture brightness. When you need not watch the screen and want to enjoy only audio, you can also deactivate the screen.

1 Press HOME MENU.
2 Select “Power Control”. (↑/↓ then ENTER)
3 Select “Energy Save”. (↑/↓ then ENTER)
4 Select “Save” or “Picture Off”. (↑/↓ then ENTER)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>Does not decrease picture brightness.</td>
</tr>
<tr>
<td></td>
<td>(factory default)</td>
</tr>
<tr>
<td>Save</td>
<td>Decreases picture brightness to save power.</td>
</tr>
<tr>
<td>Picture Off</td>
<td>Deactivates the screen to save power. To restore the screen display, press any button other than VOL +/- and MUTING. This setting is not memorized by the system.</td>
</tr>
</tbody>
</table>

5 Press HOME MENU to exit the menu.

NOTE
- You can also select this function using the Home menu when the input source is a PC.

No Signal off (AV mode only)
The system will be automatically placed into the standby mode if no signal is received for 15 minutes.

1 Press HOME MENU.
2 Select “Power Control”. (↑/↓ then ENTER)
3 Select “No Signal off”. (↑/↓ then ENTER)
4 Select “Enable”. (↑/↓ then ENTER)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disable</td>
<td>Does not place the system into the standby mode.</td>
</tr>
<tr>
<td></td>
<td>(factory default)</td>
</tr>
<tr>
<td>Enable</td>
<td>Places the system into the standby mode if no operation is performed for three hours.</td>
</tr>
</tbody>
</table>

5 Press HOME MENU to exit the menu.

NOTE
- Five minutes before the system is placed into the standby mode, a message appears every minute.

Power Management (PC mode only)
The system will be automatically placed into the standby mode when no signal is received from the personal computer.

1 Press HOME MENU.
2 Select “Power Control”. (↑/↓ then ENTER)
3 Select “Power Management”. (↑/↓ then ENTER)
4 Select “Mode1” or “Mode2”. (↑/↓ then ENTER)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>No power management</td>
</tr>
<tr>
<td></td>
<td>(factory default)</td>
</tr>
<tr>
<td>Mode1</td>
<td>• Places the system into the standby mode when no signal is received from the personal computer for eight minutes.</td>
</tr>
<tr>
<td></td>
<td>• Even when you start using the computer and a signal is received again, the system stays off.</td>
</tr>
<tr>
<td></td>
<td>• The system is switched on again by pressing STANDBY/ON on the Plasma Display or TV on the remote control unit.</td>
</tr>
<tr>
<td>Mode2</td>
<td>• Places the system into the standby mode when no signal is received for eight seconds.</td>
</tr>
<tr>
<td></td>
<td>• When you start using the computer and a signal is received again, the system is switched on.</td>
</tr>
<tr>
<td></td>
<td>• The system is switched on again by pressing STANDBY/ON on the Plasma Display or TV on the remote control unit.</td>
</tr>
</tbody>
</table>

5 Press HOME MENU to exit the menu.
Adjustments and Settings

Adjusting image positions (AV mode only)
Adjust the horizontal and vertical positions of images on the Plasma Display.

1. Press HOME MENU.
2. Select “Option”. (↑/↓ then ENTER)
3. Select “Position”. (↑/↓ then ENTER)
4. Select “H/V Position Adjust”. (↑/↓ then ENTER)

5. Adjust the vertical position (↑/↓) or horizontal position (←/→).
6. Press HOME MENU to exit the menu.

**NOTE**
- To restore the factory defaults for all the items, press ↑/↓ to select “Reset” in step 4, and then press ENTER. A confirmation screen appears. Press ↑/↓ to select “Yes”, and then press ENTER.
- Adjustments are stored separately according to input source.

Adjusting image positions and clock automatically (PC mode only)
Use Auto Setup to automatically adjust positions and clock of images coming from a personal computer.

1. Press HOME MENU.
2. Select “Option”. (↑/↓ then ENTER)
3. Select “Auto Setup”. (↑/↓ then ENTER)
4. Select an item to be adjusted. (↑/↓ then ENTER)

5. Perform adjustment. (↑/↓ and ←/→)

- Use ↑/↓ only when you adjust the vertical position after selecting “H/V Position Adjust”.

6. Press HOME MENU to exit the menu.

**NOTE**
- To restore the factory defaults for all the items, press ↑/↓ to select “Reset” in step 4, and then press ENTER. A confirmation screen appears. Press ↑/↓ to select “Yes”, and then press ENTER.
AV mode

Selecting a screen size
In single-screen mode, press SCREEN SIZE to change the size of the screen from among the selectable options for the type of video signals currently received.
- The selectable screen sizes differ depending on the types of input signals.

**AV mode**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:3</td>
<td>For 4:3 “standard” pictures. A side bar appears on each side.</td>
</tr>
<tr>
<td>FULL</td>
<td>For 16:9 squeeze pictures.</td>
</tr>
<tr>
<td>ZOOM</td>
<td>For 16:9 letterbox pictures. Bars may appear on the top and bottom with some programs.</td>
</tr>
<tr>
<td>CINEMA</td>
<td>For 14:9 letterbox pictures. Bars may appear on the top and bottom on some programs.</td>
</tr>
<tr>
<td>WIDE</td>
<td>In this mode pictures are progressively stretched toward each side of the screen.</td>
</tr>
</tbody>
</table>

PC mode except for XGA signals

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:3</td>
<td>Fills the screen without altering the input signal aspect ratio.</td>
</tr>
<tr>
<td>FULL</td>
<td>Full 16:9 screen display</td>
</tr>
<tr>
<td>Dot by Dot</td>
<td>Matches input signal with same number of screen pixels.</td>
</tr>
</tbody>
</table>

PC mode for XGA signals
(Ex. 1024 × 768 input at PRO-1120HD)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:3</td>
<td>Matches input signal with the same number of screen pixels. Optimized for 1024 × 768 display</td>
</tr>
<tr>
<td>FULL1</td>
<td>Full 16:9 screen display Optimized for 1024 × 768 display</td>
</tr>
<tr>
<td>FULL2</td>
<td>For wide signal display Use when displaying 1280 × 768 signal resolution.</td>
</tr>
</tbody>
</table>

**NOTE**
- In 2-screen mode, press SCREEN SIZE to change the size of left screen.
- The PC mode above is for the PRO-1120HD. For the PRO-920HD the number of panel pixels is different, so signal processing and actual viewing conditions will vary slightly.
- While watching High Definition TV broadcasting, pressing SCREEN SIZE switches between FULL and WIDE.
- If you watch High Definition TV broadcasting with WIDE selected, part of the screen (e.g., images, graphic interface) can be missed. If this is the case, select FULL.
Changing the brightness at both sides of the screen (Side Mask)

With the 4:3 screen size selected for the AV mode, you can change the brightness of the gray side masks that appear at both sides of the screen.

1. Press HOME MENU.
2. Select “Option”. (↑/↓ then ENTER)
3. Select “Side Mask”. (↑/↓ then ENTER)
4. Select the desired parameter. (↑/↓ then ENTER)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td>Always sets the same brightness for the gray side masks. (factory default)</td>
</tr>
<tr>
<td>Auto</td>
<td>Adjusts the brightness of the gray side masks according to the brightness of images.</td>
</tr>
</tbody>
</table>

5. Press HOME MENU to exit the menu.

Language setting

You can select a language to be used for on-screen display such as menus from among three languages: English, French, and Spanish.

1. Press HOME MENU.
2. Select “Option”. (↑/↓ then ENTER)
3. Select “Language”. (↑/↓ then ENTER)
4. Select a language. (←/→)

5. Press HOME MENU to exit the menu.
Timer Presetting

Presetting TV programs using the timer

Using the menu, you can easily preset TV programs for watching later (auto channel select), recording with a D-VHS recorder, or recording via the supplied VCR controller.

With the power to the system left on, the Auto Channel Preset automatically selects the preset TV program when its on-air time comes. Then you will not miss an important TV program when you are enjoying another TV program.

For the connections with a D-VHS recorder, see pages 54 and 55. For the connections with the supplied VCR controller, see page 59.

**NOTE**
- You can make up to 32 presettings in total.
- In steps 4 to 8, you can also press ↔ to move the cursor.

1. Press HOME MENU.
2. Select “Timers”. (↑/↓ then ENTER)
3. Select a list number. (↑/↓ then ENTER)

4. Specify a date. (↑/↓ then ENTER)
   - The selections include the days of the week (e.g., Mondays), “Weekdays”, “Weekends”, and “Everyday”. Selecting one of these will cause the timer to activate periodically.

5. Specify the start and end times. (↑/↓ then ENTER for each field)

6. Select antenna A or B. (↑/↓ then ENTER)

7. Specify a channel number. (↑/↓ then ENTER for each digit)

8. Select a recording device. (↑/↓ then ENTER)
   - To preset for auto channel select, select “None”.

9. Press HOME MENU to exit the menu.

An alarm screen appears slightly before the preset timer is activated. If watching a TV channel through antenna A or B in a single-screen mode, the screen allows you to cancel the presetting by pressing D.

The icons beside the list numbers have the following meanings.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Preset for recording; no conflicts with other timers exist.</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Preset for auto channel select; no conflicts with other timers exist.</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Preset for recording; conflicts with other timers exist.</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Preset for auto channel select; conflicts with other timers exist.</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Preset for recording; the timer start has been delayed.</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Preset for auto channel select; the timer start has been delayed.</td>
</tr>
</tbody>
</table>
**Timer Presetting**

**NOTE**
- If you set a timer to record a future digital program on a VCR, you must first turn off Parental Control. Otherwise, you will record only a black screen. See “Temporarily deactivating the Parental Control” on page 37.
- To change the TV program presetting, repeat the above procedure. To cancel the presetting, press D after selecting a list number in step 4.
- Switch on the recording equipment at least 30 seconds before the start of the preset program; otherwise recording will not be executed.
- When presetting for recording, finish the operations two minutes (one minute for auto channel select) before the start of the program; otherwise presetting may fail.
- Auto channel select is not executed when the system is in the standby mode.
- Recording is not executed if recordable D-VHS tape is not present in the D-VHS recorder when the preset program starts. This is also true when a specified D-VHS recorder is not in connection.
- For recording with a VCR, confirm that the video output terminals on the Media Receiver have been connected to the signal input terminals on the VCR.
- Presettings become ineffective if the start time and the end time are identical.

**Priority rules for overlapped presettings**
When preset TV programs are overlapped, the following three rules are used to determine a higher priority. If more than one of the three rules are met, the rules are applied in the order; 1, 2, then 3.

**Rule 1:** Presetting for recording is given a higher priority over presetting for auto channel select.

![Diagram of Rule 1]

Presetting for recording

Presetting for auto channel select

The shaded area is not executed.

**Rule 2:** If two presettings are overlapped, presetting with earlier start time is given a higher priority. If two presettings are sequential, the last portion of the first program may not be recorded for 60 seconds (or less) because recording of the second program is started at the exact start time.

![Diagram of Rule 2]

Program A

Program B

The shaded area is not executed.

**Rule 3:** If presettings at the same start time are overlapped, presetting with a higher list number is given a higher priority.
You can connect many types of external equipment to your Plasma Display System, like a DVD player, VCR, personal computer, game console, and camcorder.

To view images coming from external equipment, select the input source using the INPUT buttons on the remote control (page 14) or the INPUT button on the Plasma Display.

**CAUTION**
- To protect all equipment, always turn off the system before connecting to a DVD player, VCR, personal computer, game console, camcorder, or other external equipment.

**NOTE**
- Refer to the relevant instruction manual (DVD player, personal computer, etc.) carefully before making connections.

### Watching a DVD image

#### Connecting a DVD player

Use the INPUT 1 terminals when connecting a DVD player and other audiovisual equipment.

![Diagram of DVD player connections](image)

#### Displaying a DVD image

To watch a DVD image, press INPUT 1 on the remote control unit or press INPUT on the Plasma Display to select INPUT1.

**NOTE**
- Refer to your DVD player instruction manual for the signal type.
- The INPUT 1 terminals are checked for cable connections in the order where; 1) Component Video, 2) S-Video, 3) Video.
- Connect external equipment to only terminals that are to be actually used.
- You can also use the INPUT 3 terminals when connecting only with the Component Video output terminals on a DVD player.

### Watching a VCR image

#### Connecting a VCR

Use the INPUT 2 terminals when connecting a VCR and other audiovisual equipment.

![Diagram of VCR connections](image)

#### Displaying a VCR image

To watch a VCR image, press INPUT 2 on the remote control unit or press INPUT on the Plasma Display to select INPUT2.

**NOTE**
- The INPUT 2 terminals are checked for cable connections in the order where; 1) S-Video, 2) Video.
- Connect external equipment to only terminals that are to be actually used.
Using HDMI Input

The INPUT 1 and INPUT 3 terminals include HDMI terminals to which digital video and audio signals can be input. To use the HDMI terminal, activate the terminal and specify the types of video and audio signals to be received from the connected equipment. For the types of these signals, see the operation manual that came with the connected equipment.

Before starting the menu, press INPUT 1 (or INPUT 3) on the remote control unit or press INPUT on the Plasma Display to select INPUT 1 (or INPUT 3).

### Input signal correlation table

<table>
<thead>
<tr>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920×1080@59.94/60Hz</td>
</tr>
<tr>
<td>720×480p@59.94/60Hz</td>
</tr>
<tr>
<td>1280×720p@59.94/60Hz</td>
</tr>
<tr>
<td>720(1440)×480i@59.94/60Hz</td>
</tr>
</tbody>
</table>

### Connecting HDMI equipment

#### Media Receiver (rear view)

Audio cable (commercially available)
Make this connection when inputting analog audio signals.

HDMI cable (commercially available)

**To activate the HDMI terminal:**

1. Press HOME MENU.
2. Select “Option”. (↑/↓ then ENTER)
3. Select “HDMI Input”. (↑/↓ then ENTER)
4. Select “Setting”. (↑/↓ then ENTER)
5. Select “Enable”. (↑/↓ then ENTER)

#### Item Description

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disable</td>
<td>Deactivates the HDMI terminal. (factory default)</td>
</tr>
<tr>
<td>Enable</td>
<td>Activates the HDMI terminal.</td>
</tr>
</tbody>
</table>

6. Press HOME MENU to exit the menu.

**To specify the type of digital video signals:**

1. Press HOME MENU.
2. Select “Option”. (↑/↓ then ENTER)
3. Select “HDMI Input”. (↑/↓ then ENTER)
4. Select “Video”. (↑/↓ then ENTER)
5. Select the type of digital video signals. (↑/↓ then ENTER)

- If you select “Auto”, an attempt will be made to identify the type of digital video signals when digital video signals are received.

#### Item Description

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto</td>
<td>Automatically identifies input digital video signals. (factory default)</td>
</tr>
<tr>
<td>Color-1</td>
<td>Digital Component Video signals (4:2:2) locked</td>
</tr>
<tr>
<td>Color-2</td>
<td>Digital Component Video signals (4:4:4) locked</td>
</tr>
<tr>
<td>Color-3</td>
<td>Digital RGB signals locked</td>
</tr>
</tbody>
</table>

6. Press HOME MENU to exit the menu.

**NOTE**

- If you select a parameter other than “Auto”, make such a setting that results in natural color.
- If no image appears, specify another digital video signal type.
- For the digital video signal types to be specified, check the operation manual that came with the connected equipment.

**To specify the type of audio signals:**

1. Press HOME MENU.
2. Select “Option”. (↑/↓ then ENTER)
3. Select “HDMI Input”. (↑/↓ then ENTER)
4. Select “Audio”. (↑/↓ then ENTER)
5. Select the type of audio signals. (↑/↓ then ENTER)

- If you select “Auto”, an attempt will be made to identify the type of audio signals when audio signals are received.

**NOTE**

- If you select a parameter other than “Auto”, make such a setting that results in natural color.
- If no image appears, specify another digital video signal type.
- For the digital video signal types to be specified, check the operation manual that came with the connected equipment.
## En | Enjoying through External Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto</td>
<td>Automatically identifies input audio signals. (factory default)</td>
</tr>
<tr>
<td>Digital</td>
<td>Accepts digital audio signals.</td>
</tr>
<tr>
<td>Analog</td>
<td>Accepts analog audio signals.</td>
</tr>
</tbody>
</table>

### 6 Press HOME MENU to exit the menu.

#### NOTE
- If no sound is output, specify another audio signal type.
- For the audio signal types to be specified, check the operation manual that came with the connected equipment.
- Depending on the equipment to be connected, you also need to connect analog audio cables.

### Enjoying a game console or watching camcorder images

#### Connecting a game console or camcorder
Use the INPUT 4 terminals to connect a game console, camcorder and other audiovisual equipment.

#### Media Receiver (front view)

- AV cable (commercially available)
- S-Video cable (commercially available)
- Component Video cable (commercially available)

#### Game console/Camcorder

### Displaying an image of the game console or camcorder
To watch an image coming from the game console or camcorder: press INPUT 4 on the remote control unit or press INPUT on the Plasma Display to select INPUT4.

### Recording digital TV programs using a VCR or DVD recorder
If you connect recording equipment such as a VCR or DVD recorder to the MONITOR OUT terminals on the rear of the Media Receiver, you can record, for example, digital TV programs using the recording equipment. You can also record digital TV programs more easily by using the supplied VCR controller. Connect the VCR controller to the VCR control terminal on the rear of the Media Receiver and then position the controller so that its light emitting section faces the remote control sensor on the recording equipment. For more information, see page 59.

### Avoiding unwanted feedback
You can prevent unwanted feedback from adversely affecting the quality of images. Specify the output terminal whose output is to be inhibited.

1. Press HOME MENU.
2. Select “Option”. (↑/↓ then ENTER)
3. Select “Monitor Out”. (↑/↓ then ENTER)
4. Select “INPUT1 Prohibit”, “INPUT2 Prohibit”, “INPUT3 Prohibit”, or “INPUT4 Prohibit”. (↑/↓ then ENTER)
5. Press HOME MENU to exit the menu.

### NOTE
- The INPUT 4 terminals are checked for cable connections in the order where: 1) Component Video, 2) S-Video, 3) Video.
- Connect external equipment to only terminals that are to be actually used.
Connecting a recorder

Media Receiver (rear view)

VCR controller (for presetting digital TV programs for recording)

VCR or DVD recorder

Connecting other audio equipment

The digital audio output terminal (optical) on this system can output Dolby Digital signals. Using an optical digital cable, connect an AV receiver to the digital audio output terminal (optical) on the rear of the Media Receiver. This allows audio such as digital TV broadcasting to be played in high quality. If your AV receiver does not have a digital audio input terminal (optical), connect the MONITOR OUT terminals (AUDIO) on the rear of the Media Receiver to the audio input terminals on the AV receiver.

**NOTE**

- When using the digital audio output terminal (optical), you need to make settings depending on your AV receiver. For more information, see the instruction manual that came with the AV receiver.

Connecting an AV receiver

Media Receiver (rear view)

Optical digital cable (commercially available)

AV receiver

**NOTE**

- About the MONITOR OUT terminals
  The MONITOR OUT terminals cannot output the following signals:
  1. Video signals input from the COMPONENT VIDEO terminal
  2. Video signals from a personal computer
  3. S-Video signals when a conventional TV channel is being received
  4. S-Video signals when Video signals (INPUT 1, 2, and 4) are being input
  5. Digital video and audio signals from the HDMI terminals
- When watching images played back on a VCR or DVD recorder connected to the MONITOR OUT terminals, select an input source (e.g., TV channel reception) on the recording equipment other than external input sources. Selecting an external input source may result in distorted images or noise.
- Analog broadcasting signals are not sent to the MONITOR OUT (S-VIDEO) terminal. This is also true of composite signals coming from INPUT 1, 2, or 4.
Switching the optical audio signal type
Set up for the DIGITAL AUDIO output terminal (OPTICAL), depending on your AV receiver.

1. Press HOME MENU.
2. Select “Option”. (↑/↓ then ENTER)
3. Select “Digital Audio Out”. (↑/↓ then ENTER)
4. Select “Dolby Digital” or “PCM”. (↑/↓ then ENTER)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCM (factory default)</td>
<td>Always outputs in the PCM format regardless of the types of signals.</td>
</tr>
<tr>
<td>Dolby Digital</td>
<td>For Dolby Digital encoded signals, outputs in the Dolby Digital format. For PCM encoded signals, outputs in the PCM format.</td>
</tr>
</tbody>
</table>

5. Press HOME MENU to exit the menu.

Watching a D-VHS image

What is i.LINK?
i.LINK is a digital serial interface for handling digital video, digital audio, and other data in two directions. i.LINK is Sony’s term for the IEEE 1394 data transport bus. Digital AV equipment compatible with i.LINK can be connected using a single i.LINK cable. The i.LINK interface allows this PDP system to control one of up to two i.LINK compatible devices (in connection) that can be identified.

Which i.LINK devices are connectable?
For i.LINK devices, this system supports only D-VHS recorders. The i.LINK terminals on this system cannot be connected with other equipment such as DVD recorders, digital video cameras, personal computers, and PC peripheral devices because of differences in the specifications.

What can be recorded through i.LINK?
With D-VHS recorders connected to this system through i.LINK, you can record only digital TV programs. You cannot record conventional TV channels nor contents coming from external input sources and personal computers.

Connecting D-VHS recorders
Use the i.LINK terminals when connecting D-VHS recorders.

When connecting a single D-VHS recorder

When connecting two D-VHS recorders
You can connect two D-VHS recorders directly to the i.LINK terminals on the rear of the Media Receiver.
Enjoying through External Equipment

Using i.LINK cables you can also connect up to two D-VHS recorders in a daisy chain.

Displaying a D-VHS image
To watch a D-VHS image, press i.LINK on the remote control unit or press INPUT on the Plasma Display to select i.LINK.

Useful and important notification

Useful information
• D-VHS recorders connected through i.LINK can play back digital TV programs recorded using this system.
• D-VHS recorders connected through i.LINK can record only digital TV programs. Using i.LINK, these recorders cannot record conventional TV channels nor contents coming from external input sources.
• This system can be simultaneously connected with up to two D-VHS recorders that support i.LINK. You can control one of these D-VHS recorders (basic functions only).
• Some D-VHS recorders connected through i.LINK may not allow this system to control through the control panel screen or to display images and output sound.
• To record digital TV programs using connected D-VHS recorders, use D-VHS tape. You cannot use VHS tape nor S-VHS tape.
• Some D-VHS recorders connected through i.LINK may not allow this system to play back images and sound recorded on VHS tape, S-VHS tape, or (if with analog signals) D-VHS tape.
• This system supports the Digital Transmission Content Protection (DTCP) technology. The DTCP is a copy protection technology that presents data coding and device authentication.
• i.LINK may not allow copy-restricted video, audio, and other data to be copied from one i.LINK device to another. It also may not allow video, audio, and other data to be transferred with equipment that does not support the DTCP.

Precautions
• While one D-VHS recorder connected through i.LINK is recording or playing back, do not switch on or off the other connected D-VHS recorder (not in use) or do not connect or disconnect the i.LINK cable from that D-VHS recorder. Doing so can result in image and sound interruption.
• Some D-VHS recorders that support i.LINK cannot relay data when their power is off. Check the instruction manual that came with your D-VHS recorder. This system allows you to change the setting for data relay in the standby mode. See “Setting up for i.LINK standby” on page 57.

Precautions about i.LINK connections
• Use S400 i.LINK cables that have 4-pin plugs and are shorter than 3.5 m (11.48 feet).
• Some i.LINK devices cannot relay data when their power is off.
• Do not make the following loop connections:
Setting up for controlling a D-VHS recorder
You can operate the connected D-VHS recorder from the Plasma Display that shows the control panel screen. After making the connections, use the menu to specify the model of the D-VHS recorder to be operated. You can operate only a single D-VHS recorder from the Plasma Display.

1 Press HOME MENU.
2 Select “Tuner Setup”. (►/◄ then ENTER)
3 Select “Recorder Setup”. (►/◄ then ENTER)
4 Select “i.LINK Setup”. (►/◄ then ENTER)
5 Select “i.LINK List”. (►/◄ then ENTER)
6 Select the D-VHS recorder model to be operated. (►/◄ then ENTER)
7 Press A to select “Connect”.
8 Press HOME MENU to exit the menu.

NOTE
- The following information appears at the right end of the i.LINK list to indicate the connection status of the D-VHS recorders:
  - Control: Data connection with the D-VHS recorder has been established and the recorder is ready for control.
  - Link: The D-VHS recorder has been physically connected, and can be controlled if it is selected for control.
  - : Currently not physically connected
- When connected to any device other than a D-VHS, the device is not listed in the i.LINK List.

Editing the i.LINK list
The i.LINK list shows all devices connected through i.LINK interfaces. In this list, you can change the name or order of devices or delete device information.

1 Press HOME MENU.
2 Select “Tuner Setup”. (►/◄ then ENTER)
3 Select “Recorder Setup”. (►/◄ then ENTER)
4 Select “i.LINK Setup”. (►/◄ then ENTER)
5 Select “i.LINK List”. (►/◄ then ENTER)
6 Select the desired device. (►/◄)
7 Press A to select “Connect”.
8 Press HOME MENU to exit the menu.

To change the name of a device:
7 Press B to select “Rename”.
8 Enter up to 7 characters using ◄/ ►, ◄/ ◄, and ENTER.

To change the order of devices:
7 Press C to select “Move”.
8 Select the new desired position. (►/◄ then ENTER)
- The selected device is moved to the selected position.
9 Press HOME MENU to exit the menu.

To delete information about a device:
7 Press D to select “Delete”.
- A confirmation message appears.
- A warning message appears if the selected device has been preset for recording with the timer or if its power is on. If this is the case, you cannot delete the device that you have selected.
8 Press A to execute the deletion.
9 Press HOME MENU to exit the menu.
Setting up for i.LINK standby
Use the following procedure to enable data transfer between multiple i.LINK devices even when the system is in the standby mode.

1. Press HOME MENU.
2. Select “Tuner Setup”. (↑/↓ then ENTER)
3. Select “Recorder Setup”. (←→ then ENTER)
4. Select “i.LINK Setup”. (↑/↓ then ENTER)
5. Select “i.LINK Standby”. (↑/↓ then ENTER)
6. Select “Enable”. (↑/↓ then ENTER)
7. Press HOME MENU to exit the menu.

**NOTE**
- With “Enable” selected, the system relays data between multiple i.LINK devices even when in the standby mode; the i.LINK circuits are energized in that mode.

In standby mode

<table>
<thead>
<tr>
<th>i.LINK device</th>
<th>Media Receiver</th>
<th>i.LINK device</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No data relay

Operating the control panel screen
The control panel screen appears when you press i.LINK. It disappears when you press i.LINK again. To select a button on the control panel screen, press ↑↓ or ← →, and then press ENTER on the remote control.

1. Shows the current status of the D-VHS recorder.
2. Shows the name of the currently selected device.
3. Shows counter time output by the D-VHS recorder.
4. Shows the manufacture name of the D-VHS recorder to be operated.
5. Shows the model name of the D-VHS recorder to be operated.
6. Shows the type of inserted video tape; D for D-VHS, S for S-VHS, and no display for VHS.
7. Appears when any tape has been inserted.
8. Appears when the inserted tape has been write protected. The inserted tape cannot be used for recording when this indicator appears.
9. Appears when the D-VHS recorder has been preset for recording and is in the standby mode.
10. Switches on and off the D-VHS recorder.
11. Starts recording.
12. Rewinds to the start of the current program.
13. Rewinds the tape.
14. Pauses the tape.
15. Stops the current tape motion.
17. Forwards to the start of the next program.
18. Forwards the tape.
19. Exits the control panel screen and displays the i.LINK Setup menu.
20. Allows you to change the D-VHS recorder to be operated. After pressing this button, press ↑↓ to select the desired model from the list, and then press ENTER.

**NOTE**
- If no i.LINK device has been connected, “No i.LINK devices are connected.” appears. If this is the case, connect i.LINK devices.
- If none of the connected equipment has been supported for control, you cannot execute control.
Watching an image from a personal computer

Connecting a personal computer
Use the PC terminals to connect a personal computer.

**NOTE**
- The PC input terminals are DDC2B-compatible.
- Plug & Play may not correctly function, depending on personal computers in use.

Media Receiver (front view)

Displaying an image from a personal computer
When connecting to a personal computer, the input signal type is automatically identified. If the personal computer image does not come in clearly, you may need to use Auto Setup in the menu. See page 45.

To watch an image coming from the personal computer, press **PC** on the remote control unit or press **INPUT** on the Plasma Display to select “PC”.

**NOTE**
- The PC terminals cannot be used for audiovisual equipment.

Signal names for 15-pin mini D-sub connector

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Signal name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R</td>
</tr>
<tr>
<td>2</td>
<td>G</td>
</tr>
<tr>
<td>3</td>
<td>B</td>
</tr>
<tr>
<td>4</td>
<td>Not connected</td>
</tr>
<tr>
<td>5</td>
<td>Not connected</td>
</tr>
<tr>
<td>6</td>
<td>GND (ground)</td>
</tr>
<tr>
<td>7</td>
<td>GND (ground)</td>
</tr>
<tr>
<td>8</td>
<td>GND (ground)</td>
</tr>
<tr>
<td>9</td>
<td>+5V</td>
</tr>
<tr>
<td>10</td>
<td>GND (ground)</td>
</tr>
<tr>
<td>11</td>
<td>Not connected</td>
</tr>
<tr>
<td>12</td>
<td>SDA</td>
</tr>
<tr>
<td>13</td>
<td>HD</td>
</tr>
<tr>
<td>14</td>
<td>VD</td>
</tr>
<tr>
<td>15</td>
<td>SCL</td>
</tr>
</tbody>
</table>

**NOTE**
- A Macintosh adaptor may be required for use with some Macintosh computers.

Computer compatibility chart

<table>
<thead>
<tr>
<th>Resolution</th>
<th>Frequency</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>720 × 400</td>
<td>70 Hz</td>
<td></td>
</tr>
<tr>
<td>640 × 480</td>
<td>60 Hz</td>
<td></td>
</tr>
<tr>
<td></td>
<td>65 Hz</td>
<td>Macintosh 13° (67 Hz)</td>
</tr>
<tr>
<td></td>
<td>72 Hz</td>
<td></td>
</tr>
<tr>
<td></td>
<td>75 Hz</td>
<td></td>
</tr>
<tr>
<td>800 × 600</td>
<td>56 Hz</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60 Hz</td>
<td></td>
</tr>
<tr>
<td></td>
<td>72 Hz</td>
<td></td>
</tr>
<tr>
<td></td>
<td>75 Hz</td>
<td></td>
</tr>
<tr>
<td>832 × 624</td>
<td>74.5 Hz</td>
<td>Macintosh 16°</td>
</tr>
<tr>
<td>1024 × 768</td>
<td>60 Hz</td>
<td></td>
</tr>
<tr>
<td></td>
<td>70 Hz</td>
<td></td>
</tr>
<tr>
<td></td>
<td>75 Hz</td>
<td>Macintosh 19°</td>
</tr>
<tr>
<td>1280 × 768</td>
<td>56 Hz</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60 Hz</td>
<td></td>
</tr>
<tr>
<td></td>
<td>70 Hz</td>
<td></td>
</tr>
</tbody>
</table>
Enjoying through External Equipment

Connecting the VCR controller

Connect the supplied VCR controller to the Media Receiver. This allows you to preset digital TV programs for recording; see page 48. When the specified time comes, the system in the standby mode is automatically switched on and the specified TV program is recorded using the connected VCR or DVD recorder.

**NOTE**

- Make sure to leave the VCR power on when presetting TV programs for recording with the VCR controller.
- Be sure to firmly connect the VCR controller to the VCR control terminal on the rear of the Media Receiver. If you have mistakenly connected it to the CONTROL IN or CONTROL OUT terminal, remote control or other operations may be disabled.

Use the following procedure to set the manufacture of the recording equipment:

1. Press **HOME MENU**.
2. Select “Tuner Setup”. (➔/➔ then **ENTER**)
3. Select “Recorder Setup”. (➔/➔ then **ENTER**)
4. Select “VCR Setup”. (➔/➔ then **ENTER**)
5. Select the manufacture of the recording equipment. (➔/➔ then **ENTER**)
6. Check that the power to the recording equipment is on, and insert tape into the slot.
   - Insert tape you think it all right to erase its contents. The contents will be erased because Rec and Stop codes are output in the test.
   - Check that the light emitting section on the VCR controller cable faces the recording equipment.
7. Press **A** to execute recording test.
   - If the recording equipment fails to start and stop recording, check and change the specified recording equipment manufacture.
8. Press **A** to select “Yes, Store Setting”.
9. Press **HOME MENU** to exit the menu.

**NOTE**

- Even if you correctly specify the manufacture of the recording equipment, control of some models may be disabled.
- Perform the recording test when the recording equipment is not in recording standby or is not recording.
- The recording test takes approximately 10 seconds.
- The PIONEER has been set as the factory default.
The lists of controllable recording equipment manufactures

<table>
<thead>
<tr>
<th>Manufacture</th>
<th>Manufacture</th>
<th>Manufacture</th>
<th>Manufacture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admiral</td>
<td>Admiral</td>
<td>Admiral</td>
<td>Admiral</td>
</tr>
<tr>
<td>Advantz</td>
<td>Advantz</td>
<td>Advantz</td>
<td>Advantz</td>
</tr>
<tr>
<td>Adventura</td>
<td>Adventura</td>
<td>Adventura</td>
<td>Adventura</td>
</tr>
<tr>
<td>Aiko</td>
<td>Aiko</td>
<td>Aiko</td>
<td>Aiko</td>
</tr>
<tr>
<td>Aiwa</td>
<td>Aiwa</td>
<td>Aiwa</td>
<td>Aiwa</td>
</tr>
<tr>
<td>Akai</td>
<td>Akai</td>
<td>Akai</td>
<td>Akai</td>
</tr>
<tr>
<td>American High</td>
<td>American High</td>
<td>American High</td>
<td>American High</td>
</tr>
<tr>
<td>Asha</td>
<td>Asha</td>
<td>Asha</td>
<td>Asha</td>
</tr>
<tr>
<td>Audiovox</td>
<td>Audiovox</td>
<td>Audiovox</td>
<td>Audiovox</td>
</tr>
<tr>
<td>Beaumark</td>
<td>Beaumark</td>
<td>Beaumark</td>
<td>Beaumark</td>
</tr>
<tr>
<td>Bell &amp; Howell</td>
<td>Bell &amp; Howell</td>
<td>Bell &amp; Howell</td>
<td>Bell &amp; Howell</td>
</tr>
<tr>
<td>Broksonic</td>
<td>Broksonic</td>
<td>Broksonic</td>
<td>Broksonic</td>
</tr>
<tr>
<td>CCE</td>
<td>CCE</td>
<td>CCE</td>
<td>CCE</td>
</tr>
<tr>
<td>Calix</td>
<td>Calix</td>
<td>Calix</td>
<td>Calix</td>
</tr>
<tr>
<td>Canon</td>
<td>Canon</td>
<td>Canon</td>
<td>Canon</td>
</tr>
<tr>
<td>Capehart</td>
<td>Capehart</td>
<td>Capehart</td>
<td>Capehart</td>
</tr>
<tr>
<td>Carver</td>
<td>Carver</td>
<td>Carver</td>
<td>Carver</td>
</tr>
<tr>
<td>Cineral</td>
<td>Cineral</td>
<td>Cineral</td>
<td>Cineral</td>
</tr>
<tr>
<td>Citizen</td>
<td>Citizen</td>
<td>Citizen</td>
<td>Citizen</td>
</tr>
<tr>
<td>Colt</td>
<td>Colt</td>
<td>Colt</td>
<td>Colt</td>
</tr>
<tr>
<td>Craig</td>
<td>Craig</td>
<td>Craig</td>
<td>Craig</td>
</tr>
<tr>
<td>Curtis Mathes</td>
<td>Curtis Mathes</td>
<td>Curtis Mathes</td>
<td>Curtis Mathes</td>
</tr>
<tr>
<td>Cybernex</td>
<td>Cybernex</td>
<td>Cybernex</td>
<td>Cybernex</td>
</tr>
<tr>
<td>Daewoo</td>
<td>Daewoo</td>
<td>Daewoo</td>
<td>Daewoo</td>
</tr>
<tr>
<td>Daytron</td>
<td>Daytron</td>
<td>Daytron</td>
<td>Daytron</td>
</tr>
<tr>
<td>Denon</td>
<td>Denon</td>
<td>Denon</td>
<td>Denon</td>
</tr>
<tr>
<td>Dynatech</td>
<td>Dynatech</td>
<td>Dynatech</td>
<td>Dynatech</td>
</tr>
<tr>
<td>Electrohome</td>
<td>Electrohome</td>
<td>Electrohome</td>
<td>Electrohome</td>
</tr>
<tr>
<td>Electrophonic</td>
<td>Electrophonic</td>
<td>Electrophonic</td>
<td>Electrophonic</td>
</tr>
<tr>
<td>Emerex</td>
<td>Emerex</td>
<td>Emerex</td>
<td>Emerex</td>
</tr>
<tr>
<td>Emerson</td>
<td>Emerson</td>
<td>Emerson</td>
<td>Emerson</td>
</tr>
<tr>
<td>Fisher</td>
<td>Fisher</td>
<td>Fisher</td>
<td>Fisher</td>
</tr>
<tr>
<td>Fuji</td>
<td>Fuji</td>
<td>Fuji</td>
<td>Fuji</td>
</tr>
<tr>
<td>Funai</td>
<td>Funai</td>
<td>Funai</td>
<td>Funai</td>
</tr>
<tr>
<td>GE</td>
<td>GE</td>
<td>GE</td>
<td>GE</td>
</tr>
<tr>
<td>Garrard</td>
<td>Garrard</td>
<td>Garrard</td>
<td>Garrard</td>
</tr>
<tr>
<td>Go Video</td>
<td>Go Video</td>
<td>Go Video</td>
<td>Go Video</td>
</tr>
<tr>
<td>GoldStar</td>
<td>GoldStar</td>
<td>GoldStar</td>
<td>GoldStar</td>
</tr>
<tr>
<td>Grądiente</td>
<td>Grądiente</td>
<td>Grądiente</td>
<td>Grądiente</td>
</tr>
<tr>
<td>Grundig</td>
<td>Grundig</td>
<td>Grundig</td>
<td>Grundig</td>
</tr>
<tr>
<td>HI-Q</td>
<td>HI-Q</td>
<td>HI-Q</td>
<td>HI-Q</td>
</tr>
<tr>
<td>Harman/Kardon</td>
<td>Harman/Kardon</td>
<td>Harman/Kardon</td>
<td>Harman/Kardon</td>
</tr>
<tr>
<td>Headquarter</td>
<td>Headquarter</td>
<td>Headquarter</td>
<td>Headquarter</td>
</tr>
<tr>
<td>Hitachi</td>
<td>Hitachi</td>
<td>Hitachi</td>
<td>Hitachi</td>
</tr>
<tr>
<td>JVC</td>
<td>JVC</td>
<td>JVC</td>
<td>JVC</td>
</tr>
<tr>
<td>Jensen</td>
<td>Jensen</td>
<td>Jensen</td>
<td>Jensen</td>
</tr>
<tr>
<td>KEC</td>
<td>KEC</td>
<td>KEC</td>
<td>KEC</td>
</tr>
<tr>
<td>KlH</td>
<td>KlH</td>
<td>KlH</td>
<td>KlH</td>
</tr>
<tr>
<td>Kenwood</td>
<td>Kenwood</td>
<td>Kenwood</td>
<td>Kenwood</td>
</tr>
<tr>
<td>Kodak</td>
<td>Kodak</td>
<td>Kodak</td>
<td>Kodak</td>
</tr>
<tr>
<td>Lloyd's</td>
<td>Lloyd's</td>
<td>Lloyd's</td>
<td>Lloyd's</td>
</tr>
<tr>
<td>Logik</td>
<td>Logik</td>
<td>Logik</td>
<td>Logik</td>
</tr>
<tr>
<td>MEI</td>
<td>MEI</td>
<td>MEI</td>
<td>MEI</td>
</tr>
<tr>
<td>MGA</td>
<td>MGA</td>
<td>MGA</td>
<td>MGA</td>
</tr>
<tr>
<td>MGN Technology</td>
<td>MGN Technology</td>
<td>MGN Technology</td>
<td>MGN Technology</td>
</tr>
<tr>
<td>MTC</td>
<td>MTC</td>
<td>MTC</td>
<td>MTC</td>
</tr>
<tr>
<td>Magnasonic</td>
<td>Magnasonic</td>
<td>Magnasonic</td>
<td>Magnasonic</td>
</tr>
<tr>
<td>Magnavox</td>
<td>Magnavox</td>
<td>Magnavox</td>
<td>Magnavox</td>
</tr>
<tr>
<td>Magnin</td>
<td>Magnin</td>
<td>Magnin</td>
<td>Magnin</td>
</tr>
<tr>
<td>Marantz</td>
<td>Marantz</td>
<td>Marantz</td>
<td>Marantz</td>
</tr>
<tr>
<td>Marta</td>
<td>Marta</td>
<td>Marta</td>
<td>Marta</td>
</tr>
<tr>
<td>Matsushita</td>
<td>Matsushita</td>
<td>Matsushita</td>
<td>Matsushita</td>
</tr>
<tr>
<td>Memorex</td>
<td>Memorex</td>
<td>Memorex</td>
<td>Memorex</td>
</tr>
<tr>
<td>Minolta</td>
<td>Minolta</td>
<td>Minolta</td>
<td>Minolta</td>
</tr>
<tr>
<td>Mitsubishi</td>
<td>Mitsubishi</td>
<td>Mitsubishi</td>
<td>Mitsubishi</td>
</tr>
<tr>
<td>Motorola</td>
<td>Motorola</td>
<td>Motorola</td>
<td>Motorola</td>
</tr>
<tr>
<td>Multitech</td>
<td>Multitech</td>
<td>Multitech</td>
<td>Multitech</td>
</tr>
<tr>
<td>NAD</td>
<td>NAD</td>
<td>NAD</td>
<td>NAD</td>
</tr>
<tr>
<td>NEC</td>
<td>NEC</td>
<td>NEC</td>
<td>NEC</td>
</tr>
<tr>
<td>Nikko</td>
<td>Nikko</td>
<td>Nikko</td>
<td>Nikko</td>
</tr>
<tr>
<td>Nikon</td>
<td>Nikon</td>
<td>Nikon</td>
<td>Nikon</td>
</tr>
<tr>
<td>Noblex</td>
<td>Noblex</td>
<td>Noblex</td>
<td>Noblex</td>
</tr>
<tr>
<td>Olympus</td>
<td>Olympus</td>
<td>Olympus</td>
<td>Olympus</td>
</tr>
<tr>
<td>Optimus</td>
<td>Optimus</td>
<td>Optimus</td>
<td>Optimus</td>
</tr>
<tr>
<td>Optonica</td>
<td>Optonica</td>
<td>Optonica</td>
<td>Optonica</td>
</tr>
<tr>
<td>Orion</td>
<td>Orion</td>
<td>Orion</td>
<td>Orion</td>
</tr>
<tr>
<td>Panasonic</td>
<td>Panasonic</td>
<td>Panasonic</td>
<td>Panasonic</td>
</tr>
<tr>
<td>Penney</td>
<td>Penney</td>
<td>Penney</td>
<td>Penney</td>
</tr>
<tr>
<td>Pentax</td>
<td>Pentax</td>
<td>Pentax</td>
<td>Pentax</td>
</tr>
<tr>
<td>Philco</td>
<td>Philco</td>
<td>Philco</td>
<td>Philco</td>
</tr>
<tr>
<td>Philips</td>
<td>Philips</td>
<td>Philips</td>
<td>Philips</td>
</tr>
<tr>
<td>Pilot</td>
<td>Pilot</td>
<td>Pilot</td>
<td>Pilot</td>
</tr>
<tr>
<td>Pioneer</td>
<td>Pioneer</td>
<td>Pioneer</td>
<td>Pioneer</td>
</tr>
<tr>
<td>Portland</td>
<td>Portland</td>
<td>Portland</td>
<td>Portland</td>
</tr>
<tr>
<td>Profitronic</td>
<td>Profitronic</td>
<td>Profitronic</td>
<td>Profitronic</td>
</tr>
<tr>
<td>Proscan</td>
<td>Proscan</td>
<td>Proscan</td>
<td>Proscan</td>
</tr>
<tr>
<td>Protec</td>
<td>Protec</td>
<td>Protec</td>
<td>Protec</td>
</tr>
<tr>
<td>Pulsar</td>
<td>Pulsar</td>
<td>Pulsar</td>
<td>Pulsar</td>
</tr>
<tr>
<td>Quarter</td>
<td>Quarter</td>
<td>Quarter</td>
<td>Quarter</td>
</tr>
<tr>
<td>Quartz</td>
<td>Quartz</td>
<td>Quartz</td>
<td>Quartz</td>
</tr>
<tr>
<td>Quasar</td>
<td>Quasar</td>
<td>Quasar</td>
<td>Quasar</td>
</tr>
<tr>
<td>RCA</td>
<td>RCA</td>
<td>RCA</td>
<td>RCA</td>
</tr>
<tr>
<td>Radio Shack</td>
<td>Radio Shack</td>
<td>Radio Shack</td>
<td>Radio Shack</td>
</tr>
<tr>
<td>Radix</td>
<td>Radix</td>
<td>Radix</td>
<td>Radix</td>
</tr>
<tr>
<td>Randex</td>
<td>Randex</td>
<td>Randex</td>
<td>Randex</td>
</tr>
<tr>
<td>Realistic</td>
<td>Realistic</td>
<td>Realistic</td>
<td>Realistic</td>
</tr>
<tr>
<td>Ricoh</td>
<td>Ricoh</td>
<td>Ricoh</td>
<td>Ricoh</td>
</tr>
<tr>
<td>Runco</td>
<td>Runco</td>
<td>Runco</td>
<td>Runco</td>
</tr>
<tr>
<td>STS</td>
<td>STS</td>
<td>STS</td>
<td>STS</td>
</tr>
<tr>
<td>Salora</td>
<td>Salora</td>
<td>Salora</td>
<td>Salora</td>
</tr>
<tr>
<td>Samsung</td>
<td>Samsung</td>
<td>Samsung</td>
<td>Samsung</td>
</tr>
<tr>
<td>Sanyo</td>
<td>Sanyo</td>
<td>Sanyo</td>
<td>Sanyo</td>
</tr>
<tr>
<td>Scott</td>
<td>Scott</td>
<td>Scott</td>
<td>Scott</td>
</tr>
<tr>
<td>Sears</td>
<td>Sears</td>
<td>Sears</td>
<td>Sears</td>
</tr>
<tr>
<td>Semp</td>
<td>Semp</td>
<td>Semp</td>
<td>Semp</td>
</tr>
<tr>
<td>Sharp</td>
<td>Sharp</td>
<td>Sharp</td>
<td>Sharp</td>
</tr>
<tr>
<td>Shintom</td>
<td>Shintom</td>
<td>Shintom</td>
<td>Shintom</td>
</tr>
<tr>
<td>Shogun</td>
<td>Shogun</td>
<td>Shogun</td>
<td>Shogun</td>
</tr>
<tr>
<td>Singer</td>
<td>Singer</td>
<td>Singer</td>
<td>Singer</td>
</tr>
<tr>
<td>Sony</td>
<td>Sony</td>
<td>Sony</td>
<td>Sony</td>
</tr>
<tr>
<td>Sylvania</td>
<td>Sylvania</td>
<td>Sylvania</td>
<td>Sylvania</td>
</tr>
<tr>
<td>Symphonic</td>
<td>Symphonic</td>
<td>Symphonic</td>
<td>Symphonic</td>
</tr>
<tr>
<td>TMK</td>
<td>TMK</td>
<td>TMK</td>
<td>TMK</td>
</tr>
<tr>
<td>Tatung</td>
<td>Tatung</td>
<td>Tatung</td>
<td>Tatung</td>
</tr>
<tr>
<td>Teac</td>
<td>Teac</td>
<td>Teac</td>
<td>Teac</td>
</tr>
<tr>
<td>Technics</td>
<td>Technics</td>
<td>Technics</td>
<td>Technics</td>
</tr>
<tr>
<td>Teknika</td>
<td>Teknika</td>
<td>Teknika</td>
<td>Teknika</td>
</tr>
<tr>
<td>Thomas</td>
<td>Thomas</td>
<td>Thomas</td>
<td>Thomas</td>
</tr>
</tbody>
</table>

Some modes of the listed manufactures may not allow control through the VCR controller.
Enjoying through External Equipment

Connecting control cords

Connect control cords between the Media Receiver and other PIONEER equipment having the logo. You can then operate the connected equipment by sending commands from its remote control unit to the remote control sensor on the Media Receiver.

After the CONTROL IN terminals have been connected, the remote control sensors on the connected equipment do not accept commands from the remote control units. Face the remote control units to the remote control sensor on the Plasma Display when operating the connected equipment.

NOTE
- Make sure that the power is turned off when making connections.
- Complete all component connections before making control cord connections.

About SR+

The CONTROL OUT terminal on the rear of the Media Receiver supports SR+ that allows linked operations with a PIONEER AV receiver. SR+ presents functions such as the input switch linkage operation function and the DSP surround mode display function. For more information, see the instruction manual that came with the PIONEER AV receiver supporting SR+.

NOTE
- While in connection through SR+, the volume on this system is temporarily minimized.

The control cables (commercially available) are mono sound cables with mini plugs (no resistance).
Learning function of the remote control unit
You can operate the connected AV products (AV Receiver, Cable Box, SAT tuner, VCR, DVD, DVD recorder, LD) using the learning function of your remote control unit. This remote control unit has a function that can memorize each remote control code.

2 to 5 cm (0.8 to 2.0 inches)

Remote control (Supplied accessory) Remote control of AV product

Using the learning function
1. Slide the Mode switch to match the device whose remote control signal you want to be learned.
2. Press EDIT/LEARN and 2 at the same time.
   • The LED flashes.
3. Press a button to be learned.
   • The LED lights up.
   • For the functions that can be learned, see pages 64 to 68.
   • When learning is finished, the LED starts flashing again.
4. Press EDIT/LEARN again to exit the Learn mode.

NOTE
• To exit the Edit mode halfway, press EDIT/LEARN again.
• If the Mode switch selection is changed when in the Edit mode, the Edit mode is cancelled.
• If no operation is performed for more than one minute, the Edit mode is cancelled.
• When you enter a code not listed, the LED flashes quickly.
• If the table on page 63 does not include your desired manufacturer or the remote control does not work, you can make the memory learn its signal by the Learn mode.
• The initial mode is “000” (PIONEER).

Presetting manufacture codes
1. Slide the Mode switch to match the device to which you want to preset the remote control signal.
2. Press EDIT/LEARN and 1 at the same time.
   • The LED flashes.
3. Press 0 – 9 to enter the manufacture code. See page 63.
   • Preset mode is finished once the LED no longer lights up.

NOTE
• To exit the Edit mode halfway, press EDIT/LEARN again.
• If the Mode switch selection is changed when in the Edit mode, the Edit mode is cancelled.
• If no operation is performed for more than one minute, the Edit mode is cancelled.
• When you enter a code not listed, the LED flashes quickly.
• If the table on page 63 does not include your desired manufacturer or the remote control does not work, you can make the memory learn its signal by the Learn mode.
• The initial mode is “000” (PIONEER).
### Useful Remote Control Features

#### Manufacture codes

<table>
<thead>
<tr>
<th>CABLE/SAT</th>
<th>VCR</th>
<th>DVD/DVR</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>PIONEER (CABLE)</td>
<td>PIONEER</td>
</tr>
<tr>
<td>001</td>
<td>PIONEER (CABLE)</td>
<td>FISHER</td>
</tr>
<tr>
<td>002</td>
<td>JERROLD (CABLE)</td>
<td>FISHER 2</td>
</tr>
<tr>
<td>003</td>
<td>JERROLD (CABLE)</td>
<td>FISHER 3</td>
</tr>
<tr>
<td>004</td>
<td>JERROLD (CABLE)</td>
<td>GOLDSTAR</td>
</tr>
<tr>
<td>005</td>
<td>JERROLD (CABLE)</td>
<td>HITACHI</td>
</tr>
<tr>
<td>006</td>
<td>JERROLD (CABLE)</td>
<td>HITACHI 2</td>
</tr>
<tr>
<td>007</td>
<td>JERROLD (CABLE)</td>
<td>HITACHI 3</td>
</tr>
<tr>
<td>008</td>
<td>JERROLD (CABLE)</td>
<td>MAGNAVOX 2</td>
</tr>
<tr>
<td>009</td>
<td>JERROLD (CABLE)</td>
<td>MITSUBISHI</td>
</tr>
<tr>
<td>010</td>
<td>JERROLD (CABLE)</td>
<td>MITSUBISHI 2</td>
</tr>
<tr>
<td>011</td>
<td>JERROLD (CABLE)</td>
<td>MITSUBISHI 3</td>
</tr>
<tr>
<td>012</td>
<td>S.A. 1 (CABLE)</td>
<td>MITSUBISHI 4</td>
</tr>
<tr>
<td>013</td>
<td>S.A. 2 (CABLE)</td>
<td>MITSUBISHI 5</td>
</tr>
<tr>
<td>014</td>
<td>S.A. 3 (CABLE)</td>
<td>MITSUBISHI 6</td>
</tr>
<tr>
<td>015</td>
<td>S.A. 4 (CABLE)</td>
<td>PANASONIC</td>
</tr>
<tr>
<td>016</td>
<td>ZENITH 1 (CABLE)</td>
<td>PANASONIC 2</td>
</tr>
<tr>
<td>017</td>
<td>ZENITH 2 (CABLE)</td>
<td>PANASONIC 3</td>
</tr>
<tr>
<td>018</td>
<td>ZENITH 3 (CABLE)</td>
<td>RCA</td>
</tr>
<tr>
<td>019</td>
<td>RCA</td>
<td></td>
</tr>
<tr>
<td>020</td>
<td>PIONEER (SAT)</td>
<td>RCA 3</td>
</tr>
<tr>
<td>021</td>
<td>RCA 1 (SAT)</td>
<td>SANYO</td>
</tr>
<tr>
<td>022</td>
<td>RCA 2 (SAT)</td>
<td>SANYO 2</td>
</tr>
<tr>
<td>023</td>
<td>SONY 1 (SAT)</td>
<td>SANYO 3</td>
</tr>
<tr>
<td>024</td>
<td>SHARP</td>
<td>PHILIPS</td>
</tr>
<tr>
<td>025</td>
<td>SHARP 2</td>
<td>RCA (LD)</td>
</tr>
<tr>
<td>026</td>
<td>SHARP 3</td>
<td>SONY (MD)</td>
</tr>
<tr>
<td>027</td>
<td>SONY (BETA)</td>
<td>SONY (LD)</td>
</tr>
<tr>
<td>028</td>
<td>SONY (YHS)</td>
<td></td>
</tr>
<tr>
<td>029</td>
<td>SONY (8mm)</td>
<td></td>
</tr>
<tr>
<td>030</td>
<td>TOSHIBA</td>
<td></td>
</tr>
<tr>
<td>031</td>
<td>JVC</td>
<td></td>
</tr>
<tr>
<td>032</td>
<td>JVC 2</td>
<td></td>
</tr>
<tr>
<td>033</td>
<td>JVC 3</td>
<td></td>
</tr>
<tr>
<td>034</td>
<td>JVC 4</td>
<td></td>
</tr>
<tr>
<td>035</td>
<td>JVC 5</td>
<td></td>
</tr>
<tr>
<td>036</td>
<td>ZENITH</td>
<td></td>
</tr>
<tr>
<td>037</td>
<td>MITSUBISHI (J-3)</td>
<td></td>
</tr>
<tr>
<td>038</td>
<td>SHARP (J-2)</td>
<td></td>
</tr>
<tr>
<td>039</td>
<td>PANASONIC (J-3)</td>
<td></td>
</tr>
<tr>
<td>040</td>
<td>TOSHIBA (J-3)</td>
<td></td>
</tr>
<tr>
<td>041</td>
<td>GRANDIENTE</td>
<td></td>
</tr>
<tr>
<td>042</td>
<td>AKAI</td>
<td></td>
</tr>
<tr>
<td>043</td>
<td>PIONEER 2</td>
<td></td>
</tr>
<tr>
<td>044</td>
<td>SANYO</td>
<td></td>
</tr>
<tr>
<td>045</td>
<td>MAST FI</td>
<td></td>
</tr>
<tr>
<td>046</td>
<td>AKAI</td>
<td></td>
</tr>
<tr>
<td>047</td>
<td>ALBA</td>
<td></td>
</tr>
<tr>
<td>048</td>
<td>BUSH</td>
<td></td>
</tr>
<tr>
<td>049</td>
<td>THOMSON</td>
<td></td>
</tr>
<tr>
<td>050</td>
<td>BIRD</td>
<td></td>
</tr>
<tr>
<td>051</td>
<td>TELEFUNKEN</td>
<td></td>
</tr>
<tr>
<td>052</td>
<td>ALBA</td>
<td></td>
</tr>
</tbody>
</table>
Using the remote control unit to control other devices

Receiver control buttons
When a Pioneer receiver is connected to the display, the receiver can be operated using buttons 1 to 3.
When a non-Pioneer receiver is connected to the display, the signals for 1 to 3 must first be learned before operating. See page 62.

1 RECEIVER (STANDBY/ON)
   Turns the receiver power on and off.
2 RECEIVER INPUT
   Selects the input source connected to the receiver.
3 RECEIVER VOL +/−
   Adjusts the receiver volume level. Press VOL + to increase the volume and VOL − to decrease it.

NOTE

• (RECEIVER) MUTING
   Allows the remote control unit to learn receiver’s mute signal. Use this button when the mode switch is set to a position other than TV.
• The color-highlighted buttons on the remote control can learn the control signal from another device’s remote control.
Useful Remote Control Features

Cable control buttons
When the Mode switch is set to CBL/SAT, the cable converter connected to the display can be operated using 1 to 5.

Cable converters made by other manufacturers and not preset can also be operated using the remote control unit if 1 to 5 have learned the functions. See page 62.

1 0 – 9
Press a button (or buttons) that corresponds to the channel that you want to watch.

2 CH +/–
Press CH + or CH – to tune in a higher or lower channel.

3 SOURCE
Turns the cable converter power on and off.

4 CH ENTER *
Fix the selected channel with the direct channel selection buttons.

5 CH RETURN *
Press to switch between the current channel and the channel you were watching immediately before.

* Some manufacturers do not preset CH ENTER and CH RETURN. Use these buttons to learn if necessary.

NOTE
- CABLE and SAT cannot be selected at the same time.
- The color-highlighted buttons on the remote control can learn the control signal from another device’s remote control.
Useful Remote Control Features

SAT control buttons
When the SAT is preset by the learning function of the remote control, the remote control unit buttons will function as shown below.

- When the **Mode switch** is set to **CBL/SAT**, satellite broadcast tuners made by other manufacturers and not preset can also be operated with the remote control unit if 1 to 8 have learned the functions. See page 62.

1  **0 – 9**
   Press a button (or buttons) that corresponds to the channel that you wish to watch.

2  **CH +/-**
   Press **CH +** or **CH –** to tune in a higher or lower channel.

3  **ENTER, ↑/↓/←/→**
   **ENTER:** Press to activate the selected function.
   **↑/↓/←/→:** Press the button to select items on the SAT GUIDE screen or SAT MENU screen.

4  **SAT INFO**
   When this button is pressed, information on satellite broadcasting will appear.
   - Use this button to learn if necessary.

5  **SOURCE**
   Turns the Satellite broadcast tuner power on and off.

6  **CH ENTER**
   Fix the selected channel with the direct channel selection buttons.
   - Use this button to learn if necessary.

7  **SAT MENU**
   When this button is pressed, the satellite broadcasting menu screen will appear.

8  **SAT GUIDE**
   When this button is pressed, the satellite broadcasting guide screen will appear.

**NOTE**
- CABLE and SAT cannot be selected at the same time.
- The color-highlighted buttons on the remote control can learn the control signal from another device’s remote control.
Useful Remote Control Features

VCR control buttons
When the VCR is preset by the learning function of the remote control, the remote control unit buttons will function as follows when the Mode switch of the remote control unit is set to VCR.

- When the input selector button having the same number as the input terminal connecting the VCR is pressed, the VCR can be operated using 1 to 8.
- VCR made by other manufacturers and not preset can also be operated using the remote control unit if 1 to 8 have learned the functions. See page 62.

1 CH +/-
Press to select the channel of the TV tuner on the VCR.

2 ➔ (PLAY)
Selects playback.

3 ◀◀ (REW)
Rewinds the tape and allows picture search.

4 SOURCE
Turns the power of the VCR on and off.

5 II (PAUSE/STILL)
Sets pauses and still pictures.

6 ➔➔ (FF)
Rapidly advances the tape and allows picture search.

7 ● (REC)
Starts recording.

8 ■ (STOP)
Stop tape transport.

NOTE
- The color-highlighted buttons on the remote control can learn the control signal from another device’s remote control.
Useful Remote Control Features

When the DVD/DVR is preset by the learning function of the remote control, the remote control unit buttons will function as follows when the **Mode switch** of the remote control unit is set to DVD/DVR:

- When the input selector button having the same number as the input terminal connecting a DVD player or DVD recorder is pressed, these players can be operated using 1 to 12.
- DVD players or DVD recorders made by other manufacturers and not preset can also be operated using the remote control unit if 1 to 12 have learned the functions. See page 62.

1. **CH +/-** (DVD recorder only)
   - Press to change the channel of the tuner built in the DVD recorder.

2. **RETURN**
   - When the DVD menu is in display, press to restore the immediately previous screen.

3. **► (PLAY)**
   - Selects playback.

4. **◄◄ (SCAN)/◄◄ (CHAPTER SEARCH)**
   - Continue pressing to go backward.
   - Pressing quickly once takes you to the start of the chapter currently playing. Each time you press it, you move back to the start of the previous chapter.

5. **SOURCE (OFF)**
   - Turns the power of the DVD player or DVD recorder on and off.

6. **II (PAUSE/STILL)**
   - Sets pauses and still pictures.

7. **SAT/DVD MENU (DVD, DVD recorder)**
   - When this button is pressed, the DVD menu will appear.

8. **ENTER, ↑/↓/←/→ (DVD, DVD recorder)**
   - **ENTER**: Press to activate the selected function.
   - **↑/↓/←/→**: Press the button to select items on the DVD MENU screen.

9. **DVD TOP MENU (DVD, DVD recorder)**
   - When this button is pressed, the DVD top menu will appear.

10. **►► (SCAN)/►►I (CHAPTER SEARCH)**
    - Continue pressing for fast forward.
    - Pressing quickly once takes you to the start of the next chapter. Each time you press it, you move ahead to the start of the next chapter.

11. **● (REC)**
    - Starts recording.

12. **■ (STOP)**
    - Playback stops when pressing once.
    - With some DVD players or DVD recorders, pressing the button twice may open the disc tray.

11, 12 **REC STOP**
    - Press and hold ●, and then press this button to stop recording. This operation is true of only Pioneer DVD recorders.

**NOTE**
- The DVD player or DVD recorder cannot be selected at the same time.
- The color-highlighted buttons on the remote control can learn the control signal from another device’s remote control.
Appendix

Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>No power.</td>
<td>• Make sure the Plasma Display and the Media Receiver are connected correctly. (See page 18.)&lt;br&gt;• Is the power cord disconnected? (See page 23.)&lt;br&gt;• Has the main power been turned on? (See page 24.)&lt;br&gt;• Check if you pressed ( TV ) on the remote control unit. (See page 24.)&lt;br&gt;• If the indicator on the system lights up red, press ( TV ).</td>
</tr>
<tr>
<td>Green and red rectangles appear on the screen alternately.</td>
<td>• Check if the system cable has been disconnected or almost disconnected? (See page 18.)</td>
</tr>
<tr>
<td>The system cannot be operated.</td>
<td>• External influences such as lightning, static electricity, etc., may cause improper operation. In this case, operate the system after first turning the power of the Plasma Display and the Media Receiver, or unplugging the power cord and re-plugging it in after 1 or 2 minutes.</td>
</tr>
<tr>
<td>Remote control unit does not operate.</td>
<td>• Is the Mode switch set correctly? Slide it to the TV setting position. (See page 14.)&lt;br&gt;• Are batteries inserted with polarity (+, –) aligned? (See page 20.)&lt;br&gt;• Are batteries worn out? (Replace with new batteries.) (See page 20.)&lt;br&gt;• Operate the remote control unit while pointing it toward the remote control sensor on the Plasma Display. (See page 20.)&lt;br&gt;• Are you using it under strong or fluorescent lighting?&lt;br&gt;• Is a fluorescent light illuminated near the remote control sensor?</td>
</tr>
<tr>
<td>No image and audio is presented.</td>
<td>• Check if the input source for video or PC has been unintentionally selected although you want to watch a TV channel. (See page 25.)&lt;br&gt;• Check if you have activated the Parental Control function. (See page 33.) Enter a password to temporarily cancel the Parental Control function. (See page 37.)</td>
</tr>
<tr>
<td>No picture.</td>
<td>• Is connection to other components correct? (See pages 50 to 58.)&lt;br&gt;• Is a non-compatible PC signal being input? (See page 58.)&lt;br&gt;• Is picture adjustment correct? (See page 41.)</td>
</tr>
<tr>
<td>Audio is output but no image is presented.</td>
<td>• Check if you have selected “Picture Off” for Energy Save. With this option selected, the screen is deactivated; only audio is output. To restore the screen display, press any button other than ( VOL +/– ) and MUTING. (See page 44.)</td>
</tr>
<tr>
<td>Images are presented but no audio is output.</td>
<td>• Check if you have selected the minimum volume. (See page 26.)&lt;br&gt;• Check if you have muted sound. (See page 26.)&lt;br&gt;• When using a video or PC input source, check that the audio terminal is also in connection. (See pages 50 to 54 and 58.)</td>
</tr>
<tr>
<td>Sound is reversed between the right and left. Sound is output from only a single speaker.</td>
<td>• Check if the speaker cable connections have been reversed between the right and left or if the speaker cable from either speaker has been disconnected. (See pages 12 and 18.)&lt;br&gt;• Has the balance been correctly adjusted? (See page 43.)</td>
</tr>
<tr>
<td>Picture is cut off.</td>
<td>• Is the image position correct? (See page 45.)&lt;br&gt;• Has the correct screen size been selected? (See page 46.)</td>
</tr>
<tr>
<td>Strange color, light color, dark or color misalignment.</td>
<td>• Adjust the picture tone. (See page 41.)&lt;br&gt;• Is the room too bright? The picture may look dark in a room that is too bright.</td>
</tr>
<tr>
<td>Power is suddenly turned off.</td>
<td>• Is the sleep timer set? (See page 40.)&lt;br&gt;• Check the power control setting. (See page 44.)&lt;br&gt;• The system’s internal temperature has increased. Remove any objects blocking vent or clean. (See pages 15 and 16.)</td>
</tr>
<tr>
<td>Panel sounds / noises</td>
<td>• Panel generated sounds, examples: Fan motor noise, Electrical Circuit Humming / Glass Panel buzzing are normal operation of a phosphor-based matrix display.</td>
</tr>
</tbody>
</table>

**Code** | **Message** | **Check**
---|---|---
SD04 | Powering off. Internal temperature too high. Check temperature around PDP. | Check if the ambient temperature of the Plasma Display is high. |
SD05 | Powering off. Internal protection circuits activated. Is there a short in speaker cable? | Check the speaker cable connections between the Plasma Display and the speakers. |
SD11 | Powering off. Internal temperature too high. Check temperature around media receiver. | Check if the ambient temperature of the Media Receiver is high. |
The video program that you watch may be high definition (HD) or standard definition (SD). This Plasma Display is designed to scale to each type of definition properly. If the video program’s definition type changes while a menu window is displayed on the screen (for example: HD→SD or SD→HD), the menu size may temporarily shrink or enlarge until the scaling is completed. This may happen, for example, when you switch between television and an external digital video recorder (D-VHS), or when your recorded program switches between different definition types, while the on-screen menu is being shown.

If this happens, the menu will return to its normal size after two to three seconds. This action is normal, and does not indicate a problem with your Plasma Display system.
This product in part uses “OpenSSL” software.

To the extent the OpenSSL software is being used, the following notification applies:

Copyright (c) 1998-2004 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgment: “This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/)”
4. The names “OpenSSL Toolkit” and “OpenSSL Project” must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.
5. Products derived from this software may not be called “OpenSSL” nor may “OpenSSL” appear in their names without prior written permission of the OpenSSL Project.
6. Redistributions of any form whatsoever must retain the following acknowledgment: “This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/)”

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT “AS IS” AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Original SSLeay License

Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)

All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com). The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are adhered to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young’s, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement: “This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)” The word “cryptographic” can be left out if the routines from the library being used are not cryptographic related :-).
4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: “This product includes software written by Tim Hudson (tjh@cryptsoft.com)”

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG “AS IS” AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence (including the GNU Public Licence.)
**Linux Source Notice**
The Pioneer Plasma Television integrated with the Media Receiver in part is powered by utilizes the Linux operation system. The machine readable copy of the corresponding source code is available for the cost of distribution. To obtain a copy, please visit http://www.pioneerelectronics.com/ for more information.

**GNU General Public License**
Version 2, June 1991
Copyright (C) 1989, 1991 Free Software Foundation, Inc.
59 Temple Place - Suite 330, Boston, MA 02111-1307, USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

**Preamble**
The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software—to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation’s software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author’s protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors’ reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone’s free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

**GNU General Public License**

**TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION**

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The “Program”, below, refers to any such program or work, and a “work based on the Program” means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term “modification”.) Each licensee is addressed as “you”.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program’s source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License.
(Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:
   a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
   b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
   c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License.

However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients’ exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.
9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

**NO WARRANTY**

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

**END OF TERMS AND CONDITIONS**

**How to Apply These Terms to Your New Programs**

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the “copyright” line and a pointer to where the full notice is found.

<one line to give the program’s name and an idea of what it does.>

Copyright (C) yyyy  name of author

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place - Suite 330, Boston, MA 02111-1307, USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author

Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type ‘show w’. This is free software, and you are welcome to redistribute it under certain conditions; type ‘show c’ for details.

The hypothetical commands ‘show w’ and ‘show c’ should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than ‘show w’ and ‘show c’; they could even be mouse-clicks or menu items—whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a “copyright disclaimer” for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program ‘Gnomovision’ (which makes passes at compilers) written by James Hacker.

signature of Ty Coon, 1 April 1989

Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.
GNU Lesser General Public License

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.
59 Temple Place, Suite 330, Boston, MA 02111-1307, USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence
the version number 2.1.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software—to make sure the software is free for all its users. This license, the Lesser General Public License, applies to some specially designated software packages—typically libraries—of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. Restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author’s reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder.

Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the “Lesser” General Public License because it does Less to protect the user’s freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library.

A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users’ freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a “work based on the library” and a “work that uses the library”. The former contains code derived from the library, whereas the latter must be combined with the library in order to run.
GNU Lesser General Public License

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called “this License”). Each licensee is addressed as “you”.

A “library” means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The “Library”, below, refers to any such software library or work which has been distributed under these terms. A “work based on the Library” means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term “modification”.)

“Source code” for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library’s complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

   a) The modified work must itself be a software library.

   b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

   c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

   d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.) These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of the derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy. This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program containing no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a “work that uses the Library”. Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License. However, linking a “work that uses the Library” with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a “work that uses the library”. The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.
Appendix

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library. You may distribute such a combined library, provided that the terms permit modification of the work for the customer’s own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License.

Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work which must be distributed under Sections 1 and 2 above; and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user’s computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the “work that uses the Library” must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients’ exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.
If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns. Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and “any later version”, you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms or, alternatively, under the terms of the ordinary General Public License.

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the “copyright” line and a pointer to where the full notice is found.

<one line to give the library’s name and an idea of what it does.>

Copyright (C) year name of author

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307, USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a “copyright disclaimer” for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library ‘Frob’ (a library for tweaking knobs) written by James Random Hacker.

signature of Ty Coon, 1 April 1990

Ty Coon, President of Vice

That’s all there is to it!
## Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>50” Plasma Display, Model: PRO-505PU</th>
<th>43” Plasma Display, Model: PRO-435PU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Pixels</td>
<td>1280 × 768 pixels</td>
<td>1024 × 768 pixels</td>
</tr>
<tr>
<td>Audio Amplifier</td>
<td>13 W + 13 W (1 kHz, 10 %, 8 Ω)</td>
<td>13 W + 13 W (1 kHz, 10 %, 8 Ω)</td>
</tr>
<tr>
<td>Surround System</td>
<td>SRS/FOCUS/TruBass</td>
<td>SRS/FOCUS/TruBass</td>
</tr>
<tr>
<td>Power Requirement</td>
<td>120 V AC, 60 Hz, 363 W (0.2 W Standby)</td>
<td>120 V AC, 60 Hz, 298 W (0.2 W Standby)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>1270 (W) × 737 (H) × 93 (D) mm (50 (W) × 29 (H) × 3 11/16 (D) inches)</td>
<td>1120 (W) × 652 (H) × 93 (D) mm (44 1/8 (W) × 25 11/16 (H) × 3 11/16 (D) inches)</td>
</tr>
<tr>
<td>Weight</td>
<td>32.8 kg (72.3 lbs.)</td>
<td>26.8 kg (59.1 lbs.)</td>
</tr>
</tbody>
</table>

### Item Media Receiver, Model: PRO-R05U

<table>
<thead>
<tr>
<th>Reception System (Digital)</th>
<th>ATSC Digital TV system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circuit type</td>
<td>8VSB/64QAM/256QAM/QPSK demodulation</td>
</tr>
<tr>
<td>Tuner</td>
<td>VHF/UHF</td>
</tr>
<tr>
<td>CATV</td>
<td>VHF 2–13 ch, UHF 14–69 ch</td>
</tr>
<tr>
<td>Audio format</td>
<td>Dolby Digital</td>
</tr>
<tr>
<td>Reception System (Analog)</td>
<td>American TV standard NTSC system</td>
</tr>
<tr>
<td>Circuit type</td>
<td>Video signal detection PLL full synchronous detection, PLL digital synthesizer system</td>
</tr>
<tr>
<td>Tuner</td>
<td>VHF/UHF</td>
</tr>
<tr>
<td>CATV</td>
<td>VHF 2–13 ch, UHF 14–69 ch</td>
</tr>
<tr>
<td>Audio multiplex</td>
<td>BTSC system</td>
</tr>
<tr>
<td>Terminals</td>
<td></td>
</tr>
<tr>
<td>Rear</td>
<td>ANTENNA/CABLE A IN: 75 Ω UNBAL, F Type for DTV/VHF/UHF/CATV in</td>
</tr>
<tr>
<td></td>
<td>ANTENNA B: 75 Ω UNBAL, F Type for VHF/UHF/CATV in</td>
</tr>
<tr>
<td></td>
<td>Loop out</td>
</tr>
<tr>
<td>i.LINK (TS)</td>
<td>S400 (2)</td>
</tr>
<tr>
<td>INPUT 1</td>
<td>COMPONENT VIDEO in, S-VIDEO in, VIDEO in, AUDIO in, HDMI in</td>
</tr>
<tr>
<td>INPUT 2</td>
<td>S-VIDEO in, VIDEO in, AUDIO in</td>
</tr>
<tr>
<td>INPUT 3</td>
<td>COMPONENT VIDEO in, AUDIO in, HDMI in</td>
</tr>
<tr>
<td>Monitor Out</td>
<td>S-VIDEO out, VIDEO out, AUDIO out</td>
</tr>
<tr>
<td>Digital Audio Output</td>
<td>Optical (1)</td>
</tr>
<tr>
<td>VCR Control Output</td>
<td>1</td>
</tr>
<tr>
<td>CONTROL IN</td>
<td>1</td>
</tr>
<tr>
<td>CONTROL OUT</td>
<td>1</td>
</tr>
<tr>
<td>Cable CARD</td>
<td>Point of Deployment</td>
</tr>
<tr>
<td>Front</td>
<td>INPUT 4: COMPONENT VIDEO in, S-VIDEO in, VIDEO in, AUDIO in</td>
</tr>
<tr>
<td></td>
<td>PC: Analog RGB in, AUDIO in</td>
</tr>
<tr>
<td>OSD</td>
<td>English/French/Spanish</td>
</tr>
<tr>
<td>Power Requirement</td>
<td>120 V AC, 60 Hz, 45.3 W (31 W Standby)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>420 (W) × 90 (H) × 295 (D) mm (16 9/16 (W) × 3 9/16 (H) × 11 10/16 (D) inches)</td>
</tr>
<tr>
<td>Weight</td>
<td>5.8 kg (12.8 lbs.)</td>
</tr>
</tbody>
</table>

*Design and specifications are subject to change without notice.*
Appendix

Trademarks
• FOCUS, WOW, SRS and symbol are trademarks of SRS Labs, Inc. FOCUS and WOW technologies are incorporated under license from SRS Labs, Inc.
• Manufactured under license from Dolby Laboratories. “Dolby” and the double-D symbol are trademarks of Dolby Laboratories.
• HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
• This product includes FontAvenue® fonts licensed by NEC Corporation. FontAvenue is a registered trademark of NEC Corporation.
• “i.LINK” and the “i.LINK” logo are trademarks.
• DDC is a registered trademark of Video Electronics Standards Association.
• CableCARD is a trademark of Cable Television Laboratories, Inc.
• The names of the companies or institutions are trademarks or registered trademarks of the respective companies or institutions.

Copyright protection
• This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited consumer uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.