



SAMSUNG PLASMA DISPLAY

Owner's Instructions

SPN4235



ELECTRONICS

SERVICE DIVISION
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www.samsungusa.com



Warning! Important Safety Instructions

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

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



This symbol indicates high voltage is present inside. It is dangerous to make any kind of contact with any inside part of this product.



This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

Note to CATV system installer: This reminder is provided to call CATV system installer's attention to Article 820-40 of the National Electrical Code (Section 54 of Canadian Electrical Code, Part I), 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.

Caution: FCC/CSA regulations state that any unauthorized changes or modifications to this equipment may void the user's authority to operate it.

Caution: To prevent electric shock, match the wide blade of plug to the wide slot, and fully insert the plug.

Attention: pour éviter les chocs électriques, introduire la lame le plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

Important: One Federal Court has held that unauthorized recording of copyrighted TV programs is an infringement of U.S. copyright laws.

Certain Canadian programs may also be copyrighted and any unauthorized recording in whole or in part may be in violation of these rights.

TO PREVENT DAMAGE WHICH MAY RESULT IN FIRE OR ELECTRIC SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

Thank You for Choosing Samsung

Thank you for choosing Samsung! Your new Samsung product represents the latest in television technology. We designed it with easy-to-use on-screen menus and closed captioning capabilities, making it one of the best products in its class. We are proud to offer you a product that will provide convenient, dependable service and enjoyment for years to come.

Important Safety Information

Always be careful when using your PDP. To reduce the risk of fire, electrical shock, and other injuries, keep these safety precautions in mind when installing, using, and maintaining your machine.

- Read all safety and operating instructions before operating your PDP.
- Keep the safety and operating instructions for future reference.
- Heed all warnings on the PDP and in the operating instructions.
- Follow all operating and use instructions.
- Unplug the PDP from the wall outlet before cleaning. Use a damp cloth; do not use liquid or aerosol cleaners.
- Never add any attachments and/or equipment without approval of the manufacturer. Such additions can increase the risk of fire, electric shock, or other personal injury.
- Do not use the PDP where contact with or immersion in water is a possibility, such as near bath tubs, sinks, washing machines, swimming pools, etc.
- Do not place the PDP on an unstable cart, stand, tripod, bracket, table, or floor where it can fall. A falling PDP can cause serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the PDP. Follow the manufacturer's instructions when mounting the unit, and use a mounting accessory recommended by the manufacturer. Move the PDP and cart with care. Quick stops, excessive force, and uneven surfaces can make the unit and cart unsteady and likely to overturn.
- Provide ventilation for the PDP. The unit is designed with slots in the cabinet for ventilation to protect it from overheating. Do not block these openings with any object, and do not place the PDP on a bed, sofa, rug, or other similar surface. Do not place it near a radiator or heat register. If you place the PDP on a rack or bookcase, ensure that there is adequate ventilation and that you've followed the manufacturer's instructions for mounting.
- Operate your PDP only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your appliance dealer or local power company.
- Use only a grounded or polarized outlet. For your safety, this PDP is equipped with a polarized alternating current line plug having one blade wider than the other. This plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still does not fit, contact your electrician to replace your outlet.



FCC Information

- Protect the power cord. Power supply cords should be routed so that they won't be walked on or pinched by objects placed on or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.
- Unplug the PDP from the wall outlet and disconnect the antenna or cable system during a lightning storm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power-line surges.
- Avoid overhead power lines. An outside antenna system should not be placed in the vicinity of overhead power lines or other electric light or power circuits or where it can fall into such power lines or circuits. When installing an outside antenna system, be extremely careful to keep from touching the power lines or circuits. Contact with such lines can be fatal.
- Do not overload the wall outlet or extension cords. Overloading can result in fire or electric shock.
- Do not insert anything through the openings in the unit, where they can touch dangerous voltage points or damage parts. Never spill liquid of any kind on the PDP.
- Ground outdoor antennas. If an outside antenna or cable system is connected to the PDP, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information about proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.
- Do not attempt to service the PDP yourself. Refer all servicing to qualified service personnel. Unplug the unit from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - when the power-supply cord or plug is damaged
 - if liquid has been spilled on the unit or if objects have fallen into the unit
 - if the PDP has been exposed to rain or water
 - if the PDP does not operate normally by following the operating instructions
 - if the PDP has been dropped or the cabinet has been damaged
 - when the PDP exhibits a distinct change in performance
- If you make adjustments yourself, adjust only those controls that are covered by the operating instructions. Adjusting other controls may result in damage and will often require extensive work by a qualified technician to restore the PDP to normal.
- When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part. Unauthorized substitutions may result in additional damage to the unit.
- Upon completion of any service or repairs to this PDP, ask the service technician to perform safety checks to determine that the PDP is in a safe operating condition.
- The PDP can properly operate in a temperature range of 32~104°F(0~40°C) and 80% humidity. Do not use in a hot and humid place.
- Before moving the PDP equipped with speakers, separate the speakers from the PDP. If you move the PDP with the speakers attached, it may result in damage or injury.

User Instructions

The Federal Communications Commission Radio Frequency Interference Statement includes the following warning:
 NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television receptions, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

User Information

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. If necessary, consult your dealer or an experienced radio/television technician for additional suggestions. You may find the booklet called How to Identify and Resolve Radio/TV Interference Problems helpful. This booklet was prepared by the Federal Communications Commission. It is available from the U.S. Government Printing Office, Washington, DC 20402, Stock Number 004-000-00345-4.

The party responsible for product compliance:
 SAMSUNG ELECTRONICS CO., LTD
 America QA Lab of Samsung
 3351 Michelson Drive,
 Suite #290, Irvine, CA92612 USA

Warning

User must use shielded signal interface cables to maintain FCC compliance for the product. Provided with this monitor is a detachable power supply cord with IEC320 style terminations. It may be suitable for connection to any UL Listed personal computer with similar configuration. Before making the connection, make sure the voltage rating of the computer convenience outlet is the same as the monitor and that the ampere rating of the computer convenience outlet is equal to or exceeds the monitor voltage rating. For 120 Volt applications, use only UL Listed detachable power cord with NEMA configuration 5-15P type (parallel blades) plug cap. For 240 Volt applications use only UL Listed Detachable power supply cord with NEMA configuration 6015P type (tandem blades) plug cap.

IC Compliance Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations of ICES-003.

Cet appareil Numérique de classe B respecte toutes les exigences du Règlement NMB-03 sur les équipements produisant des interférences au Canada.

Notice de Conformité IC

Cet appareil numérique de classe B respecte toutes les exigences du Règlement ICES-003 sur les équipements produisant des interférences au Canada.

VCCI

This is a Class B product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

Important Warranty Information Regarding Television Format Viewing

Wide screen format PDP Displays (16:9, the aspect ratio of the screen width to height) are primarily designed to view wide screen format full-motion video. The images displayed on them should primarily be in the wide screen 16:9 ratio format, or expanded to fill the screen if your model offers this feature and constantly moving. Displaying stationary graphics and images on screen, such as the dark side-bars on non-expanded standard format television video and programming, should be limited to no more than 5% of the total television viewing per week.

Additionally, viewing other stationary images and text such as stock market reports, video game displays, station logos, web sites or computer graphics and patterns, should be limited as described above for all televisions. **Displaying stationary images that exceed the above guidelines can cause uneven aging of PDP Displays that leave subtle, but permanent burned-in ghost images in the PDP picture. To avoid this, vary the programming and images, and primarily display full screen moving images, not stationary patterns or dark bars.** On PDP models that offer picture sizing features, use these controls to view different formats as a full screen picture.

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

User Instructions

Screen Image retention

Do not display a still image (such as on a video game or when hooking up a PC to this Monitor) on the plasma monitor panel for more than several minutes as it can cause screen image retention. This image retention is also known as "screen burn". To avoid such image retention, refer to page 24 of this manual to reduce the degree of brightness and contrast of this screen when displaying a still image.

Cell Defect

The plasma display panel consists of fine cells. Although the panels are produced with more than 99.9 percent active cells, there may be some cells that do not produce light or remain lit.

Altitude

The PDP will not operate normally at altitudes above 6500 ft.

Warranty

Warranty Period: One year starting from the purchase of your Monitor.
Warranty does not cover any damage caused by image retention.

Table of Contents

General Information

Your New Plasma Display Panel	10
Remote Control Buttons	12
Wall Installation Instructions	14

Connection

Connecting VHF and UHF Antennas	20
Connecting Cable TV	22
Connecting a Speaker	24
Connecting a VCR	25
Connecting a Camcorder	26
Connecting a DVD Player	27
Connecting a DTV Receiver	28

Operation

Turning the PDP(PDP) On and Off	32
Memorizing the Channels	34
Setting Up Your Remote Control	38

Picture Control

Customizing the Picture	42
Using Automatic Picture Settings	43
Selecting the Color Tone	44
Viewing the Picture-in-Picture	45
Changing the PIP channel	50
Changing the Screen Size	51
Freezing the Picture	52

Sound Control

Customizing the Sound	54
Using Automatic Sound Settings	55
Choosing a Multi-Channel Sound (MTS) Soundtrack	56
Using the Auto Volume	57
Using Virtual Dolby	58
Using a Subwoofer	59

Channel Control

Fine Tuning Channels	62
LNA (Low Noise Amplifier)	63

Connecting a PC and Operation

Connecting to a PC	66
Adjusting the PC Screen	70
Changing the Position of the Image	71
Changing the Size of the Image	72
Information	73
Picture Quality Adjustment	74
Power Saver (PC mode only)	75

Time Setting

Setting the Clock	80
Setting the Sleep Timer	81
Setting the Timers	82
Setting the Preferred Channel Volume Level	84

Function Description

Selecting a Menu Language	86
Picture Quality Adjustment	87
Digital Noise Reduction	88
Setting a Auto Power	89
Using the V-Chip	90

Appendix

Troubleshooting	98
Care and Maintenance	99
Specifications	100

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P L A S M A D I S P L A Y P A N E L

General Information

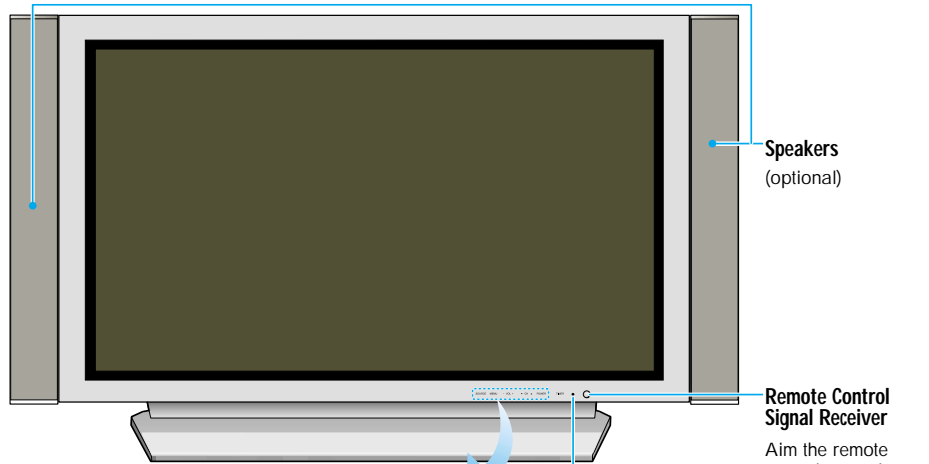


Your New Plasma Display Panel	10
Remote Control Buttons	12
Wall Installation Instructions	14



Your New Plasma Display Panel

Front Panel



SOURCE button

Press to display all of the available video sources (ie., Video, S-Video, Component1, Component2, PC).

MENU button

Displays the main on-screen menu.

VOL(+,-) button

Press to increase or decrease the volume. Also used to adjust items on the on-screen menu.

CH(▼,▲) button

Press CH▲ or CH▼ to change Channels. Also used to select items on the on-screen menus.

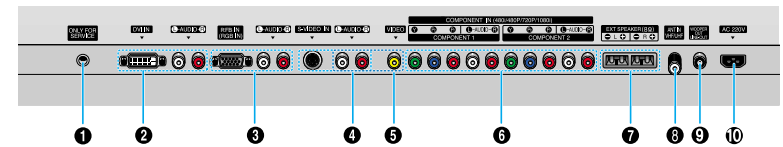
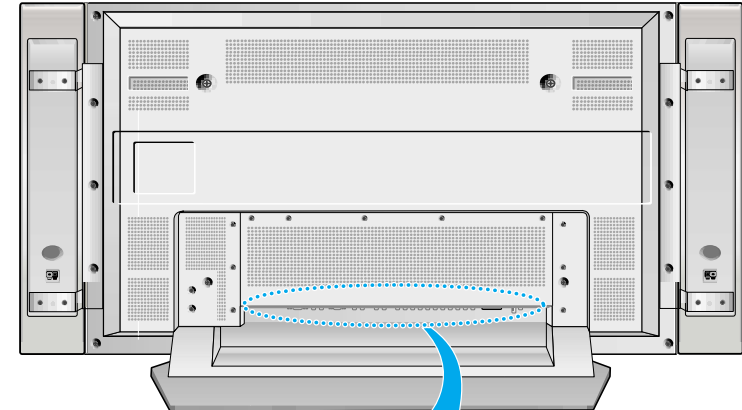
POWER button

Press to turn the PDP on and off.

Power Indicator

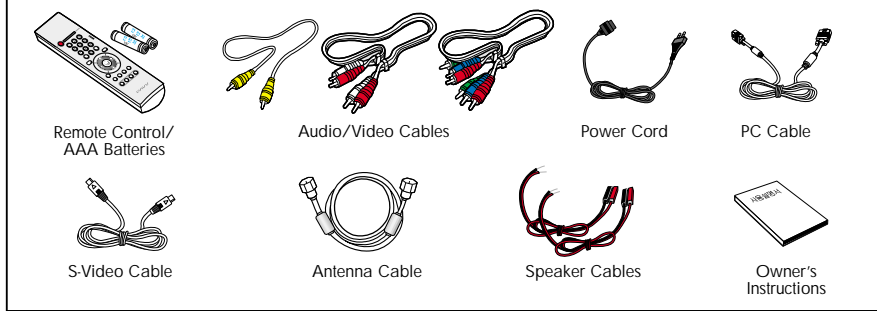
Power Off : LED Red
 Power On (Timer On) : LED Green
 Power On (Timer Off) : LED Off

Rear Panel



- 1 Service jack**
- 2 DVI Input jacks**
 Receives the digital video/audio signals from a set top box or PC.
- 3 PC(RGB) Input jack(15pin)**
 Connect to the video output jack on your PC.
- 4 S-Video Input jack**
 Connect a S-Video signal from external sources such VCRs or DVD players.
- 5 Video Input jacks**
 Connect a video/audio signals from external sources such VCRs or DVD players.
- 6 Component Video/Audio Input jacks (Y/P_b/P_r/Audio L/Audio R)**
 Connect to the audio and component output jacks of a DVD player or Set-Top Box.
- 7 External Speaker Out jacks**
 Connect external speakers.
- 8 Antenna jack**
 Connect to antenna.
- 9 Sub-woofer speaker output jack**
 Connect to the Sub-woofer speaker jack.
- 10 Power Input jack**
 Connect the supplied power cord.

Checking Accessories





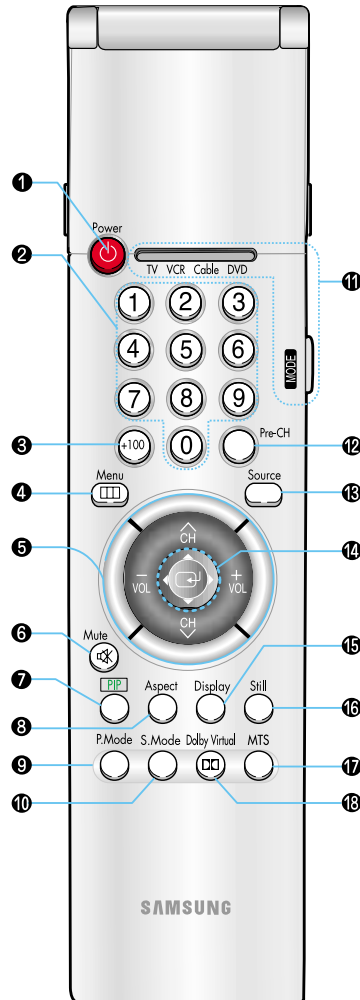
Remote Control Buttons

Remote Control

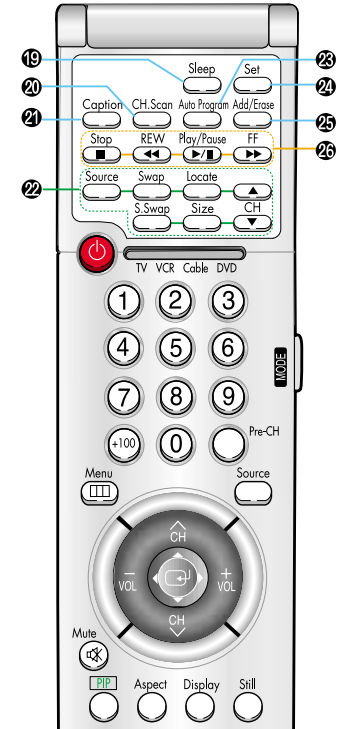
Flip the cover open in the arrow direction.



- 1 Power button**
Turns the PDP on and off.
- 2 Number buttons**
- 3 +100 button**
Press to select channels over 100. For example, to select channel 121, press "+100", then press "2" and "1."
- 4 Menu button**
Displays the main on-screen menu.
- 5 CH (Channel) and VOL (Volume) buttons**
Press CH▲ or CH▼ to change Channels. Also used to select items on the on-screen menus.
- 6 Mute button**
Press to mute the PDP sound.
- 7 PIP button**
Activates picture in picture.
- 8 Aspect button**
Press to change the screen size.
- 9 P.Mode button**
Adjust the PDP picture by selecting one of the preset factory settings (or select your personal, customized picture settings.)
- 10 S.Mode button**
Adjust the PDP sound by selecting one of the preset factory settings (or select your personal, customized sound settings.)
- 11 Mode button**
Selects a target device to be controlled by the Samsung remote control (i.e., VCR, Cable, or DVD players).
- 12 Pre-CH button**
Tunes to the previous channel.
- 13 Source button**
Press to display all of the available video sources (i.e., Video, S-Video, Component1, Component2, PC, DVI).
- 14 Joystick button**
Used to adjust items on the on-screen menu.
- 15 Display button**
Press to display information on the PDP screen.
- 16 Still button**
Press to pause the current screen.
- 17 MTS button**
Press to choose stereo, mono or Separate Audio Program (SAP broadcast).
- 18 Virtual Dolby button**
This feature allows the TV's L/R speakers to provide a Home Theater-like Dolby effect. The center and surround sounds are mixed into the L/R speakers.



- 19 Sleep button**
Press to select a preset time interval for automatic shutoff.
- 20 CH.Scan button**
Press to memorize(scan) the available channels.
- 21 Caption button**
Controls the caption decoder.
- 22 PIP control buttons**
Source : Press to select one of the available signal sources for the PIP window.
Swap : Exchanges the video signal that is currently displayed on the main screen with the signal in the PIP window.
Locate : Press to move the PIP window on the screen.
S.Swap: Press to select the audio (PIP or Main).
Size : Press to make the PIP window Large, Small or Double.
CH▲▼: Displays the available channels in sequence. (These buttons change channels in the PIP window only).
- 23 Auto Program button**
The TV automatically cycles through all of the available channels and stores them in memory.
- 24 SET button**
Used during setup of this remote control, so that it will work compatibly with other devices (VCR, cable box, DVD, etc.)
- 25 Add/Erase button**
Press to add or erase channels in the TV's memory.
- 26 VCR, DVD control buttons**
Controls VCR tape or DVD disc functions: Stop, Rewind, Play/Pause, Fast Forward.



Installing the Batteries in Your Remote Control

- 1** Slide the back cover to open the battery compartment of the remote control.
- 2** Install two AAA size batteries. Make sure to match the "+" and "-" ends of the batteries with the diagram inside the compartment.
- 3** Slide the cover back into place.



Remote Control Operation Range.

You can use your remote control within a distance of 23 feet and an angle of 30 degrees from the left and right sides of the remote control receiver of the TV.

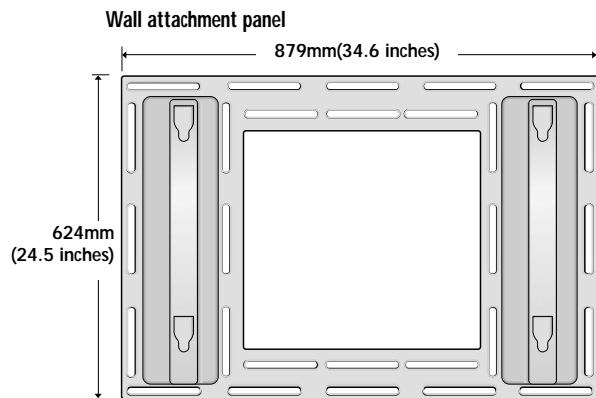


Wall Installation Instructions

Installation Notes

- 1 Do not install the PDP in any location other than a vertical wall.
- 2 To protect the performance of the PDP and prevent problems, avoid the following places.
 - Do not install next to smoke and fire detectors.
 - Do not install in an area subjected to vibration.
 - Do not install in an area subjected to high voltage.
 - Do not install near or around any heating apparatus.
- 3 Use only recommended parts and components.

Parts (Wall attachment panel is sold separately. Check with your dealer)



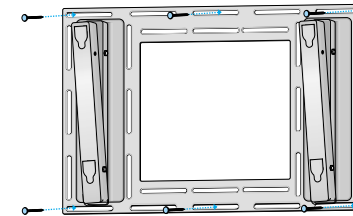
bolt



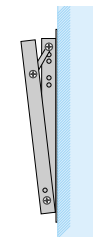
Insulation holder

Installing the Display on the Wall Attachment Panel

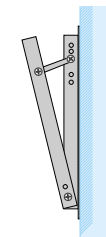
- 1 See the drawing of the wall attachment panel shown in page 14 to check for the stability of the wall where the PDP is to be installed. If the wall is not enough strong to support the PDP, strengthen the wall before installation.
- 2 Fix the wall attachment panel on the wall using bolts as shown in the following figure: Fixing bolts must protrude from the wall approx. 0.6 inches.



- 3 Using the wall attachment panel, you may adjust the angle of the display from 0 to 20 degrees. The angle can be set in 5 stages with 5 degrees of distance each, using the angle control holes on the sides of the panel.



When the angle has been set to 5 degrees.

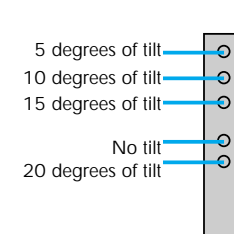


When the angle has been set to 15 degrees.



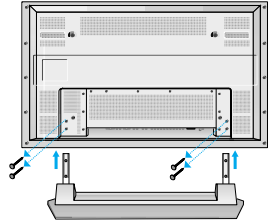
When the panel hasn't been tilted.

Angle control holes

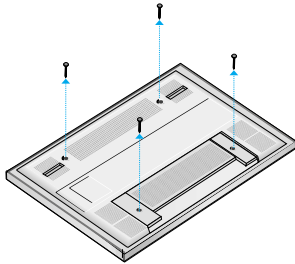


Continued...

- 4 Remove four small screws from the rear side of the display, then separate the stand from the PDP.

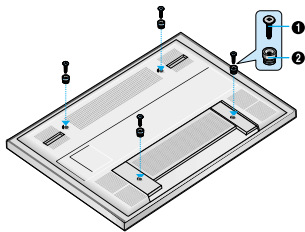


- 5 Remove four large screws from the rear side of the display.

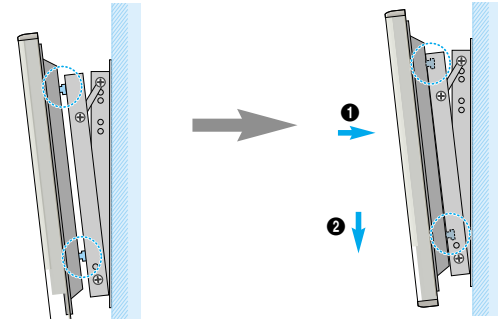


- 6 Insert the bolts and insulation holders into the four screw-holes as shown in the following figure:

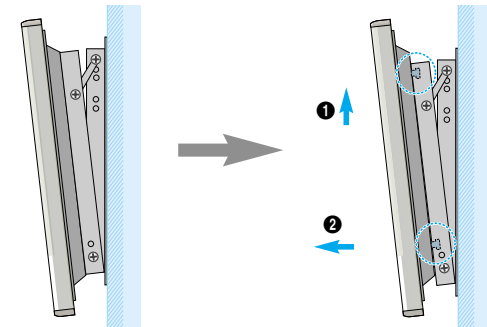
- 1 Bolt
- 2 Insulation holder



- 7 Hang the protruding plastic part on the rear of the PDP in the groove on the top of the wall attachment panel. Then, slide down the PDP. (Do not slide down the PDP with too much force. The protruding plastic part might be taken off.)



● Separating the Display from the Wall Attachment Panel



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P L A S M A D I S P L A Y P A N E L

Connections



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Connecting a Camcorder	26
Connecting a DVD Player	27
Connecting a DTV Receiver	28