



POLYCOM®

OWNERS MANUAL

ユーザーマニュアル

사용 설명서

РУКОВОДСТВО ПОЛЬЗОВАТЕЛЯ

MANUAL DEL PROPIETARIO

使用手冊



用戶手冊



50" PDP DISPLAY

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Important Safety Instructions

	WARNING RISK OF ELECTRIC SHOCK DO NOT OPEN	
WARNING: To reduce the risk of electric shock, do not remove the front or back covers. No user-serviceable parts inside. Refer servicing to qualified service personnel only.		



The lightning flash with arrow-head within a triangle is intended to inform the user that parts inside the product are a risk of electric shock.



The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are explained.

Special Notices

Certain programs may be copyrighted and unauthorized recording in whole or in part may be in violation of copyright laws in the U.S. and Canada.

FCC/CSA regulations state that any unauthorized modifications to this display may void user authority to operate it.

Warning & Precautions

- ▶ Read and keep these instructions.
- ▶ Follow all instructions.
- ▶ Heed all warnings.
- ▶ The unit should be operated from the type of power source indicated on the label. If the type of available power is unknown, consult your dealer or local power company.
- ▶ Do not use this apparatus near water.
- ▶ Clean only with dry cloth.
- ▶ Do not block any ventilation openings. Install in accordance with the manufacturer's instruction.
- ▶ Do not install near any heat sources such as radiators. Heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- ▶ Do not defeat the safety purpose of the polarized or grounding-type. A polarized plug has two blades with one wider than other. A grounding type plug has two blades and third grounding prong. The wide blade or the third prong are provided for you safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- ▶ Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- ▶ Only use attachments/accessories specified by the manufacturer.
- ▶ 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.
- ▶ Unplug this apparatus during lightning storms or when unused for long periods of time.
- ▶ 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.
- ▶ Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
- ▶ Do not hit this panel. Be careful to prevent from getting hurt by broken glass pieces in case the panel breaks.
- ▶ Be sure to install the display unit according to the installation instruction recommended by the manufacturer.
- ▶ Upon completion if service or maintenance, request the service technician to perform safety check to ensure that the display unit is in proper operating condition.
- ▶ This display unit only operates within the temperature 0°C to 40°C. Operation outside of the recommendation may cause damage to your product.

Important Safety Instructions

- ▶ Disconnect the unit from the main supply and refer servicing to qualified service personnel under the following conditions:
 - Power cord or plug is damaged or frayed.
 - Liquid has been spilled into the product and/or the unit has been exposed to water or moisture.
 - Unit does not operate normally when the operating instructions are not followed. Adjust only those controls that are covered by the operating instructions, improper adjustment of other controls may result in damage which often requires extensive work by a qualified technician to restore the unit to normal operation.
 - Unit has been dropped or the cabinet has been damaged.
 - Unit exhibits a distinct change in performance, indicating a need for service.

Cleaning & Maintenance

Disconnect from the electric outlet before cleaning. Do not use liquid or aerosol cleaners. Use only a slightly damp cloth for cleaning.

Regulatory Notice

CE Statement

The CE label on this product indicates that it complies with the 89/336/EEC directive on electromagnetic compatibility and safety rules as defined in the 73/23/EEC and 93/68/EEC low voltage directives.

This Product is protected against interferences from other electronic devices, provided that these devices comply with the standards in force. Sporadic interferences may happen nevertheless.

FCC Statement

The Federal Communications Commission Radio Frequency Interference Statement includes the following warning:

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/display technician for help.

Warning

User must use shielded signal interface cables to maintain FCC compliance for the product. Provided with this display 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 5-15 P 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.

ROHS Compliance Statement

This display defined in this owner manual is 100% ROHS compliant and meets all the requirements set forth in European Union Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment.

Information on Disposal for Your Old Product

Used electrical and electronic equipment must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of used electrical and electronic equipment. When this crossed-out wheeled bin symbol is attached to a product, it means the product is covered by the European Directive 2002/979/EC. If you wish to discard of this product, please contact your local authorities and ask the correct method of disposal. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.

Attention: If you want to dispose of this equipment, please do not use the ordinary dust bin!

Checking the Accessories Supplied



PDP Display



Remote Control
with Batteries



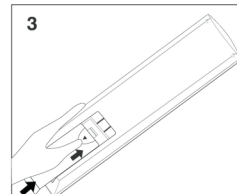
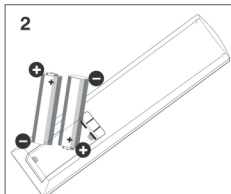
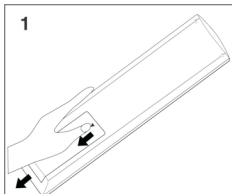
User's Manual

Front Panel Controls

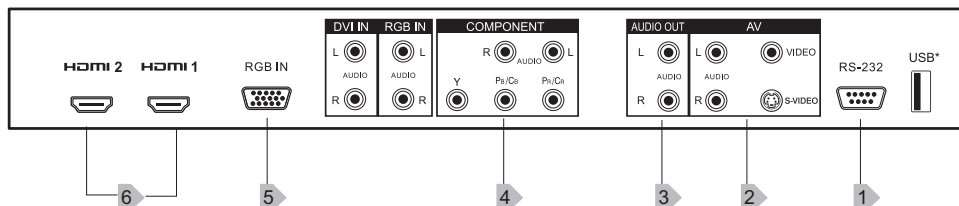


- 1 **Status LED**
Orange-Standby
The LED will illuminate in orange color if the display is at standby mode and the main power cord is plugged into the back of the unit.
Solid Green-Power on
- 2 **Power(Standby) Button**
Turns power on from standby mode. There is a wait period between on/standby cycles.
- 3 **Volume Adjustment Buttons**
Use these buttons to adjust volume up and down. These keys also serve as an navigation and adjustment keys when On Screen Display menu is engaged.
- 4 **Select Buttons**
Use these buttons to navigate through the On Screen Display menu.
- 5 **Menu Button**
Use this button to engage the On Screen Display menu.
- 6 **Input Button**
Use this button to switch between available inputs.

Battery Installation



Rear Panel Connections



1 RS-232 Connector

Connect to a computer serial port.

2 Composite/S-Video Input

Connect S-Video signals from external sources such as VCRs, DVD players or camcorder.

3 Audio Output

Variable or fixed audio output jacks for connecting to an external audio amplifier.

4 Component Video Input

Auto-detecting component video inputs (Y/Pb/Pr or Y/Cb/Cr) for connecting to the component output of video conferencing system, DVD player or Set-Top Box.

5 RGB Input

Connect to RGB input of computer or Set-Top Box.

6 HDMI 1 /HDMI 2 Input

Connects to the digital video signals from a Set-Top Box or PC video connector.

Note:

DVI is also supported through HDMI, using a DVI to HDMI adapter cable. DVI audio is supported using the DVI audio input jacks.

*HDMI, the HDMI logo and High-Definition Multimedia Interface are trade marks or registered trademarks of HDMI Licensing LLC

*USB port is provided for after service/engineer use ONLY.

Remote Control Buttons

1 Standby Power On/off

Push this button to turn on the display from Standby mode. Push it again to Standby mode.

2 POLYCOM Mode

Push this key to select POLYCOM modes for optimal conference performance.

3 Number Keypad

These keys are not applicable for this display.

4 Quick View

This key is not applicable for this display.

5 Wide

Toggles between various aspect ratio settings.

6 Menu

Engages the On Screen Display menu.

7 VOL. / ADJ.

Turns volume up or down. (Only applicable if optional side mounted or external amplified speakers are connected directly to the display.)

Use ADJ. keys to scroll through the On Screen Display menu.

8 SEL..

Use SEL. button up or down to navigate through the On Screen Display menu.

9 EXIT

Press Exit button to close the On Screen Display menu screen.

10 Direct Input Selection Keys

Directly change input signal modes.

11 Input Select

Press to select input signal modes sequentially.

12 Sound Mute On/Off

To mute or restore the sound. (Only applicable if optional side mounted or external amplified speaker are connected directly to the display.)

13 Info.

Press to show the status of the display.

14 Q.Access

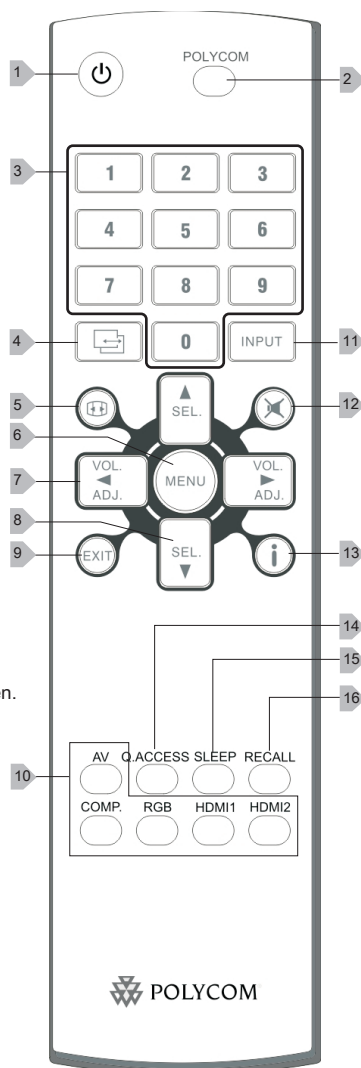
This key is not applicable for this display.

15 Sleep

Press this key to engage sleep timer selection directly.

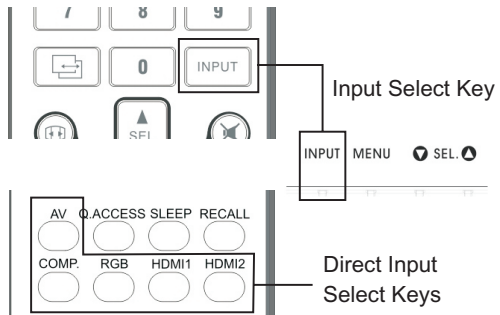
16 Recall

Press this key to return to POLYCOM video mode settings for optimal conference performance.



Changing Inputs

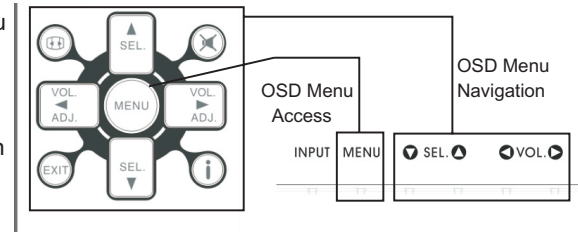
- 1 Press the INPUT key on the control panel or the **INPUT** key on the remote control.
- 2 Pressing the INPUT key will cycle the display through all available input signal sources in the following order.
 AV → S-VIDEO → COMPONENT → RGB
 HDMI 2 ← HDMI 1 ← RGB
 Simply select the input that you would like to switch to.



Using the OSD Menu

The On Screen Display (OSD) menu allows access to setup various parameters equipped with this display.

- 1 To access the OSD menu, press menu button on the front control panel or press **MENU** key on the remote control.
- 2 Navigation through the OSD menu can be accomplished by using the arrow keys on the remote control.



Note:

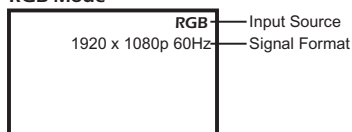
- 1 After change settings on the OSD menu, the new settings are confirmed automatically when OSD picture vanish.

On-Screen Status Display

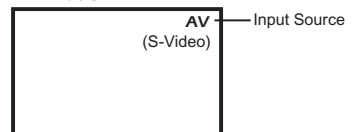
The On-Screen Status Display show detailed information regarding the operational status of the display. The status display automatically appears whenever there is a change in the state of the display such as input change. The status display will automatically disappear after a timeout period.

To manually show the Status Display, simply press the **i** key on the remote control. For Example:

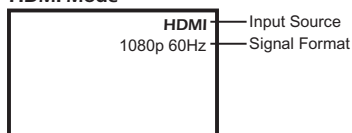
RGB Mode



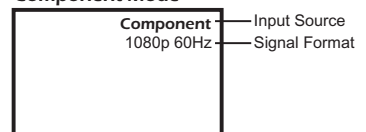
AV Mode



HDMI Mode



Component Mode

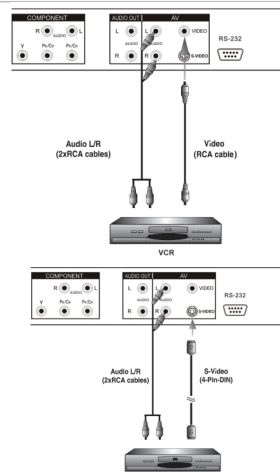


Connecting POLYCOM Video Conferencing System

Refer to the Administrator's Guide included with the POLYCOM video conferencing system for configuring the monitor(s) and audio system for optimal performance.

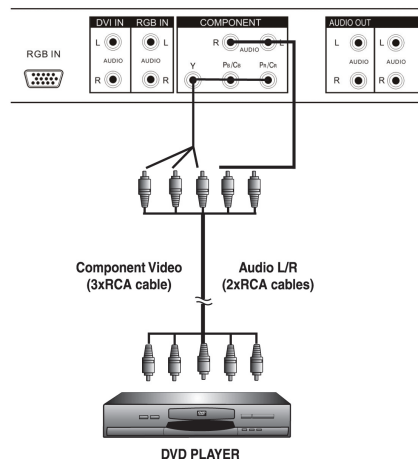
Connecting a VCR Using Composite/S-Video

- 1 Connect the Composite/S-Video(4-pin DIN) connector from the VCR to the Composite / S-Video input on the back of display.
- 2 Connect the red (R) and white (L) audio jacks from the VCR to the red (R) and white (L) audio-in jacks located next to the back of display.



Connecting a DVD Using Component Video Input

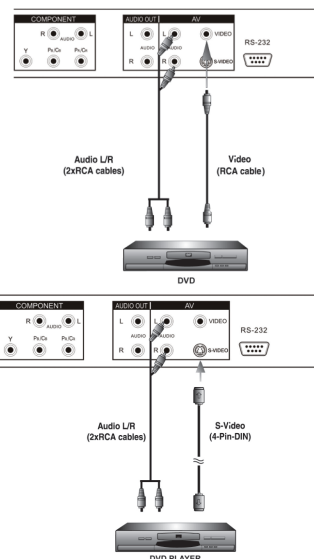
- 1 Connect the green-colored (labeled as Y) jack from the DVD to the green-colored jack of the display.
- 2 Connect the red-colored (labeled as P_R/C_R) jack from the DVD to the red-colored P_R/C_R jack of the display.
- 3 Connect the blue-colored (labeled as P_B/C_B) jack from the DVD to the blue-colored P_B/C_B jack of the display.
- 4 Connect the red (R) and white (L) audio jacks from the DVD the R and L audio-in jacks located next to the P_R/C_R connector of the display.



Connecting a DVD (con't)

Using Composite/S-Video Input

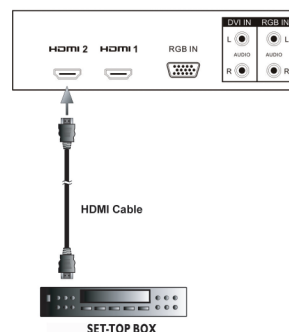
- 1 Connect the Composite/S-Video (4-pin DIN) connector from the DVD to the Composite/S-Video input on the back of display.
- 2 Connect the red (R) and white (L) audio jacks from the DVD to the red (R) and white (L) audio-in jacks located next to the S-Video connector.
- 3 When Composite and S-Video are both connected, S-Video will have higher priority.



Connecting a Set-Top Box

Using HDMI Input

- 1 Connect the HDMI connector from the back of the Set-Top Box to the HDMI connector located on the back of the display.

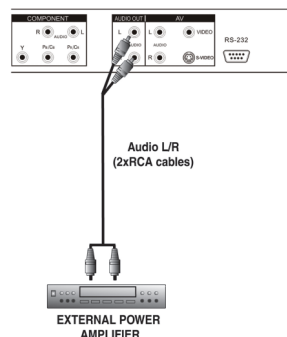


Notes:

- 1 Some Set-Top Boxes may not have a HDMI output. Use Component Video input or RGB input method if this is the case.
- 2 Upon connecting your Set-Top Box to the HDMI input of the display, it may be necessary to adjust various picture setting on the display or to correctly match the output of the Set-Top Box. This is caused by the different video timing set by various Set-Top Box manufacturers.
- 3 If the external device has DVI output only, use a DVI to HDMI adapter cable to connect to the HDMI terminal.

Connecting to an External Amplifiers

- 1 This display can be connected to an external amplifier using the AUDIO OUT jacks located on the back of the display.
- 2 Connect the red (R) and white (L) AUDIO OUT jacks from right side of the connector panel to the external amplifier.

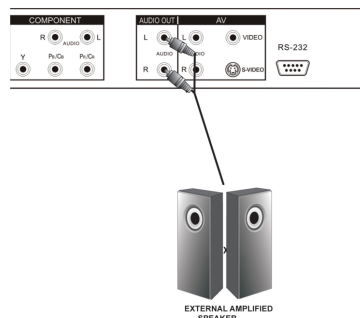


Note:

- 1 The AUDIO OUT RCA jacks can be set to either Fixed or Variable audio out levels.

Connecting External Amplified Speaker

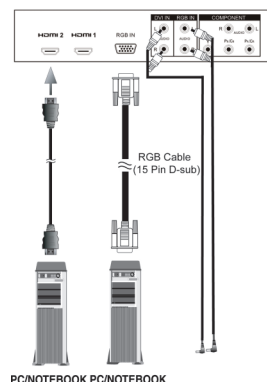
- 1 Connect the red(R) and white(L) audio out sockets located to the right of the connector panel of the set respectively to the right and left amplified speaker.



Connecting a PC

Using RGB or HDMI Video Input

- 1 For most PCs, connect the 15-pin D-Sub RGB connector from the back of the PC to the RGB-IN Connector located on the back of the display.
- 2 Connect the red (R) and white (L) audio jacks from the PC to the R and L jacks located next to the RGB connector.



Connecting to a PC (con't)

Setting Up Your Display Using Plug and Play

This display adheres to VESA Plug and Play standard to eliminate complicated and time consuming setup of displays. This display identifies itself to the computer and automatically sends the PC its Extended Display Identification Data (EDID) using Display Data Channel (DDC) protocols.

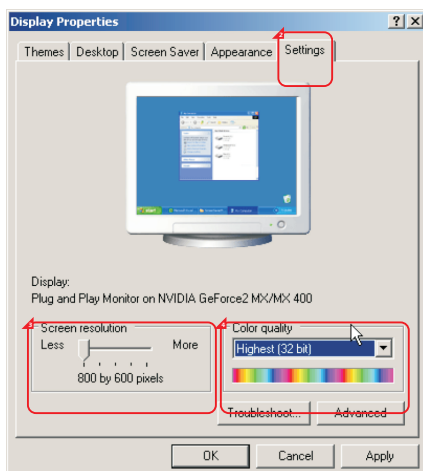
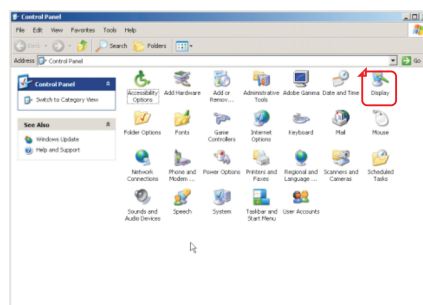
How To Set Up Your Display with PC (Windows)

The display settings for a typical Windows-based computer are shown below; however, actual screens on your computer will differ depending on the version of Windows and video equipped with the computer. Even though the actual screen may look different from example displayed below, basic set-up routine will apply in most cases.

- 1 Go to Window's CONTROL PANEL by clicking: START, SETTINGS, CONTROL PANEL. The CONTROL PANEL Window is displayed. Select the DISPLAY icon from this window.
- 2 The DISPLAY PROPERTIES dialog box is displayed. Select the SETTINGS tab to display your computer's video output settings.
- 3 Set the "Screen Resolution" setting to 1920x1080p PIXELS. For COLOR QUALITY, select 24 BIT COLOR (might also be expressed as 16 million colors).
- 4 If a vertical-frequency option exists, set the value to 60Hz.
- 5 Click OK to complete the setting.

Note:

- 1 Both screen position and size will vary, depending on the type of PC graphics card and its resolution selected.



Supported Resolutions






Under HDMI, DVI and RGB modes, this Display supports the following resolutions:

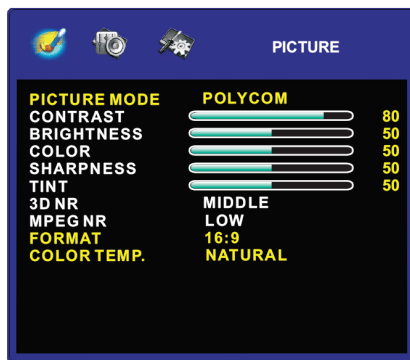
Mode No.	Mode	Resolution	H-Frequency (KHz) +/- 0.5KHz	V-Frequency (Hz) +/- 1Hz	Dot rate Polarity (MHz)	V-Sync Polarity (TTL)	H-Sync (TTL)
1	VGA	640 x 480@60Hz	31.469	59.940	25.175	-	-
2	DOS	720 x 400@70Hz	31.469	70.087	28.320	+	-
3	SVGA	800 x 600@60Hz	37.879	60.317	40.000	+	+
4	XGA	1024 x 768@60Hz	48.364	60.004	65.000	-	-
5	SXGA	1280 x 1024@60Hz	63.981	60.020	108.00	+	+
6		1360 x 768@60Hz	47.712	60.015	85.500	+	+
7	*	720 x 480i@60Hz	15.734	59.940	27.000	-	-
8	*	720 x 576i@50Hz	15.625	50.000	13.500	-	-
9	*	720 x 480p@60Hz	31.469	59.940	27.000	-	-
10	*	720 x 576p@50Hz	31.250	50.000	27.000	-	-
11		1280 x 720p@60Hz	45.000	60.000	74.250	+	+
12		1280 x 720p@59Hz	44.955	59.940	74.176	+	+
13		1280 x 720p@50Hz	37.500	50.000	74.250	+	+
14		1920 x 1080i@60Hz	33.750	60.000	74.250	+	+
15		1920 x 1080i@59Hz	33.716	59.940	74.176	+	+
16		1920 x 1080i@50Hz	28.125	50.000	74.250	+	+
17		1920 x 1080p@24Hz	27.000	24.000	74.250	+	+
18		1920 x 1080p@25Hz	28.125	25.000	74.250	+	+
19		1920 x 1080p@30Hz	33.750	30.000	74.250	+	+
20		1920 x 1080p@50Hz	56.250	50.000	148.500	+	+
21		1920 x 1080p@59Hz	67.433	59.940	148.352	+	+
22		1920 x 1080p@60Hz	67.500	60.000	148.500	+	+

Note:

- 1 This display does not support Macintosh resolution.
- 2 “*”:not available for RGB Mode.

Picture Adjustment

- 1 Press the  on the front panel or remote control and  key to enter Picture menu. Use  to select the PICTURE Option from the menu.
- 2 Various picture settings are available from the Picture menu. Use  to adjust that you wish and press  key to confirm select.



Explanation of Various Picture Control Settings

PICTURE MODE

There are four preset picture modes that you can choose from to optimize the video picture according to the type of programming you are watching. (1)POLYCOM; (2)CUSTOM; (3)MILD; (4)VIVID.

Note:

Note that the default Picture Mode setting is set to "POLYCOM". This setting is standard mode, which is optimized (and recommended) for use with POLYCOM Video conferencing system all video inputs. As such, many of the adjustment sub-settings are "gray-out" and are not accessible to the user. In order to make adjustments to these settings, "CUSTOM" picture mode must be selected.

CONTRAST

Adjust Contrast to increase the level of "white" in the video picture. Increasing Contrast will make white area of the video picture brighter. Contrast works in conjunction with BRIGHTNESS.

BRIGHTNESS

Adjust brightness to enhance the level of dark area in the video picture such as night scenes and shadow scenes. Increasing brightness will make dark areas more visible.

COLOR

Use color to adjust the color saturation of the picture. Increasing color will make the color more intense. Reducing color setting will make the color less intense.

SHARPNESS

Use sharpness to adjust the amount of detail enhancement to the video picture. Increase the setting will enhance the edges of objects in the video picture. Decreasing the setting will reduce enhancement.

TINT

Use Tint to adjust the color of flesh tones. Increasing color will make the picture with more red in appearance. Decreasing setting in left direction will shift the picture with more green in appearance.

3D NR/MPEG NR

To improve the quality of the picture in the case of poor reception.

Explanation of Various Picture Control Settings (con't)

H-POSITION

Use to change horizontal position of the picture. Increase to shift the picture to the right. Decrease to shift the picture to the left.

V-POSITION

Use to change vertical position of the picture. Increase to shift the picture up. Decrease to shift the picture down.

FORMAT

Use to change various screen width modes. There are three modes to choose from: (1)16:9; (2) 4:3;(3)PANORAMA. **Note:**

PANORAMA is only available for AV/S-Video Mode.

AUTO ADJUST

Use AUTO ADJUST to fine-tune the display to perfectly synchronize to the video signal source under RGB mode.

COLOR TEMP.

Select the COLOR TEMP. for white balance. There are three setting to choose from: (1)NORMAL; (2)WARM; (3)COOL.

CLOCK

Use clock to fine-tune the monitor to perfectly ADC PLL divider clock ratio synchronize to the video signal source under RGB mode.





PHASE

Use phase to fine-tune the monitor to perfectly ADC clock phase synchronize to the video signal source under RGB mode.

Fine Tuning Under RGB Mode





Picture Quality Adjustment

Due to various PC video cards with different specifications, it is likely that the initial video picture has subtle noise or imperfections. Please use the following procedures to adjust the picture quality when using under RGB mode

- 1 Press  key on the front control panel or remote control.
- 2 Use  to enter Picture option from the menu.
- 3 Use  keys to select AUTO ADJUST option from the menu.
- 4 Use  to change the setting till your video picture is optimal.

Picture Quality Adjustment-Manual Adjustment

In certain cases, users may desire to manually adjust. To do so, please follow below procedure. Due to various PC video cards with different specifications, it is likely that the initial video picture may not fit exactly to the size of the display. Please use the following procedures to adjust the picture position.

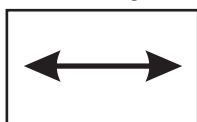
- 1 Press  key on the front control panel or remote control
- 2 Use  to enter Picture option from the menu.
- 3 Use  keys to select H-Position or V-Positon from the menu and press keys to confirm selection.
- 4 Use  to change the setting till your video picture is best fit within the display area.

Understanding Widescreen Modes

This display is capable of displaying a wide-screen image on the native 16:9 aspect ratio screen. However, not all available video content fits perfectly in a wide-screen (16:9) format resulting in unused screen space. This display is capable of displaying images in various formats that is suitable for various types of content depending on its size.

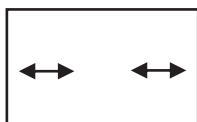
For 4:3 (Square) Content

Content from traditional TV, VCR and some DVD's are formatted using a "square" 4:3 format. When viewing content in this "Square" format, the following viewing modes are suitable.



16:9 (WIDE)

The original 4:3 image is proportionally stretched to fill the entire screen. This is the default setting from factory.



PANORAMA









The original 4:3 image is stretched only on the left and right sides to fill the screen, leaving the center image unchanged.



4:3 (NORMAL)

In 4:3 mode, the original 4:3 image is preserved but black bar are used to fill the extra space on the left and right.

Adjusting Sound Settings

- 1 Press the  key on the front panel or remote control. Use  to select the SOUND option from the menu.
- 2 Various sound settings are available from the SOUND menu. Use   to select the option that you wish to adjust.
- 3 Use   to change the setting. After achieving desired setting, press  key to close the OSD or press  key to keep adjusting.



Explanation of Various Sound Control Settings

SOUND EFFECT

There are four preset audio modes that you can choose from: POLYCOM, MUSIC, MOVIE and CUSTOM.

BASS

Adjusts the BASS level of the sound. For more bass response, increase the BASS level.

TREBLE

Adjust the TREBLE level of the sound. For more vocal and high frequency response, increase the TREBLE level.

Explanation of Various Sound Control Settings

BALANCE

Adjusts the BALANCE level between left and right channels.

SURROUND

This display is equipped with Surround Sound circuitry. Use Surround Sound to simulate a surround sound effect if you are not using a multi-channel sound setup.







AUDIO OUTPUT

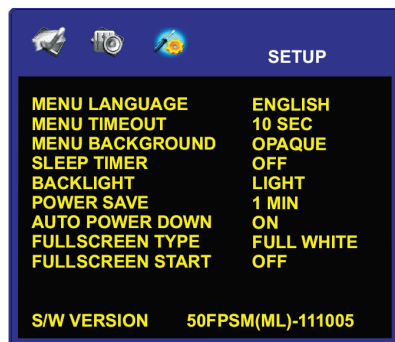
Set the type of audio output sent from the audio output jacks located in the rear of the display. When set to VARIABLE, audio output is affected by the display's internal volume controls. When set to FIXED, the audio output bypasses the display's internal audio control so that function such as bass, treble and volume controls have no effect.

SPEAKER

Set to On to turn on the monitor's internal amplification and internal speakers. Set OFF to turn off internal amplification and speakers. This setting will not effect AUDIO OUTPUT jacks.

System Adjustment

- 1 Press the  on the front panel or remote control. Use  to select the SYSTEM Option from the menu.
- 2 Use  to select the option that you wish to adjust.
- 3 Use  to change the setting. After achieving desired setting, press  key to close the OSD or  key to keep adjusting.



Explanation of Various System Setting

SLEEP TIMER

After user selects the sleep time option, the display will automatically shut-off without user intervention.

POWER SAVE

When there are no signals detected by the display, the display will automatically go into sleep mode until signal is restored. Power save mode /feature works with HDMI/ RGB and Component input options.

FULL SCREEN TYPE

This function is used to eliminate electrically charged residual images. There are two functions for selection : (1) FULL WHITE; (2)MULTI-COLOR.

FULL SCREEN START

User can select (1) OFF; (2) 30 MIN; (3)60 MIN; (4)120 MIN to start FULLSCREE TYPE function.

AUTO POWER DOWN

After no more than 4 hours in on mode following the last user interaction, the display shall be automatically switched from on mode to standby mode.

Troubleshooting

The following table lists possible problems and methods for remedy. Please refer to this table prior to contacting a service representative.

Symptom	Possible Cause	Remedy
No Picture is displayed.	1. The power cord is disconnected. 2. The selected input has no connection. 3. The display is in standby mode in RGB mode	1.Plug in the power cord. 2.Connect the selected device to the display. 3.Press any key on your keyboard.
Poor picture or poor sound.	1. Electronic appliances, cars, motorcycles or fluorescent lights may be nearby.	1.Move the display to another location to reduce interference.
Color is abnormal.	1. The signal cable is not connected properly.	1.Make sure that the signal cable is attached firmly to the rear panel of the display.
Picture is distorted.	1. The signal cable is not connected properly. 2. The input signal is not supported by the display.	1.Make sure that the signal cable is attached firmly. 2.Check that the video signal source is supported by the display (refer to the specifications section).
Image doesn't fill up the full size of the screen.	1.If under VGA mode, the Format settings are incorrectly set.	1.Use the Format options in the PICTURE menu to adjust the size of the picture.
Sound with no picture.	1. The signal cable is not connected properly.	1.Make sure that both video and sound inputs are correctly connected.
Picture with no sound.	1. The signal cable is not connected properly. 2. Volume is turned all the way down. 3. The sound is muted.	1.Make sure that both video inputs and sound inputs are correctly connected. 2.Use the volume adjustment buttons to adjust sound. 3.Switch MUTE off using the MUTE button on the remote control.
The remote control buttons do not work.	1.The remote control batteries are flat or incorrectly installed. 2.The position of the selection switch does not correspond to the selected input.	1. Change the batteries. Please note that you must then reprogram the remote control. 2.Put the selection switch on the correct position.
Some picture elements do not light up.	1. Some pixels of the display may not turn on.	1.This display was manufactured using an extremely high level of technology; however, sometimes some pixels of the display may not display. This is not a malfunction.
After-Images can be seen on the display after it has been powered off. (Examples of still pictures include logos, video games, computer images and images displayed in 4:3 format)	1. A still picture was displayed for an extended period of time.	1.Do not allow a still image to be displayed for an extended period of time as this can cause a permanent after-image to remain on the screen.

Specification

Display Panel

Screen size	50" - 16:9
Aspect ratio	1920(Horizontal) x 1080p(Vertical) pixels
Number of pixels	0.576 mm x 0.576 mm
Luminance	1,345 cd/m ²

Power Source

Input voltage	100 ~240 Vac, 50/60 Hz
Input current	4.2A Max.
Power consumption	420 Watts Max.
Stand-by	0.4 Watts Max.

Connection

Connector Types	Video Composite in RCA Jack x 1 set (S-Video in jack(4 pin DIN S-Terminal) x 1 set) Video Component RCA in Jack x 1 set Audio L/R in Jack x 4 sets Audio L/R Out Jack x 1 set 15 Pin D-Sub for RGB x 1 set 19 Pin HDMI x 2 sets RS-232 x 1 set
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Video/S-Video Signal

Type	Analog
Polarity	Positive
Amplitude &	S-VIDEO : Y=1VP-P (with Sync) C=0.286Vp-p (NTSC), C=0.3Vp-p(PAL)
Frequency	H:15.734KHz V:60Hz(NTSC) H:15.625KHz V:50Hz(PAL)
Input Impedance	75 ohms

Y/C_B/C_R or Y/P_B/P_R Signal (Component)

Type	Analog
Polarity	Positive
Amplitude	AV:1Vp-p(with sync), CB/PB:0.7Vp-p, CR/PR:0.7Vp-p
Frequency	H:support to 15K~68KHz V:support 24~60Hz

RGB Signal

Type	TTL
Polarity	Positive or Negative
Amplitude	RGB:0.7Vp-p
Frequency	H:support to 27K~68KHz V:support to 24~70Hz

HDMI Signal

Type	Digital
Polarity	Positive or Negative
Frequency	H:support to 15K~68KHz V:support 24~70Hz

Specification

Audio Signal

Analog 500mV rms/more than 10K ohm.

Pin Assignments For D-Sub connector (In/Loop out)

1. RED	4. GND	7. GREENGND	10. GND	13. H-SYNC
2. GREEN	5. GND	8. BULEGND	11.NC	14. V-SYNC
3. BLUE	6. REDGND	9. 5V	12.SDA	15 SCL

Pin Assignments For 19 Pin HDMI Connector (Digital only)

1.HDMI_RX2+	8.Ground (For +5V)	15.RX5VDDC SCL
2.Ground (For +5V)	9.HDMI_RX0-	16.RX5VDDC SDA
3.HDMI_RX2-	10.HDMI_RXC+	17. Ground (For +5V)
4.HDMI_RX1+	11.Ground (For +5V)	18. IN_5V
5. Ground (For +5V)	12.HDMI_RXC-	19. RX_HOTPLUG
6.HDMI_RX1-	13.No Connect	
7.HDMI_RX1+	14.Connect	

Timing For Component

Mode No.	Resolution	H-Frequency (KHz) +/- 0.5KHz	V-Frequency (Hz) +/- 1Hz	Dot rate Polarity (MHz)	V-Sync Polarity (TTL)	H-Sync (TTL)
1	720 x 480i@60Hz	15.734	59.940	27.000	-	-
2	720 x 576i@50Hz	15.625	50.000	13.500	-	-
3	720 x 480p@60Hz	31.469	59.940	27.000	-	-
4	720 x 576p@50Hz	31.250	50.000	27.000	-	-
5	1280 x 720p@60Hz	45.000	60.000	74.250	+	+
6	1280 x 720p@59Hz	44.955	59.940	74.176	+	+
7	1280 x 720p@50Hz	37.500	50.000	74.250	+	+
8	1920 x 1080i@60Hz	33.750	60.000	74.250	+	+
9	1920 x 1080i@59Hz	33.716	59.940	74.176	+	+
10	1920 x 1080i@50Hz	28.125	50.000	74.250	+	+
11	1920 x 1080p@24Hz	27.000	24.000	74.250	+	+
12	1920 x 1080p@25Hz	28.125	25.000	74.250	+	+
13	1920 x 1080p@30Hz	33.750	30.000	74.250	+	+
14	1920 x 1080p@50Hz	56.250	50.000	148.500	+	+
15	1920 x 1080p@59Hz	67.433	59.940	148.352	+	+
16	1920 x 1080p@60Hz	67.500	60.000	148.500	+	+

Note:

- 1 This display does not support Macintosh resolution.
- 2 Maximum Resolution Up to 1920 x 1080p

Specification

Dimensions & Weight

	Without SPK Without/STAND	With SPK With/STAND	Without SPK With STAND	With SPK Without STAND
Width	1256mm	1436mm	1256mm	1436mm
Height	762mm	793mm	793mm	762mm
Depth	135.7mm	260mm	260mm	135.7
Net Weight	68.3lbs/31Kg	79.4lbs/36Kg	72.8lbs/33Kg	75.0lbs/34Kg
Gross Weight	88.2lbs/40Kg	99.2lbs/45Kg	92.6lbs/42Kg	94.8lbs/43Kg

Operating

Temperature	0~40°C
Relative Humidity	20~80%
Pressure	600~835 mm/hg

Non-Operating

Temperature	-20~60°C
Relative Humidity	20~80%
Pressure	562~835 mm/hg

Acoustics

(IHF A-weight 1 meter) 30dB Max.

Sound

Residual hum(at volume Max.)	100uW Max.
Practical Max. Audio Output (at 10% THD Max.)	10W+10W Max./14 ohm
Sound Distortion (at 250mw 1KHz)	1% Max.
Audio Output (input at 1.4Vp-p)	>=1.0Vp-p

Reliability Requirement

The MTBF is 100,000 hrs. under operation 25+5°C (Half luminosity, motion picture)

Emission Requirement

The unit shall meet the EMI limits in all screen modes as qualified by CB/CE/UL/FCC/VCCI/ CCC/BSMI/Gost-R/S-Mark/Spring Mark and KC.

Specification

Power Management

Mode	H-sync	V-sync	Video	Power Dissipation
Normal	Pulse	Pulse	Active	Normal power
Stand-by	No pulse	No pulse	No video	Less than 0.5 Watt
Power Saving	Pulse	No pulse	B(blanked)	Less than 0.5 Watt
Power Saving	No pulse	Pulse	B(blanked)	Less than 0.5 Watt

Note:

- 1 The power indicator LED color is green in normal state, orange in stand-by and power saving state.
- 2 This display offers a power management feature that is enabled by default, and that can be used to automatically transition from On Mode to Sleep Mode.

RS-232 Connection

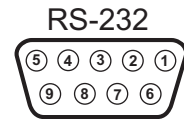
Overview

This monitor is equipped with an RS-232 serial terminal for using the monitor with computer controls. The RS-232 serial terminal conforms to the RS-232 interface specification. The computer will require software application (such as Hyper Terminal) which allows the computer to send and receive control data that can support the communication parameters described in the section.

Interface Parameters

These parameters are required to setup communications with the monitor.

Specification	RS-232	RS-232 Pin Layout
Sync Method	Synchronous	Pin 1 Received Line Signal Detector (Data Carrier Detect)
Baud Rate	9600 bps	Pin 2 Received Data (RXD)
Parity	None	Pin 3 Transmit Data (TXD)
Character Length	8 Bits	Pin 4 Data Terminal Ready (DTR)
Stop Bit	1 Bits	Pin 5 Signal Ground
		Pin 6 Data Set Ready (DSR)
		Pin 7 Request To Send (RTS)
		Pin 8 Clear To Send (CTS)
		Pin 9 Ring Indicator



Command Format and Sequencing

Data Structure Overview

In order to transmit data from the computer to the display, the data must be sent in a structured format. The format used by this display follows a COMMAND:DATA sequence. All commands and its related data are formatted using a 3-character format separated by a colon in-between. For example, the Power On command is sent as: PWR:PON where PWR is telling the display that it is receiving a Power related command, followed by the actual command to carry out.

Communications Overview

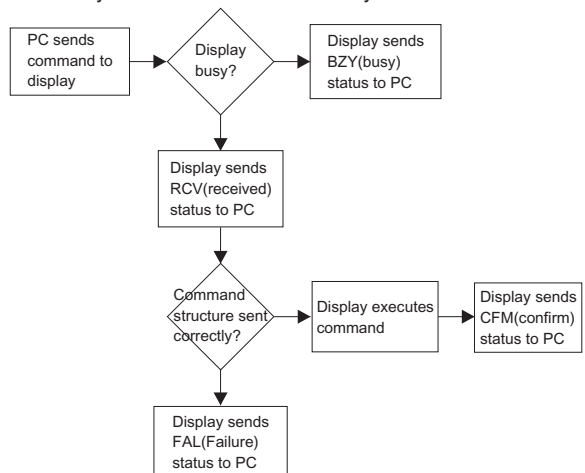
As commands are sent from the PC, the display will provide feedback regarding the state of command execution back to the PC. The display provides information status to inform the following:

- 1 Whether the command sent by the computer was received by the display.
- 2 Whether the COMMAND : DATA structure was correctly formatted for execution by the display.
- 3 Whether the command sent was successfully carried out by the display.

The following is an example of the communication

process between the PC and the display using a program such as Hyper Terminal.

Example: Read Power Status followed by Power On command and input select to AV with disruption.



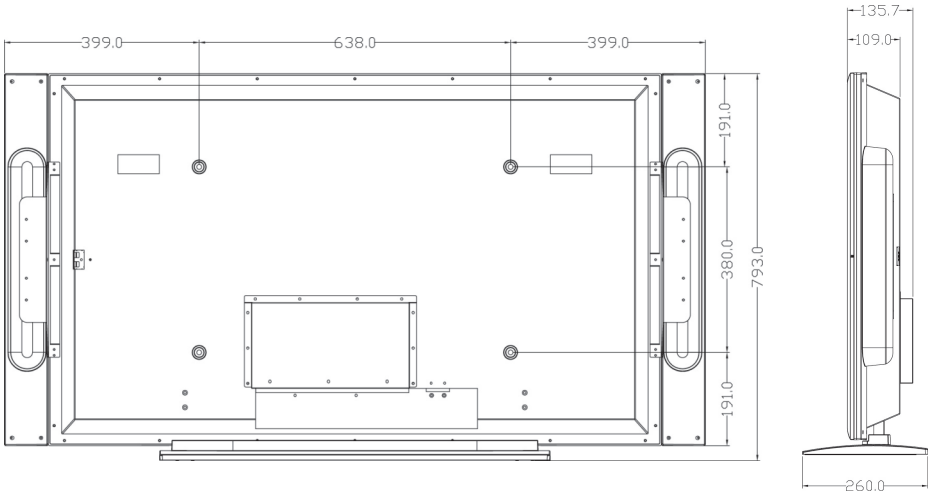
Command Format and Sequencing Communications Overview

PC Status		Display Status	
>REA:PWR	Send command to read power status	→	Display rcv command
>RCV	Rcv acknowledgment of command received	←	Send confirmation of comm and rcv'd to PC
>OFF	Rcv OFF status from display	←	Send actual status of power to PC(OFF)
>CFM	Rcv confirmation of command complete	←	Send confirmation of command completion
>PWR:PON	Send command to POWER ON the display	→	Display is not busy and waiting for command
>RCV	Rcv acknowledgment of command	←	Send confirmation of command rcv'd to PC
>CFM	Rcv confirmation of command complete	←	Display powers on and sends confirmation
>INP:AV1	Send command to switch to AV1 input	→	Display is busy doing another task
>BZY	Rcv acknowledgment of command not accepted	←	Send busy status because it can't rcv data
>	Send command to void previous command	→	Rcv command to clear previous command
>RCV	Rcv acknowledgment of command received	←	Send confirmation of command rcv'd to PC
>CFM	Rcv confirmation of command complete	←	Clear command buffer and sends confirm
>INP:AV1	Send command to switch to Av1 input again	→	Display is not busy and rcv's command
>RCV	Rcv acknowledgment of command received	←	Send confirmation of command rcv'd to PC
>CFM	Rcv confirmation of command complete	←	Display switche to AV1 and sends confirm
>	Ready to send another command	→	Display is ready to accept another command

Command and Data Tables

Description	Command Data	
Read Data	REA	PWR,BRT, CON, CLR, TNT, SHP, INP, MUT, LNG, TMP, ZOM, FPL, POS, BLK, PLC, VPS, HPS, RCL, VOL, BAS, TRB, XBS, PAS, DSP, REA
Power On/Off	PWR	PON=Power On, OFF=Power Off
Brightness	BRT	001...100
Contrast	CON	001...100
Color	CLR	001...100
Tint	TNT	001...100
Sharpness	SHP	001...100
Input Select	INP	CP1=Component, RG1=RGB, HDM=HDMI1, HM2=HDMI2
V-Position	VPS	001...100
H-Position	HPS	001...100
Recall	RCL	000
Mute	MUT	MON=Mute, OFF=Normal
Language	LNG	ENG=English, SPA=Spanish, FFR=French, ITA=Italian, DEU=German, SWE=Swedish
All Black	BLK	BON=All Black, OFF=Return
Polycom mode	PLC	000
Aspect Ratio	ZOM	WID=16:9, NOR=4:3 with black bars, PAN=PANORAMA(Only AV/S mode)
Keypad Lock	FPL	FO1=Lock, OFF=Unlock
Color Temp	TMP	MID=Natural, HIG=Cool, 65D=Warm
Volume	VOL	001...100
Bass	BAS	001...100
Treble	TRB	001...100
Balance	BAL	001...100
Display Model Name	DSP	INF (Example: DSP:INF RCV CFM PMP-50FPSM(ML))
Return Model Name	REA	INF (Example: REA:INF RCV CFM PMP-50FPSM(ML))
Power On Source	POS	OFF=Normal (Last Memory) CP1=Component, RG1=RGB, HDM=HDMI1, HM2=HDMI2

Dimensional Drawings



Color Scheme



Item	Color Scheme
Outer Front Bezel	A170-5954
Inner Front Bezel	A170-5954
Sliver Strip	A170-1868

[illegible]

PMP-50FPSM EXPLODED VIEW (MECHANICAL PARTS)

PMP-50FPSM EXPLODED VIEW (MECHANICAL PARTS)				
ITEM	PART NO.	DESCRIPTION	UNIT	REMARKS
1	SET	PMP-50FPSM	1	
2	TLABM1806Y1----	MODEL LABEL	1	
3	TLABD1142Y1----A	Serial Label	1	
4	TLABD2003Y1B----	BAR CODE	1	
5	SSAKH0203Y1----	EPE BAG	1	
6	SPAKA0746Y1F----	STYROFOAM	1	
7	YRC-294POLYCOMB	REMOTE CONTROL	1	ACCESSORY KIT
	RBATB0226Y1DD--	BATTERY	2	ACCESSORY KIT
	TINSE2227Y1----	USER MANUAL	1	ACCESSORY KIT
	SSAKD0003Y1-T-C	DATA BAG	1	ACCESSORY KIT
8	YTAPEZ500T750-B	PE FILM	1	
9	SPAKC0871Y1R-W	CARTON	1	
10	JHNDP0020Y1----	CASE HANDLE	4	
11	YTAPEQ0751900--	TAPE	1	
12	YTAPEZ999T988--	PE FILM	1	
13	YTIE-P155Y1600-	WRAPPING	4	
14	PTPE-0004Y1P--D	PROTECT FILM	3	
15	PTPE-0004Y1P--E	PROTECT FILM	1	

Regulatory Label

TLABM1806Y1---

Consumo de energía en modo de espera
0.22 Wh

SAMPO PMP-50FPSM

ENERGIA - ENERGIJA
ENERGIEFFIZIENZIA - ENERGIJA
ENERGIJA - ENERGIJE
ENERGIJA

397 kWh/annum

127 cm

50 inch

2010/1062 - 2016