

User Manual

Planar Simplicity M Series



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RoHS Compliance Statement

The Planar Simplicity M Series is fully RoHS compliant.

Part Number: 020-1409-00D

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Introduction

The Planar® Simplicity™ M Series is a line of 43", 50", 55", 65", 75", and 86" 4K resolution (3840 x 2160) LCD displays with 500-nit brightness. The displays offer 4K at 60Hz streaming, media playback, a sleek design and commercial functionality in an affordable 4K digital signage solution.

Featuring an elegant design with logo-free narrow bezel and slim profile, the Planar Simplicity M Series is the ideal display solution for digital signage applications in retail stores, restaurants, medical offices, corporate meeting areas and hospitality.

Designed for commercial installations, Planar Simplicity M Series comes standard with a full array of connectivity and external control, including support for native 4K resolution at up to 60Hz via HDMI 2.0, enabling smooth motion video and mouse tracking.

Caution: This manual is intended for use by qualified service persons and end users with experience installing LCD displays.

1. Safety Information

Before using the Planar Simplicity M Series, please read this manual thoroughly to help protect against damage to property, and to ensure personnel safety.

- Be sure to observe the following instructions.
- For your safety, be sure to observe ALL the warnings detailed in this manual.
- For installation or adjustment, please follow this manual's instructions, and refer all servicing to qualified service personnel.

2. Safety Precautions

- If water is spilled or objects are dropped inside the display, remove the power plug from the outlet immediately. Failure to do so may result in fire or electrical shock. Contact your dealer for inspection.
- If the display is dropped or the chassis is damaged, remove the power plug from the outlet immediately. Failure to do so may result in fire or electrical shock. Contact your dealer for inspection.

WARNING! Wall mounts must be secure.

• If the display is hung on a wall, the wall must be strong enough to hold it. Simply mounting it to wallboard or wall paneling won't be adequate or safe.

Caution: The screen could be damaged by heavy pressure.

Slight pressure on the LCD will cause distortion of the image. Heavier pressure will
cause permanent damage. Displays should be mounted where viewers cannot touch the
screen or insert small objects in the openings that will create hazards by contacting bare
conductive parts.

Caution: The front polarizer is soft and subject to scratches from sharp objects.

- The polarizer is a thin sheet of film laminated to the outside layer of glass on the LCD screen. Take care when handling items near the screen.
- If the power cord or plug is damaged or becomes hot, turn off the main power switch of the display. Make sure the power plug has cooled down and remove the power plug from the outlet. If the display is still used in this condition, it may cause a fire or an electrical shock. Contact your dealer for a replacement.

2.1 Important Safety Instructions

- Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use the display near water.
- 6. Clean the LCD screens with an LCD screen cleaner or LCD wipes.
- 7. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
- 8. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for the 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 any Planar large format LCD display.
- 10. Only use the attachments/accessories specified by the manufacturer.
- 11. Unplug all displays during lightning storms or when unused for long periods of time.
- 12. In instances where a power surge has occurred and a display no longer has an image, the display power will need to be reset.
- 13. You must follow all National Electrical Code regulations. In addition, be aware of local codes and ordinances when installing your system.
- 14. Refer all servicing to qualified service personnel. Servicing is required when any of the displays have been damaged in any way, such as the AC power cord or plug is damaged, liquid has been spilled or objects have fallen into a product, the products have been exposed to rain or moisture, do not operate normally or have been dropped.
- 15. Keep the packing material in case the equipment should ever need to be shipped.
- 16. Wall mounts must be secure. The wall must be strong enough to hold displays brackets, cables and accessories. Seismic engineers should be consulted in areas prone to earthquakes.
- 17. Slight pressure on the LCD will cause distortion of the image. Heavier pressure will cause permanent damage. Displays should be mounted where viewers cannot touch the screen or insert small objects in the openings that will create hazards by contacting bare conductive parts.
- 18. The front polarizer is soft and subject to scratches from sharp objects. The polarizer is a thin sheet of film laminated to the outside layer of glass on the LCD screen. Take care when handling items near the screen.

3. Recommended Usage

In order to get the most out of your LCD, use the following recommended guidelines to optimize the display.

3.1 Burn-In Versus Temporary Image Retention

Burn-in causes the screen to retain an image essentially forever, with little or no way to correct the problem. Under normal use, an LCD will not experience burn-in, as plasma displays do, nor will it retain images in any way.

Normal use of an LCD is defined as displaying continuously changing video patterns or images. However, LCDs can experience *temporary* image retention when recommended usage guidelines are not followed.

What is Temporary Image Retention?

Temporary image retention (TIR) can occur when a static image is displayed continuously for extended periods of time (12 hours or longer). An electrical charge differential may build up between the electrodes of the liquid crystal, which causes a negative-color video image (color-inverted and brightness-inverted version of the previous image) to be retained when a new image is displayed. This behavior is true for any LCD device from any LCD manufacturer.

TIR is not covered under warranty. See standard warranty terms and conditions for details. Here are some guidelines to help you avoid TIR:

- Use the LCD to show a screen saver, moving images or still pictures that change regularly. When using high-contrast images, reposition the images frequently.
- Turn off the LCD when it is not in use. To use your source computer's Power Options Properties, set up your computer to turn off the display when not in use.

3.2 Warranty Coverage

The following models are warranted for **16 x 7** usage:

- 43": SLM43
- 50": SLM50
- 55": SLM55
- 65": SLM65
- 75": SLM75
- 86": SLM86

Planar recommends turning off the power for 12 hours per day for optimal performance.

For complete warranty details, please visit www.planar.com/warranty.

3.3 Important Waste Disposal Information

Please recycle or dispose of all electronic waste in accordance with local, state, and federal laws. Additional resources can be found online at http://www.planar.com/about/green/.

The crossed-out wheelie bin symbol is to notify consumers in areas subject to Waste Electrical and Electronic Equipment (WEEE) Directive 2012/19/EU that the product was placed on the market after August 13, 2005 and must not be disposed of with other waste. Separate collection and recycling of electronic waste at the time of disposal ensures that it is recycled in a manner that minimizes impacts to human health and the environment. For more information about the proper disposal of electronic waste, please contact your local authority, your household waste disposal service, or the seller from whom you purchased the product.



3.4 Normal Usage Guidelines

Normal use of the LCD is defined as operating in the open air to prevent heat buildup, and without direct or indirect heat sources such as lighting fixtures, heating ducts, or direct sunlight that can cause the modules to experience high operating temperatures. For all modules, do not block fans or ventilation openings. If the LCD module will be installed in a recessed area with an LCD surround or enclosure, ensure adequate openings are applied for proper air flow and ventilation.

At 3000 meters or below, the maximum ambient operating temperature for the LCD module cannot be above 40° C nor below the minimum ambient operating temperature of 0° C. If one of these conditions exists, it is up to the installer to ensure that module placement is changed, thermal shielding is provided and/or additional ventilation is provided to keep the display within its nominal operating parameters.

Cooling Requirements

For optimal performance, active cooling by the installer should be planned for when the ambient temperature at the top of the wall is predicted to be above the specified ambient temperature for the panel. Cooling may be done behind the displays and depending on the wall configuration.

4. VESA Mounts, General Description

VESA mounts are used to secure the Planar Simplicity M Series display. The display can be installed using a variety of VESA mounts available through Planar. If you do not have a VESA mount, and would like to purchase one, contact Planar.

If you purchased a VESA mount, you should have a received a separate box with mounting supplies and an installation manual. Follow these instructions carefully.

Caution: Shorter screws will result in insufficient mounting strength and longer screws could puncture parts inside the display. The device may fall, causing serious personal injury or death. To prevent injury, this device must be securely attached to the wall in accordance with the installation instructions supplied with the mount. The mount must be secured to the Planar Simplicity M Series display as noted below:

- SLM43, SLM50, SLM55: Four M6-1.0 VESA mounting locations. 8mm 10mm thread engagement is required for secure mounting.
- SLM65, SLM75, SLM86: Four M8-1.25 VESA mounting locations. 10mm 15mm thread engagement is required for secure mounting.

Select the correct screw/spacer combination for the mount.

- Prior to installation, make sure you know where all of the mounting points are located.
- Follow all safety precautions outlined in the VESA Installation manual.
- Verify the parts received with the list shown in the VESA Installation manual.

5. Cleaning the Display

If dust collects on the power plug, remove the plug from the outlet and clean off the dust. Dust build-up may cause a fire.

Remove the power plug before cleaning. Failure to do so may result in electrical shock or damage.

Keep the following points in mind when cleaning the surface of the display:

- When the surface of the display becomes dirty, wipe the surface lightly with a soft clean cloth.
- If the surface requires additional cleaning, use LCD screen cleaner or LCD wipes, which are available at most electronics stores.
- Do not let cleaner seep into the display, as it may cause electrical shock or damage.
- Refer to the Planar Display Cleaning Guidelines for more information.

Package Contents

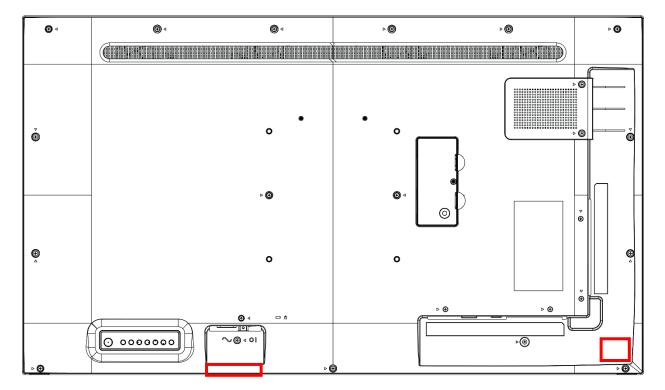
Part	Description	Number	Picture
LCD Display	One per box.	1	
HDMI Cable	HDMI cable.	1	
AC Power Cord	Power cord	1	
IR Extender Cable	Receive signals from the remote control.	1	

Part	Description	Number	Picture
Remote Control	Used to control the display (AAA batteries included)	1	
Cable Clips	Used to clamp and organize the cables.	2	
2.5mm to DB9 Adapter	2.5mm (TRRS, male) to DB-9 (female) adaptor.	1	
Quick Start Guide	Quick start guide.	1	Total of size Total of size

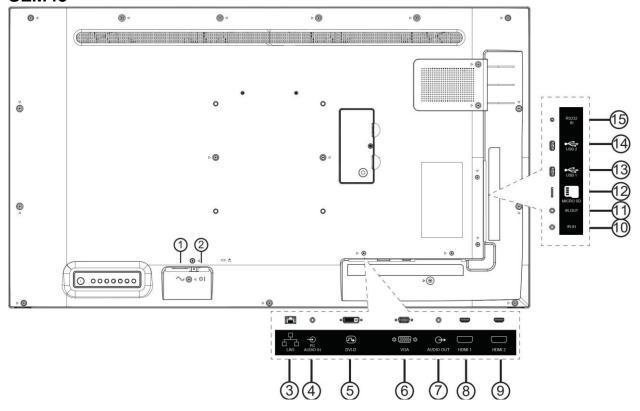
6. Installing the Cable Clips

Use the cable clips included in the Accessory Kit to assist with cable management. These clips adhere into place using adhesive backing as shown in the image below.

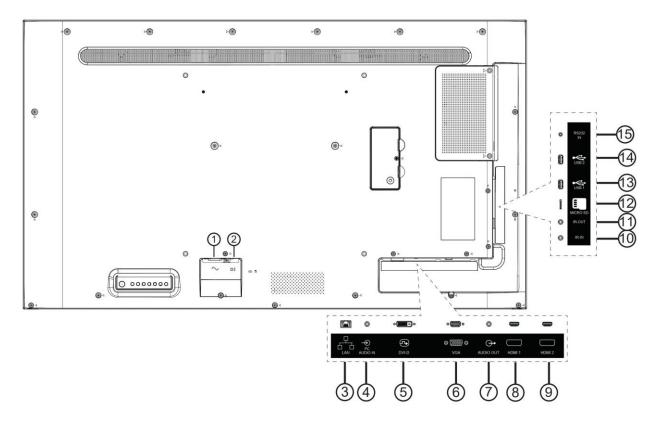
Attach clips near HDMI and AC power cables to assist with cable routing and to release cable strain.



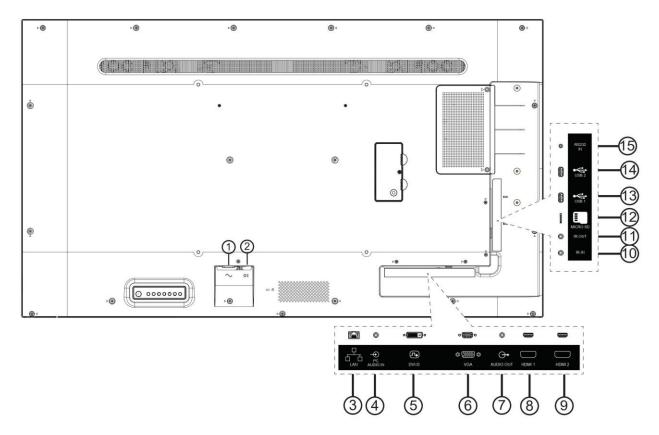
7. Planar M Simplicity Series - Standard Inputs



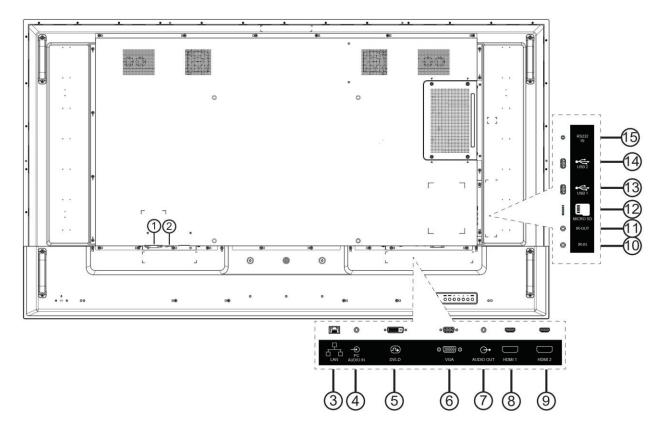
Item	Description
1	AC IN: IEC C14
2	Main Power Switch
3	LAN
4	PC Audio In: 3.5mm TRS (female)
5	DVI-D
6	VGA
7	Audio Out: 3.5mm TRS (female)
8	HDMI 1: HDMI, 4K/60Hz, HDCP 2.2
9	HDMI 2: HDMI, 4K/60Hz, HDCP 2.2
10	IR in: 2.5mm TRS (female)
11	IR out: 2.5mm TRS (female)
12	Micro SD
13	USB 1
14	USB 2
15	RS232 In: 2.5mm TRRS (female)



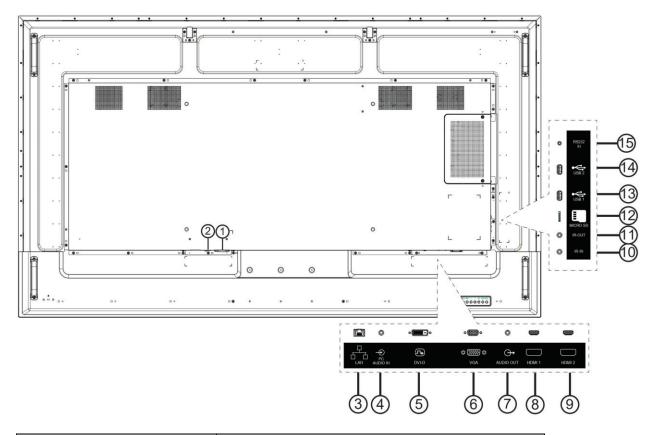
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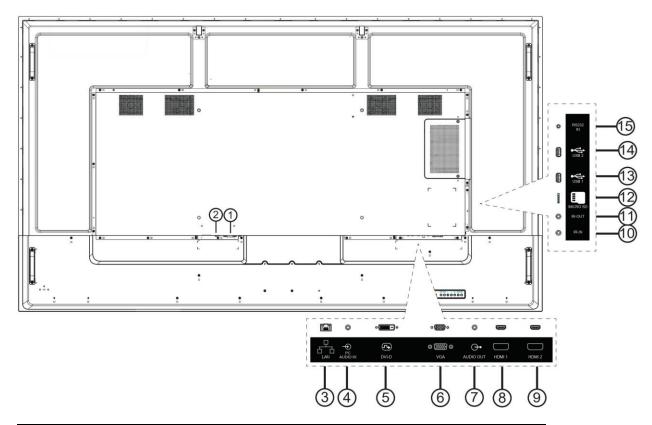
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12	Micro SD
13	USB 1
14	USB 2
15	RS232 In: 2.5mm TRRS (female)

Installing the Display

This section explains how to install your display. We suggest that you read the entire section before you attempt to install the unit.

8. Before You Begin

Make sure you have all the items in these lists before you begin unpacking and installing your display(s).

8.1 Tools/Equipment List

Depending on your installation, you may need one or more of the following items:

- String/string level
- Digital/laser level
- Ladders/lift
- Back brace
- Stud finder (if hanging display on a wall)

8.2 Other Things You May Need

- LCD screen cleaner or LCD wipes available at most electronics stores
- At least two very strong people to help lift unit into place

8.3 Plan Your Installation

You should have a detailed plan of how the units are to be configured. The plan should include calculations for the following:

- · Power maximums reference below by display size:
 - SLM43: 13 units max per 20A circuit for 115V operation
 - SLM50: 11 units max per 20A circuit for 115V operation
 - SLM55: 11 units max per 20A circuit for 115V operation
 - SLM65: 7 units max per 20A circuit for 115V operation
 - SLM75: 7 units max per 20A circuit for 115V operation
 - SLM86: 4 units max per 20A circuit for 115V operation
- Cable runs
- Ventilation and cooling requirements
- If hanging display on a wall, location of studs in the wall

8.4 Prepare Your Installation Location

Prepare the area where you will install the unit. If custom enclosures are part of the installation, they must be fully designed to accommodate the installation of the displays, the installed units, and ventilation and cooling requirements.

If your installation includes a lot of construction or dust, it is **highly recommended** that you clean all of the screens after the wall installation and configuration are complete.

8.5 Cable Length Recommendations

Cable length performance may vary between different cables and sources. The recommended maximum cable lengths are as follows:

HDMI

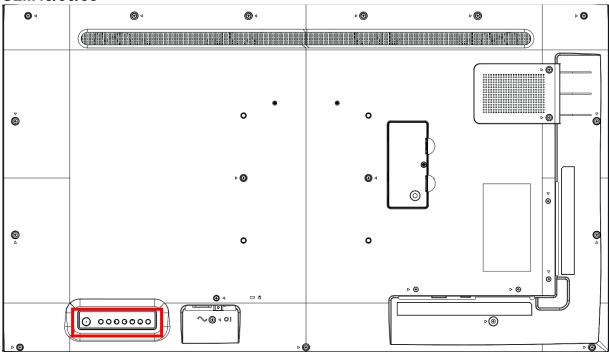
- 4K @ 50/60Hz: 5m (15 ft) maximum
- 4K @ 24/25/30Hz: 15m (50 ft) maximum
- 1080p @ 60Hz and lower resolutions: 20m (65 ft) maximum

Operating the Display

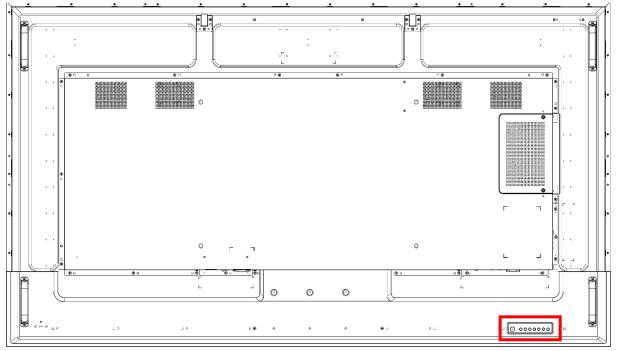
9. OSD Keypad

The OSD keypad is located on the rear of the display.

SLM43/50/55



SLM65/75/86

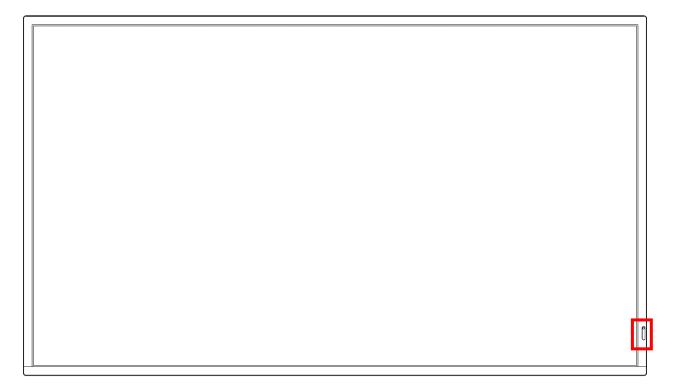


OSD Keypad Buttons

Key	Descriptions
Power	Power on / Power off
Mute	Audio Mute
Input	Source Selection
+	Menu Right / Increase value / Volume +
-	Menu Left / Decrease value / Volume -
A	Menu Up
▼	Menu Down
Menu	Menu open / close

10. Remote Control Receiver

The remote control receiver is located on the front of the display near the bottom right corner. The IR extender cable can be used if remote control reception is needed in a different location.



11. LED Indicators

The LED indicator light is located on the front of the display near the bottom-right corner.

LED On

Power Status	Condition
Green	Power on
Red	Standby Power save mode
Red / Green Blinking	IR codes received
Off	AC off

12. Using the Display in Flat or Tilted Orientation

The display is not recommended for use in flat orientation for tabletop, floor, or ceiling installations. LCD panels of this size are at risk of panel deflection, which can cause cosmetic sagging, brightness uniformity issues, and a shortened life span. Installations where the display is tilted downward or upward at an angle may also be prone to these issues and are not recommended.

Note: Failure to follow these instructions will void the warranty.

13. IR Command Protocol

The Planar Simplicity M Series displays accept commands in the form of IR signals that conform to the NEC protocol. Each Planar Simplicity M Series remote control has an NEC control code associated with it. You can use these codes to program a third-party "universal" remote control to work with the Planar Simplicity M Series displays. These third-party products usually come with a computer software application for this purpose. For more information, consult the documentation provided with the remote control.

Note: In addition to supporting the NEC protocol, Planar Simplicity M Series displays are also compatible with the IR protocol for the predecessor Planar Simplicity 4K displays. Refer to the manual for Planar Simplicity 4K displays, or contact Planar Support for more information.

The IR control codes have the following characteristics:

- Each code consists of the following:
- A leader pulse (a modulated pulse of 9 ms followed by a non-modulated pulse of 4.5 ms)
- 16 address bits. The default address is 1785 (0x06F9, binary 00000110 11111001)
- 16 data bits: eight (8) bits for the command followed by the logical inverse of the command
- An end pulse (a modulated pulse of 0.56 ms, similar to the modulated pulse in the '0' and '1' bits). The end of the modulated pulse constitutes the end of the data transmission.
- The carrier frequency is 38 kHz, with the modulated pulses having a 33% duty cycle.
- Commands are sent at a maximum rate of 9 Hz.

For example, below is the NEC control code for the ON button of the Planar Simplicity M Series remote control (assuming the default address is used).

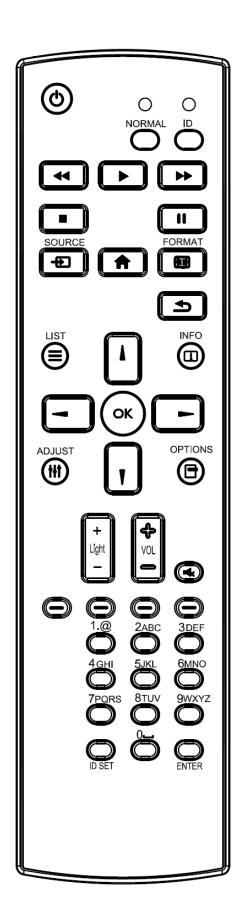
Hex	06	F9	01	FE
Binary	00000110	11111001	00000001	11111110
Function	Address Byte 1	Address Byte 2	Command	Command (Logical Inverse)

The following example shows the pulse train for this command.



Remote Control Button Name	Address	Data	NEC Data From Remote (Hex Code)	Description	
Power	0x42BD	0x0C	0x42BD0CF3	Power toggle	
Normal	N/A	N/A	N/A	Sends commands to any displays	
ID	N/A	N/A	N/A	Sends commands to only one display (see section 15)	
44	0x42BD	0x2B	0x42BD2BD4	Rewind	
•	0x42BD	0x2C	0x42BD2CD3	Play	
*	0x42BD	0x28	0x42BD28D7	Fast forward	
	0x42BD	0x31	0x42BD31CE	Stop	
II	0x42BD	0x30	0x42BD30CF	Pause	
Source	0x42BD	0x38	0x42BD38C7	Opens the source menu	
Home	0x42BD	0x54	0x42BD54AB	Opens the menu	
Format	0x42BD	0xF5	0x42BDF50A	Selects the aspect ratio	
Back (Short Press <1.6s)	0x42BD	0x0A	0x42BD0AF5	Navigate back (one level)	
Back (Long Press >1.6s)	0x42BD	0x9F	0x42BD9F60	Navigate back (all levels)	
List	0x42BD	0xCC	0x42BDCC33	N/A	
Info	0x42BD	0x0F	0x42BD0FF0	Show current input and Signal Information if available	
Up	0x42BD	0x58	0x42BD58A7	Navigate up	
Down	0x42BD	0x59	0x42BD59A6	Navigate down	
Left	0x42BD	0x5A	0x42BD5AA5	Navigate left	
Right	0x42BD	0x5B	0x42BD5BA4	Navigate right	
OK	0x42BD	0x5C	0x42BD5CA3	Selects the current menu item	
Adjust	0x42BD	0x90	0x42BD906F	N/A	
Options	0x42BD	0x40	0x42BD40BF	Open Media Player's Toolbar	
Light +	0x42BD	0x12	0x42BD12ED	Backlight increase	
Light -	0x42BD	0x13	0x42BD13EC	Backlight decrease	
Vol +	0x42BD	0x10	0x42BD10EF	Volume increase	
Vol -	0x42BD	0x11	0x42BD11EE	Volume decrease	
Mute	0x42BD	0x0D	0x42BD0DF2	Audio mute	
[Red]	0x42BD	0x6D	0x42BD6D92	Red button	
[Green]	0x42BD	0x6E	0x42BD6E91	Green button	
[Yellow]	0x42BD	0x6F	0x42BD6F90	Yellow button	
[Blue]	0x42BD	0x70	0x42BD708F	Blue button	
1	0x42BD	0x01	0x42BD01FE	'1' numeric entry	
2	0x42BD	0x02	0x42BD02FD	'2' numeric entry	

Remote Control Button Name	Address	Data	NEC Data From Remote (Hex Code)	Description
3	0x42BD	0x03	0x42BD03FC	'3' numeric entry
4	0x42BD	0x04	0x42BD04FB	'4' numeric entry
5	0x42BD	0x05	0x42BD05FA	'5' numeric entry
6	0x42BD	0x06	0x42BD06F9	'6' numeric entry
7	0x42BD	0x07	0x42BD07F8	'7' numeric entry
8	0x42BD	0x08	0x42BD08F7	'8' numeric entry
9	0x42BD	0x09	0x42BD09F6	'9' numeric entry
0	0x42BD	0x00	0x42BD00FF	'0' numeric entry
ID Set	N/A	N/A	N/A	ID set for ID mode (see section 14)
Enter	N/A	N/A	N/A	ID enter for ID mode (see section 14)
On	0x06F9	0x01	0x06F901FE	Power On
Off	0x06F9	0x09	0x06F909F6	Power Off
HDMI 1	0x06F9	0x29	0x06F929D6	Selects the HDMI 1 input
HDMI 2	0x06F9	0x2A	0x06F92AD5	Selects the HDMI 2 input
DVI	0x06F9	0x2E	0x06F92ED1	Selects the DVI-D input
VGA	0x06F9	0x2F	0x06F92FD0	Selects the VGA input



14. Pairing the Remote Control to the Display

The remote control can send commands to any display or to one specific display.

To send commands to all displays: Hold down the NORMAL button on the remote control until the green LED lights. When NORMAL mode is active, the green LED above the NORMAL button will blink when any key on the remote control is pressed.

To send commands to only one display: Hold down the ID button on the remote control until the red LED lights. When the ID mode is active, the red LED above the ID button will blink when any key on the remote control is pressed.

For initial setup of ID mode, perform the following steps:

- 1. In the OSD, change the Monitor ID setting to a unique value (see page 45).
- On the remote control, hold down the ID SET button until the red LED above the ID button turns on.
- 3. Us the 0-9 keys to enter the same value selected for the Monitor ID setting. Press the ENTER key. The red LED will blink twice to confirm the ID code was successfully accepted. The remote control will automatically change to ID mode.
- 4. Test that the pairing is successful by pressing a remote control key, such as the HOME key. If the key is not accepted by the display, check the Monitor ID setting in the OSD matches the ID code selected on the remote control.

15. Basic Remote Functions

15.1 Turning the Display On

- 1. Insert the power cord into the display and into the power outlet.
- 2. Ensure the AC switch is set to "-".
- 3. Press the power button on the remote or keypad.

15.2 Turning the Display Off

With the power on, press the power button on the remote or keypad to put the LCD panel in a standby mode. To turn off power completely, turn the AC switch to "O" or disconnect the AC power cord from the power outlet.

Note: If there is no signal for a certain period of time, the LCD panel will automatically go into standby mode.

15.3 Adjusting the Volume

- 1. Using the remote, press the VOL- or VOL+ to increase or decrease the volume.
- 2. Pressing the MUTE button temporarily turns off all sound. To restore the sound, press the MUTE button again.

Note: The analog audio out is variable. S/PDIF is fixed.

15.4 Selecting the Input Source

Press the SOURCE button on the remote or press the INPUT button on the keypad. Use the arrow buttons to select one of the following input sources and press OK: "HDMI 1, HDMI 2, DVI-D, VGA, Media Player, Browser, CMS, Android, Android App".

Note: When the display cannot find a source, a "No signal" message will appear.

Note: The app associated with the Android App source can be configured in the Android menu under Settings -> Signage Display -> Source Settings. See page 65 for more information.

15.5 Navigating Through the Menus

- 1. With the power on, press MENU. The main menu appears.
- 2. Within the menu, use ♠, ▼, ◀, ▶, and OK to navigate through the menus and adjust options.
- Press BACK to return to the previous menu. To exit the menu system, press HOME.

16. OSD Initial Settings Menu

Use this menu to make initial setup adjustments to the OSD (On-Screen Display) menu and other on-screen messages.

When this display is turned on for the first time, initial set-up is required. This process is outlined in the following Initial Configuration section.

Note: The Planar Simplicity M Series models run on a proprietary embedded Android 8.0 operating system. The pre-installed apps may be updated by their respective developers without prior notice. APKs installed by the user are not guaranteed to operate by Planar. Google Play is not supported. For questions or support regarding third-party apps, please contact the app vendor.

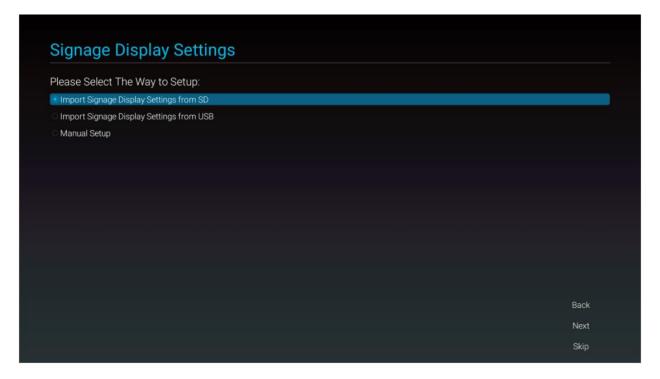
16.1 Initial Configuration / Importing Settings

Welcome Page

1. Select a language and press start.

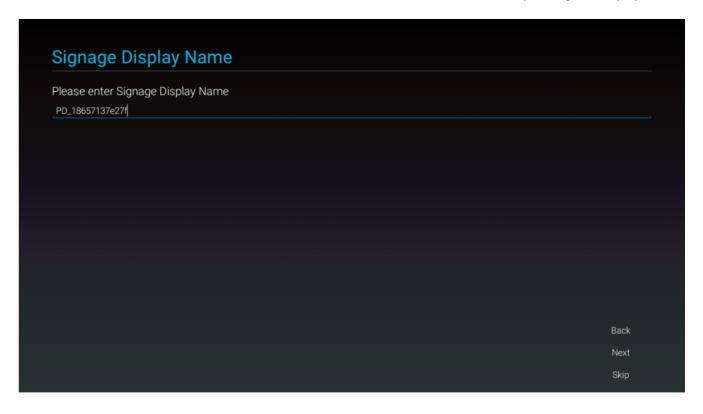


Signage Display Settings



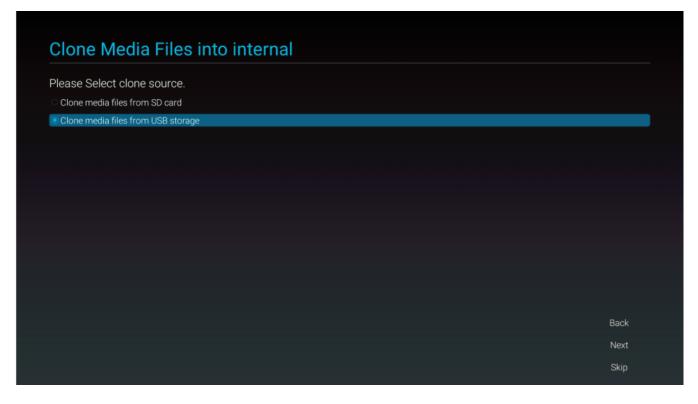
2. Use one of the following setup options:

- a. Import Signage Settings from SD.
 - Use settings previously saved to an SD card using the Export Signage Display Settings in the Android OSD (<u>see page 56</u>). This will import all settings except for the Signage Display Name field.
- Import Signage Display Settings from USB
 - Use settings previously saved to a USB storage device using the Export Signage Display Settings in the Android OSD (<u>see page 56</u>). This will import all settings except for the Signage Display Name field.
- c. Manual Setup
 - i. Signage Display Name
 - 1. Assign a name to the display. By default, this is "PD_" plus the MAC address of the display.



ii. Clone Media Files

 Import media files previously saved to an SD card or USB storage device using the Clone Media Files feature in the Android OSD (see page 57).

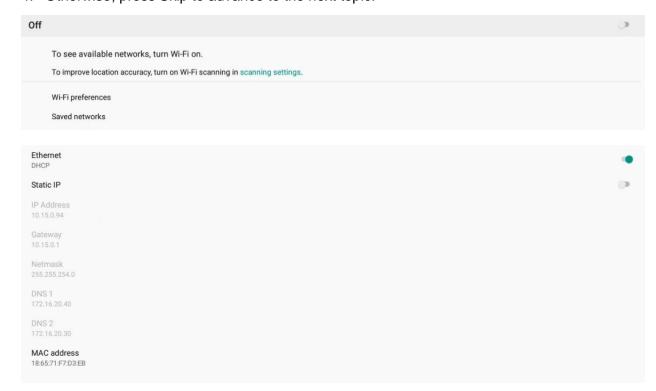


Network Setting

3. If using the network connection, press Next to set up.



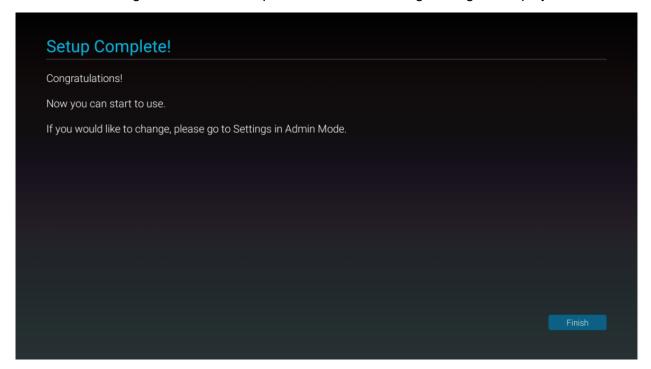
4. Otherwise, press Skip to advance to the next topic.



- 5. For Wi-Fi, select the desired network. For Ethernet, select Static IP to configure your IP settings. Press save when complete.
- 6. When finished, select Enable to complete setup. Press the Return key on the remote control if enabling the network connection is not desired.

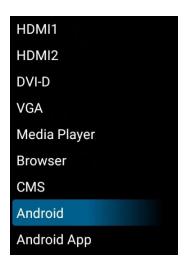
Setup Complete

7. Initial configuration is now complete. Press finish to begin using the display.



17. Input Menu

Below are the menus used for selecting the input sources for all models:



17.1 Source Options

 Options: HDMI 1, HDMI 2, DVI-D, VGA, Media Player, Browser, CMS, Android, Android App

18. OSD Main Menu

18.1 Picture

Picture	Backlight	80
Screen	Contrast	50
Audio	Sharpness	0
Configuration 1	Brightness	50
Configuration 2	Tint	50
Advanced Settings	Color	55
	Noise reduction	Off
	Gamma	2.2
	Color temperature	Native
	Color control	Action
	Smart power	Off
	Overscan	Off
	Picture reset	Action

Backlight

Range: 0~100Default: 80

Contrast

Increase or decrease the contrast of the picture. Press

or

to select the desired level.

Range: 0~100Default: 50

Sharpness

• Adjust the definition of the picture. Press ◀ or ▶ to select the desired level.

Range: 0~100Default: 0

Brightness

Increase or decrease the brightness of the picture. Press

✓ or

to select the desired level.

Range: 0~100Default: 50

Tint

Increase or decrease the green hue. Press

✓ or

to select the desired level

Range: 0~100Default: 50

Color

• Adjust the brilliance and brightness. Press ◀ or ▶ to select the desired level

Range: 0~100Default: 50

Noise Reduction

Reduce random noise in video content

• Options: Options: Off, Low, Medium, High

• Default: Off

Gamma

Select gamma.

• Options: Native, 2.2, 2.4, S gamma, D-image

• **Default**: 2.2

Color Temperature

• Select color temperature.

Options: 3200K, 5500K, 6500K, 7500K, 9300K, 10000K, Native, User 1, User 2

• **Default**: Native

Color Control

- Red Gain
 - Adjust the amount of red in bright content. Press ◀ or ▶ to select the desired level.

Range: 0~255Default: 128

- Green Gain
 - Adjust the amount of green in bright content. Press ◀ or ▶ to select the desired level.

Range: 0~255Default: 128

- Blue Gain
 - Adjust the amount of blue in bright content. Press ◀ or ▶ to select the desired level.

Range: 0~255Default: 128



Smart Power

• Automatically adjust the image settings in order to reduce power consumption

• Options: Off, Medium, High

• **Default:** Off

Overscan

• Adjust the zoom (overscan) of the image.

• Options: Off, On

• Default: Off

Picture Reset

• Reset all setting in the Picture menu to their default values.

18.2 Screen

Picture	H position	50
Screen	V position	50
Audio	Tracking	50
Configuration 1	Phase	0
Configuration 2	Aspect Ratio	Fill
Advanced Settings	Custom zoom	Action
	Auto adjust	Action
	Screen reset	Action

H Position

Adjust the horizontal position of the image (VGA source only). Press

or

to select
the desired level.

Range: 0~100Default: 50

V Position

Adjust the vertical position of the image (VGA source only). Press

✓ or

to select the desired level.

Range: 0~100Default: 50

Tracking

Adjust the clock of the displayed signal (VGA source only). Press

✓ or

to select the desired level.

Range: 0~100Default: 50

Phase

Adjust the phase of the displayed signal (VGA source only). Press

✓ or

to select the desired level.

Range: 0~100Default: 50

Aspect Ratio

Adjust the aspect ratio of the screen.

• Options: Fill, 4:3, Native, 21:9, Custom

• Default: Fill



Custom Zoom

Zoom

 Adjust the zoom (overscan) of the image. Available when Aspect Ratio is set to Custom. Press ◀ or ▶ to select the desired level.

Range: 0~100Default: 0

H Zoom

Adjust the zoom (overscan) of the image in the horizontal direction only.
 Available when Aspect Ratio is set to Custom. Press ◀ or ▶ to select the desired level.

Range: 0~100Default: 0

V Zoom

 Adjust the zoom (overscan) of the image in the vertical direction only. Available when Aspect Ratio is set to Custom. Press ◀ or ▶ to select the desired level.

Range: 0~100Default: 0

H Position

 Adjust the horizontal position of the image (VGA source only). Available when Aspect Ratio is set to Custom. Press ◀ or ▶ to select the desired level.

Range: 0~100Default: 50

V Position

 Adjust the vertical position of the image (VGA source only). Available when Aspect Ratio is set to Custom. Press ◀ or ▶ to select the desired level.

Range: 0~100Default: 50

Auto Adjust

- Force the display to reacquire and lock to the input signal (VGA source only). This is useful when the signal quality is marginal.
- Note: This feature does not continually reacquire the signal.

Screen Reset

Reset all settings in the Screen menu to their default values.

18.3 Audio

Picture	Balance	50
Screen	Treble	50
Audio	Bass	50
Configuration 1	Volume	100
Configuration 2	Audio out (line out)	20
Advanced Settings	Maximum volume	100
	Minimum volume	0
	Mute	Off
	Audio source	Digital
	Audio reset	Action
	Audio Out Sync	Off
	Internal Speaker	On

Balance

Adjust the balance of the left and right speakers. Press

or

to select the desired level.

Range: 0~100Default: 50

Treble

Adjust the sound in high tones. Press

✓ or

to select the desired level.

Range: 0~100Default: 50

Bass

Adjust the sound in low tones. Press

✓ or

to select the desired level.

Range: 0~100Default: 50

Volume

Adjust the sound. Press

✓ or

to select the desired level.

Range: 0~100Default: 20

Audio Out (Line Out)

Adjust the sound on the L/R audio outputs. Available if Audio Out Sync is set to Off.
 Press ◀ or ▶ to select the desired level.

Range: 0~100Default: 20

Maximum Volume

• Limit the maximum value of the Volume control. Press ◀ or ▶ to select the desired level

Range: 0~100Default: 100

Minimum Volume

Limit the minimum value of the Volume control. Press

✓ or

to select the desired level

Range: 0~100Default: 0

Mute

Turn off the sound.

Options: Off, OnDefault: Off

Audio Source

• Select the audio source to play through the display's internal speakers and audio outputs

• Options: Analog, Digital

Default: Analog for VGA, Digital for all other sources

Audio Reset

Reset all settings in the Audio menu to their default values.

Audio Out Sync

• Choose whether the internal speakers and audio out use the same volume control, or separate controls.

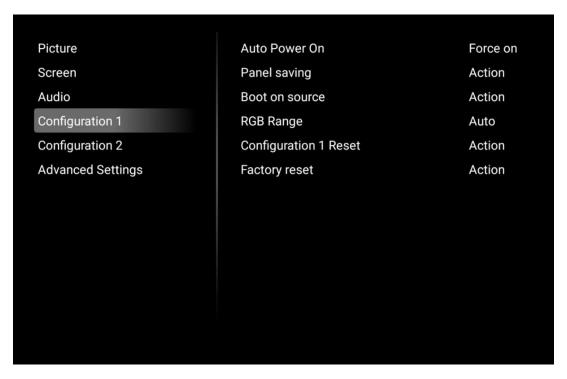
Options: Off, OnDefault: Off

Internal Speaker

Select the audio source to play through the display's internal speakers and audio outputs

Options: Off, OnDefault: On

18.4 Configuration 1



Auto Power On

- Select the behavior of the display when AC power is turned on
- Options: Power off, Force on, Last status
- Default: Force on

Panel Saving



Brightness

- Automatically limit the backlight intensity in order to reduce power consumption
- o **Options:** Off, On
- Default: Off
- Pixel Orbit
 - Create slight frame motion to help avoid image retention
 - Options: Off, OnDefault: Off

Boot On Source



Input

- Select the source to display on power up.
- Options: Last Input, HDMI 1, HDMI 2, DVI-D, VGA, Media Player, Browser, CMS, Android, Android App
- Default: Last Input

Playlist

- Select the media player playlist to play at power up, if the Media Player source is selected as the power up input.
- **Options:** 0-7
- Default: 0

RGB Range

- Select RGB range for HDMI and DisplayPort sources.
- Options: Auto, Full, Limited
- **Default:** Auto

Configuration 1 Reset

Reset all settings in the Configuration 1 menu to their default values.

Factory Reset

• Reset all settings in all menus to their default values.

18.5 Configuration 2

Picture	OSD Timeout	45
Screen	OSD H position	50
Audio	OSD V position	50
Configuration 1	OSD Rotation	Landscape
Configuration 2	Information OSD	10
Advanced Settings	Splash Screen	Off
	Monitor ID	Action
	Thermal Status	35.63℃ 96.13°F
	Monitor information	Action
	HDMI Version	2.0
	Configuration 2 Reset	Action

OSD Timeout

Adjust the time in seconds before the OSD menu disappears. Press

 or

 to select the desired level.

• Range: Off, 5~120 seconds

• Default: 45

OSD H Position

Adjust the horizontal position of the OSD menu. Press

✓ or

to select the desired level.

Range: 0~100Default: 50

OSD V Position

Adjust the vertical position of the OSD menu. Press

✓ or

to select the desired level.

Range: 0~100Default: 50

OSD Rotation

Select the OSD orientation.

• Range: Landscape, Portrait

• Default: Landscape

• **Note:** The Simplicity M Series does not support installing the panel in portrait orientation.

Information OSD

- Select whether the information message box displays on the screen, and for how long.
 Press ◀ or ▶ to select the desired level.
- Options: Off, 1~60 seconds
- Default: 10

Splash Screen

- Select whether a splash screen appears when the monitor powers up.
- Options: Off, On, User
- **Default**: On
- Note: Refer to "Creating a Custom Splash Screen Logo" on page 72 for more information.

Monitor ID

- Select the ID code to use with an IR remote control in ID mode. <u>See page 26</u> for more info. Press

 or

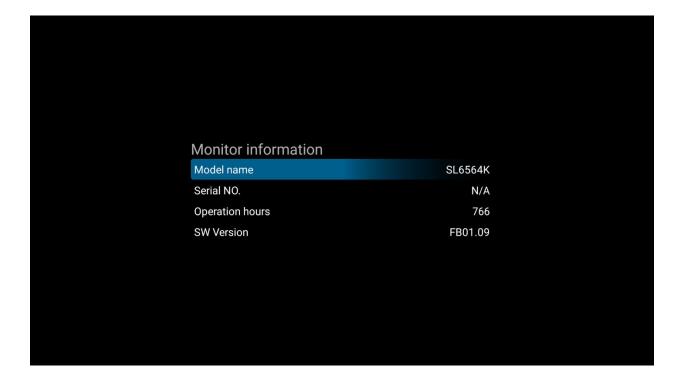
 to select the desired level.
- Options: 1~255
- Default: 1

Thermal Status

Read the internal temperature of the display

Monitor Information

This read-only menu provides information on the display and its firmware version



HDMI Version

• Select the HDMI version of the HDMI inputs

• **Options:** 1.4, 2.0

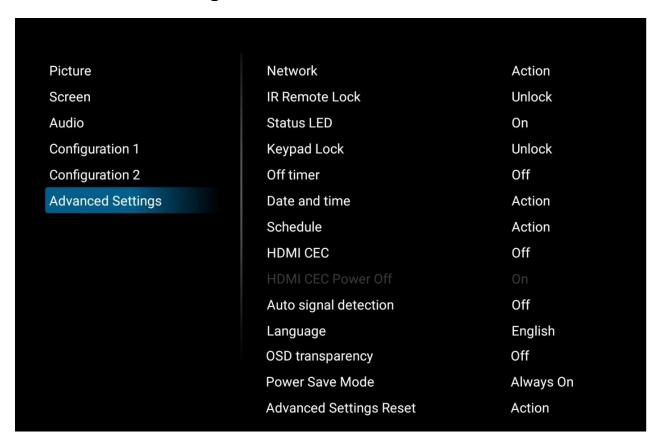
• **Default:** 2.0

 Note: HDMI 2.0 is the more modern standard and supports 3840x2160 @ 60Hz resolution. However, sometimes HDMI 1.4 is needed for compatibility with older devices.

Configuration 2 Reset

• Resets all settings in the Configuration 2 menu to their default values

18.6 Advanced Settings



Network

• Opens the Ethernet settings menu. <u>See page 51</u> for more information.

IR Remote Lock

- Lock or unlock IR remote control functionality. To disable the IR remote lock, press the Info key for 10 seconds.
- Options: Unlock, Lock All, Lock all but Volume, Lock All but Power, Lock All Except PWR & VOL
- **Default**: Unlock

Status LED

- Enable or disable the status LED
- Options: Off, On
- Default: On

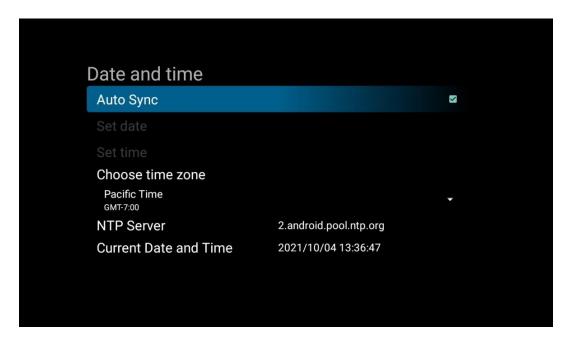
Keypad Lock

- Lock or unlock the keypad controls
- Options: Unlock, Lock All, Lock all but Volume, Lock All but Power, Lock All Except PWR & VOL
- **Default**: Unlock

Off Timer

- Options: Off, 1~24 hours
- Default: Off

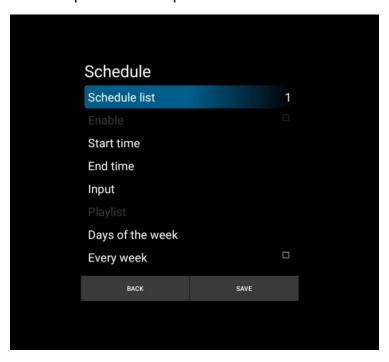
Date and Time



- Auto Sync
 - Automatically obtain the current date and time information from an NTP server.
 - o Options: Off, On
 - o **Default:** On
- Set Date
 - Set the current date. Available when Auto Sync is set to Off.
- Set Time
 - Set the current time. Available when Auto Sync is set to Off.
- Choose Time Zone
 - Set the current time zone
- NTP Server
 - Lists the NTP server that will be used to automatically obtain the current date and time.
- Current Date and Time
 - Displays the current date and time configured in the display.

Schedule

• This menu is used to configure schedules for powering on and powering off the display at preset times. Up to seven different schedules can be set.



- Schedule List
 - Select the schedule preset to configure.
 - Range: 1~7Default: 1
- Enable
 - Make the selected schedule active. Available when Start Time, End Time, Input, Playlist (Media Player source only) and Days of the Week are configured.
 - o Options: Off, On
 - Default: Off
- Start Time
 - Set the time when the display will power on.
- End Time
 - Set the time when the display will enter standby mode.
- Input
 - Select the source to display when the unit powers on.
- Playlist
 - Select the playlist to show when the display powers on (Media Player source only).
- Days of the Week
 - Select which days of the week the selected schedule is active.
 - o Options: Sun, Mon, Tue, Wed, Thu, Fri, Sat
 - o **Default:** None
- Every Week
 - Indicate whether the schedule is for the current week only, or for every week going forward.
 - o Options: Off, On
 - Default: Off

HDMI CEC

• Enable HDMI CEC support on the display. The CEC commands listed in the table below are implemented:

Command	Value
Image View On	0x04
Text View On	0x0D
Standby	0x36
User Control Pressed	0x44
User Control Released	0x45
Routing Change	0x80
Active Source	0x82
Give Physical Address	0x83
Report Physical Address	0x84
Request Active Source	0x85
Give Device Power Status	0x8F
Inactive Source	0x9D
Get CEC Version	0x9F

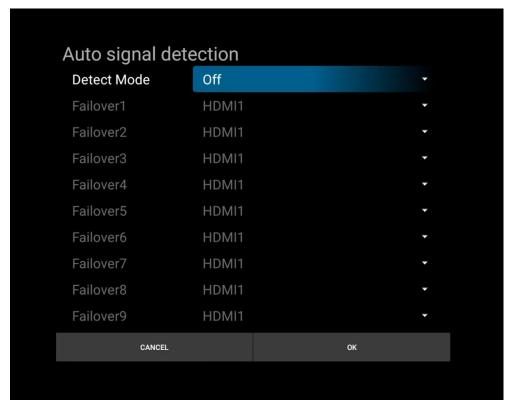
Options: Off, OnDefault: Off

HDMI CEC Power Off

• Select whether to power off other HDMI devices via CEC when the display is powered off.

Options: Off, OnDefault: Off

Auto Signal Detection



- Detect Mode
 - Automatically searches for a signal on either all inputs or selected inputs.
 - Options: Off, All, Failover
 - o Default: Off
 - Note: The following sources are not included in the search: Media Player, Browser, CMS, Android, Android App.
- Failover 1-9
 - Select the sources to be searched if no signal is present on the main input.
 - Options: HDMI 1, HDMI 2, DVI-D, VGA, Media Player, Browser, CMS, Android, Android App
 - o Default: HDMI 1

Language

- Select the OSD language
- **Options:** English, French, German, Spanish, Italian, Simplified Chinese, Traditional Chinese, Japanese, Portuguese
- **Default:** English

OSD Transparency

- Adjust the transparency of the OSD menu. Press

 ✓ or

 to select the desired level.
- Options: Off, 5~100 percent
- Default: Off

Power Save Mode

- Select the standby behavior of the unit.
- Options: Standby Mode, Networked Standby Mode, Wake on Signal, Always On
- Default: Standby Mode
- **Standby Mode:** Achieves the lowest standby power consumption and disables LAN and RS232 functionality while in standby. The Scheduling feature will remain functional.
- Networked Standby Mode: Supports waking the unit via Wake-on-LAN (WoL) but disables RS232 functionality while in standby. The Scheduling feature will remain functional.
- Wake on Signal: The unit will enter a standby mode if no signal is detected. When a signal is restored, the unit will quickly power on and display the image. This mode supports the full LAN and RS232 command set while in standby mode.
 - Note: Sending an OFF command via Keypad, IR, CEC, RS232 or LAN will bypass Wake On Signal detection.
 - Note: If Failover detection has been enabled, the unit will automatically search for a signal on other inputs before entering standby.
- Always On: This is the fast startup mode. An OFF command sent via Keypad, IR, CEC, RS232 or LAN will place the unit into a standby mode that enables the fast startup. This mode supports the full LAN and RS232 command set while in standby mode.
- **Note:** Startup time can be reduced by performing one of the following actions:
 - Disable the splash screen (see page 50)
 - Select one of the following Power Save Mode settings: Wake on Signal, Always
 On. These modes will forcibly set the splash screen to Off

Advanced Settings Reset

• Resets all settings in the Advanced Settings menu to their default values

19. OSD Android Settings Menu

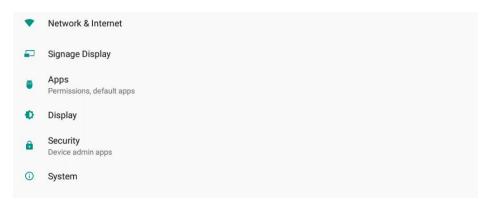
19.1 Android Main Menu

To access the Android menu, open the Source menu and select Android.



Note: In addition to the IR remote control, use a USB keyboard and mouse to navigate the Android menu and modify settings.

19.2 Settings



Network & Internet

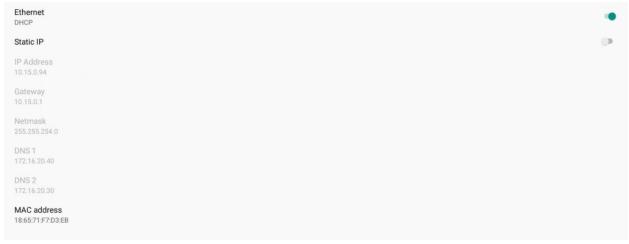


Wi-Fi



- Wi-Fi
 - Enable the Wi-Fi interface. Turn on switch at the top of the menu to enable Wi-Fi network selection.
 - Note: Wi-Fi support is only available with the TP-Link TL-WN725N USB adapter.
 Other Wi-Fi dongles are not supported at this time.

Ethernet



- Ethernet
 - Enable the network interface
 - Options: Disable, Enable
 - Default: Disable
- Static IP
 - Enable dynamic IP mode or configure the static IP settings of the display's Ethernet port.
 - Options: Disable (use DHCP), Enable (use static IP)
 - Default: Disable

IP Address

- The IP address used by the display's network interface.
- Configurable if Static IP is enabled.

Gateway

- The default gateway used by the display's network interface.
- Configurable if Static IP is enabled.

Netmask

- The subnet mask used by the display's network interface.
- Configurable if Static IP is enabled.

DNS 1

- o The address of the primary DNS server used by the display's network interface.
- o Configurable if Static IP is enabled.

DNS 2

- The address of the secondary DNS server used by the display's network interface.
- Configurable if Static IP is enabled.

MAC Address

The MAC address of the display's network interface.

Signage Display



General Settings



- Signage Display Name
 - Assign a name to the display. By default, this is "PD_" plus the MAC address of the display.
- Boot Logo
 - Select a boot animation to be used when the Splash Screen setting is set to User
 - Note: Refer to "Creating a Custom Splash Screen Logo" on page 72 for more information.

Screenshot

 This menu allows the current image on the display to be captured periodically, saved in internal memory, and optionally e-mailed to the selected address.



Server Settings



Email Notification

• This menu configures Simple Mail Transfer Protocol (SMTP) for sending the screenshots to an email recipient.



Main Switch

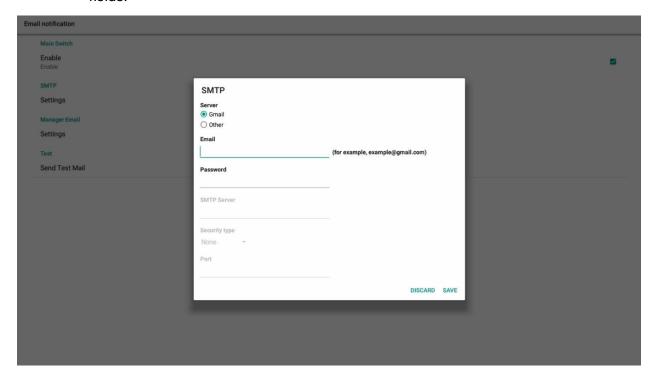
Enable or disable e-mail functionality.

Options: Disable, Enable

Default: Disable

SMTP

Use this menu to enter the Simple Mail Transfer Protocol (SMTP) server settings.
 Ask your network administrator or ISP to provide the correct settings for the following fields.



Server

- o Select whether a Gmail server or another server will be used.
- Note: Using Gmail requires enabling support for less secure apps in your Gmail account. Consult your Gmail settings for more info.

Email

Specify the e-mail account that will send messages.

Password

The password for the e-mail account.

SMTP Server

The SMTP server name or address associated with the e-mail account.

Security Type

- o The type of security for the SMTP connection
- o Options: None, SSL, TLS, STARTTLS
- o Default: None

Port

The port for the SMTP connection.

Manager Email

Specify the e-mail address that will receive notifications.

Send Test Mail

Test the SMTP settings to confirm they are configured properly.

FTP

o Configures File Transfer Protocol (FTP) access to the display's file system.



- Main Switch
 - Enable or disable FTP functionality
 - Options: Disable, Enable
 - Default: Enable
 - Note: FTP functionality will not work until values are entered into the Account and Password fields.
- Account
 - FTP login name.
- Password
 - FTP login password
- Storage Path
 - Read-only indication showing that the FTP storage location is the internal memory.
- Port
 - The port for the FTP connection.
 - Range: 1025~65535
 - Default: 2121
- ADB Over Network
 - Android debugging control for engineering use only.

Source Settings



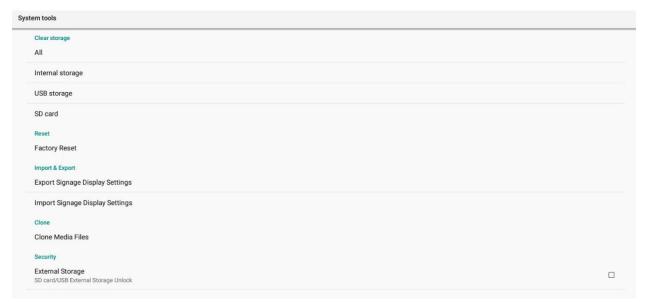
- Media Player
 - Edit the Media Player's playlists and settings.
- Browser
 - Edit any saved bookmarks in the web browser.
- Android App
 - Select the app associated with the Android App source.
 - Default: Chromium

Network Application

SICP Network Port



System Tools



- Clear Storage
 - Erase all user configurable storage in the selected location.
 - All: Internal storage, USB storage, and SD card
 - Internal Storage
 - USB Storage
 - SD Card

Factory Reset

- Reset all internal storage to default values
- Note: Choosing this option will cause the display to go through initial setup (see page 34).
- Export Signage Display Settings
 - Write all display settings to a USB storage device or an SD card, excluding the Signage Display Name field.
 - This allows the display's settings to copy to another unit.
- Import Signage Display Settings
 - Read all display settings from a USB storage device or an SD card, excluding the Signage Display Name field.
 - This allows the display's settings to copy from another unit.

Clone Media Files

 This menu allows all media files to copy from the specified location to the selected destination.



- Clone Source
 - The source location to copy the media files from.
 - Options: Internal Storage, SD Card, USB Storage
- Target Location
 - The destination to copy the media files to.
 - Options: Internal Storage, SD Card, USB Storage
- Clone
 - Press to complete the clone operation.
- System Updates
 - Initiates the firmware upgrade process. Refer to the directions in the firmware upgrade package for more information.

Apps

App info

7 apps installed

App permissions

Default apps

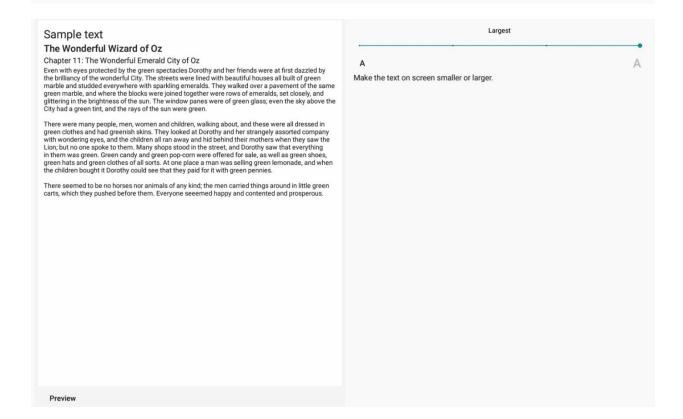
Chromium

- App Info
 - Provides a list of any additional apps installed on the display.
- App Permissions
 - Provides a list of permissions for each app installed on the display.
- Default Apps
 - Select the apps associated with the Browser source and the home screen.

Display

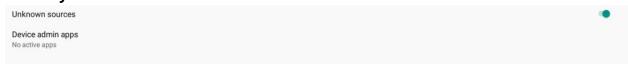
Font size

Largest



- Font Size
 - Configures the font size used in the Android menu.
 - Options: Small, Default, Large, Largest
 - Default: Largest

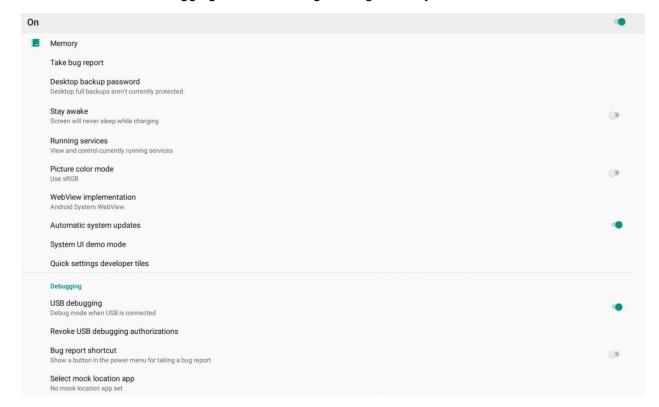
Security



- Unknown Sources
 - Allow the installation of third party Android apps.
 - Settings: Disable, Enable
 - Default: Disable
- Device Admin Apps
 - Select an Android app to be a device administrator.

System

- Keyboard & Inputs
 - Configure keyboard settings.
- Developer Options
 - Android debugging controls for engineering use only.



About

Lists firmware version information.

Status

Legal information

Model

SLM65

Android version

8.0.0

Android security patch level

December 1, 2017

Kernel version

4.9.44 tpvswa@tpvswa09 #46 Thu Sep 2 16:31:31 CST 2021

Build number

FB01.02

19.3 Apps

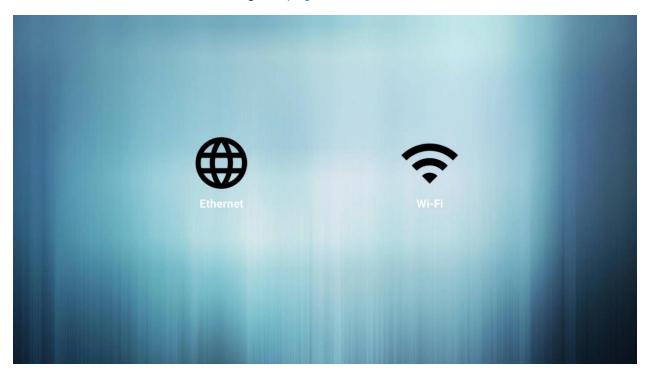
Lists pre-installed apps on the display. Select an app to run it.



19.4 Network

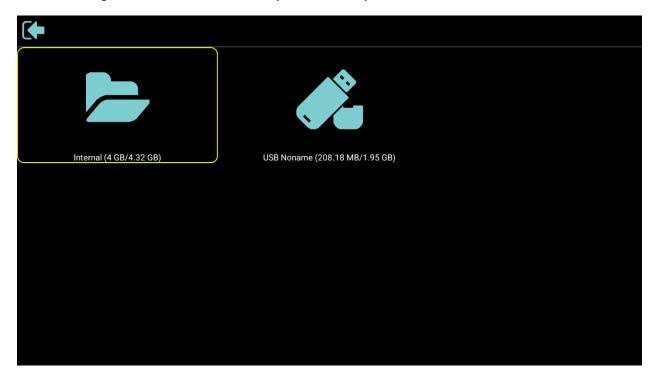
Click Ok to navigate through to Ethernet menu.

See the Ethernet menu under Settings on page 51.



19.5 Storage

Allows management of the internal file system and any drives connected via USB.



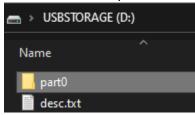
19.6 Help

Provides a URL and QR code for accessing Planar's technical support website.

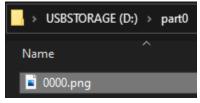


20. Creating a Custom Splash Screen Logo

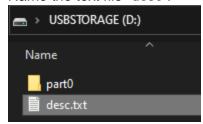
- 1. Create a folder with the PNG file inside it to use as a logo:
 - Name the folder "part0".



• Name the PNG file "0000" and place it inside the part0 folder.



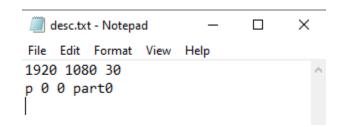
- 2. Create a text file for file settings:
 - Name the text file "desc".



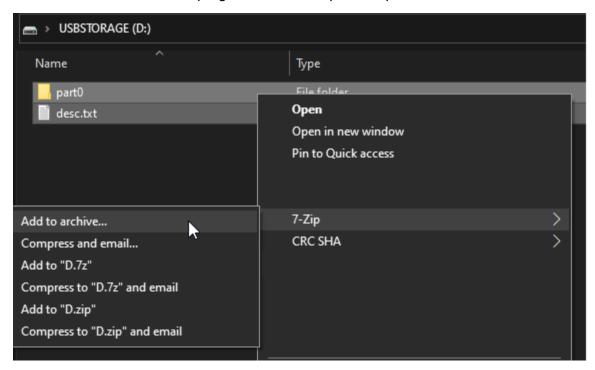
• Include these three lines in the desc text file:

Line 1: 1920 1080 30 Line 2: p 0 0 part0 Line 3:

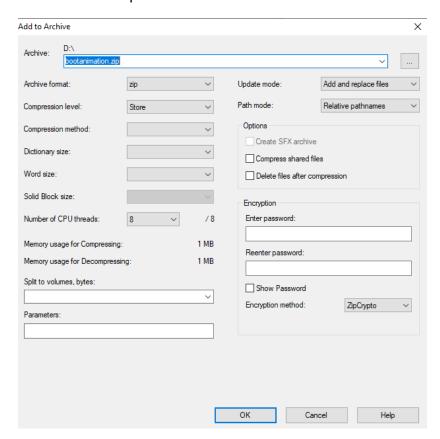
Where Line 3 is a new blank line.



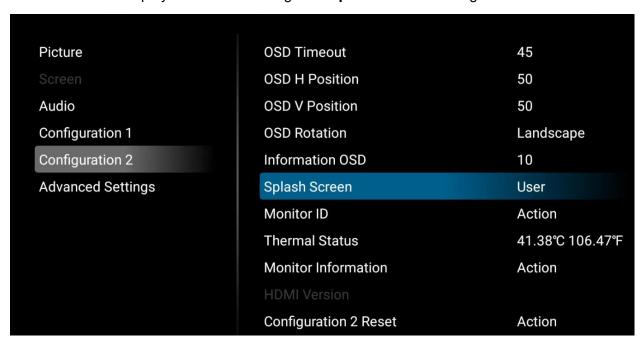
- 3. Create a compressed file with the "part0" folder and "desc" text file:
 - Select both files and used a program such as 7zip to compress.



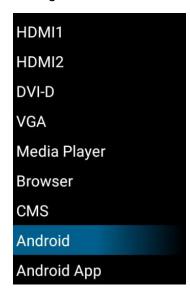
 The compression level needs to be "Store" and the Archive needs to be named "bootanimation.zip"



- 4. Place the "bootanimation.zip" folder onto a USB stick and insert it into the display.
- 5. Go to the display's Menu and change the Splash Screen setting to User.



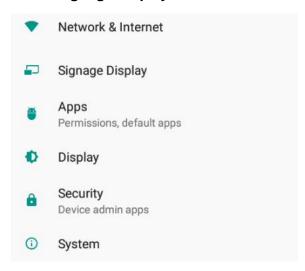
6. Change Source to Android:



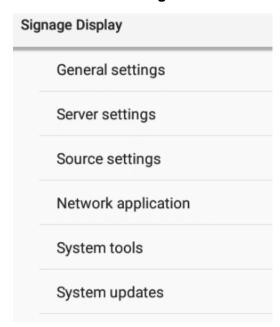
7. Navigate to **Settings:**



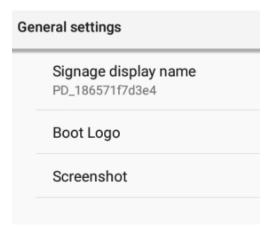
8. Select Signage Display.



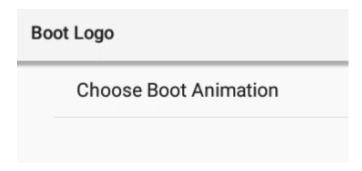
9. Select General Settings.



10. Select Boot Logo.



11. Select Choose Boot Animation.



12. Select the USB symbol with the "bootanimation.zip" folder and click **Save**.

Choose Boot Animation



13. Test by rebooting the display.

21. Media Player

The Planar Simplicity M Series display has an embedded Media Player that can be used to play videos, photos and/or music from a USB Drive. Please see below for more information.

21.1 Supported Media Formats

The table below outline the supported media formats and compatibility for video, audio, and visual content.

Media Player Video Compatibility					
Format	File Types	Max Resolution and Bit Rate			
MPEG 1/2	MPEG program stream (.dat, .vob, .mpg, .mpeg) MPEG transport stream (.ts) MP4 (.mp4, .mov) 3GPP (.3gpp, .3gp) AVI (.avi) MKV (.mkv)	1080p/30Hz 40Mbps			
MPEG 4	MP4 (.mp4) AVI (.avi) MKV (.mkv)	1080p/30Hz 40Mbps			
H.263	FLV (.flv) AVI (.avi)	1080p/30Hz 40Mbps			
H.264	FLV (.flv) MP4 (.mp4) MPEG transport stream (.ts) AVI (.avi) MKV (.mkv)	4K/60Hz 135Mbps			
H.265	MP4 (.mp4, .mov) MPEG transport stream (.ts) MKV (.mkv)	4K/60Hz 100Mbps			
Google VP8	MKV (.mkv) WebM (.webm)	1080p/30Hz 50Mbps			

Media Player Audio Compatibility					
Format File Types Max Bit Rate and Samplin Rate					
MPEG Audio (MPEG 1/2/2.5 Audio Layer 1/2/3)	MP3	8-448 Kbps 16-48 KHz 2 Channel			
AAC Audio (MAIN, ADIF, ATDS Header, AAC-LC, AAC-HE	AAC M4A	3-576 Kbps 8-48 KHz 5.1 Channel			

Media Player Image Compatibility					
Format	File Types	Max Resolution			
JPEG (JFIF file format 1.2)	JPG JPEG	1920 x 1080			
ВМР	BMP	15360 x 8640			
PNG	PNG	1920 x 1080			

21.2 Main Menu

Play

- This menu starts showing the content in a created playlist. If no playlists are available, create one starting with the Compose section on page-65.
- The content will play in the order selected during content creation, and with the features selected in the Settings menu.



Compose

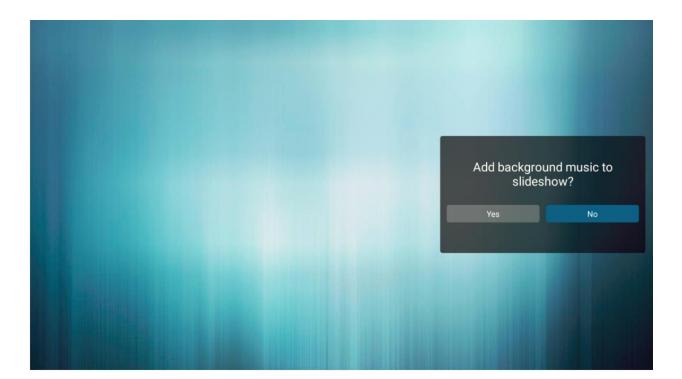
- Use this menu to create a playlist of photos and/or videos.
- Select media from
 - Internal
 - o USB
 - SD card
- Photos must be in the following folder: /planar/photo
- Videos must be in the following folder: /planar/video
- Audio files must be in the following folder: /planar/music



Press the Options key on the remote to bring up the sidebar menu



- Select All: Select all items in the current folder, and de-select all items in the current playlist
- Delete All: Remove all items from the current playlist
- o Add / Remove: Add or keep checked items in the playlist.
- o Remove unchecked items from the playlist if present.
- Sort: Rearrange the order of files in the playlist
- Save / Abort: Save or discard the changes to the playlist
 - **Note:** Save changes to the playlist once, modifications are complete. Any unsaved changes will be lost.
- o After saving the playlist, background music can be added.
 - Note: This option is displayed after saving a playlist (see image below).
- Back: Close the sidebar menu



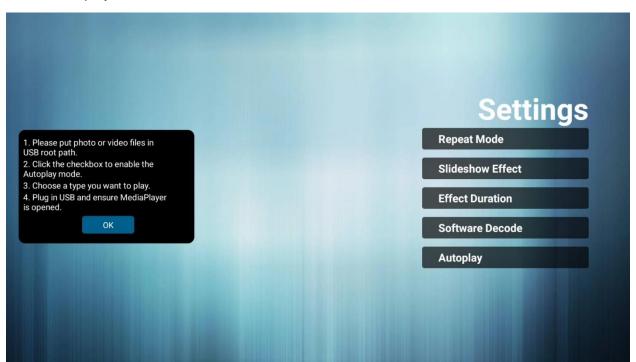
Settings

• This menu contains several options for customizing your playback experience



- Repeat Mode
 - Play each file only one time or repeat them
 - Options: Repeat Once (display each file once), Repeat All (repeat showing all files)
 - o **Default:** Repeat All
- Slideshow Effect
 - Select the transition type that occurs when switching from one image to another
 - Options: Random, Bounce, Fade In/Out, Top to Bottom, Zoom, Left to Right, Right to Left, Fold, Corner, None
 - o **Default:** None
- Effect Duration
 - Select the amount of time to show each image in the playlist
 - o **Options:** 5 sec, 10 sec, 15 sec, 20 sec
 - o **Default:** 5 sec
- Software Decode
 - o Not supported.

Autoplay



22. Browser Menu

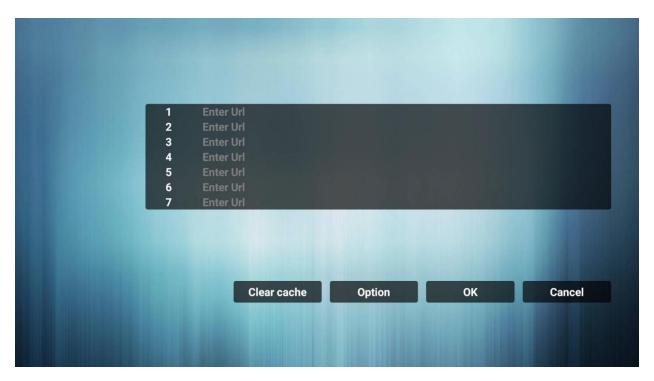
The Planar Simplicity M Series display has an embedded browser that can be used to schedule and deploy simple, web-based content. Please see below for more information.

22.1 Compose

This menu offers seven input fields for URL configuration using manual entry and import and export list functions.

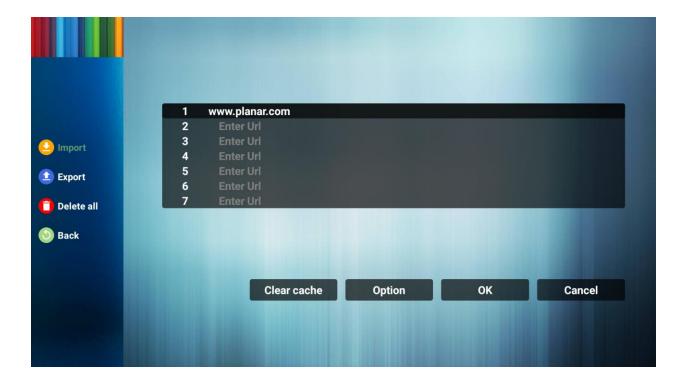


 Click Compose and choose any list item (1-7) then enter a URL. Press Ok to save data on the list. See figure below for reference.



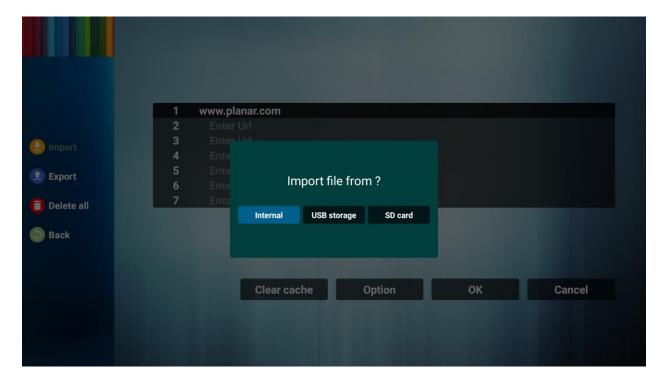
Option

- This sidebar menu accesses import and export functions for the URL list.
- To access the menu, scroll past the last URL entry and click Option.



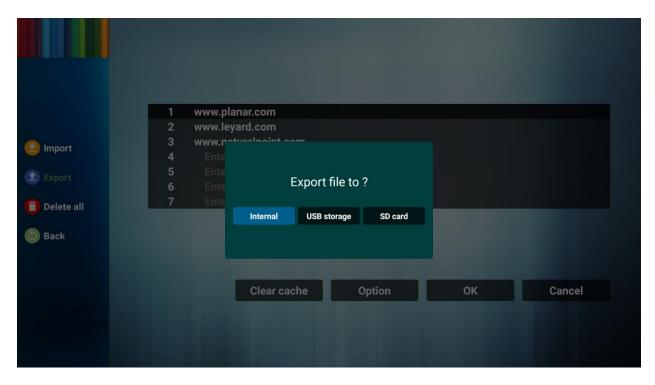
Import

- o Import URLs from a text file from one of the following sources:
 - Internal
 - USB
 - SD card
- Click Import and choose storage location, select file, and press Import to add URLs in to the URL list.
- Note: The file containing URLs must be formatted as a text file, and an internal file is only available as a source if a file is uploaded directly to the display using the FTP server function (see page 54).

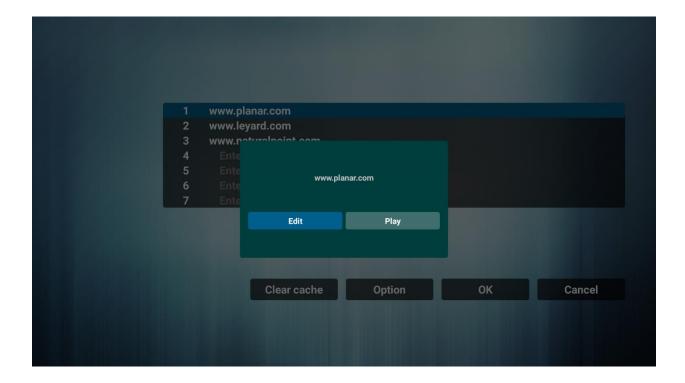


Export

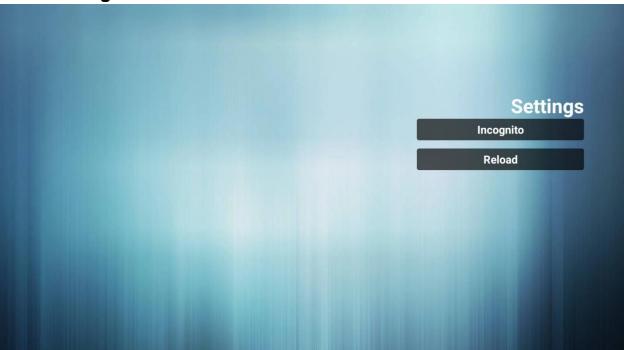
- Export the URL list to a file on one of the following sources:
 - Internal
 - USB
 - SD card
- Choosing internal storage opens a dialogue box showing the file path and file name. Saving the list to the internal location specified in the storage path makes the list available as future internal import option
- Press save and Ok to navigate back to the main menu.
- Note: If you do not click Ok then changes made to the list will not save.



- Delete all
 - Deletes all URL records from the URL list page
- Back
 - o Closes sidebar option menu
- Once URL list options are saved, you can choose to Edit or Play a URL
 - o Edit: Edit existing URL dialog
 - Play: Navigates to and opens the webpage stated by the URL



22.2 Settings



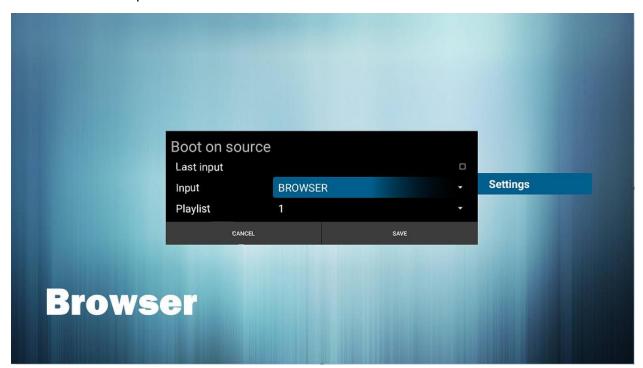
This menu contains several browser options.

- Incognito
 - Select private browsing mode.
 - o **Settings:** Disable, Enable
 - o Default: Disable
- Reload
 - o Setup automatic reloading of the web page on a periodic basis.

22.3 Boot on Source Functionality

Browser is one of the OSD Menu Boot On Source options (see page 43).

- To configure this setting go to the OSD Menu, select Configuration 1, and set input to Browser.
- Choose a numbered URL option from the URL list and press Save.
 - Note: The Default Browser in the Boot on Source Menu is 0. If you do not assign a URL list number, the display will restart showing the Browser Settings Menu. The picture below is from OSD menu for reference.



23. Content Management System

CMS Source opens HyperSign app. See Hypersign.com for more information.

External Control

In addition to using the Planar Simplicity M Series remote control and display, there are other methods of controlling the Planar Simplicity M Series display externally:

- Using a serial link to send commands and to receive responses to those commands.
 The same set of commands can be sent over RS-232, TCP or UDP. See the *Planar Simplicity M Series RS232 User Manual* for more information.
- Using discrete infrared (IR) codes to program a third-party remote control.

Signal Compatibility

Compatible Video Sources								
Signal Type	Resolution	Frame Rate (Hz)	Line Rate (kHz)	Pixel Rate (MHz)	HDMI 1-2	DVI	VGA	References
PC	640x350	70.090	31.469	25.175	Х	Х	х	
	640x480	59.940	31.469	25.175	Х	Х	Х	VESA DMT, CEA-861-F Format 1
	640x480	72.809	37.861	31.500	Х	Х	Х	VESA DMT
	640x480	75.000	37.500	31.500	Х	Х	Х	VESA DMT
	720x400	70.087		28.322	Х	Χ	Χ	
	800x600	56.250		36.000	Х	Х	Х	
	800x600	60.317	37.879	40.000	Х	Х	Х	
	800x600	72.188	48.077	50.000	Х	Х	Х	VESA DMT
	800x600	75.000	46.875	49.500	Х	Х	Х	VESA DMT
	832x624	74.551	49.726	57.284	Х	Х	Х	
	1024x768	60.004		65.000	Х	Х	Х	
	1024x768	70.069		75.000	Χ	Х	Х	_
	1024x768	75.029		78.750	Χ	Х	Х	VESA DMT
	1280x720	59.855	44.772	74.500	Χ	Х	Х	
	1280x768	59.870		79.500	Χ	Х	Х	VESA CVT
	1280x768	74.893		102.250	Χ	Х	Х	
	1280x800	59.810			Χ	Х	Х	
	1280x1024	60.020		108.000		Х	Х	
	1280x1024	75.025		135.000		Х	Х	VESA DMT
	1440x900	59.887		106.500		Х	Х	
	1680x1050	59.954		146.250	Χ	Х	Х	
	1920x1080	59.934	66.587	138.500	Χ			VESA CVT-R
SDTV	480i	60			Χ	Х		SMPTE 125M, CEA-861-F Formats 6 & 7
	576i	50			Χ	Х		ITU-R BT.601, CEA-861-F Formats 21 & 22
EDTV	480p	60	31.469	27.000	Χ	Χ	Х	ITU-R BT.1358, CEA-861-F Format 17 & 18
	576p	50	31.250	27.000	Х	Х		SMPTE 125M, CEA-861-F Format 6 & 7
HDTV	1080i	50	28.125	74.500	Χ	Х		SMPTE 274M, CEA-861-F Format 20
	1080i	60	33.750	74.250	Х	Х		SMPTE 274M, CEA-861-F Format 5
	720p	50	37.500	74.250	Х	Х	Х	SMPTE 296M, CEA-861-F Format 19
	720p	60	45.000	74.250	Χ	Х	Х	SMPTE 296M, CEA-861-F Format 4
	1080p	50	56.250	148.500	Х	Х	Х	SMPTE 274M, CEA-861-F Format 31
	1080p	60	67.500	148.500	Χ	Х	Х	SMPTE 274M, CEA-861-F Format 16
UHDTV	3840x2160	24		297.000				CEA-861-F Format 93, HDMI 1.4b VIC 1
	3840x2160	25		297.000				CEA-861-F Format 94, HDMI 1.4b VIC 2
	3840x2160	30		297.000				CEA-861-F Format 95, HDMI 1.4b VIC 3
	3840x2160	50		297.000				CEA-861-F Format 96, 4:2:0 sub-sampling
	3840x2160	50		594.000				CEA-861-F Format 96
	3840x2160	60		297.000				CEA-861-F Format 97, 4:2:0 sub-sampling
	3840x2160	60		594.000				CEA-861-F Format 97, 4.2.0 sub-sampling
	0070AZ 100	00	100.000	JJ000	^	<u> </u>	<u> </u>	OEA OOT-1 TOITIGE 97

Color Subsampling Support

Video Timing	Input	RGB 4:4:4 Supported	YUV 4:4:4 Supported	YUV 4:2:2 Supported	YUV 4:2:0 Supported
4K @ 50/60Hz	HDMI 1-2	х	x	x	х
All Other Supported Timings	DVI	х			
All Other Supported Timings	HDMI 1-2	х	х	х	

Power Consumption

The power consumption values stated in the Specifications table are calculated under the typical conditions of viewing a single source with default settings. The "Power Consumption: Backlight Max (Typ.)" value is instead calculated by increasing the default value of 90 to 100, and multiplying the wattage by approximately 1.1. The power consumption would increase if any other factor was introduced and should be taken into account when estimating power consumption.

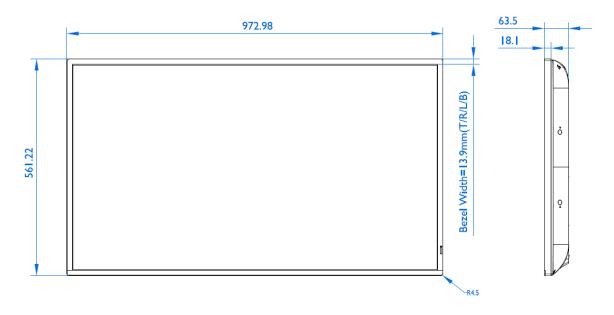
Specifications

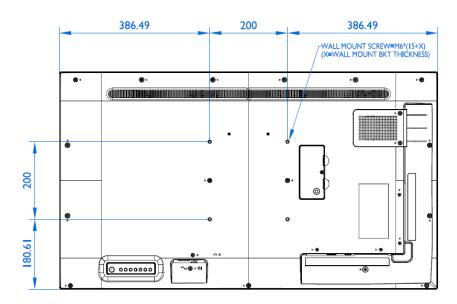
Item	SLM43	SLM50	SLM55	SLM65	SLM75	SLM86			
LCD Panel									
Resolution	3840x2160								
Aspect Ratio		16:9							
Screen Size	43"	50"	55"	65"	75"	86"			
Orientation			Lands	scape					
Brightness (Typ.)		500 cd/m ²							
Contrast Ratio (Typ.)	1200:1	4000:1	1200:1	1200:1	1200:1	1200:1			
Viewing Angle (Typ.)			178 de	egrees					
Response Time (Typ.)			8r	ns					
Color Gamut			72% l	NTSC					
Display Color			1.07 billion (10-bit depth)					
Haze (Typ.)	1%	2%	1% 1%		1%	25%			
Connectivity									
Standard Inputs	HDMI 2.0 x 2, DVI, VGA, Media Player								
HDCP 2.2			Yes (HD	OMI 2.0)					
Audio Output			Line out, S	S/PDIF out					
Control and Monitoring		LAN RJ4	5, RS232, IR In/	Out, HDMI-CEC	, Keypad				
Mechanical									
Display Dimensions w/ Handles	N/A	N/A	N/A	57.6" x 33.0" x 3.7" (1462.3mm x 837.3mm x 93.4mm)	66.3" x 37.9" x 3.8" (1683.5mm x 961.7mm x 95.3mm)	75.9" x 43.3" x 3.8" (1929.0mm x 1100.0mm x 95.3mm)			
Display Dimensions w/o Handles	38.3" x 22.1" x 2.5" (973.0mm x 561.2mm x 63.5mm)	44.4" x 25.6" x 2.5" (1128.4mm x 649.0mm x 63.5mm)	48.9" x 28.1" x 2.5" (1241.8mm x 712.6mm x 63.6mm)	57.6" x 33.0" x 2.7" (1462.3mm x 837.3mm x 68.9mm)	66.3" x 37.9" x 2.7" (1683.5mm x 961.7mm x 69.5mm)	75.9" x 43.3" x 2.7" (1929.0mm x 1100.0mm x 69.5mm)			
Bezel Width	13.9mm	14.9mm	13.9mm	14.9mm	14.9mm	15.5mm			
Display Weight	24 lbs (11 kg)	33 lbs (15 kg)	37 lbs (17 kg)	61 lbs (28 kg)	81 lbs (37 kg)	109 lbs (50 kg)			
Mounting	VESA 200x200	VESA VESA VESA VESA VESA VESA VESA VESA 000x400 600x400 <							
Fanless		Yes							

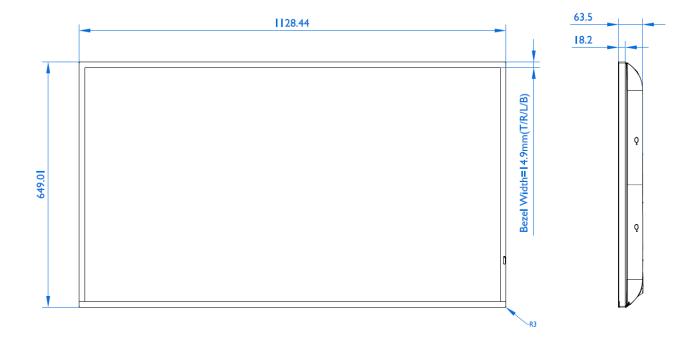
Item	SLM43	SLM50	SLM55	SLM65	SLM75	SLM86			
Speakers	10W x 2 built-in								
Usage									
Recommended Usage	16x7								
Backlight			D-L	.ED					
Backlight Life			30,000 h	ours min					
Power Source									
Power Consumption (Typ.)	97W	113W	112W	168W	184W	350W			
Power Consumption Backlight Max (Typ.)*	121W	141W	140W	210W	230W	438W			
BTU/hr (Typ.)	97W x 3.42 BTU = 332 BTU/hr	113W x 3.42 BTU = 386 BTU/hr	BTU = 386 BTU = 383		184W x 3.42 BTU = 629 BTU/hr	350W x 3.42 BTU = 1197 BTU/hr			
Standby Power Consumption	< 0.5W								
Input Voltage / Frequency	AC 100-240V 50-60 Hz								
AC Inlet Type	C14								
Environment									
Storage Temperature	Min -4°F ~ Max 140°F (-20°C ~ 60°C)								
Operating Temperature	Min 32°F ~ Max 104°F (0-40°C) at up to 3000 m								
Humidity	20-85% RH								
Approvals		FCC Class A, NRTL, CE							

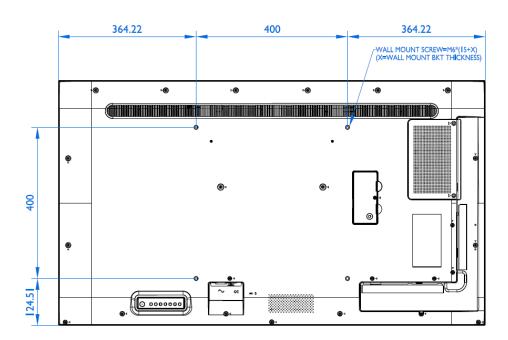
^{*} Refer to Power Consumption section (page 93) for details on how this is calculated.

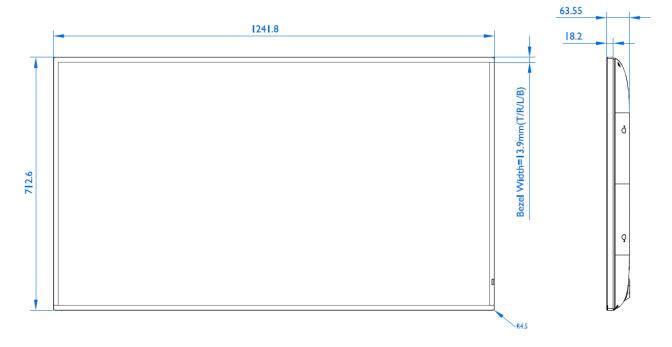
Dimensions

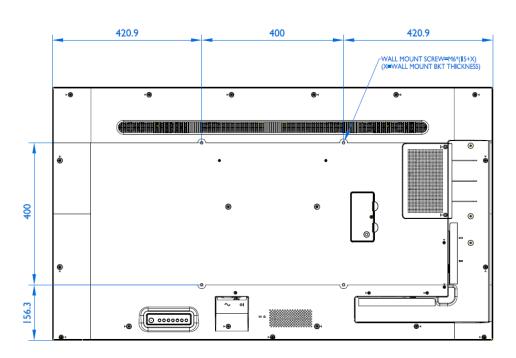




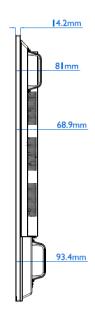


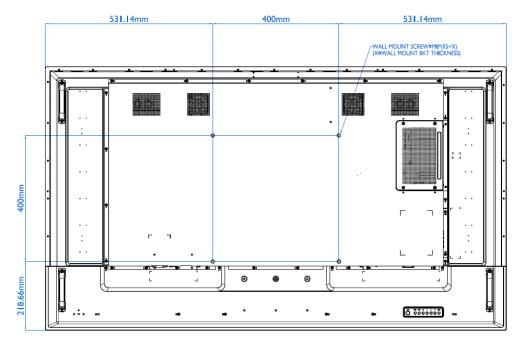


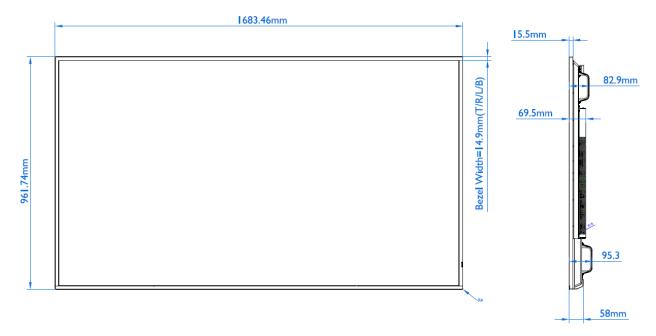


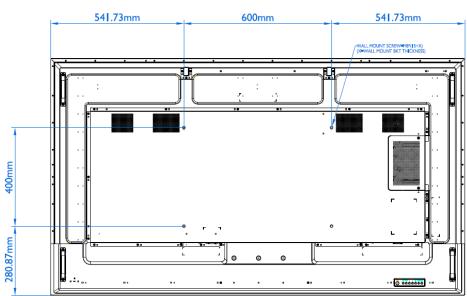


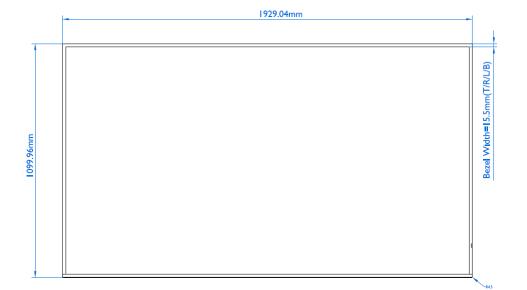




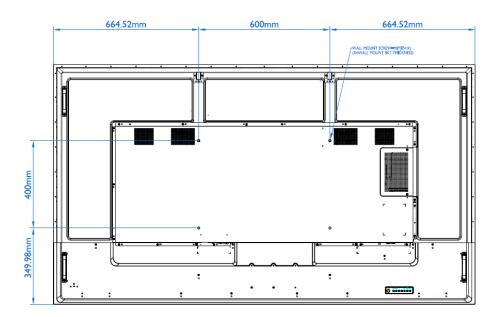












Troubleshooting

Before calling service personnel, please check the following table for a possible cause of the problem you are experiencing. Please note the following:

- Perform the adjustments according to "Operating the Display" on page 21.
- If the problem you are experiencing is not described below, or you cannot correct the problem, stop using the display and contact Planar's Technical Support Department. See "Accessing the Planar Technical Support Website" on page 93.

Issue	Check for the following					
	Make sure the correct source is selected.					
No image is displayed	Make sure the main power switch is ON.					
ino image is displayed	Check that the source equipment is operating correctly.					
	Make sure the input signal is compatible with this display.					
The image is not centered	Make sure the input signal is compatible with this display.					
	Make sure the batteries are new and installed correctly. Ensure the remote is aimed at the IR sensor.					
The remote control doesn't work	Make sure the remote control sensor is plugged in correctly.					
	Make sure the remote is aimed towards the back of the display where the sensor is located.					
The picture color looks poor	Check the picture settings. Reset the display					

Accessing the Planar Technical Support Website

Go to http://www.planar.com/support/ to locate the following support documents and resources:

- User Guide
- RS232 User Manual
- Standard Warranties
- Planar support hotline number and email

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