

User Manual / Installation Guide

Model No. P070UG

Warning! This monitor is equipped with Mini USB port, signals and power is obtained from standard USB 2.0 or USB 3.0 port. Do not expose this unit in the rain or moisture environment to damage the monitor.

PRECAUTIONS

- Do not use the monitor near water.
- Do not place the monitor on an unstable cart, stand, or table. If the monitor falls, it can injure a person and cause serious damage to the appliance. Use only a cart or stand recommended by the manufacturer or sold with the monitor. If you mount the monitor on a wall or shelf, use a mounting kit approved by the manufacturer and follows the kit instructions.
- The monitor should be operated with an USB cable with Mini USB B type connector on monitor end and standard USB A type connector on the other end to PC or USB signal source.
Normally it is packed with monitor.
- Never spill liquids on the monitor.
- Do not attempt to service the monitor yourself; opening or removing covers can damage to the monitor or panel. Please refer all servicing to qualified service personnel.
- For Wall mount adaptor, wall socket shall be installed near the equipment and shall be easily accessible.



Index:

I.	Introduction -----	3
	Features-----	3
	Unpack the monitor-----	3
	Check Accessories-----	3
II.	Installation -----	4-5
	Installing the DisplayLink USB Graphics Software-----	4
	Using the Display Link Software-----	8
	Control buttons/Connector-----	17
III.	For your safety -----	17
IV.	Support timing -----	17
V.	Mechanical dimension -----	18
VI.	FCC Warning Statement -----	18
VII.	Product General Specification -----	19

I. Introduction

P070UG is color TFT LCD monitor, with compact and ecological design. Typical power consumption is only 2.5W with LED backlight.

➤ Features

- 7 inch diagonal screen with native display resolution 800 * 480.
- Full flat front panel with high quality protective glass.
- Fully Glossy surface throughout monitor's appearance.
- No ventilation hole design.
- Cable management down routing through the mounting stand
- Light weight, only 1000 g physically.

➤ Unpack the monitor

- Put the monitor on a clean surface; make sure the box in upright position.
- Remove packing materials from inside of box.

➤ **Check accessory**

Please make sure the entire accessory is included:

 <p data-bbox="555 1547 711 1581">USB cable</p>	
 <p data-bbox="475 1854 715 1888">Quick start guide</p>	<p data-bbox="810 1854 1145 1888">User guide & Driver CD</p>

II. Installation

Installing the DisplayLink USB Graphics Software

The following section shows you how to install the DisplayLink USB Graphics software on different operating systems.

Note: If you have v3.x, R4.1 or R4.2 DisplayLink software installed you must uninstall it, using the Windows Add/Remove Programs feature, before installing this release. Devices will continue working after this release is installed.

Windows 7

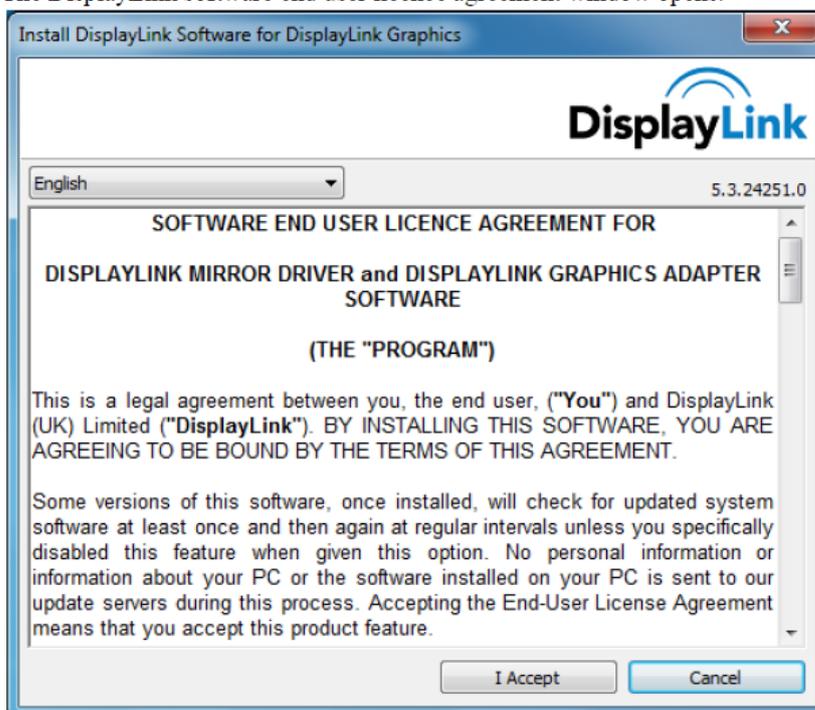
The preferred method of installation is using Window 7's Windows Update facility.

To Install the DisplayLink USB Graphics on Windows 7

1. Connect your DisplayLink device via the USB cable to your PC.
Windows detects the new hardware and automatically downloads the driver.



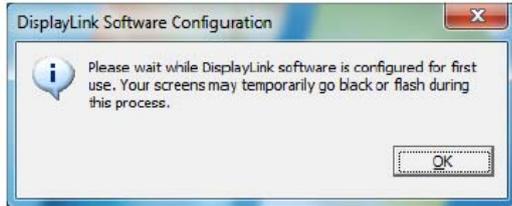
2. Once downloaded, the install will run
The DisplayLink software end user licence agreement window opens.



3. Click *I Accept*.
The DisplayLink Core software installs



The Windows User Account Control window opens.



5. Click *Yes*.
DisplayLink automatically installs the device.
The DisplayLink software end user licence agreement window opens (see above).
6. Click *I Accept*.
The DisplayLink USB Graphics software installs, without notification that it has completed.

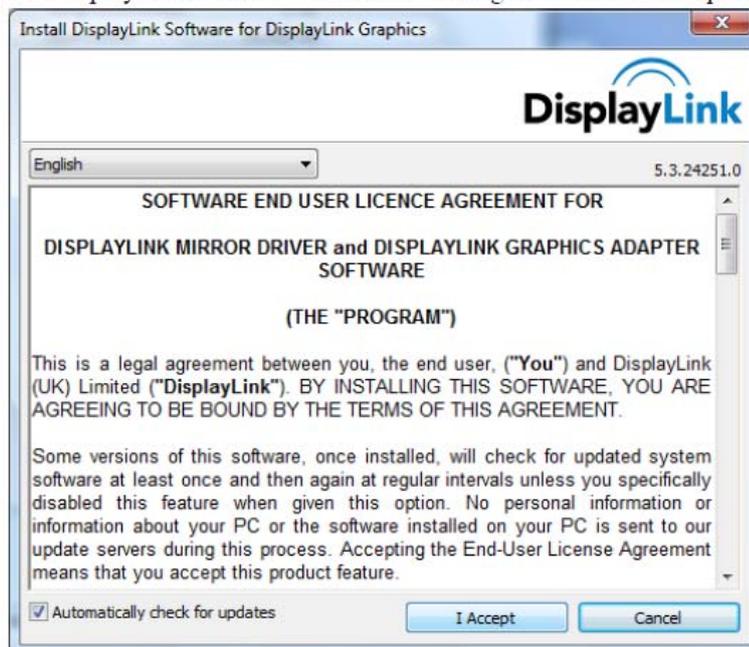
Note: On some machines you may need to reboot before you can use your DisplayLink enabled device.

Windows Vista

To Install the DisplayLink USB Graphics on Windows Vista

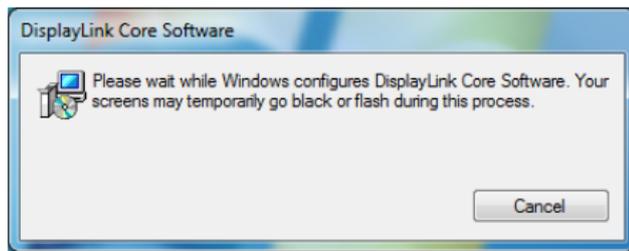
Important! Do not connect a DisplayLink device/screen to your PC before the install.

1. Double click on Setup.exe.
The Windows User Account Control window opens (if enabled in the OS).
2. Click Continue.
The DisplayLink software end user licence agreement window opens.



3. Click *I Accept*.
DisplayLink Core software and DisplayLink Graphics installs.



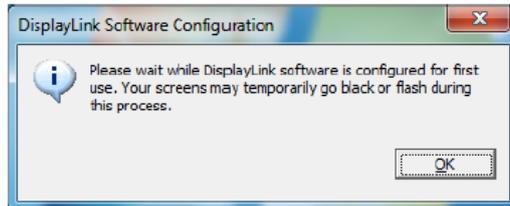


Note: The screen may flash or go black during the install.
No message will be shown at the end of the install.

4. Connect your DisplayLink device via the USB cable to your PC.
Installing device driver message



The Windows User Account Control window opens.



5. Click *Yes*.
DisplayLink automatically installs the device.
The DisplayLink software end user licence agreement window opens (see above).
6. Click *I Accept*.
The DisplayLink USB Graphics software installs, without notification that it has completed.

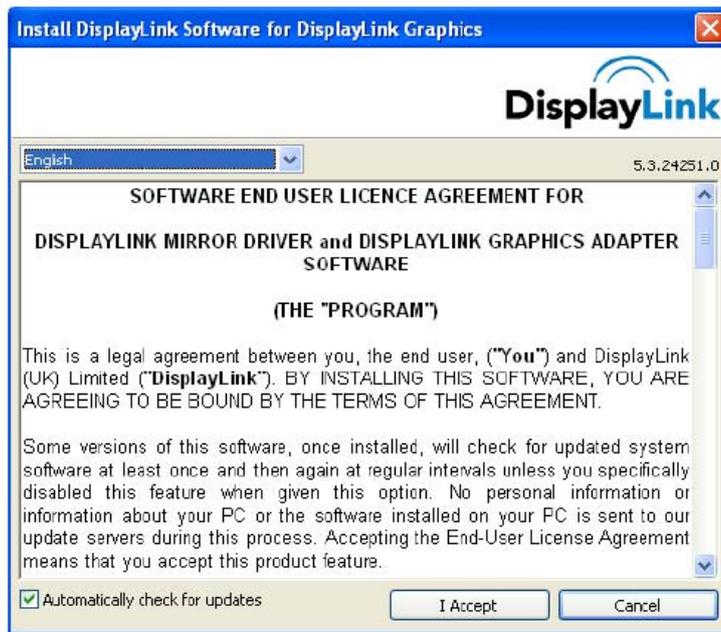
Note: On some machines you may need to reboot before you can use your DisplayLink enabled device.

Windows XP

To Install the DisplayLink USB Graphics on Windows XP

Important! Do not connect a DisplayLink device/screen to your PC before the install.

1. Double click on Setup.exe.
The DisplayLink software end user licence agreement window opens.



2. Click *I Accept*.
DisplayLink Core software and DisplayLink Graphics installs.



Note: The screen may flash or go black during the install.

3. Connect your DisplayLink device via the USB cable to your PC. The following message (or similar) will be seen.



Windows installs the DisplayLink device.

Note: The screen may flash or go black during the install.

Using the DisplayLink Software

This section describes how to use DisplayLink's Software. The section is divided into sub-sections relating to your operating system.

Note: The terminology for "mirror mode", can vary between operating systems and the DisplayLink GUI. The terms "Clone", "Mirror" and "Duplicate" are interchangeable and provide the same function of making the contents of the 2 selected displays identical..

Behaviour on first connect

When connecting a device based on the DL-3x00 family, the firmware version will be checked by the host software. If they do not match, the firmware on the device will be updated. While the firmware is updating, a window similar to that shown below will be shown.



This process may take up to 20 seconds. Once complete, your device should begin to function.

Device/Monitor Detection

The DisplayLink System tray GUI, covered below, will only be available when a DisplayLink device is detected on the USB bus.

When using a DL-1x0 or DL-1x5 based product, a new monitor will also be added in Windows Display Properties, even if there is no monitor connected to the device.

DL-3x00 devices now support monitor detect, therefore a new display will only be available once the device is connected to the PC AND a monitor is attached to the video output of the device.

Resolution Support

When a monitor is connected to a DisplayLink device, the DisplayLink host software reads the supported modes from the display. These are the only supported modes offered by the DisplayLink software, through the DisplayLink UI or Windows Display Properties. The DisplayLink software will use the monitor's preferred mode by default.

If the monitor does not report any supported modes, DisplayLink will offer a list of default modes.

Note: not all supported monitor modes may be offered if they are not supported by your DisplayLink device.

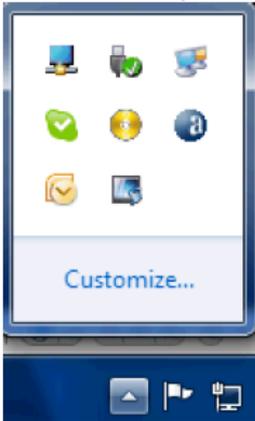
Windows 7 - Controlling the Display

Controlling the Display

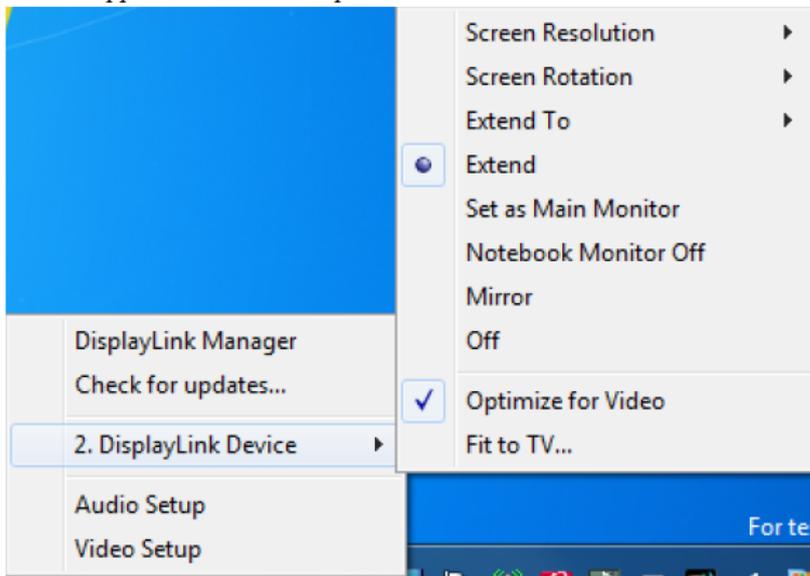
When devices are attached, an icon appears in the taskbar. This gives you access to the DisplayLink manager menu.

To use the DisplayLink Manager Menu

1. From the taskbar, click the *Show hidden icons* arrow to show all available icons.



2. Click the DisplayLink icon . A menu appears with several options. These are shown and described below.



Menu Option	Sub-menu Option	Description
DisplayLink Manager		This is the UI title. Clicking on this item will open Windows screen resolution.
Check for Updates		Connects to the Update Server to check for newer driver versions and downloads them, if available.
DisplayLink devices	Options to configure this DisplayLink device	In this section of the menu, a list of connected DisplayLink devices will appear. Each of these devices has its own sub-configuration menu. These Submenu options are covered in the table below.
Audio Setup		Opens the Windows Audio Configuration Window.
Video Setup		Opens the Windows Screen Resolution window.

Display Menu	Description	
Screen Resolution	Displays a list of available resolutions. Some resolutions may be enclosed by []. Please see, Inferred Modes . This option is not available in mirror mode, as the resolution is defined as the resolution of the main monitor.	
Screen Rotation	Normal	No rotation is applied to the DisplayLink display
	Rotated Left	Rotates the extended or mirrored display by 270 degrees clockwise.
	Rotated Right	Rotates the extended or mirrored display by 90 degrees clockwise.
	Upside-Down	Rotates the extended or mirrored display by 180 degrees clockwise.
Extend To	Right	Extends the display to the right of the main display.
	Left	Extends the display to the left of the main display.
	Above	Extends the display above of the main display.
	Below	Extends the display below the main display.
Extend	Extends your Windows desktop onto this display.	
Set as Main Monitor	Sets this screen as the main display.	
Notebook Monitor Off	Switches off the display of the notebook and makes the DisplayLink display the main display. Note: This option will only appear when 1 DisplayLink USB screen, is connected. It will also only appear on Laptop computers.	
Mirror	Copies what is on the main display and reproduces it on this display. Note: The resolution of this display and the primary must be the same in mirror mode. This may be lower than the preferred resolution of the display. It is only possible to mirror 2 displays. If a display is already set to mirror mode, this option will be greyed out for the other DisplayLink displays and not available.	
Off	Switches off this display.	
Optimize for Video	Select this option for better movie playback performance on the DisplayLink enabled displays. Only select this option when playing back video content. Note: Text may appear less clear when enabled.	
Fit to TV	If the Windows desktop does not completely appear on the TV, this option can be used to adjust the size of the Windows desktop. See “Fit to TV” for details on how to configure this feature. Notes: <ul style="list-style-type: none"> This option will only appear when 1 DisplayLink USB screen, is connected This option will only work in extend mode. Selecting the option in mirror mode will extend the displays. 	

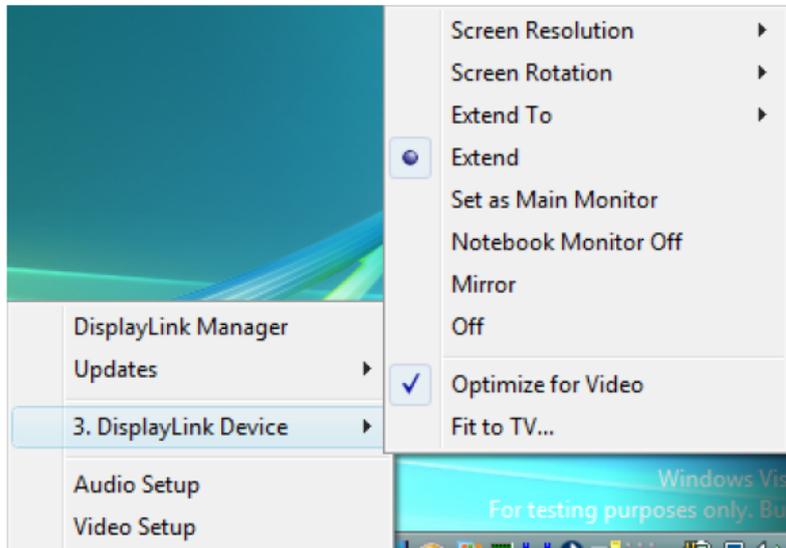
Table 2: DisplayLink menu – Windows 7

Windows Vista and Windows XP – Controlling the Display

When devices are attached, an icon appears in the taskbar. This gives you access to the DisplayLink manager menu.

To use the DisplayLink Manager Menu

1. Click the DisplayLink icon  on the taskbar. The menu appears as shown below.



2. Select an option from the menu, using the following table for the options available.

Menu Option	Sub-menu Option	Description
DisplayLink Manager		This is the UI title. Clicking on this item will open Windows screen resolution.
Updates	Check Now	Connects to the Update Server to check for newer driver versions and downloads them, if available.
	Configure	Opens the Update Options window where you can configure automatic updates.
DisplayLink devices	Options to configure this DisplayLink device	In this section of the menu, a list of connected DisplayLink devices will appear. Each of these devices has its own sub-configuration menu. These Submenu options are covered in the table below.
Audio Setup		Opens the Windows Audio Configuration Window.
Video Setup		Opens the Windows Display Settings window.

Display Menu	Description
Screen Resolution	Displays a list of available resolutions. Some resolutions may be enclosed by []. Please see, Inferred Modes . This option is not available in mirror mode, as the resolution is defined as the resolution of the main monitor.
Screen Rotation	Normal No rotation is applied to the DisplayLink display

Display Menu	Description	
	Rotated Left	Rotates the extended or mirrored display by 270 degrees.
	Rotated Right	Rotates the extended or mirrored display by 90 degrees.
	Upside-Down	Rotates the extended or mirrored display by 180 degrees.
Extend To	Right	Extends the display to the right of the primary display.
	Left	Extends the display to the left of the primary display.
	Above	Extends the display above of the primary display.
	Below	Extends the display below the primary display.
Extend		Extends your Windows desktop onto this display.
Set as Main Monitor		Sets this screen as the primary display.
Notebook Monitor Off		Switches off the display of the notebook and makes the DisplayLink display the main display. Note: This option will only appear when 1 DisplayLink USB screen, is connected. It will also only appear on Laptop computers.
Mirror		Copies what is on the main display and reproduces it on this display. Note: The resolution of this display and the primary must be the same in mirror mode. This may be lower than the preferred resolution of the display.
Off		Switches off this display.
Optimize for Video (Windows Vista Only)		Select this option for better movie playback performance on the DisplayLink enabled displays. Only select this option when playing back video content. Note: Text may appear less clear when enabled.
Fit to TV		If the Windows desktop does not completely appear on the TV, this option can be used to adjust the size of the Windows desktop. See “Fit to TV” for details on how to configure this feature. Notes: <ul style="list-style-type: none"> • This option will only appear when 1 DisplayLink USB screen, is connected • This option will only work in extend mode. Selecting the option in mirror mode will extend the displays.

Table 3: DisplayLink menu – Windows Vista

Setting the Display into Extend Mode

In extend mode, the monitor attached to the DisplayLink USB Graphics device forms part of the extended Windows desktop. The extra desktop area is a great productivity aid, allowing more applications or documents to be visible at a time.

To set the display into Extend Mode

1. Click on the DisplayLink icon .
2. Select *Extend*.

The device is now extended in the direction it was the last time the display was in this mode. For more control, use the Extend To submenu and select one of the options. This puts the device into extend mode, and places it to the Left/Right/Above/Below the main (primary) monitor.

Setting the Display into Mirror Mode

In mirror mode, the monitor attached to the DisplayLink USB Graphics device duplicates what is on the primary display.

To set the display into Mirror mode

1. Click on the DisplayLink icon .
2. Select *Mirror*.

The resolution, colour depth and refresh rate of the primary screen are replicated on the monitor connected to the DisplayLink USB Graphics device.

If the monitor connected to the DisplayLink USB Graphics device supports a lower resolution than the primary display, then the primary graphics device will have its resolution changed automatically to ensure the whole picture fits on the external screen. Where the monitor connected to the DisplayLink USB Graphics device is of a larger size than the primary screen the image will be letter-boxed to keep the aspect ratio correct.

Windows Vista and XP – Windows Display Properties

You can also configure the DisplayLink USB Graphics device from the Windows Display Properties dialog box.

To open the Windows Display Properties on Windows Vista

1. Right-click on the Desktop.
2. Click Personalize.
3. Click Display Settings.
The Display Settings window opens.

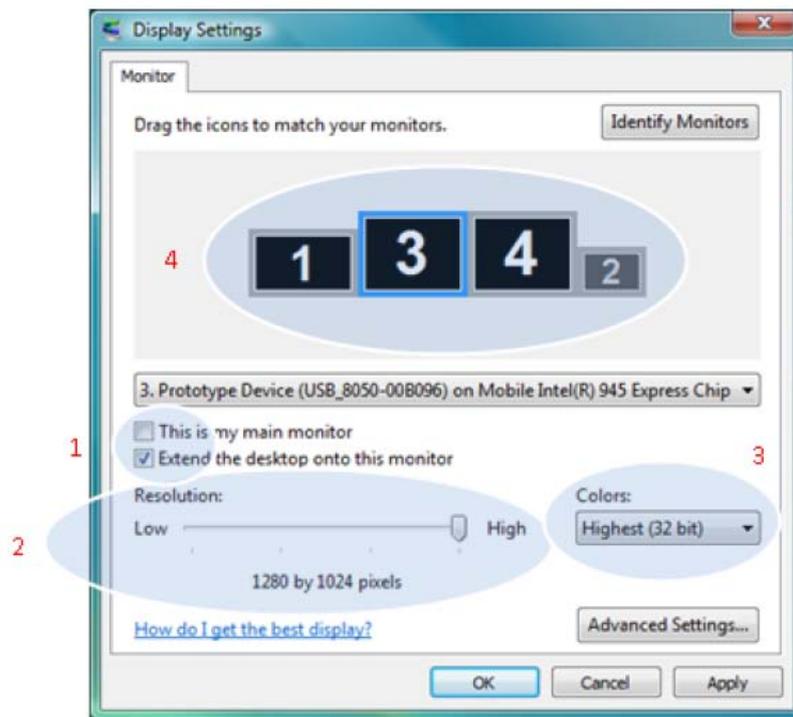


Figure 1: Display Setting - Vista

Select the display to be configured. Its mode, resolution, colour quality and position can all be controlled from here.

To open the Windows Display Properties on Windows XP

1. Right-click on the Desktop.
2. Select Properties.
The Display Properties dialog opens.
3. Select the *Settings* tab.

Setting the Display into Extend Mode

Use this procedure when you want to extend the Windows desktop to the DisplayLink display. This allows many different applications to be spread over multiple displays, to be able to see multiple applications at the same time.

To set the display to Extend Mode using Windows Display properties

1. Select Extend the desktop onto this monitor checkbox (1 in Figure 1).
2. Arrange the screen resolution using the *Resolution* slide bar. (2)
3. Select the colour quality from the *Colors* drop-down list. (3).
4. Arrange its position with respect to the other monitors on the extended desktop in using the drag area (4).
5. Click *OK* to save your changes.

For more detailed mode setting, including the refresh rate, click Advanced Settings button, then the Adapter tab then on the List all modes button. All valid combinations of resolution, colour quality and refresh rate are listed. For CRT monitors, it is best to use a high refresh rate so as to avoid discomfort due to flicker. Flat panel monitors do not flicker and a low refresh rate is adequate.

To set the display to Extend Mode using the DisplayLink menu

1. From the taskbar, click on the DisplayLink icon .
2. Select *Extend*.

Setting the DisplayLink Display to Mirror the Primary Screen

Mirror mode copies what is on the main display and reproduces it on the secondary display.

To set the display into Mirror Mode

1. Uncheck the *Extend the desktop onto this monitor* checkbox (1 in Figure 1).
2. Click *Apply*.

To set the display into Mirror mode using the DisplayLink menu

1. From the taskbar, click on the DisplayLink icon .
2. Select *Mirror*.

Note: The display resolution of the primary display and the DisplayLink display may be changed to a lower resolution. In mirror mode, both screens must output the same resolution, which may not be the maximum resolution of the display.

This mode is NOT recommended if using the DisplayLink display as the primary laptop display, as it is unlikely to provide the optimum resolution for the DisplayLink display. Please see, [Setting the DisplayLink display as the Primary Display](#).

Setting the DisplayLink display as the Primary Display

To make the DisplayLink USB Graphics the Primary Display

1. Select the *This is my main monitor* checkbox (1 in Figure 1).
2. Click *Apply*.

Note: On some PCs and laptops it is necessary to disable the main display (clear the *Extend the desktop onto this monitor* checkbox for the main display) as part of the same settings change. The reason for this is that many primary graphics card drivers tend to make the laptop screen primary if it is enabled. The only workaround for this is to disable the laptop screen to allow another screen to be primary. To do this:

1. Select the *This is my main monitor* checkbox (1 in Figure 1) of the DisplayLink display.
2. Select the primary display (Display 1).
3. Uncheck the *Extend the desktop onto this monitor* checkbox (1 in Figure 1).
4. Click *Apply*.

The DisplayLink USB Graphics device stays primary if the PC enters hibernate or suspend mode or is rebooted. If the DisplayLink USB Graphics device is detached from the computer while it was set as the main monitor, the computer's display will become the main monitor again..

To make the DisplayLink USB Graphics the Primary Display using the DisplayLink menu

1. From the taskbar, click on the DisplayLink icon .
2. Select *Set as Main Monitor*.

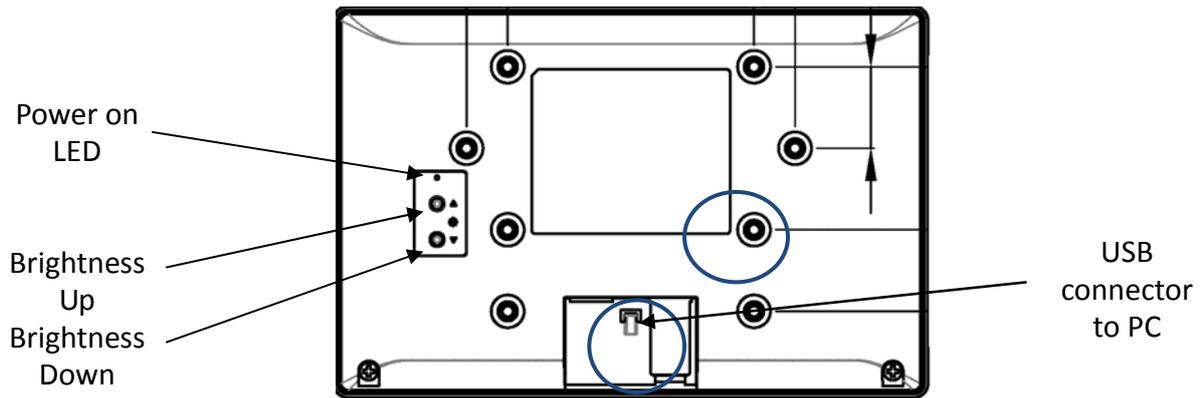
Setting a Laptop Lid to do Nothing (Upon Close)

It is possible to use a laptop with a DisplayLink USB device and conveniently have the laptop closed on the side by setting its action when closing the lid to 'do nothing' , and then making the DisplayLink USB Graphics device screen primary while disabling the main screen. The laptop lid can then be closed and the laptop used with only the DisplayLink USB Graphics device screen and with an external keyboard and mouse.

To set a laptop to do nothing

1. Select Start menu > Control Panel > Power Options.
2. Select *Choose* what closing the lid does.
3. From When I close the lid, select *Do nothing* from the *On battery* and *Plugged in* drop down list.

Control Buttons/Connectors



Power	After USB driver is installed, connect monitor to PC via USB cable. Monitor will be turned on, and blue LED indicator will be lit.
Up	Press this key will increase screen brightness
Down	Press this key will decrease screen brightness

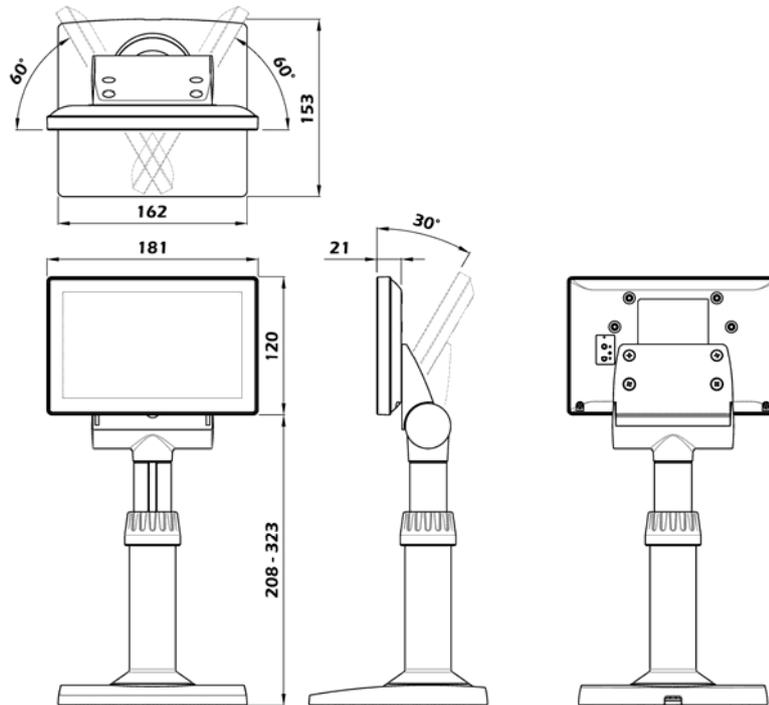
III. For your safety

1. When move the monitor, always disconnect USB cable to avoid any danger.
2. Please use USB cable correctly when install it.
3. In case of notice any abnormal smell or noise, please stop operation and call the nearest dealer or service center.

IV. Support timing chart:

Timing Mode	Reference Standard	Resolution	Pixel MHz	FH KHz	FV Hz	Interlace	H Polarity	V Polarity
Mode 1	VESA	800×480	33.260	31.5	60	NO	na	na

V. Mechanical dimension



VI. FCC Warning Statement:

FCC Class A Warning



This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CISPR 22 Class A Warning



This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Taiwan and Other Traditional Chinese Markets Class A Warning



This is a Class A Information Product, when used in residential environment, it may cause radio frequency interference, under such circumstances, the user may be requested to take appropriate countermeasures.

警告 這是甲類資訊產品，在居住環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

VII. Product General Specification

Model	P070UG
Display size	7"
Display Area	152.40mm x 91.44mm
Optimal Resolution	800 * 480
Brightness	250 cd/m ² (typ)
Contrast Ratio	500:1(typ)
Response Time	30 ms (typ)
Viewing Angle	V: 50 /60 , H: 80 /80
Input Video signal	Mini USB B type (With 1.8 meter USB cable)
Power consumption	2.5W max.
Input Frequency	H: 31.5kHz ; V:60Hz
Power supply	5V DC @0.5A max.
Temperature	Operating : 0°C~40°C ; Storage : -10°C~50°C
Weight	1130g (net)
Physical Dimension	328~443 (H) (adjustable) *181 (W) *153(D) mm
Approvals	CE, FCC, BSMI
MTBF (LED backlight)	20,000 hrs
Wall Mount type	VESA 75 * 75 mm
Optional item	
Color	White

*Product specification to be changed without prior notice

*Made In Taiwan