# **Video Wall Display**

# **User's Manual**



## **Safety Instructions**



- Please handle the display with <u>extreme</u> care, significant impact will damage the LCD panel.
- The display should be moved by no less than two persons at any time to ensure safe handling.
- Please keep the display away from any heat sources. Place the display in a stable and well-ventilated place.
- Please handle with care as product contains glass.
- The holes or openings on the display are designed for ventilation. Do not cover or block the ventilation holes or openings with any objects.
- Remove protective covering from the screen before you use the display.
- Shut off the power supply before cleaning. Use a soft lint-free cloth instead of a tissue to wipe the screen.
- Do not attempt to repair this product yourself! Improper disassembly of the product may invalidate the warranty and lead to possible danger
- If you have a problem that cannot be solved using the "Troubleshooting" guidelines, please contact your supplier.

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### 1. Introduction

Congratulations on your purchase of our product. Please read carefully and follow all instructions in the manual before first use.

The product should not be exposed to liquids dripping or splashing and no objects filled with liquids, such as vases, should be placed on the product.

For user convenience, a number of operations can be performed through the remote control.

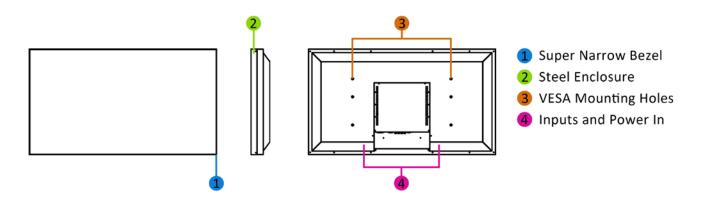
#### Attention:

- 1. Do not change any default setting when it is unnecessary.
- 2. Keep the product far away from water during installation and use.

#### 1.1 Box Contents

- 1 x Video Wall Display.
- 1 x Power Cable.
- 1 x HDMI Cable.
- 1 x CD (User Manual).
- 1 x Remote Control.
- 1 x Serial Control Box (with Cat 5 cable).

### 1.2 Product Overview



**Figure 1 Product Overview** 

### 1.3 Serial Control Box

### 1.3.1 Connection to the screen

Before using the Remote Control the Serial Control Box (with the remote's infrared sensor in it) must be connected to the screen.

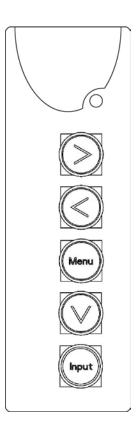


Figure 2 Serial Control Box to Screen Connection

Unless Remote Control is faulty it is recommended that you do not attempt to change any settings with the Serial Control Box, only use it as a sensor for the main Remote Control.

Once all required changes have been made the Serial Control Box can be disconnected or hidden.

## 1.3.2 Serial Control Box Overview



| Button        | Function                                       |                      |
|---------------|--|----------------------|
| $\rightarrow$ | Right navigation button                        | adjust volume        |
| <b>←</b>      | Left navigation button                         | select in OSD menu   |
|               |  | select signals input |
|               |  | adjust values        |
| MENU          | Open/close OSD menu or return to previous menu |                      |
| <b>\</b>      | Select signal input                            |                      |
| INPUT         | Signal input select                            |                      |

### **1.4 Remote Control**



| Button          | Function           |
|-----------------|--------------------|
| POWER/          | Power on or off    |
| MENU            | Display settings   |
| SETUP           | Menu settings      |
| SOURCE/⊕        | Input source       |
| <b>A</b>        | Up (navigation)    |
| ◀               | Left (navigation)  |
| <b>&gt;</b>     | Right (navigation) |
| ▼               | Down (navigation)  |
| <b>▶</b> /      | Play media         |
|                 | Stop media         |
| <b>I</b>        | Previous           |
| <b>&gt;&gt;</b> | Next               |
| ×               | Display settings   |
| <b>L</b> +      | Raise volume       |
| <b>U</b> -      | Lower volume       |

### 1.5 Replacing the Remote Control Battery

- 1. Slide the battery cover off, as shown below.
- 2. Remove the used batteries.
- 4. Insert the two new AAA batteries with their terminals corresponding to the indicators.
- 5. Put the cover back on.



### 1.6 Menu Operation

The Menu includes the following sub-menus: Picture, Sound, System, Function and Geometry.

First, ensure that the Serial Control Box is connected to the screen via the CAT5 port (as shown).



Figure 3 Serial Control Box to Screen Connection

When using the Remote Control please ensure that it is no more than 20cm away from the sensor on the Serial Control Box. This close proximity control feature is to ensure that you only control the desired device if there are others in its vicinity.

The Menu includes the following menus: Picture, Sound, Time and Option.

Press "MENU" to bring up the menus, press  $\leftarrow \rightarrow$  to select the desired menu and  $\uparrow \downarrow$  to select the desired item, press "PLAY" to confirm selection. Press "menu" at any time to go back or exit.

### **Picture**

Here is where you can edit settings such as brightness, contrast, colour temperature and backlight brightness. Any settings that you change can be reset back to default at any time.

| Picture Mode      | <standard></standard> | or Mild/User/ | Auto/Dynamic |
|-------------------|-----------------------|---------------|--------------|
|                   | User                  | Contrast      | 50           |
|                   |                       | Brightness    | 50           |
|                   |                       | Colour        | 50           |
|                   |                       | Sharpness     | 50           |
|                   |                       | Tint          | 50           |
| Color Temperature | <medium></medium>     | or Warm/      | User/Cool    |
| Aspect Ratio      |                       | ,             |              |
| Noise Reduction   |                       |               |              |
| PC Setup          |                       |               |              |
| Backlight         | <100>                 | or 1-         | -100         |

#### Sound

In this menu you can adjust all of the sound settings for your monitor such as the sound mode EQ settings or the left/right balance. Any settings that you change can be reset back to default at any time.

| Sound Mode     | <standard></standard> | or Music/Movie/Sports/User |
|----------------|-----------------------|----------------------------|
| Balance        | <0>                   | -50(left) to +50(right)    |
| Auto Volume    | <off></off>           | or On                      |
| Surround Sound | <off></off>           | or Surround                |
| EQ             | 120 Hz                | 50                         |
|                | 500 Hz                | 50                         |
|                | 1.5K Hz               | 50                         |
|                | 5K Hz                 | 50                         |
|                | 10K Hz                | 50                         |

#### Time

Here you can set a time and date for your screen as well as scheduling daily on/off times for the built in power timer. You can also adjust at what temperature the internal fans become active.

| Clock       | <date and="" time=""></date> | Date   |
|-------------|------------------------------|--|
|             |                              | Month  |
|             |                              | Year   |
|             |                              | Hour   |
|             |                              | Minute   |
| Off Time    | <off></off>                  | Hour   |
|             |                              | Minute   |
| On Time     | <off></off>                  | Hour   |
|             |                              | Minute   |
| Temperature | XX                           | (Current screen temperature)                   |
| Fan Active  | <30>                         | (Temperature when internal fans become active) |

### Option

Under this menu are settings like on screen display language, on screen display duration time, and the video wall tiling settings. You can also restore all of the menus default settings and lock your screen so as you have to enter a password to access any of the menus.

| OSD Language            | <english></english>               | or Franais/Espanol/<br>Poruguês/Arabic/中文 |
|-------------------------|-----------------------------------|---|
| Restore Default Setting | (Resets menu settings to default) |   |
| Blending                | <low></low>                       | or Middle/High/Off                        |
| OSD Duration            | <off></off>                       | or 5sec/10sec/15sec                       |
| Multi Setup             | Board ID                          | 1   |
|                         | Current X                         | 1   |
|                         | Current Y                         | 1   |
|                         | Total X                           | 1   |
|                         | Total Y                           | 1   |
| Multi Crop              | Left Edge                         | 0   |
|                         | Up Edge                           | 0   |
|                         | Right Edge                        | 0   |
|                         | Down Edge                         | 0   |
| Copy Start              |                                   |   |
| Lock System             | <off></off>                       | or On (Password – 1842)                   |

The above table shows the screen's default settings, if you want to use your screen as part of a video wall you must give values to the X and Y settings. The following is an example of a 3x3 video wall:

| 1 |
|---|
| 1 |
| 3 |
| 3 |
| 0 |
| 0 |
| 0 |
| 0 |
|   |

| _  | 1   | 2   | 3 →x |
|----|-----|-----|------|
| 1  | 1,1 | 2,1 | 3,1  |
| 2  | 1,2 | 2,2 | 3,2  |
| 3  | 1,3 | 2,3 | 3,3  |
| Ϋ́ |     |     |      |

| CURRENT X  | 2 |
|------------|---|
| CURRENT Y  | 1 |
| TOTAL X    | 3 |
| TOTAL Y    | 3 |
| LEFT EDGE  | 0 |
| UP EDGE    | 0 |
| RIGHT EDGE | 0 |
| DOWN EDGE  | 0 |

| _  | 1   | 2   | 3 →x |
|----|-----|-----|------|
| 1  | 1,1 | 2,1 | 3,1  |
| 2  | 1,2 | 2,2 | 3,2  |
| 3  | 1,3 | 2,3 | 3,3  |
| Ϋ́ | _   | _   |      |

| CURRENT X  | 3 |
|------------|---|
| CURRENT Y  | 1 |
| TOTAL X    | 3 |
| TOTAL Y    | 3 |
| LEFT EDGE  | 0 |
| UP EDGE    | 0 |
| RIGHT EDGE | 0 |
| DOWN EDGE  | 0 |

| _          | 1   | 2   | 3 →> |
|------------|-----|-----|------|
| 1          | 1,1 | 2,1 | 3,1  |
| 2          | 1,2 | 2,2 | 3,2  |
| 3          | 1,3 | 2,3 | 3,3  |
| <b>V</b> - |     |     |      |

| CURRENT X   | 1 |            | 1   | 2   | 3 →> |
|-------------|---|------------|-----|-----|------|
| CURRENT Y 2 |   | 1 11       |     | 2.1 | 2.1  |
| TOTAL X     | 3 | 1          | 1,1 | 2,1 | 3,1  |
| TOTAL Y     | 3 |            | 4.0 | 2.2 | 2.2  |
| LEFT EDGE   | 0 | 2          | 1,2 | 2,2 | 3,2  |
| UP EDGE     | 0 |            |     |     |      |
| RIGHT EDGE  | 0 | 3          | 1,3 | 2,3 | 3,3  |
| DOWN EDGE   | 0 | Υ  <br>  Υ |     | ļ   |      |

...and so on.

The "EDGE" settings are for fine calibration of a video wall. This setting is to eliminate any black edges that you may have. In most cases you should not need to use this function.

- "LEFT EDGE" stretches the overall display horizontally from the left hand side.
- "UP EDGE" stretches the overall display vertically from above.
- "RIGHT EDGE" stretches the overall display horizontally from the right hand side.
- "DOWN EDGE" stretches the overall display horizontally from below.

Note: This function is only available when the display is being used as part of a video wall.

### **Switching between inputs**

One crucial feature that does not appear on the Main Menu is selecting the input source. This is done by first pressing "SOURCE" and then scrolling down to the desired input source and select by pressing "PLAY".

| PC-RGB       |  |  |  |  |
|--------------|--|--|--|--|
| PC-RGB (BNC) |  |  |  |  |
| COMPONENT    |  |  |  |  |
| DVI          |  |  |  |  |
| HDMI         |  |  |  |  |
| AV1          |  |  |  |  |
| AV2          |  |  |  |  |
| DMP          |  |  |  |  |

### 1.7 Inputs

VGA (PC-RGB) - Video Graphics Array Signal Input

HDMI – High Definition Multimedia Interface Signal Input

DVI – Digital Video Interface

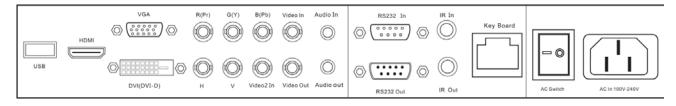
YPbPr - Component Signal Input

Video In (AV) – Composite Signal Input (X2)

BNC - Bayonet-Neill-Concelman

RS232 – Serial communication transmission

USB (DMP) – Universal Serial Bus (for internal media player)



**Figure 4 Screen Inputs** 

# 2. FAQ and Troubleshooting

### 2.1 How do I create content for my video wall?

The following example is for a 1x3 video wall configuration.

If the output size for your digital signage media player is 1920x1080 pixels (16:9 ratio), and you have a video wall configuration that has another aspect ratio you must squash your video content to fit the 16:9 ratio.

The overall aspect ratio for this video wall is 16:27 (1920x3240 pixels), however the media player can still only output a 16:9 (1920x1080) video.

Step 1 of 3. First create your content based on the overall aspect ratio (16:27).



Step 2 of 3. Now you must resize the video so it has an aspect ratio of 16:9, i.e. resize the long side of 3240 pixels to 1080 pixels. The video that you send to the media player must be 1920x1080 pixels.



Step 3 of 3. This video can now be processed by the media player and when sent to a 1x3 configuration video wall will look like this.

