



AV Connectivity, Distribution And Beyond...

VIDEO WALLS VIDEO PROCESSORS
VIDEO MATRIX SWITCHES
EXTENDERS SPLITTERS WIRELESS
CABLES & ACCESSORIES

KVM Quad Screen Video Multiviewer With IR, Keyboard and Mouse Control



Model #: DVI-SPLITPRO-4K

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Product Application & Market Sectors



Corporate



House Of Worship



Military



Residential



Education



Industrial



Medical



Aviation



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SECTION I: GETTING STARTED

I.1 IMPORTANT SAFEGUARDS

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
 - Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
 - Repair or attempted repair by anyone not authorized by us.
 - Any damage of the product due to shipment.
 - Removal or installation of the product.
 - Causes external to the product, such as electric power fluctuation or failure.
 - Use of supplies or parts not meeting our specifications.
 - Normal wear and tear.
 - Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

I.2 SAFETY INSTRUCTIONS

The Avenview DVI-SPLITPRO-4K Advanced Quad Screen Video Processor has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipment's, the DVI-SPLITPRO-4K should be used with care. Read the following safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.



- ⚠ Do not dismantle the housing or modify the module.
- ⚠ Dismantling the housing or modifying the module may result in electrical shock or burn.
- ⚠ Refer all servicing to qualified service personnel.
- ⚠ Do not attempt to service this product yourself as opening or removing housing may expose you to dangerous voltage or other hazards
- ⚠ Keep the module away from liquids.
- ⚠ Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- ⚠ Have the module checked by a qualified service engineer before using it again.
- ⚠ Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.



1.3 REGULATORY NOTICES FEDERAL COMMUNICATIONS COMMISSION (FCC)

This equipment has been tested and found to comply with Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment.

| Warning symbols | Description |
|---|--|
|  | <p>ONLY USE THE PROVIDED POWER CABLE OR POWER ADAPTER SUPPLIED. DO NOT TAMPER WITH THE ELECTRICAL PARTS. THIS MAY RESULT IN ELECTRICAL SHOCK OR BURN.</p> |
|  | <p>DO NOT TAMPER WITH THE UNIT. DOING SO WILL VOID THE WARRANTY AND CONTINUED USE OF THE PRODUCT.</p> |
|  | <p>THE VIDEO BOARDS ARE VERY SENSITIVE TO STATIC. PLEASE ENSURE IF RACK MOUNTED OR INSTALLED ON A SURFACE, IT SHOULD BE IN A GROUNDED ENVIROMENT.</p> |
|  | <p>⚠ WARNING</p> <p>Read & understand user guide before using this device.</p> <p>Failure to follow the proper installation instructions could result in damage to the product and preventing expected results.</p> |



2. INTRODUCTION

Avenview **DVI-SPLITPRO-4K KVM Quad Screen Multiviewer with IR, Keyboard and Mouse** is an advanced video processor for most multimedia presentations. This unit is an ideal solution for applications where four video signals must be displayed on a single display. It supports up to 16 types of video inputs, of which four can be outputted simultaneously with the desired display layout through software control. The advanced video processor allows you to manipulate the output images to various sizes and multiple positions on the desired display. This unit can be controlled with the ease of the front panel buttons, IR remote and RS232 via a cable or control system, this functionality allows the user to easily set the desired outputs by 5 preset layouts or 8 custom layouts saved by the user.

Avenview DVI-SPLITPRO-4K is also equipped with a Master PS/2 Keyboard and Mouse Control. With this feature, users can switch Keyboard and Mouse Control among 2 to 4 PC sources and control the individual PC with the interactive USB connectors with software available for download.

The embedded scalar converts signals from input sources to match the native resolution of monitors, flat panel displays, projectors as well as user-selectable output settings up to WUXGA (1920x1200). Dual outputs are provided in both analog (VGA) and digital (DVI) format, one is connected to remote display and the other is connected to on-site display for real time monitoring.

- Support Six most popular video formats: four VGA, four DVI/HDMI, four component, four S-Video and four composite inputs
- Input resolution support from 640x480 to 1920x1200, interlaced or progressive.
- DVI & HDMI
- Support HDCP
- Dual outputs (DVI / VGA), 640x480 to 1920x1200.
- 4 Port Keyboard / Mouse Control with PS/2 Input and USB Outputs
- Video background available.
- Adjustable size & position through software.
- Dynamic transition for video sizing and positioning
- Titles, borders and colored backgrounds.
- Resize, position, zoom & pan and blend output video.
- Image parameters and layouts are automatically saved in flash memory and can be recalled for later use.
- Several Image parameters and layouts can be saved in computers and can be loaded for later use.
- Video parameters adjustable (brightness, contrast, color temperature, etc.).
- User-selectable output settings, up to 1920x1200.
- Use as a Video Splitter, a Video Converter and a Video Switcher.
- Firmware upgradable for support of new features and technology enhancements.
- Control through RS-232/RS-485 over Cat-5 and IR Remote Control
- Can be cascaded to obtain more images using RS-485 control path
- Control protocol available for customer proprietary design
- 1RU Size



DVI-SPLITPRO-4K

LAYOUT 1

MONITOR/TV
Preset layout 1

CABLE INDEX

- Output
- Input / Source
- RS-232
- PS2 Ctrl
- USB Ctrl



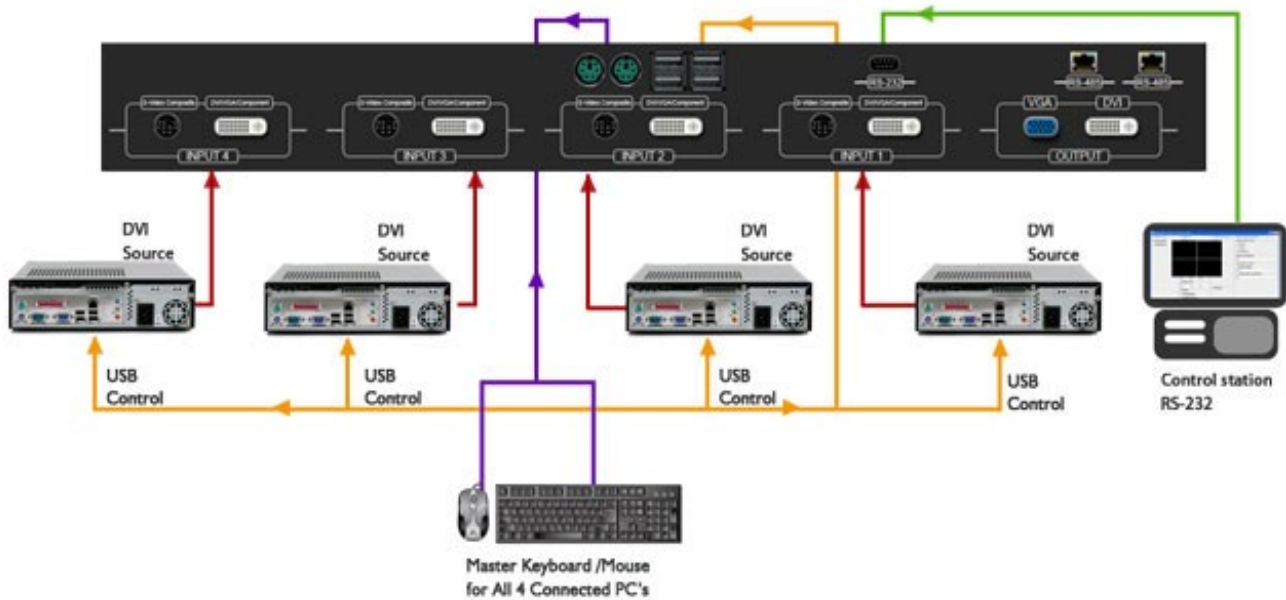
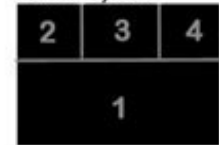
Preset Layout 2



Preset Layout 3



Preset Layout 4



2.1 PACKAGE CONTENTS

Before you start the installation of the converter, please check the package contents.

| | | | |
|----|----------------------------------|----|---|
| 1 | DVI-SPLITPRO-4K | X1 |  |
| 2 | DVI – DVI & VGA BREAKOUT CABLE | X4 |  |
| 3 | VGA TO COMPONENT BREAKOUT CABLE | X4 |  |
| 4 | DVI TO VGA ADAPTER | X4 |  |
| 5 | Y CABLE –S-VIDEO TO S-VIDEO-CVBS | X4 |  |
| 6 | RACK MOUNTING KIT | X1 |  |
| 7 | RS232 TO USB ADAPTER | X1 |  |
| 8 | IR REMOTE CONTROL | X1 |  |
| 9 | SOFTWARE CD | X1 |  |
| 10 | AC POWER SUPPLY | X1 |  |
| 11 | USER'S MANUAL | X1 |  |



2.2 BEFORE INSTALLATION

- Put the product in an even and stable location. If the product falls down or drops, it may cause an injury or malfunction.
- Don't place the product in too high temperature (over 50°C), too low temperature (under 0°C) or high humidity.
- Use the DC power adapter with correct specifications. If inappropriate power supply is used then it may cause a fire.
- Do not twist or pull by force ends of the video cable. It can cause malfunction.
- Avenview DVI-SPLITPRO-4K has 16 inputs and accepts both graphics and video signals, which come from computers (DVI or VGA), composite, and component video sources respectively. You can pick up four of the ten inputs and then display four of them simultaneously on the same screen.

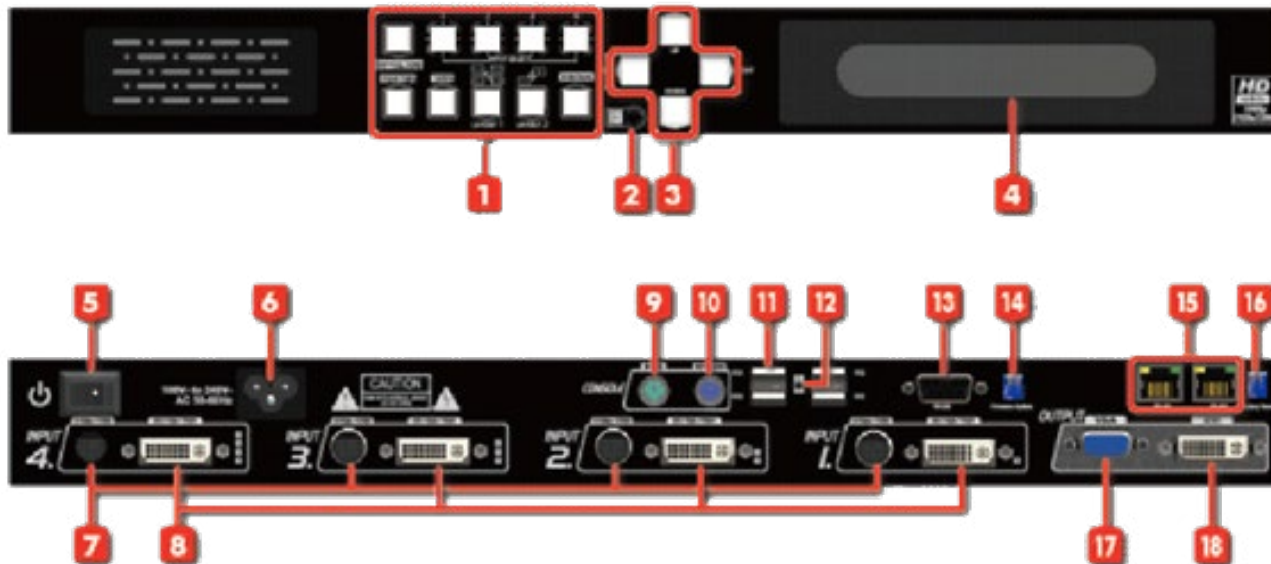
| Connectors | | Video Source |
|----------------------------------|---|--|
| INPUT | DVI, COMPONENT, VGA, COMPOSITE, S-VIDEO | DVI |
| | | HDMI (DVI to HDMI Cable or Adapter)*NOT SUPPLIED* |
| | | VGA (DVI to VGA Adapter) |
| | | Component (YPbPr) (DVI to VGA Adapter and VGA to Component Adapter) |
| | | Composite |
| | | S-Video |
| OUTPUT | DVI-I OUT | Display |
| | | 1 x DVI Display |
| | | VGA Display (DVI to VGA Adapter) |
| | | 1 x DVI Display & 1 x VGA Display (through DVI to DVI/VGA Y Cable) |
| KEYBOARD / MOUSE CONNECTOR | KEYBOARD MOUSE I/O | 2 x PS/2 Compatible Keyboard and Mouse |
| | | 4 x USB Output connected up to 4 PC |



2.3 PANEL DESCRIPTION

Avenview Advanced Quad Screen Video Processor (DVI-SPLITPRO-4K) has 16 inputs and accepts both graphics and video signals, which come from computers (DVI or VGA), composite, and component video sources respectively. You can pick up four of the ten inputs and then display four of them simultaneously on the same screen. DVI-SPLITPRO-4X REAR PANEL

2.3.1 DVI-SPLITPRO-4K Front and Rear Panel



| | |
|---|---------------------------------------|
| 1 CONTROL PANEL | 2 IR SENSOR |
| 3 CONTROL BUTTONS (UP,DOWN,LEFT,RIGHT) | 4 INFORMATION DISPLAY |
| 5 POWER SWITCH | 6 POWER SUPPLY 100-240V |
| 7 S-VIDEO/CPOMPOSITE INPUT | 8 DVI/HDMI/VGA/COMPONENT INPUT |
| 9 PS/2 MOUSE | 10 PS/2 KEYBOARD |
| 11 USB (PC 1-4 CONTROL) | 12 USB to PC SWITCH |
| 13 SERIAL CONTROL (RS232) | 14 MODE SETTING |
| 15 RS484 (CASCADE) | 16 MODE SETTING |
| 17 VGA OUTPUT | 18 DVI/HDMI OUTPUT |

To reset the DVI-SPLITPRO-4K to factory default settings: Turn on the DVI-SPLITPRO-4K then switch both DIP Switches simultaneously up and down to reset the unit to factory default settings



3. INSTALLATION

To setup Avenview DVI-SPLITPRO-4K follow these steps for connecting to a device:

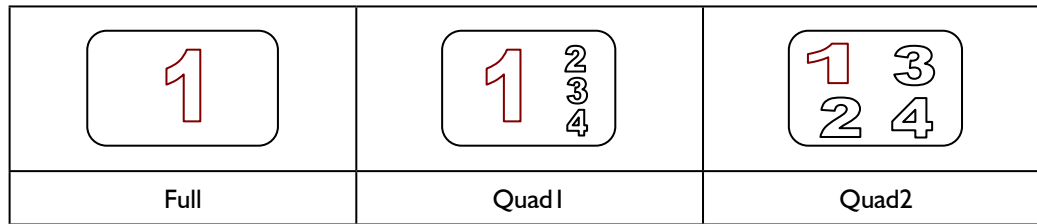
1. Mount or fix the DVI-SPLITPRO-4K safely
2. Switch off DVI-SPLITPRO-4K and all source devices and displays that will be connected
3. Connect a monitor, projector, other displays that come with DVI / VGA inputs by using 1 male – male DVI cable to DVI-SPLITPRO-4K DVI output. (you can connect 2 displays equipped with DVI and VGA respectively by DVI – DVI/VGA Y cable
4. Plug-in DVI to DVI/VGA breakout cable to DVI-Component-VGA and plug in VGA to Component adapter to VGA connector of the breakout cable
5. Connect a device equipped with DVI output (such as PC) to the DVI connector of the breakout cable
6. Connect a device equipped with the component video output to 3-RCA jack of the Component video adapter
7. Connect a device with VGA output (such as laptop) to VGA connector of DVI-SPLITPRO-4K
8. Connected a device with Composite or S-Video video output to composite input of DVI-SPLITPRO-4K through S-Video / Composite Y cable.
9. Connect the USB Cable(s) between DVI-SPLITPRO-4K and computer(s)
10. Connect your computer to DVI-SPLITPRO-4K via RS232 to USB Adapter cable and then install the software
11. Turn ON DVI-SPLITPRO-4K
12. Run the Control Software and establish the connection between PC and DVI-SPLITPRO-4K
13. Turn ON all connected devices and then control the display output thru RS232 and included software

3.1 Installation to Control 1-4 PC's via USB

1. Follow instructions 1-11 before attempting to control PC control
2. Connect one set of PS/2 compatible Keyboard and Mouse if any control to computer(s) is necessary
3. Connect the USB Cable(s) between DVI-SPLITPRO-4K and computer(s) located on the rear panel
4. Download software PS2 to USB Driver from downloads section.



3.2 Default display modes for KVM hot key control



* **Red Icon** implies the main display area.

| Key Combination | Function Description |
|------------------------|--|
| Ctrl + Alt + Shift + 1 | Keyboard & mouse control granted to computer #1 |
| Ctrl + Alt + Shift + 2 | Keyboard & mouse control granted to computer #2 |
| Ctrl + Alt + Shift + 3 | Keyboard & mouse control granted to computer #3 |
| Ctrl + Alt + Shift + 4 | Keyboard & mouse control granted to computer #4 |
| Ctrl + Alt + Shift + 5 | Switch Video #1 to the main display area |
| Ctrl + Alt + Shift + 6 | Switch Video #2 to the main display area |
| Ctrl + Alt + Shift + 7 | Switch Video #3 to the main display area |
| Ctrl + Alt + Shift + 8 | Switch Video #4 to the main display area |
| Ctrl + Alt + Shift + 0 | Mode switching between Full, Quad I, Quad2, Quad3 ⁴ |

4. SOFTWARE INSTALLATION

1. Hotkey definitions are based on IBM PS/2 compatible keyboard and the Ctrl, Alt, and Shift keys are on the LEFT side of the keyboard.
2. Switching video source to the main display area will bring DVI-SPLITPRO-4K back to one of the video default layouts as shown above.
3. While the control software is adjusting the video layout, the keyboard and mouse control will be off.
4. User can define Quad3 through the software

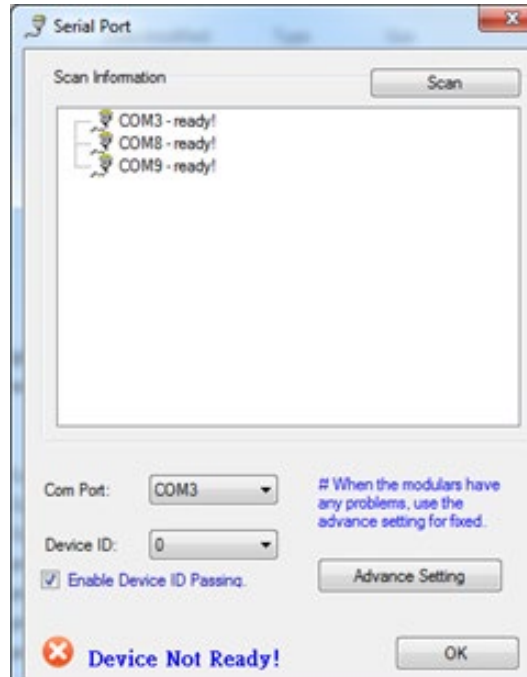
4.1 System Requirements

1. The DVI-SPLITPRO-4K provides a software control program which runs under Microsoft Windows 98, 2000, XP, Vista, 7 through the interface of RS-232 serial control.
2. Before you click on the icon of the software, make sure you have secured the connection between your computer COM port and the DVI-SPLITPRO-4K.
3. Install driver for RS232 to USB adapter
4. Once DVI-SPLITPRO-4K is turned on, it display green LED light
5. Ensure that correct driver for RS232-USB Adapter (included with DVI-SPLITPRO-4X/K) are installed. You can check "Device Manger" under "Ports" page to check if drivers are installed correctly

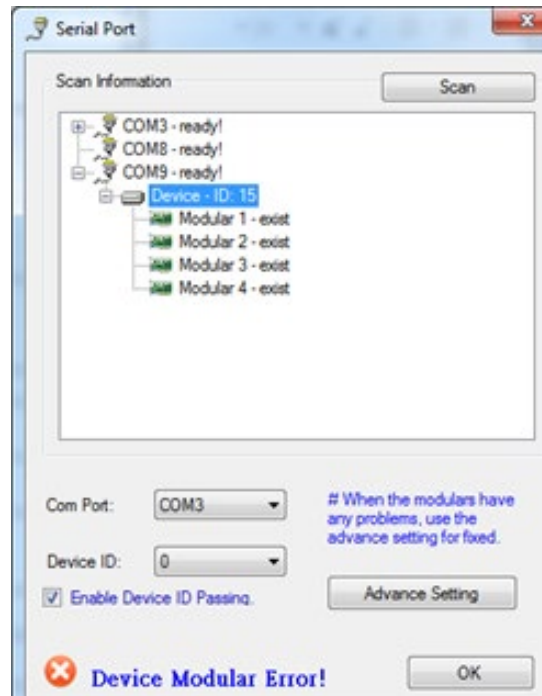


5. SOFTWARE SETUP GUIDE

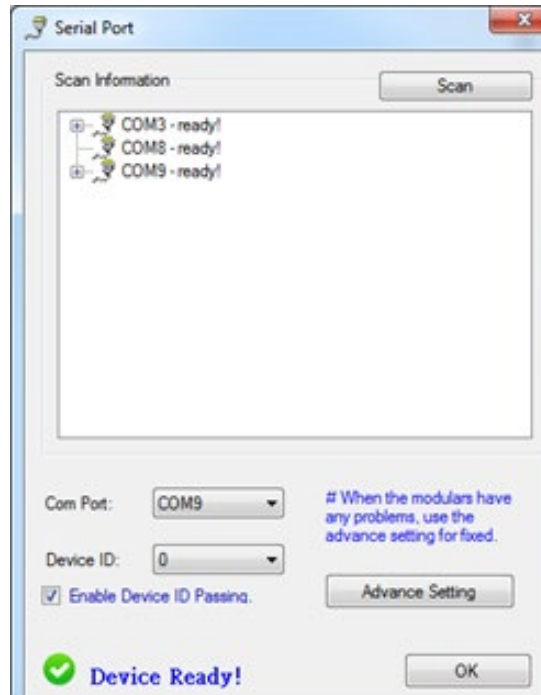
1. Power up the DVI-SPLITPRO-4K and you can see VFD on the front panel blink.
2. Launch Avenview Control Software. It will open following “Serial Port” setting page.



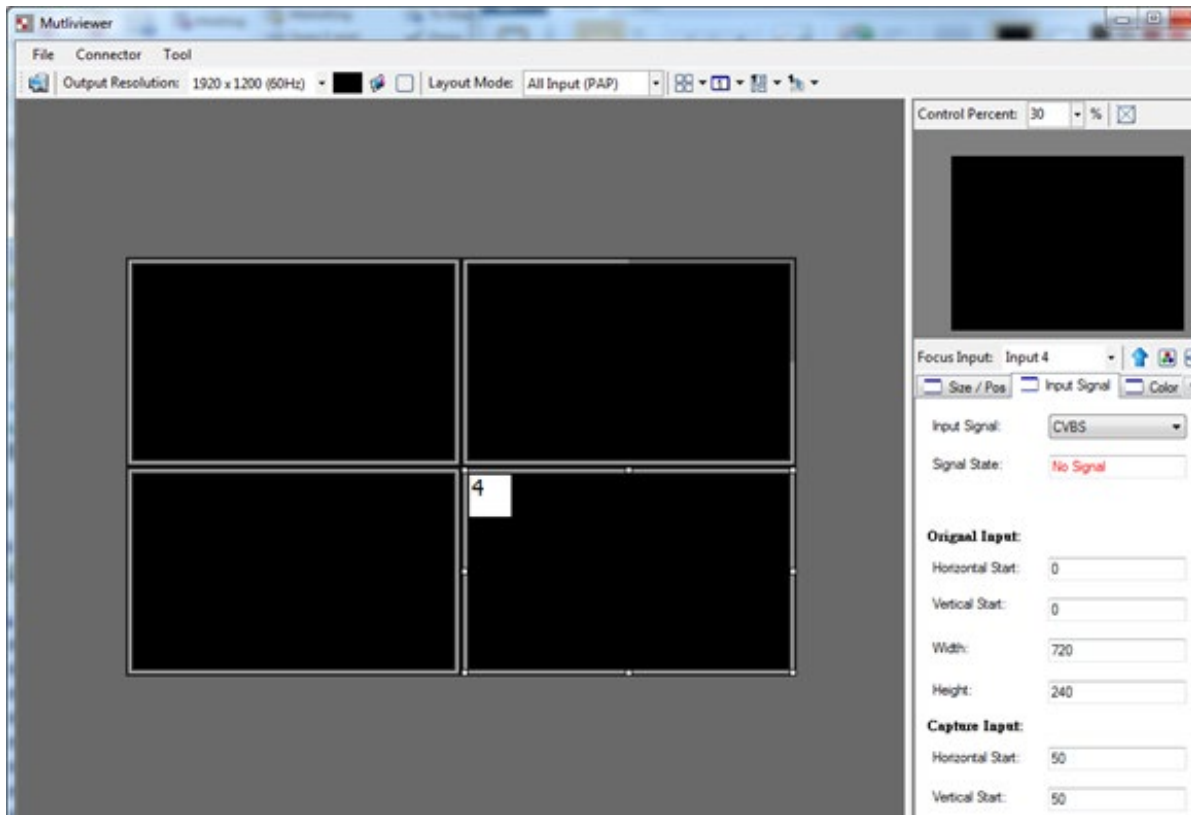
3. Click on Scan button and it will automatically detect Avenview Video Processor and display the following screen:



4. Note the “Device – ID” and Select Correct “Com Port” and Device ID” from bottom of screen. Once Correct “Com Port” and “Device ID” is selected, it will change “Device Modular Error” to “Device Ready” as shown below:

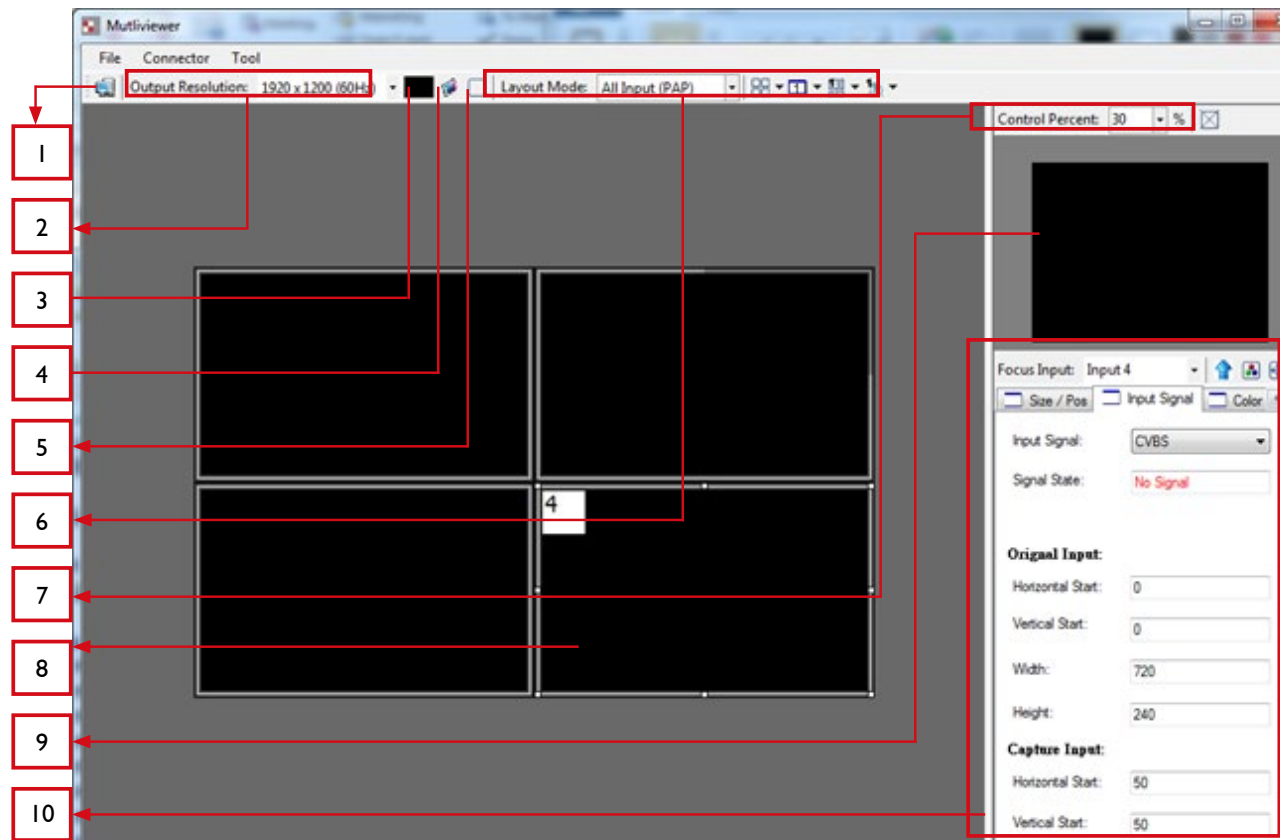


5. Once Device is Ready, click “OK” and Avenview Control Software will launch



5.3 Software Operation

The software has following menu options available:



1 FAST LINKAGE

This button will update software GUI for device state

2 OUTPUT RESOLUTION

| Supported Mode | Resolution | Supported Mode | Resolution |
|----------------|------------------|----------------|------------------|
| HDTV 720p | 1280x720 @ 60Hz | VESA | 1280x768 @ 60Hz |
| HDTV 1080p | 1920x1080 @ 60Hz | VESA | 1366x768 @ 60Hz |
| VESA | 800x600 @ 60Hz | VESA | 1400x1050 @ 60Hz |
| VESA | 1024x768 @ 60Hz | VESA | 1600x1200 @ 60Hz |
| VESA | 1280x1024 @ 60Hz | VESA | 1920x1200 @ 60Hz |

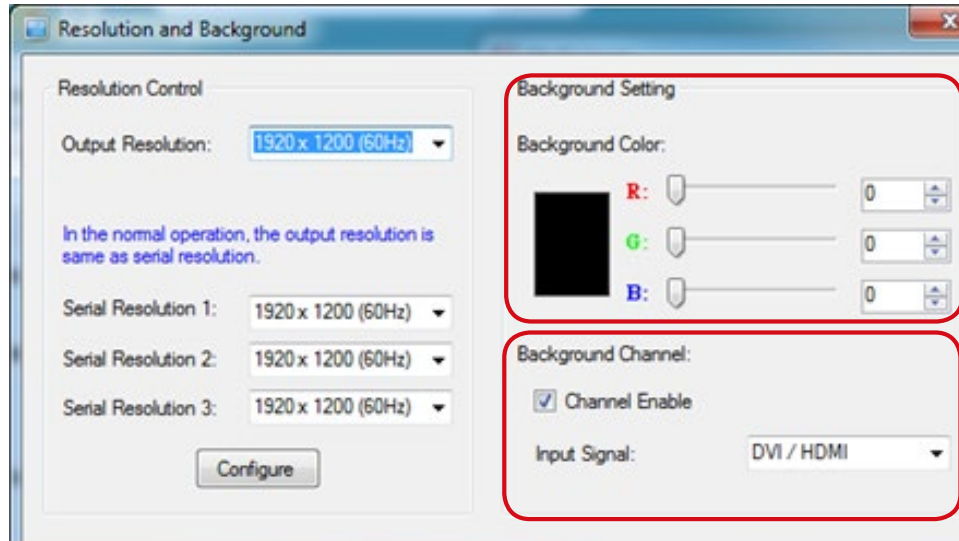
3 BACKGROUND COLOR

Clicking on this button will show the color dialog for background color adjustment.



4 BACKGROUND SETTING

DVI-SPLITPRO-4K offers the video background to make this advanced unit actually working like 5 channel video mixer! The default background video must work as full screen! Users can choose between color and video background through the following control window. Click on this button will show the dialog for output resolution, background color and background channel setting.

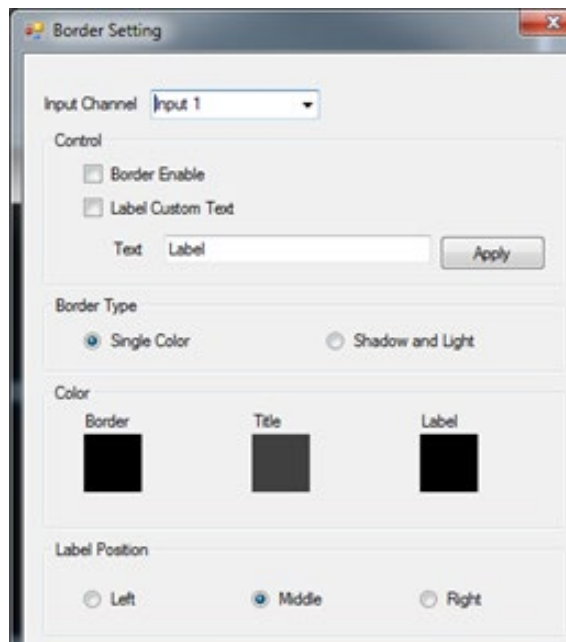


Note * We recommend not changing Serial Resolutions.

**ONLY INPUT 4 CAN BE USED
AS "BACKGROUND CHANNEL"**

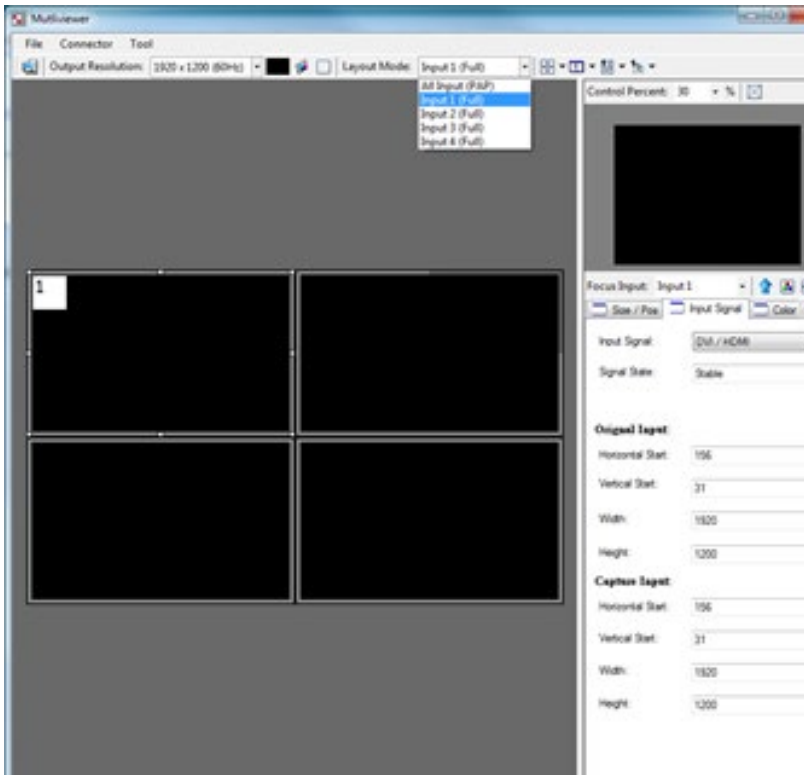
5 BORDER SETTINGS

Allows you to enable Border and enter Custom Text for Labels each Input Source.



6 DISPLAY / LAYOUT MODE

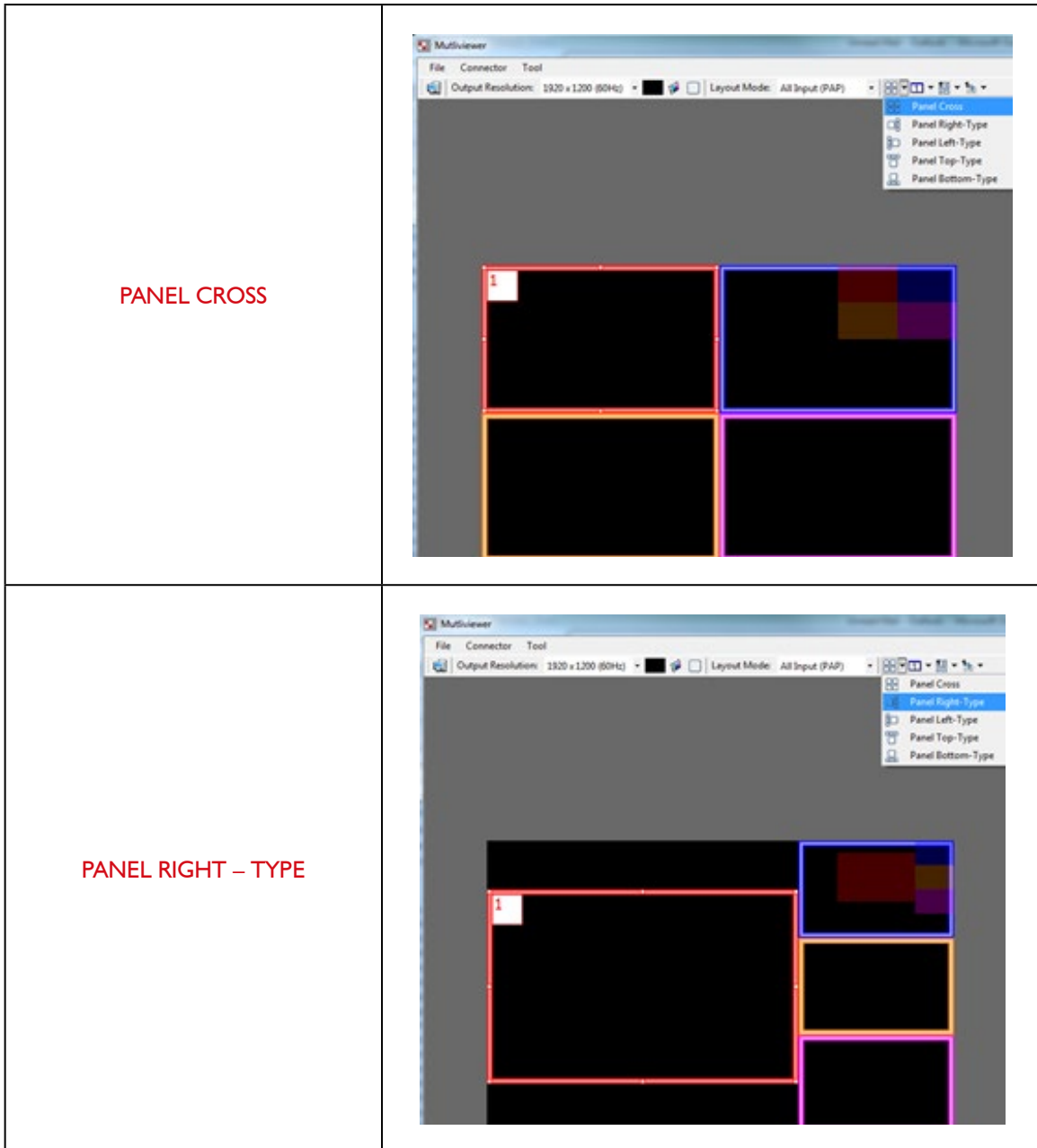
Set signal channel full screen or all channel Notice that the input sources will not be changed in Software.



5.4 DEFAULT LAYOUTS

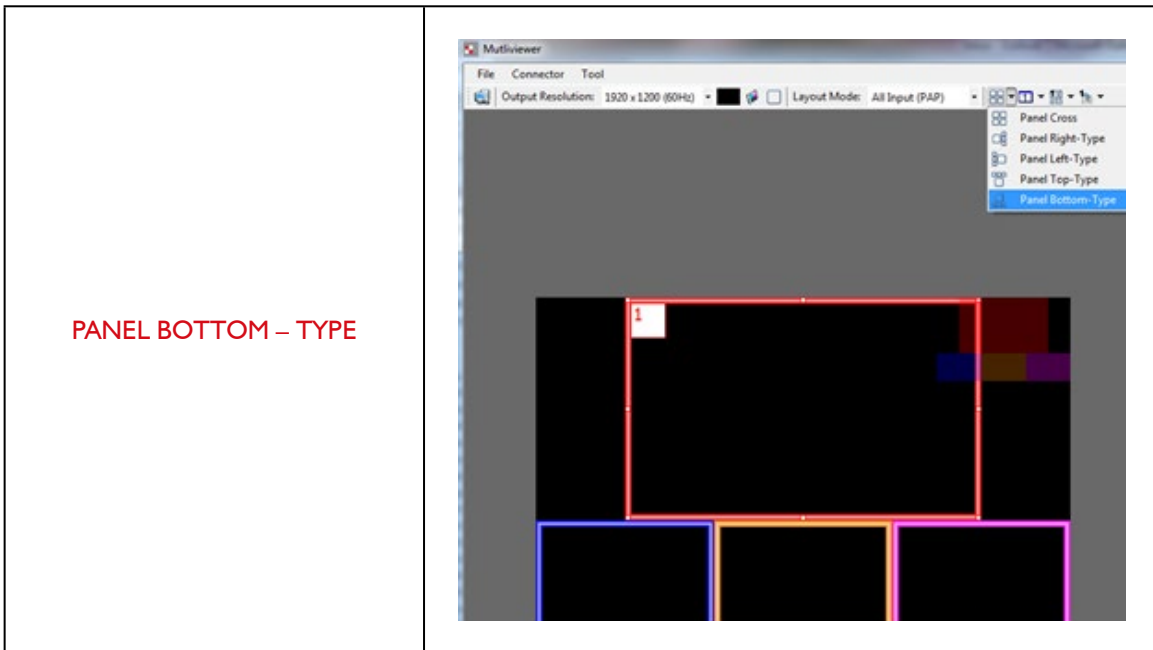
There are 5 pre-configured layouts available from Control Software, IR Remote Control or Front Panel Buttons.

- Panel Cross
- Panel Right – Type
- Panel Left – Type
- Panel Top – Type
- Panel Bottom – Type



| | |
|--------------------------|--|
| <p>PANEL LEFT – TYPE</p> | |
| <p>PANEL TOP – TYPE</p> | |





PANEL BOTTOM – TYPE

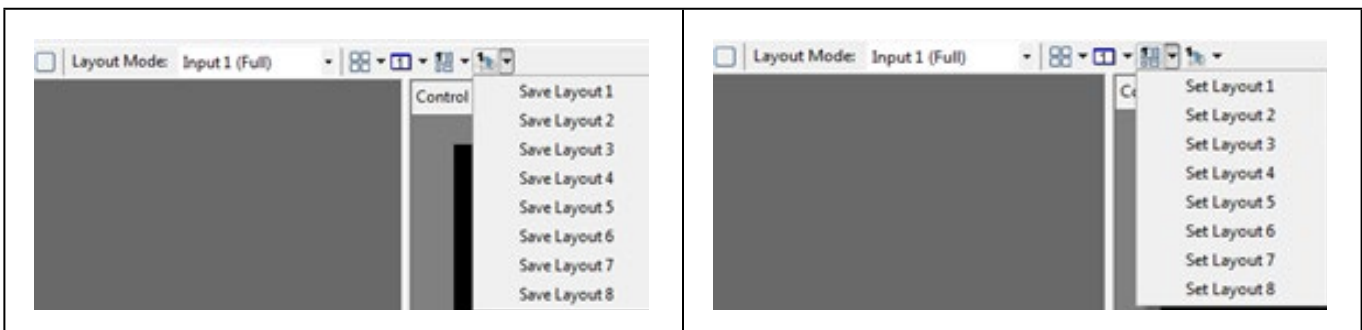
Input Signal which is selected at “Focus Input” will be displayed as Main Video Sources.

5.5 FOCUS INPUT

Select which Input Source should stay in focus when “Layouts” are selected

5.6 SAVE AND SET CUSTOM LAYOUTS

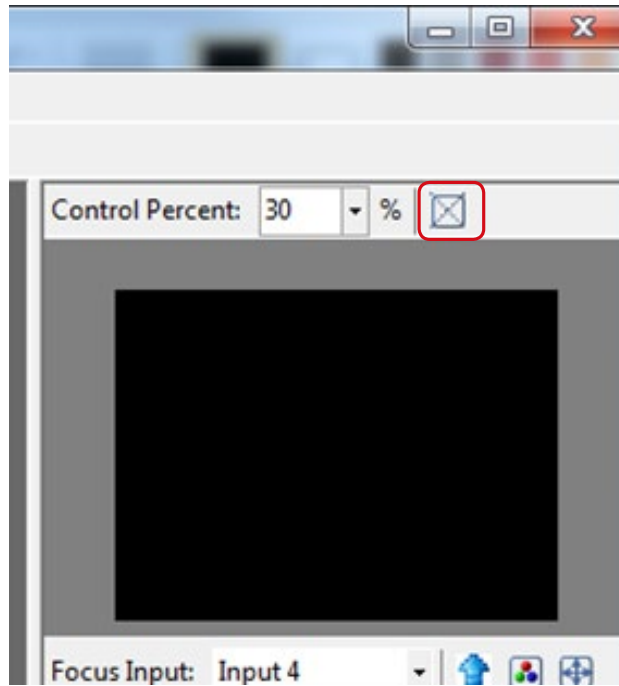
Save up to 8 Custom Layouts and Set them using Control Software, Front Panel or IR Remote Control.



7

LAYOUT CONTROL SIZE

Set layout control size in Software by percent.



If you enable Fixed Stretch, Aspect Ratios are kept with each Input layout is changed.

8

LAYOUT CONTROL

Create different Layouts by Drag and Drop. You can use “Fixed Aspect Ratio” as described above to retain Aspect Ratio of source image.

9

PREVIEW WINDOW

Shows preview Window of Layouts

10

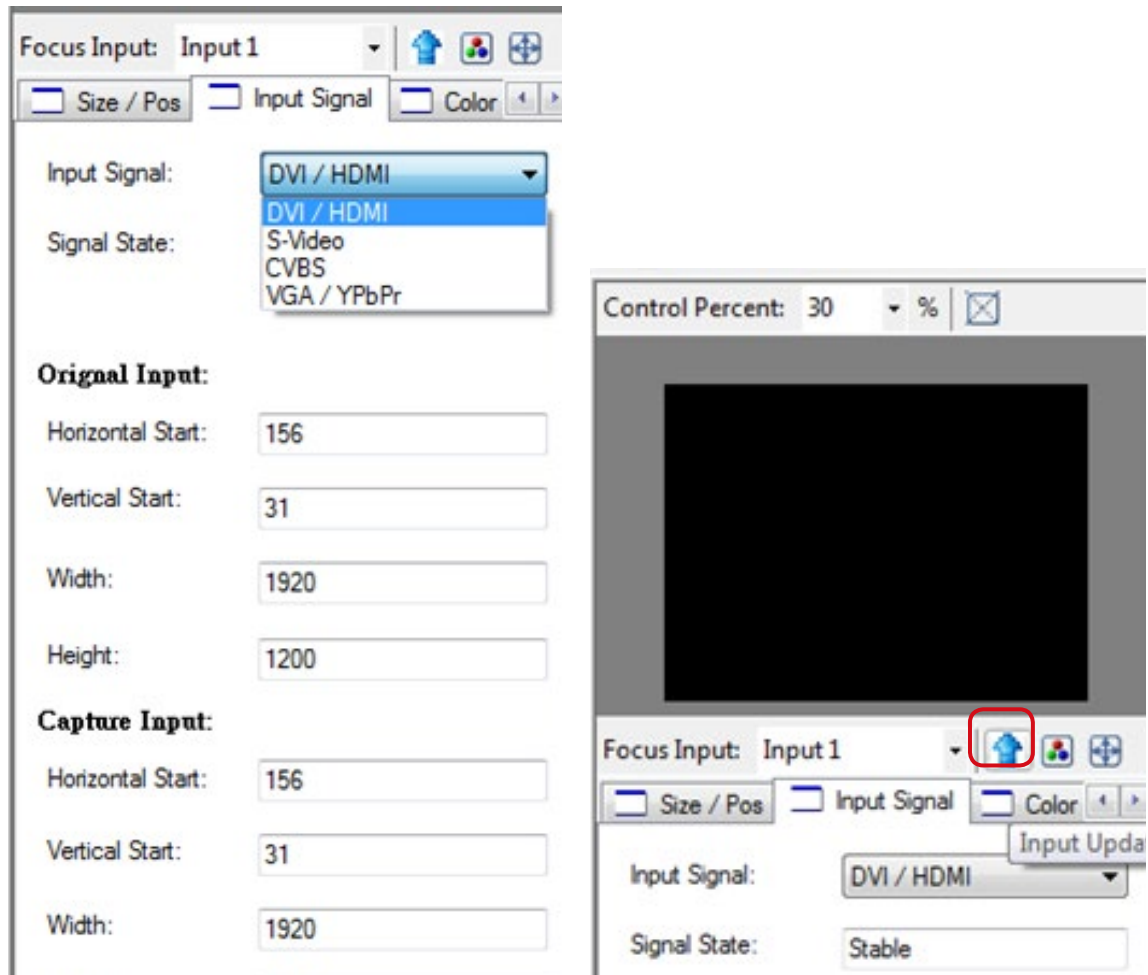
INPUT CHANNEL SELECTION AND CUSTOMIZATION

In this section you can Select Input Channel, Input Signal, Channel Window Visible, Blend Settings, Custom Height, Custom Width, Color Brightness, Contrast, Saturation, Hue, Red, Green, Blue, Color Balance and Auto Configuration.



5.7 INPUT SELECTION:

- Select "Focus Input" from drop down menu or by Clicking on Main Layout Window.
- Click on "Input Signal".
- Select Correct "Input Signal" from drop down menu.
- Once right Input Signal is selected, click on UP ARROW (Input Update) beside Focus Input to update it on system memory.



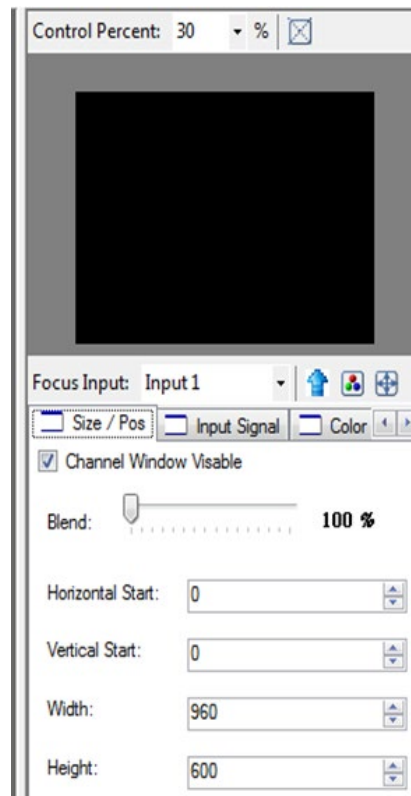
5.8 SIZE AND POSITION:

Select on “Size / Pos”

CHANNEL WINDOWS VISIBLE: You may uncheck “Channel Window Visible” if you decide to not show this Windows on screen

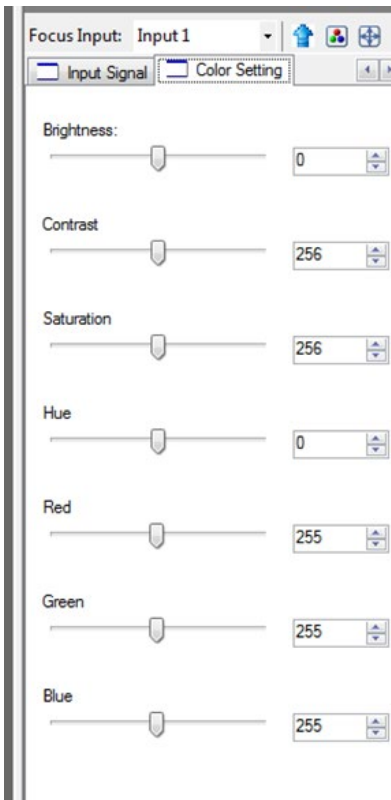
BLEND: Change the value of Blending from 100% to 0%. This will allow you to overlay an Input Source on other.

CUSTOM HEIGHT AND WIDTH: If you have specific requirement for Input Layout, you may adjust them here.



5.9 COLOR SETTING:

Various options to change Brightness, Contrast, Saturation, Hue, Red, Green and Blue are available on each “Input Source”



5.10 COLOR BALANCE AND AUTO CONFIGURE:

You may adjust Color Balance and Auto Configure them by selecting these options






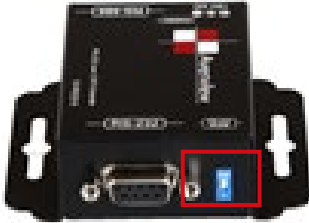


6. SOFTWARE CONFIGURATION

Follow these steps to select right Output Resolution and Input Signal

- Once RS232 communication is setup properly, you should select Optimal “OUTPUT Resolution” supported by your Display (TV or Monitor)
- Select correct “Input Signal” for each Input.
- After Selecting right Input Signal, ensure to Click on “Input Update”
- Repeat above steps for each Input you have connected
- Select Layout Mode
- Select “Default Layouts” or create your own by dragging dropping



7. CASCADE INSTALLATION

| PRODUCT | SETTINGS |
|---|---|
|  | <p>The Device ID number will show on the VFD, like below picture.</p> |
|  | <p>The "Device ID" number can adjust by button menu. Please push the "Down, Up, Left, Right" button, enter Menu→ "(05/05) System Setting" Menu→ "(03/03) Device ID" Menu.</p> |
|  | <p>Push the "Right" button. When the "Up" and "Down" arrow are display, you can adjust number by "Up" and "Down" button.</p> |
|  | <p>Set DVI-SPLITPRO-4K to RS485 Mode by "DIP Switch". Please check the VFD will display "Square" Icon.</p> |
|  | <p>Set the dip switch on the dvi-splitpro-4x to # 1 off (up) #2 on (down) As illustrated in picture</p> |
|  | <p>Using C5-RS232-S to control all the cascaded DVI-SPLITPRO-4K</p> |



8. CONVERTER SERIAL

(I) C5-RS232-S (Transmitter)

| Model Name | | C5-RS232-S |
|---------------------------|---------|--|
| ROLE OF USAGE | | Transmitter [TX] |
| TRANSMISSION LENGTH | | Up to 1,000m (1,100yd) [CAT5e] |
| BAUD RATE | | Up to 57.6kbps in cascade mode |
| INPUT | | 1X RS-232 |
| OUTPUT | | 1X RJ-45 |
| RS-232 CONNECTOR | | DE-9 [9-pin D-sub female] |
| RJ-45 CONNECTOR | | WE/SS 8P8C with 2 LED indicators |
| DIP SWITCH | | 6-PinD & audio mode [SW Main] 6-pin operation & firmware update |
| Mechanical | | C5-RS232-S |
| HOUSING | | Metal case |
| DIMENSIONS [L X W X H] | MODEL | TBA |
| | PACKAGE | 270 X 175 x 80mm [10.6" X 6.9" X 3.1"] |
| | CARTON | 450 X 370 x 300mm [1'6" x 1'3" x 11.8"] |
| WEIGHT | MODEL | TBA |
| | PACKAGE | TBA |
| FIXEDNESS | | Wall-mounting case upon request |
| POWER SUPPLY | | 5V 2A DC |
| POWER CONSUMPTION | | 1 Watt [max] |
| OPERATION TEMPERATURE | | 0~40°C [32~104°F] |
| STORAGE TEMPERATURE | | -20~60°C [-4~140°F] |
| RELATIVE HUMIDITY | | 20~90% RH [no condensation] |
| PACKAGE CONTENTS | | 1x C5-RS232-S 2x 5V power adapter 1x User Manual |

* Please make sure the DIP switch is in the "ON" Mode





C5-RS232-S

DVI-SPLITPRO-4K



Device ID: 0



Device ID: 1

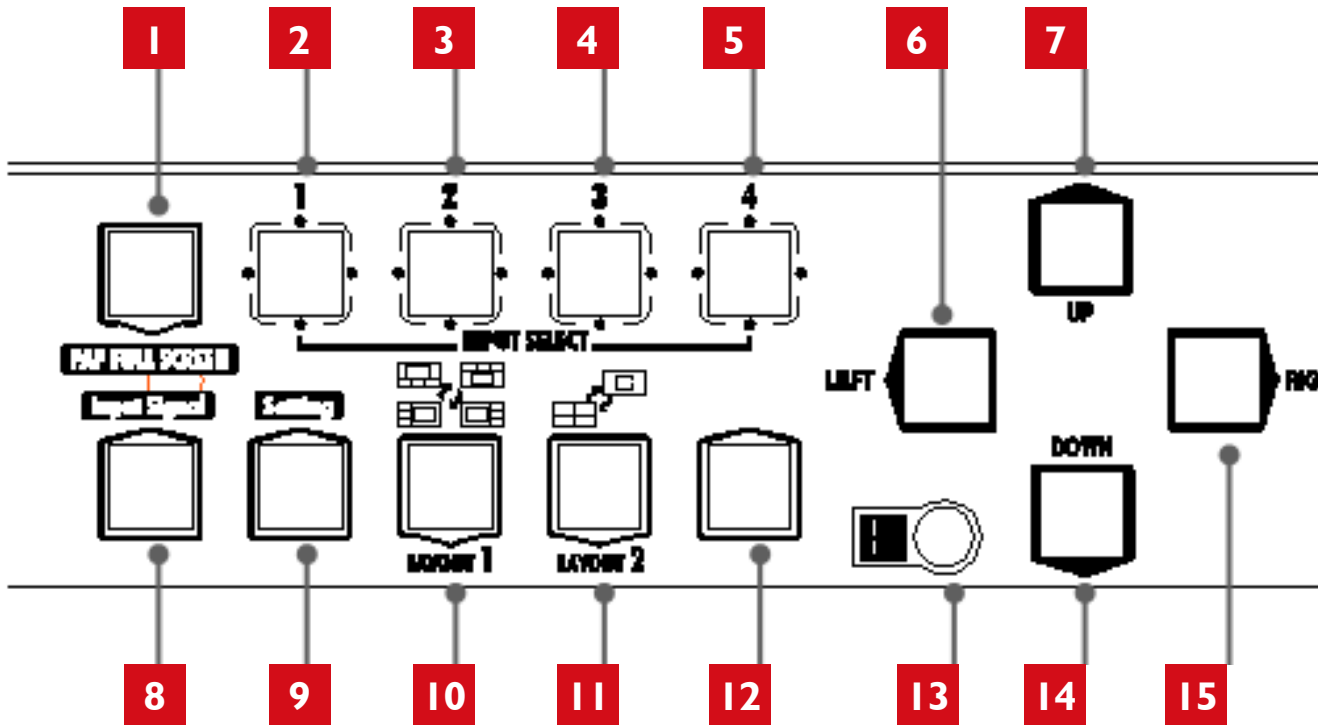


Device ID: 2.....



9. FRONT PANEL CONTROLS

9.1 FRONT PANEL PUSH BUTTONS DESCRIPTION



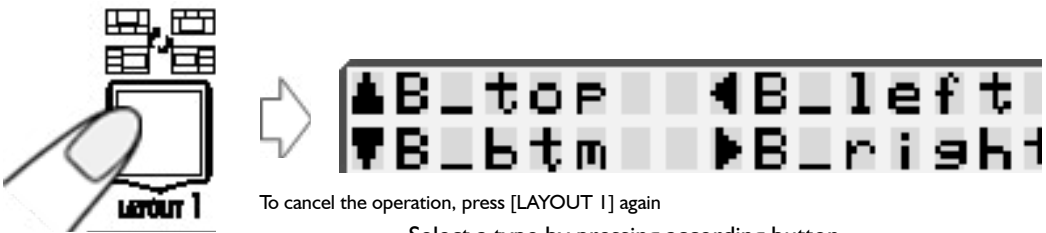
| | | | |
|-------------------------------------|----------------------------|---------------------------------------|------------------------|
| 1 | PAP Full Screen | 11 | Function key: Layout 2 |
| 2 3 4 5 | Input Select | 12 | N/A |
| 8 | Function key: Input Signal | 13 | Infrared Sensor |
| 9 | Function key: Setting | 6 7 14 15 | Navigation |
| 10 | Function key: Layout 1 | | |

9.2 FRONT PANEL PUSH BUTTONS FUNCTIONS

9.3 SELECTING PIP WINDOW ARRANGEMENT

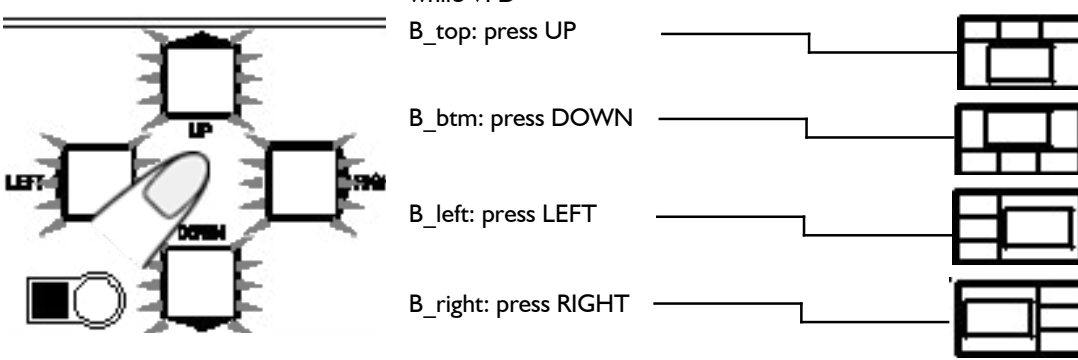
Main Window with 3 triple sub-windows aside

You may choose one of the following layouts from 4 presets:

1. 

To cancel the operation, press [LAYOUT 1] again

Select a type by pressing according button while VFD

2. 

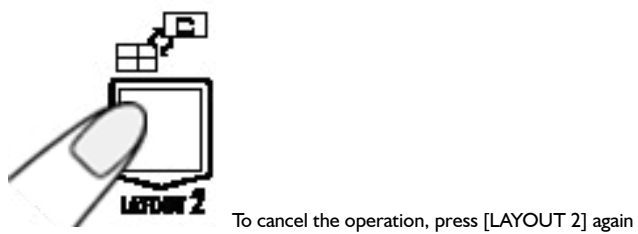
B_top: press UP

B_btm: press DOWN

B_left: press LEFT

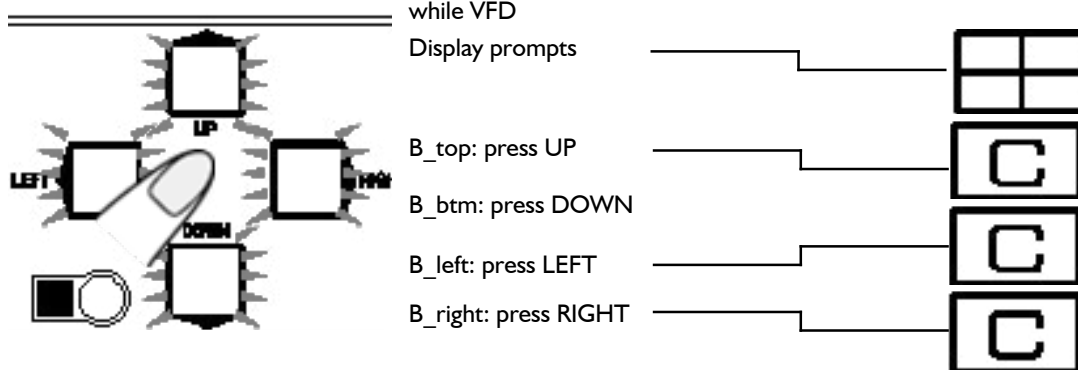
B_right: press RIGHT

Quad Windows in crisscross + 3 user-defined custom layouts

1. 

To cancel the operation, press [LAYOUT 2] again

Select a type by pressing according button while VFD

2. 

Display prompts

B_top: press UP

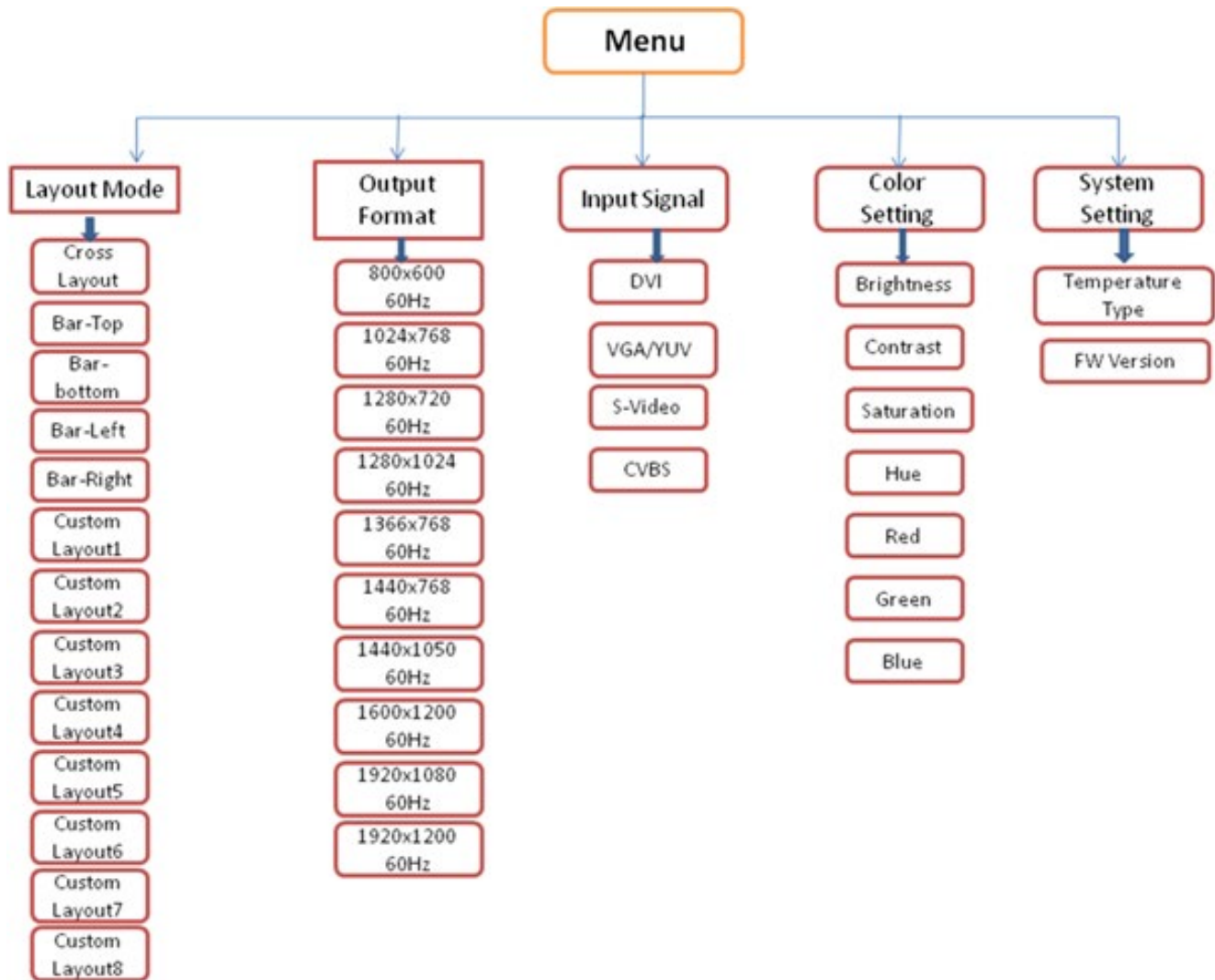
B_btm: press DOWN

B_left: press LEFT

B_right: press RIGHT



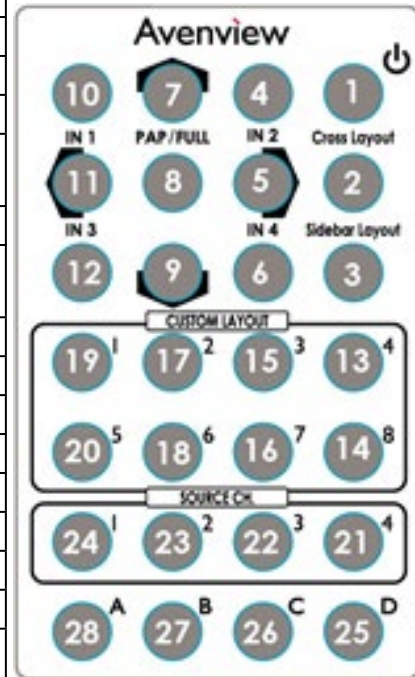
10. ON SCREEN DISPLAY MENU



11. IR REMOTE CONTROL

Avenview DVI-SPLITPRO-4K, Advanced Quad Screen Processor ships with a compact IR Remote Control that allows for direct access to most commands used to control the video processor.

| IR REMOTE BUTTON DEFINE | |
|-----------------------------------|---|
| 1. Power Button | Set the output video into Sleep Mode (No Video) |
| 2. Cross-Layout | Set PAP layout to default layout (cross type) |
| 3. Side-Bar Layout | Set PAP layout to default layout (Side-Bar type) |
| 4. IN 2 (Input Channel 2) | First Press Set channel 2 to be focus channel Second Press enables Channel 2 Full Screen |
| 5. Right Button | Enables Menu Options and Also Select Button in Menu Options |
| 6. IN 4 (Input Channel 4) | Set channel 4 to be focus channel Second Press enables Channel 4 Full Screen |
| 7. Up Button | Move Up in Menu settings |
| 8. PAP Full Screen | Move to the left titles |
| 9. Down Button | Move Down in Menu settings |
| 10. IN 1 (Input Channel 1) | Set channel 1 to be focus channel Second Press enables Channel 1 Full Screen |
| 11. Left Button | Previous in Menu settings |
| 12. IN 3 (Input Channel 3) | Set channel 3 to be focus channel Second Press enables Channel 3 Full Screen |
| 13. Custom Layout4 | Set PAP layout to custom position and size |
| 14. Custom Layout8 | Set PAP layout to custom position and size |
| 15. Custom Layout3 | Set PAP layout to custom position and size |
| 16. Custom Layout7 | Set PAP layout to custom position and size |
| 17. Custom Layout2 | Set PAP layout to custom position and size |
| 18. Custom Layout6 | Set PAP layout to custom position and size |
| 19. Custom Layout1 | Set PAP layout to custom position and size |
| 20. Custom Layout5 | Set PAP layout to custom position and size |
| 21. Ch4 Source | Toggle between channel 4 input source DVI/HDMI, VGA/Y-Pb-Pr, S-VIDEO, CVBS |
| 22. Ch3 Source | Toggle between channel 3 input source DVI/HDMI, VGA/Y-Pb-Pr, S-VIDEO, CVBS |
| 23. Ch2 Source | Toggle between channel 2 input source DVI/HDMI, VGA/Y-Pb-Pr, S-VIDEO, CVBS |
| 24. Ch1 Source | Toggle between channel 1 input source DVI/HDMI, VGA/Y-Pb-Pr, S-VIDEO, CVBS |
| 25. D Button | Reserve |
| 26. C Button | Reserve |
| 27. B Button | Reserve |
| 28. A Button | Reserve |



12. SPECIFICATIONS

| MODEL | DVI-SPLITPRO-4K |
|-------------------------------|---|
| DESCRIPTION | Advanced Quad Screen Video Processor with IR, Keyboard and Mouse Control |
| DUAL OUTPUT SUPPORT | Yes (DVI & VGA) |
| BACKGROUND VIDEO INPUT | Yes |
| HDCP COMPLIANCE | Yes |
| VIDEO BANDWIDTH | DVI/HDMI Single Link - 4.95Gbps |
| | VGA - 165 MHz |
| | Component - 30 MHz |
| | S-Video - 13.5 MHz |
| | Composite - 13.5 MHz |
| SUPPORTED RESOLUTIONS | 480i / 480p / 720p / 1080i / 1080p (60) / 1920x1200@75 / 1600x1200@60 |
| AUDIO SUPPORT | No |
| CONTROL | RS232 / RS485 |
| EMBEDDED VIDEO MIXER | Yes |
| ABILITY TO CASCADE | Yes |
| INPUT TMDS SIGNAL | 1.2 Volts (peak - peak) |
| ESD PROTECTION | Human body model - ± 15 kV (air gap discharge) & ± 8 kV (contact discharge) |
| INPUT | 4 x VGA (through included DVI to VGA Adapter) |
| | 4 x DVI |
| | 4 x HDMI (through HDMI to DVI Cable / Adapter, not supplied) |
| | 4 x Component (through included adapter) |
| | 4 x Composite (through included cable) |
| | 4 x S-Video (through included cable) |
| | 1 x RS232 |
| | 1 x RS485 |
| OUTPUT | 1 x DVI |
| DVI CONNECTOR TYPE | DVI-I (29-Pin female) |
| VGA CONNECTOR TYPE | HD-15 (15-pin D-sub female) |
| S-VIDEO CONNECTOR | 9 Pin |
| RS232 CONNECTOR | DE-9 (9-pin D-sub female) |
| RCA CONNECTOR | 75 Ω |
| RJ45 CONNECTOR | WE/SS 8P8C with 2 LED indicators |
| DIMENSIONS | 15.3" x 11.8" x 1.7" (L x W x H) |
| SIZE | 1U Rack-mount with ears |
| POWER SUPPLY | AC 100-240V |
| POWER CONSUMPTION | 35 Watts (max) |
| OPERATING TEMPERATURE | 0~40°C [32~104°F] |
| STORAGE TEMPERATURE | -20~60°C [-4~140°F] |



13. SUPPORTED RESOLUTIONS

13.1 DVI / Component / VGA

| SUPPORTED MODE | RESOLUTION | SUPPORTED MODE | RESOLUTION |
|----------------|-----------------|----------------|-----------------|
| NTSC/480i/525i | 720x240 @60Hz | VESA | 800x600 @75Hz |
| PAL/576i/625i | 720x288 @50Hz | VESA | 800x600 @85Hz |
| 480p/525p | 720x483 @60Hz | MAC | 832x624 @75Hz |
| 480p (16:9) | 960x483 @60Hz | VESA | 1024x768 @60Hz |
| 576p/625p | 720x756 @50Hz | MAC | 1024x768 @60Hz |
| (HDTV) 720p | 1280x720 @50Hz | VESA | 1024x768 @70Hz |
| (HDTV) 720p | 1280x720 @60Hz | IBM | 1024x768 @72Hz |
| (HDTV) 1080i | 1920x1080 @50Hz | VESA | 1024x768 @75Hz |
| (HDTV) 1080i | 1920x1080 @60Hz | MAC | 1024x768 @75Hz |
| (HDTV) 1080p | 1920x1080 @30Hz | VESA | 1024x768 @85Hz |
| VESA | 720x400 @85Hz | VESA | 1152x864 @75Hz |
| VESA | 640x350 @85Hz | MAC | 1152x870 @75Hz |
| VESA | 640x400 @85Hz | SUN | 1152x900 @66Hz |
| IBM | 720x400 @70Hz | SUN | 1152x900 @76Hz |
| IBM | 720x350 @70Hz | VESA | 1280x960 @60Hz |
| IBM | 640x350 @70Hz | VESA | 1280x960 @85Hz |
| IBM | 640x400 @70Hz | VESA | 1280x1024 @60Hz |
| VESA | 640x480 @60Hz | HP | 1280x1024 @60Hz |
| MAC | 640x480 @67Hz | IBM | 1280x1024 @67Hz |
| VESA | 640x480 @72Hz | HP | 1280x1024 @72Hz |
| VESA | 640x480 @75Hz | VESA | 1280x1024 @75Hz |
| VESA | 640x480 @85Hz | SUN | 1280x1024 @76Hz |
| VESA | 800x600 @56Hz | VESA | 1600x1200 @60Hz |
| VESA | 800x600 @60Hz | VESA | 1920x1200 @60Hz |
| VESA | 800x600 @72Hz | | |

13.2 DVI-OUT

| SUPPORTED MODE | RESOLUTION | SUPPORTED MODE | RESOLUTION |
|----------------|-----------------|----------------|-----------------|
| (HDTV) 720p | 1280x720 @50Hz | VESA | 1366x768 @60Hz |
| (HDTV) 720p | 1280x720 @60Hz | VESA | 1400x1050 @60Hz |
| (HDTV) 1080p | 1920x1080 @60Hz | VESA | 1400x1050 @50Hz |
| VESA | 640x480 @60Hz | VESA | 1152x864 @75Hz |
| VESA | 800x600 @60Hz | VESA | 1600x1200 @60Hz |
| VESA | 1024x768 @60Hz | VESA | 1920x1200 @50Hz |
| VESA | 1152x864 @75Hz | VESA | 1920x1200 @60Hz |
| VESA | 1280x1024 @60Hz | | |



14. GENERAL TROUBLESHOOTING

| PROBLEM | POSSIBLE SOLUTION |
|---|--|
| NO POWER | <ul style="list-style-type: none"> • Ensure that DVI-SPLITPRO-4K is plugged in • If you are recovering from power outage, accidentally unplug the adapter or other power surge conditions, leave the device off for an at least a minute and then power it on again. |
| NO OR DISTORTED IMAGE | <ul style="list-style-type: none"> • Make sure all cables are in good working condition and properly connected to the DVI-SPLITPRO-4K and displays. • Configure the output video resolution so that it doesn't exceed the native resolution of the display. (in this case, the message of "out of range" is usually showed on your screen) |
| POOR QUALITY | <ul style="list-style-type: none"> • We suggest that don't use T-connectors to split your video source into to images displayed on two different screens. That will lower output video quality. Use a distribution amplifier instead of T-connectors. • Make sure the video source is not compressed and maintains the highest native resolution. |
| WRONG COLOR | <ul style="list-style-type: none"> • Press "Color Balance" key for auto configuration. Auto color configuration only works at VGA and Component inputs. |
| NO VIDEO AFTER FACTORY HARDWARE AND SOFTWARE RESET | <ul style="list-style-type: none"> • Always perform a hard power reset from the back of the unit using the power switch on back right. • In the configuration software after the factory reset navigate to: <ul style="list-style-type: none"> ➤ Advance setting button ➤ Ensure the correct COM Port is enabled ➤ Wait until Green check mark and Device Ready! is complete ➤ Proceed to "Device Setting/Testing" "Execute Selector" ➤ Select "Modular Configure" then Press Execute Button |



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LABOR: During the Warranty Period of THREE (3) YEARS, Avenview will repair or replace the product(s) at no cost using new or used parts equivalent to novel performance and reliability if the product(s) is determined to have abide by Avenview's published guidelines. Cost of Labor applicable to product(s) after Warranty Period. For labor costs, please contact support@avenview.com.

PARTS: During the Warranty Period of THREE (3) YEARS, Avenview will supply new or rebuilt replacements in exchange for defective parts of the product(s) at no cost if the product(s) is determined to have abide by Avenview's published guidelines. Cost of Parts applicable to product(s) after Warranty Period. For part(s) costs, please contact support@avenview.com.

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275 Woodward Avenue, Kenmore, NY 14217
1.866.508.0269





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Phone: 1 (866) 508 0269



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