



HDMI/3G-SDI Dual Display, 4K/30

User Manual

500841-V2



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1 Safety Precautions

To ensure the best performance from the product, please read all instructions carefully before using the device. Save this manual for future reference.

- Follow basic safety precautions to reduce the risk of fire, electrical shock, and injury.
- Do not dismantle the housing or modify the module. It may result in electrical shock or burns.
- Do not open or remove the housing of the device as you may be exposed to dangerous voltage or other hazards.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture and do not install this product near water. Keep the product 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 the housing, unplug the module immediately.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- Using supplies or parts not meeting the product specifications may cause damage, deterioration or malfunction.
- Refer all servicing to qualified service personnel.
- Install the device in a place with adequate ventilation to avoid damage caused by overheat.
- Unplug the power when left unused for a long period of time.
- Information on disposal of devices: do not burn or mix with general household waste, please treat them as normal electrical waste.

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2 Introduction

The HDMI/3G-SDI Dual Display, 4K/30 (model: 500841-V2) supports two independent 7 inch IPS LCD displays mounted conveniently and securely on a 3 RU 19" rack. These devices save a significant amount of space in multi-display Pro AV and Broadcast applications.

The unit supports input and loop-out of HDMI signals up to 4K/30, SDI signals up to 3G-SDI, and CVBS signals with Audio. The unit supports a tri-color Tally light indicator per display, customizable buttons allowing customers to tailor them to their needs, and advanced functions such as Center Marker, Safe Frames, Check Field, Focus Assist, Aspect Ratio, Image Flip, P2P, Vectorscope, histogram and Image Freeze.

3 Features

- Dual 7-inch IPS LCD displays
- Supports HDMI (4K/30), 3G-SDI and CVBS with Audio
- Fits 19-inch rackmount @ 3 RU
- Tri-color Tally light indicator per display
- Waveform: RGB, YUV, Y
- Histogram, Vectorscope
- Supports Center Marker, Safe Frames, Check Field, Focus Assist,
- Aspect Ratio, Image Flip, P2P & Image Freeze
- Customizable buttons tailored to customer needs
- Supports firmware update via mini USB

4 Package Contents

- One (1) HDMI/3G-SDI Dual Display, 4K/30
- One (1) 12VDC/3A Multinational Power Supply
- One (1) User manual (available via download)

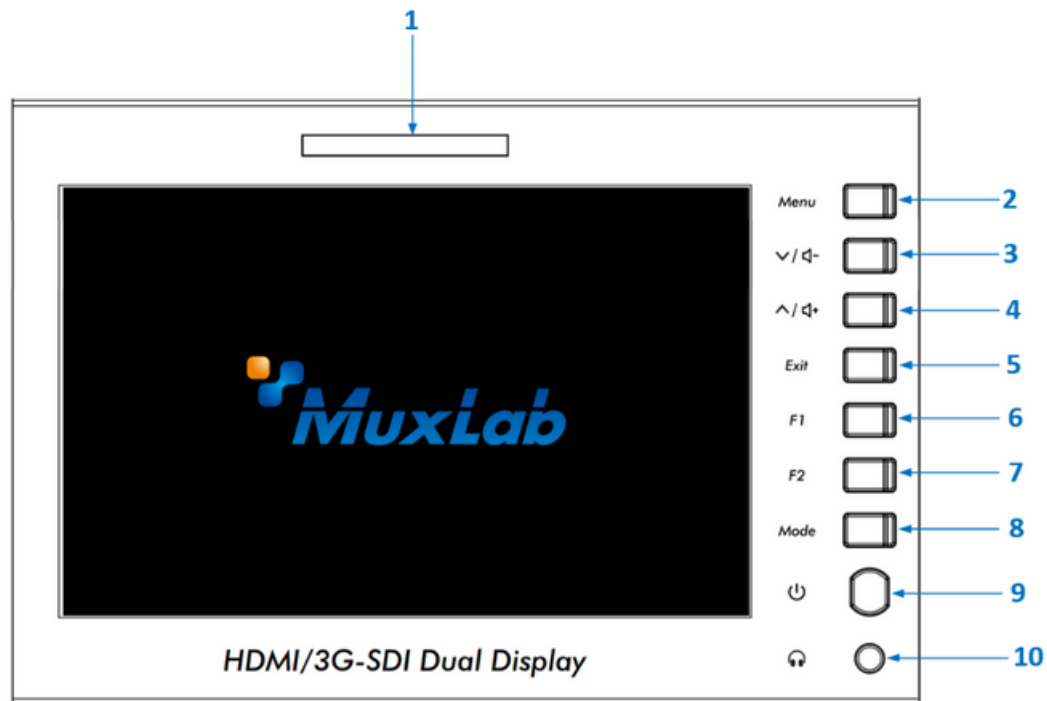
Notes: Confirm that the product and accessories are all included. If not, please contact the supplier from which you purchased the unit.

5 Specifications

Screen Size	Two 7" screens
Resolution	1920x1200 pixel
Dot Pitch	0.07875 (W) x 0.07875 (H) mm
Aspect Ratio	16:10
Brightness	450cd/m2
Contrast	1100:1
Backlight	LED
Viewing Angle	80°/80°(L/R) 80°/80°(U/D)
Inputs	HDMI, 3G/HD/SD-SDI, Audio(L/R), Video
Outputs	HDMI, 3G/HD/SD-SDI, Video, 3.5mm Audio Jack
Control Inputs	Ethernet
SDI Support Format	720p (60/59.94/50/30/29/25/24/23.98) 1080i (60/59.94/50) 1080p (60/59.94/50/30/29.97/25/24/24sF/23.98/23.98sF)
HDMI Support Format	480i/576i/480p/576p 720p (60/59.94/50/30/29.97/25/24/23.98) 1080i (60/59.94/50) 1080p (60/59.94/50/30/29.97/25/24/23.98) 4K 3840x2160p (30/29.97/25/24/23.98Hz) 4096x2160p (24Hz)
Power Consumption	≤21W
Input Voltage	9.0 to 24VDC
Power Source	100/240VAC to 12VDC @ 3A power supply
Working Temperature	0°C to 50°C
Storage Temperature	-20°C to 60°C
Install Way	Rack Mount
Dimensions	482.6L X 132H X 30.5D mm
Weight	1.89kg
Warranty	2 years
Order Information	500841-V2 HDMI/3G-SDI Dual Display, 4K/30 (UPC: 627699028414)

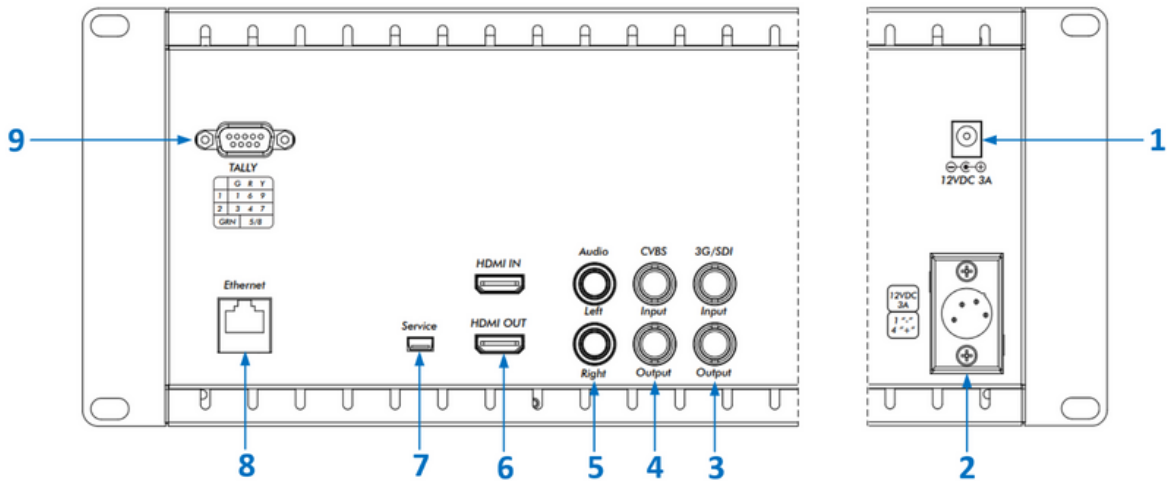
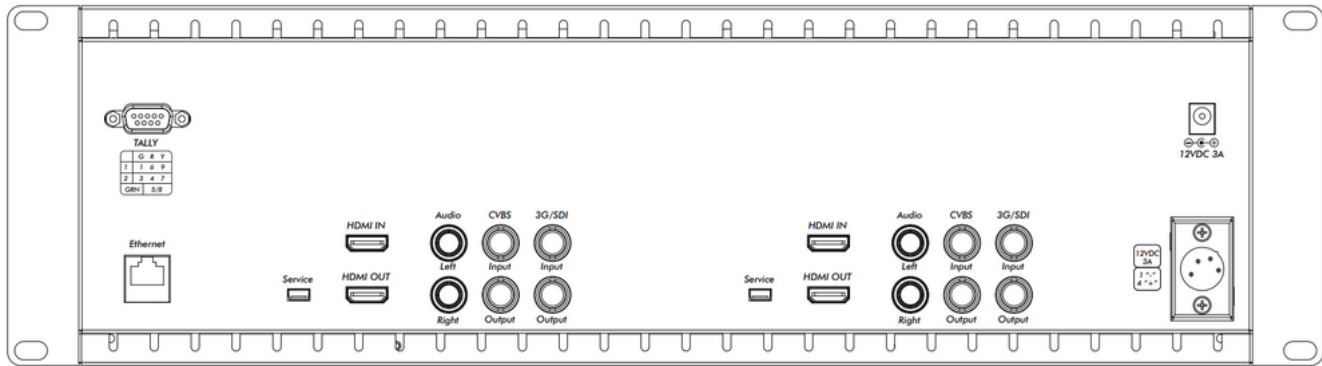
6 Product Description

6.1 Front Panel Description



No	Name	Function Description
1	Indicator	Tally indicator
2	Menu	Menu button, enter/confirm
3	∨ / ⏮	<ul style="list-style-type: none"> Next item selection/parameters increasing after enter the menu Volume decrease adjustment when menu without display
4	∧ / ⏭	<ul style="list-style-type: none"> Previous item selection/parameters decreasing after enter the menu Volume increasing adjustment when menu without display
5	Exit	Exit the menu
6	F1	Custom function shortcut button
7	F2	Custom function shortcut button
8	Mode	Input signal selection and confirm
9	⏻	Power Switch
10	🎧	Earphone jack port

6.2 Rear Panel Description



No	Name	Function Description
1	DC power input port	12VDC Power Input
2	XLR power input port	4-pin XLR 12VDC power input
3	3G/SDI	IN (SDI serial data input) OUT (SDI serial data output)
4	CVBS	IN (Composite video broadcast signal input) OUT (Composite video broadcast signal output)
5	Audio	L (Audio signal left stereo input) R (Audio signal right stereo input)
6	HDMI	IN (High definition multimedia interface input) OUT (High definition multimedia interface output)
7	USB service port	Firmware update, LUT file importing port
8	LAN port	Ethernet LAN connector
9	TALLY	TALLY indicator input port

6.3 Power Input Way

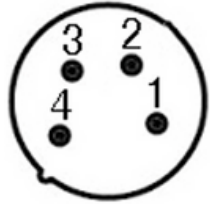
There are two ways to power the monitor:

1. Through a power supply connected to a 2.1mm DC socket. Check that the power input polarity is as shown below.



Please use a qualified power supply with an output power of no less than 21W 9-24VDC.

2. Through a power supply connected to the 4-pin XLR interface. The polarity of the 4-pin XLR power input is shown below.

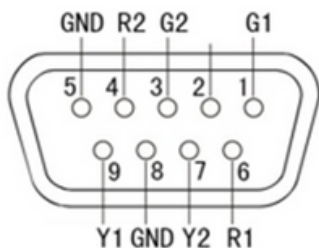


Pin number	Signal
1	GND
2	No connection
3	No connection
4	+12V

6.4 Tally Indicator Connection

Input signal. Each of two Tally lights support three colors, green, red and yellow, depending on the input applied.

GND port 5 and 8 is sharing



Indicator Color	Pin Connection	
	1 Screen	2 Screen
Green	1-5	3-8
Red	6-5	4-8
Yellow	9-5	7-8

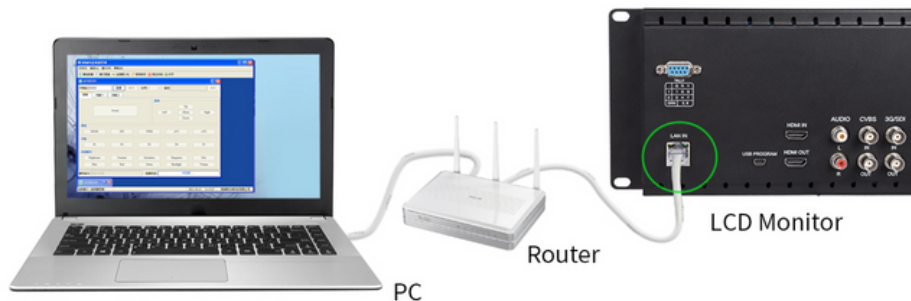
7 Display Operation Instructions


Connect the provided power supply into the unit. The two displays will turn on, and the unit is ready to use. The user can operate and set each display as necessary via the corresponding buttons next to each screen.

7.1 Ethernet Connection

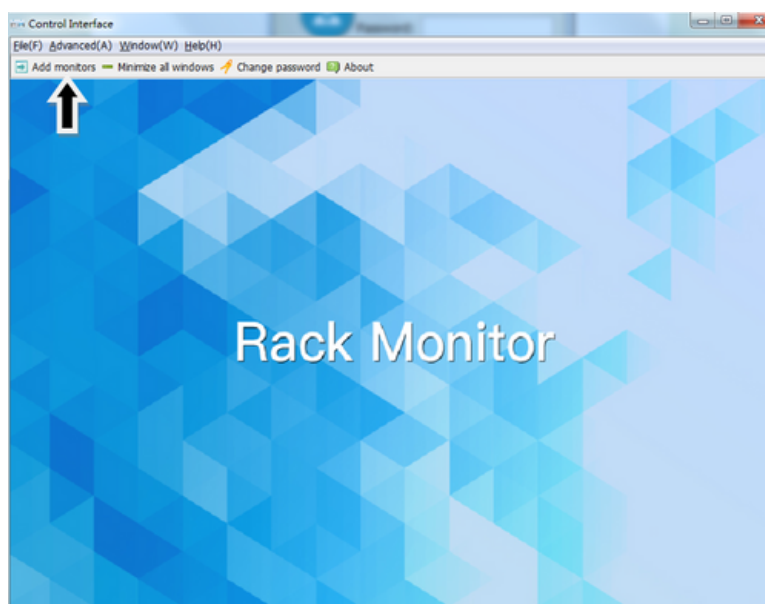
The 500841-V2 can be managed through the LAN port using the software control. Follow these instructions to control the display.

1. Connect your computer into the Ethernet port (or through a network switch/router). IP address will be displayed in the monitor.

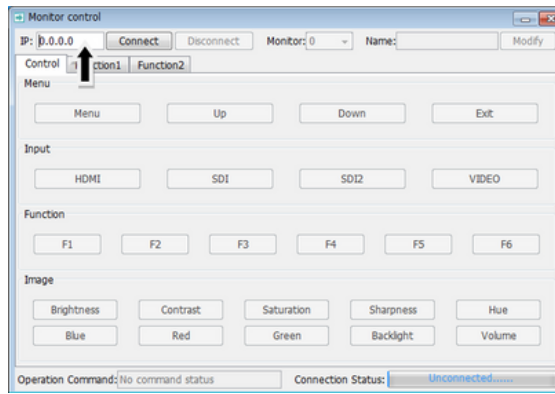


2. Open the  folder which should be previously downloaded in the computer and click on the Monitor Control.exe icon

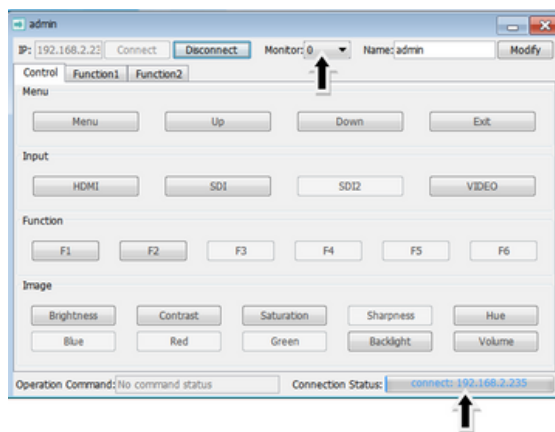
3. Login and add monitor



4. Enter IP address



5. Select the display you wish to control

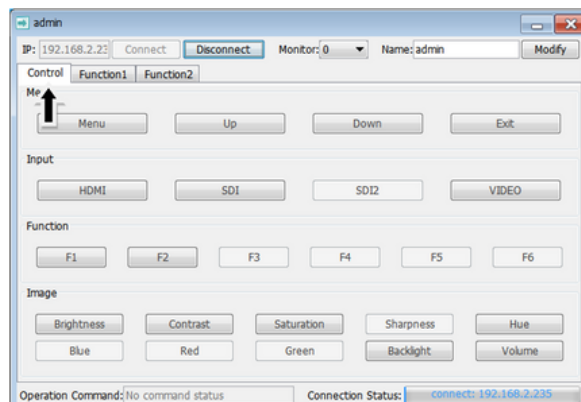


If the unit is connected, the IP will be displayed at the bottom

6. Three tabs will appear: Control, Function1 and Function2

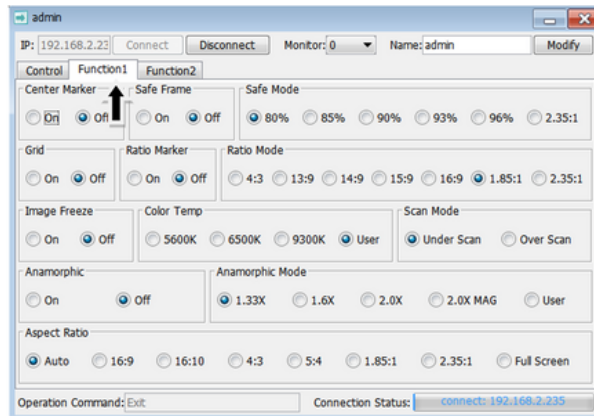
Control Tab

It allows you to navigate through the menu, access to the interfaces among others functionalities.



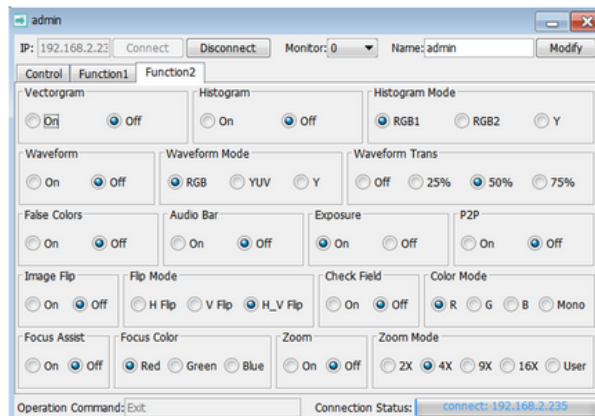
Function1 Tab

It allows you to change the ratio mode, control aspect ratio, image freeze, etc. See screenshot for details.





Function2 Tab









In this tab, user has access to Image flip, histogram, vectorgram among others parameters. See below for more details:







7.2 Menu Function Instruction

7.2.1 Assist




 All Waves	<p>On, Off After turning on, waveform, vector, histogram and embedded audio will be shown.</p>
 Waveform	<p>On, Off Mode: RGB, YUV, Y This essential feature assists with the calibration of professional video cameras. It shows the overall brightness of the image assisting the video professional in correcting exposure. The waveform feature also checks the evenness of the lighting when lighting a chromakey or background. Waves Trans: Off, 25%, 50%, 75%</p>





 Vector	On, Off shows how saturated the image is and where the pixels in the image land on the color spectrum.
 Histogram	On, Off Mode: RGB1, RGB2, Y
 Focus Assist	On, Off Color: (Red, Green, Blue) Peaking Level: you can adjust the peaking level after turning on (1~10)
 Embedded Audio	On, Off The Audio Level Meters provide numerical indicators and headroom levels. The audio meter is green, and will turn yellow when exceeds -20dB, and turn red when exceeds -9dB
 Over Exposure	On, Off Exposure Level: you can adjust the exposure level after turning on (10~100)
 Check Field	On, Off Mode: Red, Green, Blue, Mono
 False Colors	On, Off
 Time Code	On, Off Mode: LTC, VITC (Only under SDI signal)

7.2.2 Mark





 Nine Grid	On, Off Color: Red, Green, Blue, Black, White, Gray
 Safe Frames	On, Off Mode: 80%, 85%, 90%, 93%, 96%, 2.35:1 Color: Red, Green, Blue, Black, White, Gray
 Center Marker	On, Off Color: Red, Green, Blue, Black, White, Gray
 Ratio Marker	On, Off Mode: 4:3, 13:9, 14:9, 15:9, 16:9, 1.85:1, 2.35:1 Color: Red, Green, Blue, Black, White, Gray Modified Mark: 0~5

7.2.3 Display






 Scan Mode	Under Scan, Over Scan
 Aspect ratio	Auto, 16:9, 16:10, 4:3, 5:4, 1.85:1, 2.35:1, Full Screen
 Anamorphic	On, Off Mode: 1.33X, 1.6X, 2.0X, 2.0X MAG, User Under the User, can be customized (1.20X~2.00X)

 Image Flip	On, Off Mode: H Flip, V Flip, H_V Flip
 Zoom Mode	On, Off Mode: 2X, 4X, 9X, 16X, User User can be customized (100%~200%)
 Image Freeze	On, Off
 P2P	On, Off

7.2.4 User

 LUT	On, Off After the LUT Switch is turned on, you can use the Lut (SLOG2, SLOG3, LOGC, VLOG). Lut Import: Confirm After copying the 3D LUT file to the USB flash drive and inserting it into USB adapter cable (USB-female to mini-USB) press MENU button Confirm to import the 3D LUT file. Lut Table Show the 4 built-in Lut and the custom load Lut (up to 32)
 Display Adjustment	Backlight: 0~100 Brightness: 0~100 Contrast: 0~100 Saturation: 0~100 Tint: 0~100
 Color Adjustment	Color Temp.: 5600K, 6500K, 9300K, User Under the User, the red, green and blue of the image can be adjusted (0~255)
 Shortcut Key	User can configure the 2 custom shortcut buttons F1, F2 on the panel. Ex: Press MENU button to enter the menu, select User and press MENU to confirm. Then press the shortcut key and press MENU to confirm, select F1 and confirm to pop up the function items, then select one of them and press to confirm, the cursor will change to gray color after confirming. Same settings for F2.

7.2.5 System

 Language	English, 简体中文, Español, Português, Français, Nederlands, Deutsch, 日本語, 繁體中文, 한국어로, Русский язык
 OSD Option	OSD Time: Off, 15Sec, 30Sec, 45Sec OSD Trans: Off, 25%, 50%, 75% No Signal: Red, Green, Blue, Black, White, Gray
 Volume	On, Off 0~100
 Reset	Scroll the wheel to select Reset and press Confirm, the system back to original setting.
 Firmware Update	After copying the upgrade file to the USB flash drive and inserting it into USB adapter cable (USB-female to mini-USB), press "MENU" wheel button Confirm to update. After the upgrade, monitor will automatically restart. Note: USB adapter cable not include, need to prepare by user

8 Troubleshooting

If there is any problem when using the unit, please try following ways to inspect and solve. Please contact us if you still can not solve it or have other problems.

8.1 Only Monochrome or Single Color Image/Video

- ① Check the Saturation, Brightness & Contrast adjustment.
- ② Check the unit "Check Field" settings. Is "Check Field" in Monochrome image/video, or in another single color state? If so, change to "Color" mode.

8.2 No Image/Video after Power On

- ① Check condition of the signal cable and connection. Also if the display is correctly synchronized with the input signal. Press the "Mode" button to test and confirm the correct setting.
- ② Make sure to use a standard AV connector/adaptor to connect to the unit.

8.3 No Sound Output

- ① Volume control may be too low. Press the Volume Up button to increase the volume.
- ② Check the source Audio signal and confirm that Audio is present. If available, test on a separate device.

9 Application Example

