Avonic AV-MN500

Triple 5” Rack Mount

HD LCD Monitor

User Manual

Version 1.2

Update notes:
Audio de-embedding to headphone

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Introduction

Congratulations

Thank you for purchasing the Avonic AV-MN500 5” Triple Rack Mount Monitor. Before beginning to operate this device, please read the manual in order to make sure the best performance is obtained. Please, save this manual for future reference.

Safety Notes

- Installation and servicing should only be done by Qualified Service Personnel and conform to all local codes.
- This unit is designed for indoor use only and it must not be installed where exposed to water or other liquids and moisture.
- Before powering on the device, check the input power voltage carefully.
- Avoid shock and vibration when transporting and installing the device.
- Electronic devices produce heat. Do not block the ventilation slots of the device and make sure the installation environment is well ventilated to avoid overheating.
- Before cleaning, unplug the power cable. Use a soft, damp cloth to clean the device, do not use strong or abrasive detergent to clean as it will damage the device.
- If you wish to dispose this product, please contact Avonic to obtain info about the take-back procedure.

Package contents and Accessories

Quantity	Description	Avonic SKU
1 pc	Triple 5” Rack Mount HD LCD Monitor	AV-MN500
1 pc	Power adapter 12V 3A	AV-MN500-PSU
1 pc	Tally kit	AV-MN500-TALLY

Product Overview

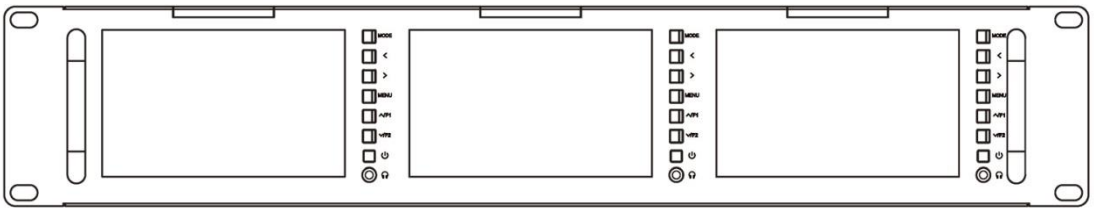
This monitor adopts advanced integrated circuits and special TFT LED panel, which makes it low power consumption, stable performance, no radiation etc. This monitor is with HDMI, 3G-SDI, CVBS and AUDIO input, HDMI, 3G-SDI, CVBS output, Stereo headphone etc. It has a wide range of application, casing compact, simple operation, and strong compatibility. The advanced features contain Screen Marker, Pixel to Pixel, Image Flip, and Color Temp. etc.

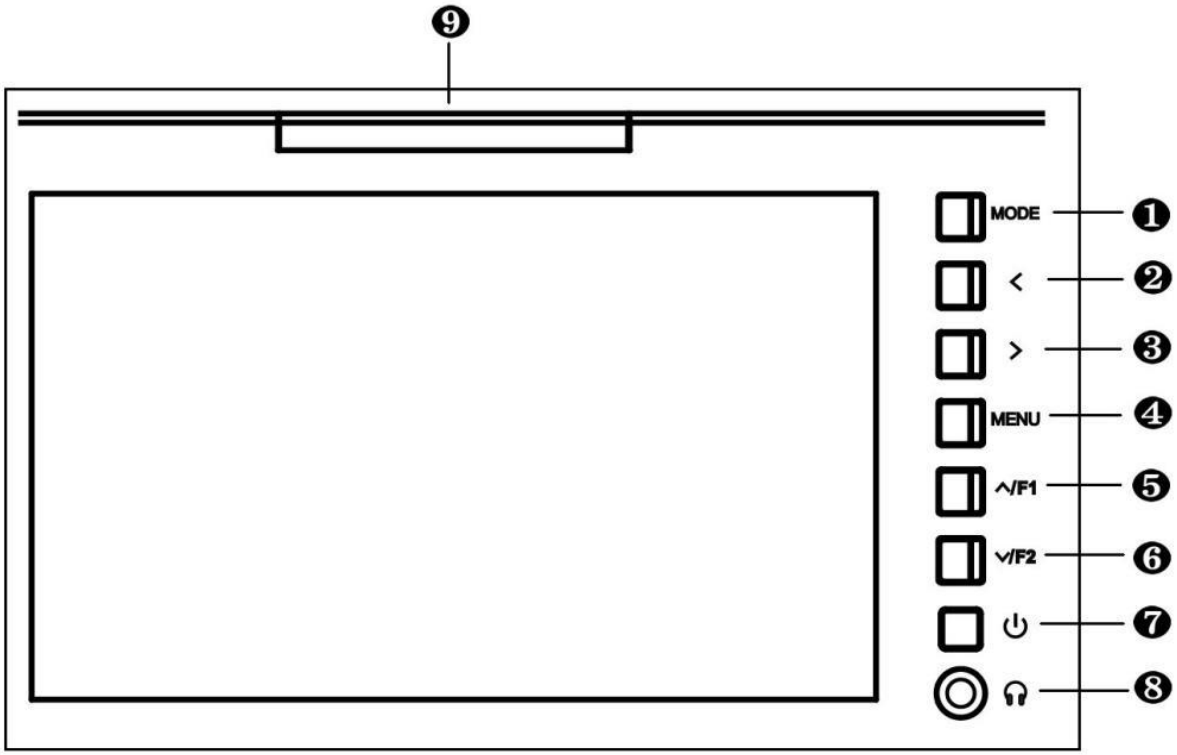
Features

- 2U rack mount with triple 5” LCD monitor, compact thin and lightweight design, which makes it suitable for installing where the space is limited to be installed in the standard 19-inch rack.
- Three-color Tally indicator.
- With VIDEO, AUDIO, HDMI, 3G-SDI input, suitable for a variety of signals.
- Headphone AUDIO output from all inputs. De-embeds audio from HDMI and 3G-SDI.
- Custom buttons, could set the custom F button function as customers operating habit.
- With advanced functions like Center Marker, Safe Frames,
- Check Field, Focus Assist, Aspect Ratio, Image Flip, P2P, Image Freeze, etc.

Product Description

Front Panel View





1. MODE: Signal input selection.

2. ＜：Volume down. In menu operation, it is for the adjustment of the set item.

3. ＞：Volume up. In menu operation, it is for the adjustment of the set item.

4. MENU：Menu button

5. Λ/F1：No menu display, it is F1 button, when enters into menu bar, it is for the up item selection.

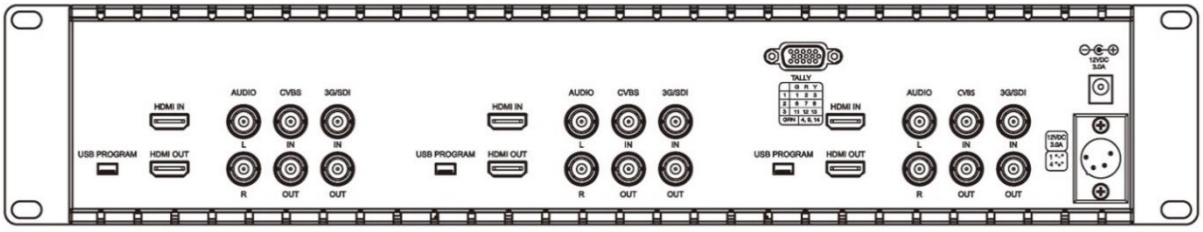
6. V/F2：No menu display, it is F2 button, when enters into menu bar, it is for the down item selection.

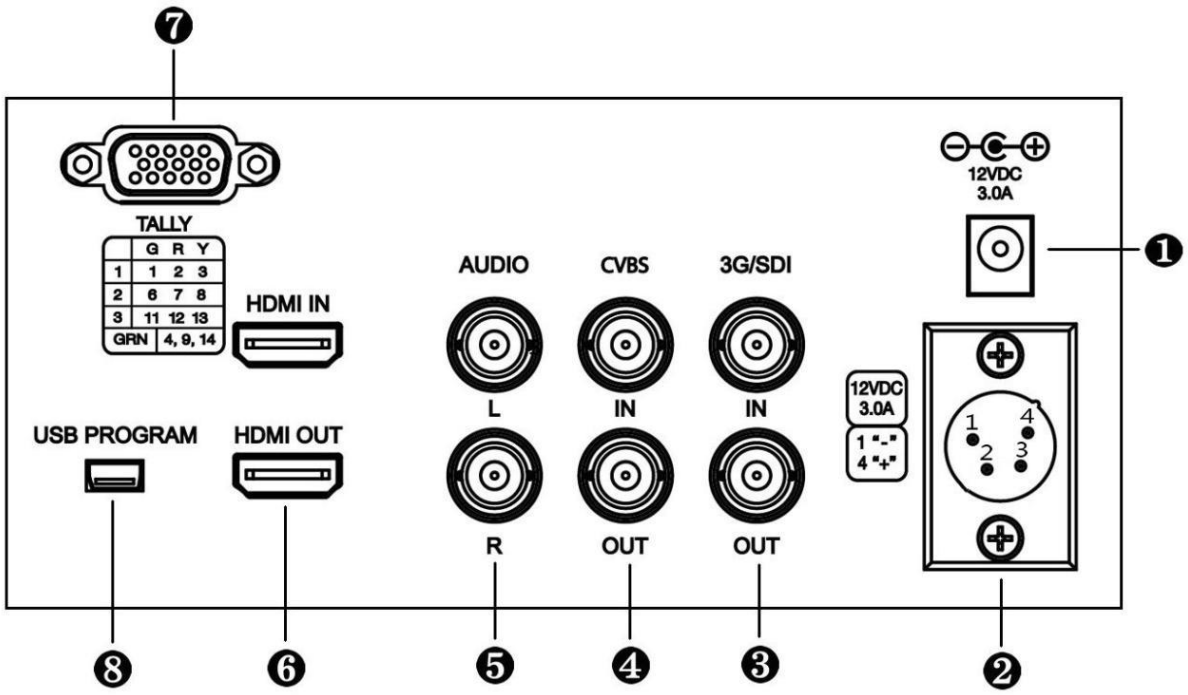
7. ⏻：On/Standby button

8. 🎧：Earphone jack

9. TALLY indicator.

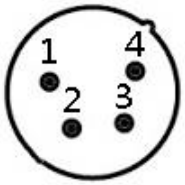
Rear Panel View





1.DC power input port.

2. 4-pin XLR DC12V power input.



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

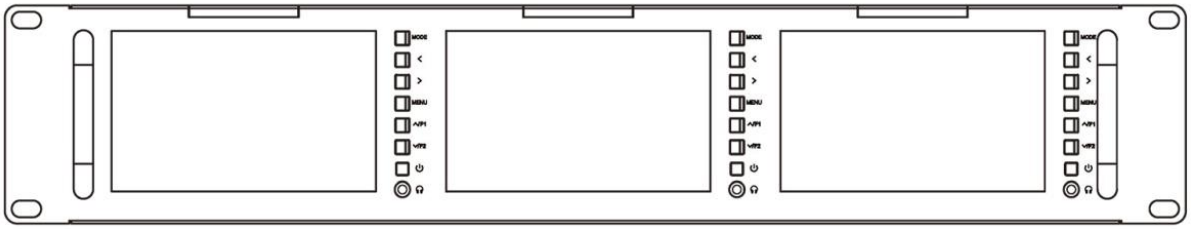
3. 3G/SDI：input & output

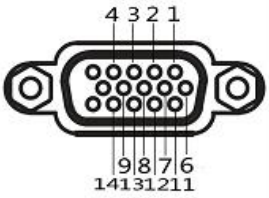
4. CVBS： input & output

5. AUDIO：Audio input L / R

6. HDMI：input & output

7. TALLY indicator input





Screen #1	Screen #2	Screen #3	Tally
1	6	11	Green Light
2	7	12	Red Light
3	8	13	Yellow Light
4	9	14	Ground

8. USB program upgrade port

Installation

Power adapter installation

Connect DC12V power to monitor, the three displays light, and then customers could operate the corresponding display screen button on the panel.

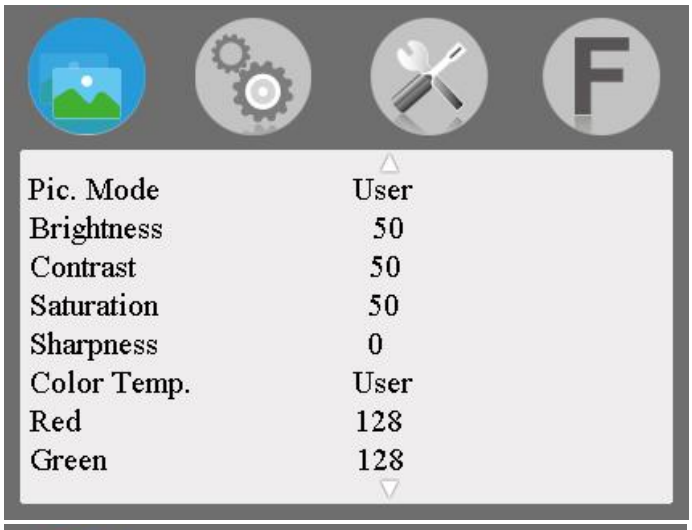
Operation Instructions

Menu

Menu instruction

Press MENU button to pop-up menu, and press＜or＞button to enter menu selection, then press∨/F2 button to enter secondary menu, and then use ∧/F1 or ∨/F2 button to select the menu item, after enter into secondary menu, use＞or＜ button to adjust item parameters, press MENU button to exit.

Image Color

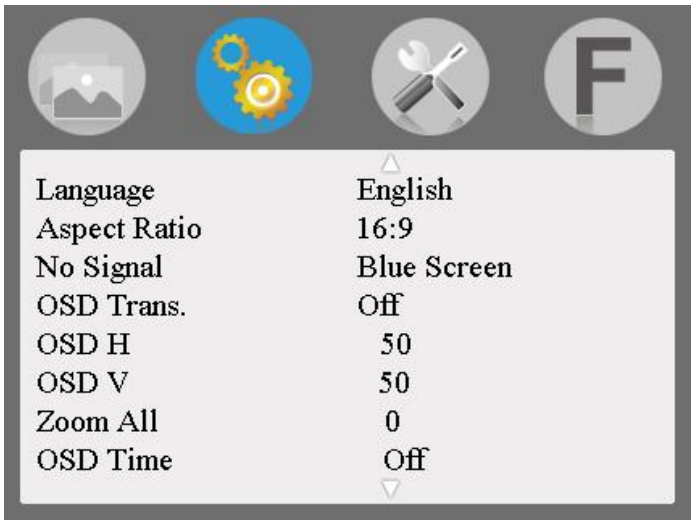


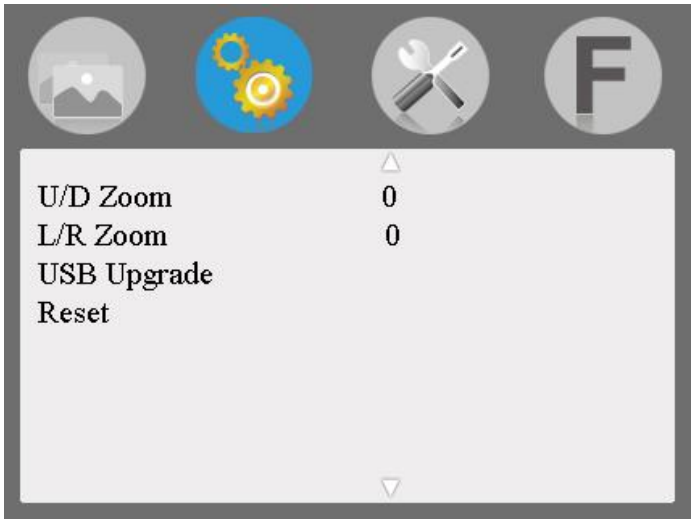
- Pic. Mode: Standard, Dynamic, Mild, User. Select “User” to adjust Brightness, Contrast, Saturation Sharpness according to the site situation.
- Brightness: To adjust image's brightness.
- Contrast: To adjust the brightest and the darkest ratio of the image, please note the sense of picture will make the picture lose the color when adjust proportion too high or

low.

- Saturation: To adjust color concentration.
- Sharpness: Also called ‘Resolution’, is an indicator for the image plane definition and image edge sharpness. If sharpness is higher, then the details contrast on the image is higher, the image is more clearly.
- Color Temp.: 6500, 9300, User. When select “User”, adjust the R/G/B to meet the different user's requirement for the different Color Temp.
- Tint: On NTSC video mode, color tint is adjusted by Tint.

Setting Menu

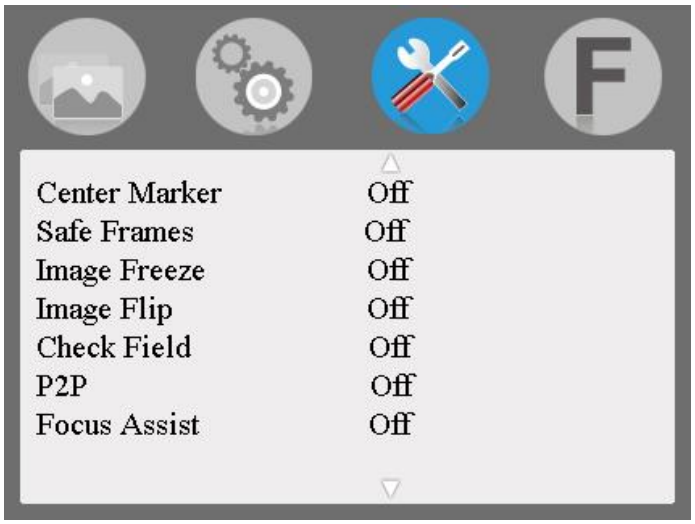




- Language: Language for OSD: English, 中文, Español, Português, Français, Nederlands, Deutsch, 日本語
- Aspect Ratio: To change the aspect ratio
- Panorama, Just Scan, Zoom 1, Zoom 2, 16:9, 4:3 , Autom No Signal: Color options of screen background when no signal: Blue Screen, Red Screen, Green Screen, Black
- Screen, White Screen
- OSD Trans.: To adjust the level of transparent.
- OSD H: To adjust the OSD position in horizontal.

- OSD V: To adjust the OSD position in vertical.
- Zoom All：Select this function and use “＜” or “＞” button to adjust the image to Zoom In or Zoom Out separately.
- OSD Time：Menu display time selection: 30s ,20s、10s, Off.
- U/D Zoom: Press “＜”or “＞”button, to adjust the proportion of the image Up and Down to Zoom In or Zoom Out.
- L/R Zoom Press “＜”or “＞” button, to adjust the proportion of the image Left and Right to Zoom In or Zoom Out.
- USB Upgrade: When need to upgrade the native data application software, copy the file to the U disk, then through the USB cable to connect with upgrade USB port, press “＞”key to confirm. After the upgrade, monitor will automatically restart. Do NOT plug a USB cable into this connector without contacting the factory.
- Reset: Press “＞” button, back to original setting.

Function



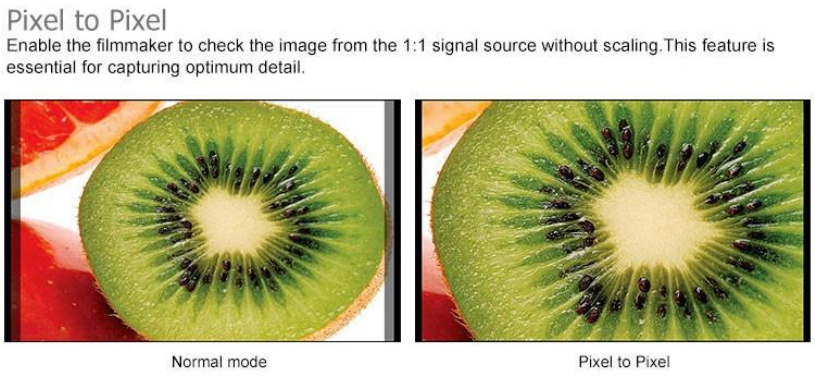
- Center Marker: To set center mark (cross mark) display.

- Safe Frames: To adjust screen marker (off, 96%, 93%, 90%,85%, 80%, 2.35:1)
- Image Freeze: The current picture still (capture function)
- Image Flip: The H_V Flip, H Flip, V Flip of the image around flip.
- Check field: To switch among Color, Mono, Red, Green, Blue.

Normal image

Objects in focus with red peaking

- P2P: (Pixel-To-Pixel mode) The display mode makes the resolution of the image consistent with display of the physical resolution.



- Focus Assist ： Under HDMI input, select this function, Peaking (Superimpose red highlight over parts of the monochrome image in focus), could be used as focus auxiliary function in camera viewfinder.

Shortcut button setting

- F1：Custom button, Choose F1, press“＜” or “＞”button to pop-up (Center Marker, Safe Frames , Check Field, Focus Assist, Image Freeze, Aspect Ratio, Image Flip , P2P, Image Freeze) and use “∧/F1”or “∨/F2” to set one of them as definition function. Press “MENU” to confirm.
- F2：Custom button, see F1

Operation

Monitor button instruction

	Normal Operation Mode	Menu mode	Menu Item Mode
⏻	Corresponding display screen On/Standby button		
MODE	Signal input selection		
MENU	Menu Button		
＞	Volume Up	Menu bar selection	Value selection
＜	Volume down	Menu bar selection	Value selection
∧/F1	F1 Custom Button		Value selection
∨/F2	F2 Custom Button		Value selection
F1/ F2			

Maintenance

Before cleaning, unplug the power cable. Use a soft, damp cloth to clean the device, do not use strong or abrasive detergent to clean that will damage the device.

Troubleshooting

Only Mono or Single color picture

- Please check Saturation, Brightness &Contrast adjustment.
- Please check monitor color from the menu "Check Field" is in Mono image or in other single color state.

No image after put on the power

- Check if signal cable connection is in good condition, also need
- to check if the monitor is synchronized with the input signal,
- press “MODE” button to have a try.
- Make sure to use the standard adapter to connect the monitor.

No Sound

- Volume control did not open, can press the volume button and try increasing the volume.
- Check the AUDIO input and ensure there is AUDIO signal.

Contact

For any questions or suggestions, contact the reseller or the local distributor of Avonic. Find the local distributor on the website of Avonic.

For the recent manual or datasheet, look at the Avonic website.

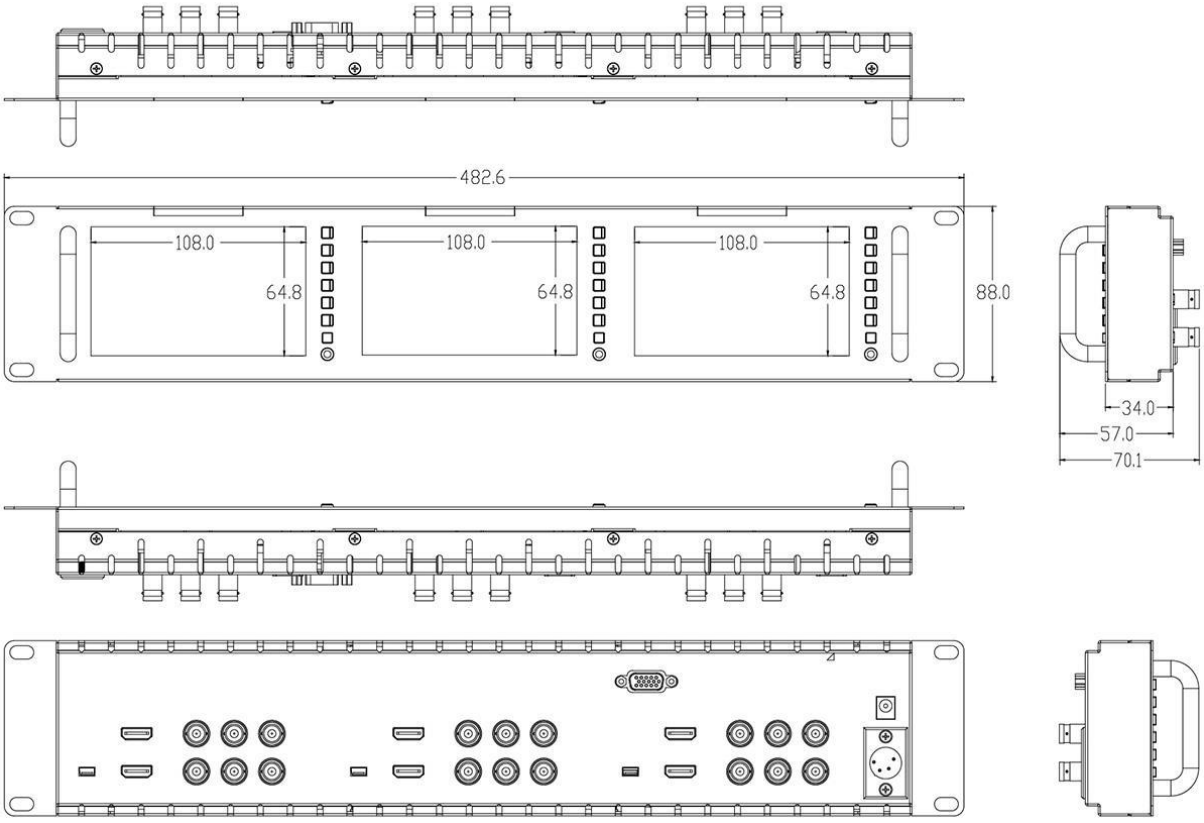
www.avonic.eu

Appendix

Technical Data

Panel Size	
Panel Type	TFT LCD
Resolution	800×480
Backlight	LED
Dot Pitch	0.045(W) x 0.135 (H) mm
Aspect Ratio	16:9
Brightness	500cd/m^2
Contrast	500:1
Response Time	T_{on} = 10ms; T_{off} = 15ms
Viewing Angle	70°/70°(L/R) 50°/70°(U/D)
Input Signal	HDMI / 3G-SDI / Video / Audio(RCA L/R)
Output signal	HDMI / 3G-SDI / Video / (de-embedded) Audio on headphone output
Color Video Format	PAL-4.43 / NTSC-3.58
HDMI Support Format	480i /480p /576i /576p 720p (60/59.94/50/30/29/25/24/23.98） 1080i (60/59.94/50） 1080p(60/59.94/50/30/29.97/25/24/24fps/23.98/23.98fps)
SDI Support Format	480i/576i 720p(60/59.94/50/30/29/25/24/23.98) 1080i(60/59.94/50) 1080p(60/59.94/50/30/29.97/25/24/24fps/23.98/23.98fps)
Headphone Output	Stereo headphone output 3.5 mm interface
Input Voltage	DC：9.0～24.0V
Power Consumption	≦25W
Unit Size (mm)	482.6Lx88Hx34D mm
Unit Weight	≈1570g
Working Temperature	-20～55℃
Storage Temperature	-30～65℃

Physical Dimensions



Quick Installation Guide