VX4S-N

All-in-One Controller

V1.0.1

Specifications

Overview

The VX4S-N is a professional LED display controller developed by NovaStar. Besides the function of display control, it also features powerful image processing capabilities. With excellent image quality and flexible image control, the VX4S-N greatly meets the needs of the media industry.

Features

- Industry-standard input connectors
    - 1x CVBS
    - 1x VGA
    - 1x DVI (IN+LOOP)
    - 1x HDMI 1.3
    - 1x DP
    - 1x 3G-SDI (IN+LOOP)
- 4x Gigabit Ethernet outputs, capable of loading up to 2,300,000 pixels
- Quick screen configuration supported

  Computer software for system configuration is not necessary.
- Seamless high-speed switching and fade effect supported, to present professional-quality images
- Adjustable PIP position and size, free control at will

- Nova G4 engine adopted, enabling exquisite image display with a good sense of depth, without flickering and scanning lines
- White balance calibration and color gamut mapping based on different features of LEDs used by screens, to ensure the reproduction of true colors
- Independent external audio output supported
- High bit-depth video input: 10-bit and 8-bit
- Multiple device units connected for image mosaic
- NovaStar's new-generation pixel level calibration technology adopted, ensuring a fast and efficient calibration process
- An innovative architecture adopted, allowing for smart screen configuration

  The screen debugging can be completed within several minutes, which greatly shortens the preparation time on the stage.

Appearance

Front Panel

Button	Description
Power switch	Power on or power off the device.
LCD screen	Display the device status, menus, submenus and messages.
Knob	• Rotate the knob to select a menu item or adjust the parameter value. • Press the knob to confirm the setting or operation.
ESC button	Exit the current menu or cancel the operation.

Control buttons	• PIP: Enable or disable the PIP function.
	     – On: PIP enabled
	     – Off: PIP disabled
	 • SCALE: Enable or disable the image scaling function.
	     – On: Image scaling function enabled

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	– Off: Image scaling function disabled
	• MODE: A shortcut button for loading or saving the preset
	• TEST: Open or close the test pattern.
	  – On: Open the test pattern.
	  – Off: Close the test pattern.

Input source buttons	Switch the layer input source and display the input source status. • On: The input source is connected and being used. • Flashing: The input source is not connected, but already used. • Off: The input source is not used.
Function buttons	• TAKE: When the PIP function is enabled, press this button to switch between the main layer and PIP. • FN: An assignable button
USB (Type-B)	Connect to the control PC.

Rear Panel

Input		
Connector	**Qty**	**Description**
3G-SDI	1	• Up to 1920×1080@60Hz input resolution • Support for progressive and interlaced signal inputs • Support for deinterlacing processing • Support for loop through
AUDIO	1	A connector for connecting the external audio
VGA	1	VESA standard, up to 1920×1200@60Hz input resolution
CVBS	1	A connector for accepting PAL/NTSC standard video inputs

DVI	1	• VESA standard, up to 1920×1200@60Hz input resolution
		• Support for custom resolutions
		  – Max. width: 3840 pixels (3840×652@60Hz)
		  – Max. height: 1920 pixels (1246×1920@60Hz)
		• HDCP 1.4 compliant
		• Support for interlaced signal inputs
		• Support for loop through

HDMI 1.3	1	• Up to 1920×1200@60Hz input resolution
		• Support for custom resolutions
		  – Max. width: 3840 pixels (3840×652@60Hz)
		  – Max. height: 1920 pixels (1246×1920@60Hz)
		• HDCP 1.4 compliant
		• Support for interlaced signal inputs

DP	1	• Up to 1920×1200@60Hz input resolution • Support for custom resolutions

		− Max. width: 3840 pixels (3840×652@60Hz)
		− Max. height: 1920 pixels (1246×1920@60Hz)
		• HDCP 1.3 compliant
		• Support for interlaced signal inputs
Output		
Ethernet port	4	4 ports load up to 2,300,000 pixels.
		• Max. width: 3840 pixels
		• Max. height: 1920 pixels
		Only Ethernet port 1 can be used for audio output. When the multifunction card is used for audio decoding, the card must be connected to the Ethernet port 1.
DVI OUT	1	A connector for monitoring the output images
Control		
ETHERNET	1	• Connect to the control PC for communication.
		• Connect to the network.
USB (Type-B)	1	• Connect to the control PC for device control.
		• Input connector to link another device
USB (Type-A)	1	Output connector to link another device

Dimensions
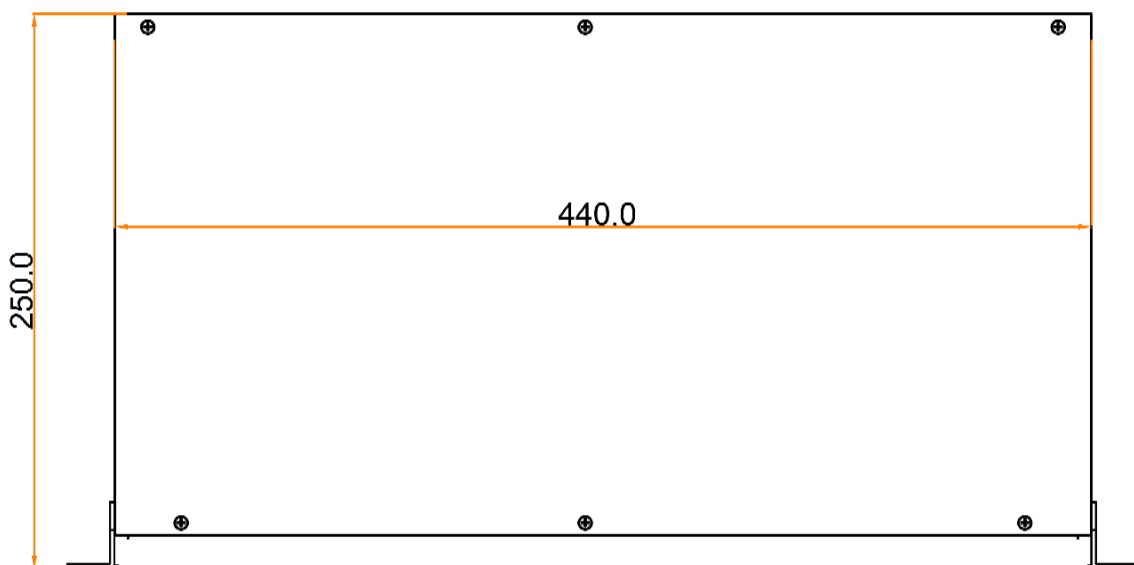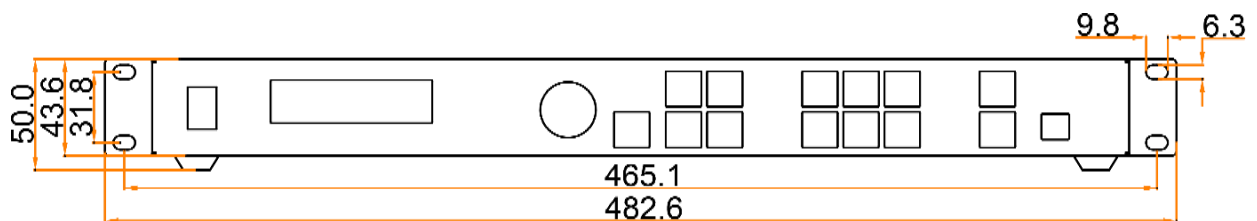
Tolerance: ±0.8   Unit: mm

Specifications

Overall Specifications		
Electrical Specifications	Power connector	100-240V~, 50/60Hz. 1.5A
	Power consumption	25 W
Operating Environment	Temperature	−20°C ~ +60°C
	Humidity	20% RH to 90% RH, non-condensing
	Storage Humidity	10% RH to 95% RH, non-condensing
Physical Specifications	Dimensions	482.6 mm × 250.0 mm × 50.0 mm
	Net weight	2.55 kg
	Gross weight	5.6 kg
Packing Information	Carrying case	540 mm × 140 mm × 370 mm
	Accessories	1x Power cord 1x USB cable 1x DVI cable 1x HDMI cable 1x User Manual
	Packing box	555 mm × 405 mm × 180 mm
Certifications		CE, RoHS, FCC, UL, CMIM
Noise Level (typical at 25°C/77°F)		38 dB (A)

Video Source Features

Input Connector	Color Depth		Recommended Max. Input Resolution
HDMI 1.3 DP	8-bit	RGB 4:4:4	1920×1080@60Hz
		YCbCr 4:4:4	
		YCbCr 4:2:2	
		YCbCr 4:2:0	Not supported
	10-bit	RGB 4:4:4	1920×1080@60Hz
		YCbCr 4:4:4	
		YCbCr 4:2:2	
		YCbCr 4:2:0	Not supported
	12-bit	RGB 4:4:4	Not supported

Input Connector	Color Depth		Recommended Max. Input Resolution
		YCbCr 4:4:4	
		YCbCr 4:2:2	
		YCbCr 4:2:0	
SL-DVI	8-bit	RGB 4:4:4	1920×1080@60Hz
3G-SDI	• Max. input resolution: 1920×1080@60Hz • Supports ST-424 (3G) and ST-292 (HD) standard video inputs. • DOES NOT support input resolution and bit depth settings.		

Attachment

The Conflict List of PIP Signal Source.

		Main Layer Input Source					
		HDMI	DVI	VGA	CVBS	SDI	DP
PIP Input Source	HDMI	-	×	√	√	√	√
	DVI	×	-	√	√	√	√
	VGA	√	√	-	√	√	√
	CVBS	√	√	√	-	√	√
	SDI	√	√	√	√	-	√
	DP	√	√	√	√	√	-

- √ denotes the input sources can be used by both the main layer and PIP at the same time.
- × denotes the input sources cannot be used by both the main layer and PIP at the same time.
- - denotes the main layer and PIP use the same input source.