



Specifications

LED Display Video Controller VX400s

Rev1.4.0 NS160100411

Overview

The VX400s is a NovaStar professional LED display video controller, featuring excellent display control and powerful front-end video processing capabilities. With outstanding image quality and flexible image control functions, the VX400s can greatly satisfy the user needs in media industry.

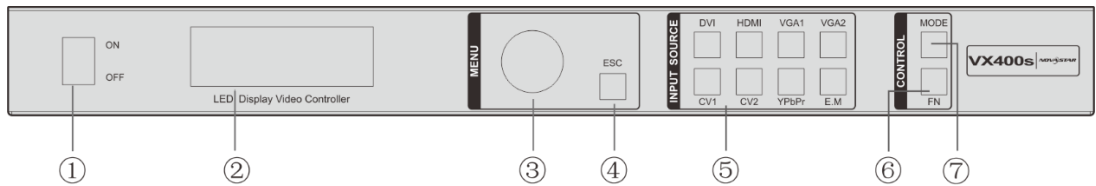
Features

- 1) Provides a variety of video input connectors, including 2 × CVBS, 2 × VGA, 1 × SDI, 1 × DVI, 1 × HDMI and 1 × YPbPr.
Input resolutions of some connectors can be up to 1080p@60Hz.
You can freely scale the image based on the screen resolution.
- 2) Computer software for system configuration is not necessary. The system can be configured using one knob and one button. All can be done just by fingers. That's what we called Touch Track.
- 3) Powerful image processing, professional image control and user-friendly UI design, allowing for an easy and convenient display control experience.
- 4) Adopts an innovative architecture to implement smart configuration, allowing for the screen debugging to be completed within several minutes, which greatly shorten the preparation time on the stage.
- 5) Provides seamless high-speed switch and fade-in/fade-out effect so as to strengthen and display picture demonstration of professional quality.
- 6) The position and size of PIP can both be adjusted, which can be controlled at will.
- 7) Visualized LCD screen and distinct button indicators simplifies system control operations.
- 8) Adopts NovaStar G4 engine to realize a perfect display image with no flickering or scanning lines, as well as fine quality and good sense of depth.
- 9) Adopts NovaStar new-generation calibration technology, allowing for a fast and efficient calibration process.
- 10) Implements white balance calibration and color gamut mapping based on different features of the LEDs used by different screens to ensure colors are faithfully reproduced.
- 11) Supports HDMI/DVI video input and HDMI audio input.

- 12) Supports high bit depth video input: 10bit/8bit.
- 13) Video output loading capacity is 2.3 million pixels and supported video formats are RGB, YCbCr4:2:2 and YCbCr4:4:4.

Appearance

Front Panel



| | | | | | | | | |
|--|------------------|----------------|--------|----------------|--------|------------------|---------|--|
| ①: Power button | | | | | | | | |
| ②: Operation screen | | | | | | | | |
| <table border="1"> <tr> <td>1 DVI</td> <td>1920×1080@60Hz</td> </tr> <tr> <td>2 HDMI</td> <td>1920×1080@60Hz</td> </tr> <tr> <td>Screen</td> <td>1920×1080 ☀ 100%</td> </tr> <tr> <td>Primary</td> <td> </td> </tr> </table> | 1 DVI | 1920×1080@60Hz | 2 HDMI | 1920×1080@60Hz | Screen | 1920×1080 ☀ 100% | Primary | |
| 1 DVI | 1920×1080@60Hz | | | | | | | |
| 2 HDMI | 1920×1080@60Hz | | | | | | | |
| Screen | 1920×1080 ☀ 100% | | | | | | | |
| Primary | | | | | | | | |
| <ul style="list-style-type: none"> 1) Row 1: Main layer1, signal source and resolution 2) Row 2: PIP 2, signal source and resolution 3) Row 3: Screen width, height and brightness 4) Row 4: Status bar <p>The icon descriptions are as below.</p> | | | | | | | | |
| <p>Primary: The device is set as primary. Backup: The device is set as backup.</p> | | | | | | | | |
| : Pixel to pixel : Scale down : Scale up | | | | | | | | |
| : PIP off : PIP on | | | | | | | | |
| : Image mosaic off : Image mosaic on | | | | | | | | |
| : Output port (Ethernet port 2 is used for output) | | | | | | | | |
| : All the buttons and knob are locked. | | | | | | | | |

③: Knob

Press the knob to enter the operation menu screen.
Rotate the knob to select a menu item or adjust a parameter.

④: ESC button

Press the button to exit the current menu or cancel the operation.

⑤: 8 input source buttons

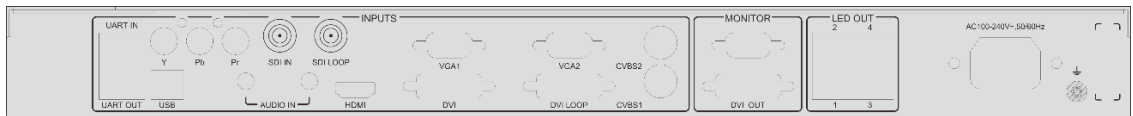
Press the button to set the input source of main layer. Hold down the button to set the input source of PIP. The setting result can be viewed on the operation screen.

In the above figure, the input source of main layer is VGA1 and the input source of PIP is HDMI.

⑥: Fn button for entering the related menu screen

⑦: Shortcut button for loading preset

Rear Panel

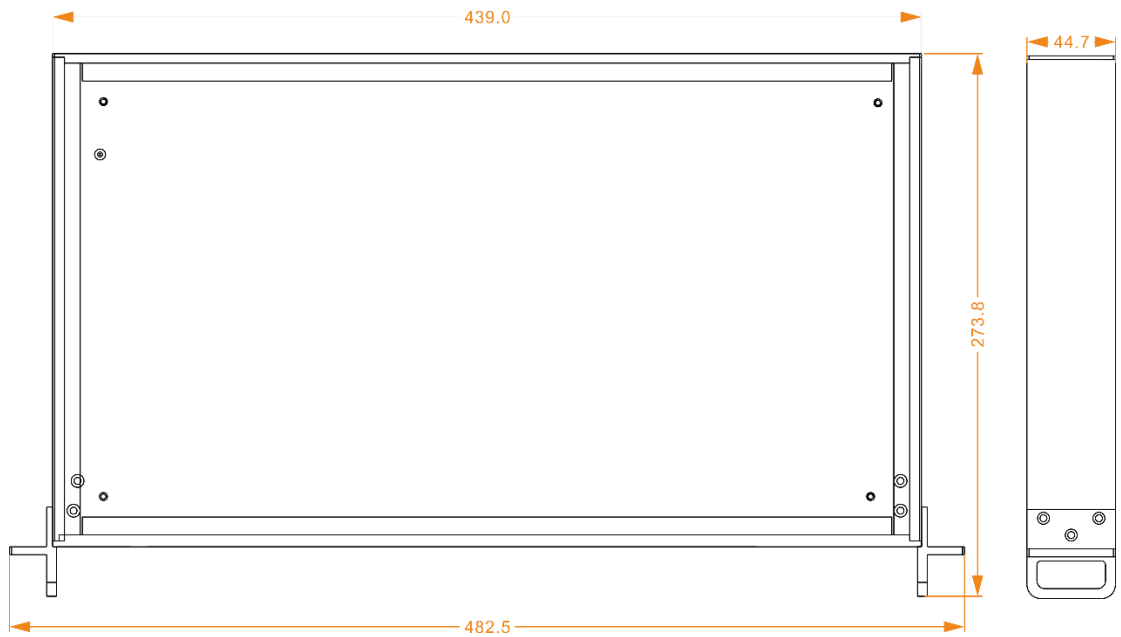


Note: To improve user experience, the connector layout may be adjusted.
Product images in this document are for reference only.

| Input | |
|-----------|--|
| Audio In | 1 × Audio input connector |
| HDMI | HDMI input connector |
| YPbPr | YPbPr input connector |
| SDI | 3G-SDI input connector De-interlacing supported |
| DVI | DVI input connector |
| VGA1-VGA2 | VGA input connector |
| CVBS1 | PAL/NTSC-compliant composite video input |
| CVBS2 | PAL/NTSC-compliant composite video input |

| Output | |
|---------------------|---|
| SDI LOOP | SDI loop output connector |
| DVI LOOP | DVI loop output connector |
| Monitor -VGA OUT | VGA monitoring connector |
| Monitor -DVI OUT | DVI monitoring connector |
| LED Out 1, 2, 3, 4 | 4 Gigabit Ethernet output connectors. Only Ethernet port 1 supports audio output. When the multifunction card is connected for audio decoding, the multifunction card must be connected to the Ethernet port 1. |
| Control | |
| UART IN | Used as input for device cascading |
| UART OUT | Used as output for device cascading |
| USB | For communication with PC |
| Power | |
| AC 100-240V-50/60Hz | AC power connector |

Dimensions



Specifications

| Input | | |
|-----------|-----|--|
| Connector | Qty | Description |
| CVBS | 2 | PAL/NTSC |
| VGA | 2 | VESA standard Resolution up to 1080p@60Hz |
| SDI | 1 | 480i, 576i, 720P, 1080i/P |
| DVI | 1 | VESA standard (1080i input supported) HDCP compliant |
| HDMI | 1 | EIA/CEA-861 standard, HDMI 1.3 standard compliant HDCP compliant |

| | | |
|-----------------------|-------------------------------|-----------------------------|
| YPbPr | 1 | Resolution up to 1080p@60Hz |
| Overall | | |
| Power connector | AC100-240V~, 50/60Hz | |
| Overall consumption | 35 W | |
| Operating temperature | -20°C–60°C | |
| Dimensions | 482.5 mm × 273.8 mm × 44.7 mm | |
| Weight | 3.09 kg | |

Appendix

Conflict List for PIP Input Source

| | | Input Source of Main Layer | | | | | | | |
|------------------------|-------|----------------------------|-----|-----|------|------|-------|-------|-------|
| | | HDMI | DVI | SDI | VGA1 | VGA2 | CVBS1 | CVBS2 | YPbPr |
| PIP Input Source | HDMI | - | x | √ | √ | √ | √ | √ | √ |
| | DVI | x | - | √ | √ | √ | √ | √ | √ |
| | SDI | √ | √ | - | √ | √ | √ | √ | √ |
| | VGA1 | √ | √ | √ | - | x | √ | √ | √ |
| | VGA2 | √ | √ | √ | x | - | √ | √ | √ |
| | CVBS1 | √ | √ | √ | √ | √ | - | x | √ |
| | CVBS2 | √ | √ | √ | √ | √ | x | - | √ |
| | YPbPr | √ | √ | √ | √ | √ | √ | √ | - |

- √: Main layer and PIP can use the input source simultaneously.
- x: Main layer and PIP cannot use the input source simultaneously.
- -: Main layer and PIP use the same input source.