NOVASTAR

Specifications
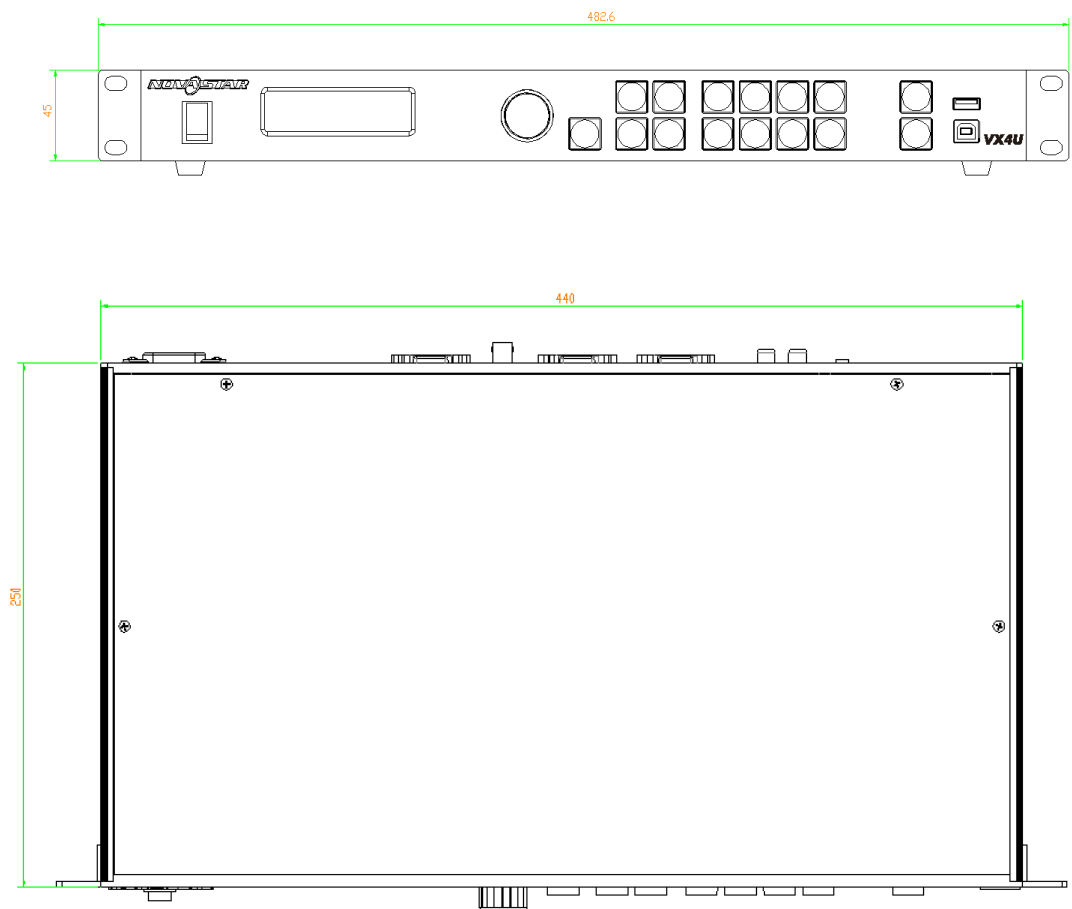
Video Controller VX4U

Overview

VX4U is a professional LED display controller of NovaStar. Besides having all the functions of an LED display controller, it also features powerful front end video processing. With high image quality and flexible image control, VX4U is able to meet the demands of media industry.

Features

1) The inputs of the VX4U include CVBS×2, VGA×2, DVI×1, HDMI×1 , DP×1 and USB×1. The supported input resolution is up to 1920× 1200@60Hz. The input images of VX4U can be zoomed point-to-point according to the resolution of LED display.

2) With seamless quick switch and fade-in/out effects to enhance and present pictures of professional quality.

3) The location and size of PIP (Picture in Picture) are adjustable, which can be controlled at will.

4) Adopts Nova G4 engine. The screen is stable and flicker free without scanning lines. Images are exquisite and have a good sense of depth.

5) Able to perform white balance calibration and color gamut mapping based on the different features of LEDs used by screens to ensure restoration of true colors.

6) HDMI/external independent audio input.

7) Supports high-bit video input, 10bit/8bit.

8) Loading capacity of video output: 2.3 million pixels.

9) Supports multiple controller montage for loading huge screen;

10) Supports Nova's new-generation pixel-by-pixel calibration technology and the calibration is fast and efficient.

11) Adopts an innovative design to enable smart configuration. Screen settings can be completed within several minutes, which has greatly shorten the preparation time.

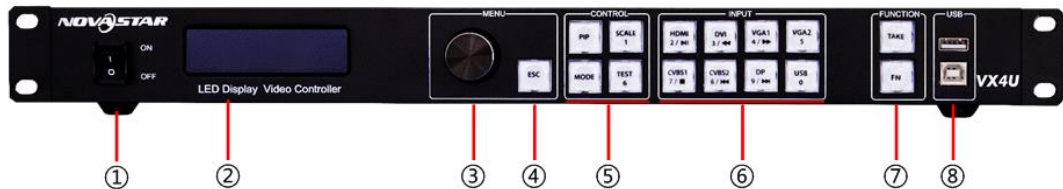12) With an intuitive LCD interface and clear button indicator lights to simplify the control of the system.

Dimensions

(mm)

Appearance

Front panel

①: **Power switch.**	
②: **Operation screen.**	
③: **Knob.** Pressing the knob indicates Enter or OK and rotating the knob means selection or adjustment.	
④: **ESC.** Escape current operation or option.	
⑤: **Four control shortcuts.** **PIP:** Enable/Disable PIP. The indicator light on denotes PIP is enabled, otherwise, PIP is disabled. **SCALE:** Enable/Disable screen scaling. The indicator light on denotes the scale function is enabled, otherwise, scale function is unavailable. **MODE:** Shortcut menu for loading or saving models. The indicator light is on when entering the model or shortcut menu. The indicator light is off after exiting. **TEST:** Shortcut for enabling or disabling test pattern. In case of entering test pattern, the indicator light is on, otherwise, the light is off.	Note： You can enter numbers, such as layer size and offset value, by pressing the number buttons. The number button will be highlighted after pressed.
⑥: **Shortcuts for switching of 8 signal input sources.** Press to set as main screen input source and long press to set as PIP input source. The setting result can be viewed on the operation screen.	
⑦: **Function keys** **TAKE:** Shortcut for screen switching. After pressing TAKE key, PIP will be enabled. Switching between MAIN and PIP will be realized after it is enabled. **Fn:** Custom shortcut.	

⑧: **Flat mouth** (Type A USB) is USB interface for connecting USB drive;

Square mouth (Type B USB) is USB control interface to connect PC for communication.

Rear Panel

Tips: In order to improve user's experience, the layout of the interfaces may be adjusted a little. The figure above is only for reference.

Inputs	
Audio	Audio Input
DP	DP Input
HDMI	HDMI Input
USB	USB Input
DVI	DVI Input
VGA1~VGA2	2-Channel VGA Inputs
CVBS1~CVBS2	PAL/NTSC System Composite Video Input
Outputs	
DVI LOOP	DVI Loop Output
Monitor -DVI OUT 1	DVI Monitoring Interface 1
Monitor -DVI OUT 2	DVI Monitoring Interface 2
LED Out 1, 2, 3, 4	4 Gigabit Ethernet outputs. 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	
ETHERNET	Ethernet Control (Connect PC for communication or access network)
Type B USB	USB Control (Connect PC for communication or USB cascade input)
Type A USB	USB cascade output

Power	
AC 100-240V ~ 50/60Hz	AC power interface

Tip: Type A USB interfaces on both the front and rear panel are not allowed to connect PC directly.

Specifications

Input Index		
Port	**Qty**	**Resolution Specifications**
CVBS	2	PAL/NTSC
VGA	2	VESA Standard, support max. 1920×1200@60Hz input
DVI	1	VESA Standard (support 1080i input), support HDCP
USB	1	Multimedia file formats: avi, mp4, mpg, mkv, mov and vob Image file formats: jpg, jpeg, bmp and png
		Multimedia coding formats: MJPEG, MPEG-1, MPEG-2, MPEG-4, DivX, H.264, Xvid
HDMI	1	EIA/CEA-861 standard, in accordance with HDMI-1.3 standard, support HDCP
DP	1	VESA Standard

Output Index		
Port	**Qty**	**Resolution Specifications**
DVI LOOP	1	Consistent with DVI input
VGA	1	Monitoring output connector
DVI	1	Max. output 1280×1024@60Hz (2.3 million pixels)
LED OUT	4	4 Gigabit Ethernet outputs. 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. Maximum horizontal resolution is 3840 pixels. Maximum vertical resolution is 1920 pixels.

Overall Specifications	
Input Power	AC100～240VAC，50/60Hz
Overall Power Consumption	25W
Operating Temperature	-20~60℃
Dimensions	482.6×250×45（mm）
Weight	2.55 Kg

Appendix

Conflict list of PIP signal sources

		Input Source of Main Channel							
		HDMI	DVI	VGA1	VGA2	CVBS1	CVBS2	USB	DP
PIP Input Source	HDMI		×	√	√	√	√	√	√
	DVI	×		√	√	√	√	√	√
	VGA1	√	√		×	√	√	√	√
	VGA2	√	√	×		√	√	√	√
	CVBS1	√	√	√	√		×	√	√
	CVBS2	√	√	√	√	×		√	√
	USB	√	√	√	√	√	√		√
	DP	√	√	√	√	√	√	√	

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