Specifications

LED Display Video Controller VX4

Rev1.0.5 NS160100378

General

The VX4 is a professional LED display controller. Besides the function of display control, it also features in powerful front end processing, so an external scalar is no longer needed. With professional interfaces integrated, VX4 with excellent image quality and flexible image control greatly meet the needs of the broadcast industry, its friendly in user-interface. So that the display to work has never been as easier and more enjoyable as with VX4.

Feature

1) The inputs of the VX4 include CVBS×3, VGA×3, DVI×2, HDMI×1 , DP×1. They support input resolution up to 1920×1200@60Hz; the input images of VX4 can be zoomed point-to-point according to the screen resolution;
2) Provide seamless high-speed switch and fade-in/ fade-out effect so as to strengthen and display picture demonstration of professional quality;
3) The location and size of PIP can both be adjusted, which can be controlled at will;
4) Adopt the Nova G4 engine; the screen is stable and flicker free without scanning lines; the images are exquisite and have a good sense of depth;
5) Can implement white balance calibration and color gamut mapping based on different features of LEDs used by screens to ensure reproduction of true colors;
6) HDMI/external audio input;
7) 10bit/8bit HD video source;
8) The loading capacity: 2.3 million pixel;
9) Support multiple controller montage for loading huge screen;
10) Support Nova's new-generation point-by-point correction technology; the correction is fast and efficient;
11) Computer software for system configuration is not necessary. The system can be configured using one knob and one button. All can be done just

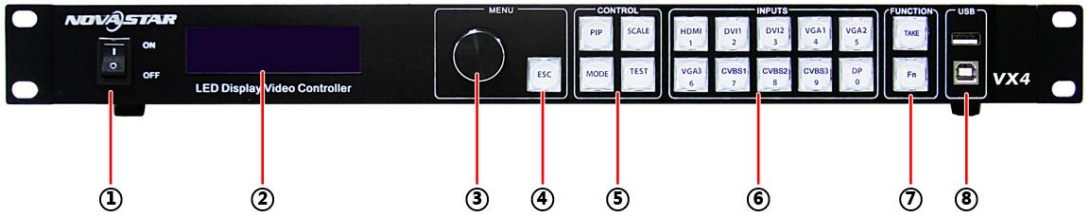
by fingers. That's what we called Touch Track!

12) Adopt an innovative architecture to implement smart configuration; the screen debugging can be completed within 30 seconds; greatly shorten the preparation time on the stage;

13) A intuitive LCD display interface and clear button light hint simplify the control of the system.

Appearance description

Front panel



①**: Power switch.**
②**: Operation screen.**
③**: Knob.** To press knob means Enter or OK, rotating knob represents selection or adjustment.
④**: ESC.** Escape current operation or selection.
⑤**: Four control keyboard shortcuts.** **PIP:** PIP Turn-on/off. The lighting of this key represents the turn-on of PIP; otherwise, PIP is turned off. **SCALE:** Picture zoom turn-on/turn off. The lighting of this key represents the turn-on of zoom function; otherwise, zoom function is unavailable. **MODE:** Shortcut menu of loading or storage of display model. The key is light when entering the model or shortcut menu, in case of exiting, the key is not bright. **TEST:** Shortcut of turn-on/off of testing picture. In case of entering testing picture, the key is bright; otherwise, the key is not bright.
⑥:**Shortcut keys for switching of 10 signal input source.** Short press to set as the main screen input source, and long press to set as PIP input source. The key is bright after press when the video source has signal; the key flashes when the input of video source has no signal. The setting result can be checked while setting on the display screen and LCD screen.

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.
⑦: **Function keys.** **TAKE:** Display switching shortcut key. After short pressing TAKE key, PIP will be opened; if it has been opened, the switching of between MAIN and PIP will be realized. **Fn:** Custom shortcut key.
⑧: **Flat mouth** (Type A, female USB) is USB interface, which connects U disk; **Square mouth** (Type B female USB) is USB controlling interface, Communication with PC.

Rear Panel

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

Input Source	
Audio	Audio Input
DP	DP Input
HDMI	HDMI Input
CVBS1~CVBS3	3-Channel PAL/NTSC TV composite video Inputs
DVI -1~DVI-2	2-Channel DVI Inputs
VGA1~VGA3	3-Channel VGA Inputs
Output Interface	
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.
Controlling Interface	
ETHERNET	Network Control (Communication with PC, or Access Network)
Type B, female USB	USB Control (Communication with PC, or Cascade IN)
Type A, female USB	USB Cascade OUT
Power	

AC 100-240V ~ 50/60Hz	AC Power Interface

Tips: The two USB (typeA) on front panel and rear panel are both forbidden to connect with PC directly.

Specification Parameters

Input Index		
Port	**Number**	**Resolution Specification**
VGA	3	VESA Standard, support max. 1920×1200@60Hz input
DVI	2	VESA Standard (support 1080i input), support HDCP
CVBS	3	PAL/NTSC
HDMI	1	EIA/CEA-861 standard, in accordance with HDMI-1.3 standard, support HDCP
DP	1	VESA Standard

Output Index		
Port	**Number**	**Resolution Specification**
DVI LOOP	1	Consistent with DVI input
DVI	2	Monitoring output connector Up to 1920×1200@60Hz output resolution
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.

Control Interface		
Port	**Number**	**Description**
USB	2	Control interface for host computer
RJ45	1	Communication interface for multiple computers

Specification of complete machine	
Input Power	AC 100-240V, 50/60Hz
Overall Power Consumption	25W
Operating Temperature	-20~60℃
Size	482.6×251.5×45（mm）
Weight	2.55 Kg

Attachment

The Conflict List of PIP Signal Source.

		Input Source of Main Channel									
		HDMI	DVI1	DVI2	VGA1	VGA2	VGA3	CVBS1	CVBS2	CVBS3	DP
PIP Input Source	HDMI		√	×	√	√	√	√	√	√	√
	DVI1	√		√	×	√	√	×	√	√	√
	DVI2	×	√		√	√	√	√	√	√	√
	VGA1	√	×	√		√	√	×	√	√	√
	VGA2	√	√	√	√		×	√	√	√	√
	VAG3	√	√	√	√	×		√	√	√	√
	CVBS1	√	×	√	×	√	√		√	√	√
	CVBS2	√	√	√	√	√	√	√		×	√
	CVBS3	√	√	√	√	√	√	√	×		√
	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.