VX6s

All-in-One Controller

V1.3.1
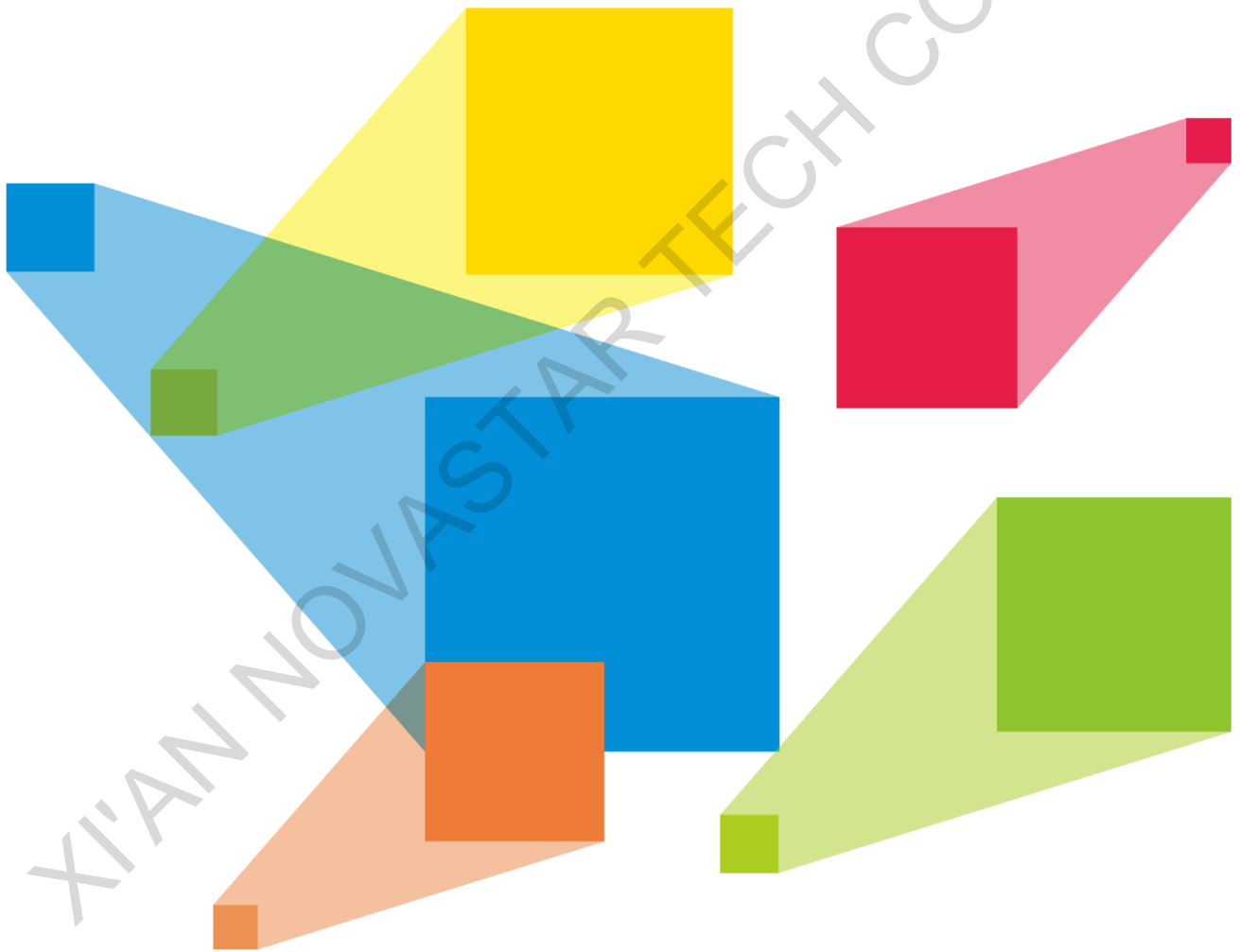
Specifications

Change History

Document Version	Release Date	Description
V1.3.1	2020-12-31	• Updated the rear panel appearance. • Updated the certifications.
V1.3.0	2020-05-20	• Increased the maximum custom resolution width of DVI and HDMI connectors to 3,840 pixels in the direct mode. • Added 3 scaling modes for windows. • Added the product packing information. • Added the function of adjusting the monitor resolution.
V1.2.0	2019-08-21	• Added the SDI1 deinterlacing function. • Added the SDI synchronization function. • Deleted the OSD function.
V1.1.1	2019-07-17	None
V1.1.0	2019-04-28	• Updated the device rear panel picture. • Added the hardware version description. • Changed part of menu names. • Adjusted the menu order.

V1.0.1	2019-03-21	• Optimized the description for the following points.
		  − The maximum video output width and height are both 4,096 pixels.
		  − Updated the description for the CONTROL area on the device front panel.
		  − Updated the description for the INPUTS area on the device front panel.
		• Added the description for getting stuck when switching the input source.
		• Added the description for the audio output of the Ethernet port.

V1.0.0	2019-03-09	First release

Introduction

The VX6s is an all-in-one controller that integrates sending card functions with video processing. Designed with powerful video processing capability, it supports 7 video inputs and 6 Gigabit Ethernet outputs.
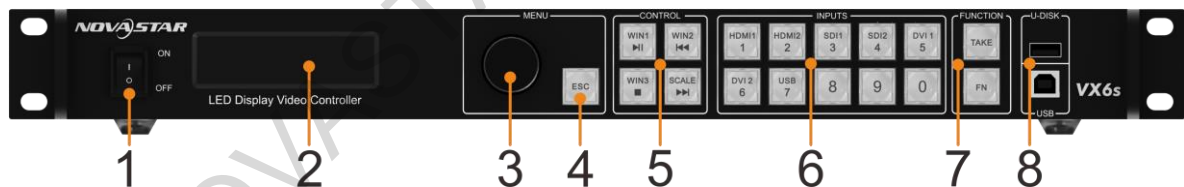
Based on the powerful FPGA processing platform, the VX6s supports multiple transition effects, such as quick seamless switching and fade, providing flexible display controlling and outstanding video presentations.

Features

- 7x inputs
  - 2x 3G-SDI
  - 2x HDMI 1.3
  - 1x DVI
  - 1x DVI (IN+LOOP)
  - 1x USB
- 2x types of output connectors
  - 6x Gigabit Ethernet ports

    Video output capacity up to 3,900,000 pixels, with the width or height up to 4096 pixels
  - 1x DVI for monitoring

    Support PVW or PGM monitoring, and the monitoring resolution is adjustable.
- 3x windows
  - Adjustable window position and size
  - Z-order sorting
  - 3 scaling modes for window output:

    Full screen

    Pixel to pixel

    Custom
- 2x screen configuration methods
  - Quick screen configuration
  - Advanced screen configuration
- 2x system modes
  - Direct mode

    Support display content monitoring.
  - Switcher mode

    Switch the PVW to PGM by pressing only the TAKE button.
- Screen brightness adjustment
- Multiple VX6s units linked to load a screen
- 16x user presets saved as templates and conveniently recalled by pressing the number buttons on the front panel
- Lock to the HDMI, SDI or DVI input source to achieve vertical synchronization between outputs of multiple VX6s units.
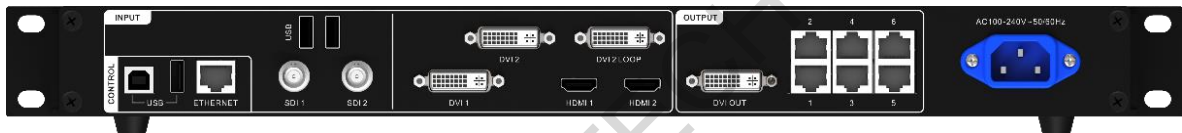
Appearance

Front Panel

No.	Button	Function
1	ON/OFF button	Power button
2	OLED screen	Displays the current status and setting menu of the device.
3	Knob	• Rotate the knob to scroll through the menu items, or adjust a parameter value. • Press the knob to confirm the selection or settings.
4	ESC button	Pressing the button exits the current menu or operation.
5	Window control buttons	Pressing a button enters the corresponding window property menu. Statuses of button indicators: • On: The window is open. • Off: The window is closed. • Flashing: The window is being edited. • When a window is open, holding down the window button can close the window. • In the USB playback mode, you can play, pause, play previous, play next or

|		stop current playback.
		• **SCALE**: This is a shortcut button for auto fit function. You can press this button to make the window of the lowest priority fit the screen.
6	Input source buttons	Pressing the button switches the input source for the window. The button indicators indicate the statuses of the input source. Button indicator descriptions:
		• Always on: The signal source is accessed.
		• Flashing: The input source is in use, but no signal source is accessed.
		• Off: The input source is not in use and no signal source is accessed.
7	Function buttons	• **TAKE**: In the switcher mode, pressing the **TAKE** button can switch the PVW to PGM seamlessly with the transition effect set previously.
		• **FN**: A custom menu button. In USB playback mode, press the button to play the media files in USB drive.
8	USB	• USB (Type-B): Connects to the upper computer.
		• USB (Type-A): A reserved port

Rear Panel

| Input		
Connector	**Quantity**	**Description**
3G-SDI	2	• Supports input resolutions up to 1920×1080@60Hz and downward compatibility.
		• Supports both progressive and interlaced signals.
		• SDI1 supports de-interlacing.
		Note:
		SDI does not support input resolution and bit depth settings.
USB 2.0	2	Connects to a mouse/keyboard, or connects to a USB drive to play media files stored in the drive. The supported USB drives and the formats of the media files in it are described as follows.
		• USB drive: FAT/FAT32
		The USB drive cannot be a partitioned one or used as the system startup disk.
		• Picture file format: JPG, JPEG, BMP, PNG and WEBP
		• Video file format: MP4, AVI, MKV, MOV, 3GP, FLV and MPG
		Video coding: MPEG-1/2, MPEG-4, H.264/AVC, MVC, H.265/HEVC, H.263, GOOGLE VP8, VC-1 and MOTION JPEG
		• Audio file format: MP3, WMA, WAV and 3GP
		Audio coding:
		− MPEG Audio: MPEG1/2/2.5 Audio Layer1/2/3
		− Windows Media Audio: WMA Version4/4.1/7/8/9, wmapro
		− WAV Audio: MS-ADPCM, IMA-ADPCM, PCM
		− FLAC Audio: Compress Level 0-8
		− AAC Audio: ADIF，ATDS Header AAC-LC and AAC-HE, AAC-ELD

		− AMR Audio: AMR-NB, AMR-WB
DVI	2	• VESA standard, input resolutions up to 1920×1200@60Hz
		• Support for custom resolutions:
		− Direct mode: Width up to 3,840 pixels (3840×648@60Hz)
		− Switcher mode: Width up to 2,048 pixels (2048×1200@60Hz)
		− Height up to 1,600 pixels (1510×1600@60Hz)
		• HDCP 1.4 compliant
		• DOES NOT support interlaced signal input.
		The frame rate of the DVI connector is 60 Hz by default and the supported frequently used standard resolutions are as follows:
		• 800×600 • 1280×800 • 1600×1200
		• 1024×768 • 1280×1024 • 1680×1050
		• 1280×720 • 1366×768 • 1920×1080
		• 1280×768 • 1440×900 • 1920×1200
DVI LOOP	1	DVI loop output connector
HDMI	2	• VESA standard, input resolutions up to 1920×1200@60Hz
		• Support for custom resolutions:
		− Direct mode: Width up to 3,840 pixels (3840×648@60Hz)
		− Switcher mode: Width up to 2,048 pixels (2048×1200@60Hz)
		− Height up to 1,600 pixels (1510×1600@60Hz)
		• HDCP 1.4 compliant
		• DOES NOT support interlaced signal input.
		The frame rate of the DVI connector is 60 Hz by default and the supported frequently used standard resolutions are as follows:
		• 800×600 • 1280×800 • 1600×1200
		• 1024×768 • 1280×1024 • 1680×1050
		• 1280×720 • 1366×768 • 1920×1080
		• 1280×768 • 1440×900 • 1920×1200

Output

Connector	Quantity	Description
Ethernet	6	6 Ethernet outputs
DVI	1	A monitoring connector, which can be set to preview the editing image or monitor the PGM
		The frame rate of the monitor output is 60 Hz and the supported standard resolutions are as follows:
		• 800×600 • 1280×800 • 1600×1200
		• 1024×768 • 1280×1024 • 1680×1050
		• 1280×720 • 1366×768 • 1920×1080
		• 1280×768 • 1440×900 • 1920×1200

Control

Connector	Quantity	Description
ETHERNET	1	Connects to the PC for communication, or to the network.
USB	1	• 1 × USB (Type-B)
		− Connects to the PC for device control.

		– Used as the input connector for cascading devices
		• 1 ×USB (Type-A) Used as the output connector for cascading devices

Dimensions

Tolerance: ±0.3   Unit: mm
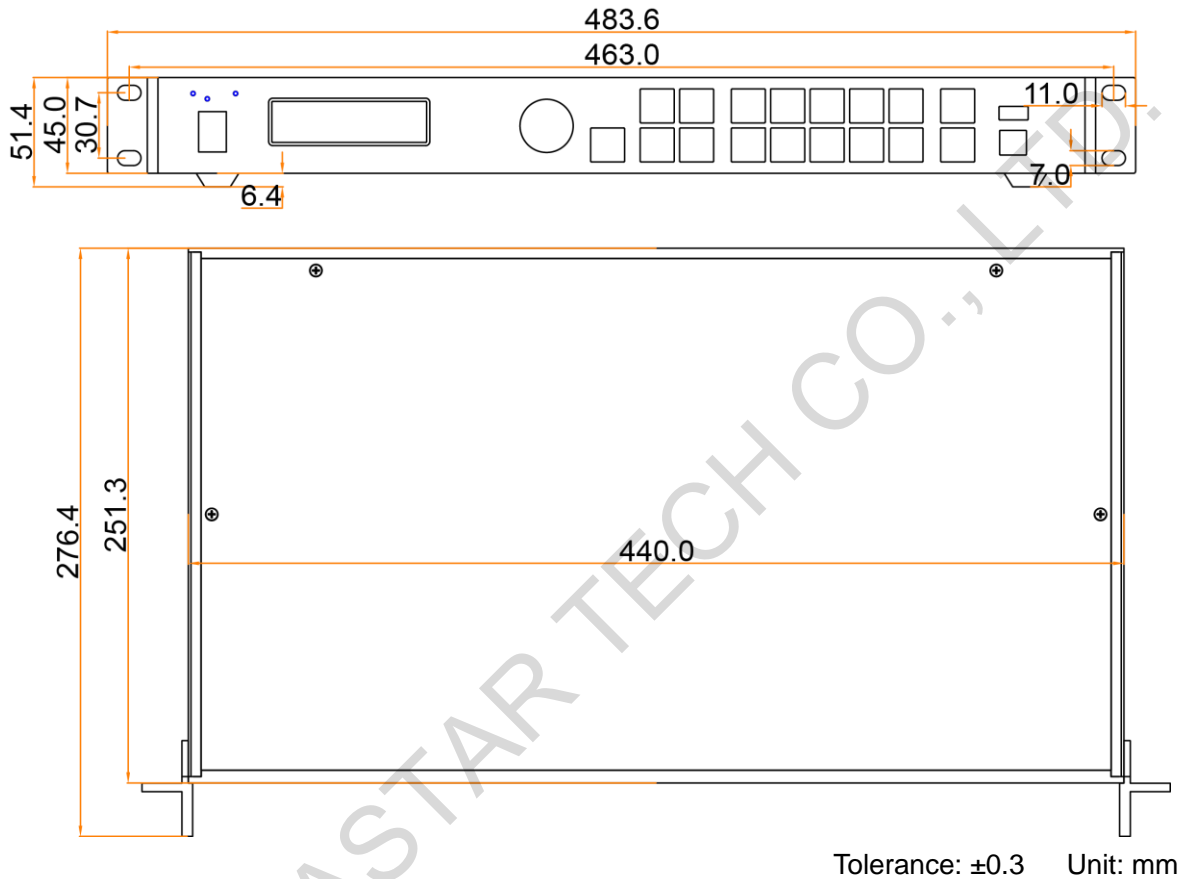
Applications
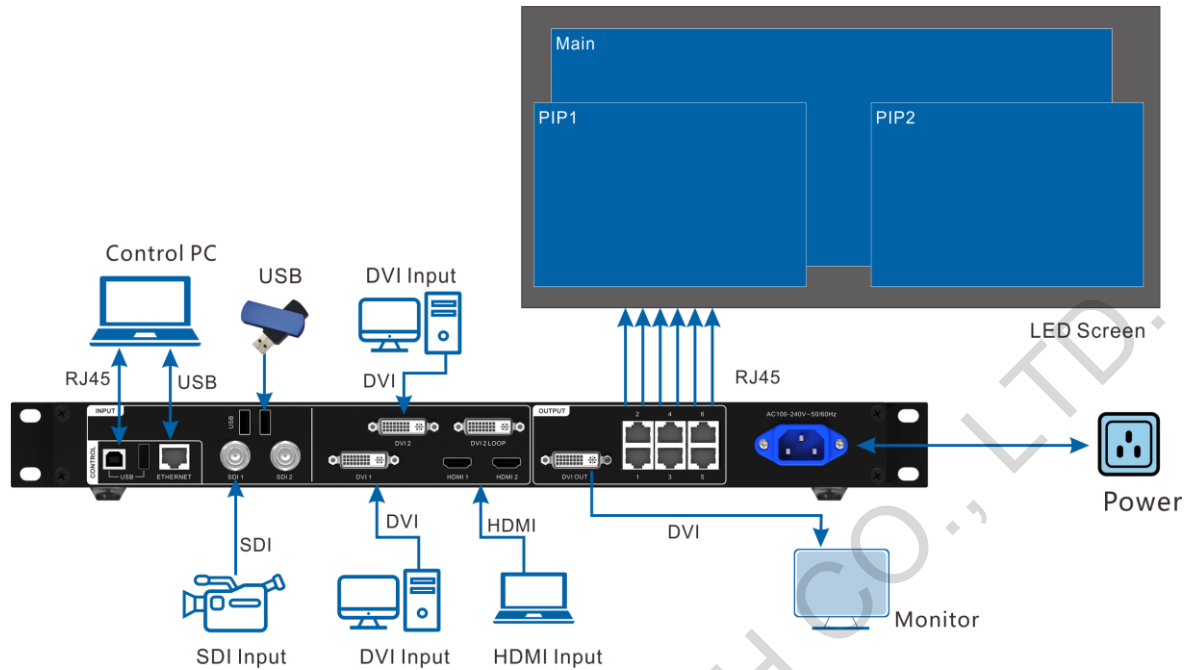
Specifications

Overall Specifications		
Electrical Parameters	Power consumption	65 W
	Power supply	AC100V-240V~ 50/60Hz
Operating Environment	Temperature	0°C to +45°C
	Humidity	20% RH to 90% RH non-condensing
storage environment	Humidity	10% RH to 95% RH non-condensing
Physical Specifications	Dimensions	483.6mm × 276.4mm × 51.4mm
	Net weight	2.71 kg
	Total weight	5.9 kg
Packing Information	Carrying case	540 mm × 370 mm × 140 mm
	Accessory box	1 × power cable 1 × USB cable 1 × DVI cable 1 × HDMI cable 1 × Ethernet cable 1 × Quick Start Guide 1 × Certificate of Approval
	Packing box	555mm × 405mm × 180mm
Certifications		CE, RoHS, FCC, IC, RCM, CB, KC, UL, EAC
Noise Level (Typical 25°C/77°F)		40 dB(A)

Video Source Features

Input Connector	Color Depth		Max. Input Resolution
HDMI 1.3	8bit	RGB 4:4:4	1920×1200@60Hz (Standard) 2046×1600@60Hz (Custom)
		YCbCr 4:4:4	
		YCbCr 4:2:2	
		YCbCr 4:2:0	Not supported
	10bit	RGB 4:4:4	1920×1200@60Hz (Standard) 2046×1600@60Hz (Custom)
		YCbCr 4:4:4	
		YCbCr 4:2:2	
		YCbCr 4:2:0	Not supported
	12bit	-	Not supported
SL-DVI	8bit	RGB 4:4:4	1920×1200@60Hz (Standard) 2046×1600@60Hz (Custom)
3G-SDI	• Max. input resolution: 1920×1080@60Hz • DOES NOT support input resolution and bit depth settings. • Support ST-424 (3G) and ST-292 (HD) standard video inputs.		

Statement

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Official website
www.novastar.tech

Technical support
support@novastar.tech