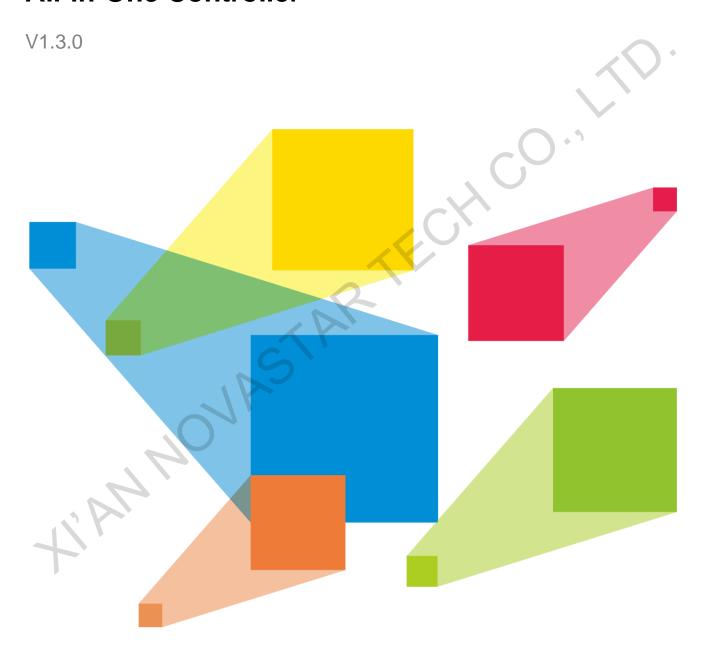


VX6s

All-in-One Controller



Specifications

Change History

Document Version	Release Date	Description
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.

PAGE 1

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	
		 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	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	
19		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	

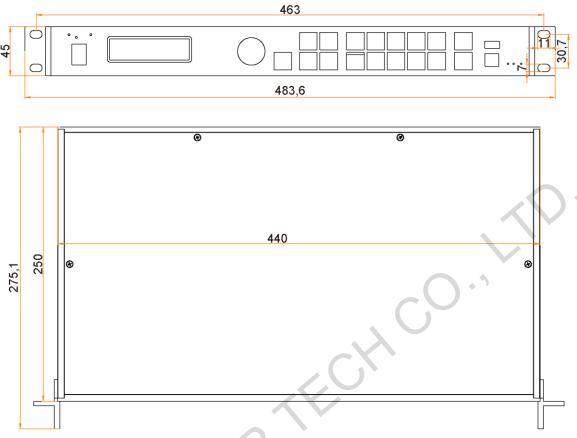
	Г	I			
DVI	2	VESA standard, input resolutions up to 1920×1200@60Hz			
		Support for custom resolutions:			
		 Direct mode: Width up to 3,840 pixels (3840×648@60Hz) 			
		 Switcher mode: Width up to 2,048 pixels (2048×1200@60Hz) 			
		 Height up to 1,600 pixels (1510×1600@60Hz) 			
		HDCP 1.4 compliant			
		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 co			
HDMI	2		input resolutions up to 192	0×1200@60Hz	
		Support for custo			
			e: Width up to 3,840 pixels		
		 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		ŀ			
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 			

www.novastar.tech

		1 xUSB (Type-A)		
		Used as the output connector for cascading devices		
Overall Specif	ications			
Electrical Parameters	Power consumption	65 W		
	Power supply	AC100V-240V~ 50/60Hz		
Operating	Temperature	0°C to +45°C		
Environment	Humidity	20% RH to 90% RH non-condensing		
storage environment	Humidity	10% RH to 95% RH non-condensing		
Physical	Dimensions	483.6 mm × 275.1 mm × 45.0 mm		
Specifications	Net weight	2.71 kg		
	Total weight	5.9 kg		
	Noise Level	40 dB(A)		
Packing	Carrying case	530 mm × 370 mm × 140 mm		
Accessory box 402 mm × 347 mm × 65 mm Accessories include: 1 × power cable 1 × USB cable 1 × DVI cable 1 × HDMI cable 1 × Ethernet cable 1 × Quick Start Guide 1 × Certificate of Approval		Accessories include: 1 × power cable 1 × USB cable 1 × DVI cable 1 × HDMI cable 1 × Ethernet cable 1 × Quick Start Guide		
Certifications		CE, RoHS, FCC, IC, RCM, CB, KC		

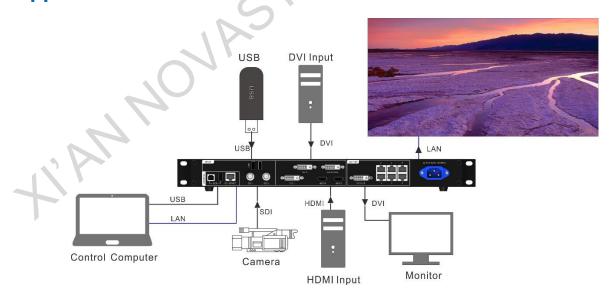
www.novastar.tech PAGE 5

Dimensions



Tolerance: ±0.3 Unit: mm

Applications



Video Source Features

Input Connector	Color Depth		Max. Input Resolution	
HDMI 1.3	8bit	RGB 4:4:4	1920×1200@60Hz (Standard)	
		YCbCr 4:4:4	2046×1600@60Hz (Custom)	
		YCbCr 4:2:2		
		YCbCr 4:2:0	Not supported	
	10bit	RGB 4:4:4	1920×1200@60Hz (Standard)	
		YCbCr 4:4:4	2046×1600@60Hz (Custom)	
		YCbCr 4:2:2	\(\).	
		YCbCr 4:2:0	Not supported	
	12bit	RGB 4:4:4	Not supported	
		YCbCr 4:4:4	0.1	
		YCbCr 4:2:2	\sim	
		YCbCr 4:2:0		
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.			

Copyright © 2020 Xi'an NovaStar Tech Co., Ltd. All Rights Reserved.

No part of this document may be copied, reproduced, extracted or transmitted in any form or by any means without the prior written consent of Xi'an NovaStar Tech Co., Ltd.

Trademark

NOVA) STAR is a trademark of Xi'an NovaStar Tech Co., Ltd.

Statement

You are welcome to use the product of Xi'an NovaStar Tech Co., Ltd. (hereinafter referred to as NovaStar). This document is intended to help you understand and use the product. For accuracy and reliability, NovaStar may make improvements and/or changes to this document at any time and without notice. If you experience any problems in use or have any suggestions, please contact us via contact info given in document. We will do our best to solve any issues, as well as evaluate and implement any suggestions.

Official website www.novastar.tech

Technical support support@novastar.tech