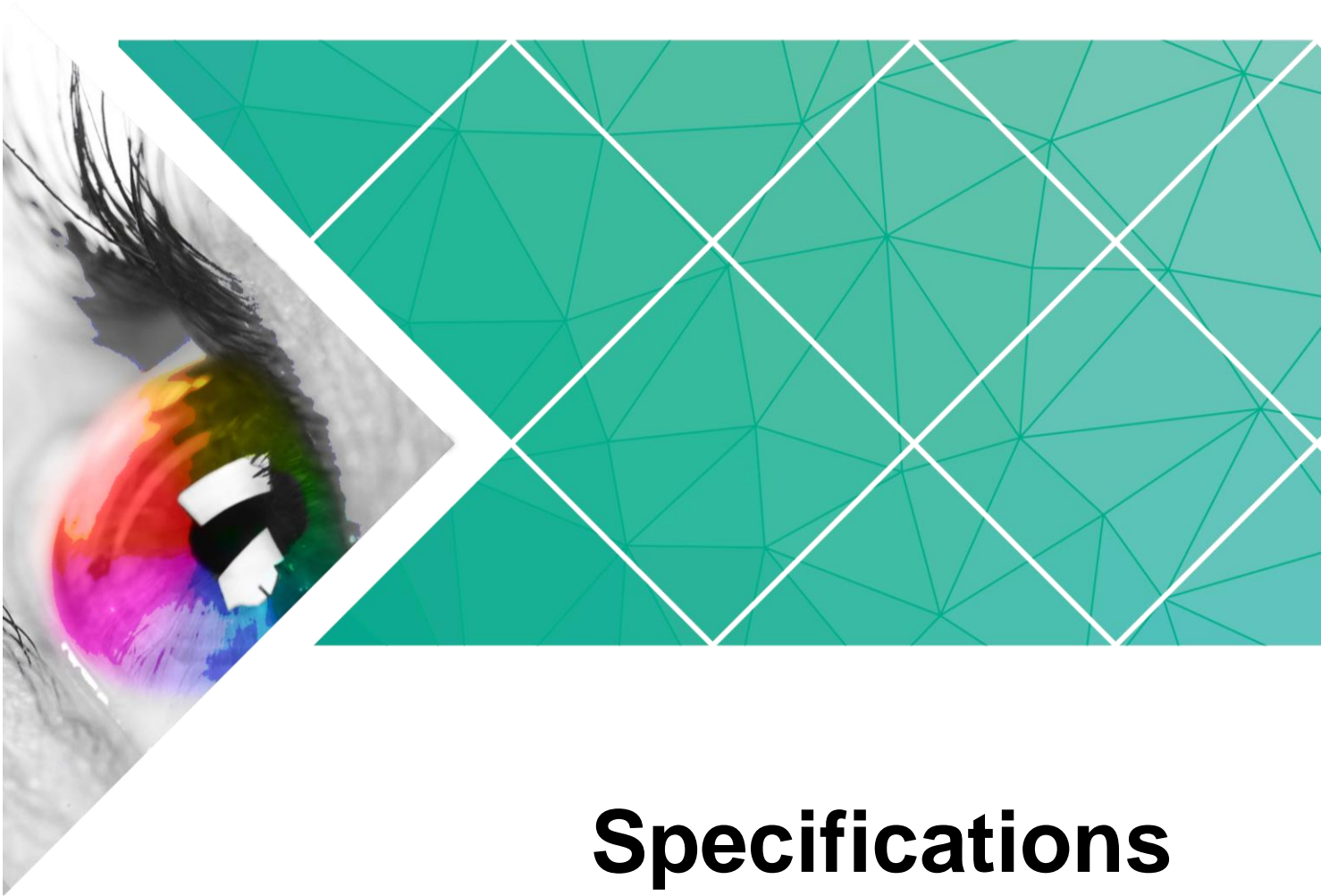


# VX6s

## All-in-One Controller



# Specifications

Document Version: V1.1.0

Document Number: NS160100416

**Copyright © 2019 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**

 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 information given in document. We will do our best to solve any issues, as well as evaluate and implement any suggestions.

## Change History

Version	Hardware Version	Release Date	Description
V1.1.0	V1.0.6.0	2019-04-28	<ul style="list-style-type: none"><li>• Updated the device rear panel picture.</li><li>• Added the hardware version description.</li><li>• Changed part of menu names.</li><li>• Adjusted the menu order.</li></ul>
V1.0.1	N/A	2019-03-21	<ul style="list-style-type: none"><li>• Optimized the descriptions for the following points.<ul style="list-style-type: none"><li>– The maximum video output width and height are both 4096 pixels.</li><li>– Updated the descriptions for Control area on the device front panel.</li><li>– Updated the descriptions for Inputs area on the device front panel.</li></ul></li></ul>
V1.0.0	N/A	2019-03-09	First release

# 1 Overview

---

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.

The VX6s is equipped with an expansion card which can connect a USB drive to play the media files stored in it. By connecting a mouse and monitor, the USB playback can be intuitively monitored in real-time.

## 2 Features

---

- Features 7 input connectors: 2 x 3G-SDI, 2 x HDMI 1.3, 2 x DVI, 1 x DVI+DVI LOOP and 1 x USB playback.
- Supports 3 x window and 1 x OSD.
- Supports quick and advanced screen configurations.
- Switches the PVW to PGM by pressing only the TAKE button in the switcher mode.
- Supports adjustment of input resolutions.
- Supports device redundancy settings.
- The maximum loading capacity of video output is 3.9 million pixels.
- Supports brightness adjustment of the screen loaded by the VX6s.
- Multiple VX6s units can be cascaded.
- Supports auto fit function of windows.
- The maximum video output width and height are both 4096 pixels.
- A total of 16 user presets can be created and saved as templates. The templates can be used directly and conveniently by pressing the number buttons on the front panel.
- Any HDMI or DVI input source can be used as the synchronization signal to achieve vertical synchronization of outputs of multiple devices.
- Features an intuitive OLED screen and clear button indicator prompt in the front panel, simplifying system control and operation.

# 3 Appearance

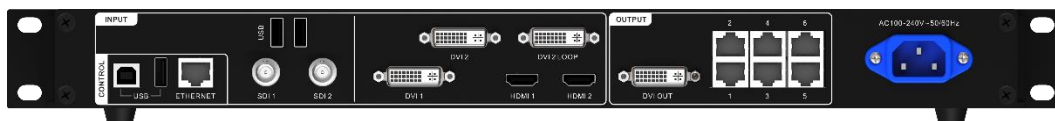
## Front Panel



No.	Button	Function
1	ON/OFF button	Power button
2	OLED screen	Displays the current status and setting menu of the device.
3	Knob	<ul style="list-style-type: none"> <li>On the home screen, pressing the knob enters the operation menu screen.</li> <li>On the operation menu screen, rotating the knob selects a menu item, and pressing the knob confirms the selection or enters the submenu.</li> <li>When a menu item with parameters is selected, you can rotate the knob to adjust the parameters. Please note that after adjustment, you need to press the knob again to confirm the adjustment.</li> </ul>
4	ESC button	Pressing the button exits the current menu or operation.
5	Window control buttons	<p>Pressing a button enters the corresponding window property menu.</p> <p>Statuses of button indicators:</p> <ul style="list-style-type: none"> <li>On: The window is open.</li> <li>Off: The window is closed.</li> <li>Flashing: The window is being edited.</li> <li>When a window is open, holding down the window button can close the window.</li> <li>In the USB playback mode, you can play, pause, play</li> </ul>

		<p>previous, play next or stop current playback.</p> <ul style="list-style-type: none"> <li>• <b>SCALE:</b> 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.</li> </ul>
6	Input source buttons	<p>Pressing the button switches the input source for the window. The button indicators indicate the statuses of the input source. Button indicator descriptions:</p> <ul style="list-style-type: none"> <li>• Always on: The signal source is accessed.</li> <li>• Flashing: The input source is in use, but no signal source is accessed.</li> <li>• Off: The input source is not in use and no signal source is accessed.</li> </ul>
7	Function buttons	<ul style="list-style-type: none"> <li>• <b>TAKE:</b> In the switcher mode, pressing the <b>TAKE</b> button can switch the PVW to PGM seamlessly with the transition effect set previously.</li> <li>• <b>FN:</b> A custom menu button. In USB playback mode, press the button to play the media files in USB drive.</li> </ul>
8	USB	<ul style="list-style-type: none"> <li>• USB (Type-B): Connects to the upper computer.</li> <li>• USB (Type-A): A reserved port</li> </ul>

Rear Panel

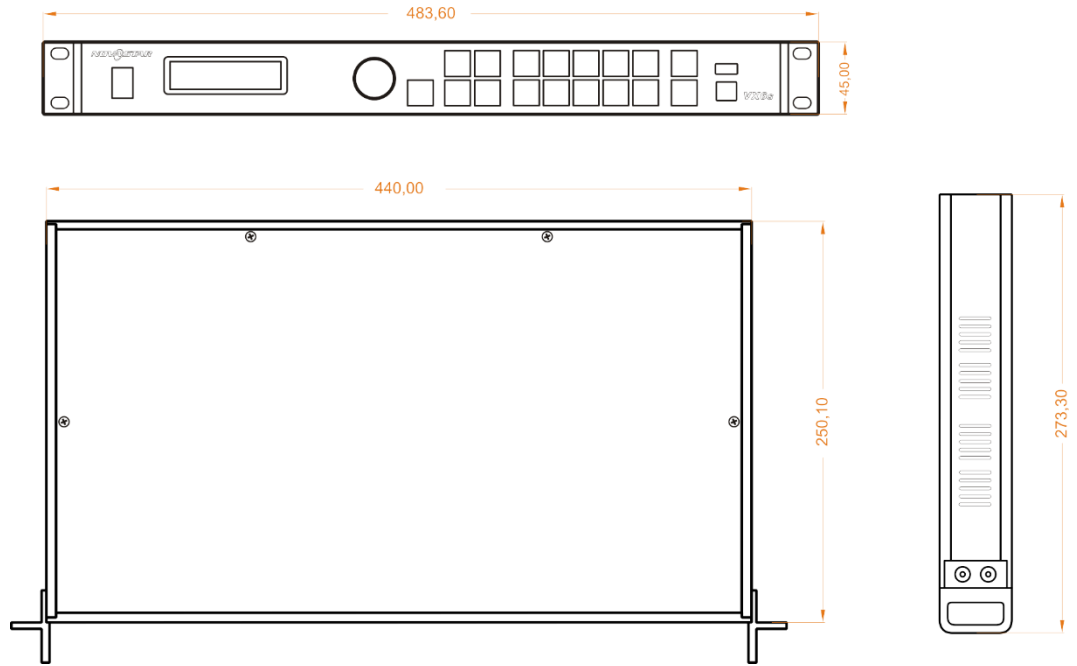


Input		
Connector	Quantity	Description
3G-SDI	2	<ul style="list-style-type: none"> <li>• Supports input resolutions up to 1920x1080@60Hz and downward compatibility.</li> <li>• SDI 1 supports de-interlacing.</li> </ul>
USB 2.0	2	<p>Connects to a mouse/keyboard, or connects to a USB drive to play media files stored in the drive. The supported USB drives and the formats of the media files in it are described as follows.</p> <ul style="list-style-type: none"> <li>• USB drive: FAT/FAT32 The USB drive cannot be a partitioned one or used as the system startup disk.</li> <li>• Picture file format: JPG, JPEG, BMP, PNG and WEBP</li> <li>• Video file format: MP4, AVI, MKV, MOV, 3GP, FLV and MPG</li> <li>• Video coding: MPEG-1/2, MPEG-4, H.264/AVC, MVC, H.265/HEVC, H.263, GOOGLE VP8, VC-1 and MOTION JPEG</li> <li>• Audio file format: MP3, WMA, WAV and 3GP</li> </ul>

		<p>Audio coding:</p> <ul style="list-style-type: none"> <li>- MPEG Audio: MPEG1/2/2.5 Audio Layer1/2/3</li> <li>- Windows Media Audio: WMA Version4/4.1/7/8/9, wmapro</li> <li>- WAV Audio: MS-ADPCM, IMA-ADPCM, PCM</li> <li>- FLAC Audio: Compress Level 0-8</li> <li>- AAC Audio: ADIF, ATDS Header AAC-LC and AAC-HE, AAC-ELD</li> <li>- AMR Audio: AMR-NB, AMR-WB</li> </ul>
DVI	2	<p>VESA standard</p> <p>Supports input resolutions up to 1920×1200@60Hz and downward compatibility.</p> <p>Supports HDCP.</p>
DVI LOOP	1	DVI loop output connector
HDMI	2	<p>Supports input resolutions up to 1920×1200@60Hz and downward compatibility.</p> <p>Supports HDCP.</p>
<b>Output</b>		
<b>Connector</b>	<b>Quantity</b>	<b>Description</b>
Ethernet	6	6 Ethernet outputs
DVI	1	A monitoring connector, which can be set to preview the editing image or monitor the PGM
<b>Control</b>		
<b>Connector</b>	<b>Quantity</b>	<b>Description</b>
ETHERNET	1	Connects to the PC for communication, or to the network.
USB (Type-B)	1	<ul style="list-style-type: none"> <li>• Connects to the PC for device control.</li> <li>• Used as the input connector for cascading devices</li> </ul>
USB (Type-A)	1	Used as the output connector for cascading devices
<b>Overall Specifications</b>		
<b>Connector</b>	<b>Quantity</b>	<b>Description</b>
Power connector	1	AC100-240V~50/60Hz
Power consumption		65 W
Operating temperature		-20°C–60°C
Dimensions		1U standard chassis
Weight		2.71 kg



# 4 Dimensions



Unit: mm

# 5 Applications

