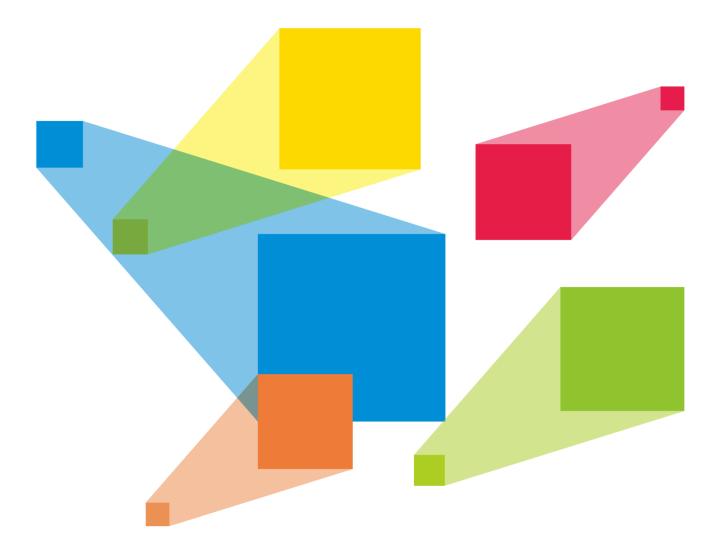


J6

Seamless Switcher

V2.2.0 NS160100530



Specification

Introduction

The J6 is a NovaStar high-performance seamless switcher that integrates video processing, screen mosaic, transition effects and multi-screen display capabilities. The J6 offers powerful video signal receiving and processing abilities, and supports up to 8 inputs with the resolutions up to $4K \times 2K@30$ Hz and 6 windows. Besides, this product supports two system modes: Splicer and Switcher. When it is in Splicer mode, a maximum of 4 DVI output connectors can be used together for output, which can realize an up to 8KK loading capacity of each J6 unit. When it is in Switcher mode, a maximum of 2 DVI output connectors can be used together for output, which can realize an up to 4KK loading capacity of each J6 unit.

Based on powerful FPGA platform, the J6 supports input and output EDID management and color adjustment, seamless transition of a variety of input sources, as well as fade and other transition effects, bringing you a more flexible and rich visual experience.

What's more, the J6 is equipped with NovaStar V-Can smart control software and C1 event controller, allowing for a rich screen mosaic effect via V-Can, C1 or front panel operations. With excellent image quality, ultra-large loading capacity and flexible operation modes, the J6 can be widely used in conference reports, exhibition centers, stage control and other application scenarios.

Features

- Compatible with industry-standard video input connectors in the market
 - DVI connector: 1920×1080@60Hz input
 - HDMI 1.3 connector: 1920×1080@60Hz input
 - 3G-SDI connector: 1920×1080@60Hz input
 - DP 1.1 connector: 4K×2K@30Hz input
 - HDMI 1.4 connector: 4K×2K@30Hz input
- 4 groups (2 connectors in each group) of DVI output connectors of a single J6 unit for mosaic output

Each group includes a main connector and a backup connector. A maximum of 4 connectors can be used for mosaic output. The mosaic layout can be 4×1 , 1×4 or 2×2 . The maximum loading capacity can reach 9,200,000 pixels and the maximum mosaic width can be up to 15360 pixels.

Dual system modes

The J6 supports both Splicer and Switcher modes, which can meet different application requirements.

Multiple window display

The J6 supports up to six $4K \times 2K$ windows with random layout. Each window supports cross connector output.

- HDMI connector for output monitoring
 - Supports monitoring of a single input source, PVW or PGM.
 - Supports monitoring of all input sources, PVW and PGM.
 - Supports displaying of input resolution and refresh rate.
- Display control function

Allows you to black out or freeze the screen by simply clicking one button.

EDID management

Supports input resolution management for DVI, HDMI and DP connectors.

Transition effects

In Splicer mode, the J6 supports setting of transition effect for source switching.

In Switcher mode, the J6 supports setting of Take effect and effect duration.

• AUX

In Switcher mode, the J6 supports AUX setting.

BKG capturing

The J6 supports capturing of input source and PGM, and the captured image can be used as BKG.

BKG settings

The J6 supports both image BKG and pure color BKG. You can save at most 6 BKG images.

- Input color, window color and output color adjustable
- Preset management

You can create at most 32 custom presets and load the preset simply by clicking one button.

• Window template management

The J6 is built-in with 7 window templates. You can load one of the window templates to quickly lay out the windows.

Multiple operation modes

You can operate the J6 via its front panel, the V-Can smart control software or C1 event controller.

• Multiple J6 units controlled by one C1 unit

You can perform operations, such as FTB, freeze or Take operation, to multiple J6 units on the C1.

 Visualized color LCD screen and distinct button indicators on front panel, simplifying system control operations



Appearance

Front Panel

	STAR				JE 🚺 🔍
ON 1	WIN-1 WIN-2 WIN-3 1 2 3	A-EXT B-SDI 4 5 C-EXT D-EXT		RREEZE	PREVET TEST
OFF	WIN-4 WIN-5 WIN-8 6 7 8	E-EXT F-EXT G-EXT H-SDI		ESC.	BKG TAKE
	WINDOWS	SOURCES		MENU	FUNCTIONS
1	2	8	4	66	8

No.	Button	Description				
1	ON/OFF	• Press ON to power on the device.				
	button	Press OFF to power off the device.				
2	Window buttons	Press a window button to open the corresponding window and enter the window settings men or press the window button to input the corresponding number on the button.				
		Button indicator descriptions:				
		• On: The window is open, and the input source is accessed normally.				
		• Dim: The window is open, but the input source is abnormal or not accessed.				
		• Off: The window is not opened.				
		• Flashing: The window is being edited.				
		• On the home screen, hold down the window button for 2s or longer to close the opened window.				
3	Input source	Press an input source button to quickly select an input source for the window.				
-	buttons	Button indicator descriptions:				
		• On: The input source is accessed and in normal use.				
		• Dim: The input source is accessed but not in use.				
		• Off: The input source is not accessed.				
4	LCD screen	Display current device status and settings menu.				
5	Knob	• On the home screen, press the knob to enter the operation menu screen.				
Ŭ		• On the operation menu screen, rotate the knob to select a menu item, and press the knob to confirm the selection or enter the submenu.				
		• When a menu item with parameters is selected, rotate the knob to adjust the parameters. Please note that after adjustment, you need to press the knob again to confirm the adjustment.				
6	Freeze button	Freeze or unfreeze the output image.				
-		Button indicator descriptions:				
		• On: The output image is frozen.				
		• Off: The output image is unfrozen.				
7	ESC button	Press the button to exit the current menu or cancel the operation.				
8	Function	• PRESET : Enter the preset menu.				
	buttons	• BKG : Enable or disable the BKG function.				
		• FTB/TEST : Press the button to make the screen fade to black and press the button again to exit the FTB mode. Hold down the button for 2s or longer to enter the test pattern menu.				



No.	Button	Description
		• FN/TAKE : The function of this button varies in different system modes (Splicer and Switcher).
		 In Splicer mode, press the button to enter the menu of the function that has been customized for FN button, Hold down the button to enter the FN settings menu.
		- In Switcher mode, press the button to send PVW to PGM.

Rear Panel

INPUTB INPUTB		
N - Centack-Loop		

Input				
No.	Connector	Description		
INPUT-A	DP1.1	Input resolution up to 4K×2K@30Hz and downward compatible		
		Supports HDCP 1.3.		
		Can be changed to HDMI 1.4 input card.		
		Input resolution up to 4K×2K@30Hz and downward compatible		
		Supports HDCP 1.4.		
Input-B	3G-SDI	Input resolution up to 1920×1080@60Hz and downward compatible		
		Supports 3G-SDI loop output.		
INPUT-C	HDMI1.3	Input resolution up to 1920×1080@60Hz and downward compatible		
		Supports HDCP 1.4.		
		Can be changed to DVI or 3G-SDI input card.		
INPUT-D	DVI Input resolution up to 1920×1080@60Hz and downward compatible			
INPUT-E		Supports HDCP 1.4.		
	-	Can be changed to HDMI 1.3 or 3G-SDI input card.		
INPUT-F	-			
INPUT-G				
INPUT-H	3G-SDI	Input resolution up to 1920×1080@60Hz and downward compatible		
		Supports 3G-SDI loop output.		
Output				
Connector	Quantity	Description		
DVI 8		• 4 groups (2 connectors in each group) of DVI output connectors can be used for mosaic output.		
		• Each group includes a main connector and a backup connector.		
		• The J6 supports dual-link DVI output mode. When the output is set to dual-link mode, DVI1 and DVI3 are used as output connectors, while DVI2 and DVI4 are unavailable.		
		• In Switcher mode, DVI3 can be used as AUX connector.		



MONITOR	1	An HDMI connector is used as monitoring connector to monitor all input sources, single input source, PVW and PGM. Resolution up to 1920×1080@60Hz	
Control			
Connector	Quantity	Description	
ETHERNET	1	Communicate with PC or connect to the network.	
USB (Type-B)	1	Connect to the PC for device control.	
USB (Type-A)	1	A reserved connector	
Overall			
Connector	Quantity	Description	
Power	1	AC100V~240V 50/60Hz	

Applications

The J6 supports two system modes: Splicer and Switcher. The connections for two modes are shown in Figure 1 and Figure 2.

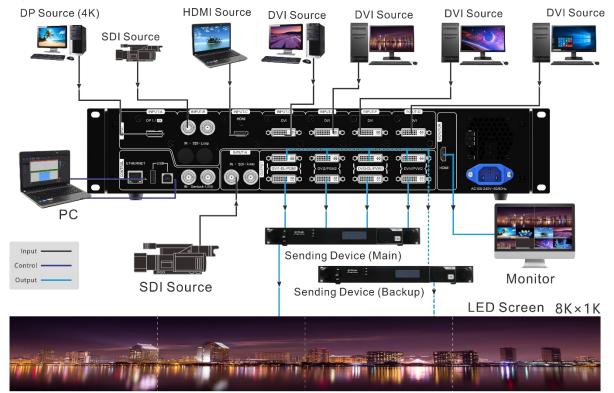


Figure 1 Connections for Splicer mode

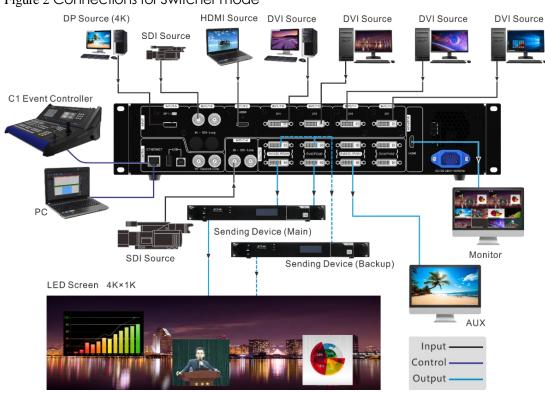
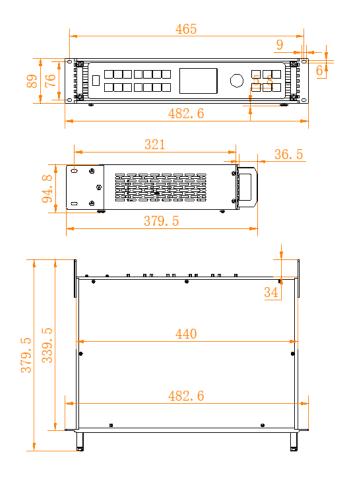


Figure 2 Connections for Switcher mode

Dimensions



Unit: mm



Specifications

Input				
DVI	Input resolution up to 1920×1200@60H HDCP 1.4	Input resolution up to 1920×1200@60Hz and downward compatible HDCP 1.4		
3G-SDI	Input resolution up to 1920×1080@60H 3G-SDI loop output	Input resolution up to 1920×1080@60Hz and downward compatible 3G-SDI loop output		
HDMI1.3	Input resolution up to 1920×1080@60H HDCP 1.4	Input resolution up to 1920×1080@60Hz and downward compatible HDCP 1.4		
DP1.1	Input resolution up to 4K×2K@30Hz ar HDCP 1.3	Input resolution up to 4K×2K@30Hz and downward compatible HDCP 1.3		
HDMI1.4	Input resolution up to 4K×2K@30Hz ar HDCP 1.4	Input resolution up to 4K×2K@30Hz and downward compatible HDCP 1.4		
Output				
DVI	output.	4 groups (2 connectors in each group) of DVI output connectors can be used for mosaic output.Each group includes a main connector and a backup connector.		
HDMI	A monitoring connector	A monitoring connector		
Control				
ETHERNET	Communicate with PC or connect to the	Communicate with PC or connect to the network.		
USB (Type-B)	Connect to the PC for device control.	Connect to the PC for device control.		
USB (Type-A)	A reserved connector	A reserved connector		
Connector performance	Common input and output resol	Common input and output resolutions		
• DVI • HDMI1.3	800×600@50/60/75/85Hz 1024×768@48/50/60/75/85Hz 1152×864@75Hz 1280×720@48/50/60Hz 1280×768@48/50/60/75Hz 1280×800@50/60Hz 1280×960@50/60/85Hz 1280×1024@48/50/60/75/85Hz 1360×768@60Hz 1364×1024@48/50/85Hz	1366×768@50/60Hz 1366×800@50/60Hz 1400×1050@48/50/60/75Hz 1440×900@60/75/85Hz 1600×900@48/50/60Hz 1600×1200@48/50/60Hz 1680×1050@60Hz 1792×1280@60Hz 1920×1080@30/48/50/60Hz		
• DP1.1 • HDMI1.4	800×600@50/60/75/85Hz 1024×768@48/50/60/75/85Hz 1152×864@75Hz 1280×720@48/50/60Hz 1280×768@48/50/60/75Hz	1680×1050@60Hz 1792×1280@60Hz 1920×1080@30/48/50/60Hz 1920×1200@50/60Hz 2048×1080@30/48/50/60Hz		



	1280×800@50/60Hz		2048×1152@30Hz	
	1280×960@50/60/85Hz		2304×1152@60Hz	
	1280×1024@48/50/60/75/8	35Hz	2048×1152@60Hz	
	1360×768@60Hz		2560×1080@50/60Hz	
	1364×1024@48/50/85Hz		2560×1400@50/60Hz	
	1400×1050@48/50/60/75Hz		2560×1600@50/60Hz	
	1440×900@60/75/85Hz		3840×1080@30/50/60Hz	
	1600×900@48/50/60Hz		3840×2160@30Hz	
	1600×1200@48/50/60Hz			
3G-SDI	480i, 576i			
	1280×720p@24/25/30/50/6	50Hz		
	1920×1080p@24/25/30/50/60Hz			
Overall Specifications	1			
Electrical specifications	Power connector	AC100V~240V 50/60Hz		
	Power consumption	50W		
Operating environment	Operating temperature	-20°C to 70°C		
	Operating humidity	20%RH to 90%RH		
	Storage humidity	10%RH to 95%RH		
Physical specifications	Dimensions	482.6mm × 379.5mm × 94.7mm		
	Package dimensions	550mm × 561 mm × 155 mm		
	Net weight	5.3 kg		
	Total weight	15 kg		
Packing information	Accessory	$1 \times$ power cord, $1 \times$ Ethernet cable, $2 \times$ DVI cable, $1 \times$ USB cable $1 \times$ HDMI cable, $1 \times$ HDMI to DVI cable, $1 \times$ mini DP to DP cable and $1 \times$ User manual		
	Flight case	550mm × 561 mm × 155 mm		
Certifications		CB, RoHS		
Noise Level (typical at 25°C/77°F)		50dB(A)		

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