

VE7

Video Input Expander

V1.0.0

NS160100310



Specification

Overview

The VE7 video input expander is an input signal receiving device with a variety of input connectors. It features powerful video input receiving capabilities, and supports a maximum of 7 video inputs up to 1920×1080@60Hz, or 1 video input up to 1920×1080@60Hz and 3 video inputs up to 4K×1K@60Hz. It also supports input EDID management and input color adjustment. The VE7 is mainly used for expanding the input sources for the N9 seamless switcher.

Features

- Industry-standard video input connectors
 - DVI: 1920×1080@60Hz and other VESA standard video source inputs
 - HDMI 1.3: 1920×1080@60Hz and other VESA standard video source inputs
 - 3G-SDI: 1920×1080@60Hz and downward compatibility, de-interlacing processing supported
 - DP 1.1: 4K×2K@30Hz and downward compatibility, custom resolutions
 - HDMI 1.4: 4K×2K@30Hz and downward compatibility, custom resolutions
 - Dual DVI: 4K×2K@30Hz and downward compatibility, custom resolutions
- 4 optical fiber outputs

The VE7 can output the received video inputs to the N9 seamless switcher via 4 optical fiber output connectors.
- DVI MVR output
 - Monitoring all input sources
 - Displaying input resolution and frame rate
 - Loop output of one input source
- EDID management and input color adjustment
 - Input resolution management of DVI, HDMI and DP connectors
 - Input color adjustment
- Device update via V-Can or NovaLCT

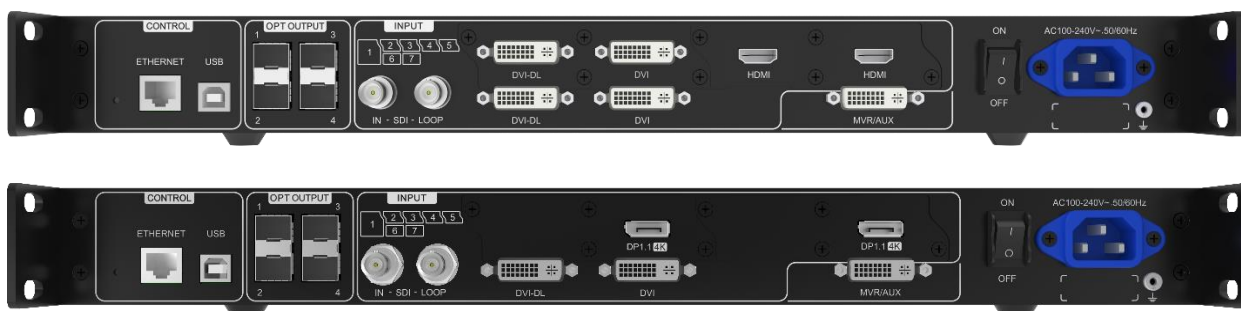
Appearance

Front Panel



Name	Status	Description
RUN	Device connection status	<ul style="list-style-type: none"> Flashes fast (flashes every second): The connection between the VE7 and N9 is normal. Flashes slowly (flashes every 5 seconds): The connection between the VE7 and N9 is abnormal.
PWR	Device power status	<ul style="list-style-type: none"> On: The device is powered on. Off: The device is not powered on.

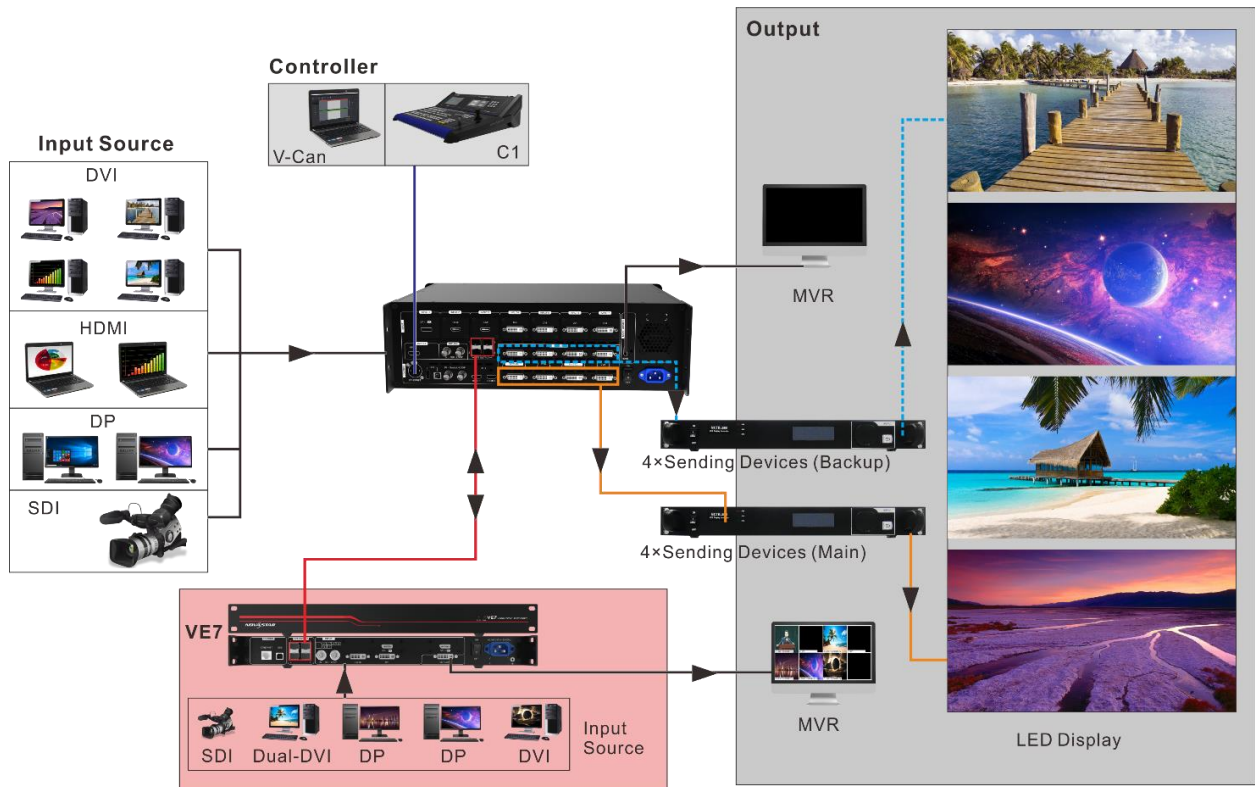
Rear Panel



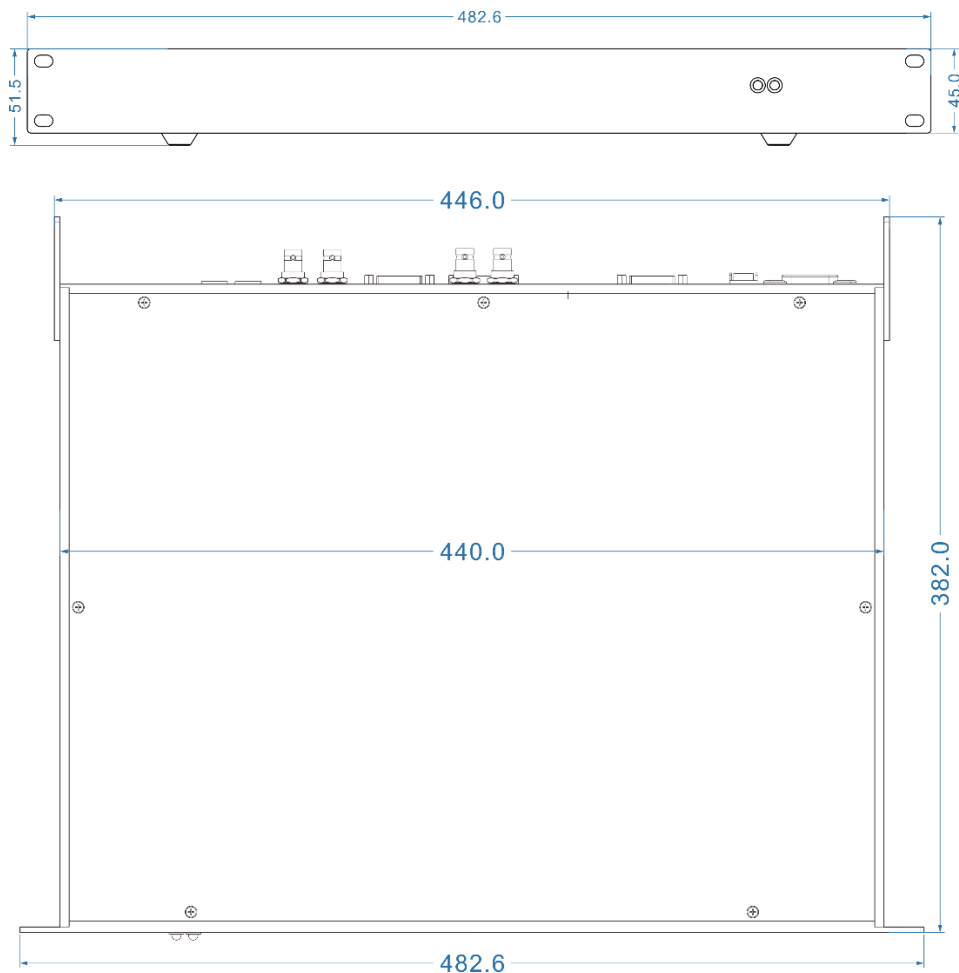
The VE7 has two versions which differ in input connectors 2, 3, 4 and 5.

Input		
No.	Connector	Description
1	3G-SDI	Supports 1920×1080@60Hz input resolution, downward compatibility and 3G-SDI loop output. Supports de-interlacing processing.
2	DVI	This connector is blank or a DVI connector by default. <ul style="list-style-type: none">In single link mode, it supports 1920×1080@60Hz input resolution, other VESA standard resolutions and custom resolutions.In dual link mode, it supports 3840×1080@60Hz input resolution, downward compatibility as well as custom resolutions. The input connector 3 is unavailable.
3	DVI	This connector is DP 1.1 or a DVI connector by default. <ul style="list-style-type: none">DP 1.1, supports 3840×1080@60Hz input resolution, downward compatibility and custom resolutions.DVI, supports 1920×1080@60Hz input resolution, other VESA standard resolutions, downward compatibility and custom resolutions.
4	HDMI 1.3	This connector is blank or an HDMI 1.3 connector by default. Supports 1920×1080@60Hz input resolution, other VESA standard resolutions, downward compatibility and custom resolutions.
5	HDMI 1.3	This connector is DP 1.1 or an HDMI 1.3 connector by default. <ul style="list-style-type: none">DP 1.1, supports 3840×1080@60Hz input resolution, downward compatibility and custom resolutions.HDMI 1.3, supports 1920×1080@60Hz input resolution, other VESA standard resolutions, downward compatibility and custom resolutions.
6	DVI-DL	<ul style="list-style-type: none">In single link mode, it supports 1920×1080@60Hz input resolution, other VESA standard resolutions and custom resolutions.In dual link mode, it supports 3840×1080@60Hz input resolution, downward compatibility as well as custom resolutions. The input connector 7 is unavailable.
7	DVI	<ul style="list-style-type: none">Supports 1920×1080@60Hz input resolution, other VESA standard resolutions, downward compatibility and custom resolutions.When the input connector 6 is set to dual link mode. the input connector 7 is unavailable.
Output		
Connector	Quantity	Description
MVR/AUX	1	<ul style="list-style-type: none">MVR: Monitoring all input sourcesAUX: Loop output of one input source via N9 configuration
OUTPUT	4	10G optical fiber connectors The VE7 can be connected to the N9 via 4 optical fiber connectors which enable the signal transmission between the VE7 and N9.
Control		
Connector	Quantity	Description
ETHERNET	1	For device update via NovaLCT
USB (Type-B)	1	
Overall Specifications		
Connector	Quantity	Description
Power connector	1	AC100V-240V~, 50/60Hz

Applications



Dimensions



Unit: mm

Specifications

Connector	Input	DVI	<ul style="list-style-type: none"> • Supports 1920×1080@60Hz and other VESA standard resolutions, downward compatibility and custom resolutions. • Supports HDCP 1.4.
		3G-SDI	<ul style="list-style-type: none"> • Supports up to 1920×1080@60Hz input resolution and downward compatibility. • Supports 3G-SDI loop output. • Supports de-interlacing processing.
		HDMI 1.3	<ul style="list-style-type: none"> • Supports 1920×1080@60Hz and other VESA standard resolutions, downward compatibility and custom resolutions. • Supports HDCP 1.4.
		DP 1.1	<ul style="list-style-type: none"> • Supports 3840×2160@30Hz input resolution, downward compatibility and custom resolutions • Supports HDCP 1.3.
		HDMI 1.4	<ul style="list-style-type: none"> • Supports 3840×2160@30Hz input resolution, downward compatibility and custom resolutions • Supports HDCP 1.4.
		Dual DVI	<ul style="list-style-type: none"> • Supports 3840×2160@30Hz input resolution, downward compatibility and custom resolutions

			• Supports HDCP 1.4.	
	Output	DVI	• MVR: Monitoring all input sources • AUX: Loop output of one input source via N9 configuration	
		OUTPUT 1, 2, 3, 4	10G optical fiber connectors The VE7 can be connected to the N9 via 4 optical fiber connectors which enable the signal transmission between the VE7 and N9.	
	Control	ETHERNET	For device update via NovaLCT	
USB (Type-B)				
Connector performance	Common resolutions	• DVI • HDMI 1.3	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 1920×1200@50/60Hz
		• DP 1.1 • HDMI 1.4 • Dual DVI	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 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 1920×1200@50/60Hz 2048×1080@30/48/50/60Hz 2048×1152@30Hz 2304×1152@60Hz 2048×1152@60Hz 2560×1080@50/60Hz 2560×1400@50/60Hz 2560×1600@50/60Hz 3840×1080@30/50/60Hz 3840×2160@30Hz
		3G-SDI	480i, 576i 1280×720p@24/25/30/50/60Hz 1920×1080p@24/25/30/50/60Hz	
Electrical specifications		Power connector	AC100V-240V~, 50/60Hz	
		Power consumption	40 W	
Operating environment		Operating temperature	0°C–60°C	
		Storage temperature	-20°C– 60°C	
Physical specifications		Dimensions	482.6 mm × 382.0 mm × 51.5 mm	
		Weight	3.4 kg	

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