VE7

Video Input Expander

V1.0.1 NS160000569

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.

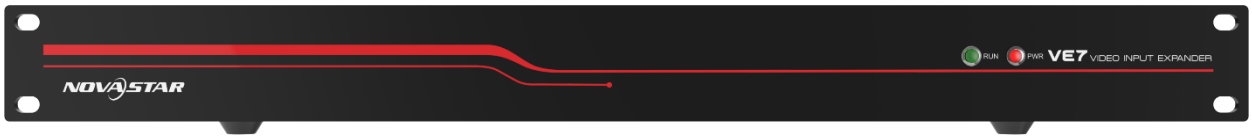
Features

- 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
  - DP 1.1: 4K×2K@30Hz
  - HDMI 1.4: 4K×2K@30Hz
- 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	• 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	• On: The device is powered on. • Off: The device is not powered on.

Rear Panel

Figure 1 Standard Version I

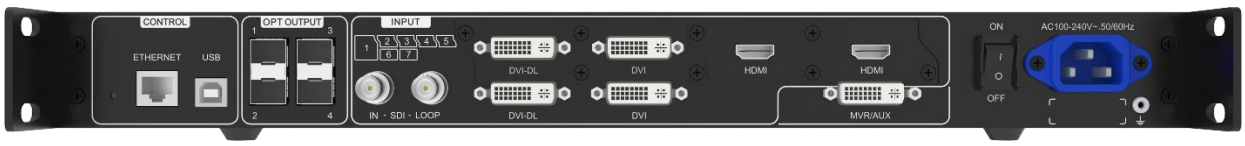


Figure 2 Standard Version II

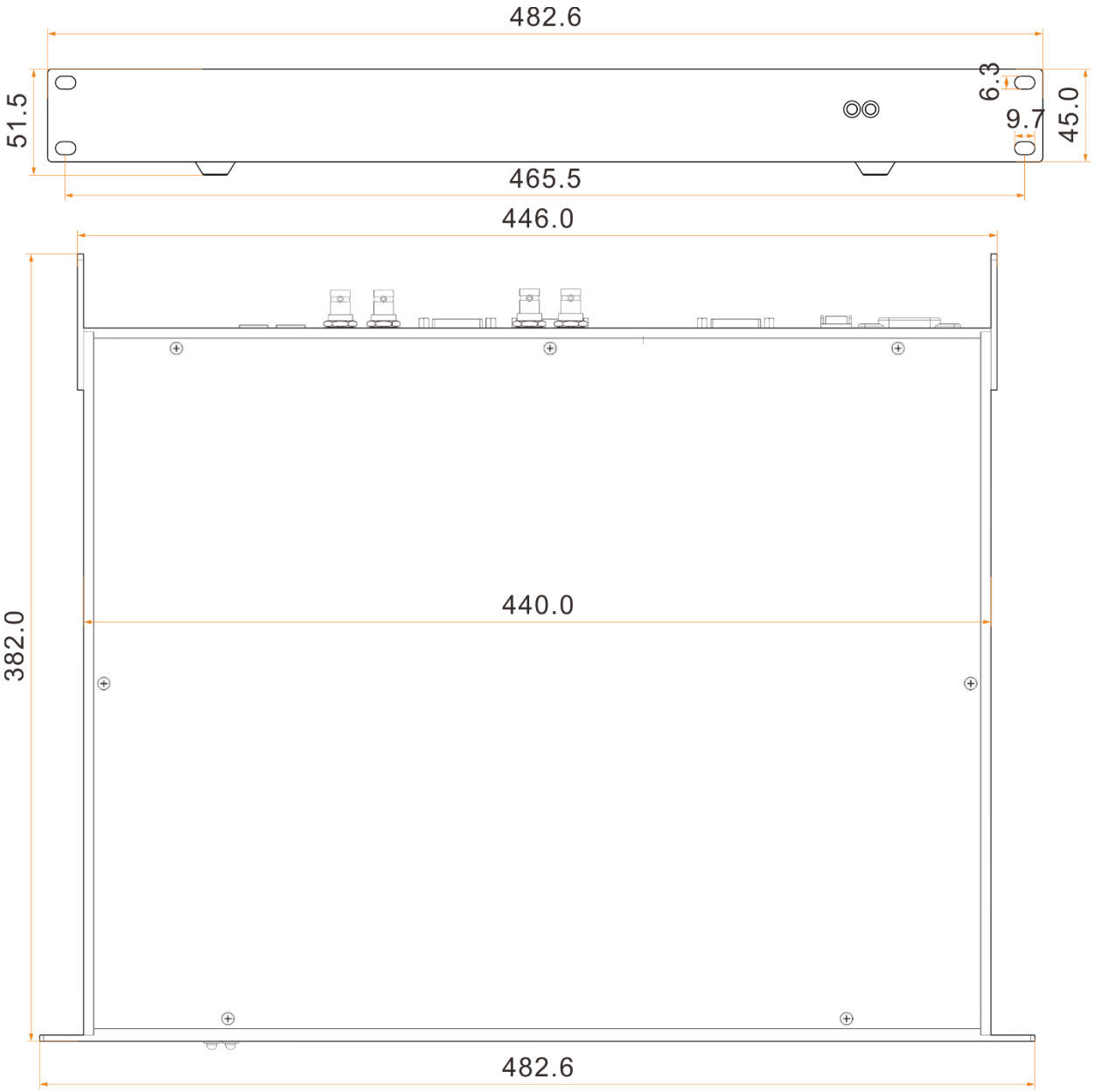
Note:

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.
2	DVI	This connector is blank or a DVI connector by default. • 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 a DP 1.1 or DVI connector by default. • DP 1.1 connector supports 3840×1080@60Hz input resolution, downward compatibility and custom resolutions. • DVI connector 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 a DP 1.1 or HDMI 1.3 connector by default. • DP 1.1 connector 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	• 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	• 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		
MVR/AUX	1	• MVR: Monitoring all input sources • AUX: Loop output of one input source via N9 configuration

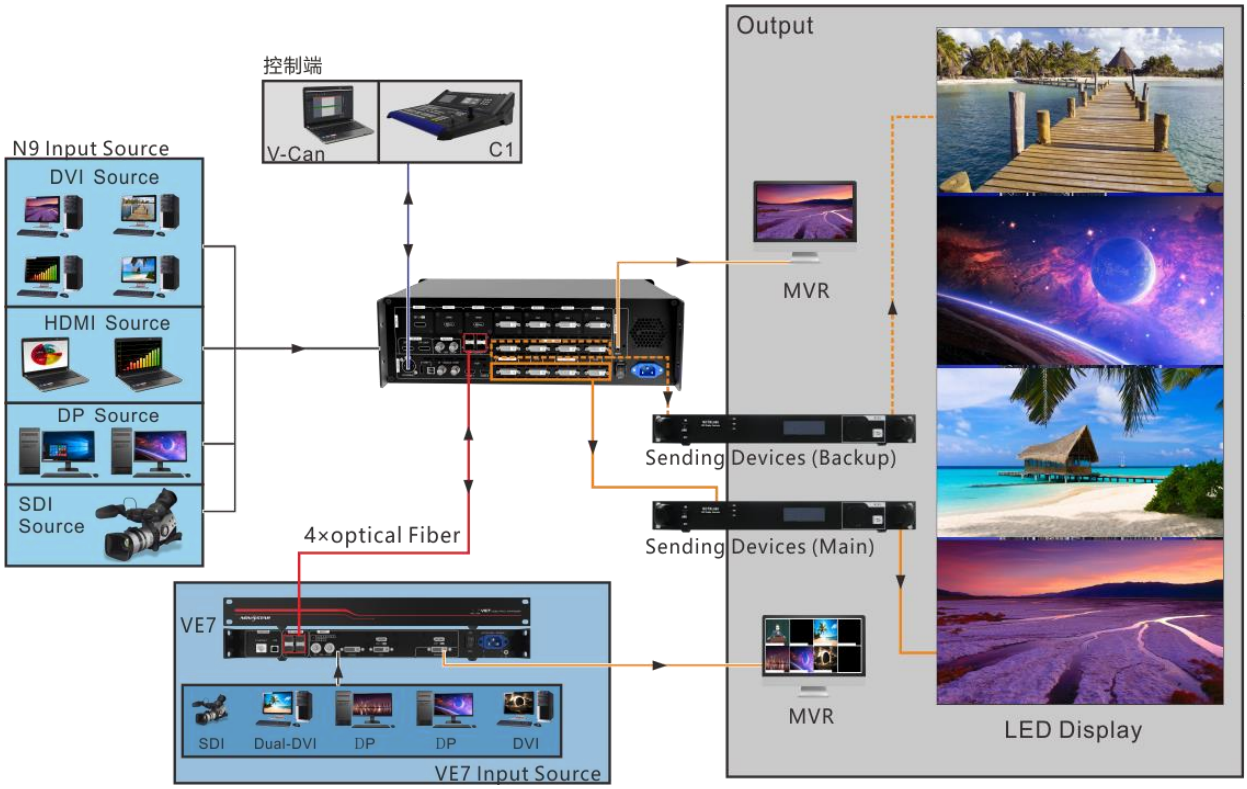
OUTPUT	4	10G optical fiber connectors The VE7 can be connected to the N9 via 4 optical fiber connectors which enable the signal transmission between the VE7 and N9.
Control		
ETHERNET	1	For device update via NovaLCT
USB (Type-B)	1	
Overall Specifications		
Power connector	1	AC100V-240V~, 50/60Hz

Dimensions



Unit: mm

Applications



Specifications

Input	
DVI	Supports 1920×1080@60Hz and other VESA standard resolutions, downward compatibility and custom resolutions. Supports HDCP 1.4. Does not support interlaced signal inputs.
3G-SDI	Supports up to 1920×1080@60Hz input resolution and downward compatibility. Supports 3G-SDI loop output. Supports deinterlacing processing.
HDMI 1.3	Supports 1920×1080@60Hz and other VESA standard resolutions, downward compatibility and custom resolutions. Supports HDCP 1.4. Does not support interlaced signal inputs.
DP 1.1	Supports 3840×2160@30Hz input resolution, downward compatibility and custom resolutions Supports HDCP 1.3. Does not support interlaced signal inputs.
HDMI 1.4	Supports 3840×2160@30Hz input resolution, downward compatibility and custom

	resolutions Supports HDCP 1.4. Does not support interlaced signal inputs.
Dual DVI	Supports 3840×2160@30Hz input resolution, downward compatibility and custom resolutions Supports HDCP 1.4. Does not support interlaced signal inputs.
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	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

	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	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	
Overall Specification		
Electrical specifications	Power connector	AC100-240V~, 50/60Hz。
	Power consumption	40 W
Operating environment	Operating temperature	0℃~60℃
	Operating humidity	0%RH~95%RH non-condensing
	Storage temperature	-20℃~60℃
Physical specifications	Dimensions	482.6mm×382.0mm×51mm
	Net weight	3.4 kg
	Total weight	21.6 kg（VE7+N9）
Packing information	Accessory	1 × power cord, 4 × 10GSFP+DAC 0.3M
	Flight case（VE7+N9）	556mm × 277mm × 700mm
Certifications		CE, RoHS, FCC, IC, EAC
Noise Level (typical at 25 ℃/77 ℉)		45dB(A)

Trademark

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