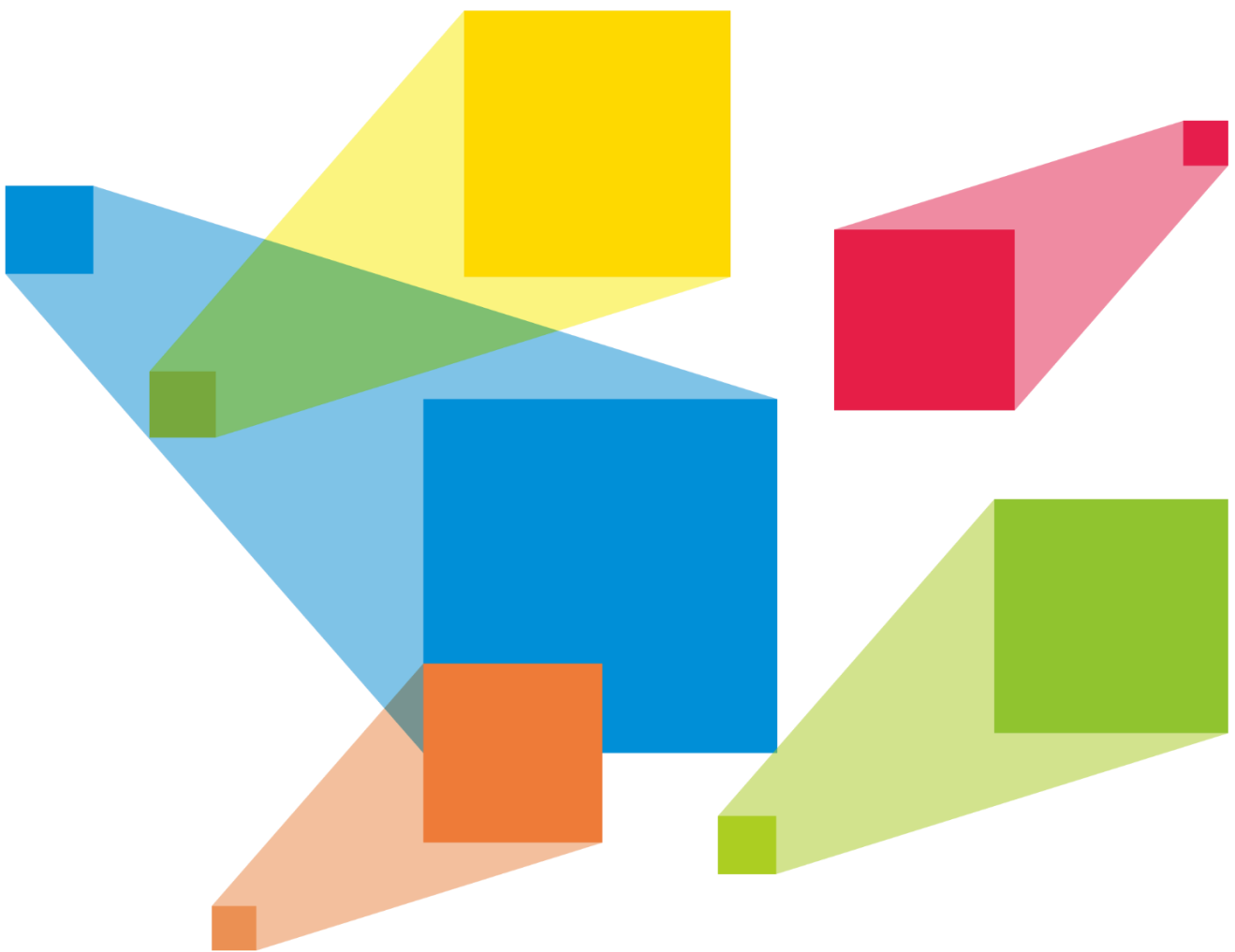# V1060n

Two-in-one control server

Nova 2-in-1 controller embedded software V2.0

Specifications

update record

Document Version	release date	Release Notes
V1.1.0	2022-02-18	• Add authentication information • Added notices and warnings
V1.0.1	2021-12- 22	Add authentication related information
V1.0.0	2021-06-15	Initial Release

Product Introduction

V1060n Is a 6 A two-in-one video controller with network port output that integrates video processing and video control

functions. A single device can load up to 390 Megapixels,

The maximum width can reach 10240 Pixels, up to 8192 Pixels, to meet the needs of on-site ultra-wide and ultra-high display

screen control.

V1060n It can receive multiple types of video signals, has high-definition image processing capabilities, supports output screen scaling, OSD , low latency, point-by-point brightness and color correction and other functions, and can provide excellent image display.

With powerful video processing and transmission capabilities, V1060n Widely used in LED Display screen fixed installation field.

Certification

CCC .

If the product does not have relevant certification in any country or region where it is sold, please contact Nova Nebula as soon as possible for confirmation or processing. Otherwise, if relevant legal risks are caused, the customer shall bear them by himself or Nova Nebula shall have the right to pursue compensation.

Product Features

- input interface
  - 2 ×HDMI 1.3
  - 1 ×DVI
  - 1 × 3G-SDI (IN+LOOP) , optional
- Output Interface
  - 6 Gigabit Ethernet port

    Maximum load 390 Megapixels, maximum

    width of a single device output

    Degree 10240 , height 8192
  - 1 HDMI 1.3 Output Interface

    Can be used as output preview or video output
- Audio Input and Output
  - Support   HDMI Accompanying audio input
  - Support   3.5mm Independent audio input
  - Support   3.5mm Independent audio output
  - Support   audio output via multi-function card

- As low as 1 Frame delay output

  When the low-latency switch is turned on and the input source is turned on synchronously, the delay between the input source and the receiving card can be reduced to 1 frame
- 3 Layers
  - Layer size and position can be adjusted individually
  - Layer priority can be adjusted
- 1 Road OSD
  - Each scene supports 1 Road OSD Graphics
  - Maximum supported import storage 8 OSD picture
  - Each OSD Maximum support 390 10,000 pixels, widest

    10240 Pixels, up to 8192 Pixel
  - OSD The picture supports top and bottom adjustment
- Powerful video processing capabilities
  - Equipped   with SuperView III Image quality processing technology supports stepless zooming of output images
  - Support   one-click full-screen zoom

- Support arbitrary interception of input source
- Image quality adjustment

  Support input image quality management, including brightness, contrast, saturation and hue adjustment
- Multiple scene saving and calling

  Support 10 custom scenes
- Hot Backup
  - Support backup between devices

- Support backup between network ports
- Synchronous output

  Supports using internal input source as synchronization source to ensure input and output image synchronization
- Support point-by-point brightness and chromaticity correction

  Cooperate with NovaLCT The calibration platform can calibrate the brightness and chromaticity of each light point , effectively eliminating color difference, making the brightness and chromaticity of the entire screen highly uniform and improving the picture quality of the display

Appearance

Front Panel

button	Function
power button	Power the device on and off.
LCD screen	Displays the current status and menu of the device.
Knobs	Select menus, adjust parameters and confirm actions.
return key	Exit a menu or cancel an operation.

Control Area	• MAIN/PIP 1/PIP 2 : Layer opening, closing and layer status display.
	  – O n : The layer is on.
	  – Flashing: The layer is being edited.
	  – Off: The layer is turned off.
	• SCALE : Full-screen automatic scaling shortcut key, which adapts the lowest priority window to fill the full screen.
	  – On: Full screen auto-zoom is on.
	  – Off: Full screen auto zoom is off.

Input Source	• HDMI 1/HDMI 2/DVI/SDI : Quick operation and status display of input source, supporting one-key switching of main window input source.
	  – On: There is a signal from the input source.
	  – Flashing: There is no signal at the input source, but it is used by the layer.
	  – Off: There is no signal from the input source or the signal is abnormal.

Function shortcut keys	• PRESET : Enter the scene setting menu. • FN : Customizable function shortcut key.

说明：

Press and hold the knob and the back button for 3 seconds at the same time and above, lock or unlock the front panel keys.
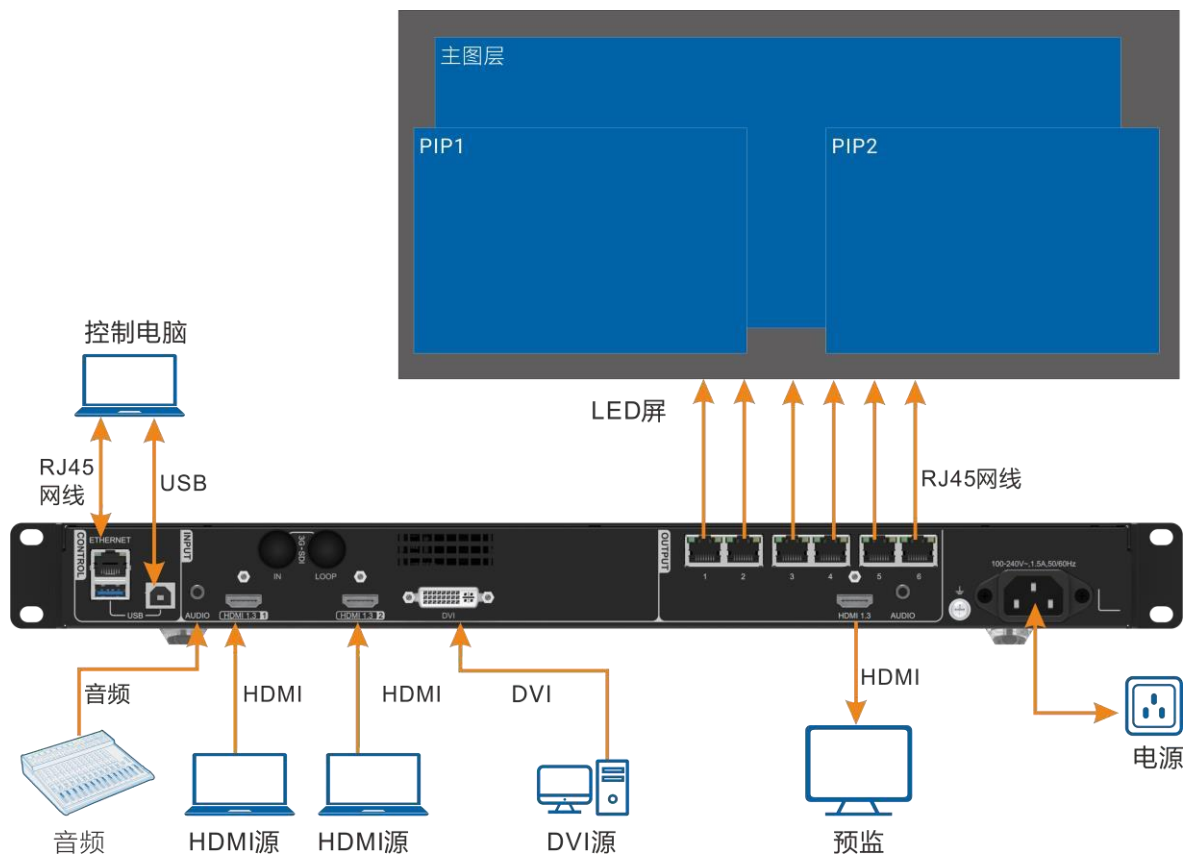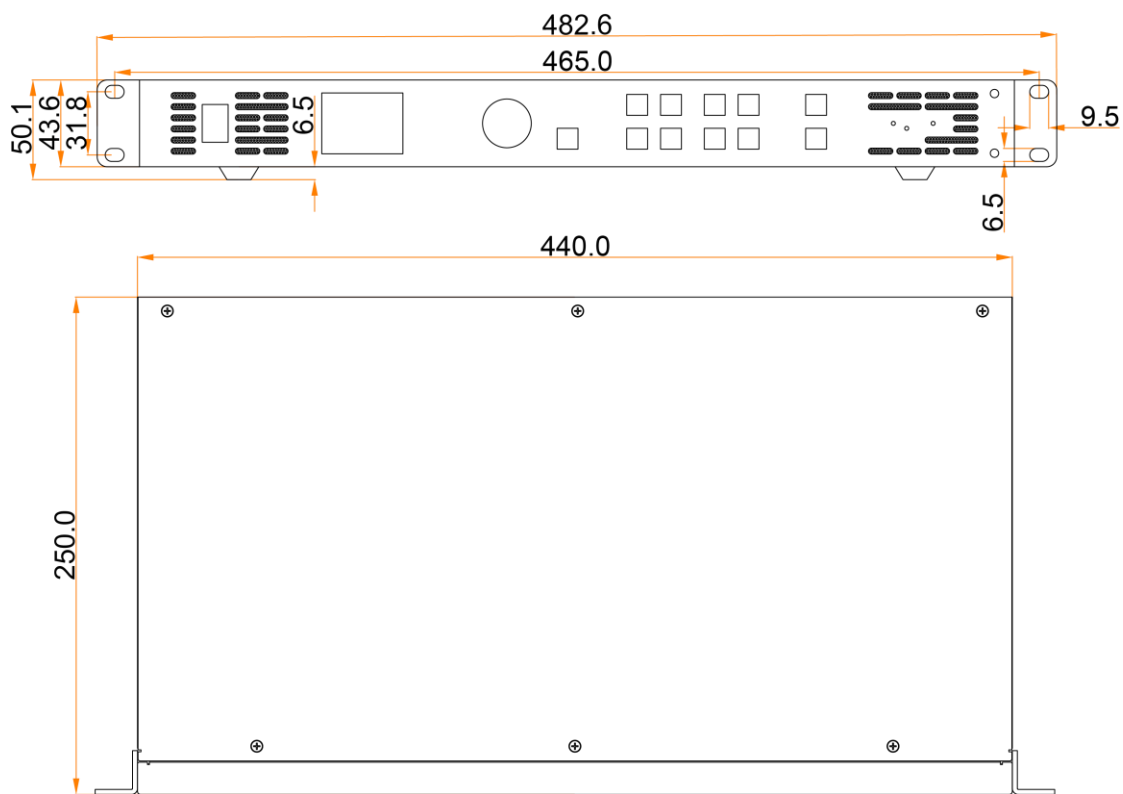
Rear Panel

input interface		
interface	**quantity**	**illustrate**
3G- SDI	1	3G-SDI Optional interface. • Support ST-424（3G），ST-292 (HD) and ST-259（SD）standard video source input. • Single channel supports 1920×1080@60Hz Video source input. • Supports deinterlacing. • Support 3G-SDI Loop Loop output.

HDMI 1.3	2	• Supports 1920 × 1200@60Hz/600×3840@60Hz (forced) video source input.
		• HDCP Support 1.4 .
		• Supports interlaced signal input.
		• Supports custom resolution.
		  – Custom limit width: 3840（3840×648@60Hz）
		  – Custom maximum height: 2784（800×2784@60Hz）
		  – Supports front-end push 600×3840@60Hz

DVI	1	• Supports 1920 × 1200@60Hz/600×3840@60Hz (forced) video source input.
		• HDCP Support 1.4 .
		• Supports interlaced signal input.
		• Supports custom resolution.
		  – Custom limit width: 3840（3840×648@60Hz）
		  – Custom maximum height: 2784（800×2784@60Hz）
		  – Supports front-end push 600×3840@60Hz

AUDIO	1	3.5mm External audio input interface.
Output Interface		
interface	**quantity**	**illustrate**

Network port	6	Gigabit network output interface.
		• Maximum load 390 CMOS.
		• Maximum width 10240 .
		• Maximum height 8192 .
		Network port 1 and network port 2 support audio output. When parsing audio through a multi-function card, you need to connect the multi-function card to network port 1 or network port 2 .
		Network port status indicator light description:
		• The indicator light in the upper left corner of the network port is the current network port connection status indicator.
		  – Steady on: The line connection is normal.
		  – Flashing: The line connection is unstable.

interface	quantity	illustrate

		– Off: The line is not connected.
		• The indicator light in the upper right corner of the network port is the communication status indicator of the current network port.
		  – Steady on: The network cable is short-circuited.
		  – Flashing: The signal is normal and communication is in progress.
		  – Off: No data transmission.

HDMI 1.3	1	HDMI 1.3 interface Used for output screen preview or video output, the output resolution is adjustable.
AUDIO	1	3.5mm Audio output interface.

Control interface		
interface	**quantity**	**illustrate**

ETHERNET	1	Connect to the host computer and through V-Can Upgrade the firmware. Network port status indicator light description:
		
		• The indicator light in the upper left corner of the network port is the current network port connection status indicator.
		  – Steady on: The line connection is normal.
		  – Flashing: The line connection is unstable.
		  – Off: The line is not connected.
		• The indicator light in the upper right corner of the network port is the communication status indicator of the current network port.
		  – Steady on: The network cable is short-circuited.
		  – Flashing: The signal is normal and communication is in progress.
		  – Off: No data transmission.

USB	2	• USB 2.0 (Type-B , square port): connect to PC , debug equipment, cascade device input. • USB 3.0 (Type-A , flat port): Cascade output interface.

Application Scenario

physical dimension

Tolerance : ± 0.3   Unit : mm

Product Specifications

Machine Specifications		
Electrical Specifications	Power interface	100-240V ~ , 1.5A , 50/60Hz
	Rated power consumption	28W
working environment	temperature	0°C ~ +50°C
	humidity	20%RH ~ 90%RH , non-condensing
Storage Environment	temperature	-20°C ~ +70°C
	humidity	10%RH ~ 95%RH , non-condensing
Physical specifications	size	482.6mm ×250.0mm ×50.1mm
	net weight	4kg
	gross weight	6.3kg
Packaging Information	Accessories	1 × power cable, 1 × USB Line, 1 × DVI Cable, 1 × HDMI Wire 1 × Quick Guide, 1 × Certificate of Compliance
	Outer box	550mm ×175mm ×400mm
Noise level (Typical , 25°C/77°F)		45dB (A)

Video source characteristics

input interface	Bit Depth		Maximum input resolution
• HDMI 1.3 • DVI (HDMI 1.3 ）	8bit	RGB4:4:4	1920×1200@60Hz (default) 3840×648@60Hz (customized)
		YCbCr4:4:4	
		YCbCr4:2:2	
		YCbCr4:2:0	not support
3G- SDI	• Maximum input resolution: 1920×1080@60Hz • Does not support setting input resolution and bit depth • Support ST-424 (3G) , ST-292 (HD) and ST-259 (SD) standard video input		

Disclaimer and Warning

This is A This product is a graded product. In a living environment, this product may cause radio interference. In this case, the user may be required to take practical measures to prevent the interference.