

# NovaPro UHD

## All-in-One Controller



## Specifications

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# 1 Overview

The NovaPro UHD is a new all-in-one controller developed by NovaStar. By integrating video processing, video control and LED screen configuration functions into one controller, this product is capable of receiving a variety of video signals, processing and sending images of resolutions up to ultra HD 4K×2K@60Hz.

The NovaPro UHD is equipped with industry-standard 4K connectors, and has some added new functions such as video rotation processing and video transition effects. With the built-in Master VI smart platform, the NovaPro UHD supports layer creation, property settings, and screen configuration via simple mouse, keyboard, and monitor operations.

The NovaPro UHD supports sending of processed video to LED display through Neutrik Ethernet port or fiber optical connectors. With powerful video processing and sending capabilities, this product is well suited for high-end rental applications, stage control systems, and fine-pitch LED displays.

## 2 Features

- A variety of input connectors: 4 × 12G-SDI connectors with loop output functions, 1 × HDMI 2.0 with loop output functions, 1 × DP 1.2, and 1 × USB playback port
- 1 × replaceable input card with four connectors  
The input card can be SDI, DVI, HDMI or VGA.
- 8 × layers, 1 × OSD and 1 × LOGO, and BKG
- 2 × layers up to 4K×2K, 6 × layers up to 2K×1K  
Layers can be scaled.
- 4K×2K OSD, cropping, transparency adjustment, dynamic/static images and texts supported  
OSD can be placed at any position.
- Layer transparency adjustment, irregular layers, layer mask, and layer overlapping and layer flipping supported
- Layer priority adjustment by z-order
- Up to 8K display width or height of a single device
- Playback of programs stored in USB drive
- MultiViewer monitoring settings, including monitoring of input sources, PVW, PGM, or mixed preview
- Sending the preview content to a monitor through wired network
- 16 × Neutrik Ethernet outputs, 4 × 10G fiber optical outputs with copy and hot backup modes
- Quick and advanced screen configurations
- With the built-in smart platform Master VI, LED screen configuration, layer configuration and video playback can be easily performed via the connected mouse, keyboard and monitor.
- 10-bit processing of the input source
- HDR function to make images finer and smoother
- Powerful image processing capability to realize low latency from input to output
- 3D sending card function supported with an external emitter
- Remote data transmission via a Gigabit Ethernet port or fiber optical connector

# 3 Appearance

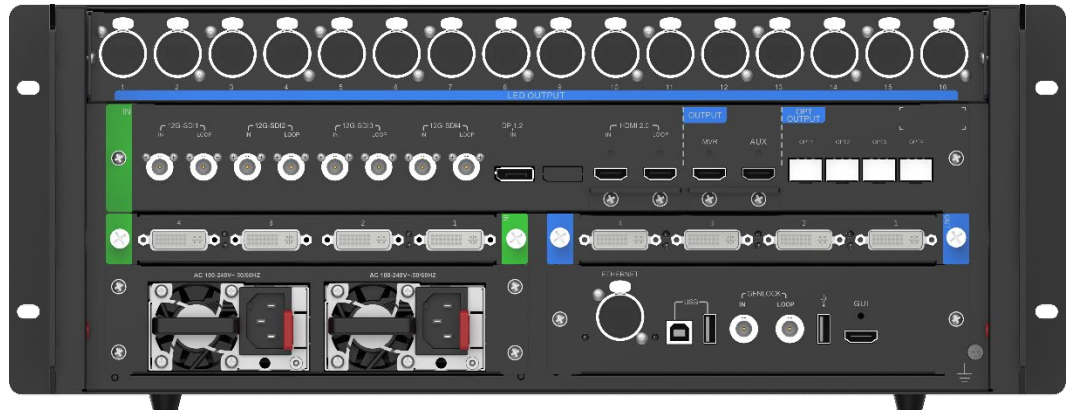
## Front Panel




Button	Function
ON/OFF button	<p>This is the power button of the device.</p> <ul style="list-style-type: none"><li>• Press it to power on the device.</li><li>• Hold it down to power off or restart the device.</li></ul>
Layer buttons	<p>These are the shortcut buttons for layer operations.</p> <ul style="list-style-type: none"><li>• Press a button to quickly create a layer.</li><li>• Blue: The layer is open, and the input source is accessed normally.</li><li>• White: The layer is open, but the input source is not accessed.</li><li>• Off: The layer is not added.</li><li>• When a layer is opened, hold down the layer button to close the layer.</li></ul>
Input source	<p>Indicate the status of the input source.</p>

selection buttons	<p>Press a button to quickly select an input source.</p> <ul style="list-style-type: none"> <li>• Blue: The input source is accessed and in normal use.</li> <li>• White: The input source is accessed but not in use.</li> <li>• Off: The input source is not accessed or used.</li> <li>• When the indicators of the buttons with numbers are blue, these buttons can be used to enter numbers.</li> </ul>
TFT screen	<p>Display current device status and settings menu.</p>
Knob	<ul style="list-style-type: none"> <li>• On the home screen, press the knob to enter the operation menu screen.</li> <li>• 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.</li> <li>• 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.</li> </ul>
Function buttons	<ul style="list-style-type: none"> <li>• Navigation button: Hold it down to enter or exit quick navigation screen. By rotating the knob, you can quickly get started with NovaPro UHD.</li> <li>• FTB: Set LED to black screen.</li> <li>• LOGO: Enter LOGO settings menu.</li> <li>• PRESET: Enter preset menu.</li> <li>• FREEZE: Freeze the PGM screen.</li> <li>• OSD: Enter OSD settings menu.</li> <li>• FN: Custom function button</li> <li>• TEST: Enter test pattern menu.</li> <li>• BKG: Enter BKG settings menu.</li> <li>• TAKE: Press the button to switch PVW to PGM with the transition effect set previously. A total of 13 transition effects are supported.</li> <li>• SHIFT: A modifier button for reserved functions</li> <li>• CUT: Press the button to switch PVW directly to PGM.</li> </ul>
ESC button	<p>Press the button to exit the current menu or cancel the operation.</p>
USB ports	<ul style="list-style-type: none"> <li>• Insert a USB drive to play media or perform system upgrade.</li> <li>• Connect a mouse or keyboard.</li> </ul>

## Rear Panel

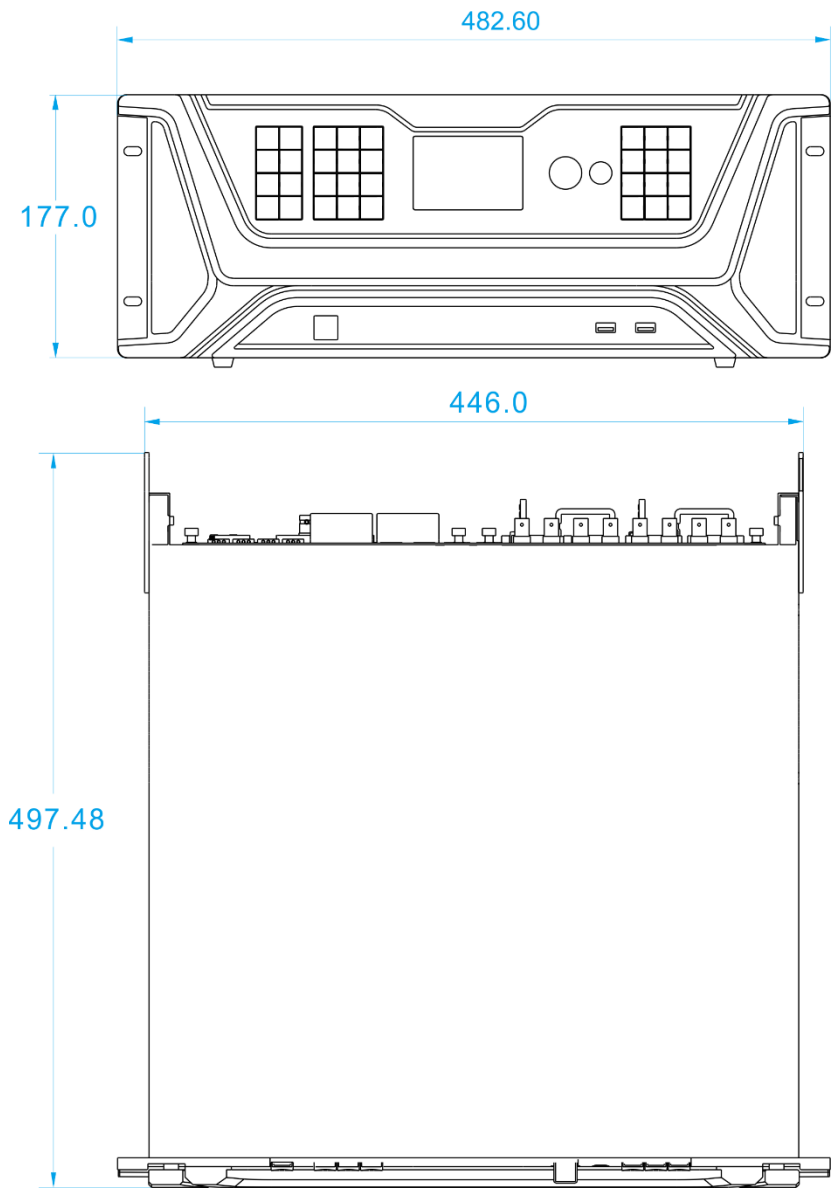


Input		
Connector	Quantity	Description
12G-SDI	4	Input resolution up to 4K×2K@60Hz and downward compatible 12G-SDI loop output
DP 1.2	1	Input resolution up to 4K×2K@60Hz (8K×1K@60Hz) and downward compatible HDCP 1.3
HDMI 2.0	1	Input resolution up to 4K×2K@60Hz (8K×1K@60Hz) and downward compatible HDCP 1.4 and HDCP 2.2 HDMI 2.0 loop output
DVI	4	Plug-in design for connecting different input cards according to users' needs HDMI input cards, SDI input cards are supported. The default option is DVI input card.
Output		
Connector	Quantity	Description
Ethernet port	16	Neutrik Gigabit Ethernet outputs
OPT 1–OPT 4	4	4 × 10G fiber optical output connectors with copy and hot backup modes <ul style="list-style-type: none"> <li>• OPT 1 transmits data of Ethernet ports 1–8.</li> <li>• OPT 2 transmits data of Ethernet ports 9–16.</li> <li>• OPT 3 is the copy/hot backup channel for OPT 1 or Ethernet ports 1–8.</li> <li>• OPT 4 is the copy/hot backup channel for OPT 2 or Ethernet ports 9–16.</li> </ul>
MVR	1	HDMI 1.4 connector, used as monitoring connector of MultiViewer to monitor input source, PVM, PGM or

		perform mixed preview
AUX	1	HDMI 1.4 connector, used as auxiliary output connector for connecting an auxiliary device, such as a teleprompter
Control		
Connector	Quantity	Description
ETHERNET	1	Connect to the PC for communication or connect to the network.
USB	1	<ul style="list-style-type: none"> <li>• USB-B: Connect to the PC for device debugging. Used as input for cascading devices</li> <li>• USB-A: Used as output for cascading devices</li> </ul>
GENLOCK IN-LOOP	1	Connect a synchronization signal source to synchronize the cascaded devices.
	1	<ul style="list-style-type: none"> <li>• Insert a USB drive to play media or perform system update.</li> <li>• Connect a mouse or keyboard.</li> </ul>
GUI	1	Connect to a monitor for human-machine interaction.

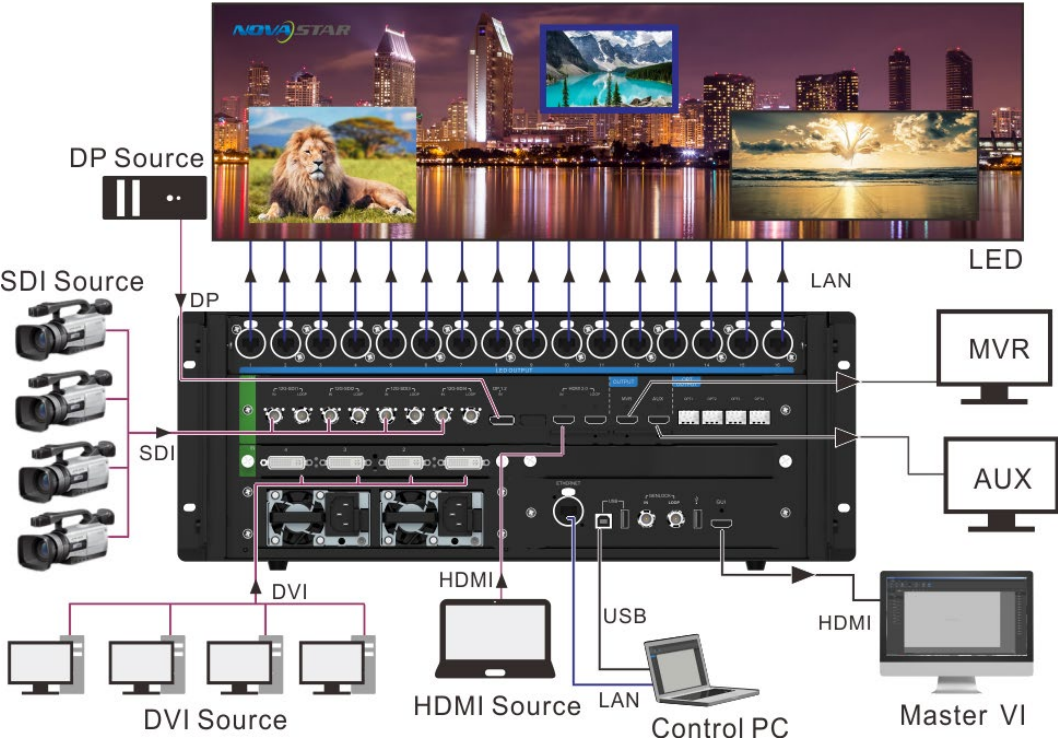


# 4 Dimensions



Unit: mm

# 5 Applications



# 6 Specifications

Overall Specifications		
Connector	Quantity	Description
Power connector	2	AC 100V–240V 50/60Hz Dual power supply design
Power consumption		180 W
Operating temperature		0°C–45°C
Storage temperature		-20°C–70°C
Operating humidify		0% RH–80% RH, non-condensing
Dimensions		4U standard chassis
Material		Metal
Weight		19.5 kg