

# 1 General

The NovaPro HD is a professional LED display controller. Besides the function of display control, it also features in powerful front end processing, so an external scalar is no longer needed. With professional interfaces, excellent image quality and flexible image control, the NovaPro HD meets the requirements of display industry.

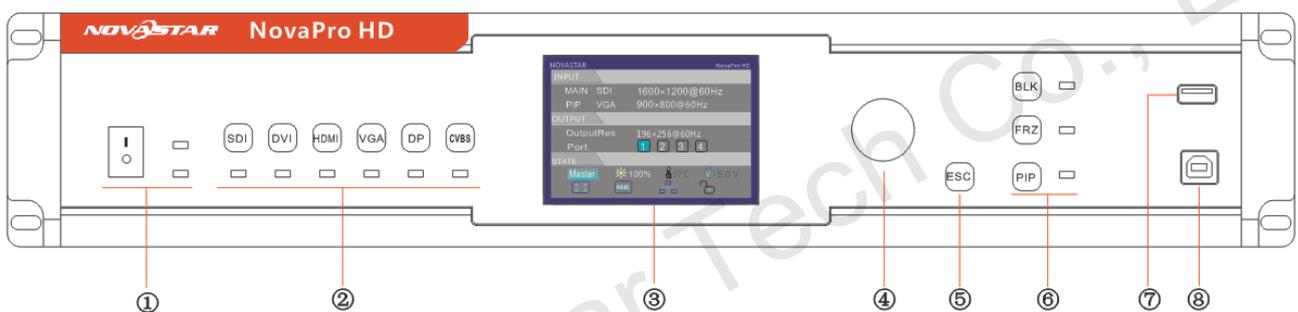
Product features:

- 1) The inputs of the NovaPro HD include CVBS, VGA, SDI, DVI, HDMI and DP. They support input resolution up to 1080p@60Hz. Highest pixel clock is 165MHz. Output bandwidth is up to 4Gbit. Advanced de-interlacing motion adaptive processing technology is adopted so that images are clear and fine. And with HDMI, the gray scale depth can be up to 12bits.
- 2) Each input can be fully configured with contrast, brightness, hue, saturation, and RGB gain. Inputs can be scaled up or down to fit the LED display resolution.
- 3) Computer software for system configuration is not necessary. The system can be configured using one wheel and one button. All can be done just by fingers. That's what we called Touch Track! You can also configure the system with browsers. This gives you the option of using a remote PC (Windows or Mac or Linux), a pad or even a smart phone to do the configuration. Real-time preview can help you with system set-up and confirm system working status.
- 4) The NovaPro HD has DMX512 and GenLock interface. Professional control and synchronization are ready to go. Optical fiber outputs enable reliable long-distance data transmission.

5) The NovaPro HD is the flagship product of our new generation controllers, powerful in processing, professional in control, and friendly in user-interface. Having a display to work has never been as easier and more enjoyable as with NovaPro HD.

## 2 Ports/Buttons

### 2.1 Front Panel



① : Power switch and indicators

- Green indicator: Indicates device working status.

Flashing normally: The device works normally.

Flashing slowly: There is no video signal.

Breathing: One or more Ethernet ports are in hot backup mode.

- Red indicator: Indicates device power status.

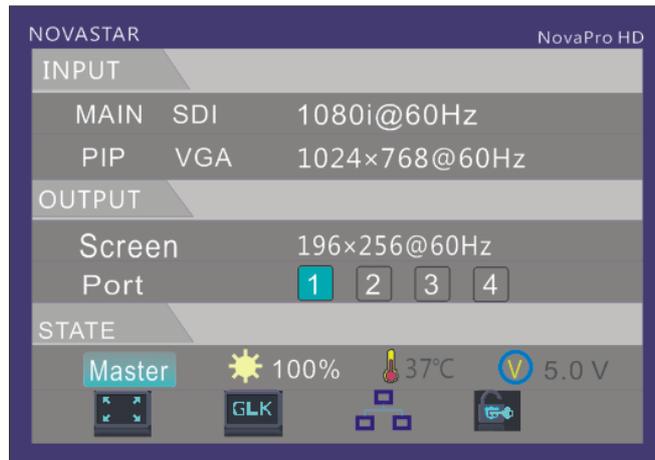
② : Input source buttons and indicators.

Press the input source button to set the input source for main picture. Hold down the

button to set the input source for PIP. You can view the operation result on the operation screen during setting.

The indicator is blue by default. It turns to green when the current input source is selected.

### ③: Operation screen.



#### ➤ INPUT:

Input source of current Main (main picture) is SDI input and resolution and field frequency is 1080i@60Hz;

Input source of current PIP (picture in picture) is VGA input and resolution and field frequency is 1024x768@60Hz.

- **OUTPUT:** Resolution and field frequency of current output is 196x256@60Hz. Internet port 1 output.

#### STATE:

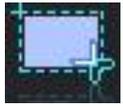
**Master**: It shows that the current controller is in main control; when Backup is displayed, it is backup.

**100%**: Current luminance of display screen is 100%.

**37°C**: When current temperature of the NovaPro HD exceeds threshold value (can be changed by users), the temperature is displayed in red and blinks.

**5.0 V**: When current voltage of the NovaPro HD exceeds threshold value (can be changed by users), the voltage is displayed in red and blinks.

: Zoom out



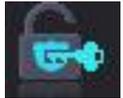
: Crop



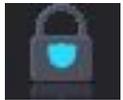
: Zoom in



: Indicating there is GLK synchronous signal input.



: Indicating the controller is not locked.



: Indicating the controller is locked and all buttons on the controller are invalid at this time.

**Locking:** Simultaneously press the knob and ESC button for more than three seconds to lock the controller.

**Unlocking:** Simultaneously press the knob and ESC button for more than three seconds to unlock the controller.

④: **Knob:** Enter by pressing the knob and select or adjust by turning the knob.

⑤: **ESC:** Exit current operation or option.

⑥: **BLK:** Display blank screen. Indicator light is blue in default when powered on and it is displayed in green when enabled;

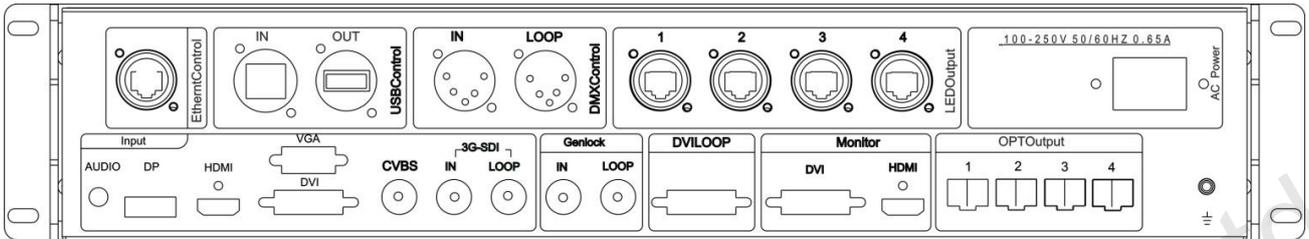
**FRZ:** Display screen picture freezing. Indicator light is blue in default when powered on and it is displayed in green when enabled;

**PIP:** Display picture in picture. Indicator light is blue in default when powered on and it is displayed in green when enabled;

⑦: USB interface: Configuration file or updating program can be imported.

⑧: USB interface: Connect to PC for communication.

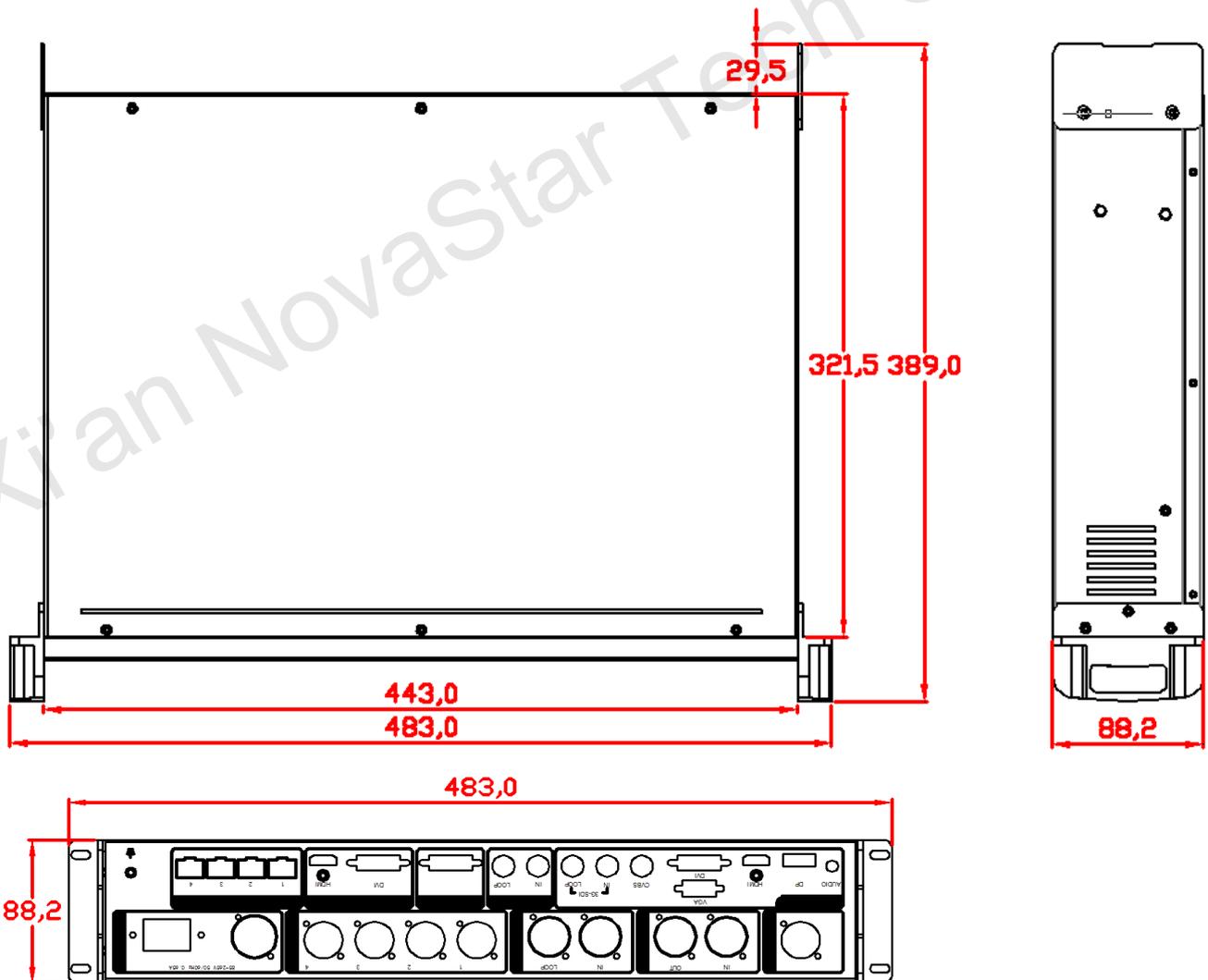
## 2.2 Rear Panel



Ethernet: Internet port which can be connected with PC for communication through standard TCP/IP.	
USB Control	IN: Connect to PC for communication.
	OUT: Cascade the next NovaPro HD.
DMX Control: Connect all consoles that support DMX512 interface protocol.	
Input	Audio input: Audio.
	Video input: DP/HDMI/VGA/DVI/ CVBS /SDI.
SDI LOOP	SDI input signal looping out port.
Genlock	IN: Genlock synchronizing signal guarantees display picture on big screen is synchronous with external Genlock source.
	LOOP: Looping out port of Genlock.
DVI LOOP	DVI input signal looping out port.
Monitor	DVI output. Monitor can be connected for monitoring.

	HDMI output. Monitor can be connected for monitoring.
LED Output: 4 Internet port outputs. Only Ethernet port 1 supports audio output. When the multifunction card is connected for audio decoding, the multifunction card must be connected to the Ethernet port 1.	
OPT Output: 4-way optical fiber output.	
AC Power: AC power interface.	

### 3 Dimensions



## 4 Technical Specifications

Input		
Port	Qty	Description
CVBS	1	PAL/NTSC
VGA	1	VESA standard
DVI	1	VESA standard (1080i input supported) Supports HDCP.
HDMI	1	EIA/CEA-861 standard, conforming to HDMI-1.3 standard Supports HDCP.
DP	1	VESA standard
3G-SDI	1	480i, 576i, 720p, 1080i/p (3G SDI)

Output		
Port	Qty	Description
DVI LOOP	1	DVI loop output, consistent with DVI input connector
SDI LOOP	1	SDI loop output, consistent with SDI input connector
LED Output	4	4 Gigabit Ethernet outputs. Only Ethernet port 1 supports audio output. When the multifunction card is connected

		<p>for audio decoding, the multifunction card must be connected to the Ethernet port 1.</p> <p>Maximum horizontal resolution is 3840 pixels.</p> <p>Maximum vertical resolution is 1920 pixels.</p>
OPT Output	4	4 optical fiber connectors for long-distance transmission
Monitor	2	<p>DVI and HDMI connectors for output image monitoring</p> <p>DVI and HDMI connectors output the same image.</p>

Overall specifications	
Input power	100 ~ 250 VAC, 50/60 Hz, 0.65 A
Overall power consumption	30 W
Operating temperature	-20~60°C
Weight	6 kg