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 integrated, NovaPro HD meets the requirements of broadcast industry, in image quality and in control.
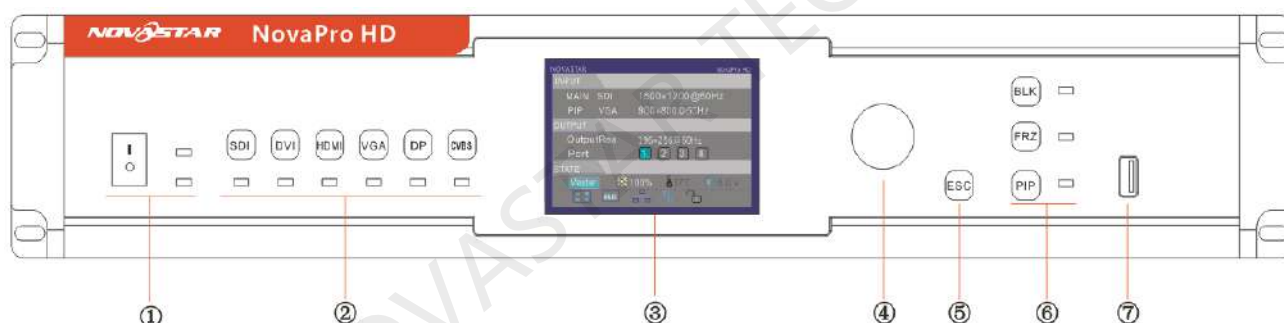
1) The inputs of the NovaPro HD include CVBS, VGA, SDI, DVI, HDMI and DP. They support input resolution up to 1080p@60Hz. Highest pixel clock is 165MHz. Output bandwidth is up to 4GBit. Advanced de-interlacing motion adaptive processing technology is adopted so that images are clear and fine. And with 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 previews assist with system set-up and confirm source status.

4) The NovaPro HD has DMX512 and GenLock interface. Professional control and synchronization are ready to go. Optical fiber outputs enable the confident

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 Port/button

2.1 Front panel

① : Red indicating light corresponds to power switch and green light corresponds to working state indicating light. When it works normally, green light normally blinks. When there is no video input signal, blinking is slow. When any internet port is in hot backup state in this equipment, breathing blinking is shown.

② : Six image input source buttons. There is the indicator light corresponding to input source signal at the bottom. It is blue in default when powered on and it is green after the current channel is selected. It is switched into input source of main picture by pressing input source button for a short time and it is switched into input

source of picture in picture by pressing it for a long time. While setting, you can view operation result on the operation screen. As shown in the figure, Main (main picture) is displayed on current operation screen: SDI, PIP (picture in picture): VGA.

③：Operation screen.

➢ **INPUI:**

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

Input source of current PIP (picture in picture) is VGA input and resolution and field frequency are 1024x768@60Hz.
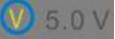
➢ **OUTPUT:** Resolution and field frequency of current output are 196×256@60Hz; internet port 1 output.

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℃ : When current temperature of NovaPro HD exceeds threshold value (can be changed by users), temperature word is displayed in red and blinks.

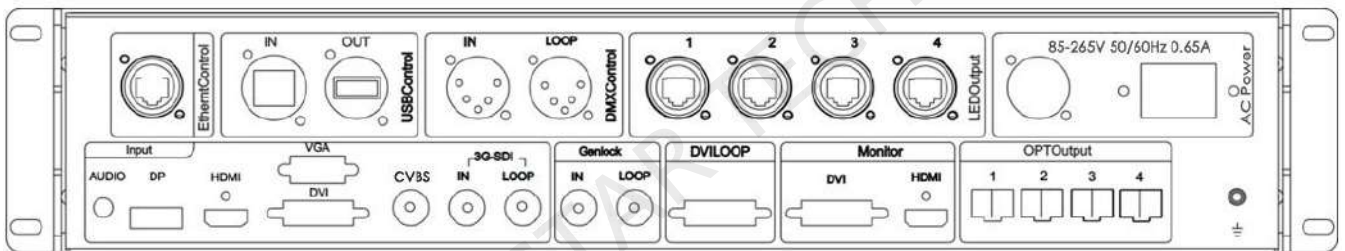| |
|---|
| **5.0 V** : When current voltage of NovaPro HD exceeds threshold value (can be changed by users), voltage word is displayed in red and blinks. |
| : Output picture is reduced picture.

 : Output picture is intercepted picture.

 : Output picture is enlarged picture. |
| GLK : Indicating there is GLK synchronous signal input. |
| : Indicating whether splicing is enabled. |
| : 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：B**LK**: 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.

2.2 Rear panel

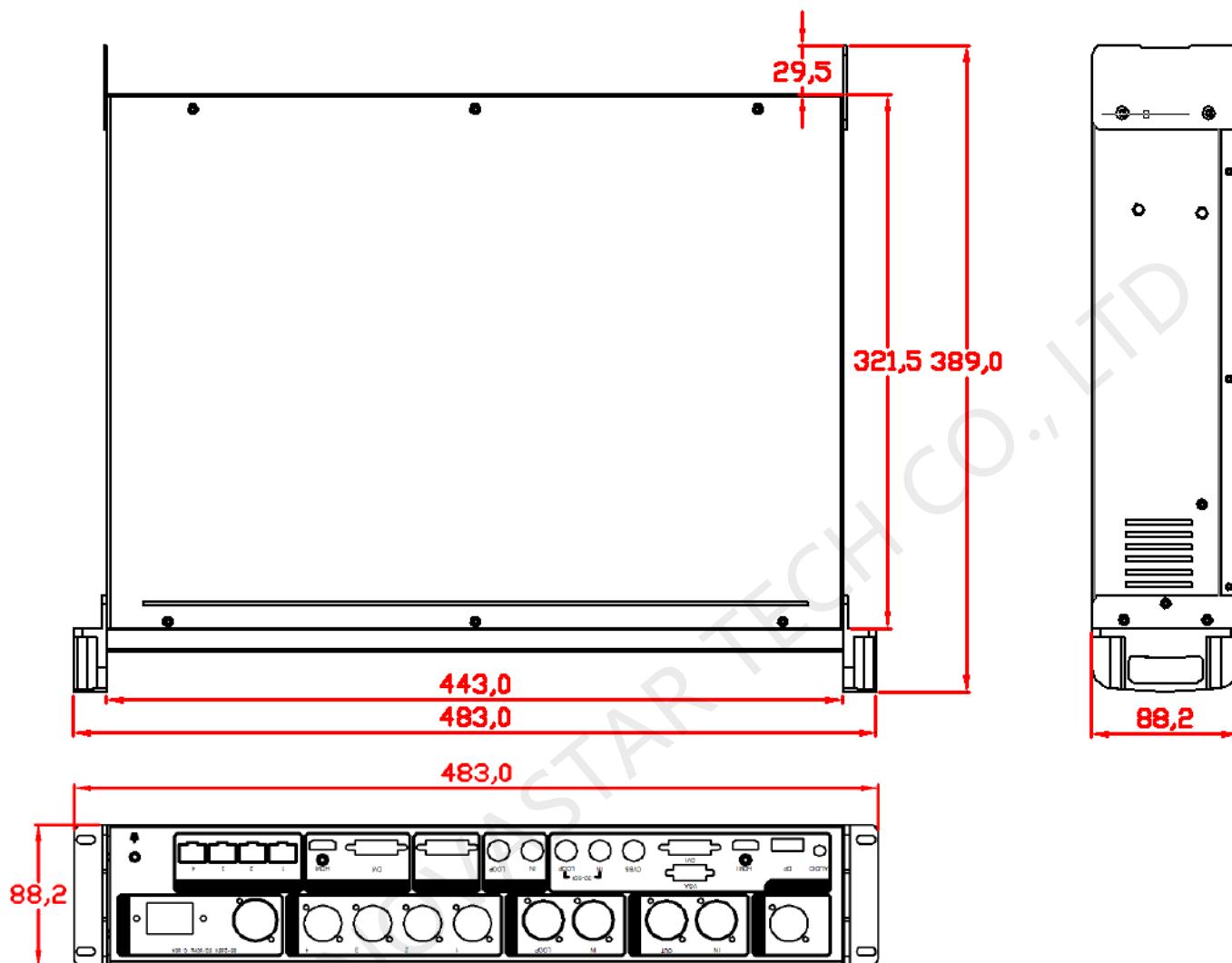| Ethernet: Internet port can be connected with PC for communication through standard TCP/IP protocol.	
USB Control	IN: Connected with PC for communication.
	OUT: Cascaded with the next NovaPro HD.
DMX Control: Connect all consoles that support DMX512 interface protocol.	
Input	Audio input: Audio
	Video 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
Montior	DVI output, monitor can be connected for monitoring
	HDMI output , monitor can be connected for monitoring
LED Output: 4-way Internet port output	
OPT Output: 4-way optical fiber output	
AC Power: AC power interface	

3 Dimension

4 Technical Specification

Input index		
Port	Amount	Resolution specification
CVBS	1	PAL/NTSC
VGA	1	VESA standard
DVI	1	VESA standard (support 1080i input) and support HDCP
HDMI	1	EIA/CEA-861 standard, conforming to HDMI-1.3 standard and supporting HDCP
DP	1	VESA standard
3G-SDI	1	480i, 576i, 720p, 1080i/p（3G SDI）

Output index		
Port	Amount	Resolution specification
DVI input looping out（DVILOOP）	1	Consistent with DVI input and does not support HDCP loping out
DVI	2	1280×1024/60Hz 1440×900/60Hz
HDMI	1	1680×1050/60Hz 1600×1200/60Hz 1600×1200/60Hz – Reduced 1920×1080/60Hz/50Hz 2560×816/60Hz

		2048×640/60Hz 1920×1200/60Hz 2304×1152/60Hz 2048×1152/60Hz 1024×1280/60Hz 1536×1536/60Hz User-defined output resolution (bandwidth optimization) Horizontal resolution: maximum 3840 pixels Vertical resolution: maximum 1920 pixels
SDI input looping out（SDILOOP）	1	480i, 576i, 720p, 1080i/p（3G SDI）

Specification of complete machine	
Input power	85～265VAC，50/60Hz，0.65A
Overall power consumption	30W
Operating temperature	-20~60℃
Weight	6Kg