



# **Specifications**

## Independent Controller MCTRL R5

Rev1.0.0 NS1601000126

### Overview

MCTRL R5 is an independent master controller developed by NovaStar with an epoch-making significance. The loading capacity of a single unit is up to 3840x1080@60Hz, which is able to meet the on-site requirements of oversized LED displays. MCTRL R5 makes it easier to create stunning rotation visual effects for users. MCTRL R5 also can be used as two independent Full-HD controllers, which makes it more flexible to load LED displays.

The design of MCTRL R5 is innovative. It allows to configure a display at

any time without PC.

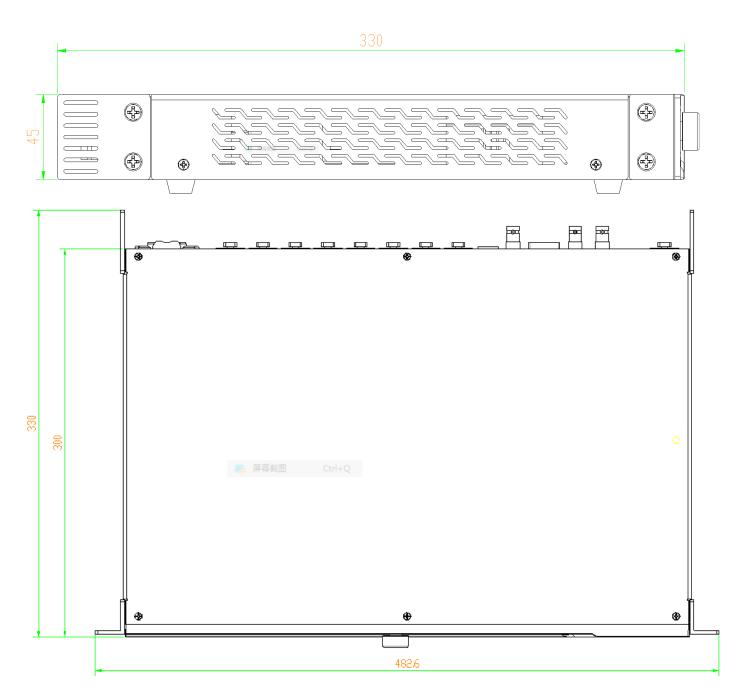
Various video inputs such as HDMI, dual-link DVI,SDI etc. and outputs of 8-channel Neutrik Gigabit Ethernet ports as well as 2-channel optical fiber ports are supported.

#### Features -

- Complete video input interfaces: 6G SDI, HDMI1.4 x 1, dual-link DVI x 1;
- Supports 8-channel Neutrik Gigabit Ethernet outputs and 2-channel optical fiber outputs and maximum loading capacity of a single unit up to 3840x1080@60Hz;
- Image rotation can be realized at any area in the screen with any angle. It will much eaiser with cabinet, ports and screen rotation operation.
- Innovative design to enable smart configuration which has greatly shortened the time for stage preparation;

- NovaStar's G4 engine to create stable and flicker-free pictures without scanning lines, and bring smooth images with a good sense of layering;
- 6) Supports NovaStar's latest pixel-by-pixel calibration technology, the process of which is fast and efficient;
- Enables white balance calibration and color gamut mapping based on the different features of LEDs on the display to ensure the real restoration of color;
- 8) Screen configuration can be done at any time without PC;
- 9) Manual adjustment of screen brightness, which makes it much easier and quicker;
- 10) Multiple controllers are able to be cascaded for uniform control.

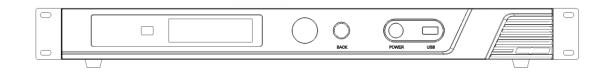
## Dimensions



Dimensions of MCTRL R5 (mm)

## Appearance

#### **Front panel**



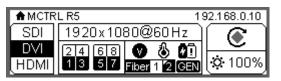
Power button;

Press the button for startup. After startup, press and hold the button

for 4~5 seconds to power off.

USB interface for connecting USB drives.

3: Operation screen



The top section of the screen displays product name (customizable) and its IP address. The meanings of other sections are described as below:

1) Input status of signal source. Highlight indicates it has signal.

2) Current input source and its resolution, frame rate.

3 )Status, the meanings of each status icon are introduced like voltage,

temperature and dual power management and etc.

4) Connection status of Ethernet ports. Highlight indicates that the

connection is available and the port works as master control. Mark on

the upper left corner of the icon indicates that the connection is

available and the port is in redundancy state.

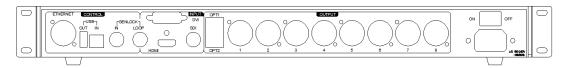
5) Connection status of optical fiber ports. Blue indicates that the connection is available and the fiber port works as master control while gray indicates the port is not connected or the connection is unavailable. Mark on the upper left corner of the icon indicates that the connection is available and the port is in redundancy state.

6) Rotation status of the screen. Whole circle and square combination icon indicates no rotations. Half circle with diamond combination icon indicates there are rotation settings in your screen.

④: Knob, Pressing the knob indicates Enter or OK, rotating the knob allows us to select or adjust.

(5): BACK: Back to the previous menu.

#### **Rear panel**



Inputs		
SDI	6G SDI interface	
HDMI 1.4	HDMI 1.4 interface	
DUAL DVI	Dual-link DVI interface	
Outputs		
	8-channel Neutrik Gigabit Ethernet	
1~8	outputs	
OPT1~2	2-channel optical fiber outputs	
Control		
ETHERNET	Control interface	
	IN: cascade input or connecting to PC for	
USB	communication	
	OUT: cascading next unit	
GenLock		

	Genlock type: Blackburst	
	Genlock synchronous signal, making sure	
IN	the pictures on LED display are	
	synchronous with external Genlock	
	source.	
LOOP	Genlock loop output	
Power supply		
AC 100-240V ~ 50/60HZ	AC power interface	

# Specifications \_\_\_\_\_

Inputs			
Port	Qty	Resolution specifications	
SDI	1	6G standard	
		Max. supported resolution:3840×1080@60Hz,	
		Max. width and height are 3840(downward	
		compatibility)	
HDMI	1	HDMI 1.4 standard	
		Max. supported resolution:3840×1080@60Hz	
		Max. width and height are 3840 (downward	
		compatibility)	
Dual-link DVI 2		VESA standard, max. supported resolution:	
	2	3840x1080@60Hz and 3840×2160@30Hz	
		(downward compatibility)	
Outputs			
Port	QTY	Resolution specifications	
RJ45	8	Neutrik Gigabit Ethernet port	
ОРТ	2	Optical fiber port, single mode and double fiber,	
		LC port, 1310mm	

OPT1 is used for transferring the data of port 1-8
OPT2 is the backup channel of OPT1
Either Gigabit Ethernet port or optical fiber port
can be used at the same time. Two types of ports
cannot be used to connect devices
simultaneously.

Control		
Port	Qty	Notes
ETHERNET	1	Control interface
USB 2	Control interface of upper computer and	
030	2	cascading interface

Overall Specifications		
Input power	AC 100-240V, 50/60Hz	
Overall power consumption	25W	
Operating temperature	-20~60°C	
Dimensions(L×W×H)	482.6×330×45 ( mm )	
Weight	4.6kg	