MCTRL R5

Independent Controller

Specifications

Product Version: V1.0.1

Document Number: NS110100548

Trademark

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Statement

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Change History

Version	Release Date	Description
V1.0.1	2018-06-04	Document style is updated.
V1.0.0	2016-06-06	First release

Contents

1 Safety

This chapter illustrates safety of the MCTRL R5 independent controller to ensure the product's storage, transport, installation and use safety.

Safety instructions are applicable to all personnel who contact or use the product. First of all, pay attention to following points.

- Read through the instructions.
- Retain all instructions.
- Comply with all instructions.

1.1 Storage and Transport Safety

- Pay attention to dust and water prevention.
- Avoid long-term direct sunlight.
- Do not place the product at a position near fire and heat.
- Do not place the product in an area containing explosive materials.
- Do not place the product in a strong electromagnetic environment.
- Place the product at a stable position to prevent damage or personal injury caused by dropping.
- Save the packing box and materials which will come in handy if you ever have to store and ship the product. For maximum protection during storage and shipping, repack the product as it was originally packed at the factory.

1.2 Installation and Use Safety

- Only trained professionals may install the product.
- Plugging and unplugging operations are prohibited when the power is on.
- Ensure safe grounding of the product.
- Beware of electric shock hazards.
- Always wear a wrist band and insulating gloves.
- Do not place the product in an area having frequent or strong shake.
- Perform dust removing regularly.

- Contact NovaStar for maintenance at any time, rather than have the product disassembled and maintained by non-professionals without authorization.
- Replace faulty parts only with the spare parts supplied by NovaStar.

2 Overview

Developed by NovaStar, the MCTRL R5 is the first independent controller that supports rotation function. With up to 3840×1080@60Hz loading capacity of a single unit, it can support any custom resolution within this range as required, thus meeting the on-site configuration requirements of extra-long or extra-large LED displays.

Working with the A8s or A10s, the MCTRL R5 supports free screen configuration on SmartLCT, presenting full rotation of the display screen at any angle, adding diversity to images, and bringing different visual experience to users.

The MCTRL R5 is mainly applied to concert control centers, live events, security monitoring, Olympic Games and various sports centers.

3 Features

- Provides complete input connectors, including 1 × 6G-SDI, 1 × dual-link DVI and 1 × HDMI 1.4.
- Supports 8 × Gigabit Ethernet ports and 2 × fiber optical outputs.
- Supports rotation of LED screens at any angle.
- Adopts innovative architectural design to enable smart configuration, which can greatly shorten the stage preparation time.
- Adopts NovaStar G4 engine to realize a perfect image display with no flickering and scanning lines, but fine quality and good sense of depth.
- Supports NovaStar's latest pixel level calibration technology with a fast and efficient process.
- Implements white balance calibration and color gamut mapping to ensure colors are faithfully reproduced.
- Supports screen configuration at any time without a PC.
- Supports easy and quick manual adjustment of screen brightness.
- Supports hardware upgrade via USB on the front panel.
- Supports cascading multiple controllers for uniform control.

4 Appearance

Front Panel

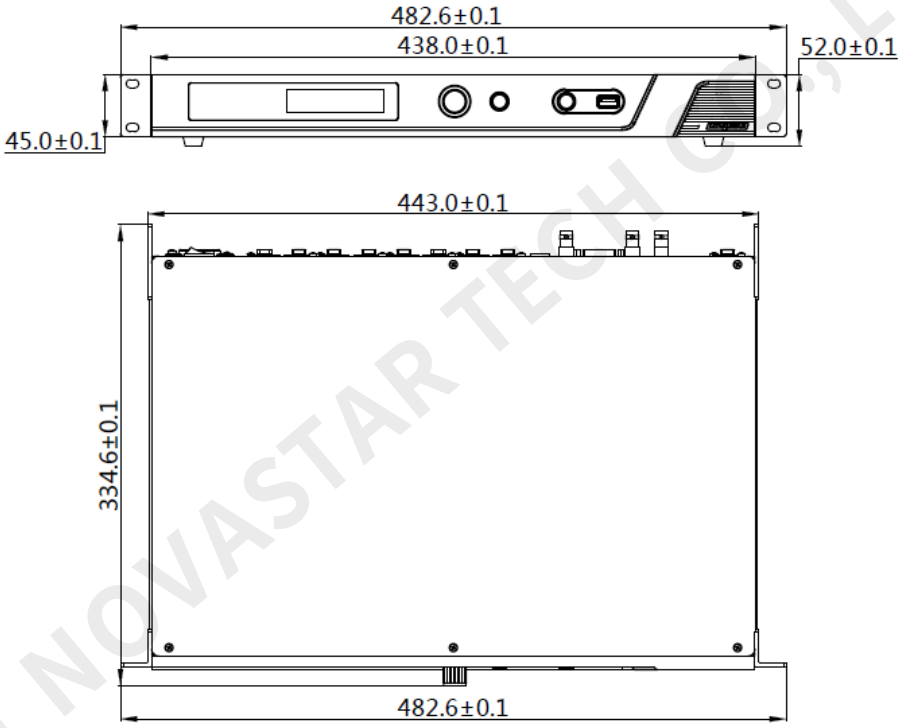
No.	Name	Description
①	Indicator **R5**	Blue always on: Normal Red on: Alarm Orange on: No signal Blue breathing: Standby
②	LED screen	Displays the menu.
③	Knob	Pressing the knob enters a menu or confirms an option or operation, while rotating the knob selects a menu item or adjusts a parameter.
④	**BACK**	Returns to the parent menu.
⑤	**POWER**	Pressing it powers on the device, while holding it down for 4–5 seconds powers off the device.
⑥	USB port	Connects to the USB drive for firmware upgrade.

Rear Panel

Input	
SDI	6G-SDI connector
HDMI	HDMI1.4 connector
DVI	DVI connector
Output	
1–8	8 × Neutrik (NE8FBH) Gigabit Ethernet outputs
OPT1–2	2 × Fiber optical outputs OPT1 corresponds to Ethernet ports 1–8. OPT2 serves as the backup for OPT1.
Control	
ETHERNET	For PC connection
USB IN	Input port for cascading devices, or for PC connection
USB OUT	Output port for cascading devices
GENLOCK	
IN	GENLOCK type: Blackburst. It is the GENLOCK synchronization signal which is used to ensure synchronization between the LED screen display and external GENLOCK source.
LOOP	GENLOCK loop output
Power Connector	
AC 100-240 V–50/60 Hz	AC power input

Note: Type-A USB port is prohibited from being connected to the upper computer directly.

5 Dimensions



Unit: mm

6 Specifications

Input Voltage	AC 100-240 V 50/60 Hz
Rated Power Consumption	25 W
Operating Temperature	-20°C–60°C
Operating Humidity	10% RH–90% RH
Dimensions	482.6 mm × 334.6 mm × 52.0 mm
Weight	4.3 kg
Certifications	• FCC • RoHS • UL&CUL • EMC • LVD • CB • IC
Packing	Each MCTRL R5 unit is equipped with a suitcase, an accessory box and a large carton. Packing dimensions: Suitcase: 550 mm × 400 mm × 175 mm, white cardboard box printed with **NOVASTAR**, one unit in a suitcase. Accessory box: 405 mm × 290 mm × 48 mm, white cardboard box printed with **Accessory Box.** Accessories include 1 × power cord, 1 × Ethernet cable, 1 × USB cable, 1 × HDMI cable and 1 × DP cable. Carton: 550 mm × 400 mm × 175 mm, craft paper box printed with **NOVASTAR**. Packing rules: Product and accessory box (containing related cables) packed in the suitcase and the suitcase packed in the large carton.