MCTRL300

Independent Controller

Specifications

Product Version: V2.3.0

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Change History

Version	Release Date	Description
V2.3.0	2019-05-15	• Updated document style. • Optimized document content.

Contents

1 Overview

The MCTRL300, one of the M3 series independent controllers of NovaStar, supports video and audio input. After decoding and data processing, videos and audios can be sent to the screen via Ethernet port. A single controller supports resolutions up to 2048×668@60Hz. It communicates with the computer via USB port, which is convenient to use.

The MCTRL300 can be mainly used for the rental and fixed fields, such as live events, security monitoring centers and various sports centers.

2 Features

2.1 Features

- 1 × DVI input
- 1 × audio input
- 1 × type-B USB control port
- UART control ports to cascade devices for uniform control
- Dual Ethernet outputs
- Supports the new generation of NovaStar calibration technology, which is fast and efficient.
- 1 × light sensor connector
- Supports resolutions up to 2048×668@60Hz and downward compatibility.
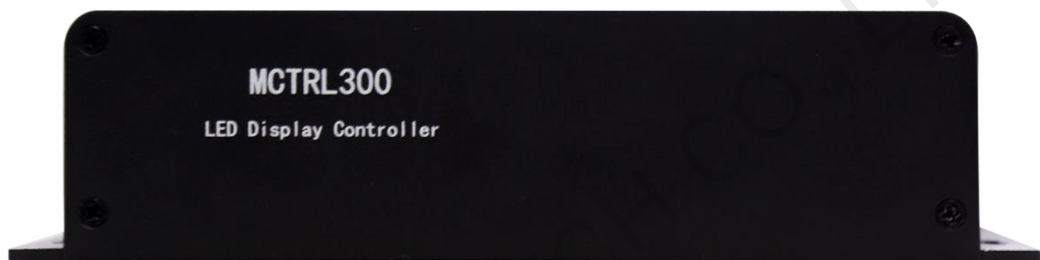- Supports a variety of video formats, as described in Figure 2-1.

2.2 Video Formats

Figure 2-1 Video formats

Input Connector	Bit Depth	Sampling Format	Maximum Input Resolution
DVI	8-bit	RGB 4:4:4	1920×1200@60Hz

3 **Appearance**

3.1 Front Panel
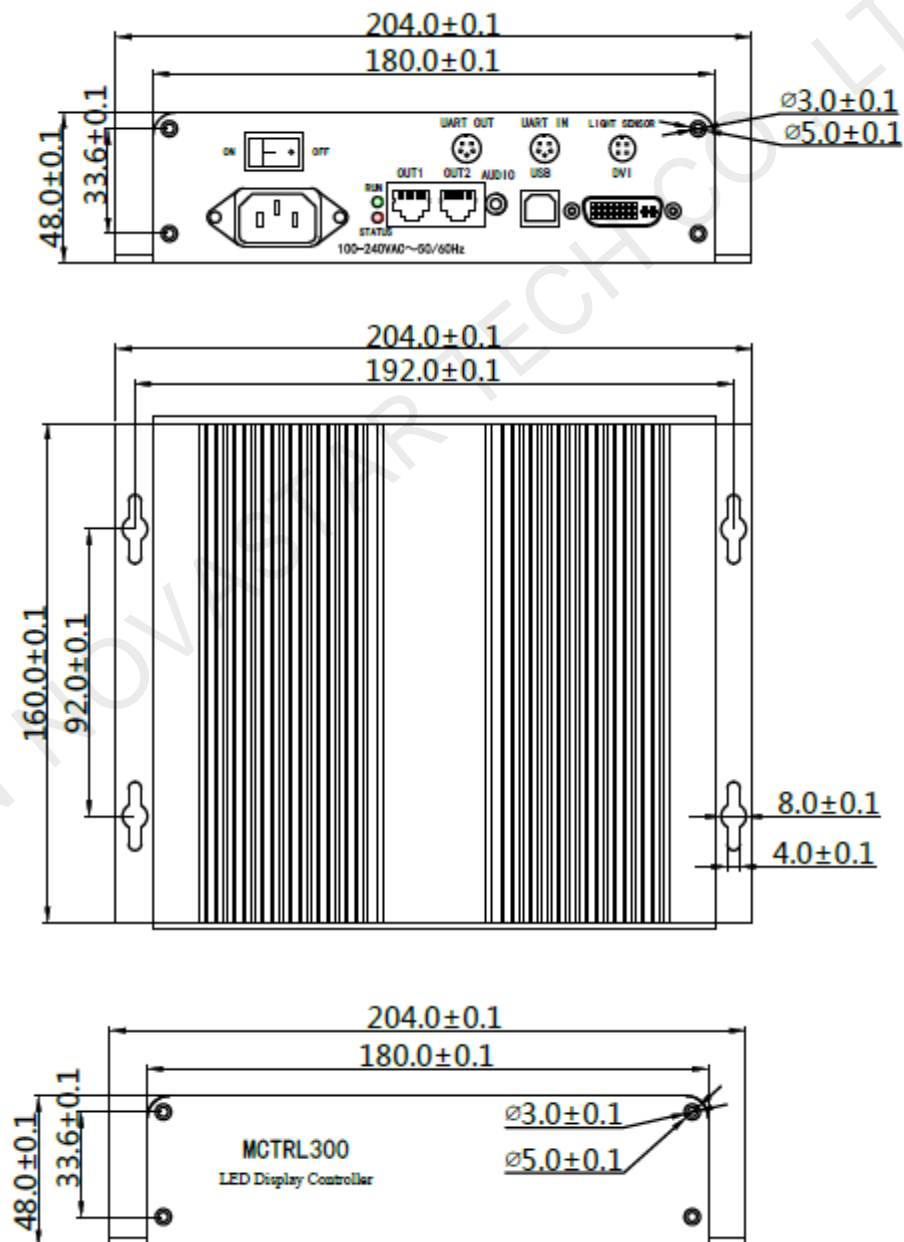

3.2 Rear Panel

Connector	Connector Name	Description

Input	DVI IN	• Single-link DVI connector
		• Resolution up to 1920×1200@60Hz and downward compatible
		• Custom resolutions supported:
		    Resolution with maximum width: 3840×600@60Hz
		    Resolution with maximum height: 800×2560@60Hz

	AUDIO	Audio input connector
Output	RJ45 × 2	• 2 Gigabit Ethernet outputs • Maximum loading capacity of a single Ethernet port: 650,000 pixels • Support redundancy between Ethernet ports.
Function	LIGHT SENSOR	Connect to light sensor to monitor ambient brightness to realize automatic screen brightness adjustment.

Connector	Connector Name	Description
Control	UART IN/OUT	Input and output ports for cascading devices
	USB	Type-B USB control port for connecting to PC
Power	AC 100V-240V~50/60Hz	
Indicators		
RUN	Device operating indicator. Working status: • Flashing slowly: Video input unavailable • Flashing normally: Video input available • Flashing rapidly: The screen is displaying startup image. • Breathing: Ethernet port redundancy has taken effect.	
STATUS	Device power indicator. Working status: • On: The power supply is normal. • Off: The power is not supplied, or the power supply is abnormal.	

4 Dimensions

Unit: mm

5 Specifications

Electrical Parameters	Input voltage	AC 100 V–240 V, 50/60 Hz
	Rated power consumption	10 W
Operating Environment	Temperature	-20°C–60°C
	Humidity	0% RH–90% RH, non-condensing
Dimensions	204 mm × 160 mm × 48 mm	
Net weight	1.04 kg	
Space Requirement	1U	
Certifications	EAC, RoHS, EMC, FCC, IC, LVD, PFOS	
Packing Information	Each packing box contains 1 controller unit.	
	Packing box	280 mm × 210 mm × 120 mm, craft paper box printed with **NOVASTAR** • 1 × power cord • 1 × cascading cable (1 meter) • 1 × USB cable • 1 × DVI cable

6 FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.