

MCTRL300

Independent Controller



Specifications

Product Version: V2.3.1

Document No. NS110100858

Copyright © 2019 Xi'an NovaStar Tech Co., Ltd. All Rights Reserved.

No part of this document may be copied, reproduced, extracted or transmitted in any form or by any means without the prior written consent of Xi'an NovaStar Tech Co., Ltd.

Trademark

 is a trademark of Xi'an NovaStar Tech Co., Ltd.

Statement

You are welcome to use the product of Xi'an NovaStar Tech Co., Ltd. (hereinafter referred to as NovaStar). This document is intended to help you understand and use the product. For accuracy and reliability, NovaStar may make improvements and/or changes to this document at any time and without notice. If you experience any problems in use or have any suggestions, please contact us via contact info given in document. We will do our best to solve any issues, as well as evaluate and implement any suggestions.

XI'AN NOVASTAR TECH CO., LTD.

Change History

| Version | Release Date | Description |
|---------|--------------|---|
| V2.3.1 | 2019-10-31 | Updated the dimensions diagram. |
| V2.3.0 | 2019-05-15 | <ul style="list-style-type: none">• Updated document style.• Optimized document content. |

Contents

| | |
|-------------------------------|------------|
| Change History | ii |
| Contents | iii |
| 1 Overview | 1 |
| 2 Features | 1 |
| 2.1 Features | 1 |
| 2.2 Video Formats | 1 |
| 3 Appearance | 2 |
| 3.1 Front Panel | 2 |
| 3.2 Rear Panel | 2 |
| 4 Dimensions | 4 |
| 5 Specifications | 5 |
| 6 FCC Caution | 6 |

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 x DVI input
- 1 x audio input
- 1 x 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 x light sensor connector
- Supports resolutions up to 2048x668@60Hz and downward compatibility.
- Supports a variety of video formats, as described in [Figure 2-1](#).

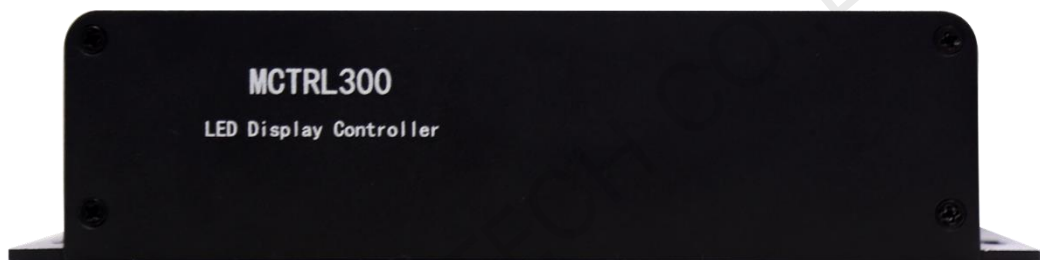
2.2 Video Formats

Figure 2-1 Video formats

| Input Connector | Bit Depth | Sampling Format | Maximum Input Resolution |
|-----------------|-----------|-----------------|--------------------------|
| DVI | 8-bit | RGB 4:4:4 | 1920x1200@60Hz |

3 Appearance

3.1 Front Panel



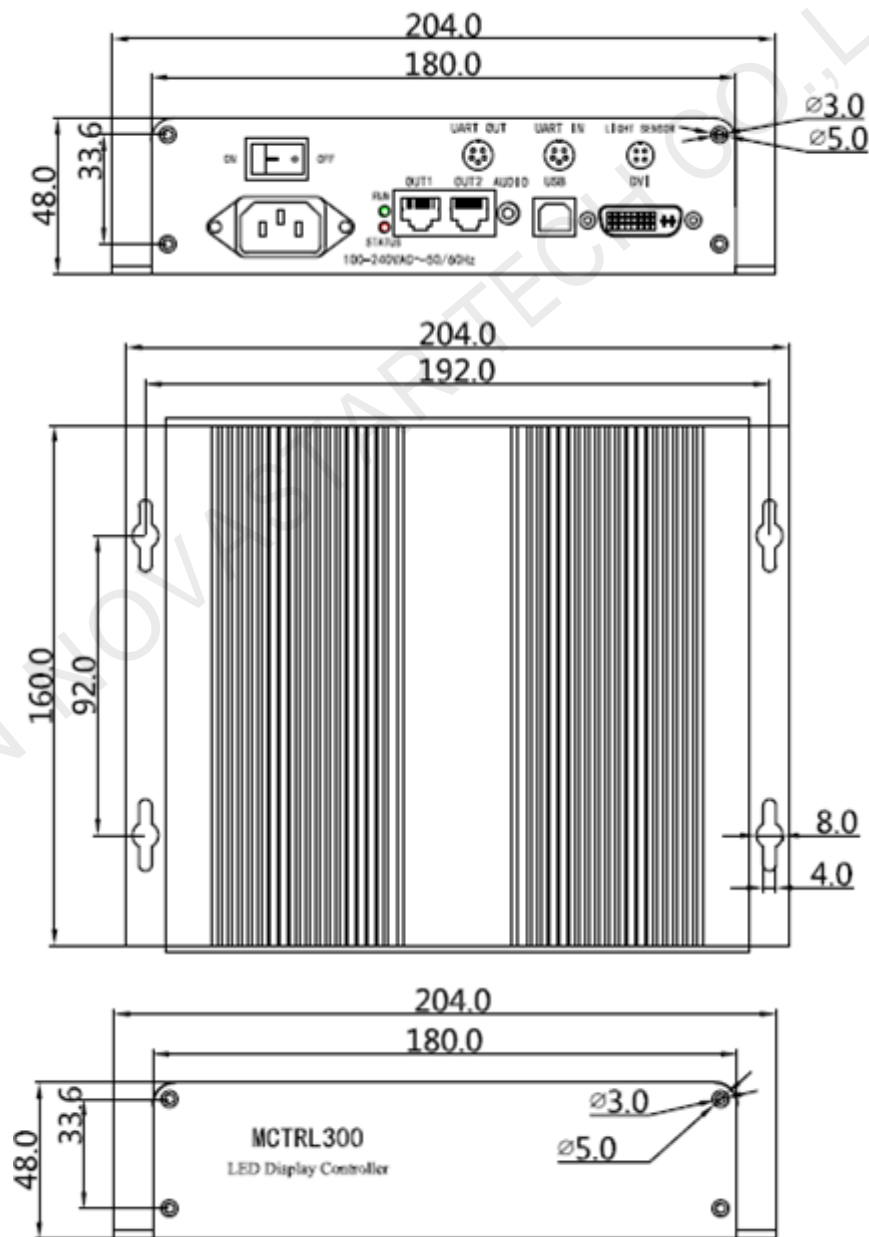
3.2 Rear Panel



| Connector | Connector Name | Description |
|-----------|----------------|--|
| Input | DVI IN | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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 |
| Physical Specifications | Dimensions | 204 mm × 160 mm × 48 mm |
| | Net weight | 1.04 kg |
| | Space Requirement | 1U |
| Packing Information | Packing box | 280 mm × 210 mm × 120 mm, craft paper box printed with NOVASTAR <ul style="list-style-type: none"> • 1 × power cord • 1 × cascading cable (1 meter) • 1 × USB cable • 1 × DVI cable |
| Certifications | EAC, RoHS, EMC, FCC, IC, LVD, PFOS | |

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.