

Red Lion Controls 308TX-N

Red Lion Controls N-Tron 308TX-N 8-Port Industrial Ethernet Switch User Manual

1. INTRODUCTION

This manual provides essential instructions for the installation, operation, maintenance, and troubleshooting of the Red Lion Controls N-Tron 308TX-N Industrial Ethernet Switch. The N-Tron 308TX-N is an unmanaged 8-port 10/100BaseTX Ethernet switch designed for reliable performance in demanding industrial environments, featuring DIN-rail mounting and an optional N-View firmware for enhanced monitoring capabilities.

Please read this manual thoroughly before attempting to install or operate the device to ensure safe and efficient use.

2. SAFETY INFORMATION

Observe the following safety precautions to prevent injury and damage to the equipment:

- **Electrical Safety:** Ensure power is disconnected before installation or maintenance. Only qualified personnel should perform electrical connections.
- **Grounding:** Always ensure the device is properly grounded according to local electrical codes.
- **Environment:** Install the switch in an environment that complies with its specified operating temperature and humidity ranges. Avoid exposure to moisture, dust, and corrosive substances.
- **Mounting:** Securely mount the device to prevent accidental dislodgement.
- **Ventilation:** Ensure adequate airflow around the unit to prevent overheating.

3. PRODUCT OVERVIEW

The Red Lion Controls N-Tron 308TX-N is an industrial-grade Ethernet switch providing eight 10/100BaseTX ports for high-speed data communication. Its robust design makes it suitable for various industrial applications, offering reliable network connectivity. The device supports DIN-rail mounting for easy integration into control cabinets.



Figure 1: Red Lion Controls N-Tron 308TX-N Industrial Ethernet Switch. This image displays the Red Lion Controls N-Tron 308TX-N Industrial Ethernet Switch. The front panel features eight RJ45 Ethernet ports, labeled 1 through 8, for network connections. Above the ports, status indicator LEDs are visible. The device is housed in a compact, black industrial enclosure, designed for DIN-rail mounting, with warning symbols on the side.

Key Features:

- 8 x 10/100BaseTX RJ45 Ports
- Auto-sensing 10/100Mbps, Auto-negotiation, Auto MDI/MDIX
- Industrial-grade operating temperature range
- DIN-Rail mountable
- Optional N-View firmware for network monitoring (model 308TX-N)

4. SETUP

4.1. Mounting

The N-Tron 308TX-N is designed for DIN-rail mounting. To mount the switch:

1. Ensure the DIN-rail is securely installed within the control cabinet or enclosure.
2. Hook the top edge of the switch's DIN-rail clip onto the top edge of the DIN-rail.
3. Push the bottom of the switch firmly towards the DIN-rail until the clip snaps into place.
4. Verify that the switch is securely attached and does not wobble.

4.2. Power Connection

The switch requires a DC power input. Refer to the specifications section for the exact voltage range. Connect the power supply wires to the terminal block located on the top of the unit. Ensure correct polarity (positive to +V, negative to -V) and a secure connection. It is recommended to use a dedicated industrial power supply.

4.3. Network Connection

Connect standard Ethernet cables (Cat5e or better) from your network devices (e.g., PLCs, HMIs, industrial computers) to any of the eight RJ45 ports on the front panel of the switch. The switch supports Auto MDI/MDIX, so straight-through or crossover cables can be used interchangeably.

4.4. Initial Configuration (N-View Firmware Option)

For models equipped with the N-View firmware option (indicated by the '-N' suffix), basic network monitoring and diagnostic features are available. Access to N-View typically involves connecting a PC to the switch and using a web browser or dedicated software. Detailed configuration and usage instructions for N-View are provided in a separate N-View Software Manual or on the Red Lion Controls website.

5. OPERATING INSTRUCTIONS

5.1. Powering On

Once the power supply is connected and secured, apply power. The Power LED on the switch will illuminate, indicating successful power-up.

5.2. LED Indicators

The N-Tron 308TX-N features several LED indicators to provide status information:

- **Power LED:** Illuminates when the switch is receiving power.
- **Link/Activity LEDs (per port):**
 - **Solid Green:** Indicates a valid network link is established on that port.
 - **Flashing Green:** Indicates data activity (transmitting or receiving) on that port.
 - **Off:** No network link detected or port is inactive.

5.3. Basic Operation

The N-Tron 308TX-N is an unmanaged switch, meaning it operates automatically without requiring user configuration for basic network forwarding. Once powered on and connected to network devices, it will automatically learn MAC addresses and forward Ethernet frames between connected devices.

6. MAINTENANCE

6.1. Cleaning

Periodically inspect the switch for dust accumulation. If cleaning is necessary, disconnect power and use a soft, dry cloth. Do not use liquid cleaners or solvents.

6.2. Environmental Checks

Regularly check the operating environment to ensure it remains within the specified temperature and humidity limits. Ensure ventilation openings are not obstructed.

6.3. Firmware Updates (N-View Models)

For models with N-View firmware, check the Red Lion Controls website periodically for available firmware updates. Follow the instructions provided with the firmware update package carefully.

7. TROUBLESHOOTING

If you encounter issues with your N-Tron 308TX-N switch, consider the following troubleshooting steps:

- **No Power LED:**
 - Check the power supply connection and ensure it is providing the correct voltage.
 - Verify the power source is active.
- **No Link/Activity LED:**
 - Ensure the Ethernet cable is securely connected at both ends.
 - Try a different Ethernet cable.
 - Verify the connected network device is powered on and functioning correctly.
 - Check the cable length; ensure it does not exceed Ethernet standards (100 meters for 100BaseTX).

- **Slow Network Performance:**

- Check for excessive network traffic or loops (though unmanaged switches typically have basic loop prevention).
- Ensure all connected devices are operating at their expected speeds (10/100Mbps).

If problems persist after performing these steps, contact Red Lion Controls technical support for further assistance.

8. SPECIFICATIONS

Specification	Value
Brand	Red Lion Controls
Model	308TX-N
Number of Ports	8
Interface Type	RJ45
Ethernet Speed	10/100BaseTX
Upper Temperature Rating	60 Degrees Celsius
Color	Black
Compatible Devices	Network Devices
UPC	747356315210
ASIN	B07CS9LNGQ
Date First Available	May 1, 2018

9. WARRANTY AND SUPPORT

9.1. Warranty Information

Red Lion Controls products are typically covered by a standard manufacturer's warranty. For specific warranty terms and conditions applicable to your N-Tron 308TX-N switch, please refer to the warranty statement included with your product packaging or visit the official Red Lion Controls website.

9.2. Technical Support

For technical assistance, product inquiries, or to report issues that cannot be resolved using the troubleshooting guide, please contact Red Lion Controls technical support. Contact information, including phone numbers and online support resources, can be found on the official Red Lion Controls website: www.redlion.net/support.

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question