MIU-4 v 3.4

Contents

Introduction

The Traf-Sys MIU-4 data controller is a stand-alone device designed to process and log data from wired Traf-Sys sensors. The MIU-4 receives contact-closure relay signals from sensors, processes the data and makes the data available via a command/response interface through the built-in serial data port.

The serial data port can be connected to a number of different devices for remote accessibility. The following are ways that the MIU-4 can be connected: direct to a pc serial port, modem or serial to IP network converter.

Each of the 4 sensor ports on the MIU-4 will provide power to the sensors and a relay signal back to the MIU-4 for processing data. The MIU-4 can support up to 4 entrances and stores up to 40 days of data.

Connecting to the MIU-4

There are two types of connection ports on the MIU-4, sensor ports and a single data port. The sensor ports are used to power sensors and relay data back to the MIU-4. The data port is a single serial interface that will allow you to retrieve data from the MIU-4.

Sensor Ports

Sensor ports are numbered 1 through 4 on the front of the MIU-4. Each sensor port can be used to handle multiple sensors in a daisy-chain configuration. This allows you to wire an entrance that would require multiple sensors with a single run of cable.

Each sensor port is an RJ-12 port with 6 connections. You must use wiring that has at least 6 conductors for your home-run wiring. All wiring to the MIU-4 is straight-through end-to end.

The 8 LEDs that appear on the front of the MIU-4 indicate activity on each of the ports. You will see each LED flash for the corresponding port when data is being sent to the MIU-4. If the LED should appear solid, this indicates that there is a short in the wiring to this port and you should check your pairs to make sure the wiring is straight-through end-to-end.

The Data Port

There is one data port available on the front of the MIU-4. This port uses a RJ-45 jack, but is actually a RS-232 serial port. There are several different ways to connect to the data port.

Direct-to-PC Connection

You can connect the MIU-4 directly to a PC using a serial connection. The MIU-4 can be used with a female DB-9 to RJ-45 adapter to connect directly to the serial port on a PC.

If you don't have a female DB-9 to RJ45 connector, you can order one by contacting sales@trafsys.com, or you can configure your own by using the following pin-out.

DB-9 to RJ45 Pin-out (Serial Connection)

The pin-out for the MIU-4 female DB-9 to RJ45 adapter is as follows:

5 – Green

3 – White

2 – Blue

Ethernet Adapter Connection

The MIU-4 can be used with a serial-to-IP Ethernet adapter to make your data available over a Local Area Network. The Serial-to-IP converter requires a male DB-9 to RJ45 adapter for connectivity.

If you need a serial to IP converter, you can order one from sales@trafsys.com. These devices can be configured to work with Traf-Sys software. For specific configuration details, see the instructions for setting up a serial-to-IP converter.

The male DB-9 to RJ45 adapter is included with the pre-configured serial to IP converter, but if you need to configure your own, you can use the following pin-out.

Male DB-9 to RJ45 Pin-out (Serial-to-IP Converter Connection)

The pin-out for the MIU-4 male DB-9 to RJ45 adapter is as follows:

5 – Green

3 – White

4 – Blue

Modem Connection

The MIU-4 can be connected to an external modem to make your data remotely available through a shared or dedicated phone line. This will allow you to communicate with the MIU-4 over a phone line using a modem-to-modem connection.

To connect the data port to a modem, you will need a male DB-25 to RJ45 adapter. You can order these adapters and pre-configured modems from sales@trafsys.com.

The male DB-25 to RJ45 adapter is included with the pre-configured external modem, but if you need to configure your own, you can use the following pin-out.

Male DB-25 to RJ45 Pin-out (External Modem Connection)

The pin-out for the MIU-4 male DB-25 to RJ45 adapter is as follows:

2 – Blue

3 – White

7 – Green

Specifications

The MIU-4 features the following specifications:

- Internal Power Supply
  - Input: 110V AC 60Hz
  - Output: 21V DC 1A
- Maximum Supported Sensors
  - Surround Sensors: 45 sensors @ 40 mA
  - Thermal Sensors: 25 sensors @ 70 mA