# TECHNICAL DATA

# **Specifications**

# **Physical**

Size

Length: 17.1" Width: 10.6" Height: 5.6" Weight 18lb.

#### **Environmental**

Storage

Temperature: -50°C to 85°C Humidity: 0 to 95%, noncondensing

Operating

Temperature: -40°C to 72°C Humidity: 0 to 95%, noncondensing

## Mounting

Standard: desktop or 19" rack mounting

Optional: 23" rack or wall mounting brackets available

#### Construction

#### Chassis

Fully enclosed, anodized aluminum, thumbscrews allow access inside

Externally accessible keypad, LEDs and connectors

#### **Electrical**

All components mounted on conformal coated, plug-in PCBs

# **Power**

Voltage

Input: 10 to 36Vdc Consumption

Typical: 6W

Maximum: 9W (with Modem and Memory Expansion PCBs)

# Isolation

**Power** 

Minimum: 3800 Vdc from B and N terminals to chassis and inputs

Inputs to Ground Minimum: 3800 Vdc

Input to Adjacent Input

Minimum: 1500Vdc

Internal Modem (optional)

Designed to meet FCC part 68 standards

# Capacities

Inputs

Digital: 240, all opto-isolated

Event Storage

Standard: 126,148 records CPU Options: 240.836, 363,716. 478,404 records

**Memory Expansion Options:** 683,204 to 2,124,996 records

Memory Full: 31st day overwrites first day, newest data overwrites oldest data

# RS-232 Ports

Quantity: 2, for PC or printer Emulation: TTY, TVI-910, ANSI

Port 1 Baud Rates: 300, 1200. 4800, 9600, 19,200, 38,400 Port 2 Baud Rates: 300, 1200,

9600, 19,200 Bit Format: N-8-1

#### **Liquid Crystal Display**

Characters: 40 total on 2 lines Character Set: A-Z upper- and lower-case, 0-9, various symbols

Viewing Area: 2.9" by .5"

# Front Panel Keypad

Quantity: 16 keys, pushbutton Keys: 0-9, Browse, Setup, Esc,

Enter, left, right

# Inputs

### Input Impedance

Minimum: 5KOhms, optoisolated

#### Voltage Range

High: 5 to 36Vdc Low: less than 2Vdc

#### **Event Validation Times**

Range: .1 to 1500 seconds in multiples of .1 seconds

Flashing: compatible with fixed

rate flashing circuits

# Memory

#### Type

Non-volatile. Event Records and Setup Database are stored in battery backed-up RAM

# Storage Longevity

Minimum: 1 year with power off

# Connectors

All on rear panel

#### Inputs

Detachable, screw-down with 12 terminals, 12 to 22 AWG

#### RS-232 Ports

DE-9 male, configured as DCE

#### **Power**

B and N to No. 6 screw terminals

#### **Telephone Line**

RJ-11 jack and No. 6 screw terminals

#### Controls

#### **LCD Contrast Adjust**

Potentiometer: 20-turn, located on Power Supply PCB

#### Power On/Off Switch

Toggle: SPST, located on Power Supply PCB

# **Indicators**

#### **LCD Panel**

Includes LED back lighting for enhanced visibility

Displays numerous command menus for configuring the recorder and retrieving data

## **LEDs (3)**

Power: green

**Terminal**: green, flashes with send/rcv data

**Modem**: green, flashes with send/rcv data and ring-in

# **Internal Clock**

# **Accuracy**

**Typical**: ±1 minute per month (20 ppm)

#### Resolution

Event Records are time stamped to nearest .1 seconds

# Internal Clock (continued) Operation

Full calendar, auto-adjusted for leap year

Non-volatile with power off Y2K compliant

# **Password Protection**

#### **Administrative Level**

Access to all functions, limit 10 characters

#### **Restricted Level**

Access to Event Record and Setup Database viewing only, limit 10 characters

#### **Passcode**

Protects against alterations to Setup Database via front panel, limit 8 digits

# Internal Modem (optional)

# Type

V.32bis, 14,400 Baud, data compression and error correction

## Usage

Remote access via auto-answer operation

#### Compliance

Designed to meet FCC part 68 standards

MICRO-AIDE reserves the right to make changes, at its sole discretion, to any specifications listed herein.

# **Terminal Port Cable**

The following cable is include with every Model 240D.

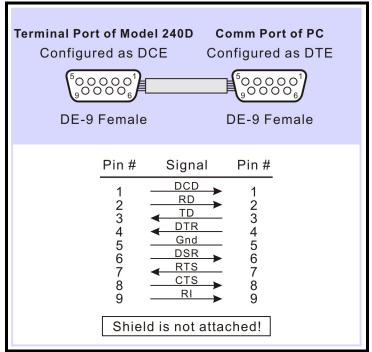


Figure 9 - Terminal Port Cable - Wiring Diagram