

234HE

Hostile Environment Remote Display

Installation and Operation Manual

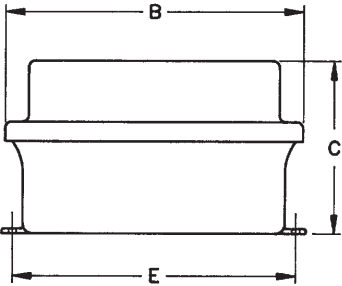
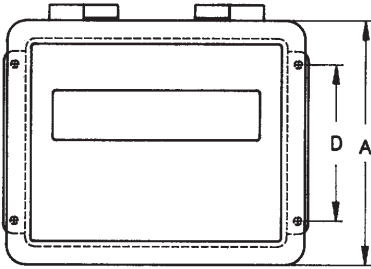


Contents

- 1. Specifications 1
- 2. Serial Communication Connections 2
- 3. Configuration of Dip Switches 4
- 4. Troubleshooting Guide 5
- 5. Remote Display/Indicator Programs 6
- 6. Replacement Parts 7
- 7. 234HE Limited Warranty 8

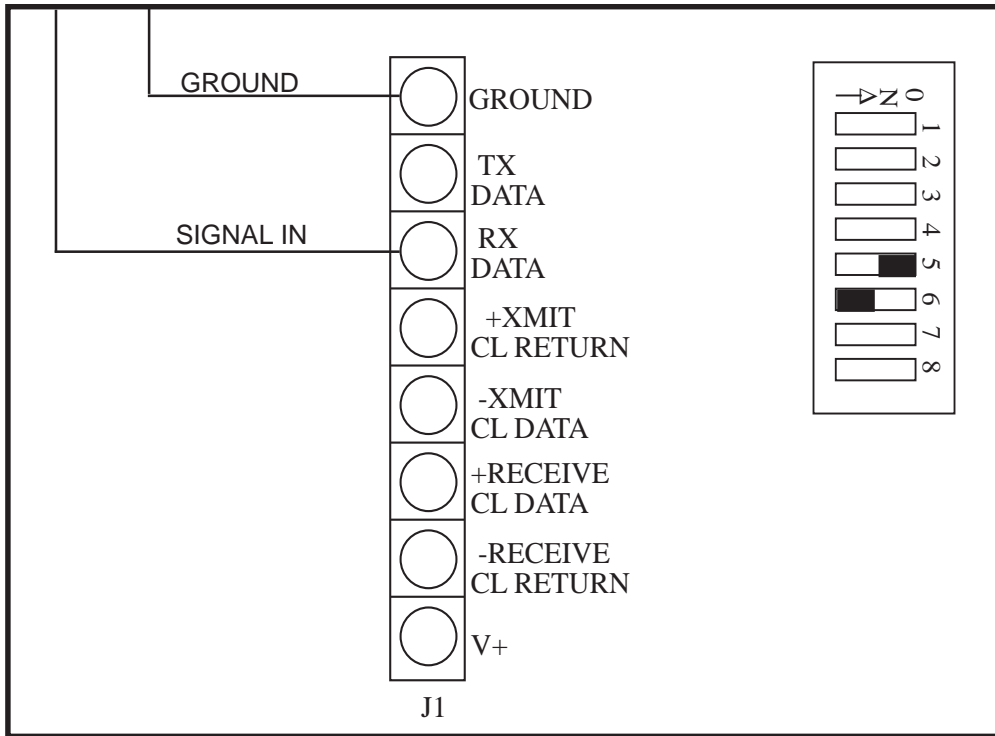
1. Specifications

- DISPLAY:**
 6 1.5" active, high visibility fluorescent yellow digits
- ENCLOSURE:**
 NEMA 4X Fiberglass Reinforced Polyester
- INPUT INTERFACE:**
 20 mA current loop (active/passive), RS-232C,
 standard ASCII serial characters
- BAUD RATE:**
 Dip switch selectable 1200 and 2400
- CHARACTER FORMAT:**
 Dip switch selectable character format,
 7 or 8 data bits, odd or even parity, 1 or 2 stop bits
- UPDATE:**
 Continuous update
- POWER CONSUMPTION:**
 24 watts, typical
- SHIPPING WEIGHT:**
 Approx. 13 lbs

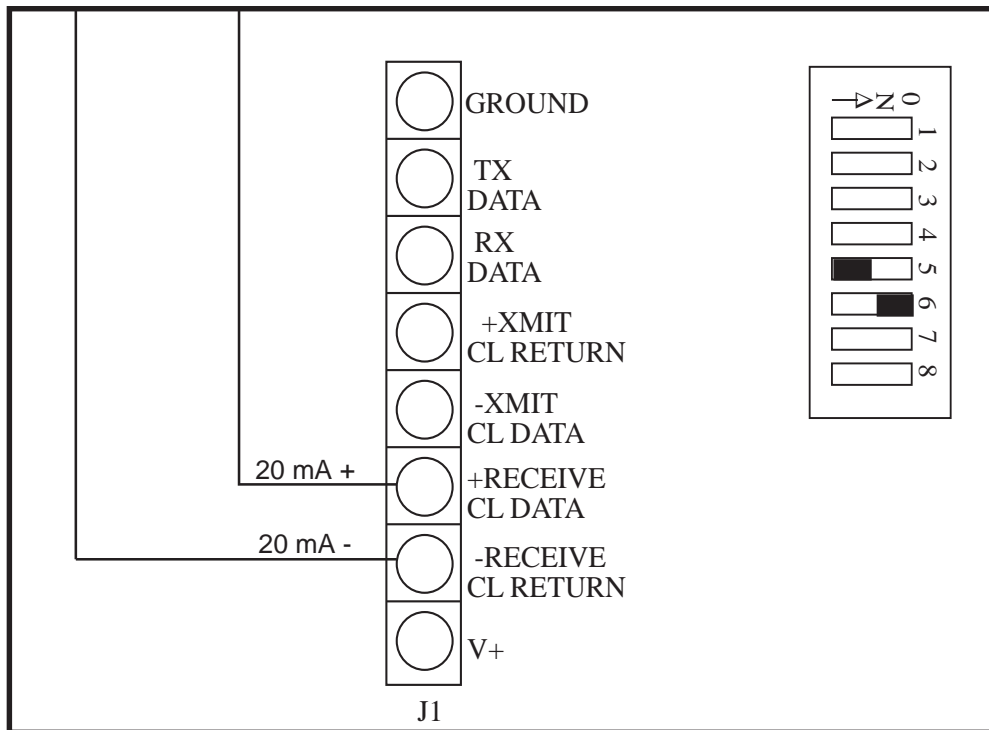


Dimensions	
A	= 9.38"
B	= 11.38"
C	= 6.63"
D	= 6.00"
E	= 10.81"

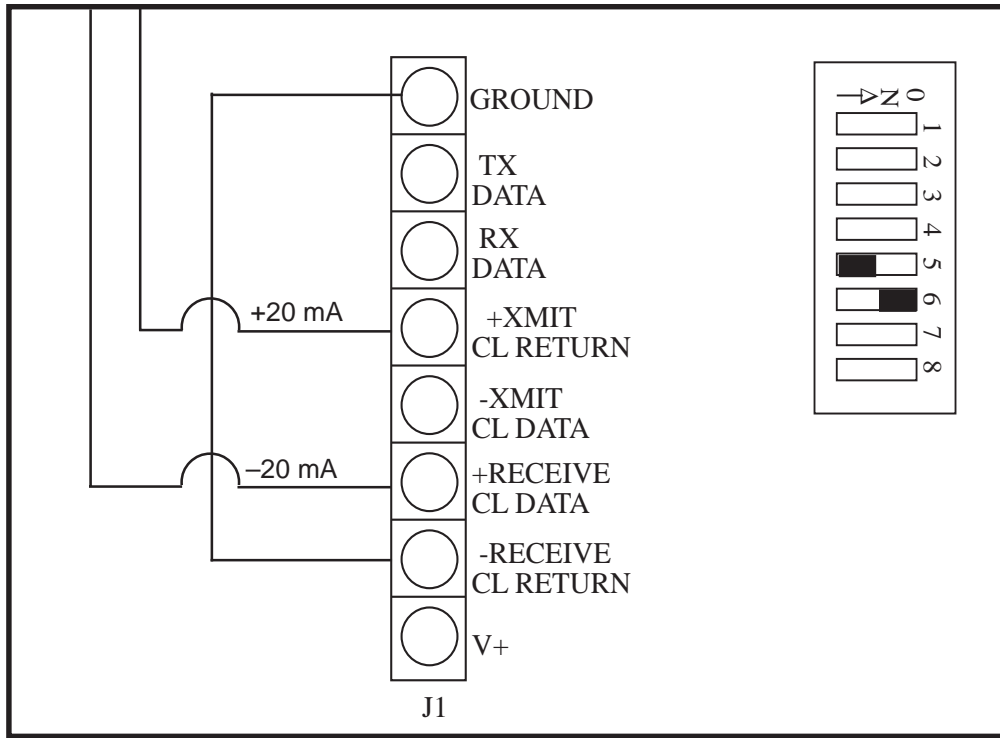
2. Serial Communications Connections



Communications Connections: RS-232C



Communications Connections: 20mA Current Loop Passive



Communications Connections: 20mA Current Loop Active

3. Configuration of Dip Switches

The purpose of dip switches #1-#6 is to ensure that the remote display and the indicator are communicating in the same format. Consult your indicator manual to find the indicator's current configuration. Check that the correct EPROM has been installed. Disconnect power and set switches 1-6. Switches #7 and #8 enable the time and temperature display if those options are installed.

Switch #1--Data Transfer Rate

(F 1.5 Series EPROM Version)		(Series 1, 2, or 3 EPROM Version)	
off	1200 BAUD	off	300 BAUD
on	2400 BAUD	on	1200 BAUD

Switch #2--Number of Data Bits

off	7 data bits
on	8 data bits

Switch #3--Number of Stop Bits

off	1 stop bit
on	2 stop bits

Switch #4--Odd Parity

off	no parity or parity disabled
on	odd / even parity enabled

Switch #5 and #6--Serial Input Format

5 off	6 on	20 mA Current Loop
5 on	6 off	RS232C

Switch #7--Time Display (Unavailable Option)

off	time display disabled
on	time display enabled

Switch #8--Temperature Display (Unavailable Option)

off	temperature display disabled
on	temperature display enabled

4. Troubleshooting Guide

PROBLEM	SOLUTION
A. No display check at power-up.	Replace fuse (1/4 A Slo-Blo). Check AC receptacle for proper 120V power supply. Press reset switch on circuit board.
B. Display shows no or different data than indicator.	Check that serial communication lines are connected properly. Check that the indicator and remote display are configured in the same format. Display has incorrect program for indicator (see Sec. 5).

5. Remote Display / Indicator Programs

Program#	Indicator and Operating Mode
F1_5-1D	UMC1000, UMC2000, IQ600, IQ700 — Continuous
F1_5-1D	Thurman EDS4 - EPROM in indicator is Continuous Condec format
F1_5-2B	UMC 1000, 2000 — Demand
F1_5-3B	Toledo 8140, 8142, 8530, 8132 ¹ , 9481 — Continuous
F1_5-3B	Fairbanks 9201RS-232 (Use COM port 1 only)
F1_5-4D	IQplus 800/810, IQplus 310 Continuous (End of line set to CR/LF)
F1_5-5A	StreeterAmet 9000 — Continuous
F1_5-6A	Cardinal 738 — Continuous
F1_5-7A	Western DF1000 — Continuous
F1_5-8A	Pennsylvania 5600 — Continuous
F1_5-9A	Flexweigh DWM IV — Continuous
F1_5-10A	IDS print w/BCD to 20 mA conversion — Continuous
F1_5-11A	AD 4321 — Continuous (Format 1, display will not show negative sign)
F1_5-12A	IQ700 Truck ID for KBB 8-1, Ver. EF EPROM
F1_5-13A	Analogic 5316 — Continuous, HB 44 (EPROM 13.0 shows gross only)
F1_5-14A	Electroscale 533 — Continuous
F1_5-15A	IQ700, IQplus 310 Demand (Net or Gross) with Time and Date
F1_5-16A	WI-110, WI-120, WI-130 — Continuous ²
F1_5-17A	Toledo 8142 with BCD Converter
F1_5-18A	Doran 7000 — Continuous
F1_5-19A	Fairbanks 90-164-1, 90-166-1, 9201 (out Com 2) — Continuous (20 mA passive only)
F1_5-1C	UMC 1000, UMC 2000, IQ600, IQ700 — Continuous
F1_5-21A	Electroscale 551 — Continuous
F1_5-22A	Analogic 5316, EPROM Revision 13.0.9 — Continuous
F1_5-23A	General Freedom I and II — Continuous
F1_5-24A	ACCU-WEIGH SEP-12K, Format 8 — Continuous
F1_5-25A	Kubota KA-10 — Continuous
F1_5-26A	Flexweigh DWMIV Continuous w/Post & Preamble (02H, 03H)
F1_5-27A	MSI TRANS-WEIGH — Continuous
F1_5-28A	OHAUS 1150 — Continuous
F1_5-29A	Hardy HI 2151 WC — Continuous
F1_5-30A	Pennsylvania 3100 — Continuous
F1_5-31A	IQplus 800/810 — Demand (Standard default format)
F1_5-32A	IQplus 310 — Demand (Net Weight Only)
F1_5-33A	IQplus 310 — Demand (Gross Weight Only)
F1_5-34A	Fairbanks 90-163-1 — Continuous
F1_5-36A	IQ700, IQplus 310, — Demand (Net or Gross) with Time and Date
F1_5-37A	Tyrel TC-10 / Howe-Richardson HR500k Continuous
F1_5-38A	Tara TR-1 Continuous, 1200 baud, fixed 8 bits, no parity, 2 stop bits
F1_5-39A	Allegany Mega 8—Continuous ³
F1_5-40A	A-N-D FG Bench Scale
F1_5-41A	Cardinal 748 — Continuous
F1_5-42A	3-weight 810 — Continuous ⁴

Notes:

- 1 The Toledo 8132 meter will not work with the 234HE without special programming to operate the 234HE at 4800 baud.
- 2 The WI130 indicator must be programmed to stream out in the standard Weightronix format to use the WI110/WI120 flip digit driver.
- 3 The Allegany Mega 8 sends out eight weight display digits. The EL234HE Remote Display shows the least significant six digits.
- 4 This special format contains three weight strings within one serial string. Dip switches 7 and 8 in switchbank 2 control which of the three strings are displayed as follows:

2-7	2-8	String Displayed
off	off	1st
off	on	2nd
on	off	3rd

6. Replacement Parts for 234HE 1.5" Flip Digit Display

DESCRIPTION	PART NUMBER
1.5" Display, CPU Board	21024
1.5" Display, Mounting Board	21025
Enclosure, Fiberglass Reinforced Polyester	16019
Back Panel	16084
EPROM, F1.5-XXX (programmed as required)	16246
Cord Grip Assembly for Power Cord, 1/2" NPT	15671
Desiccant, 5 Gram Package	16038
Power Cord Pigtail	15436
Lexan Window, 9 X 4 3/4	16083
"High Voltage" Warning Label for Lexan Shield	16861
16 Pin Connector	15823
Fuse, 1/4A SLO-BLO	16444
Fuse Holder, Single Pole	16771
Fuse Cover	16772
Installation Manual, 243HE Remote Display	16945

