234HE

Hostile Environment Remote Display

Installation and Operation Manual





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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:

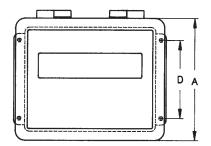
Continuous update

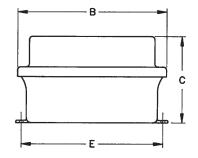
POWER CONSUMPTION:

24 watts, typical

SHIPPING WEIGHT:

Approx. 13 lbs

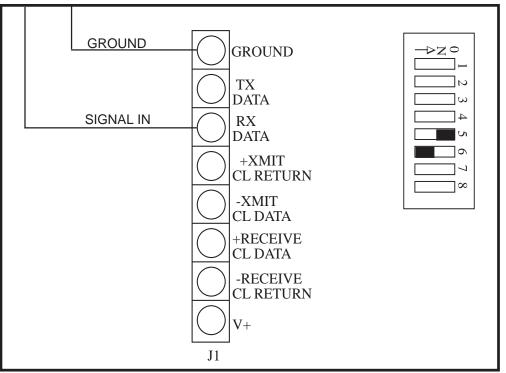




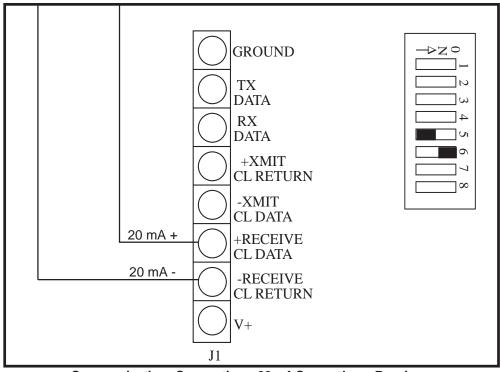
Dimensions
A = 9.38"
B = 11.38"
C = 6.63"
D = 6.00"
E = 10.81"

10/96

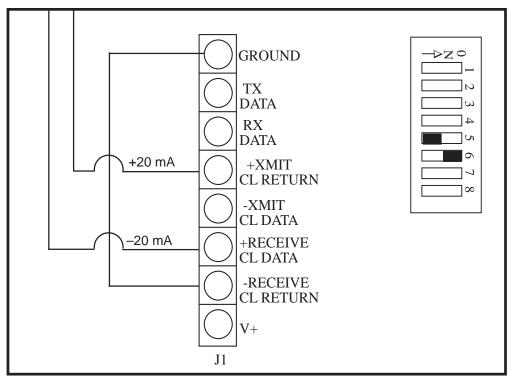
2. Serial Communications Connections



Communications Connections: RS-232C



Communications Connections: 20 mA Current Loop Passive



Communications Connections: 20 mA 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 #1Data 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 #2I	Switch #2Number of Data Bits					
off	7 data bits					
on	8 data bits					
Switch #3I	Number of Stop Bits					
off	1 stop bit					
on	2 stop bits					
Switch #40	Odd Parity					
off on	no parity or parity disabled odd / even parity enabled					
Switch #5 and #6Serial Input Format						
5 off 5 on	6 on 20 mA Current Loop 6 off RS232C					
Switch #7	Fime Display (Unavailable Option)					
off	time display disabled					
on	time display enabled					
Switch #8	Femperature Display (Unavailalble	Option)				
off	temperature display disabled					
on	temperature display enabled					

on temperature display enabled

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

r rogram#	
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 — Continuous⁴

Program# Indicator and Operating Mode

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	lst
off	on	2nd
on	off	3rd

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

DESCRIPTION

PART NUMBER

1.5" Display, CPU Board 1.5" Display, Mounting Board	21025
Enclosure, Fiberglass Reinforced Polyester	
Back Panel	
EPROM, F1.5-XXX (programmed as required)	
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	

7. 234HE Limited Warranty

Rice Lake Weighing Systems (RLWS) warrants that all RLWS equipment and systems properly installed by a Distributor or Original Equipment Manufacturer (OEM) will operate per written specifications as confirmed by the Distributor/OEM and accepted by RLWS. All systems and components are warranted against defects in materials and workmanship for one (1) year.

RLWS warrants that the equipment sold hereunder will conform to the current written specifications authorized by RLWS. RLWS warrants the equipment against faulty workmanship and defective materials. If any equipment fails to conform to these warranties, RLWS will, at its option, repair or replace such goods returned within the warranty period subject to the following conditions:

- 1. Upon discovery by Buyer of such non-conformity, RLWS will be given prompt written notice with a detailed explanation of the alleged deficiencies.
- 2. Individual electronic components returned to RLWS for warranty purposes must be packaged to prevent electrostatic discharge (ESD) damage in shipment. Packaging requirements are listed in a publication, "Protecting Your Components From Static Damage in Shipment," available from RLWS Equipment Return Department.
- **3.** Examination of such equipment by RLWS confirms that the non-conformity actually exists, and was not caused by accident, misuse, neglect, alteration, improper installation, improper repair or improper testing; RLWS shall be the sole judge of all alleged non-conformities.
- 4. Such equipment has not been modified, altered, or changed by any person other than RLWS or its duly authorized repair agents.
- 5. RLWS will have a reasonable time to repair or replace the defective equipment. Buyer is responsible for shipping charges both ways.
- 6. In no event will RLWS be responsible for travel time or on-location repairs, including assembly or disassembly of equipment, nor will RLWS be liable for the cost of any repairs made by others.

THESE WARRANTIES EXCLUDE ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NEITHER RLWS NOR DISTRIBUTOR WILL, IN ANY EVENT, BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

RLWS AND BUYER AGREE THAT RLSW'S SOLE AND EXCLUSIVE LIABILITY HEREUNDER IS LIMITED TO REPAIR OR REPLACEMENT OF SUCH GOODS. IN ACCEPTING THIS WAR-RANTY, THE BUYER WAIVES ANY AND ALL OTHER CLAIMS TO WARRANTY.

SHOULD THE SELLER BE OTHER THAN RLWS, THE BUYER AGREES TO LOOK ONLY TO THE SELLER FOR WARRANTY CLAIMS.

No terms, conditions, understanding, or agreements purporting to modify the terms of this warranty shall have any legal effect unless made in writing and signed by a corporate officer of RLWS and the Buyer.

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