

# **DIGI★STAR**

*P R E C I S E L Y*

## **ERM-2.4**

### **OPERATORS MANUAL**



**DIGI★STAR**

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## INTRODUCTION

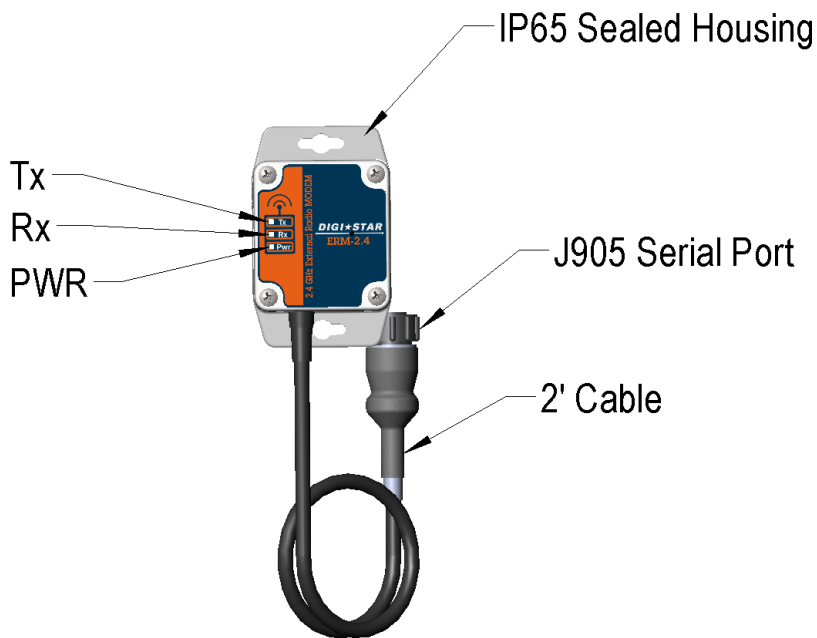
Thank you for purchasing the ERM-2.4 External Radio MODEM. This device allows you to add radio capability to any indicator with a J905 port for communicating to devices such as the Cab Control 2.4. The easy installation of the ERM-2.4 makes it a seamless process to configure your indicator to be used as a wireless device. Simply plug the ERM-2.4 into the J905 port, turn on the External Radio setting in Menu 2, configure the radio channel and you're ready to go!\*

\* Indicator must have 8J or newer software installed.

## CONTENTS

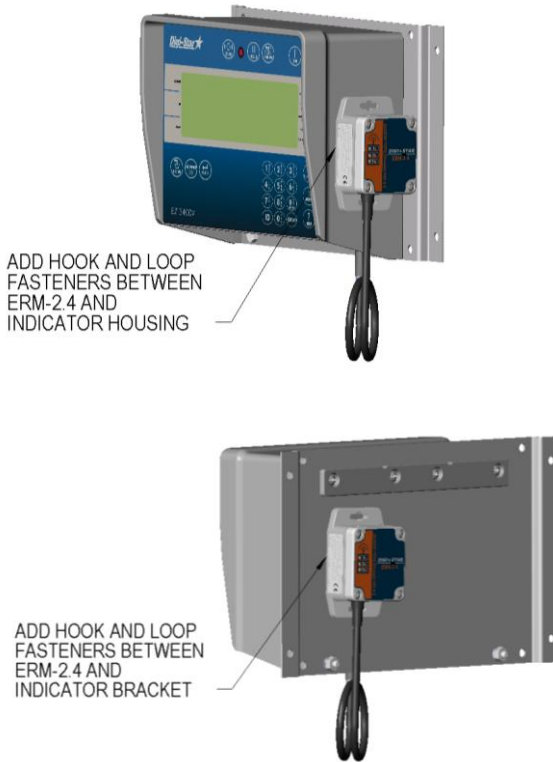
DESCRIPTION	PART NO.	QTY
RADIO-ERM-2.4	409004	1
FASTENER-HOOK AND LOOP 2.25"	406711	4

## OVERVIEW



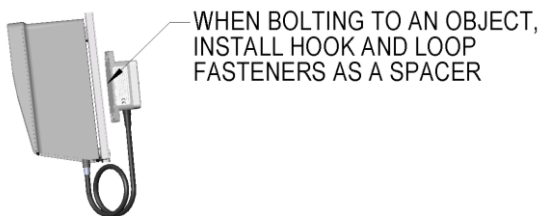
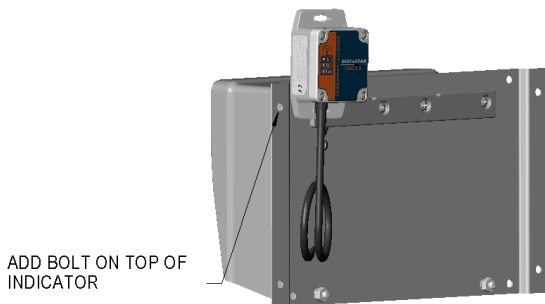
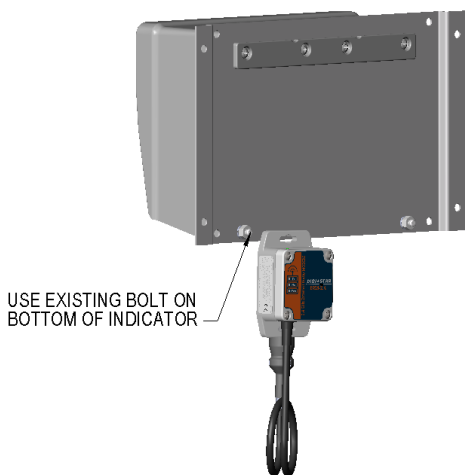
**Figure 1. System Diagram**

## SUGGESTED MOUNTING LOCATIONS



**Figure 2. Mounting Options – Hook and Loop Fasteners**

NOTE: To increase range, the ERM-2.4 may also be used with the 409156 extension cable and mounted on the implement in the vertical position (cable side down) as shown in Figure 2.



**Figure 3. Mounting Options – Bolted**



**Figure 3. Incorrect Mounting Position**

NOTE: To increase range, the ERM-2.4 may also be used with the 409156 extension cable. Orienting the unit in the horizontal position (cable side horizontal) as shown in Figure 3 is not recommended.

## INSTALLATION INSTRUCTIONS

### **1. If mounting the ERM-2.4 using the supplied hook and loop fasteners:**

- a. See “Suggested Mounting Locations” for proper mounting positions.
- b. Wipe the mounting surface clean of dirt and debris.
- c. Wipe the adhering surface and back side of ERM-2.4 clean with alcohol or cleaner spray and allow to air dry.
- d. Apply hook and loop fasteners as necessary.
- e. Allow unit to cure for 12-24 hours before use.

NOTE: Adhesive will not stick to any surface at temperatures below freezing. Install at room temperature for best results.

### **2. If mounting the ERM-2.4 using bolts:**

- a. Determine the proper sized bolt for use with connecting the ERM-2.4 to the equipment.
- b. See “Suggested Mounting Locations” for proper mounting configurations.

NOTE: Installing the ERM-2.4 in positions other than shown will decrease radio range and performance.

## INDICATOR SETUP INSTRUCTIONS

### To utilize the External Radio feature:

1. Make sure the indicator has a J905 port installed.
  - a. If no J905 serial port is installed, the indicator must be sent in for an upgrade.

NOTE: The ERM-2.4 is not compatible with J904 indicators.

2. Ensure that the software running on the scale Indicator is compatible with the ERM-2.4.
  - a. To check the current software version, press "ON" momentarily.
  - b. Continue to read the display until it shows "PRGID". Any version that displays 8J or newer is compatible. (For example 8N would be compatible).
3. To activate the External Radio feature, from the Indicator, set EXTRAD in Menu 2 (D.A.N. 229) to "ON".
4. To set up the radio channel, refer to the "Setting up the Indicator" section of the Cab Control 2.4 manual.

NOTE: The ERM-2.4 is not compatible with legacy wireless Digi-Star products.



## DEFAULT SETTINGS

SETTING [display]	D.A.N NO.	OPTIONS [displayed] BOLD=DEFAULT	DESCRIPTION
<b>MENU 5. CONTROL SETTINGS</b>			
External Radio (EXTRAD)	229	<b>ON</b>	ON enables the External Radio feature. Note: This feature automatically turns RADIO to "ON".
Scale Number (SCLMD)	231	<b>Select 1 – 24</b>	Sets the scale number to the desired channel (up to 24 channels).

## AGENCY APPROVALS

### United States of America

FCC

ID: OUR-XBEE/OUR-XBEEPRO

Contains Model XBee-PRO Radio

The enclosed device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (i.) this device may not cause harmful interference and (ii.) this device must accept any interference received, including interference that may cause undesired operation.

### Canada

Industry Canada

Contains Model XBee-PRO Radio, IC: 4214A-XBEEPRO

### Europe

ETSI



### Japan

MIC

ID: 005NYCA0378

## TESTING THE SYSTEM:

### 1. To test the system, check the following:

- a. The red Tx LED (as shown in Figure 1) should flash at a rate of approximately 10 times per second.
- b. The Cab control should show what is displayed on the Indicator.
- c. When the Cab Control 2.4 “ZERO” button is pressed, the Rx LED on the ERM-2.4 should illuminate briefly and the indicator should display “ZERO”.

NOTE: Failure to install the ERM-2.4 system properly will result in decreased range or performance. Refer to the “Suggested Mounting Locations” section for more details.

## TROUBLESHOOTING:

ERM-2.4 is not turning ON.	<ul style="list-style-type: none"> <li>• Ensure power is plugged into indicator.</li> <li>• Ensure indicator is powered ON.</li> <li>• Ensure that a J905 port is installed on the Indicator and PWR LED is ON.</li> <li>• Ensure the indicator is running 8J or newer.</li> <li>• Ensure Indicator settings are configured to work with the ERM-2.4</li> </ul>
ERM-2.4 is not communicating with Cab Control 2.4	<ul style="list-style-type: none"> <li>• Ensure radio channel is set properly.</li> <li>• Ensure ERM-2.4 is connected properly to J905 and PWR LED is ON.</li> <li>• Ensure that red Tx diagnostic LED is blinking approx. 10 times per second.</li> </ul>

Technical Support Hotline: 1(920)-563-9700

## NOTES: