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Contact Us

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Notice

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iTRAX Remote Display



WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

WARNING: Make sure all equipment is rated and approenvironment in which it is used. Any approval obtained equipment will be voided if instructions for instant on, ope service are not followed.



The iTRAX Remote Display an sed to contact sprace system operation. The Remote Display can display places data a superior our iTrax Spray Monitors or one iTrax Pressure Control system.

Spray Monitor Process Data

The Remote Displace sceives are displays process data from 1 to 4 iTRAX Spray Markov s when a companication interface is configured for a CAN bus. The operator can choose to display any or all of the following data from uch sprace process.

Base Pressure

- PreSp Duration
- Gur on Time
 - Off Time

be a selected for display is displayed sequentially, either by gun priority or data priority.

PRx . dule P cess Data

The Remote Display receives and displays process data from the iTRAX PRx module when the communication interface is configured for RS485. The operator can choose to display any or all of the following data:

- Base Pressure
- Temperature
- Belt Speed

Data selected for display is displayed sequentially.

Operator Interface

Process Data Display: Displays process data.

Nordson Key: Toggles the scrolling of process data and gun channels on and off. Press once to lock, again to unlock.

Units Display: In Display mode, displays the Engineering Units for the currently displayed process data. In Configuration mode, displays configuration menus and settings.

Gun LEDs: Light to indicate the spray monitor (gun) for with r proceedata is being displayed.

Select Key: Press to enter Configuration methods by bough the configuration menus.

Arrow Keys: Press to scroll through the selections a hable in each menu.





Dimensions: 5.5 L x 2.875 W x 3.937 H (not including mounting bracket)

Power: 24 Vdc

Communications: Proprietary 500K baud CAN protocol (Spray Monitors) or 9600 baud RS485 MODBUS RTU (Pressure Controller)

Spech

Installation





Connection	Function			
P1-1	24 VDC			
P1-2	Ground			
P2-1	CAN High (C_H) (White Wire)			
P2-2	Shield (SHD)			
P2-3	CAN Low (C_L) (Blue Wire)			
P2-4	RS485 TXRX- (RS232: TXD) (TXRX-)			
P2-5	Shield (SHD)			
P2-6	RS485 TXRX+ (RS232: RXD) (T) X+)			
P2-7	Open Collector Output (500 mA)			

Table 2 Jumper ns						
Jumper			F	ion u	ņ	
JP1	F S	5 Termi	tion ^r	sistoi	Circuit	
JP3	CAN	rminat	es	istor ir	ircuit	

RS485 Wiring and Termination

nd L

The Remote Display communicate with a PRx Module using RS485 and the MODBUS RTU stocol.

Wire CRS485 serial cashe to the terminal block in the Remote Display as show in Figure 1 of the PRx module manual for module connection of the terminal block in the Remote Display as

n both pins. This terminates the RS485 bus.

Term ation

JP1

Recommended CAN Cables

If installing the Remote Display on a CAN bus with iTRAX Spray Monitors, the following CAN cables are recommended:

- Belden 9841 (2 wire, communications only)
- Belden 3084A (4 wire, power and communications)

Refer to Figure 4 for suggested CAN bus configurations. Refer to the iTRAX Spray Monitor manual for connection instructions.

CAN

NOTE: If using a drop configuration, each drop can be no longer than 6 meters (20 ft), and the cumulative total for all drops can be no more than 39 meters (128 ft).



Configuration

The Remote Display configuration procedure changes depending on the devices it is used with: iTRAX Spray Monitors or an iTRAX PRx module.

When the Remote Display is powered up it goes through a self test and then loads the configured settings. If no settings have been made then it loads the defaults.

The Remote Display has two modes, Display mode and Configuration mode. In Display mode the Process Data display shows the relevant encred process data, and the Units display shows the relevant encretering of the form the process data. In Configuration mode the Process Dimay shows CONF and the Units Display is used to make the configuration string. On pour up the Remote Display defaults to Display mode

Entering Configuration Mode

Press the **Select** key to enter Configuration met of rom Display mode. CONF is displayed on the Process Diplay: A version number is displayed on the Units Display.

Configuration Merchavige on and Settings

Use these procedures to navige through the configuration menus and configure the Rende Display.

- Press the Selective to move from one configuration menu to the next, as selection in Figure 16
- Puss Enternment a menu. Use the Up and Down keys to scroll the upber menu tems.

Press Enter to rect a menu item and save it to memory.

ss **Sector** return to the configuration menu.



to Display mode for normal operation:

- 1. Press the **Select** key until MODE is displayed.
- 2. Press the **Enter** key, then press the **Up** or **Down Arrow** keys to scroll to DISP.
- 3. Press the **Enter** key to enter Display mode. The Process Value display will display four dashes, then start displaying process values, starting with the first configured gun channel.



Retur

Configuration - Spray Monitor Data

Make the following required and optional settings to configure the Remote Display to display Spray Monitor data. See Figure 5 for the menu map.

Mode	Function, Range, and Default
MODE	Mode to enter: DISP (Display mode) or CONF (Configuration mode). Pressing the Select key while in Display mode automatically sets the mode to CONF. Select DISP to return to display mode from configuration mode. On power up the factory default is DISP.
INTR	Display Interval (1-60 seconds): Time to display each process data value. If more than one process data is selected, each process data value is displayed for this time. The process Value display scrolls through the process values and gun channels according to the process (priority) setting. The factory default is 5 seconds.
COMM	Communications protocol: CAN1, CAN2, 485 (RS485). Set to AN1 for Supplementations. The factory default is RS485.
DATA	Process data to display: BASE (base pressure), FIRE (fire pressure) CDUR (subjection or spray time), G-ON (gun on time, or time it takes for gun to turn on). OF (gun on time, or time it takes for gun to turn off). The factory default is bar pressure.
UNIT	Display units: ENGL (English) or METR (Metric). The forcery device is Englishing
GUNS	Spray monitor network addresses (1-63) for the channels GUM, GUMR, GUN3, and GUN4. The network address settings must be the surre as the optical switch settings of the spray monitors.
	The channels GUN1-GUN4 correspond to the LE upon the second of the process display, from top to bottom. The LEDs light to indicate the output for which process data is being displayed.
	The factory default is GUN1=0001. UN2-4=00
PRIO	Data display priority: GUN (Gun Printy) or DATA thata Priority).
	 If Gun Priority is selected and more than one can channel is configured then a single process data value is capacyed for complete all in sequence, then the next configured value for each charged. If only one channel is configured then the process data values are displayed in sequence charged.
	If Data Priority is selected all the process data values for one channel are displayed in
	equences and so the process of a values for the next channel are displayed in
	For either ority, the guese ED lights while the process data values are displayed.



Configuration Menu Map for Spray Monitor Data

Data Configuration Procedure

This example sets the process value data to display:

- 1. Press the **Select** key to enter configuration mode. Press the **Select** key to scroll through the configuration menu items.
- 2. On DATA press the Enter key.
- 3. Use the **Up** and **Down Arrow** keys to scroll through the data items.
- 4. Press the **Enter** key to select a data item. Yes appears if the item was selected for display previously, No if it was not.
- 5. Use the **Up** or **Down Arrow** keys to toggle between Y to display.
- 6. Press the **Enter** key to select Yes or No. Se
- 7. Use the **Up** or **Down Arrow** keys to scroll through the rest of the DATA menu items.
- 8. Press the Select key to exit the D A men

Configuration - PRx Module Data

Make the following required and openal settings to configure the Remote Display to display PP data. Figure 6 for the menu map.

Мерц	unction and stault
MODE	Mode to enter: DISP (Display mode for CONF, configuration mode). Pressing the Select key while in Display mode, control to potential mode to CONF. Select DISP to return to display mode from configuration mode. Compower up the factory default is DISP.
INTR	Display Interval (1-to sector, 1, 1, 1, 2) to display each process data value. If more than one process data is subject, each ata value is display for this time, in sequence. Default is 5 modes.
COMM	Sector anication protocology N1, CAN2, 485 (RS485). Set to 485 for PRx modules. The body default is \$485.
DATA	Process of ta to display BASE (base pressure), TEMP (fluid temperature), RPM (belt ed). A factory of ault is BASE only. If more than one is chosen for display, then eached display bit equence. NOTE To configure the process data, refer to the Data Configuration procedure above.
JNIT	Display hits: ENGL (English) or METR (Metric). The factory default is English.
DR	1-4. T factory default is 2. The PRx module is always set to 1.



Configuration Menu Map for PRx Module Data



Parts

To order parts or components, call the Nordson Finishing Customer Support Center at (800) 433-9319 or contact your local Nordson representative.

Part	Description	Note	
1079966 DISPLAY, remote LED display		A	
NOTE A: There are no repair parts for the Remote Display.			

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