# EDI DISTRIBUTOR CONTROL 7 CONDENSED WIRING INSTRUCTIONS

### See important wiring notes on Page 4



#### **Sensor Connection Table**

Use 26 ga or heaver wire. A shield is not required. Cat 5 wire is most commonly used. Do not run with power wiring. Observe Intrinsically Safe routing proceduress. Maximum run length 4000 ft. See warning on Page 4.			
Sensor 1		Sensor 2	
Brown	Brown /Blue	Brown	Brown /Blue
Terminal <u>1</u> or <u>2</u>	Terminal <u>4</u>	Terminal <u>1 o</u> r <u>2</u>	Terminal <u>5</u>

See Page 2 for wiring check and configuration procedures.

### CHECK MOTOR & SENSOR WIRING.

#### 1. Check Motor and Distributor Movement

Press the <b>RESET</b> button then using the <b>MENU</b> number 1 ( <i>Run Motor Manually</i> ).	key go to <i>INSTALL/SETUP</i> and press key		
Using the <b>F1</b> , <b>F2</b> , <b>F4</b> and <b>F5</b> keys does the spout in the distributor move?	If not, the clutch nut on the reducer may be loose or there is no power to the motor (check site disconnect too).		
	ensor Wiring		
While still in the Run Motor Manually mode			
Using the <b>F1</b> , <b>F2</b> , <b>F4</b> and <b>F5</b> keys does the <b>S1</b> and/or <b>S2</b> sensor lights on the display blink while the spout moves?	If not, make sure the sensor wiring is complete.		
<b>3. Check Sensor Connections</b> Press <b>RESET</b> , use the <b>MENU</b> key to return to the <i>INSTALL/SETUP</i> and press key number <b>2</b> ( <i>Check Sensors</i> ).			
The Check Sensors routine will help you sort out any incorrect sensor wiring.	Follow the instructions on the display and change connections accordingly.		
	If the <i>Not Connected</i> message appears, try reversing the polarity of the indicated sensor wires at the barrier relay		
Restart Check 3 and repeat the routine after <b>CHECK OK</b> message is shown.	every wiring adjustment until the <b>SENSOR</b>		

Once the above checks have positive outcomes, the control is ready to be configured to the distributor.

### **CONFIGURING THE C7**

Press **RESET**, use the **MENU** key to return to the *INSTALL/SETUP* and press key number **3** (*Auto Install Dist.*). After successfully compleating the install routine, the distributor is ready to run. This automatic routine may take a few minutes.

IMPORTANT - It is imperative that the spout centering adjustment performed during the install be physically verified at the distributor. The *AutoTune* function of the Install process must be checked to see that proper centering was accomplished.

If necessary, centering can be manually changed using the directions contained in the operating manual.

### TROUBLE?

If you cannot determine the cause of a problem with the installation, you may call our Technical Support group. Please run all of the checks shown above. You will be asked for the results of each one when you call. Contact us at 800-328-8002.

## **BRIEF DESCRIPTION THE C7 MENU SYSTEM**



### **MENU SYSTEM in RUN MODE\***

#### CUSTOMIZE DISPLAY

- 1. Edit Access Numbers Change the number used to access a position.
- 2. Edit Position Names Rename each spout position, e.g., **POSITION 5** to **WET CORN BIN.**
- 3. Edit Function Keys Assign a Speed Dial key (F1-F6) to frequently used positions.
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4. Edit Caption

Change the name of the distributor as displayed on the top line.

#### MISC SETTINGS

1. Network Functions

For network automation. Start/stop and assign name.

2. AutoRun Testing

Used by technicians for proof of operation.

3. AutoTune Routine Used by technicians to reset spout-centering values.

#### INSTALL/SETUP

1. Run Motor Manually

Used by technicians to check motor and spout movement.

2. Check Sensors

Used by technicians to check wiring and condition of the sensors..

3. Auto Install Distributor Used by technicians to configure the C7 to the distributor.

#### \*Only the INSTALL/SETUP menu is available at boot.

### **ACCESSORIES**

 Remote C7 terminal.	
For multiple control locations. This dust and weather tight terminal allows full operation of the C7 control up to 500 ft. away. It requires a 3 wire signal cable to the C7 and a local 120 volt power supply.	
Furnished with or without a NEMA 12 enclosure.	
UIO Serial or Ethernet Communication	
The UIO is a scanner for up to 20 EDI distributor and/or VGC gates and interfaces this information to a PLC or other automation devices. All C7 controls are UIO ready (UCOM on board).	

### **IMPORTANT WIRING NOTES**

#### WARNING

Make sure the wiring meets all applicable regulations and codes including local and national standards and codes.

High voltage can kill or seriously injure personnel.

All maintenance personnel must be trained and follow the Lockout/Tagout procedures established by the facility management.

- The C7 control is weather and dust tight and mounted in a 10x8x5 NEMA 12 enclosure.
- UL / C-UL listed panels are available as an option
- Sensor wiring is Intrinsically Safe (IS).
- Sensor wiring cannot be run in conduits with the motor power or any non-IS wiring. If it is, two things will go wrong:

Electrical noise will interfere with the sensor signals causing error messages.

IS safety compliance is lost.

• See the UIO installation manual for UCOM port connection information.