# EDI CONTROL 7 OPERATORS MANUAL



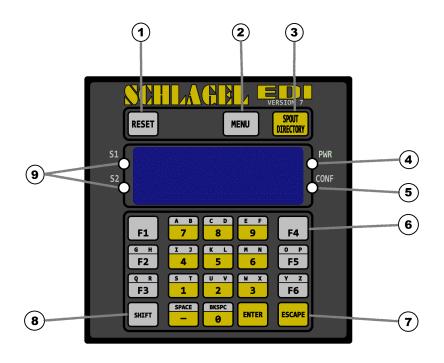
#### **New Features**

- Smaller size 10x8x5
- Water and dust tight
- Menu system for customizing
- Automated configuration
- Integrated Terminal/Control

- Spout Directory eliminates charts
- Easly to add a second control point
- Automated Sensor diagnostics
- Front panel Reset button

This manual describes the functions of the **Keypad** and **Menu System**. An explanation of the **Error Codes** including the cause and possible remedy is also included.

See the C7 Quick Install Manual for wiring and initial setup of the distributor.



| Key Pad Layout |   |  |  |  |
|----------------|---|--|--|--|
| 1              | Performes a re-boot of the C7 control.  |  |  |  |
| 2              | Allows access to the menu of special functions to customize the display or perform special operations. Use repeted presses on this key to scroll through the Menu system. Access the function with the number shown.  |  |  |  |
| 3              | Shows a list of all of the named positions of the distributor and the access number (and F-Key if set) used to move to that position. A valuable function to eliminate using a crossover chart. Use repeted presses on this key to scroll through the directory, 4 positions at a time. |  |  |  |
| 4              | Power on LED.   |  |  |  |
| 5              | A steady blue LED confirming the spout is in position and there are no errors. This LED will blink rapidly if certain errors occur.   |  |  |  |
| 6              | Six speed dial keys (F1 – F6) can be set to access any position with a single key press.  |  |  |  |
| 7              | The ESCAPE key is used to erase any missed-typed numbers when attempting to move to another position. It also is used to abandon a Menu operation.  |  |  |  |
| 8              | Used to allow alphetical characters to be typed in the Menu system when assigning names to a position. A single SHIFT press will use the upper left character shown on a key and a double press will use the upper right character.   |  |  |  |
| 9              | LEDs showing the current status of the sensors on the distributor.  |  |  |  |

## **MENU SYSTEM\***

| CUSTOMIZE DISPLAY |                                       |  |  |  |  |
|-------------------|---------------------------------------|--|--|--|--|
| 1                 | Edit Access<br>Numbers                | Change the number used to access a position. (Numbers 1 – 255 are allowed.)  Access keys by default are 1 through the number of ducts on the distributor. Use this if you would prefer to use a number with a special meaning. |  |  |  |
| 2                 | Edit Position<br>Names <sup>1,2</sup> | Rename each spout position, e.g., POSITION 5 to WET CORN BIN.  |  |  |  |
| 3                 | Edit Function<br>Keys <sup>1</sup>    | Assign a Speed Dial key (F1-F6) to frequently used positions.  |  |  |  |
| 4                 | Edit Caption <sup>2</sup>             | Change the name of the distributor as displayed on the top line.   |  |  |  |
| MISC SETTINGS     |                                       |  |  |  |  |
| 1                 | Network<br>Functions                  | For network automation. Start/stop and assign name.  |  |  |  |
| 2                 | AutoRun<br>Testing                    | Used by technicians for proof of operation.  |  |  |  |
| 3                 | AutoTune<br>Routine                   | Used by technicians to reset spout-centering values.   |  |  |  |
| INSTALL/SETUP     |                                       |  |  |  |  |
| 1                 | Run Motor<br>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<br>Distributor           | Used by technicians to configure the C7 to the distributor.  |  |  |  |

#### Notes:

Shaded routines affect the operation of the distributor and should only be used by those familiar with the results of its use.

<sup>&</sup>lt;sup>1</sup> These names are shown when using the SPOUT DIRECTORY.

<sup>&</sup>lt;sup>2</sup> Alphabetic characters require the use of the SHIFT key. Use a single or double shift to access the left or right character of the key respectivally.

<sup>\*</sup>Only the INSTALL/SETUP menu is available at boot.

### **ERROR MESSAGES**

The C7 control continuously monitors the distributor for abnormal behavior and will notify the operator when a detectable error occurs. The notification is displayed on Line 2 of the display. Optional audible or visual alarms are available. Connected PLCs or other automation equipment are also notified of the error.

| Error Msg          | Reason   | Cause & Remedy  |
|--------------------|--|---|
| DRIVE<br>ERROR     | The control has attempted to move the spout but has not received any feedback that it is moving. If it does not receive feedback for 10 seconds, the control will turn off the motor and display this error message. | The spout is jammed, the clutch is slipping or the sensor circuit is not functioning.   |
|                    |  | This is a fatal error. Press <i>Enter</i> to reset the control. This is almost always a mechanical obstruction at the distributor.  |
| POSITIONING<br>ERR | When the control was positioning the spout over a duct, it was not able to set it to the exact predetermined position.   | Something has electrically or mechanically disturbed the spout position over the duct.  |
|                    |  | The alarms are set and operator notified. Try accessing this position again. Repeated errors indicate action is required to repair the problem. Check for a loose clutch or loose drive chains in the drive assembly. |
| SPOUT<br>MOVED     | This error message indicates that the spout has been moved out of position after a successful stop. The C7 Control continuously monitor spout position and raise this alarm if the spout moves out of position.      | Something has electrically or mechanically disturbed the spout position over the duct.  |
|                    |  | This is a fatal error. Press Enter and the control will return to the reset screen. Check for a loose clutch or loose bolts on the drive wheel or drive arm assemblies.   |
| SENSOR<br>ERROR    | While the control is moving the spout it continuously anticipates the next code it   | An improperly positioned sensor block in the distributor usually causes this error.   |
|                    | will encounter. If the next code does not match the anticipated code, the control will attempt to re-read it up to 3 times. If it fails on the 3rd try, the control will issue this error.                           | This is a fatal error. Press Enter and the control will return to the reset screen. Position and shim the sensor block properly. Run the Check Sensors routine.   |