

LD Decoder Family



SPECIFICATION

BUSINESS FIELD

- LANDSCAPE & TURF
- GREENHOUSE, NURSERY & INDUSTRIAL
- AGRICULTURE
- GOLF



The Tucor LD Decoders for TWC, TWI, and AIC controllers are the original and the best 2-Wire Decoder on the market today.

The Tucor LD Decoder is a tried and tested device that has been reliably used on many sites for almost 20 years

The Tucor LD Decoder is a flexible, universal way to interface and control most of the 24 Volt Solenoids on the market today.

The Tucor LD Decoders come in one, two, four, and six solenoid capable models. There is also a one address and two solenoid version available for situations where you have the same irrigation regime/run time required such as large adjacent turf areas. These larger multi solenoid capable Tucor Decoders are useful when deploying at a control valve manifold reducing the number of required wire connections. Valves can be placed within 400' of a large Decoder connected via regular #14 gauge irrigation wire.

Economically deliver just the water your vegetation needs!

Electrical Input:

Nominal voltage: 33 VAC from line
Minimum voltage: 21 VAC
Nominal standby current:
LD-050, -100, -200 = 0.5 mA
LD-400, -600 = 0.8 mA
Wiring: 1.5 mm solid copper, PVC insulated

Electrical Output:

Max. voltage: 24 VAC
Max. current: 1200 mA
Max. load: 1-2 watt solenoids on each output

Programmable Output control:

Inrush voltage
Inrush time
Holding voltage
Holding time

Max. Decoder to valve distance:

18/2 = 150 ft.
14/2 = 300 ft.

Operation:

Number of addresses and valves:
LD-050: One address; one valve
LD-100: One address; 1 - 2 valves (working in parallel)
LD-200: two addresses; 1 - 2 valves per address (in parallel)
LD-400: Four addresses; four valves; includes internal SP 100
LD-600: Six addresses; six valves; includes internal SP-100
All addresses on multi-pack decoders can be initiated at the same time
All addresses on multi-pack decoders do not have to be used: they will not "waste" address space in the controller.



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Sensor Decoder SD-100

The **SD-100 Sensor Decoder** is a fully programmable, direct-bury decoder that provides an interface between Flowmaster controllers and field sensors. This means that virtually any type of sensor, such as flow, temperature, or moisture, can be added to a new or existing system. The sensor decoder is installed on the same two-wire path as the line decoders, so the sensor may be a considerable distance from the controller. It may be programmed to operate with a 4 20 mA or pulsed digital input (as with a standard flow meter). Up to ten SD-100's may be used on Tucor controllers.*

The SD-100 can add yet another level of flexibility and logging data to your Tucor controller.



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Sensor Decoder

INPUT ELECTRICALLY:

2 different interfaces may be selected:

- 4-20 mA
- Pulses per time

Sensor resolution is 200 steps.

Accuracy is better than 1% of maximum value.

Unique sensor ID is factory programmed.

OPERATION:

When used with an appropriate flowmeter, output is measured and recorded as flow rates.

Various controller responses may be defined based on sensor input.

The controller polls the sensors for data either once or twice per minute, depending upon the number of sensors installed.*

INSTALLATION:

The sensor is wired directly to the 2 wire path. Inputs are color-coded for proper polarization, if necessary.

The sensor calibration is defined in the appropriate controller's PC software and is then transferred to the controller via the software interface.

Includes built-in SP-100 for added surge protection.



The Tucor PD-100 Pump Decoder provides an interface between a Tucor controller and an external motor starter circuit. It receives control power and signals via the two-wire path and provides a Normally Open / Normally Closed contact for start control. The pump decoder contains a microprocessor that provides features for controlling and testing. The address can be selected in the field and contains an OFF and TEST position. The PD-100 mounts in a standard octal-style socket for ease of installation and testing

Mounts in standard 11-pin octal-style socket (included) for ease of installation. Socket keyed for DIN rail mounting.

Supports six independent, field selectable addresses: 284, 286, 287, 292, 293, 295. Contains integral OFF and TEST positions

for isolating and testing local starter circuit. Easily viewable, top-mounted LED that turns on when active. Socket supports up to 12 AWG two-wire path and control circuit wiring. Contains a Normally Open and Normally Closed contact rated

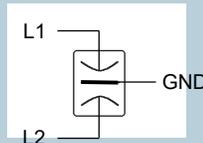
Surge Protector

1) Diagram 1: type is Siemens T23 A230

2) Normal spark-over-voltage: 230V

3) Max. spark-over-voltage: 450V

4) An SP-100 must be installed and grounded every 500 feet and at the end of a wire run. Resistance of the SP-100's ground wires to ground must be 50Ω or less.



Tucor's SP-100 Surge Protector provides for protection on the 2 wire path for electrical surges due to lightning or other static charges. Connecting the SP-100 across the 2 wire path causes high voltage spikes travelling down the path to be effectively shunted to ground through the SP-100, minimizing the risk to decoders and other devices on the



How to Order:

LD Decoders

Part Number	Product Description
PD-100	Pump Decoder
LD-050	LD Decoder 1 address, 1 solenoid
LD-100	LD Decoder, 1 address, 2 solenoids
LD-200	LD Decoder, 2 addresses, 4 solenoids
LD-400	LD Decoder, 4 addresses, built in SP-100
LD-600	LD Decoder, 6 address, built in SP-100
SP-100	Line Surge Protection
SD-100	Sensor Decoder
SD-100-M	Sensor Decoder for photo diode

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