



# TDC Series 2-Wire System

#### Controllers

For an energy efficient, highly cost-effective way to irrigate large commercial installations, you'll want the TDC Series from Toro®. Using a two-wire path to communicate to buried decoders, the TDC system eliminates high costs associated with traditional valve wiring, trenching and trouble-shooting. This proven aerospace technology allows for longer wire runs, smaller-gauge wire sizes and control of up to 200 stations. TDC systems are upgradeable to Sentinel® Central Control and the intuitive interface is the best on the market for simple and straightforward use.

#### **Features & Benefits**

#### **New ISP Decoders**

Industry leading surge protections up to 20 KV means less grounding in the field than competitive products.

#### **Advanced Diagnostics**

The TDC systems provide true two-way communication with each decoder in the field, thus providing communication verification to decoders in the field, as well as shorted or open solenoid conditions, making troubleshooting a breeze.

#### **Low-Power Operating Costs**

The TDC Decoders operate DC Latching Solenoids which utilize no power when valves are in operation.

#### Water Budget

Water budget by controller, by program and by station (Season Adjust) 0 to 250% in 1% increments.

#### Simple, Intuitive Programming

Installation and future servicing are quick and simple thanks to the large LCD display and the industry's most intuitive interface.



stainless steel pedestal. To order please specify

CDEC-PED-50, -100 or -200.

Rain Sensor

TMR-1 Compatible

PSS-KIT

Compatible



## Key-locking Metal Cabinet

TDC offers a key-locking cabinet in both the outdoor and indoor model controllers. Constructed from heavy-duty powder-coated metal, this is a wall-mount cabinet that provides superior weather and vandalism resistance.

### **TDC Series 2-Wire System**



Upgrade Module

#### **Modular Design**

The base model of the TDC offers 50 stations with capability to easily add another module allowing up to 200-station control. This is ideal for phased projects. Independently fused wire paths (4 per 100 stations = 8 for 200 stations) provide protection to the controller in the event of a short in field wiring.

TDC Series Model List				
Metal Pedestal N	etal Pedestal Mount			
Model	Description			
• CDEC-SA-100	100-station, w/remote connection			
• CDEC-SA-200	200-station, w/remote connection			
• CDEC-PED-100	100-station, Two-wire controller on stainless steel pedestal*			
• CDEC-PED-200	200-station, Two-wire controller on stainless steel pedestal*			
	* Order through EICON Special Build			
Two-Wire Station Decoders				
Model	Description			

Two-wire station becoders		
Model	Description	
• CDEC-ISP-1	1-station w/integrated surge protection (Operates up to two solenoids)	
• CDEC-ISP-2	2-station w/integrated surge protection (Operates up to four solenoids)	
• CDEC-ISP-4	4-station w/integrated surge protection (Operates up to eight solenoids)	

#### Specifying Information—DEC

	p
Model	Description
DEC-SG-LINE	Decoder, line surge protector*

<sup>\*</sup>One per 1500 Feet

#### **Specifications**

#### **Dimensions**

• Cabinet: 14" W x 13" H x 6" D (356 x 330 x 152mm)

#### **Electrical Specifications**

- Input Power: 120 VAC or 220/240 VAC (50/60 Hz)
- Station Output Power: Up to 38 VAC maximum; 3 amps maximum output
- Wiring-two wire path: Jacketed, twisted pair 14 AWG to 15,000 ft.
- Wiring-two wire path: Jacketed, twisted pair 16 AWG to 8.450 ft.
- Wiring-decoder to solenoid: Standard pair 14 AWG to 400 ft.

#### **Operating Specifications**

- 20 KV surge protection with proper grounding of 10 Ohms or less at the controller
- 10 independent irrigation programs
- Six start times per program
- Day of the week programming, odd/even, interval (1-31 days)
- 0-255% adjust by controller, by program, by station
- Day Exclusion (remove a day from standard program)
- Programmable master valve and pump start, by station
- Manual start of each station or entire program
- Non-volatile memory retains programming
- Self-diagnostics circuit breaker skips shorted/open stations
- Two-way confirmation of decoder activation
- Activate up to 20 solenoids at up to 2.8 miles away
- Programmable rain delay up to 31 days
- Water window calculator
- 10-digit alpha-numeric zone identification
- Remote-Ready and RainSensor-compatible
- Upgradeable to Sentinel® Central Control
- Utilizes DC latching solenoids for valve control

#### **Optional Accessories**

• PSS-KIT	Precision <sup>™</sup> Soil Sensor Kit
<ul> <li>DEG-SG-LINE</li> </ul>	Decoder, Line Surge Protector
• TRS	Wired RainSensor
• 53853	Wired Rain/Freeze Sensor
<ul> <li>TWRS/TWRFS</li> </ul>	Wireless RainSensor or Wireless Rain/Freeze Sens

• TMR-1-KIT Toro Maintenance Remote

#### . .

#### Warranty

Five years

#### Specifying Information—Decoders

Model	Description
CDEC-ISP-1	Single Station Decoder w/integrated surge protection
CDEC-ISP-2	Two Station Decoder w/integrated surge protection
CDEC-ISP-4	Four Station Decoder w/integrated surge protection

#### Specifying Information-TDC

CDEC-XXX-XXX				
Model	Cabinet	Description		
CDEC	xxx	xxx		
CDEC—2-wire Controller w/remote hook up	SA—Wall Mount Metal Cabinet PED—Stainless Steel Pedestal*	100—100 Stations 200—200 stations		
Example: A TDC Controller with 200 stations would be specified as: CDEC SA 200				

\*Order through EICON

