TORO Count on it.

Evolution™ Series

Controllers

Introducing the next generation in controllers!
With an intuitive interface and exclusive features for "smart" control, the new Toro® Evolution™ is an easy choice for residential and light-commercial applications.

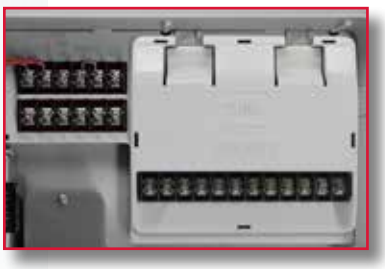
Features & Benefits

Revolutionary Interface
The Evolution™ controller's user interface was designed with the customer in mind. Shortcut buttons provide quick access to basic functions while the advanced menu leverages the experience and knowledge of the irrigation professional, all shown on a graphics display that navigates similar to many modern consumer electronic devices.

Easy Upgrade to Integrated Smart Control
An optional Smart Connector™ plugs into the timing mechanism, enabling it to wirelessly communicate directly with a number of add-on devices—including a weather sensor, handheld remote, multiple soil sensors, and up to two wireless relays.

Computer-programmable with USB Drive
Simple-to-use software allows you to program everything at a computer. Use a standard USB drive to transfer programming to one or more controllers in a matter of seconds. The USB drive also provides controller logging functionality to save an operation log for diagnostic purposes.

12-station configuration with (2) 4-station modules



16-station configuration with (1) 12-station module

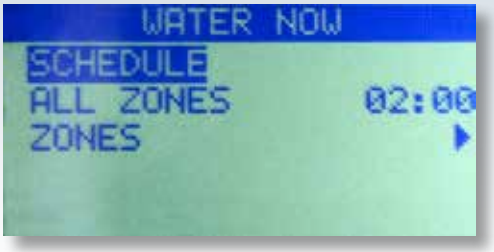
Evolution™ Series

Controller Interface

The Evolution controller's interface is a system of informative yet easy-to-understand screens that are quickly accessible using the controller's shortcut buttons.

Standard Functions

The **Standard** menu gives the homeowner access to the most fundamental functions of the controller, such as manual watering, setting watering days and start times for a ***single*** schedule, and adjusting the amount of irrigation, all directly accessible through dedicated shortcut buttons.



For example, the **Water Now Screen** allows the user to begin watering with as few as just two button presses, with the option of starting a specific schedule, specific zone, or watering all zones in series.

Another example is the **Review Screen,** which is an at-a-glance summary showing which days the controller is going to water in the next seven days for the schedule you select.

Advanced Functions

The **Advanced** menu gives the contractor access to the full power of the Evolution controller, including the ability to set up ***multiple*** irrigation and auxiliary schedules, create custom grow-in schedules, and configure any "smart" add-on devices - all operations that may otherwise overwhelm a homeowner.

For example, the **Apply Sensors** screen allows the user to easily view and configure all the sensors available to the controller, including rain, ET, and soil.

The Grow In Screen allows the user to set up a grow-in schedule for a user-defined period of time (up to 90 days), after which the controller will default back to its normal irrigation schedule(s).

Other Examples

The **Home Screen** displays the current time and date, what zones are scheduled to water next, or if currently watering, what zone(s) are currently watering and how much time is remaining, as well as any alerts – in the absence of any alerts, the screen will display "SYSTEM OK."

The **Contractor Message Screen** allows the contractor to input a custom message with their name and contact information into the controller from the software via a USB drive so it is visible to the homeowner when they press the "Help" button.

Smart Connect™ Add-On Devices

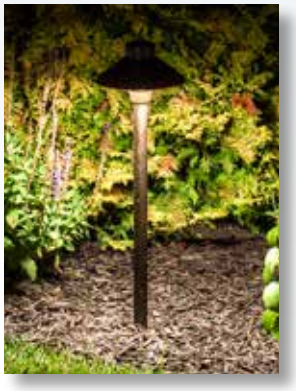
Simply plugging the Smart Connector™ into the Evolution controller allows it to communicate wirelessly with a number of add-on devices, providing a great opportunity to upgrade with a number of different water-saving and time-saving options.

Wireless ET Sensor
Uses live temperature and solar measurements as well as historical weather data for your location to calculate the amount of water needed from the irrigation system.

Handheld Remote
Makes maintenance checks a snap, allowing you to run sprinklers or schedules from up to 1000 feet (305 m) away.

Toro® Precision™ Soil Sensor
Up to three soil sensors can be used (one per schedule) to monitor the moisture level in the soil and prevent over- and underwatering. With up to a 500 feet (152,4 m) wireless range, there's no digging required to install.

Software*
Programming can be transferred from your computer to the controller in seconds using a standard USB drive.
*Smart Connector not required for software programming capability.



Wireless Auxiliary Relay
Up to two wireless relays can be used to turn on lighting, pumps, or fountains, just to name a few possibilities.

Evolution™ Series

Dimensions

- 11.25" W x 7.75" H x 4.5" D (286 x 197 x 114 mm)
- Weight: 4.5 lbs. (2 kg)

Electrical Specifications

- Electrical input power:
  - 120 VAC
  - 30 VA maximum
  - UL, CUL Listed
- Station output power:
  - 24 VAC
  - 0.75 amps per station maximum
  - 0.75 amps pump/master valve
  - 1.0 amps total load
- Surge Protection:
  - 6.0 KV common mode; 1.0 KV normal mode
- Operation of two solenoids per station (up to 0.75 amps per station max)

Programming

- One schedule in the default "standard" mode
- Up to six schedules in "advanced" mode:
  - Three irrigation schedules, four start times per schedule
  - One fixed auxiliary schedule, plus two virtual
- Three scheduling choices:
  - Seven-day calendar
  - 1- to 30-day interval with up to seven day exclusions
  - Odd/even days with up to seven day exclusions
- Monthly season adjust by schedule
- Schedule stacking, with automatic split cycle when season adjust is greater than 100%
- Grow-in schedule settable up to 90 days automatically reverts to regular irrigation schedule
- Station runtimes from one minute to twelve hours
- Allows 30, 60, or 90 second manual runtimes for things such as winterization/blowouts
- Programmable well-recovery/station-delay from 1 to 60 seconds or 1 to 60 minutes
- Pump start delay from 1 to 60 seconds
- Master valve on/off by zone
- Timed water off from one to fourteen days
- Compatible with normally-closed rain sensors
- Automatic short detection for circuit protection and faster troubleshooting
- Non-volatile memory doesn't require batteries and holds programming for up to five years

Hardware

- 4 to 16 stations with 4- and 12-station hot-swappable modules
- Cabinet easily mounts to the wall through two easily-accessible screw holes on the upper left-hand and right-hand sides of the controller
- Red LED next to display lights in the event of an alert
- 128 x 64 pixel graphical display
- Battery on the timing mechanism for "armchair" programming
- Outdoor key-lock cabinet manufactured out of durable UV-resistant plastic and includes standardized key used on many of the most popular controllers
- Indoor cabinet includes internal transformer and pigtail

Optional Add-Ons and Accessories

- EVO-SC – Smart Connector™
- PSS-SEN – Precision™ Soil Sensor Probe
- EVO-WS – ET/Weather Sensor
- EVO-HH – Maintenance Remote

Warranty

- Five years

Evolution Series Model List	
Model	**Description**
• EVO-4ID	4-station Indoor Controller
• EVO-4OD	4-station Outdoor Controller
Add-ons and Accessories	
Model	**Description**
• EMOD-4	4-station Expansion Module
• EMOD-12	12-station Expansion Module
• EVO-SC	Smart Connector

Specifying Information

EVO-4-XX-XX-SC			
Description	**Cabinet Type**	**Module**	**Connector Options**
EVO-4	**XX**	**XX**	**XX**
EVO-4 – Evolution Controller	ID – Indoor OD – Outdoor	4 – 4-station 12 – 12-station	SC – Smart Connector™
Example: A 16-station Evolution controller in an indoor cabinet with the Smart Connector would be specified as EVO-4ID-12-SC			

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Specifications subject to change without notice. For more information, contact your local Toro distributor.

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