



EVOLUTION[®] AG



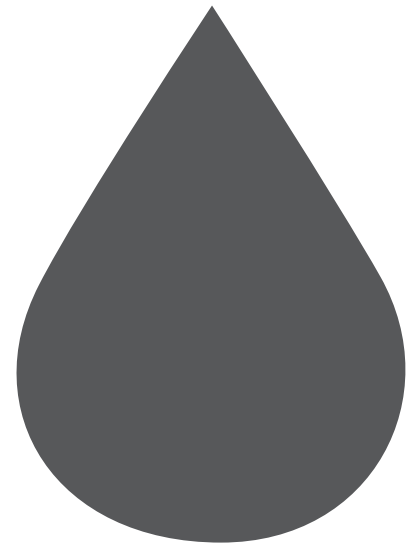
IRRIGATION & FERTIGATION CONTROLLER

THE EVOLUTION[®] AG

IRRIGATION & FERTIGATION CONTROLLER FOR AGRICULTURE & HORTICULTURE

Market demands, weather patterns and resource availability change every day, so precision agriculture practices must evolve to stay ahead. Growers want to use their valuable water, labor, & fertilizer resources to their best advantage.

Introducing a simple, intuitive and economical controller that gives agricultural and horticultural growers the features they need now! The EVOLUTION[®] AG, built on the award-winning Evolution platform, allows for modular expansion, fertilizer injection, pulse irrigation, propagation and misting schedules, along with the freedom to program valves to your specific needs: from 1 second to 24 hours.





EVOLUTION® AG

The Standard In Irrigation Control

- Program valve runtime from 1 second to 24 hours
- Operate up to 4 valves at one time
- Manage 2 Fertilizer pumps
- Wireless Valve Remote Control
 - Handheld Remote Control with 1,000 ft. range
- Modular expansion: 4, 8, 12, and 16 valves



Revolutionary Interface

The EVOLUTION® AG Controller's user interface was fine-tuned and perfected with grower needs 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 backlit graphics display that navigates similar to many modern consumer electronic devices.

FEATURES & BENEFITS FOR AGRICULTURE

The Next Level of **Agriculture**

The Evolution AG Controller was designed to easily automate agricultural irrigation in a simple, straightforward way. Open and close irrigation and fertigation valves reliably, in farming conditions, 24/7. Evolution AG—it speaks your language



- **Easy to Program & Operate**

- Built for Agriculture
- Program any valve from 1 second to 24 hours
- Easy manual runtime for water and fertilizer—any valve or schedule
- Simple interface and familiar terminology

- **Two Fertilizer Programs**

- Simple to program
 - ✓ Set delay time (to allow system filling and soil pre-wet)
 - ✓ Set fertilizer pump runtime

- **Simple Pulse Irrigation**

- Divide any watering into run-time and rest-time cycles



FEATURES & BENEFITS FOR HORTICULTURE

The Next Level of **Horticulture**

The Evolution AG Controller was engineered to specifically address the needs of horticulture growers. Simple to program, it can water, mist, or both—in seconds, minutes, or hours. Designed for remote control so you don't have to run back to the controller just to change a valve. Evolution AG –it speaks your language.



- **Propagation & Watering With One Controller**
- **Propagation / Misting Schedules**
 - Program the valve runtime and delay time in seconds, minutes, or hours
 - Can run up to 3 different schedules in different time windows
- **Programming Freedom**
 - Program any valve in seconds, minutes or hours
 - Easy manual runtime for water and fertilizer—any zone or schedule

FERTILIZER PROGRAMMING

Easy To Program & Operate

The Evolution AG was developed to meet the needs of growers. It is built to automate your watering and fertilizer injection tasks in a simple, and straight forward way. Reliably, in farming conditions, 24/7. Evolution AG - it speaks your language.

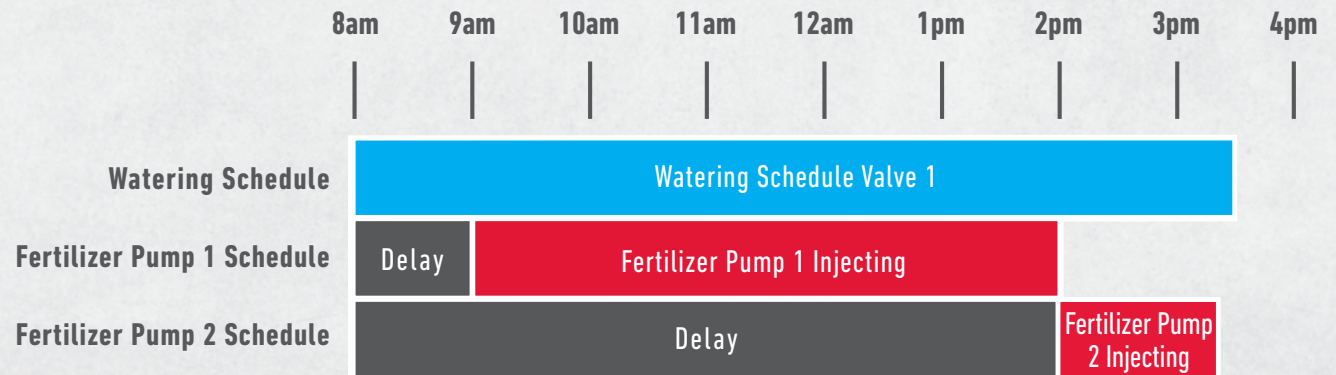
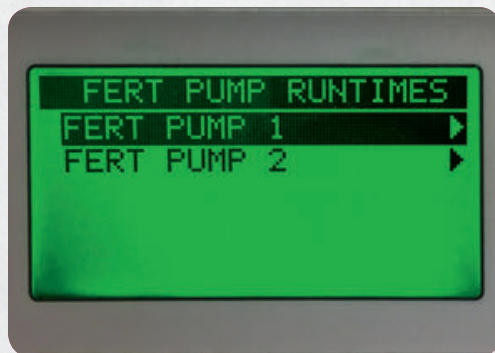
ADVANTAGE

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FERTILIZER PROGRAMMING

- Fertilize with every watering, or select specific days
- Assign up to two fertilizer pumps to each valve
- Fertilizer pumps are prevented from operating when no watering valve is operating

Below is an example of a fertilizer programming schedule:



PULSE IRRIGATION

ADVANTAGE 2 PULSE IRRIGATION

Pulse Irrigation can be useful in:

- High clay soils where runoff occurs before the desired amount of irrigation has been applied
- Sandy soils where irrigation loss to deep percolation occurs before the desired amount of irrigation has been applied
- Subsurface Drip Irrigation (SDI) where the goal is to push water up to the surface for germination for plant establishment, or to maximize the wetted soil volume
- Container grown nursery stock, or hanging baskets, where excessive drainage can be wasteful or messy.



Traditionally, pulse irrigation is accomplished by setting multiple start times for a schedule. But this can be complex, especially when the watering runtime needs to be adjusted.

The Evolution AG simply asks:

- Do you want to pulse?
- How long to pulse?
- How long to delay before the next pulse?



MISTING & PROPAGATION

Built To Promote Growth & Control

The Evolution AG controller makes it extremely simple to create a misting schedule with a few easy steps.



ADVANTAGE

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EASY TO PROGRAM

1. Select Schedule Type: Looping
2. Select Schedule Start Time
3. Select Schedule End Time
4. Select Valves To Run
5. Select Runtime
6. Select Delay

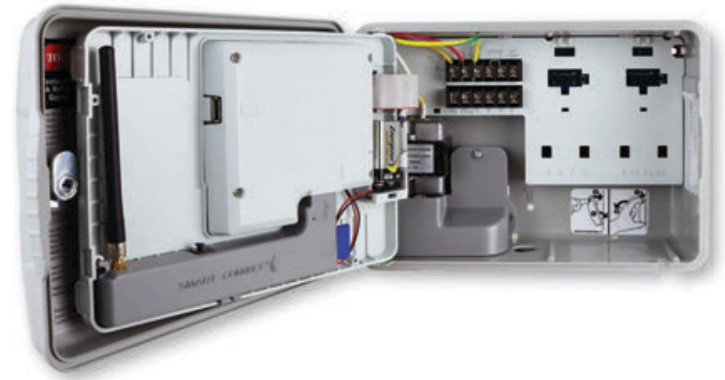


ADDITIONAL PROGRAMMING FEATURES

- Runtime range from 1 second to 24 hours
- 3 Programs
- 4 Start Times
- One button toggle between English and Spanish
- Press one button to skip current valve
- Schedule Options: Weekly, Interval, or Looping
- Non-volatile memory
 - Doesn't require batteries; holds program up to 5 years
- Firmware upgrade by USB
- Program save/transfer by USB
- Advanced Functions separated from Everyday Functions
- Powerful Diagnostics built in:
 - Zone test measures and displays current draw of solenoid, and identifies short, over current, and open conditions.
 - Automatic short detection for circuit protection and faster, more efficient troubleshooting
- Flexible Master valve programming
- Programmable well-recovery delay from 10 seconds to 30 minutes.
- Timed WATER OFF from one to fourteen days
- Adjust schedules +/- by %
- Full Toro Support for programming questions:
 - Please Call 877-345-8676 or email Tech.Support@toro.com



MODEL LIST & WIRELESS ACCESSORIES



EVOLUTION® AG Model List

Model Description

- **EVO-4AG** 4-valve Outdoor Controller

Add-Ons and Accessories

- **A-EMOD-4** 4-valve Expansion Module
- **A-EMOD-12** 12-valve Expansion Module
- **A-SR-1** Pump Start Relay
- **A-EVO-SC** Smart Connect® Plug-In Receiver
- **A-EVO-HH** Wireless Handheld Remote
- **A-EVO-AR** Wireless Auxilliary Relay
- **A-PSS-SEN** Wireless Precision™ Soil Sensor Probe
- **A-EVO-WS** Wireless Weather Sensor

Wireless Accessories



Handheld Remote

- Open any valve remotely (approximate range 1000' line of sight).



Wireless Auxiliary Relay

- Controls any device plugged into relay, e.g. Fan, lights



Precision Soil Sensor

- 4" probes appropriate for container production
- Prevents overwatering



Wireless Weather Sensor

- Rain switch
- Temperature
- Can be used to adjust watering times based on temperature and solar radiation.



SPECIFICATIONS & WARRANTY

Electrical

- Electrical input power:
 - 120 VAC
 - 30 VA maximum
 - UL, CUL Listed
- Station output power
 - 24 VAC
 - 1.0 amps total load
- Surge Protection
 - Output: 6.0 KV common mode
3.5 KV normal mode
 - Input: 7.0 KV common mode
7.0 KV normal mode
- Operation of two solenoids per station

Dimensions

- 11 1/4" W x 7 3/4" H x 4 1/4" D
- Weight 4.5 lbs.

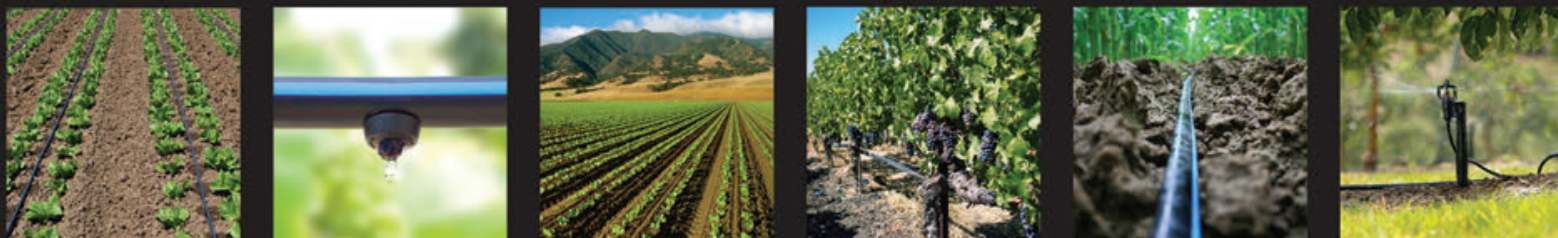
Hardware

- UV resistant plastic cabinet and faceplate
- Backlit graphic display
- Lockable cabinet

Warranty

- Five Years





WHEN WE SAY **COUNT ON IT**, WE MEAN IT

With an expanding population, growers around the world are looking to technologies that help increase productivity of existing land and maximize precious water resources. Toro's drip irrigation solutions help growers of permanent, field and row crops around the world realize substantial benefits in yield, quality, and water savings from the precise application of water and nutrients.

Visit toro.com or call **1-877-345-8676** for more information or to find your local Toro dealer.
Visit driptips.toro.com to learn more about drip irrigation and how it can help your farm.

**TORO®**

Count on it.

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Micro-Irrigation Business
1588 N. Marshall Avenue
El Cajon, CA 92020-1523, USA
Tel: +1 (800) 333-8125 or +1 (619) 562-2950
Fax: +1 (800) 892-1822 or +1 (619) 258-9973
toro.com | driptips.toro.com

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