

TBOS-II™ Series Controllers

Battery operated controllers

The TBOS-II battery-operated line of buriable controllers allows the use of automatic irrigation in the absence of AC power.

Easy to Install

- Ideal for commercial applications, including municipal parks, street and highway landscape projects, and construction projects.
- Convenient durable option for providing uninterrupted irrigation while AC-power is not available.
- Field transmitter and control module have external optical connectors for easy plug-in.
- The TBOS potted latching solenoid will mount on all Rain Bird valves: DV, DVF, ASVF, PGA, PEB, PESB, GB, EFB-CP, BPE and BPES series.
- One TBOS-II field transmitter programs an unlimited number of TBOS-II and/or TBOS Control Modules.
- The TBOS solenoid adapters will adapt the potted latching solenoid for use in retrofit applications with selected Irritrol® (Hardie/Richdel) and Buckner® valves or Champion® and Superior® valve actuators.

Easy to Program

- NEW – New user interface with drop down menu and direct access to main screen for easy navigation.
- NEW – User interface in 8 languages: English, French, Spanish, Portuguese, German, Italian, Turkish and Greek.
- NEW – Complete Manual irrigation mode.
- NEW – Built-in ID with naming capability (Field transmitter, Control module and the stations names can be customized).

Field Transmitter Features

- Fully backward compatible with Rain Bird's TBOS controller line produced since 1999.
- AM/PM or 24-hour display.

- The low battery indicator warns of failing batteries in the TBOS-II field transmitter or TBOS-II control module.
- NEW - 3 local irrigation programs may be saved and restored from Field Transmitter.
- NEW - Capability to clear the Control module's irrigation program (individual or all).
- NEW - Capability to review the irrigation program.

Controller Features

The following features are included on TBOS-II Control module.

- Basic programming includes 3 independent programs A,B and C, each with 8 start times per day.
- NEW - Stations can be assigned to several programs with different watering run times.
- Run time is from 1 minute to 12 hours in 1-minute increments.
- Independent station operation allows sequential start times (with stacking in case of overlap).
- NEW - Program and global Monthly Seasonal Adjust; 0% to 300% (1% increment).



- NEW – Five watering day cycle modes (Custom, even, odd, odd-31, cyclical) selectable by program for maximum flexibility and watering restriction compliance.
- NEW – Rain Delay from 1 to 14 days.
- NEW – Master valve output (on TBOS-II 2, 4, and 6 Control Modules)
- NEW – A TBOS Backup program may be saved and restored (manually or automatically for Contractor Default capability).
- NEW – No loss of irrigation program after a battery replacement.



TBOS-II System Components

TBOS-II Field Transmitter

- Field transmitter required for naming and programming control module
- NEW - Monochrome backlit LCD (128x54 pixels)
- NEW – Rechargeable battery pack (NiMH 750mAh 2.4V) + Jack connector
- Removable Infra-red cable
- Dimensions: 7.0 x 16.0 x 3.0 cm
- Weight: 250 g (8.81 ounces)
- Operating temperature: -10°to +65°C
- NEW - IP44 rating for ingress protection
- NEW – Drop down menu with direct access to Home screen
- Compatible IR communication with existing TBOS and new TBOS-II Control Modules.

TBOS-II Control Modules

- Available in 4 models: 1, 2, 4, or 6 stations.
- Operates one valve per station.
- Direct Rain Sensor Connection accommodates the Rain Bird RSD-BEx Rain Sensor.
- Operates with one 9V alkaline battery (Energizer and Duracell are recommended) type 6AM6 (international standard) or 6LR61 (European standard); battery not included.
- Battery life is one year with a high-quality 9V alkaline battery.
- Resists humid and harsh environments – Rated IP68: 100% waterproof and fully submersible.
- NEW – Master Valve/Pump output on 2-, 4- and 6-station Control modules.
- Dimensions: 9.5 x 13.0 x 5.3 cm
- Weight: 500 g (17.64 ounces)
- Maximum wire run between the module and solenoid: 30m by using 1.5mm² (16 AWG) extended wire.

Certifications

- UL, CE, C-Tick.

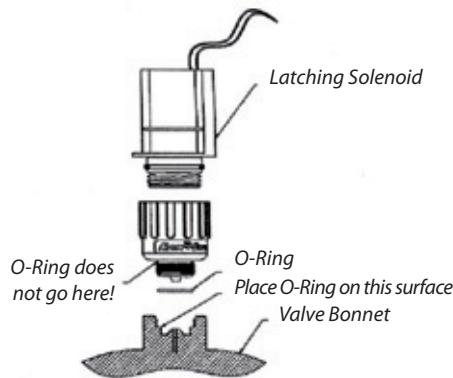
TBOS System Accessories

TBOS Potted Latching Solenoid

- Two 0.75 mm² wires (18 gauge) are supplied: 60 cm long (23.6 inches)
- Plastic adapter included for Rain Bird valves: DV, DVF, ASVF, PGA, PEB, PESB, GB, EFB-CP, BPE and BPES series.
- 10 bars (150 psi) maximum operating pressure.

TBOS Solenoid Adapters

- Easy to install.
- Black adapter for plastic valves allows the TBOS potted latching solenoid to be used with selected Irritrol (Hardie/Richel) and Buckner valves.
- Brown adapter for brass valves allows the TBOS potted latching solenoid to be used with selected Champion and Superior valve actuators.



RSD-BEx Rain Shutoff Device

- Operates with 24V or 9V controllers, including TBOS or TBOS-II.
- Designed to save water by automatically measuring precipitation and keeping irrigation systems from watering in rainy conditions.
- Does not interrupt irrigation taking place, but subsequent program starts will be prevented.
- Automatic return to normal watering schedule when the moisture level decreases as a result of natural evaporation.

RSD-Bex Rain Shutoff Device



TBOS-II Field Transmitter



TBOS-II Control Module



TBOS Potted Latching Solenoid

How To Specify

TBOS-II Control Modules:

TBOS2CM1 (1 station)

TBOS2CM2 (2 stations)

TBOS2CM4 (4 stations)

TBOS2CM6 (6 stations)

TBOS-II Field Transmitter:

TBOS2FTUS (US Field Transmitter)

TBOS2FTAU (Australian Field Transmitter)

Specifications

TBOS-II Control Module

The irrigation controller (control module) shall be programmable by a separate transmitter device only (Field Transmitter). The programs and manual operations shall be communicated to the Control Module from the Field Transmitter via an infrared connection.

The Control Module shall be of a module type which may be installed in a valve box underground. They shall function normally if submerged in water and the communication from the transmitter shall function if submerged in water.

The Control Module shall be housed in an ABS plastic cabinet and shall be potted to insure waterproof operation. Their battery compartment shall be dual-sealed to prevent water from entering the compartment. The Control Module shall have two mounting slots for screws allowing the module to be securely mounted inside a valve box.

The controller shall be designed to accommodate one 9V alkaline battery (EN22-6L561-6AM6-9V) for one full year regardless of the number of stations utilized.

The Control Module shall operate ____ (1, 2, 4 or 6) stations.

One sensor input shall be present on Control Module and shall accommodate dry contact rain sensor.

____-station (2-, 4-, or 6-) modules shall be able to support a Master valve.

All valves shall affect the Master Valve / Pump.

The controller shall have station run time capability from one minute to twelve hours in one minute increments, a 365-day

calendar with leap year and three programs A, B, C with eight start times each. One valve can be assigned to none, one, any or all programs.

Each program shall be capable of being set to any of the following: Custom Cycle (days of the week), Cyclic (1 to x days variable), Odd, Odd (no) 31 and Even.

The controller shall have a program level and global Monthly Seasonal Adjust; 0% to 300% (1% increment)

A Rain Delay shall allow the user to suspend irrigation programs from 1 to 14 days.

The controller shall be capable of starting/stopping a manual single valve or manual program, cancel irrigation in progress or launch a test valve via infrared of the Field transmitter.

Each valve not activated during the last 24 hours shall be automatically activated during 1 second each day for an anti-calcium effect.

TBOS-II Field Transmitter

The Field Transmitter shall be water resistant and housed in ABS plastic. The Field Transmitter shall be designed to accommodate a rechargeable NiMH 750mAh 2.4V battery pack.

The Field Transmitter shall have a large dot matrix LCD screen with reverse video and a seven-key programming pad. Icons and texts without abbreviations shall ease understanding. A Home button shall ease navigation.

The Field Transmitter shall be able to program an unlimited number of Control Modules via infrared communication.

TBOS Potted Latching Solenoid

Control Module station output shall drive one single potted latching solenoid that shall fit onto any Rain Bird Valves: DV, DVF, ASVF, PGA, PEB, PESB, GB, EFB-CP, or BPE or BPES series valve.

The Control Module, the Potted Latching Solenoid, and the field transmitter shall be as manufactured by Rain Bird Corporation, Glendora, California USA.

TBOS Rain Shutoff Device

The Rain Shutoff Device shall function correctly only when buried under 2" (5 cm) of sand. The device shall be pre-set and nonadjustable.

The device shall function with a DC system only. The device shall have a bypass switch.

The Rain Shutoff Device shall be as manufactured by Rain Bird Corporation, Glendora, California USA.