

TECH SPECS

TBOSTM

No Power...No Problem

The TBOS battery-operated line of buriable controllers allows the use of automatic irrigation in the absence of AC power. TBOS is easy to program, vandal-resistant, and reliable. With a host of flexible features, the TBOS will meet all your irrigation needs with only a 9V alkaline battery.

Features

- Ideal for commercial applications, including municipal parks, street and highway landscape projects and construction projects.
- Convenient temporary option for providing uninterrupted irrigation while repairs are made to an AC-powered system.
- 365-day calendar (adjusts for leap year).
- AM/PM or 24-hour display.
- Basic programming (standard mode) includes 3 independent programs, each with 8 start times per day. Run time is from 1 minute to 12 hours in 1minute increments on a 7-day calendar.
- Additional cycles (turbo mode) include even, odd, odd-31 and 1-6 day program cycles for maximum flexibility.
- The low battery indicator warns of failing batteries in the TBOS field transmitter or TBOS control module.
- Independent station operation allows simultaneous start times or sequential start times based on system hydraulic capacity.
- The TBOS field transmitter has a large Liquid Crystal Display (LCD) with self-explanatory function icons. Each function is indicated by an easy-to-understand symbol.
- The 7-key keypad is equipped with a "beep" sound to confirm that a key has been pressed for fast and sure programming.
- One TBOS field transmitter programs an unlimited number of TBOS and UNIK[™] Control Modules
- Fully backward compatible operates in standard mode with all components of Rain Bird's UNIK controller line.
- Field transmitter and control module have external optical connectors for easy plug-in.
- It is possible to transmit information even if the module is under water.
- The TBOS potted latching solenoid will mount on all Rain Bird valves in the DV, DVF, ASVF, PGA, PEB, PESB, GB, EFB-CP, BPE and BPES series.
- 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.

TBOS Control Modules

- Available in 4 models: 1, 2, 4, or 6 stations.
- · Operates one valve per station.
- Station timing: 1 minute to 12 hours in 1-minute increments with a 365-day calendar. Stations are assigned to a single program.
- Direct Rain Sensor Connection accommodates the Rain Bird RSD-BEx Rain Sensor.
- Operates with only 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.
- Waterproof case and dual-sealed battery compartment for reliable operation under water.
- Dimensions: 3¾ x 5¼ x 2 inches (9,5 x 13,0 x 5,3 cm)
- Weight: 17.64 ounces (500 g)
- Maximum wire run between the module and solenoid:

Wire Size (AWG)	18	16	14
Maximum Distance (ft)	32	50	80
Wire Size (mm²)	0,75	1,5	2,5
Maximum Distance (M)	10	15	24

TBOS Field Transmitter

- Field transmitter required for programming control module.
- Dimensions: 3½ x 7½ x 1½ inches (9,0 x 19,0 x 4,5 cm)
- Weight: 7.05 ounces (200 g)
- Operating temperature: 32° to 140° F (0° to 60° C)

TBOS Potted Latching Solenoid

- Two 18 gauge (0,75 mm2) wires are supplied: 23.6 inches (60 cm) long.
- Plastic adapter included for Rain Bird valves: DV, DVF, ASVF, PGA, PEB, PESB, GB, EFB-CP, BPE and BPES series.
- 150 psi (10 bars) 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.



TBOS Rain Shutoff Device

- Operates with TBOS control modules and latching solenoids.
- Designed to prevent programmed irrigation when a significant amount of natural rainfall makes watering unnecessary.
- Unit measures the moisture level in the site area where it is installed in sand outside the irrigated
 area
- Prevents irrigation as soon as the area has sufficient water to meet plant needs.
- 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.
- Includes on-off switch to bypass when necessary.

How to Specify

TBOSFTUS |

- <u>Models</u>
- TBOSFTUS: Field Transmitter • TBOS1CMUS: 1-Station Control Module
- TBOS2CMUS: 2-Station Control Module
- TBOS4CMUS: 4-Station Control Module
- TBOS6CMUS: 6-Station Control Module
- TBOSPSOL: Potted Latching Solenoid • TBOSADAPP: Solenoid Adapter for
- plastic valves

 TBOSADAPB: Solenoid Adapter for
- brass valves
- TBOSRAINSO: Rain Shut-Off Device



Specifications

TBOS™ Control Module

The irrigation controller (control module) shall be programmable by a separate transmitter device only. The program shall be communicated to the Control Module from the Field Transmitter via an infrared connection. The controller shall be of a module type which may be installed in a valve box underground. The controller 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. The Control Module 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 operate on one 9V alkaline battery for one full year regardless of the number of stations utilized. The controller shall operate _____ (1, 2, 4, or 6) stations either sequentially or independently.

The controller shall have station run time capability from one minute to twelve hours in one minute increments, a 365-day calendar and three programs with eight start times each. The controller shall be capable of independent program operation using a seven day cycle. The controller shall be capable of dependent program operation using Even, Odd, Odd-31 or 1-6 day cycles. The controller shall turn on stations via latching solenoids installed on the valves. Manual operations shall be initiated by attaching the Field Transmitter to the Control Module and programming a manual start. The controller shall be capable of manual single station or manual program operation.

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

TBOS Field Transmitter

The irrigation controller shall be programmable by a separate transmitter device (Field Transmitter) only. The Field Transmitter shall communicate to the Control Module via an infrared connection. The Field Transmitter shall be water resistant and housed in ABS plastic and have a removable, reversible protective sheath. The Field Transmitter shall operate on one 9V alkaline battery.

The Field Transmitter shall have a large LCD screen and a seven-key programming pad. A beep sound shall confirm every key stroke. The screen shall automatically turn off after one minute when not in use.

The Field Transmitter shall be capable of programming an unlimited number of TBOS and UNIK™ Control Modules.

The Field Transmitter shall have a low battery indicator capable of indicating low battery voltage in the Field Transmitter or TBOS Control Module.

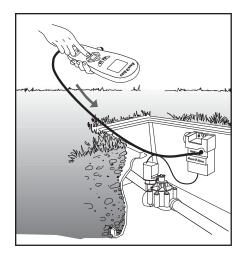
The Field Transmitter shall be as manufactured by Rain Bird Corporation, Glendora, California USA.

TBOS Potted Latching Solenoid

The Potted Latching Solenoid shall fit onto any Rain Bird DV, DVF, ASVF, PGA, PEB, PESB, GB, EFB-CP, or BPE or BPES series valve

The Potted Latching Solenoid shall fit onto selected Irritrol® and Buckner® valves and Superior® and Champion® valve actuators using plastic solenoid adapters.

The Potted Latching Solenoid and adapters 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 non-adjustable. 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.

Rain Bird Corporation

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