

ESP-BAT-BT Bluetooth® Battery-Operated Controller

Technical Specifications



BAT-BT CONTROLLER FEATURES:

- Available in 4 models: 1, 2, 4, or 6 stations
- Dedicated master valve/pump output on all station models
- Run time is from 7 seconds to 9 hours (max 18 hours with 200% seasonal adjust) in 1 second increments
- Run-off management with Cycle and Soak. Available down to 7 second cycles
- Basic programming includes:
 - Independent programs A, B, C and D
 - 8 start times per day
 - 5 watering day cycle modes (custom, even, odd, odd-31, cyclical)
 - Permanent days off by program so no irrigation takes place on certain days of the week for maximum flexibility and watering restriction compliance
- Stations can be assigned to several programs with different watering run times
- Independent station operation allows sequential start times (with stacking in case of overlap)
- Global Monthly Seasonal Adjust; 0% to 200% (1% increment)
- Rain Delay from 1 to 14 days
- Operates one valve per station

- Direct Rain Sensor Connection accommodates the Rain Bird RSD-BEX Rain Sensor
- Rain Sensor shutoff can be programmed globally or by station
- Wireless battery compartment utilizes four AA alkaline batteries (AA, LR6, LR06); batteries not included
- Battery life is 3-5 years with 4 high-quality AA batteries depending on watering schedule
- A backup program may be saved and restored (manually or automatically for Contractor Default capability)
- No loss of irrigation program after a battery replacement
- Up to 15 calendar days off per year
- Short and open circuit detection
- PIN code protection
- Resists humid and harsh environments

RAIN BIRD APP FEATURES (BAT-BT):

- Low-battery indicator warns of failing batteries in the BAT-BT Controller
- 4 local irrigation programs may be saved and restored from app
- Erase the controller's individual station programs or all programs
- Capability to review the irrigation program
- Map devices with pin shortcuts to:
 1. Share Device
 2. Edit Controller Screen
 3. Manual Irrigation
 4. Change Address
 5. Battery Status
 6. Bluetooth Status
 7. Delete Controller
- Custom names and images for controller and stations
- Share device to a team member:
 1. Device Name
 2. Station Name/Settings
 3. Programming
 4. Location
 5. Offline Changes

- Offline mode for app access of last known settings. Make, save, log and share offline changes for synchronization when you or your team member are back in Bluetooth range.
- Available for Android™ and iOS® devices
- Without Bluetooth connection, view last known:
 1. Connection Date
 2. Battery Status
 3. Controller Status
 4. Program Settings
 5. Station Settings
 6. Mapped Location
- User interface also available in Arabic, Bulgarian, Chinese, Czech, Dutch, French, German, Italian, Japanese, Polish, Portuguese, Russian, Spanish and Turkish

DIMENSIONS:

Width: 5.6" (14.22 cm)

Height: 4" (10.16 cm)

Depth: 2.5" (6.35 cm)

Weight: 24 ounces (680g)

including batteries

- Maximum wire run between the controller and TBOSPSOL solenoid: 250 ft (76.2 m) by using 18 AWG (1.024 mm) extended wire

CERTIFICATIONS:

Product Compliance:

- European Union: CE
- United Kingdom: UKCA
- Australia and New Zealand: ACMA-RCM
- USA: UL-US, FCC Part 15b & 15c, Bluetooth SIG Qualification
- Canada: C-UL, ICES-003, ISED RSS-247
- Mexico: NOM, IFETEL
- Brazil: ANATEL
- Japan: MIC
- Saudi Arabia: CST
- South Africa: ICASA
- UAE: TDRA, ECAS-ROHS
- Egypt: NTRA
- IP68: Total protection against solids and water ingress

RF Specification:

- Operation frequency band: Bluetooth, 2402-2480 MHz
- Maximum radio-frequency power:
 - 9.66 dBm (for EU and UK)
 - 9.95 dBm (for USA and Canada)
- Antenna type: PCB antenna
- Antenna gain: 2.35 dBi

How To Specify

BAT-BT Bluetooth® Battery-Operated Controller Models

- **ESPBAT-BT1** – One Station
- **ESPBAT-BT2** – Two Station
- **ESPBAT-BT4** – Four Station
- **ESPBAT-BT6** – Six Station

*All models come with a dedicated MV wire

*All models have sensor port and wire

*One and two station units have one common wire. Four and six station units have two common wires.

BAT-BT SYSTEM ACCESSORIES:

Potted Latching Solenoid

- All BAT-BT Series controllers must connect to a 9-volt DC latching valve solenoid

RAIN BIRD® COMPATIBLE VALVE SOLENOID:

TBOSPSOL – 9-Volt Potted DC Latching Solenoid

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

Solenoid Adapters

- **TBOSADAPP:** Solenoid Adapter for select non-Rain Bird valves to be compatible with Rain Bird TBOSPSOL 9-volt potted DC latching solenoid
- **Black Adapter:** Allows BAT-BT compatible DC latching solenoid (TBOSPSOL) to be used with selected Irritrol (Hardi/Richel) and Buckner Valves
- **Brown Adapter:** Allows BAT-BT compatible DC latching solenoid (TBOSPSOL) to be used with selected Champion and Superior Brass Valves

RSD-BEX Rain Shutoff Device

- Easy to install
- Operates with 24V or 9V controllers, including BAT-BT
- 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

SPECIFICATIONS:

BAT-BT Controller

The irrigation controller shall be programmable from the Rain Bird Smartphone App.

The programs and manual operations shall be communicated to the controller from a smartphone via Bluetooth.

The controller shall be housed in an outdoor rated plastic cabinet and shall be potted to insure waterproof operation. The battery compartment shall be sealed to prevent water from entering the compartment. The controller shall have one mounting slot for an included screw or zip tie allowing the controller to be securely mounted inside a valve box. The controller battery compartment shall be wireless and designed to accommodate four AA alkaline batteries (AA, LR6, LR06) for three full years regardless of the number of valves utilized. The customer can expect a maximum of 5 years of battery life.

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

One sensor input shall be present on the controller and shall accommodate dry contact rain sensor.

____ -station (1-, 2-, 4-, or 6-) models 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 7 seconds to 18 hours in 7 second increments, a 365-day calendar with leap year, up to 15 calendar days off a year, plus four programs A, B, C, D 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 days, odd days-31 and even days, with the ability to set permanent days off.

The controller shall have a program level and global Monthly Seasonal Adjust; 0% to 200% (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/ pausing/stopping a manual single valve or manual program, cancel irrigation in progress or launch a test valve via Bluetooth from the Rain Bird app.

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

BAT-BT Potted Latching Solenoid

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

The controller and Potted Latching Solenoid shall be as manufactured by Rain Bird Corporation, Glendora, California, USA.