

## **Controllers**



## **Water Saving Tips**

A Seasonal Adjust feature is available on all Rain Bird AC-powered controllers, allowing users to easily adjust irrigation schedules to changing seasonal landscape water requirements. The ESP-LX Series Controllers also feature an automated Monthly Seasonal Adjust feature to help save water through automatic adjustments every month of the year.

Water savings can also be optimized through daily irrigation schedule adjustments which fine-tune watering based on current weather. All ESP-LX series controllers can easily be upgraded to include smart weatherbased/ET or soil moisture irrigation control capability by adding the Rain Bird ET Manager Cartridge or a local rain sensor or soil moisture sensor.

All Rain Bird controllers simplify conservation through a variety of flexible programming features. With the touch of a button, the ESP-Me can recall a previously saved "Contractor Default" irrigation program; the ESP-LX Series "Delayed Recall" feature automatically reverts to typical watering programs after a user-set time period.



Major Products	Wi-Fi READY	Wi-Fi READY					₿ Bluetoot
Primary Applications	ESP-TM2	ESP-Me	ESP-LX BASIC	ESP-LXME ESP-LXMEF	ESP-LXD	ESP-9V	TBOS BT
Residential	•	•				•	•
ight Commercial	•	•	•	•	•	•	•
Commercial/Industrial			•	•	•		•
Type of Controller							
Hybrid	•	•	•	•	•		
Solid State						•	•
Battery Operated						•	•
ndoor Location	•	•	•	•	•		
Outdoor Location	•	•	•	•	•		
			•	•	•		
Features						_	_
itations (up to)	12	22	48	48	200	6	6
Programs (up to)	3	4	4	4	4	6	3
tation Timing (up to)	6 hr1	6 hr1	12 hr1	12 hr1	12 hr1	12 hr	12 hr
lumber of Starts per Program (up to)	4	6	8	8	8	6	8
urge protection	•	•	•	•	•		
30VAC Option		•	•	•	•		
·					2	Multi-station	
laster Valve/Pump Start	•	•	<b>0</b> <sup>2</sup>	<b>0</b> <sup>2</sup>		models only	
Vater Budgeting	•	•	<b>•</b> <sup>4</sup>	<b>•</b> <sup>4</sup>	•4	•	
ndividual Program/Zone Shut-Off	•	•	•	•	•		
ain Delay	•	•	•	•	•		
lattery Programmable		•	•	•	•	•	•
ensor Terminals, Status Indicator and Override	•	•	•	•	•	•	
Pelay Between Stations (up to)	9 hrs	9 hrs	0 - 10 min.	0 - 10 min.	0 - 10 min.		
low Sensing	21113	71113	0 10111111.	o 10111111.	0 10111111.		
<u> </u>							
imultaneous Multi-Station Operation			•	•	•		•
ycle + Soak™			•	•	•		
verlapping Programs			•	•	•	•	
lanual On/Off	•	•	•	•	•	•	•
emote Control Compatible	•	•	•	•	•		
Diagnostic Test			•	•	•		
Diagnostic Valve Circuit Breaker	•	•	•	•	•		
Out-of-Valve Box Programming							•
ubmersible (up to)						3.3 ft (1 m)	3.3 ft (1 n
andal/Tamper Resistant						3.5 10 (1 111)	3.5 10 (1 11
elf-Cleaning Solenoid							•
ow Battery Indicator						•	•
ave / Restore Programs	•	•	•	•	•	•	•
Master Valve ON/OFF by Station	•	•	•	•	•		•
otal Run Time Calculator by Program		•	•	•	•		•
ypass Rain Sensor by Station	•	•	•	•	•		
rogramming Schedule							
Day-of-Week							
•	•	•	•	•	•	•	•
-7 Variable Cycle	•	•	•	•	•	•	•
-31 Variable Cycle	•	•	•	•	•	•	•
dd/Even Cycle	•	•	•	•	•	•	•
0dd 31st	•	•	•	•	•		•
65-Day Calendar	•	•	•	•	•	•	
vent Day Off			•	•	•		
entral Control Compatibility							
2™ Upgradeable				•	•		
abinet							
lastic-Indoor	•	•					
lastic-Outdoor	•	•	•	•	•	•	•
owder-Coated Metal Outdoor			•	•	•		
tainless Steel Pedestal			•	•	•		
owder-Coated Metal Pedestal			•	•	•		
lardware/Accessories							
wo-Wire Decoders and Accessories					•		
ain Sensing (need Rain Sensor)	•	•	•	•	•	•	•
low Sensing (need Flow Sensor)	•			ESP-LXMEF only	•		
-				ESF-LAIVIER ONLY	•		
MRT-Y Soil Moisture Sensor	•		•				

## **LNK WiFi Module**

Irrigation System Control from Anywhere

#### Features

- Upgrades WiFi-ready controllers (ESP-Me and ESP-TM2) to make them fully accessible and programmable from iOS or Android compatible devices\*
- Operates like a wireless remote control for your irrigation system while onsite or an internet-based monitoring and control system when offsite
- Streamlines and simplifies initial irrigation timer setup and seasonal adjustment
- Instant access allows for real-time system management and timer settings
- Compatible professional app features allow for simple multi-site management and as well as remote diagnostics by landscape professionals
- Built-in mobile notifications provide troubleshooting access, simplify service calls, and warn of freezing conditions when expected
- Automatic weather adjustments provide daily run time changes, saving up to 50% in water
- Superior programming capabilities that are designed to meet the most stringent water restrictions

## **Specifications**

- 2.4 GHz (only) WiFi router compatible with WEP and WPA security settings
- Compatible with iOS 8.0 and Android 4.4 (KitKat) or later mobile devices\*
- Operating Temperature: 14° F (-10° C) to 149°F (65°C)
- Storage Temperature: -40°F (-40°C) to 150°F (66°C)
- Operating Humidity: 95% max @ 50°F to 120°F (10°C to 49°C) noncondensing environment

## **Electrical Specifications**

Input: 24VAC(RMS) 50/60Hz; 55mA max

## **Certifications**

• cULus, CE, CSA, FCC Part 15c, WEEE, IFETEL

#### **Dimensions**

Width: 1.13" (2.87 cm)Height: 1.83" (4.65 cm)Depth: 0.48" (1.22 cm)

#### Model

LNKWIFI

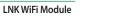


















Upgrades Rain Bird ESP-Me and ESP-TM2 Controllers



## **ESP-TM2 Series Controller**

Simple, Flexible, and Reliable for Residential Applications

#### **Features**

- Upgradeable for WiFi-based remote monitoring and control via iOS and Android mobile devices (with LNK WiFi Module sold separately).
- Internet-based weather information can be used to make daily adjustments to the irrigation schedule, saving up to 30% in water (with LNK WiFi Module sold separately).
- 4, 6, 8, and 12 station models to meet small or large residential irrigation needs
- Set Permanent Days Off per program to ensure watering never occurs on days when maintenance crews are on site (for Odd/Even/ Cyclic schedules)
- Easy to install indoors or outdoors with pre-installed power cord
- Quick programming in just 3 steps for ease of setup
- 3 available programs with up to 4 start times for each program to meet the needs of varied landscapes
- · One-touch manual watering capability for ease of use
- Large back-lit LCD display for improved visibility in low-light and direct sun conditions
- Contractor Default™ allows you to easily save and restore your custom schedule
- Delay Watering up to 14 days and automatically resume watering after the set delay has elapsed
- Bypass Rain Sensor for any station gives you the ability to customize which stations react to a rain sensor
- Seasonal Adjust by program allows you to easily reduce or increase watering by program

## **Specifications**

- Operating Temperature: Up to 149°F (65°C)
- Storage Temperature: -40°F (-40°C) to 150°F (66°C)
- Operating Humidity: 95% max @ 50°F to 120°F (10°C to 49°C) noncondensing environment

## **Electrical Specifications**

- Input required: 120VAC (±10%) @ 60Hz
- Output: 1A at 24VAC
- · Master Valve/Pump Start Relay
- External battery back-up not required. Nonvolatile memory permanently saves the current programming and a 10 year life lithium battery maintains the controllers time and date during power outages

## **Certifications**

• cULus, FCC Part 15b, IPX4, NOM



Look for the WaterSense labeled LNK WiFi Module and a Rain Bird Rain Sensor to improve the water efficiency capabilities of this controller

#### **Dimensions**

- Width: 7.92 in. (20.1 cm)
- Height: 7.86 in. (20.0 cm)
- Depth: 3.51 in. (9.0 cm)

#### Models

- TM2-4-120V: 4-station 120VAC
- TM2-6-120V: 6-station 120VAC
- TM2-8-120V: 8-station 120VAC
- TM2-12-120V: 12-station 120VAC

#### **Accessories**

- LNKWIFI: LNK WiFi Module for remote control and notification via iOS or Android device
- WR2 Series Wireless Rain + Freeze Sensors
- · RSD Series Rain Sensors





## **ESP-Me Series Controllers**

The industry's most flexible irrigation controller solution. Supports up to 22 stations

## **Features**

- · Large LCD display with easy to navigate user interface
- Rain Sensor input with override capability
- · Master valve/pump start circuit
- · Non-Volatile (100 year) storage memory
- Remotely Programmable under 9V battery power (not included)
- Program based scheduling allows 4 individual programs with 6 independent start times per program for 24 total start times
- Watering schedule options: By days of week, ODD calendar days, EVEN calendar days, or Cyclic (every 1 – 30 days) Advanced Features
- · Advanced diagnostics and short detection with LED alert
- Contractor Default™ Program Save/Restore saved program(s)
- · Rain Sensor bypass by Station
- Total Run Time Calculator by program
- · One Touch manual watering
- Delay Watering up to 14 days (applies only to stations not set to ignore Rain Sensor)
- Manual Watering option by program or station
- · Seasonal Adjust applied to all programs or individual program
- Adjustable delay between valves (default set to 0)
- Master Valve on/off by station
- Upgradeable for WiFi-based remote monitoring and control via iOS and Android mobile devices (with LNK WiFi Module sold separately).
- Internet-based weather information can be used to make daily adjustments to the irrigation schedule, saving up to 30% in water (with LNK WiFi Module sold separately).

## **Operating Specifications**

- Station timing: 1 minute to 6 hours
- Seasonal Adjust: 5% to 200%
- Max operating temperature: 149°F (65°C)

## **Electrical Specifications**

- Input Required: 120VAC  $\pm$  10%, 60Hz (International models: 230/240VAC  $\pm$  10%, 50/60Hz)
- · Master Valve/Pump Start Relay
- Operating Voltage: 24VAC 50/60Hz
- Max Coil Inrush: 11VA
- · Max Coil Holding: 5VA
  - Idle/Off power draw 0.06 amps at 120VAC
- Power back-up not required. Nonvolatile memory permanently saves the current programming and a 10 year life lithium battery maintains the controllers time and date during power outages.

## Certifications

cULus, CE, RCM, FCC Part 15b, WEEE, RoHS, NOM, IPX4



Look for the WaterSense labeled LNK WiFi Module and a Rain Bird Rain Sensor to improve the water efficiency capabilities of this controller

#### **Dimensions**

- Width: 10.7" (27.2 cm)
- Height: 7.7" (19.5 cm)
- Depth: 4.4" (11.2 cm)

#### North America Models (120VAC)

- Controller Base Models
  - ESP4MEI: 4 station indoor model
  - ESP4ME: 4 station outdoor model\*
- Modules
  - ESPSM3: 3 station module
  - ESPSM6: 6 station module (compatible with ESP-Me Series controllers only)

## Accessories

- LNKWIFI: LNK WiFi Module for remote control and notification via iOS or Android device
- WR2: Wireless Rain + Freeze Sensors
- RSD Series Rain Sensors

\*Also available in 230VAC and 240VAC models





ESP-Me Series Controller and Modules



## **ESP-9V Series**

**Battery-Operated Controller** 

#### **Features**

#### **Controller Features**

- Waterproof case ensures long life, even when installed in a valve box
- Common programming features are easily accessed on one screen, making programming quick and easy
- Operates for approximately one full year using one 9-volt alkaline battery, or two years with two 9-volt alkaline batteries
- Large LCD display with easy to navigate user interface
- · Sensor input with bypass override
- Mast valve/pump-start circuit (multi-zone units only)
- · Non-volatile (100-year) program memory
- IP68 certified for protection against dust and water intrusion
- Plastic controller case has outstanding resistance to weather, yellowing and aging

## **Scheduling Features**

- · Dedicated manual watering button for easy operation
- Automatic zone-stacking ensures that only one valve irrigates at the same time. ESP-9V will automatically irrigate the lower number zone first if zones are scheduled to water at the same time
- Contractor Rapid Programming™ automatically copies the start times and watering days from zone 1 to all remaining zones at initial setup
- Run times, start times, and watering days are customizable by zone
- 6 start times per zone
- 4 watering day options per zone: Custom days of the week, Cyclic, and ODD or EVEN calendar days
- Delay watering (1 to 9 days)

## **Valve Compatibility**

- Rain Bird K80920
- Hunter 458200
- · Irritrol DCL
- · Toro DCLS-P

## **Controller Dimensions**

• Width: 5.35" (13.59 cm)

· Height: 4.04" (10.26 cm)

• Depth: 2.42" (6.15 cm)

• Weight: 2 lbs (907 g)

## **LCD Screen Size**

• Width: 2.25" (5.72 cm)

• Height: 1.25" (3.18 cm)



With optional Wall Mount

## **Optional Wall Mount Dimensions**

Width: 4.25" (10.76 cm)
Height: 6.930" (17.60 cm)
Depth: 1.965" (4.99 cm)
Weight: 3.6 oz (107 g)

## Certifications

· cULus, FCC, IC, CE, RCM, IP68, RoHS, WEEE

#### Models

- ESP9V1: 1-Zone ESP-9V Controller
- ESP9V2: 2-Zone ESP-9V Controller
- ESP9V4: 4-Zone ESP-9V Controller
- ESP9V6: 6-Zone ESP-9V Controller
- ESP9V1SOL: 1-Zone + 9V Solenoid
- ESP9VDVKIT: 1-Zone + 1" DV Valve (SLIP)
- · 9VMOUNT: Wall-mount kit



ESP-9V Series Battery-Operated Controller



## **TBOS-BT**



Bluetooth Battery-Operated Controller. Install anywhere. Program from a Smartphone.

## **Features**

## Rain Bird App Features (TBOS-BT)

- · Create, review and transmit irrigation programs
- · Capability to set zones or programs to manually irrigate
- Basic programming includes 3 independent programs A,B and C, each with 8 start times per day
- 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
- Five watering day cycle modes (Custom, even, odd, odd-31, cyclical) selectable by program for maximum flexibility and watering
- Program and global Monthly Seasonal Adjust; 0% to 300% (1% increments)
- Built-in ID with naming capability. The control module and stations can be individually named.
- · Optional passcode
- Delay watering from 1 to 14 days
- Permanently turn the controller off to prevent irrigation
- Battery indicator reports the status of the control module's battery
- Capability to clear the control module's irrigation program

## **Controller Features**

- Operates for approximately one full year using one 9-volt alkaline battery
- Completely potted to obtain IP68 conformity
- Independent station operation allows sequential start times (with stacking in case of overlap) restriction compliance
- Master valve output (on TBOS-II 2, 4, and 6 Control Modules)
- · No loss of irrigation program after a battery replacement
- · Backwardly compatible with the TBOS-II Field Transmitter

## **Valve Compatibility**

- Rain Bird TBOS Potted Latching Solenoid (K80920)
  - DV, DVF, ASVF, PGA, PEB, PESB, GB, EFB-CP, BPE and BPES series
- Hunter 458200
- · Irritrol DCL
- Toro DCLS-P

#### Certifications

• cULus, CE, RoHS, WEEE, FCC

## **TBOS-BT System Components**

## Rain Bird App (TBOS-BT)

· Available for Android and IOS devices

#### Models

- · TBOS-BT1 (1 Station)
- · TBOS-BT2 (2 Station)
- · TBOS-BT4 (4 Station)
- · TBOS-BT6 (6 Station)

#### **Accessories**

- · TBOS Potted Latching Solenoid
- · RSD Series Rain Sensors
- 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.

## **₿ Bluetooth**\*





Google Play





## **ESP-LX Basic Controller**

The easiest to use commercial controller

#### **Features**

- Two Languages, One Dial: English and Spanish are both on one simple dial making it easy to install and maintain
- Larger Station Count compared to competitive commercial controllers.
   The ESP-LX Basic base model has 12 stations and has capacity for 48 stations using 12-station modules
- Flexible features and modular options make the controller ideal for a wide variety of applications including large residential, light commercial, and large commercial irrigation systems
- ESP = Extra-Simple Programming user interface and large LCD display with softkey text labels
- Simple, Three-Step Programming can be done using minimal dial positions. Additional programming options can be accessed through the Basic Setup and Station Timing dial positions
- Water Management Features: SimulStations™ (Operate two stations simultaneously), Cycle+Soak™, Station Delay, Seasonal Adjust, Sensor & Master Valve Programmable by Station
- Contractor Default™ allows the user to create a customized default program that can be automatically recalled up to 90 days in the future.
   This allows a temporary schedule to be created for new seed or a fast fix
- Enhanced Diagnostic Feedback™ with RASTER™ Wiring Test with external alarm light and on-screen messaging alert the user of conditions that may disrupt controller operation
- · ESP-LX Basic is not compatible with IQ NCC Cartridges

## **Electrical Specifications**

- Power Supply Voltage: 120 VAC  $\pm$  10%, 60Hz
- Output: 26.5 VAC 1.9A
- Power back-up: Lithium coin-cell battery maintains time and date while nonvolatile memory maintains the programming
- Multi-valve capacity: Maximum two 24 VAC, 7VA solenoid valves simultaneous operation including master valve

## Certifications

· cULus, CE, RCM, FCC Part 15b, IPX4

## **Controller Hardware**

- Plastic, locking, UV resistant, wall-mount case
- Optional Metal/Stainless Steel Case & Pedestal
- 12-station base unit expandable to 48 stations with 12-Station Modules

#### **Dimensions**

- Width: 14.32 in. (36.4 cm)
- Height: 12.69 in. (32.2 cm)
- Depth: 5.50 in. (14.0 cm)

#### **Models**

- ESPLXBASIC: ESP-LX Basic 12 Station Controller, 120VAC
- ESPLXBFP: ESP-LX Basic Controller Front Panel
- LXBASEMOD: ESP-LX Series Base Module for LX Basic and non flow LXME
- ESPLXMSM8: 8-Station Module for ESP-LXME/F and ESP-LX Basic Controller
- ESPLXMSM12: 12-Station Module for ESP-LXME/F and ESP-LX Basic Controller

## **Optional Accessories**

 Painted Metal and Stainless Steel Pedestal/Enclosure Options available (see page 90)

#### For more information call the ESP-LX Hotline: 1-866-544-1406

Note: The ESP-LX Basic is not compatible with IQ NCC Communication Cartridges



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## **ESP-LXME/F Controllers**

Modular - Easily expandable from 8 or 12 stations up to 48 stations with 8- and 12-station modules

#### **Features**

- Hot-swappable modules, no need to power down the controller to add/ remove modules
- 8- or 12-stations base unit expandable to 48 stations with 8- and 12-Station Modules
- Flow Smart Module<sup>™</sup> factory installed (ESP-LXMEF) or field upgradable (ESP-LXME)
- · Dynamic station numbering eliminates station numbering gaps
- · Master valve/pump start circuit
- Weather Sensor input with override switch
- 6 user-selectable languages
- Standard 10kV surge protection
- · Non-Volatile (100-year) program memory
- · Front panel is removable and programmable under battery power
- Compatible with Rain Bird Landscape Irrigation and Maintenance Remote
- Plastic, locking, UV resistant, wall-mount case, Optional Metal and Stainless Steel Case & Pedestal

#### **Water Management Features**

- Optional Flow Smart Module™ with Learn Flow utility and flow usage totalizer — standard on ESP-LXMEF
- FloWatch™ protection for high and low flow conditions with user defined reactions (requires flow sensor)
- FloManager™ manages hydraulic demand, making full use of available water to shorten total watering time
- SimulStations™ are programmable to allow up to 5 stations to operate at the same time
- Station sequencing by station numbers or station priorities
- · Water Windows by program plus Manual MV Water Window
- Cycle+Soak<sup>™</sup> by station
- · Rain Delay
- 365-Day Calendar Day Off
- Programmable Station Delay by program
- · Normally Open or Closed Master Valve programmable by station
- Weather Sensor programmable by station to prevent or pause watering
- Program Seasonal Adjust
- · Global Monthly Seasonal Adjust

## **Operating Specifications**

- Station run times: 0 min to 12 hrs
- Seasonal Adjust; 0% to 300% (16 hrs maximum station run time)
- 4 independent programs (ABCD)
- · ABCD programs can overlap
- 8 start times per program

ESP-LXME Controller

- Program Day Cycles include Custom days of the week, Odd, Odd31, Even, & Cyclical dates
- Manual station, program, test program

## **Electrical Specifications**

- Power Supply Voltage: 120 VAC  $\pm$  10%, 60Hz (International models: 230 VAC  $\pm$  10%, 50Hz; Australian models: 240 VAC  $\pm$  10%, 50Hz)
- Output: 26.5 VAC 1.9A
- Power back-up: Lithium coin-cell battery maintains time and date while nonvolatile memory maintains the programming
- Multi-valve capacity: Maximum five 24 VAC, 7VA solenoid valves simultaneous operation including the master valve, maximum two solenoid valves per station module
- · Certifications: cULus, CE, RoHS, WEEE, RCM, FCC Part 15b, IPX4

#### **Dimensions**

- Width: 14.32 in. (36.4 cm)
- Height:12.69 in. (32.2 cm)
- Depth: 5.50 in. (14.0 cm)

## **Models**

- ESP8LXME: 8-Station Controller, 120VAC
- ESP12LXMEF: 12-Station Controller with Flow Smart Module, 120VAC
- IESP8LXME: 8-Station Controller for International Market, 230VAC
- FSMLXME: Flow Smart Module for ESPLXME/F Controller
- ESPLXMSM8: 8-Station Module for ESP-LXME/F Controller
- ESPLXMSM12: 12-Station Module for ESP-LXME/F Controller
- ESPLXMEFP: ESPLXME Controller Front Panel Only

## Accessories

- Painted Metal and Stainless Steel Pedestal/Enclosure Options available (see page 90)
- IQ Communication Cartridge (see page 102)
- Rain Bird FS-Series Flow Sensors (see page 95)

## For more information call the ESP-LX Hotline: 1-866-544-1406





## **ESP-LXD Decoder Controller**

50 – 200 station capable Two-Wire Decoder Commercial Controller

#### **Controller Features**

- 50-station capability standard expandable to 200 stations with optional ESPLXD-SM75 modules
- Four available sensor inputs (one wired plus up to three decodermanaged) with override switch
- · Five flow sensors supported
- Supported decoders: FD-101TURF, FD-102TURF, FD-202TURF, FD-401TURF, FD-601TURF
- Supports SD-210TURF sensor decoders (flow sensing and weather sensor support) and LSP-1 line surge protectors (one per 500 feet of two-wire path required)
- Central Control capable with Rain Bird IQ Communications Cartridges and software (see pg. 102)
- Advanced Features From Cycle+Soak™ to Contractor Default Program™, the ESP-LXD offers innovative features proven to cut installation expenses, troubleshooting time and water use
- Program backup and barcode decoder address entry with the optional PBCLXD
- · Six user-selectable languages
- · Removable front panel is programmable under battery power
- Plastic, locking, UV resistant, wall-mount case, Optional Metal and Stainless Steel Case & Pedestal
- Compatible with Rain Bird Landscape Irrigation and Maintenance Remote - Flow Smart Module™ factory installed or field upgradable
- Plastic, locking, UV resistant, wall-mount case, Optional Metal and Stainless Steel Case & Pedestal

## **Operating Specifications**

- Station timing: 0 min to 12 hrs
- Program level and global Monthly Seasonal Adjust; 0% to 300% (16 hrs maximum station run time)
- 4 independent programs (ABCD); ABC programs stack, ABCD overlap
- 8 start times per program
- Program Day Cycles include Custom days of the week, Odd, Odd no 31st, Even, and Cyclical dates
- Manual station, program, test program
- · Certifications: cULus, CE, RoHS, WEEE, RCM, FCC Part 15b, IPX4

## **Upgrade Options**

- IQ-NCC Network Communication Cartridge
- ESP-LXD-SM75 75-station module
- PBCLXD Programming Backup Cartridge



## **Electrical Specifications**

- Power Supply Voltage: 120 VAC  $\pm$  10%, 60Hz (International models: 230 VAC  $\pm$  10%, 50Hz; Australian Models: 240 VAC  $\pm$  10%, 50Hz)
- Power back-up: Lithium coin-cell battery maintains time and date while nonvolatile memory maintains the schedule
- Multi-valve station capacity: up to 2 solenoid valves per station; simultaneous operation of up to eight solenoids and/or master valves

#### Dimensions (W x H x D)

• 14.32" x 12.69" x 5.50" (36.4 x 32.2 x 14.0 cm)

#### Model

- ESP-LXD: 50-station, 120 VAC
- IESPLXD: 50-station for international markets, 230 VAC
- IESPLXDEU: 50-station for Europe, 230 VAC
- IESPLXDAU; 50-station for Australia, 240 VAC

## **Accessories**

- FD-TURF: two-wire decoders (see pg. 91)
- SD-210TURF: two-wire sensor decoder (see pg. 91)
- LSP1TURF: two-wire line surge protection (see pg. 91)
- DPU-210: two-wire decoder programming unit (see pg. 92)
- Painted Metal and Stainless Steel Pedestal/Enclosure Options available (see pg. 92)
- IQ-NCC: Network Communication Cartridge for ESP-LX Series Controllers (see page 102)
- See page 95 for information on Rain Bird FS-Series Flow Sensors
   <sup>1</sup>FD-TURF decoders include peel-off barcode address labels
   <sup>2</sup>Barcode scanning pen not included sold separately; Unitech MS100NRCB00-SG recommended (www.ute.com)

## For more information call the ESP-LX Hotline: 1-866-544-1406



ESP-LXD Decoder Controller

# Controllers

## **FD-TURF Two-Wire Decoders**

SiteControl and ESP-LXD with Support for 1, 2, 4 or 6 Decoder Addresses

#### Features

- Five different decoder options let you choose the precise amount of landscape irrigation control you need. Select different two-wire decoders to operate one, two, four, or six valves.
- Installed out of sight and protected from the elements and vandalism
- Enables advanced diagnostic and sensor features

## **Specifications**

• Mounting: In valve box (recommended) or direct burial

#### · Power Draw:

- FD-101TURF: 0.5 mA (idle) 18 mA (per active solenoid)
- FD-102TURF: 0.5 mA (idle) 18 mA (per active solenoid)
- FD-202TURF: 1 mA (idle) 18 mA (per active solenoid)
- FD-401TURF: 1 mA (idle) 18 mA (per active solenoid)
- FD-601TURF: 1 mA (idle) 18 mA (per active solenoid)

#### • Dimensions:

- FD-101TURF: Length: 2.77 in. (70 mm), Diameter: 1.5 in. (40 mm)
- FD-102TURF: Length: 3.35 in. (85 mm), Diameter: 1.77 in. (45 mm)
- FD-202TURF: Length: 3.35 in. (85 mm), Diameter: 1.97 in. (50 mm)
- FD-401TURF: Length: 3.94 in. (100 mm), Diameter: 2.56 in. (65 mm)
- FD-601TURF: Length: 3.94 in. (100 mm), Diameter: 2.56 in. (65 mm)

## · Solenoids:

- FD-101TURF: 1 with individual control
- FD-102TURF: 1 or 2 simultaneously
- FD-202TURF: 1 to 4 simultaneously
- FD-401TURF: 1 to 4 with individual control
- FD-601TURF: 1 to 6 with individual control

## Wires:

- FD-101TURF: Blue to cable, white to solenoid
- FD-102TURF: Blue to cable, white to solenoid
- FD-202TURF: Blue to cable, white and brown to solenoids
- FD-401TURF: Blue to cable, color-coded to solenoids
- FD-601TURF: Blue to cable, color-coded to solenoids

## Surge Protection: One of the following is required every 500 ft. along two-wire path (40 V, 1.5 kW transil)

- LSP-1 Line Surge Protector
- FD-401TURF with built in surge protection
- FD-601TURF with built in surge protection

Note: Minimum 100hms resistance grounding required at controller and each surge protector

 Input Fuse (FD-401TURF and FD-601TURF only): 300-500 mA, thermal

## • Electrical Input:

- Maximum voltage: 36 Vpp
- Maximum load:
- FD-101TURF: 1 Rain Bird solenoid (one per address)
- FD-102TURF: 2 Rain Bird solenoids (two per address)
- FD-202TURF: 4 Rain Bird Solenoids (two per address)
- FD-401TURF: 4 Rain Bird Solenoids (one per address)
- FD-601TURF: 6 Rain Bird solenoids (one per address)

## • Decoder/Solenoid Wires:

- Electrical resistance: Max. 3 ohms

#### Maximum Distance Decoder/Solenoids:

- Cable length: 14 gauge, 456 feet
- Wiring: 2 x 14-gauge (1.5 mm2) solid copper, UF insulated type

## • Environment:

- Working range: 32° to 122° F (0° to 50° C)
- Storage range: -4° to 158° F (-20 to 70° C)
- Humidity: 100%

**Note:** Rain Bird recommends using Rain Bird DB Series Wire Connectors (pg. 73)waterproof connectors for all connections.

**Note:** FD-Series Decoders are not compatible with residential valves like the Rain Bird HV, DV, DVF, ASVF, JTV, JTVF, and Drip Control Zone Kit with ASVF/DV valves

#### Models

- FD-101TURF: Field Decoder interfacing signal line and valve
- FD-102TURF: Field Decoder interfacing signal line and valve or one pair of valves
- FD-202TURF: Field Decoder interfacing signal line and 2 valves or 2 pair of valves
- FD-401TURF: Field Decoder interfacing signal line and up to 4 individual valves
- FD-601TURF: Field Decoder interfacing signal line and up to 6 individual valves
- LSP-1TURF: Line Surge Protection
- SD-210TURF: Sensor Decoder interfacing signal line and analog or digital decoders





# PBCLXD Programming Backup Cartridge for ESP-LXD

Provides program backup and restore and barcode scanning capability for the ESP-LXD controller (not compatible with ESP-LXME or ESP-LX Basic)

## **Upgrade Kit Features**

- Provides 8 full backups, including all programs, flow information and decoder addresses – allows you to easily archive 8 different controllers – restoring all information typically takes two minutes or less
- Snaps into the back of the ESP-LXD front panel; installs without tools; no additional enclosures or external wiring required
- Kit includes cable for interface to barcode scanning pen (pen not included) – allows you to quickly scan decoder addresses into the ESP-LXD controller during installation to save you time

## Model

· PBCLXD (works with all versions of the ESP-LXD controller)



**PBCLXD Cartridge** 

## **Controller Pedestals**

Pedestals for ESP-LX Series, ESP-MC, ESP-SAT, ESP-SITE, and CCU

#### Features

· Includes all necessary mounting bolts, nuts, and washers

## **Specifications**

- · Material: Powder-coated steel and stainless steel
- · Field wiring connection: In controller

## **Dimensions**

Model	Height	Width	Depth
• LXMM	12%" (32.7 cm)	14½" (36.8 cm)	7¾" (19.7 cm)
<ul> <li>LXMMPED</li> </ul>	28" (71.1 cm)	141/4" (36.2 cm)	7 ¼" (18.4 cm)
<ul> <li>LXMMSS</li> </ul>	12%" (32.7 cm)	14½" (36.8 cm)	7¾" (19.7 cm)
<ul> <li>LXMMSSPED</li> </ul>	28" (71.1 cm)	14¼" (36.2 cm)	7¼" (18.4 cm)

#### Model

- LXMM: Metal Cabinet for ESP-LX Series Controllers\*
- LXMMPED: Metal Pedestal for ESP-LX Series Controllers\*
- LXMMSS: Stainless Steel Metal Wall Mount Enclosure for ESP-LX Series Controllers
- LXMMSSPED: Stainless Steel Metal Pedestal for ESP-LX Series Controllers
- \* Note: Metal cabinets and pedestals are not standard on ESP-LX Series controllers and must be purchased separately. LXMMPED requires LXMM, and LXMMSSPED requires LXMSS.



LXMMSSPED Shown with ESP-LXD in LXMMSS Stainless Steel Cabinet

## **DPU-210 Decoder Programming Unit**

For ESP-LXD, MDC/MDC2 and SiteControl FD-Turf Two-Wire Decoders

 Decoder Programming Unit tests and verifies operation of the ESP-LXD, MDC/MDC2, or SiteControl FD Series Field Decoders. Also allows for re-programming decoder addresses for maximum site set-up flexibility



## **Internet Connected Water Meters** (ICWM)



Advanced Single-Jet Technology Water Meters

## **Features**

- 5 year data plan works anywhere the Verizon 4G wireless network reaches avoiding costs of network integration
- Digital register with web interface for water usage data collection and analysis including monthly water budgeting and over-usage alerts
- Extreme low flow accuracy starting 0.1 gpm to easily identify leaks
- · Wide operating temperature range
- Lead free NSF61 compliant
- Low flow, backflow and high usage reports and alerts
- 5 year data service plan + 5 year warranty included
- Compact design for tight installations with no upstream or downstream straight pipe requirements
- Single moving element and no strainer requirement for low maintenance
- Brass, bronze, cast iron, or composite plastic body for durable, longlasting performance
- · Unaffected by sand or small debris in line
- · High resistance to freezing

## Certifications

- FM Approved (ICWM600S)
- NSF Standard 61 Compliant
- · AWWA C712 Standard





Operating Specifications													
Model	Size (in)	Description	Lay Length	Approx. weight w/ register (lbs.)	Initial Wireless Term	Body Material	End Connection	Max Op Press (PSI)	Min Test Flow (GPM)	Nor Op R Min (GPM)		Max Cont. Duty (GPM)	Head Loss @ SMOC (PSI)
ICWM075S	5/8" X 3/4"	5/8" Single-Jet Cellular IC Flow Meter	7.5"	1	5 years	Plastic	1" NPSM	230	0.0625	0.125	30	24	13
ICWM100S	1"	1" Single-Jet Cellular IC Flow Meter	10.75"	5.6	5 years	Low lead Bronze	1.25" NPSM	230	0.125	0.5	70	35	8
ICWM150S	1.5"	1.5" Single-Jet Cellular IC Flow Meter	7.87"	10	5 years	Low lead Brass	Oval Flange	230	0.250	0.500	105	88	7.25
ICWM200S	2"	2: Single-Jet Cellular IC Flow Meter	9.78"	12	5 years	Low lead Brass	Oval Flange	230	0.250	0.75	165	130	7.25
ICWM300S	3"	3" Single-Jet Cellular IC Flow Meter	11.8"	32	5 years	Low lead Brass	3" Flange	230	0.50	0.75	350	175	7.25
ICWM300SH	3"	3" High Flow Single-Jet Cellular IC Flow Meter	13.75"	48	5 years	Lead free Bronze	3" Flange	230	0.75	1.5	500	350	7.25
ICWM400S	4"	4" Single-Jet Cellular IC Flow Meter	13.75"	48	5 years	Lead free Bronze	4" Flange	230	0.75	1.5	500	350	7.25
ICWM400SH	4"	4" High Flow Single-Jet Cellular IC Flow Meter	17.75"	89	5 years	Lead free Bronze	4" Flange	230	1.00	2.00	1000	600	9.5
ICWM600S	6"	6" Single-Jet Cellular IC Flow Meter	17.75"	89	5 years	Lead free Bronze	6" Flange	230	1.00	2.00	1000	600	9.5
ICWM200T	2"	2" Turbine Cellular IC Flow Meter	7.87"	12	5 years		2" Flange	232	1.50	2.00	396	176	NA
ICWM300T	3"	3" Turbine Cellular IC Flow Meter	8.9"	32	5 years	Epoxy coated	3" Flange	232	2.00	3.00	880	440	NA
ICWM400T	4"	4" Turbine Cellular IC Flow Meter	9.8"	48	5 years	cast Iron	4" Flange	232	2.00	4.00	1320	700	NA
ICWM600T	6"	6" Turbine Cellular IC Flow Meter	11.8"	91	5 years		6" Flange	232	8.00	16.00	1540	1000	NA

Note: Spool connections are available to adjust lay length.



## **FMD Series Landscape Water Meters**

Manage What You Measure!

#### **Features**

- Lower cost than comparable brass flow meters and most plastic flow sensors.
- Passive management of irrigation using the meter's register dial.
- Delivers precise accuracy with flow ranges from 0.25 gpm to 160 gpm.
- Landscape Water Meter allows the property manager to avoid higher costs associated with tiered water rates.
- Landscape Water Meters are an integral part of an overall water efficient irrigation system.
- Supports California AB1881 and 20/20, LEED, Sustainable Sites Initiative, and the EPA WaterSense Program.
- Rebates offered by Water Agencies.
- · Satisfies NSF/ANSI standard 61 Annex G.

## **Mechanical Properties**

- Multi-Jet Totalizing Landscape Water Meter with analog register dial readout (minimum volumetric resolution of 0.1 gallons).
- Brass body and glass-filled nylon construction provide maximum protection against high pressure surges, physical damage and corrosion.
- Not to be used with an unfiltered water source containing potential debris (lakes, ponds, wells, or other unfiltered sources).
- Exposing the Landscape Water Meter, full of water, to temperatures below freezing can lead to permanent damage. To winterize the meter, allow it to drain through a downstream drain valve.

#### **Models**

FM0625B:  $\frac{3}{4}$ " with coupling inlet dimension x  $\frac{3}{4}$ " NPT outlet. FM075B:  $\frac{3}{4}$ " with coupling inlet dimension x 1" NPT outlet. FM100B: 1" with coupling inlet dimension of 1" NPT. FM150B:  $\frac{1}{4}$ " with coupling inlet dimension of  $\frac{1}{4}$ " NPT. FM200B: 2" with coupling inlet dimension of 2" NPT.



## Rain Bird FMD Series Landscape Water Meters Suggested Operating Range

The following tables indicate the suggested flow range for Rain Bird FMD Series Landscape Water Meters. Rain Bird Sub-Meters will operate both above and below the indicated flow rates. However, good design practice dictates the use of this range for best performance. Landscape Water Meters should be sized for flow rather than pipe size.

FMD Landscape Water Meter Operating Specifications									
Model	Sub-meter Size	Flow Range	Body Thread (D)						
FM0625B	5/8"	0.25 to 20 GPM	3/4" x 3/4"						
FM075B	3/4"	0.50 to 30 GPM	1" x 1"						
FM100B	1"	0.75 to 50 GPM	1" x 1"						
FM150B	1½"	1.5 to 100 GPM	1½" x 1½"						
FM200B	2"	2.0 to 160 GPM	2" x 2"						

## Notes:

Maximum operating pressure is 150 psi for all models.

Maximum working water temperature is 80° F for all models.

Maximum operating air temperature is 105° F for all models.

Measurement accuracy at minimimum flow is +/- 3% for each model.

FMD Land	FMD Landscape Water Meter Pressure Loss (psi)																		
Model	Sub-meter Size	1 GPM	5 GPM	7.5 GPM	10 GPM	15 GPM	20 GPM	25 GPM	30 GPM	40 GPM	50 GPM	60 GPM	70 GPM	80 GPM	90 GPM	100 GPM	120 GPM	140 GPM	160 GPM
FM0625B	5/8"	0.5	1.5	4.0	6.0	10.0	15.0	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
FM075B	3/4"	0.2	0.7	1.5	3.2	5.0	7.0	10.0	15.0	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
FM100B	1"	Χ	0.1	0.3	0.5	1.4	2.0	3.2	4.5	7.8	13.0	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
FM150B	1½"	Χ	Χ	Χ	0.2	0.3	0.5	0.9	1.2	1.5	3.2	4.5	6.0	8.0	10.1	13.0	Χ	Χ	Χ
FM200B	2"	Χ	Χ	Χ	Χ	0.1	0.2	0.3	0.8	0.9	1.5	1.9	2.6	3.3	4.0	5.0	7.0	9.6	13.0

## **Flow Sensors and Transmitters**

Maxicom,2® SiteControl, IQ, ESP-LX Series Controllers or IQ™

## Features (Sensors)

- · Simple six-bladed impeller design
- Designed for outdoor or underground applications
- Available in PVC, brass or stainless steel construction
- Pre-installed in tee or saddle mounted insert versions

## **Operating Specifications (Sensors)**

- Accuracy: +- 1% (full scale)
- Velocity: 1/2-30 feet (0.15 9.2 meters) per second depending on model
- Pressure: 400 psi (27.5 bars) (max) on metal models; 100 psi (6.9 bars) (max) on plastic models
- Temperature: 220° F (105° C) (max) on metal models; 140° F (60° C) (max) on plastic models

## **Features (Transmitters)**

- Programmable from a computer (PT322 Maxicom and SiteControl Systems only – not required for ESP-LXMEF or ESP-LXD)
- Reliable solid-state design, available with or without LCD display
- Operates with MAXILink,<sup>™</sup> and (hard-wire) two-wire satellite systems
- Easy-to-program, menu-driven design
- Mounted in optional NEMA enclosure (PT3002 only)

## **Operating Specifications (Transmitters)**

- · Input required:
  - 12-30 VDC/VAC on PT322
  - 12-24 VAC/VDC on PT 3002
- · Output: Pulse output
- Operating Temp: -4° F-158° F (-20° C to 70° C)
- Units: Domestic and International units available on PT3002

## **Dimensions**

- PT322: 3.65" x 1.75" x 1.0" (93mm x 44m x 25mm)
- PT3002: 3.78" x 3.78" x 2.21" (96mm x 96mm x 56mm)
- FS100P: 3.50" x 3.94" x 1.315" (89mm x 100mm x 33mm)
- FS150P: 5.0" x 5.16" x 2.38" (127mm x 131mm x 60mm)
- FS200P: 5.63" x 5.64" x 2.88" (143mm x 143mm x 73mm)
- FS300P: 6.50" x 6.83" x 4.23" (165mm x 173mm x 107mm)
- FS400P: 7.38" x 7.83" x 5.38" (187mm x 199mm x 137mm)
- FS100B: 5.45" x 4.94" x 2.21" (138mm x 126mm x 56mm)
- FS150B: 6.5" x 5.19" x 2.5" (165mm x 132mm x 64mm)
- FS200B: 4.25" x 8.35" x 2.94" ( 108mm x 212mm x 75mm )
- FS350B: 7.13" x 3"(diameter) (181mm x 76mm (diameter))
- FS350SS: 7.13" x 3"(diameter) (181mm x 76mm (diameter))

- Configuration
- For ESP-LXD Decoder Systems, the Flow Sensor is installed with a Two-Wire Decoder Sensor Decoder (SD210TURF)
- For ESP-LXMEF Systems, the Flow Sensor is attached to the FSM-LXME Flow Smart Module
- For (Hard Wire) Two-Wire Satellite Systems (Maxicom<sup>2</sup>
   <sup>®</sup> and SiteControl), the Flow Sensor is installed with a Pulse Transmitter and a Rain Bird Pulse Decoder (DECPULLR)
- For Link Radio Satellite Systems (Maxicom<sup>2</sup> and SiteControl), the Flow Sensor is installed with a Pulse Transmitter (no pulse decoder required)
- For ESP-SITE Satellite Systems (Maxicom<sup>2</sup>), the Flow Sensor is installed with a Pulse Transmitter (no decoder required)
- For SiteControl Decoder Systems, the Flow Sensor is installed with a Two-Wire Decoder Sensor Decoder (SD210TURF)
- Surge protection (FSSURGEKIT) is recommended for Maxicom &
   SiteControl systems One at the Pulse Transmitter, and if more than 50'
   of wire run, one at the Flow Sensor. FSSURGEKIT is not compatible with
   ESP-LXMEF and ESP-LXD Controllers





Flow Sensor Transmitters and Accessories



## Flow Sensors and Transmitters (cont.)

#### Models

#### · Brass TEE's

- FS200B: 2" (50mm) Brass Tee Flow Sensor
- FS150B: 1 1/2" (40mm) Brass Tee Flow Sensor
- FS100B: 1" (25mm) Brass Tee Flow Sensor

#### Plastic TEE's

- FS400P: 4" (110mm) PVC Tee Flow Sensor
- FS300P: 3" (75mm) PVC Tee Flow Sensor
- FS200P: 2" (50mm) PVC Tee Flow Sensor
- FS150P: 1 1/2" (40mm) PVC Tee Flow Sensor
- FS100P: 1" (25mm) PVC Tee Flow Sensor

#### Inserts

- FS350SS: 3" and higher, Stainless Steel Insert
- · FS350B: 3" and higher, Brass Insert
- FSTINSERT: Replacement insert for Tee type sensors
- Pulse Transmitters (not necessary with ESP-LX Controllers)
- PT322: Pulse Transmitter, no display
- PT3002: Pulse Transmitter, LCD display

#### Accessories

- PTPWRSUPP: Pulse Transmitter power supply
- NEMACAB: NEMA Enclosure for PT3002
- FSSURGEKIT: Flow Sensor surge protection kit
- DECPULLR: Pulse Decoder for two-wire satellites
- SD210TURF: Sensor Decoder for decoder systems
- FSMLXME: Flow Smart Module for ESP-LXME Series Controllers

## **Rain Bird Flow Sensor Suggested Operating Range**

The following tables indicate the suggested flow range for Rain Bird Flow Sensors. Rain Bird Sensors will operate both above and below the indicated flow rates. However, good design practice dictates the use of this range for best performance. Sensors should be sized for flow rather than pipe size.

Model	Suggested Operating Range (Gallons / Minute)	Suggested Operating Range (Liters / Minute)	Suggested Operating Range (Cubic Meters / Hour)					
FS100P	5.4 - 54	20 - 200	1.2 - 12					
FS150P	5 - 100	19 - 380	1.1 - 23					
FS200P	10 - 200	40 - 750	2.3 - 45					
FS300P	20 - 300	75 - 1130	4.5 - 70					
FS400P	40 - 500	150 - 1900	9 - 110					
FS100B	2 - 40	7.6 - 150	0.5 - 9					
FS150B	4 - 80	15 - 300	1 - 18					
FS200B	10 - 100	38 - 380	2.3 - 23					
FS350B	Depen	nds on Pipe Type and S	ize - please					
FS350SS	reference Flow Sensors tech spec							

## **RSD-BEx**

Wired Rain Sensor

## **Features and Benefits**

- Automatic rain shutoff prevents overwatering due to natural precipitation
- Robust, reliable design reduces service call backs
- · Moisture sensing disks work in a variety of climates
- · Different sensor mounts permit speed and flexibility on the job site
- · Latching hinge maintains alignment

## **Mechanical Properties**

- Multiple rainfall settings from  $\frac{1}{6}$ " (5 20 mm) are quick and easy with just the twist of a dial
- · Adjustable vent ring helps control drying time
- · High-grade, UV resistant polymer body resists the elements
- · Comes with 5" latching aluminum bracket
- Not compatible with ESP-SMT or ESP-SMTe controllers

## **Electrical Specifications**

- Application: Suitable for low voltage 24 VAC control circuits and 24 VAC pump start relay circuits\*
- Switch electrical rating: 3A @ 125/250 VAC
- Capacity: Electrical rating suitable for use with up to ten 24 VAC,
   7 VA solenoid valves per station, plus one master valve
- Wire: 25' (7.6 m) length of #20, 2 conductor UV resistant extension wire
- · Certifications: cULus, CE, RCM, WEEE, RoHS
- \* Not recommended for use with high voltage pump start, pump start relay circuits or devices.

## **Dimensions**

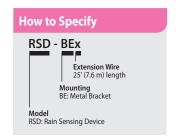
- Overall length: 6.5" (16.5 cm)
- Overall height: 5.4" (13.7 cm)
- Bracket hole pattern: 1.25" (3.2 cm)

#### Model

 RSD-BEx: Rain sensor w/ latching bracket, extension wire



RSD-BEx



# ntrollers

## WR2 Series Wireless Rain + Freeze Sensors

Superior responsiveness to rainfall and cold temperatures, save up to 35% on water usage

#### **Features & Benefits**

- Enhanced antenna array provides superior signal reliability that overcomes most line-of-sight obstructions
- Sensor signal strength indicator enables one person set up, reducing installation time
- Convenient adjustment and monitoring of rain or freeze settings at the controller interface
- Simple battery replacement without the need to disassemble the sensor
- · Highly intuitive icon-driven controller interface simplifies programming
- Easy to install, self-leveling sensor bracket mounts to flat surfaces or rain gutters
- Antennas concealed within the units for greater visual appeal and product robustness
- "Quick Shut Off" interrupts active irrigation cycle during a rain event

## **Electrical Specifications**

- Application: suitable for use with 24 VAC controllers (with or without pump start / master valve)
- Electrical rating suitable for use with up to six 24VAC 7VA solenoids plus an additional master valve or pump start that does not exceed 53VA
- Controller Interface Wire: 30" (76 cm) length of #22 gauge (0.64 mm) UV resistant extension wire
- Certifications: cULus, CE, RCM, FCC, ISED (IC), WEEE, RoHS, ICASA
- FCC approved spread spectrum 2 way radio transceivers with FCC Class B approvals
- Signal transmission distance of 700' (213.4 m) Line of Sight
- · Battery life: four or more years under normal operating conditions
- 6 KV surge / lighting protection

## **Mechanical Properties**

- Adjustable rainfall settings from 1/8" 1/2" (3 13 mm)
- Adjustable low temperature settings from 33°F 41°F (0.5° 5°C)
- Three irrigation modes to select: Programmed, Suspend Irrigation for 72 hours, Override sensor for 72 hours

**Note:** The WR2-48 model replaces the Suspend Irrigation for 72 Hours mode with 48-Hour Irrigation Hold Active mode.

- "Quick Shut Off" suspends active irrigation cycle within approximately two minutes
- High-grade, UV resistant polymer units resist harmful environmental effects

## Models

- North America (916 MHz)
- WR2-RFC: Rain + Freeze Combo
- WR2-48: Rain + Freeze Combo with 48-hour hold
- International (868 MHz)
  - WR2-RFC-868: Rain + Freeze Combo



Step 1



Program in seconds

Step 2



Determine best sensor location

Step 3



Install sensor easily using mounting bracket



## **SMRT-Y Soil Moisture Sensor Kit**

Accurate • Reliable • Smart

#### **Features and Benefits**

- · Turns any controller into a water saving smart controller
- Healthier landscapes less prone to nutrient depletion, fungus and shallow root growth
- Typical water savings exceed 40%
- TDT digital sensor enables highly accurate readings that are independent of soil temperature and electrical conductivity (EC)
- · · Displays soil moisture content, soil temperature and EC
- Corrosion-resistant in-ground sensor made of high-grade 304 stainless steel

## **Operating Specifications**

- · 25 Volts AC at 12W
- Operating temperature: -4°F to 158°F (-20°C to 70°C)
- Survival temperature: -40°F to 185°F (-40°C to 85°C)
- · Certifications: cULus, RCM

#### **Dimensions**

## **Controller Interface**

- W: 3.0" (76mm); H: 3.0" (76mm); D: 0.75" (19mm)

## In-Ground Soil Moisture Sensor (without wires)

- W: 2.0" (50mm); L: 8.0" (200mm); D: 0.5" (12mm)
- 18 AWG wire leads @ 42 in. (106.7 cm) length

#### **SMRT-Y Kit**

## **Includes**

- Controller Interface
- In-Ground Soil Moisture Sensor
- Anodized, rust-proof screws, 1.5"(two per package)
- Wire nuts 5 blue, 2 gray, 1 yellow
- Multilingual instruction manual, "Quick Start" Guide and Soil Moisture sticker

#### **Models**

• SMRT-Y: Soil Moisture Sensor Kit

NEW FOR 2018: All SMRT-Y models are RoHS compliant

