ET Manager™ Cartridge
For ESP-LX series controllers

The Rain Bird ET Manager Cartridge easily upgrades any ESP-LX series controller to an ET/Weather based irrigation controller. The ET Manager Cartridge uses the same Weather Reach™ signal as the Rain Bird ET Manager (ETMi). The ET Manager Cartridge saves water by making real-time adjustments to the irrigation schedule based on hourly weather information. Additionally, by eliminating the need to travel to controller sites to make adjustments or programming changes, the ET Manager Cartridge contributes to significant labor savings.

Applications
The ET Manager Cartridge is ideal for high-end residential and light commercial applications. The ET Manager Cartridge is easily installed in any ESP-LX series controller with minimal need for tools or wiring.

Water Saving Benefits
- Water Savings of 20 – 50% over traditional time based irrigation control.
- Rain interrupt to prevent irrigation during rain events.
- Wind interrupt prevent overspray during high wind conditions.
- Four separate moisture balances are maintained. One for each program or hydrozone to efficiently water varied plant types (example: turf, shrubs, trees, annuals, etc).

Easy Installation
- ET Manager Cartridge easily mounts in an ESP-LX series controller (ESP-LXME, ESP-LXD, ESP-LXM.)
- Antenna mounts on NPS nipple.
- Setup Wizard walks user through all key setup parameters.

Reduced Liability
- Minimum temperature interrupt to prevent irrigation during freezing conditions reducing liabilities associated with walkway icing.

ETC-LX Features
- Upgrade an ESP-LX series controller ET/Weather based irrigation control.
- Modular ET Manager Cartridge snaps into dedicated bay on back of controller faceplate.
- Installs in seconds with no tools.
- Ribbon cable connects ETC-LX cartridge to the controller.
- Antenna cable connects with snap in connector.
- Status LEDs show current status of communication.
- ETC-LX kit includes ET Manager Cartridge, receiver antenna and manual.

Sensors and Accessories
ET Manager Cartridge incorporates a rain gauge input, for optional local rain fall measurement. Rain Bird offers the **ETM-RG** tipping bucket rain gauge as an accessory to the ET Manager Cartridge. The tipping rain gauge is an ideal complement to the ET Manager Cartridge, this electronic gauge accurately measures rain to 1mm per tip, reducing run-off from over-watering and avoiding landscape damage. The rain gauge is durable, weatherproof, and resists UV and extreme temperatures. Measurements per tip are accurate, with a maximum +/- 2% deviation. Each gauge includes a 30' cable.

Rain Bird offers a remote mounting kit, **ETM-RMK**, so that the antenna can be remotely mounted to improve signal reception or remotely locate the antenna to prevent vandalism. The kit contains a 30' (9,1 m) cable, connector and junction box. The cable must be installed in conduit for outdoor applications.

ET Manager Programming Software
The Rain Bird ET Manager Programming Software (**ETMPS**) uses your personal computer to simplify ET Manager programming. This application allows the user to transfer ET Manager Scheduler settings directly from the PC to an ET Manager Cartridge via a USB cable. Additional functions of the ET Manager Programming Software:

- Conveniently program all settings
- Quickly program multiple ET Managers
- Review ET Manager programming history
- Integrate with ET Manager Scheduler application

ETC-LX

ESP-LXD

ESP-LXME

ETM-RG

The ET Manager Cartridge uses the same weather signal as the ET Manager

Both can use a local rain gauge

SOLAR   TEMPERATURE   WIND   HUMIDITY   RAINFALL

ET Manager Programming Software (cont.)

- Print a programmed settings report
- Access ET Manager diagnostic tools
- Save commonly used program settings for future use

Weather Reach™ Signal

Weather Reach™ Signal providers are available in the US and Canada. Please see www.rainbird.com/WRSP to find a local signal provider. For more information contact the ET Manager™ hotline at 1-877-351-6588.

Operating Specifications

- Electrical power is provided by the ESP-LX Modular
- Operating Temperature Range 5˚F-149˚F (Radio reception operating temperature: 32˚F - 122˚F)
- Tipping Rain Gauge wire: 18 – 26 awg

Specifications

The ET Manager kit shall consist of a cartridge and a receiver device that receives hourly weather signals and automatically makes adjustments to the ESP-LX series controllers. The adjustments to the controller shall be made in such a way to efficiently apply irrigation to meet plant needs based on measured weather conditions.

The ET Manager Cartridge shall be installed in the front panel of the ESP-LX series controller. All necessary set-up for receiving the Weather Reach™ signal shall be done through the ESP-LX controller user interface when the dial is in the "ETM/IQ Settings" position.

A dedicated terminal connection shall be provided on the ET Manager Cartridge to allow connection of an optional tipping rain gauge (**ETMRG**) to measure local rain fall. The user can configure this input to accept either 1mm per tip or .005" per tip type devices.

The ET Manager Cartridge will interrupt irrigation if rain, high wind, or freezing conditions are measured. The set point for interrupt may be set by the user through either the programming software or the ESP-LX series controller user interface. Rain interrupt will have both an hourly threshold and a 24 hour threshold. The default set points shall be:

- Temperature 32˚F (0°C)
- Wind 20 MPH (32,1 km/h)
- 1 Hour Rain   .20" (5,08 mm)
- 24 Hour Rain 1" (25,4 mm)

The ET Manager Cartridge shall be as manufactured by Rain Bird Corporation, Glendora, California.

ET Manager Cartridge (ETC-LX) Optional Equipment	
ETMRG	Local Rain Gauge
ETMRMK	ET Receiver Remote Mounting Kit
ETMPS	ET Manager Programming Software