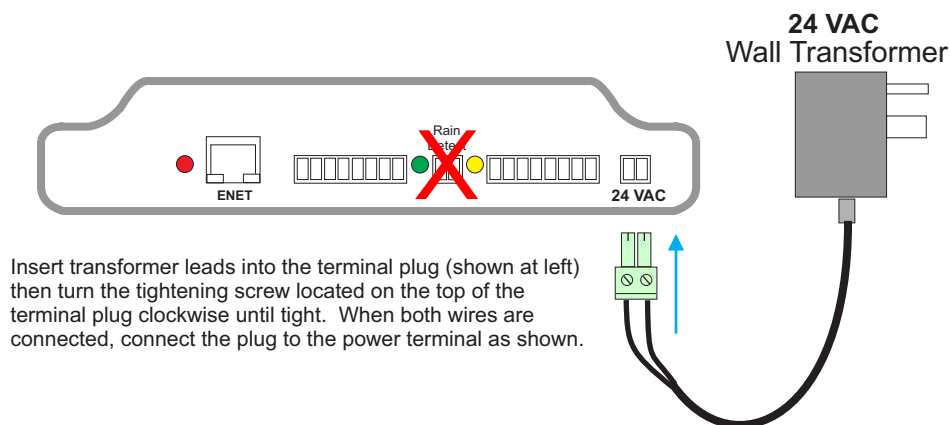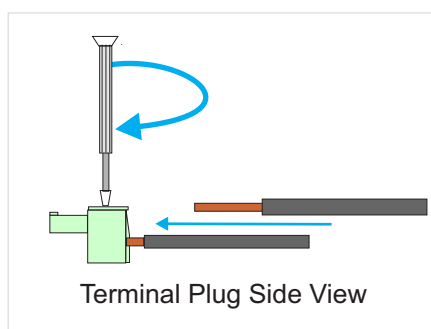# EtherRain-7P Connection Guide

Rev C

EtherRain controllers are compatible with existing sprinkler wires and standard automatic irrigation valves and use the industry standard 24V AC sprinkler timer transformers for power. The ER-7P is the member of the EtherRain controller family that provides control for 7 sprinkler valves and control for one irrigation pump relay or one master valve. The pump control output provides transformer voltage whenever a cycle is running and is intended for use in driving the power control relay of an irrigation pump or a master valve.
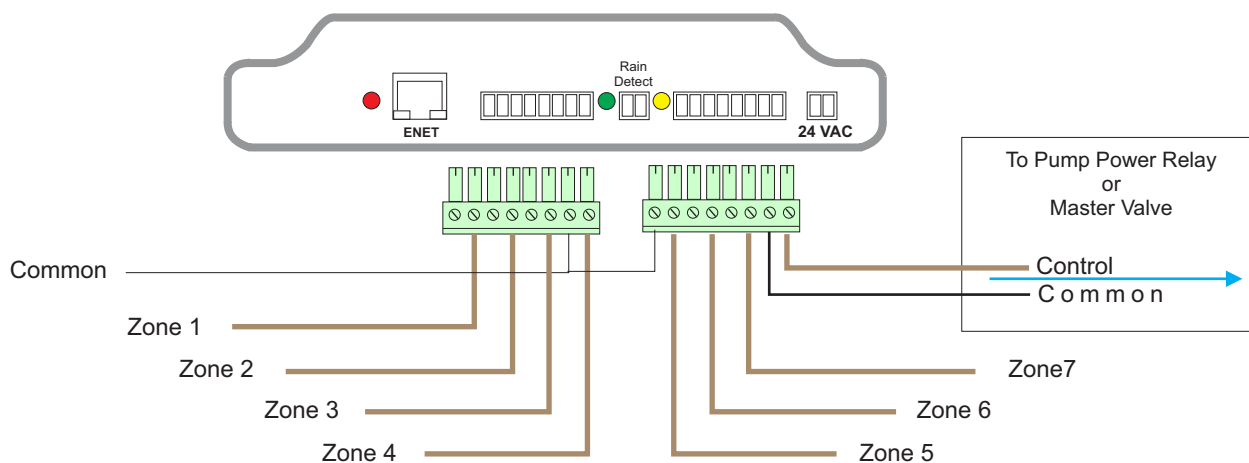
Step 1. Connecting Power

EtherRain requires the use of a user-supplied 24VAC UL-approved wall transformer. These are commonly found on the irrigation aisle at home improvement centers and hardware stores. An example is the RainBird UT-1. Some transformers have three leads, with one lead being ground. EtherRain does not require the use of the ground so that lead can be trimmed. The diagram below shows how power is connected to the EtherRain.

24 VAC
Wall Transformer

Terminal Plug Side View

ENET   Rain Detect   24 VAC

Insert transformer leads into the terminal plug (shown at left) then turn the tightening screw located on the top of the terminal plug clockwise until tight. When both wires are connected, connect the plug to the power terminal as shown.

Step 2. Connecting Sprinkler Wires and Pump Relay Wire

EtherRain-7P provides terminals for 7 valve wires, 1 pump relay control wire (or master valve), and 8 common wires. Typically only one or two common wires are used in most installations. To connect the sprinkler wires to EtherRain, simply connect your valve wires to the terminal plugs as shown below. Connect your common wire or wires to any common input. Connect the control wires as shown below.

ENET   Rain Detect   24 VAC

To Pump Power Relay
or
Master Valve

Control
C o m m o n

Common
Zone 1
Zone 2
Zone 3
Zone 4
Zone 5
Zone 6
Zone 7

Step 3. Connecting to the Network

To connect EtherRain to the network, plug one end of a CAT5 or equivalent patch cable into an open port on a network switch or router. Plug the other end into the Ethernet connector on the EtherRain controller.

For initial setup, EtherRain requires a DHCP server on your network to obtain an IP address. Once setup the EtherRain can be configured with a static address. The RED LED will wink while obtaining an IP address from DHCP and will fully illuminate when an IP address has been obtained. See Application notes for information on using wireless bridging devices.