

# EziStat PowerPak

## Slimline Integrated Cooler Control for Two-Speed Evaporative Cooler

### Installation Instructions

**WARNING:** FAILURE TO READ AND FOLLOW ALL INSTALLATION AND OPERATING INSTRUCTIONS COULD LEAD TO PERSONAL INJURY AND/OR DAMAGE TO PROPERTY.

**WARNING:** CONTROL MUST BE INSTALLED AND USED IN ACCORDANCE WITH APPROPRIATE ELECTRICAL CODES AND REGULATIONS. CONSULT WITH A QUALIFIED ELECTRICIAN IF YOU ARE NOT SURE ABOUT ANY PART OF THESE INSTRUCTIONS.

**WARNING:** DO NOT CONNECT TO A CIRCUIT OPERATING AT MORE THAN 150 VOLTS TO GROUND.

**WARNING:** CLEAN OUTER SURFACE GENTLY WITH DAMP CLOTH ONLY. DO NOT USE SOAPS OR CLEANING LIQUIDS.

**WARNING:** DO NOT ATTEMPT TO SERVICE OR REPAIR. NO USER SERVICEABLE COMPONENTS.

**WARNING:** TO AVOID FIRE, ELECTRICAL SHOCK OR DEATH DISCONNECT ELECTRICAL POWER TO THE SYSTEM AT THE MAIN FUSE OR CIRCUIT BREAKER BEFORE STARTING THE INSTALLATION, AND LEAVE DISCONNECTED UNTIL THE INSTALLATION IS COMPLETE.

### System Overview

- This control system is intended to be used with an evaporative cooler with a 2-speed blower (Fan) and a water pump (Pump).
- The control is designed for Fan motors up to 1HP (120V) or 2HP (240V), and with Pump up to 1/10 HP (120V) or 1/8 HP (240V).
- The Fan and Pump must both be rated at 120V or 240V.

### Included in kit

- EziStat PowerPak, with detachable face plate.



### Additional Requirements

Depending on application and installation, the following additional items may be required:

- Screws or bolts for mounting EziStat PowerPak
- Wiring and housing for connection of EziStat PowerPak; power supply; and Cooler fan and pump.
- Wire Nuts for wiring connections
- Conduit, Connectors, a suitable Connection Box (in or near cooler) and watertight connectors to protect all wiring
- Wall-mounted outlet box

### Location of EziStat PowerPak

- 1) Determine a suitable place to install EziStat PowerPak (away from sources of heat, sunlight, or ventilation, and between 4 and 6 feet from the floor).
- 2) Install a wall-mounted outlet box, if one not appropriately located; consider how the wiring from the cooler will be routed there.

### Preparation of wiring

#### 120 Volt Installation

- 3) Connect the common connections from the Pump and Fan to the Neutral supply.
- 4) Route the 'Active' wire; 'Common/Neutral' wire; Pump drive; and Fan "High" and Fan "Low" wires down to the Outlet Box, in accordance with local and national electrical codes, taking care to identify each wire for connection with the EziStat PowerPak.

#### 240 Volt Installation

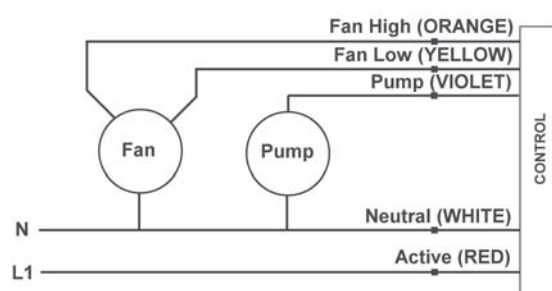
- 3) Connect the common connections from the Pump and Fan to the L2 supply.
- 4) Route the 'L1' wire; 'L2' wire; Pump drive; and Fan "High" and Fan "Low" wires down to the Outlet Box, in accordance with local and national electrical codes, taking care to identify each wire for connection with the EziStat PowerPak.

### Installation of the EziStat PowerPak

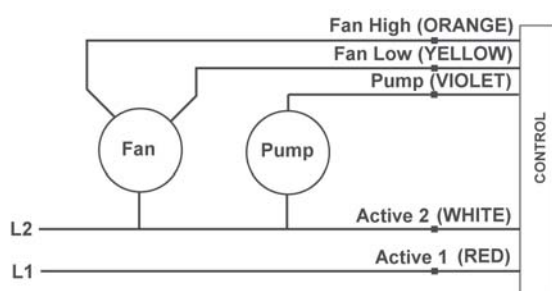
- 5) At the Outlet Box, Pull the wiring through about 6 inches from the wall, and connect to EziStat PowerPak as per the wiring diagram below
- 6) Tidy up the wiring and ease the EziStat PowerPak into the outlet box.
- 7) Screw the EziStat PowerPak into position, and fit the front face plate.

## Wiring Connections

### 120 Volt Installation



### 240 Volt Installation



## Operating Instructions

### Automatic Operation (Auto mode)

**The fan and water pump are controlled automatically to achieve the desired comfort level.**

This mode is activated by pressing the 'Auto' button. A blue LED is illuminated. Pressing the 'Auto' button again deactivates this mode.

The Temperature Set Point may be altered by rotating the large dial.

On starting, if the pads in the cooler are too dry, the fan may be delayed from starting until the pads have absorbed some water. This is called **Pre-wet** and lasts for 2 minutes, indicated by a flashing blue LED. Selecting 'Fan' and then 'Auto' will bypass the pre-wet and cause the fan and pump to start immediately. (If cooling is required).

### Manual Operation (Cool mode)

**The water pump is switched on, and the fan speed set to the desired speed by the user.**

This mode is activated by pressing the 'Cool' button. An orange LED is illuminated, the pump is activated and the fan set to Low speed. Pressing the 'Cool' button again selects High fan speed, indicated by the LED changing from orange to green. Pressing the 'Cool' button again, deactivates the mode.

The Temperature Set Point has no effect.

On starting, if the pads in the cooler are too dry, the fan may be delayed from starting until the pads have absorbed some water. This is called **Pre-wet** and lasts

for 2 minutes, indicated by a flashing LED. Selecting 'Fan' and then 'Cool' will bypass the pre-wet and cause the fan and pump to start immediately.

### Ventilation Operation (Fan mode)

**The fan speed is set by the user, the water pump is turned off.**

This mode is activated by pressing the 'Fan' button. An orange LED is illuminated, and the fan runs at Low speed with no pump activity (ie no water cooling). Pressing the 'Fan' button again selects High fan speed, indicated by the LED changing from orange to green. Pressing the 'Fan' button again deselects this mode.

The Temperature Set Point has no effect.

### Time Delay Operation (Timer mode)

**Delayed start or finish mode**

The 'Timer' button is used to set a delay period of 2, 4, or 8 hours, depending on how many times the button is pressed.

If the cooler is operating (in 'Auto', 'Cool' or 'Fan' modes) when the 'Timer' button is pressed, the delay period determines when the cooler will switch off. If the cooler is Off when the 'Timer' button is pressed, the delay period determines when the cooler switches on.

The starting mode is indicated by a flashing LED. You can change this mode by pressing the appropriate button ('Auto', 'Cool' or 'Fan').

The period countdown starts immediately and one of the green timer LEDs will be illuminated indicating the time period left.

You can cancel the Timer function at any time by pressing the 'Timer' button until all the timer LEDs go out.

### In the event of a power outage

If the cooler is operating in 'Auto', 'Cool' or 'Fan' mode when power is interrupted, the cooler will resume in the same mode of operation when the power is restored.

If the cooler was in any 'Timer' mode at the time of a power interruption, the cooler will remain off when power is restored.

## Troubleshooting Guide

The guide below is intended to aid an Installer or Service Technician in resolving simple problems.

**CAUTION: To prevent electrical shock and/or damage to the equipment, disconnect electrical power to the system at the main fuse or circuit breaker before checking any exposed wiring, and leave disconnected until after wiring has been properly secured.**

**Any testing performed on live conductors must be carried out by qualified personnel only.**

Observation	Possible Cause	Remedial Action
<b>Cooler does not work/ No LED activity in response to button presses on the Wall Unit.</b>	Incorrect connection of wiring to Slimline Integrated Control.	Check the correct connection of the “Active” or “Live” and “Common” or “Neutral” wires. Ensure the correct wiring order at both ends, and that the terminals are correctly fitted and secured.
	<b>Power Supply Circuit Breaker Off</b> or <i>Appliance Control Box</i> not connected to the <b>Power Supply</b> .	Check the condition of Power Supply Circuit Breaker. Verify that the Circuit Breaker Switch is On.
	<b>Blown Fuse</b>	Check the condition of all Fuses. Replace blown fuse with the correct type
<b>Water Pump does not work</b>	Poor connection of <b>Water Pump</b> terminals.	Verify that Water Pump leads are correctly connected; “Neutral” or “Common” in a connection box, and “Active” or “Live” to the Slimline Integrated Control “Pump” wire.
<b>Fan Motor does not work/No Fan High Speed and/or Fan Low Speed Operation</b>	Poor connection to <b>Fan Motor</b> terminals.	Verify that the Fan leads are correctly connected; “Neutral” or “Common” in a connection box, with the two wires for the two different fan speeds to the Slimline Integrated Control “Pump” wire.
<b>Fan Motor is “High” when “Low” required, and “Low” when “High” required</b>	Incorrect connection of the Fan windings. The High speed winding is connected to “Fan Low”, and the Low speed winding is connected to “Fan High”	Re-connect the “Fan High” and “Fan Low” wires the correct way round.

# Mounting Template

