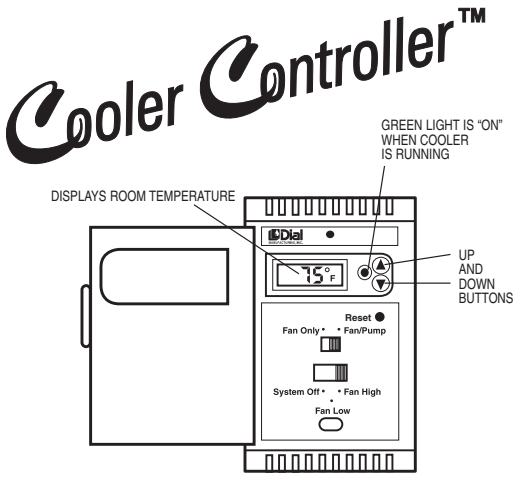
Cooler Controller™ Instructions



NOTE: Default temperature is 77° F

INSTRUCTIONS – COOLER CONTROLLER **Model 7617**

WARNING: House Voltage can be lethal. Turn off power before installing Cooler Controller. The installer must be technically qualified for this type of installation. A qualified electrician should check all wiring and circuit breakers and be sure that the cooler is correctly grounded.

CAUTION: Turn the Cooler Controller switch to "off" position before turning power "on". Read all instructions first before installation.

IMPORTANT: Your Cooler Controller includes a Reset Button (see Figure). When necessary, push button to reset unit. Use included tool (or equivalent) to depress reset button.

WARNING: DO NOT connect to a circuit operating at more than 150 volts to ground.

WARNING: DO NOT attempt to service or repair. No user serviceable components.

INTRODUCTION

Your digital thermostat controls a standard 115vac, 60Hz, or 230vac, 60Hz, residential evaporative cooler with blower motors from 1/3 HP up to 1 HP, and 1 or 2 speeds.

Manual slide switches allow for 5 different cooler settings: Off, Fan Only - High Speed (High Vent), Fan Only - Low Speed (Low Vent), Fan / Pump - High Speed (High Cool) or Fan / Pump - Low Speed (Low Cool).

A Liquid Crystal Display (LCD) constantly displays the room temperature. Once a Set Point Temperature (SPT) is defined, the controller will operate the cooler until it reaches a temperature that is 3 degrees below the SPT. The default SPT is 77 degrees F (for example, during initial set up, and in the event of power failure).

FEATURES

- Electrical Ratings: See chart below
- Room temperature constantly displayed
- Temperature adjustment always accessible
- High impact ABS case
- Case door covers operating control slide switches
- Dual slide switches for cooler operations: OFF, LOW VENT (Fan Only & Low), HIGH VENT (Fan Only & High), LOW COOL (Fan / Pump & Low), HIGH COOL (Fan / Pump & High)
- Power/Pump "ON" green LED indicator light
- Adjustable "Pre-Start" (pad pre wet) Time: 4 minute (default), or change to 2 minute, or 0 minute
- Green LED "on" when controller is "on"
- Green LED blinks during "Pre-Start Mode"
- Installs in standard single gang electrical junction box
- Two gang wall plate adapter available separately (PN 7616)
- Loss of power default temperature setting of 77 Degrees F
- Reset Button
- Temperature Calibration

COOLER CONTROLLER MODEL 7617				
INPUT		OUTPUT		
BLACK POWER(L1)	**WHITE** COM or L2	**YELLOW / BLACK** FAN HIGH	**RED** FAN LOW	**ORANGE / BLACK** PUMP
115 Vac, 60Hz, 15.2A		115 Vac, 60Hz, 14A, 1Hp	115 Vac, 60Hz, 9A, 1/3Hp	115 Vac, 60Hz, 1.2A, 1/40Hp
230 Vac, 60Hz, 7.8A		230 Vac, 60Hz, 7A, 1Hp	230 Vac, 60Hz, 4.5A, 1/3Hp	230 Vac, 60Hz, 0.8A, 1/40Hp

INSTALLATION

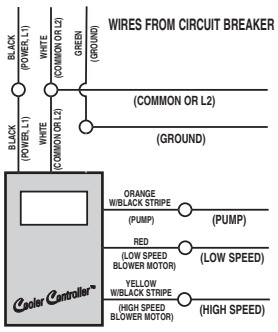
IMPORTANT: TURN OFF ELECTRICITY AT CIRCUIT BREAKER BEFORE WORKING ON COOLER CONTROLLER OR EVAPORATIVE COOLER.

Your Cooler Controller mounts into a standard 2" x 4" single gang electrical junction box. An adapter plate is available separately to mount the Cooler Controller into a two-gang box. For new installations, locate your Cooler Controller so that it senses average house temperatures and is not subject to unusual temperature variations. Avoid positioning it nearby an air conditioning vent or within an immediate area of a heat-generating appliance. Normally a hallway location is ideal.

With circuit breaker turned off, connect the thermostat wires as shown within the Electrical Diagram. Use wire nuts supplied. Position all wiring into junction box. Mount thermostat to junction box using the screws provided.

If replacing a manual, 6 position rotary wall switch with the Cooler Controller: Your old manual, 6 position rotary wall switch has 4 wires connected to it. See table below and follow electrical diagram referenced above for proper wiring connections.

IMPORTANT: In order for your Cooler Controller to function properly, all 5 wires must be connected correctly. Thus, for 115vac, the white wire of the Cooler Controller MUST be connected to the Common (Return) wire of the Evaporative Cooler. And for 230vac, the white wire of the Cooler Controller MUST be connected to the L2 (Return) wire of the Evaporative Cooler. If you cannot locate the Return (Common, or L2) wire within your existing junction box, then you MUST install a Return (Common, or L2) wire from your cooler to this Cooler Controller junction box. And note, a ground wire is not connected to the Model 7617 Cooler Controller. For wiring a 1 speed blower motor, connect High speed wiring as shown and cover (protect) Low speed wire of Cooler Controller with wire nut. **WARNING**: House Voltage can be lethal. The installer must be technically qualified for this type of installation.



SET-UP AND OPERATION

Turn circuit breaker "on". The LCD should blink "77F". Once your Cooler Controller is properly installed and connected to electric power, for optimum performance, it is recommended that the unit be allowed to stabilize for approximately 10 to 15 minutes before turning cooler "on". By allowing the unit to stabilize, it will then display a more accurate room temperature. Afterwards, if further room temperature calibration is of interest, then refer to "TEMPERATURE CALIBRATION" section.

MANUAL 6-POSITION SWITCH (RSK-2)		COOLER CONTROLLER Model 7617	
TERMINAL DESIGNATION	FUNCTION	FUNCTION	WIRE COLOR
L1	Power	Power	Black
2	Pump	Pump	Orange With Black Stripe
1	Blower, Low Speed	Low Fan	Red
C	Blower, High Speed	High Fan	Yellow With Black Stripe
NO CONNECTION	Common/ Return	Common/ Return	White

Turn cooler "on." Open case door to uncover the two manual slide switches. These two switches allow for 5 different cooler settings: OFF, or Fan Only - High Speed (High Vent), or Fan Only - Low Speed (Low Vent), or Fan / Pump - High Speed (High cool) or Fan / Pump - Low Speed (Low Cool). Position slide switches to desired operating settings. Regardless of the slide switch settings, initially a "4-Minute Pre-Start Mode" will occur before the Cooler Controller turns on the blower motor. If the top switch is in the "Fan / Pump" position, then the Cooler Controller will pre-wet the pads for 4 minutes. If the top switch is in the "Fan Only" position, then the Cooler Controller will simply delay the starting of the blower motor for 4 minutes. The green LED will blink during "Pre-Start Mode." Also, if interested, this "Pre-Start" time can be adjusted between 4 minute (default), or 2 minute, or 0 minute (refer to "ADJUST TIME OF PRE-START MODE" section).

To establish the Set Point Temperature (SPT), simply push the UP or DOWN arrow buttons until the desired SPT value is displayed on the LCD. At this point, the Cooler Controller will flash that value for 10 seconds and will then operate the cooler until it reaches a temperature that is 3 degrees below the SPT. To change the SPT, again simply push the UP or DOWN arrow buttons per above.

TEMPERATURE CALIBRATION

Some installations may require temperature calibration. Calibrate unit only after electric power has been connected, and cooler has been "off", for approximately 10 to 15 minutes. To calibrate unit, place bottom slide switch (S2) into "System Off" position, and place top slide switch (S1) into "Fan / Pump" position. Then push and hold both up and down arrow buttons for 5+ seconds — unit will then enter its Temperature Calibration mode when the LCD blinks its current room temperature. At this time, push the up or down arrow button to adjust the room temperature that is displayed, accordingly. When no buttons are pushed for 10 seconds, unit will leave the Temperature Calibration mode and it will automatically return to its standard operating mode. Reposition slide switches as desired.

ADJUST TIME OF PRE-START MODE (change Pad Pre-Wet Time)

If desired, time of "Pre-Start Mode" (pad pre-wet time) can be adjusted, between 4 minute (default), or 2 minute, or 0 minute. To adjust, place bottom slide switch (S2) into "System Off" position, and place top slide switch (S1) into "Fan Only" position. Then push and hold both up and down arrow buttons for 5+ seconds — unit will then enter this adjustment time mode and LCD will display current "Pre-Start Mode" time as "P4" or "P2" or "P0". Push up or down arrow button to change time of "Pre-Start Mode", accordingly. When no buttons are pushed for 10 seconds, unit will leave this adjustment time mode and it will automatically return to its standard operating mode. Reposition slide switches as desired.

POWER OUTAGES & RESETTING COOLER CONTROLLER

If your Cooler Controller does not respond properly after a power outage, then either an internal component has failed (which is not covered by product warranty), or the unit needs to be reset. To reset unit, push reset button using supplied tool (or equivalent). See Figure. If unit responds properly, then change SPT as desired. Also, after a power outage, temperature calibration and time of Pre-Start Mode will revert to factory default settings.

IMPORTANT NOTES

- Not for use with low voltage (e.g. 24vac) input power.
- If a power outage occurs, the LCD will reset the SPT to 77 degrees F, and LCD will display will blink "77F".
- One speed blower motors can be used with your digital thermostat. Simply connect the high or low speed wire of the thermostat to the blower motor, cap the unused thermostat wire (low or high) and position the bottom slide switch to the corresponding compatible speed.

LIMITED WARRANTY

1. Cooler Controller is warranted under normal use for 90 days from date of sale to user. In event of defect or failure, replacement is made through your authorized dealer or retailer.
2. Reason for replacement, purchase date, failure date, and sales receipt must accompany Cooler Controller returned for replacement.
3. Warranty is void if Cooler Controller has been abused, altered or improperly installed.
4. We do not pay the cost of a service call at the site of installation to diagnose cause of trouble or the cost of labor or transportation to replace a defective Cooler Controller.
5. We are not responsible for any incidental or consequential damage resulting from any malfunction unless required to do so by law.

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