

# CoolerMiser™

## CM170 / CM171 EZ Installation Instructions

CoolerMiser™ is designed to operate as an intelligent power controller for refrigerated beverage coolers. Note that CoolerMiser may not be used on any cooler which contains perishable products.

### General Theory of Operation

Using a Passive Infrared (PIR) occupancy sensor, CoolerMiser will automatically shut down the controlled cooler when the area around it has been vacant for 15 minutes. However, CoolerMiser will periodically re-power the machine automatically to ensure that the vended product stays cold. In addition, CoolerMiser contains a current sensor which determines if the cooler's compressor is operating and will delay power-down of the cooler until the compressor has completed its cooling cycle.

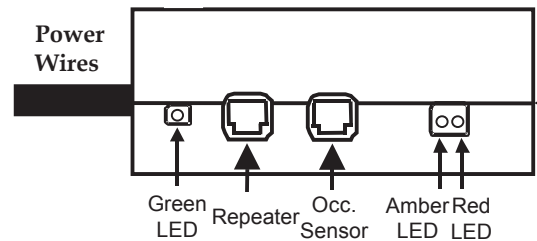
To install the CoolerMiser, follow these simple steps:

### Prepare For Installation

1. Unplug the cooler from the wall outlet. If it is necessary to move the machine, be careful as it can be heavy. Note- Each cooler should remain on the same outlet/circuit breaker at the end of installation.
2. Remove ALL items from top of the cooler. Using a clean cloth, carefully wipe the area as shown where the CoolerMiser will be attached. Ensure the area is dry when cleaning is complete. The surface temperature of the back of the cooler should be above 65F to ensure the Velcro adhesive adheres properly to the machine.

### Install The CoolerMiser

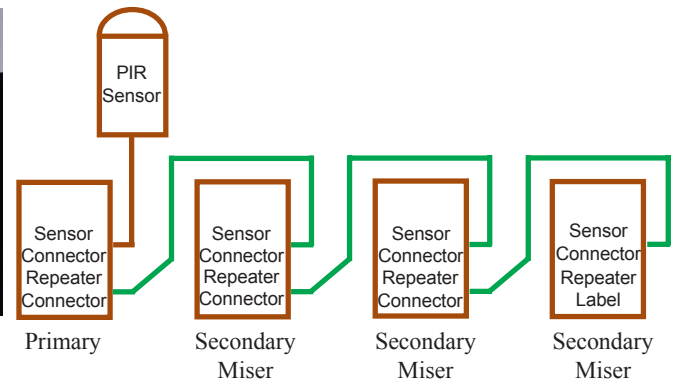
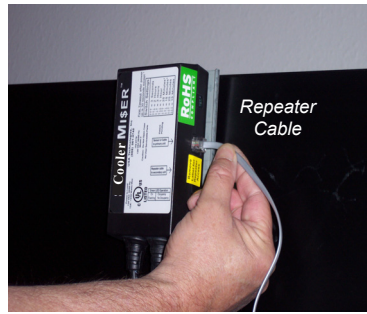
3. The CoolerMiser will be placed on top of rear of the cooler as shown below for each model. Carefully remove the white plastic material covering the adhesive backing on the Velcro. Be very careful not to contact the exposed Velcro adhesive prematurely to the machine back, as it is very difficult to remove. First place the CoolerMiser on top of the cooler without the Velcro adhesive touching the machine back, then slide the CoolerMiser forward so the adhesive touches the rear of the machine in your intended placement location. Press firmly to ensure good contact.



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4. If a Secondary CoolerMiser is being installed, use the supplied 3 Meter (10 feet) phone style cable to connect the OCCUPANCY SENSOR connector on this CoolerMiser to the REPEATER connector on the Primary CoolerMiser. Only remove the yellow label covering the REPEATER connector on the previous unit in the chain. Additional Secondary CoolerMisers can be daisy-chained using the same techniques shown in the below diagram. A maximum of four Misers can be daisy-chained in this fashion. It is acceptable to mix CoolerMisers with SnackMisers, PlugMisers, and/or VendingMisers provided the sensor coverage is acceptable for all devices sharing the sensor.



### Validate The Installation

5. Plug the cooler's power cord into the CoolerMiser. Then, plug each CoolerMiser's power cord into the wall outlet. The following should occur:
- The cooler should power up immediately.
  - The Green LED should flash twice to indicate that the temperature sensor is functional.
  - The Amber LED should then come on as the CoolerMiser attempts to synchronize with the compressor's operation. This typically will require that the compressor cycle on and off.
  - The Red LED should come on, indicating occupancy detection.

The PIR sensor must be allowed to stabilize for several minutes before its placement can be verified. Once the sensor is warmed up, it will flash at the slightest movement within its field of view. Validate that the sensor can "See" an occupant at, or approaching, all machines controlled by this sensor. If necessary, relocate the Primary unit and repeat the coverage test. The Red LED on the CoolerMiser will mirror the state of the PIR sensor, with an additional 3 second delay. This verifies that CoolerMiser is communicating with the PIR sensor.

6. The CoolerMiser will not power-down the cooler the first time only after installation until the compressor has completed three cycles to allow the CoolerMiser to learn the compressor operation. Following this initial power-down, the CoolerMiser will operate with its standard 15 minute time-out for occupancy and two compressor cycles between energy savings mode operation.

**NOTE:** The CoolerMiser will flash all three LEDs simultaneously and light a RED LED in the Occupancy sensor if the cooler has failed and will not shut down its compressor after several hours of use. Since this prohibits the CoolerMiser from shutting down the machine, please call the machine owner service line for service.

