

APPLICATION

The TE86SB-560 has been designed and manufactured specifically for use with the CW-30 Series Environmental Control Equipment manufactured by M A N Systems Inc. This thermostat is mercury free and requires no batteries. It uses advanced proportional plus integral (P+I) control for optimum temperature control.

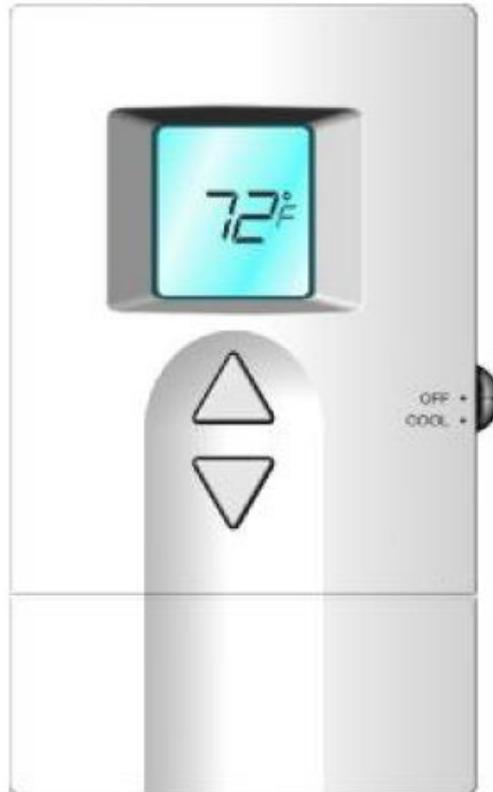


Fig. 1 Thermostat

Dimensions: 5¼" (H) x 3¼" (W) x 1¼" (D)

FEATURES

- Stylish design with continuously backlit LCD display.
- Slider switch allowing user to switch equipment on or off.
- User options and set point are retained in the event of lost power.



Back Lighting: The thermostat features a back light that will illuminate all the time. The user can easily see the LCD screen under dim light situation.

INSTALLATION

Read these instructions thoroughly before installing product. Failure to follow these instructions could damage the product or cause a hazardous condition. Installer must be a trained, experienced service technician. Check product for proper operation after installation.



CAUTION

Damage to cooling system may occur. Disconnect power and the thermostat wire from the equipment while installing the thermostat.

Mounting Location.

Mount the thermostat approximately 5 ft. (1.5m) above the floor in a location that is free from direct flow of cold air from any supply air grilles, ducting or from the equipment itself (for non-ducted applications). Failure to locate thermostat mounting as indicated will result in poor temperature control. NOTE: Level thermostat mounting is for appearance only and is not required for proper thermostat operation.

Mounting Thermostat

Take out the back plate by removing the locking screw (if any) at the bottom of the thermostat. Use flat head screw driver to unlock the snaps. Lift and pull it up to remove back plate.

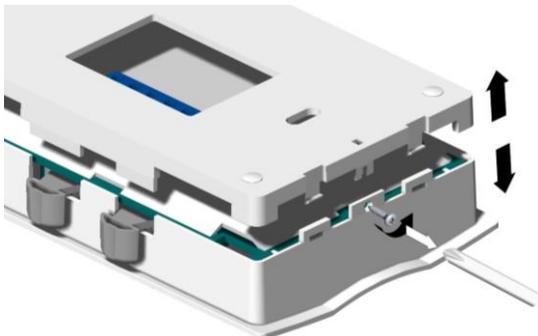
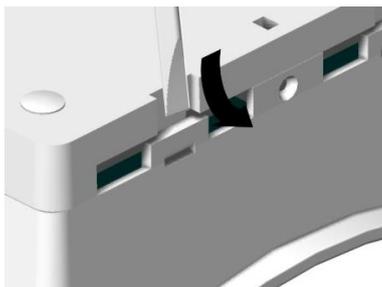


Fig. 2 Taking out back plate



Using back plate as a guide, mark two mounting holes on the wall. Drill two mounting holes. Place anchors (provided) into the holes until flush with the hole. Position back plate on the wall and pass the wires from the equipment through the wiring hole. Holding the back plate in place on the wall, secure it to the wall using mounting screws (provided).

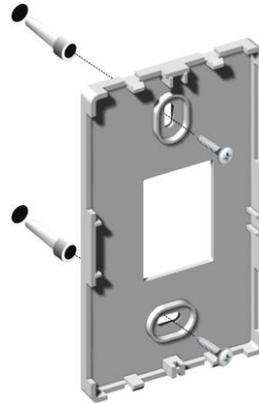


Fig. 3. Installing back plate

Wiring

You will notice a 6-conductor terminal strip on the back side of the thermostat (which can be removed from the thermostat if needed as shown in Figure 4). Four terminals are not operable. Only the two operable terminals are required. Loosen the terminal screws as needed.

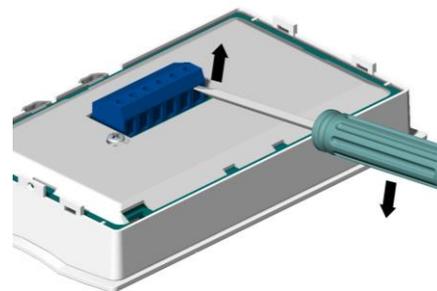


Fig. 4 If needed, remove the terminal strip by sliding it up and off the thermostat body

The thermostat wire supplied with the ONAM equipment is an 18-2 stranded cable. While the wire is color coded, its connection to the thermostat is not affected by polarity. Install one conductor to one of the operable terminals and install the second conductor to the other operable terminal. Firmly tighten terminal screw when finished.

Place the thermostat back on to the back plate making sure that it is oriented correctly and then snap it in place. Secure the thermostat by tightening the screw provided to protect the thermostat from unwanted access.



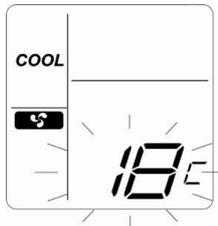
Fig. 5. Installing and securing the thermostat

OPERATION

Temperature Setting

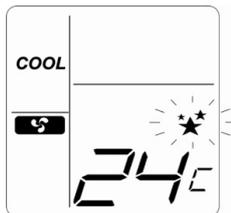
Use the ‘Up’ or ‘Down’ push keys to set temperature.

The display shows set point value flashing for 5 seconds before returning to the room temperature.



Minimum Off Timer

If the thermostat calls for operation while the minimum off timer is not expired, the star symbol keeps flashing.



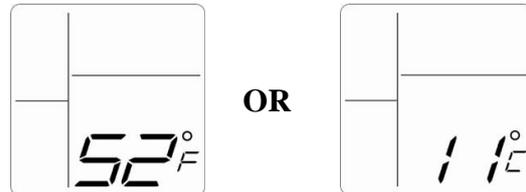
SYSTEM CHECKOUT

Slide mode switch to COOL. Using the ‘Up’ and ‘Down’ push keys, adjust the temperature to the desired set point. If this is below the room temperature, a star symbol is shown on the display. If flashing, the compressor delay time is not yet expired. If lit steady, equipment should energize.

ADVANCED SETUP

The thermostat has been factory set to display the temperature in degrees Fahrenheit. To change to the Celsius scale, the factory settings must be changed and this can be done as follows:

Set the temperature set point to 52°F (or 11 °C)



Press the ‘Up’ and ‘Down’ keys simultaneously to enter installer setup.



Press the ‘Up’ key once; display will read “OP:02”. You can now toggle between °F and °C by using the ‘Down’ arrow.



To exit setup, press the ‘Up’ key a number of times (skipping parameters OP:03 to OP:06). The change to the setting will be saved and the thermostat will exit to the normal operating mode.

NOTE: After return to normal operation, change the set point to the desired temperature; otherwise the default set point (70 °F or 21°C) will be used.

Note: There are a total of six factory parameters. Do not alter any except “OP:02”. If a change is accidentally made to any of the other parameters, ensure that “OP:04” is set to “00” and “OP:05” is set to “03”.

