

## Emerson 1E78-140

# Emerson 1E78-140 Non-Programmable Heat Only Thermostat User Manual

Model: 1E78-140

## INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of your Emerson 1E78-140 Non-Programmable Heat Only Thermostat. Please read this manual thoroughly before installation and use to ensure proper function and safety.

The Emerson 1E78-140 is designed for use with most single-stage heat-only systems, including 24-volt and millivolt systems. It is not compatible with electric baseboard heat or certain other systems.

## SETUP AND INSTALLATION

### Tools Required

- Screwdriver
- Drill (if new mounting holes are needed)
- Wire strippers (if needed)

### Removing Your Old Thermostat

1. Turn off power to your heating system at the main fuse or circuit breaker panel.
2. Remove the cover of your old thermostat.
3. Take a photo of the existing wiring connections for reference.
4. Disconnect the wires from the old thermostat terminals, noting which wire was connected to each terminal.
5. Remove the old thermostat base from the wall.

### Mounting the New Thermostat

1. Separate the front cover from the thermostat base.
2. Position the new thermostat base on the wall. Use the provided screws and anchors to secure it.

## Wiring

**Important:** Ensure power is off before wiring. This thermostat is for 2-wire heat-only systems. Connect wires only to R and W terminals.

Refer to the wiring diagram below. Identify each wire attached to the old thermostat by taking a photo of old wiring.



*Image: Wiring diagram for the Emerson 1E78-140 thermostat. It illustrates connections for 2-wire heat-only systems to R and W terminals. The image also shows two AAA Energizer batteries and various mounting screws and anchors included with the thermostat. A caution notice regarding battery life and freeze hazard is visible.*

- Connect the wire from your heating system's R terminal to the R terminal on the thermostat.
- Connect the wire from your heating system's W terminal to the W terminal on the thermostat.

## Battery Installation

The thermostat requires two AAA batteries for operation. Install the batteries into the compartment located on the back of the thermostat, observing the correct polarity (+/-).



*Image: Front view of the Emerson 1E78-140 thermostat. The digital display shows "70" as the current temperature. To the right of the display are two gray buttons for adjusting the temperature up and down. Below the Emerson logo, a system switch is visible, set to "OFF HEAT".*

After wiring and battery installation, attach the thermostat front cover to the base.  
Turn on power to your heating system at the main fuse or circuit breaker panel.

# OPERATING INSTRUCTIONS

## System Switch

The system switch is located on the front of the thermostat. It has two positions:

- **OFF:** Turns the heating system off.
- **HEAT:** Activates the heating system to maintain the set temperature.

## Setting the Temperature

Use the Up (▲) and Down (▼) buttons located next to the digital display to adjust your desired temperature setting. The thermostat will maintain this temperature with a precision of plus/minus 1 degree Fahrenheit.

## Backlight

The digital display features a backlight for improved visibility, especially in low-light conditions. The backlight activates when buttons are pressed.

# MAINTENANCE

## Battery Replacement

When the "Change Battery" indicator (a battery icon) is displayed on the screen, the batteries have limited remaining life and should be replaced soon. The system will not operate with dead batteries.

1. Remove the thermostat cover.
2. Remove the old AAA batteries.
3. Insert two new AAA alkaline batteries, ensuring correct polarity.
4. Replace the thermostat cover.

## Cleaning

Clean the thermostat with a soft, damp cloth. Do not use abrasive cleaners or solvents.

# TROUBLESHOOTING

Problem	Possible Cause	Solution
Display is blank or dim.	Dead or low batteries.	Replace the two AAA batteries.
Heating system does not turn on.	<ul style="list-style-type: none"><li>• System switch is in OFF position.</li><li>• Batteries are dead.</li><li>• Power to heating system is off.</li><li>• Incorrect wiring.</li></ul>	<ul style="list-style-type: none"><li>• Set system switch to HEAT.</li><li>• Replace batteries.</li><li>• Check circuit breaker/fuse for heating system.</li><li>• Verify wiring connections (R and W terminals).</li></ul>

Problem	Possible Cause	Solution
"Change Battery" icon displayed.	Low battery power.	Replace the two AAA batteries promptly.

SPECIFICATIONS

Feature	Detail
Brand	Emerson
Model Number	1E78-140
Controller Type	Push Button
Special Feature	Temperature Display
Temperature Control Type	Manual
Included Components	Thermostat, Temperature Sensor
Power Source	Electric (2 AAA batteries for display/control)
Voltage	24 Volts (for system operation)
Display Type	LED
Control Method	Touch (buttons)
Mounting Type	Wall Mount
Style	Digital
Backlight	Yes
Compatibility	Most single-stage heat-only systems (24V and millivolt). Not compatible with electric baseboard heat.
Precision	+/- 1 degree F



Image: A side view of the Emerson 1E78-140 thermostat, held in a hand for scale. The image indicates the thermostat's height is 5.5 inches (14 cm).

## WARRANTY INFORMATION

---

Specific warranty details for the Emerson 1E78-140 thermostat are typically provided with the product packaging or can be obtained directly from the manufacturer, Emerson. Please refer to the documentation included in your product box or visit the official Emerson website for the most current warranty terms and conditions.

## CUSTOMER SUPPORT

---

For technical assistance, troubleshooting beyond this manual, or inquiries regarding your Emerson 1E78-140 thermostat, please contact Emerson customer support. Contact information can usually be found on the product packaging or on the official Emerson website.