

Emerson 1F80-0261

Emerson 1F80-0261 Single Stage 5/1/1 Programmable Digital Thermostat User Manual

Model: 1F80-0261

1. PRODUCT OVERVIEW

The Emerson 1F80-0261 is a single-stage, 5/1/1 day programmable digital thermostat designed for residential heating and cooling systems. It features a large, easy-to-read digital display with a backlight option for enhanced visibility.

Key Features:

- Large, easy-to-read digital display with backlight.
- 5/1/1 day programmable schedule for customized comfort.
- Compatible with most single-stage heating and cooling systems, including heat pump systems without auxiliary heat.
- Precision temperature control within $\pm 1^{\circ}\text{F}$.
- Adjustable temperature display.
- Includes clock display, filter indicator, and low battery indicator.

Note: This thermostat is not compatible with electric baseboard heating systems or multi-stage HVAC systems.



Image 1.1: Front view of the Emerson 1F80-0261 Digital Thermostat, showing the LCD screen, control buttons (TIME, PRGM, RUN/HOLD, Up/Down arrows), and SYSTEM (COOL, OFF, HEAT) and FAN (ON, AUTO) switches.

2. SETUP AND INSTALLATION

Proper installation is crucial for the optimal performance of your thermostat. If you are unfamiliar with HVAC wiring, it is recommended to consult a qualified technician.

Before Installation:

- **Power Off:** Always turn off the power to your heating and cooling system at the main circuit breaker or fuse box before beginning any installation or maintenance.
- **Review Wiring:** Identify and label existing thermostat wires.
- **Mounting:** The thermostat is designed for wall mounting. Ensure a suitable location away from direct sunlight, drafts, or heat sources.

Power Source:

The Emerson 1F80-0261 thermostat can be powered by either hardwiring to your HVAC system (30 Volts) or by two AA batteries (included). It is recommended to use both for reliable operation and to ensure program settings are retained during power outages.

Included Components:

- Emerson 1F80-0261 Thermostat Unit
- 2 AA Alkaline Batteries
- User Manual (this document)

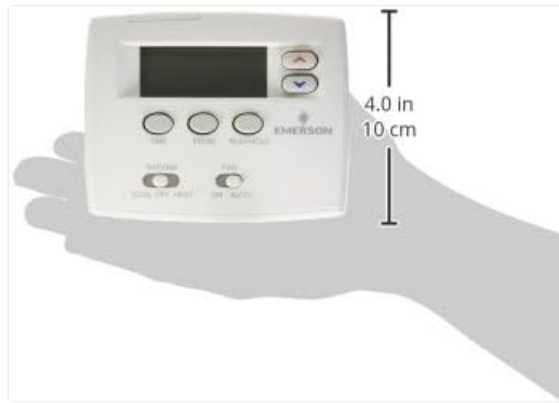


Image 2.1: Side view of the Emerson 1F80-0261 Digital Thermostat, illustrating its approximate dimensions of 4.0 inches (10 cm) in height, providing a visual reference for installation planning.

3. OPERATING INSTRUCTIONS

This section details the basic operation and programming of your Emerson 1F80-0261 thermostat.

Display and Controls:

- The LCD screen simultaneously displays the current room temperature and the set temperature.
- **Up/Down Arrows:** Adjust the set temperature.
- **TIME Button:** Used for setting the current time and day.
- **PRGM Button:** Used to enter and adjust the programming schedule.
- **RUN/HOLD Button:** Switches between programmed operation and holding a constant temperature.
- **SYSTEM Switch:** Selects the operating mode: COOL (air conditioning), OFF (system off), or HEAT (heating).
- **FAN Switch:** Controls the fan operation: ON (fan runs continuously) or AUTO (fan runs only when heating or cooling is active).

Programming the Schedule:

The thermostat allows for a 5/1/1 day programming schedule, meaning you can set one schedule for weekdays (Monday-Friday), one for Saturday, and one for Sunday. Each day can be divided into four time segments (e.g., Morning, Day, Evening, Night), each with its own temperature setting.

1. Press the **PRGM** button to enter programming mode.
2. Use the **Up/Down Arrows** to adjust the time and temperature for each segment.
3. Press **PRGM** again to advance to the next segment or day.
4. Press **RUN/HOLD** to exit programming mode and activate the schedule.

Energy Management Recovery (EMR):

This thermostat features an Energy Management Recovery (EMR) function. When enabled, the thermostat's microcomputer calculates the optimal time to activate your heating or cooling system to reach your desired temperature by the start of a programmed segment. This allows for gradual temperature changes, typically around 1°F every 15 minutes, which can improve system efficiency.

- EMR can be enabled or disabled through the Installer/Configuration Menu. Refer to the detailed instructions in the full user manual for accessing and adjusting this setting.

4. MAINTENANCE

Regular maintenance ensures the longevity and accurate operation of your thermostat.

Battery Replacement:

- The thermostat uses two AA alkaline batteries.
- A low battery indicator will appear on the display when batteries need replacement.
- It is recommended to replace the batteries every two years, even if the low battery indicator has not appeared, to prevent potential battery leakage and damage to the thermostat.
- To replace, carefully remove the thermostat from its wall plate, replace the batteries, and reattach.

Air Filter Monitoring:

- The thermostat includes a filter indicator feature. When activated, this indicator reminds you to check or replace your HVAC system's air filter.
- Refer to your HVAC system's manual for specific air filter replacement guidelines.

5. TROUBLESHOOTING

This section addresses common issues you might encounter with your thermostat.

Common Issues and Solutions:

- **Thermostat Display is Blank:**
 - Check if the batteries are correctly installed and have sufficient charge. Replace if necessary.
 - If hardwired, ensure the power to the HVAC system is on and wiring connections are secure.
- **Buttons Are Unresponsive or Delayed:**
 - If buttons require prolonged pressing (e.g., 30 seconds) to respond, this may indicate internal component wear or battery issues. Try replacing batteries first. If the issue persists, consider professional inspection or replacement.
- **System Not Responding to Thermostat Settings:**
 - Ensure the SYSTEM switch is set to COOL or HEAT, not OFF.
 - Verify that the set temperature is appropriately above (for heating) or below (for cooling) the current room temperature.
 - Check the circuit breaker for your HVAC system.
- **Program Settings Lost After Power Outage:**
 - The thermostat is designed to retain program settings during power outages. If settings are lost, ensure batteries are installed and functional, as they provide backup power for memory retention.

6. SPECIFICATIONS

Brand	Emerson
Model Name	80 Series Blue
Model Number	1F80-0261
Controller Type	Hand Control
Color	White
Specific Uses	Air Conditioner, Furnace, Heat Pump
Temperature Control Type	Programmable
Connectivity Technology	Wired
Power Source	Dual Powered - Hardwired or Battery
Voltage	30 Volts
Display Type	LCD
Backlight	Yes
Control Type	Button Control
Mounting Type	Wall Mount
Batteries	2 AA batteries required (included)
Item Weight	4.48 ounces (approx. 127 grams)
Product Dimensions	1.5 x 4.75 x 3.75 inches (approx. 3.8 x 12.1 x 9.5 cm)

7. WARRANTY AND SUPPORT

Specific warranty details and direct support contact information are not provided within this document. For information regarding product warranty, technical support, or service, please refer to the official Emerson website or the documentation included in the product packaging. You may also contact the retailer where the product was purchased.