Emerson 1F85U-22NP

Emerson 1F85U-22NP Non-Programmable Thermostat User Manual

Model: 1F85U-22NP | Brand: Emerson

1. Introduction

The Emerson 1F85U-22NP is a non-programmable digital thermostat designed for single-stage, multi-stage (2H/2C), or heat pump (2H/2C) systems with a dual fuel option. It features a large, clear 5-inch display for easy readability, even in low lighting conditions. This thermostat offers straightforward temperature control without complex programming, making it ideal for users who prefer manual adjustments.

Key Features:

- Big, clear display for easy reading.
- Easy installation with built-in level indicator and pluggable terminals.
- Advanced features including keypad lock and temperature limits.
- Dual fuel standard, eliminating the need for additional sensors.
- Non-programmable operation for direct control.
- Backlit display for visibility in various lighting conditions.
- Operates on 24-Volt or Millivolt systems.
- System switch for Heat, Off, Cool, Auto, Aux/Emer modes.
- Fan switch for Auto and On modes.
- Customizable "Away" button.

2. Safety Information

Always read and understand all instructions before installing or operating this thermostat. Failure to follow these instructions could result in personal injury and/or property damage.

- **Electrical Hazard:** Disconnect power to the heating and cooling system at the main fuse or circuit breaker box before

installation to prevent electrical shock or equipment damage.

- **System Compatibility:** This thermostat is designed for 24-Volt or Millivolt systems. It is not compatible with electric baseboard heat or some other systems. Consult a qualified HVAC technician if unsure about compatibility.
- **Professional Installation Recommended:** If you are unfamiliar with thermostat installation, it is recommended to seek professional assistance to ensure proper and safe setup.
- **Proposition 65 Warning:** This product may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

3. Package Contents

Verify that all items listed below are included in your package:

- Emerson 1F85U-22NP Thermostat Unit
- User Manual
- Mounting Hardware (screws, wall anchors)
- 2 AA Batteries

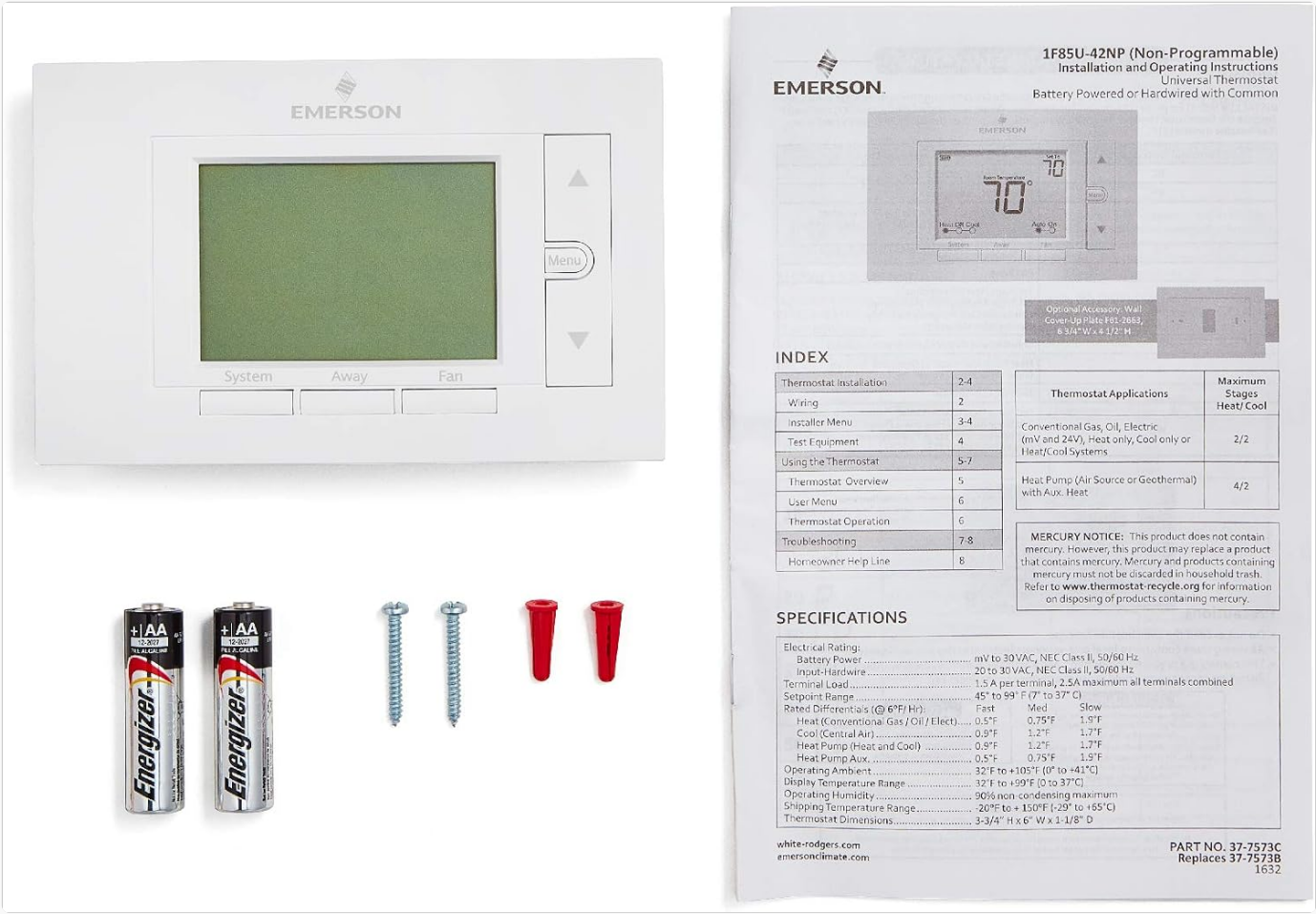


Figure 3.1: Package contents of the Emerson 1F85U-22NP Thermostat, showing the thermostat, user manual, mounting screws, and two AA batteries.

4. Installation

Proper installation is crucial for the optimal performance of your thermostat. Follow these steps carefully.

4.1 Mounting the Thermostat

1. **Disconnect Power:** Turn off power to your heating and cooling system at the circuit breaker or fuse box.
2. **Remove Old Thermostat:** Carefully remove your old thermostat from the wall. Note the wiring connections before disconnecting them. It is recommended to label each wire with the terminal it was connected to.
3. **Mounting Plate Installation:** Separate the new Emerson thermostat from its mounting plate. Position the mounting plate on the wall where the old thermostat was located. Use the built-in level indicator to ensure the plate is straight. Mark the screw holes.
4. **Drill Holes and Insert Anchors:** Drill pilot holes if necessary and insert the provided wall anchors.
5. **Secure Mounting Plate:** Secure the mounting plate to the wall using the provided screws.

4.2 Wiring

Connect the wires from your heating and cooling system to the corresponding terminals on the thermostat's mounting plate. The thermostat features pluggable terminals for easy and secure connections. Refer to the wiring diagram in the included user manual for specific configurations based on your system type (e.g., conventional, heat pump).

- **Common Terminals:** RH, RC, C, W/E, W2, Y, Y2, G, O/B/6, L.
- Ensure all connections are tight and secure.

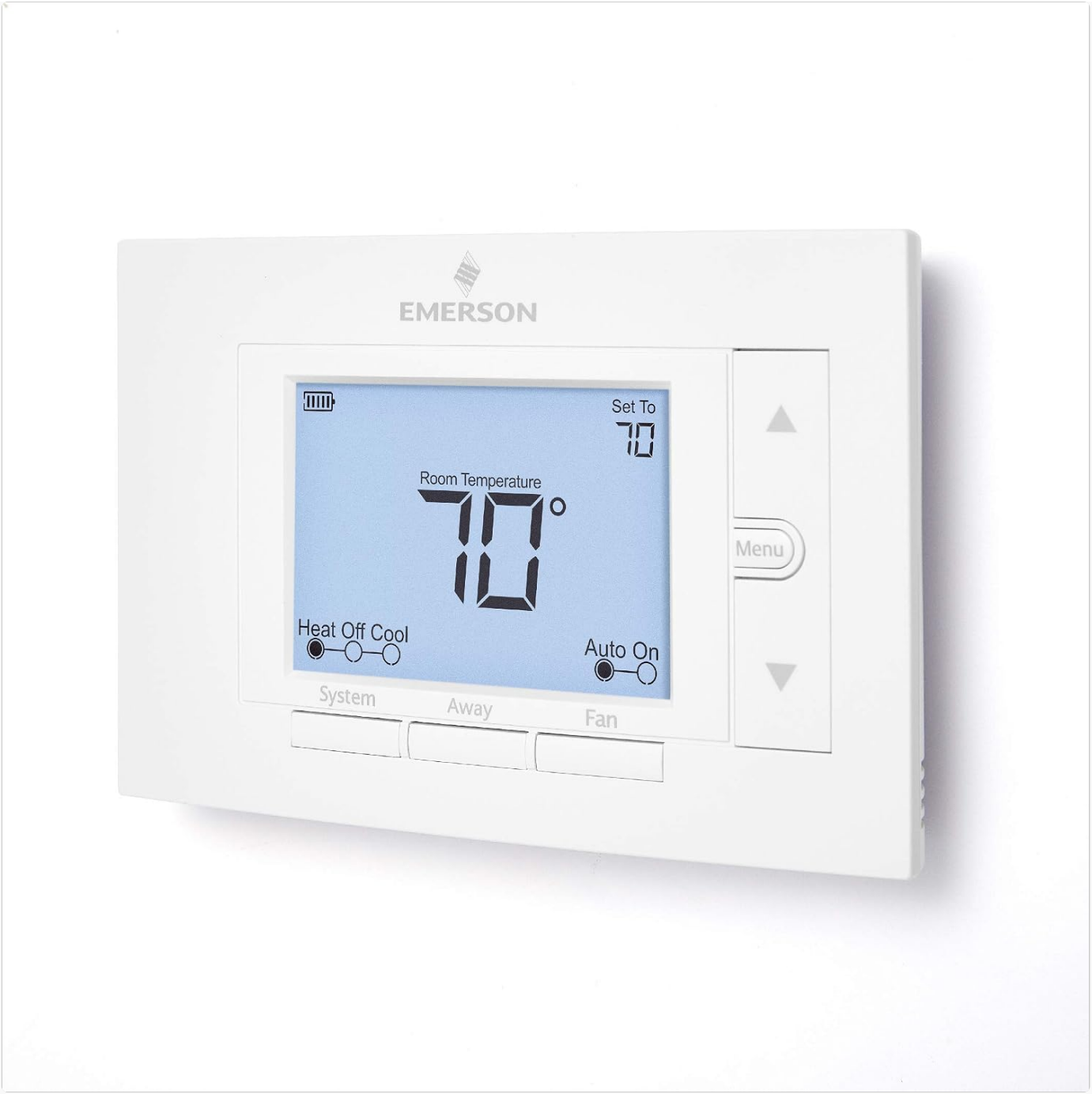


Figure 4.1: The Emerson 1F85U-22NP Thermostat separated from its backplate, revealing the wiring terminals and the built-in level for accurate installation.

4.3 Initial Setup

1. **Attach Thermostat:** Once wiring is complete, carefully attach the thermostat unit to the mounted backplate.
2. **Insert Batteries:** Insert the two AA batteries into the designated compartment.
3. **Restore Power:** Turn on power to your heating and cooling system at the circuit breaker or fuse box.
4. **Configure Settings:** The thermostat will power on. Follow the on-screen prompts or refer to the manual's configuration menu section to set up your system type (e.g., conventional, heat pump) and other initial preferences.

5. Operating Instructions

The Emerson 1F85U-22NP thermostat is designed for simple, direct control of your home's temperature.

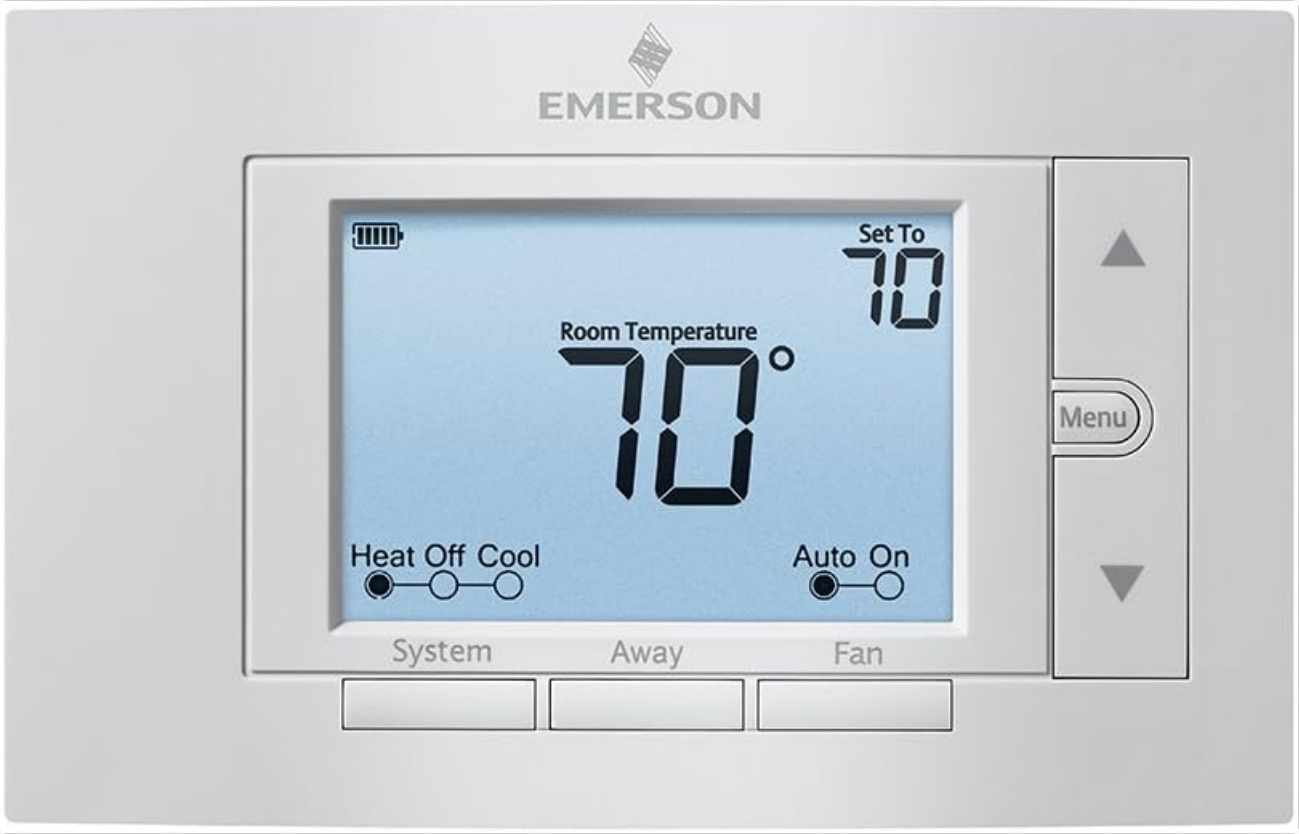


Figure 5.1: The large, clear display of the Emerson 1F85U-22NP Thermostat, showing the current room temperature (70°F) and the set temperature (70°F), along with system and fan mode indicators.

5.1 Adjusting Temperature

- Use the **Up (▲)** and **Down (▼)** arrow buttons on the right side of the thermostat to increase or decrease the desired temperature.
- The display will show both the current room temperature and your set temperature.

5.2 System Mode Selection

Press the **System** button to cycle through the available modes:

- **Heat:** Activates the heating system to reach the set temperature.
- **Off:** Turns off both heating and cooling systems.
- **Cool:** Activates the cooling system to reach the set temperature.
- **Auto:** Automatically switches between heating and cooling to maintain the set temperature range.
- **Aux/Emer:** (For heat pump systems) Activates auxiliary or emergency heat.

5.3 Fan Mode Selection

Press the **Fan** button to select the fan operation mode:

- **Auto:** The fan runs only when the heating or cooling system is actively operating.
- **On:** The fan runs continuously, regardless of whether the heating or cooling system is active.

6. Advanced Features

The Emerson 1F85U-22NP includes several advanced features for enhanced control and convenience.

6.1 Keypad Lockout

This feature allows you to lock the thermostat's keypad to prevent unauthorized changes to settings. Consult the full user manual for instructions on how to activate and deactivate the keypad lockout function.

6.2 Temperature Limits

You can set upper and lower temperature limits to ensure the thermostat operates within a desired range, preventing the temperature from going too high or too low. Refer to the detailed instructions in the user manual for setting these limits.

6.3 Customizable "Away" Button

The "Away" button provides a quick way to set the thermostat to a pre-defined energy-saving temperature when you leave your home. This feature can be customized to your preferred "away" temperature settings. Instructions for customization are available in the complete user manual.

7. Maintenance

Regular maintenance helps ensure the longevity and accurate operation of your thermostat.

7.1 Battery Replacement

- The thermostat is powered by two AA batteries (included).
- When the battery indicator on the display shows low power, replace both batteries with new alkaline AA batteries.
- To replace, gently pull the thermostat unit away from its wall-mounted backplate. Remove the old batteries and insert new ones, observing polarity. Reattach the thermostat to the backplate.

7.2 Cleaning

- Clean the thermostat's exterior with a soft, damp cloth.
- Do not use abrasive cleaners or solvents, as they may damage the finish or internal components.
- Ensure no moisture enters the thermostat's vents or openings.

8. Troubleshooting

If you experience issues with your Emerson 1F85U-22NP thermostat, refer to the following common troubleshooting tips:

Problem	Possible Cause	Solution
No Display/Blank Screen	Dead batteries or no power from system.	Replace batteries. Check circuit breaker for HVAC system.
System Not Responding	Incorrect system mode, loose wiring, or tripped circuit breaker.	Verify system mode (Heat/Cool/Off). Check wiring connections. Reset circuit breaker.
Inaccurate Temperature Reading	Thermostat location, dirt buildup, or internal sensor issue.	Ensure thermostat is not exposed to direct sunlight or drafts. Clean exterior. If issue persists, contact support.
Fan Not Operating	Fan mode set to Auto when system is off, or wiring issue.	Set Fan mode to "On" for continuous operation. Check fan wiring.

For more detailed troubleshooting or persistent issues, please refer to the comprehensive troubleshooting guide in the full user manual or contact Emerson customer support.

9. Specifications

Feature	Detail
Brand	Emerson
Model Name	80 Series
Model Number	1F85U-22NP
Controller Type	Hand Control
Special Features	Temperature Display, Lockable, Low Voltage, Auto Changeover
Color	White
Specific Uses For Product	Heat Pump
Temperature Control Type	Manual
Included Components	User Manual, Thermostat, 2 AA Batteries
Power Source	Battery Powered
Item Weight	0.61 Pounds (9.8 ounces)
Voltage	24 Volts
Shape	Rectangular
Display Type	LCD
Screen Size	5 Inches
Control Type	Button Control
Control Method	Touch
Mounting Type	Wall Mount
Backlight	Yes
Batteries Required	2 AA batteries (included)
Battery Cell Type	Alkaline
Product Dimensions	6 x 1.13 x 3.75 inches
Country of Origin	China

Feature	Detail
UPC	786710552427

10. Warranty and Support

Emerson products are manufactured to the highest standards and undergo rigorous quality control. For specific warranty information, please refer to the warranty card included with your product or visit the official Emerson website. For technical support, troubleshooting assistance, or to inquire about replacement parts, please contact Emerson customer service through the contact information provided in your product packaging or on their official website.

Note: Product specifications and features are subject to change without notice.

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Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question