

## Mroinge M701

# Mroinge M701 Non-Programmable Thermostat User Manual

Model: M701

## INTRODUCTION

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This manual provides instructions for the installation, operation, and maintenance of your Mroinge M701 Non-Programmable Thermostat. This device is designed for single-stage 1 Heat/1 Cool systems, offering clear temperature and humidity display with a large blue LCD.

## PRODUCT FEATURES

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- Large LCD display with blue backlight for clear readability.
- Displays current room temperature and humidity.
- Compatible with single-stage 1H/1C systems (Gas, Oil, or Electric Furnaces).
- Dual power options: 24VAC power source or 2 AAA batteries (C-wire not required for battery operation).
- Separate heating and cooling swing settings for optimal comfort control.
- Temperature calibration function for accurate readings.
- Built-in 3-minute compressor delay protection to extend HVAC system lifespan.

**Important Compatibility Note: This thermostat is not compatible with Heat Pump Systems, Aux heating, Emergency heating, Multi-Stage Systems, RV systems, or 120/240V Electric Baseboard/Line Volt Systems.**

## WHAT'S IN THE BOX

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This image displays the contents of the Mroinge M701 thermostat packaging. It includes the thermostat unit, mounting hardware, an installation manual, and terminal wire label stickers.

- 1 x Mroinge M701 Thermostat
- 1 x Installation Manual
- 2 x Mounting Screws and Wall Anchors
- 1 x Terminal Wire Label Stickers

## INSTALLATION GUIDE

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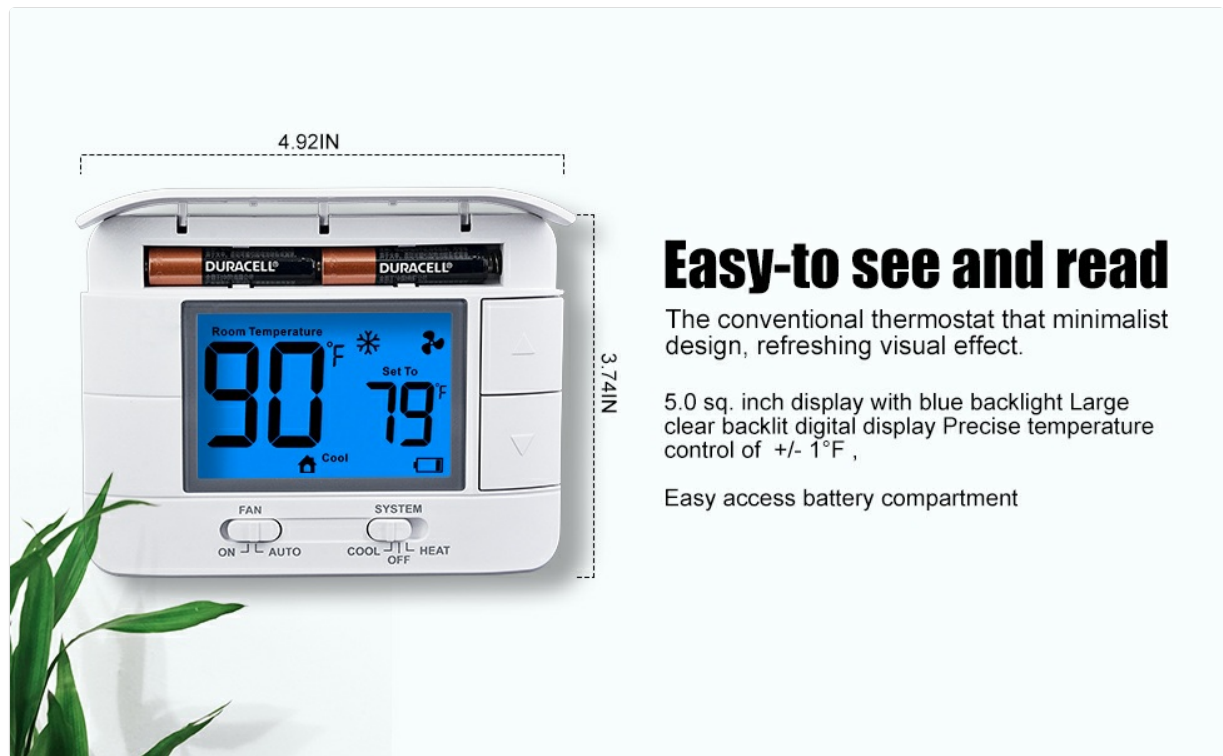
### Before You Begin

- Ensure the power to your heating/cooling system is turned off at the main breaker before starting installation.
- Confirm compatibility with your existing system. This thermostat is designed for single-stage 1H/1C systems (Gas, Oil, Electric Furnaces).
- Gather necessary tools: screwdriver, wire strippers (if needed).

### Removing Your Old Thermostat

1. Carefully remove the cover of your old thermostat.
2. Take a picture of the wiring connections for reference.
3. Label each wire with the provided terminal wire label stickers according to its connection on your old thermostat.
4. Disconnect the wires and remove the old thermostat base from the wall.

### Mounting the New Thermostat



## Easy-to see and read

The conventional thermostat that minimalist design, refreshing visual effect.

5.0 sq. inch display with blue backlight Large clear backlit digital display Precise temperature control of +/- 1°F ,

Easy access battery compartment

This image displays the dimensions of the Mroinge M701 thermostat: 4.92 inches (width) x 3.74 inches (height) x 0.98 inches (depth).

1. Position the new thermostat base on the wall and mark the mounting holes.
2. Drill pilot holes if necessary and insert wall anchors.
3. Secure the new thermostat base to the wall using the provided screws.

## Wiring the Thermostat



## Separate Heating and Cooling Swing (Cycle Rate)

The swing setting, often called cycclerate, differential or anticipation is adjustable, a smaller swing setting will cause more frequent cycles and a larger swing setting will cause fewer cycles.

The factory default for cooling is 0.4°F and 0.4°F for heating.

This image illustrates the wiring terminals on the Mroinge M701 thermostat base. It shows common terminals (C, O, B, W) and power/relay terminals (RH, RC, G, Y).

- Connect the labeled wires from your wall to the corresponding terminals on the new thermostat base. Ensure connections are secure.

- Refer to the terminal label reference chart for specific wire functions.

**Note: If your system has thick, stranded wires, or wires labeled 110V or 120V, it is not compatible with this thermostat.**

## Powering the Thermostat

The thermostat can be powered either by a 24VAC C-wire or by 2 AAA batteries.

- If using batteries, insert 2 fresh AAA alkaline batteries into the battery compartment.

## Easy to use and read

LCD Large Screen / Precise Temperature Control with +/- 1 Degree  
Room Temperature Calibration Adjustment / Low Battery Indicator  
3 Minute Compressor Delay Protection (Selectable ON or OFF)

**Display Room Temperature**

The display range of temperature  
32°F to 99°F(0°C to 50°C)

**Display Room Humidity**

The display range of humidity  
10%RH to 99%RH

**Easy Change Battery Door**  
**Not Supplied Batteries**

**Temperature Setpoint Buttons**  
Press the Up or Down arrow buttons to select the desired room temperature.

**Set Temperature**  
44°F to 90°F(7°C to 32°C)

is displayed (non-flashing) when the SYSTEM switch is in the COOL position. is displayed (flashing) when the compressor is in lockout mode.

is displayed when the FAN switch is in the ON/AUTO position.

is displayed when the SYSTEM switch is in the HEAT position.

is displayed when the 2 "AAA" batteries are low and should be replaced. high quality alkaline batteries are recommended.

This image shows the battery compartment located at the top of the Mroinge M701 thermostat, designed for easy battery replacement. It indicates that 2 AAA batteries are required and not supplied.

## Completing Installation

1. Carefully attach the thermostat front panel to the mounted base.
2. Restore power to your heating/cooling system at the main breaker.

## OPERATING INSTRUCTIONS

### Display Overview



This image shows the main display of the Mroinge M701 thermostat. It features a large blue LCD screen displaying the current room temperature (e.g., 90°F), the set temperature (e.g., 79°F), and indicators for system mode (Cool) and fan status.

The large blue LCD screen displays:

- Current Room Temperature (range: 32°F to 99°F / 0°C to 50°C)
- Set Temperature (range: 44°F to 90°F / 7°C to 32°C)
- Room Humidity (range: 10%RH to 99%RH)
- System Mode (Cool, Heat, Off)
- Fan Mode (On, Auto)
- Low Battery Indicator

### Setting the Temperature

Use the **Up** and **Down** arrow buttons on the right side of the thermostat to adjust the desired set temperature.

## Compatible with 85% of Systems

Works with the HVAC equipment found in most homes, No common wire (c-wire) required on most systems.  
(Required a common wire (c-wire) on heat only and cool only systems)



Gas or Oil Heat ----- ✓	Heat Only Systems - Floor or Wall Furnaces --- ✓
Electric Furnace ----- ✓	Heat Only Systems----- ✓
Cool Only Systems ----- ✓	Millivolt Systems ----- ✓

RV --- NO      Multi-stage Systems --- NO !  
Heat Pump (with Aux. or Emergency Heat) ---- NO !

This image shows a hand pressing the "Up" arrow button on the Mroinge M701 thermostat to increase the set temperature. The display clearly shows the room temperature and the adjustable set temperature.

### System Mode Selection

Use the **SYSTEM** switch at the bottom of the thermostat to select the operating mode:

- **COOL:** Activates the cooling system when the room temperature rises above the set temperature.
- **OFF:** Turns off both heating and cooling systems.
- **HEAT:** Activates the heating system when the room temperature falls below the set temperature.

### Fan Mode Selection

Use the **FAN** switch at the bottom of the thermostat to select the fan operation mode:

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

### Temperature Calibration

The thermostat allows for temperature calibration to ensure accurate readings. Refer to the full installation manual for detailed steps on how to access and adjust this setting.

## Compressor Delay Protection

This thermostat includes a built-in 3-minute compressor delay protection. This feature helps prevent short cycling of the compressor, extending the lifespan of your HVAC system. This function is selectable ON or OFF.

## Separate Heating and Cooling Swing (Cycle Rate)



This image shows the Mroinge M701 thermostat display indicating a "Cool Swing" setting of "0.4°F". This setting defines the temperature differential before the system activates.

The swing setting, also known as cycle rate or differential, determines the temperature range within which the thermostat will activate the heating or cooling system. A smaller swing setting results in more frequent cycles, while a larger swing setting leads to fewer cycles. The factory default for both heating and cooling swing is 0.4°F.

## MAINTENANCE

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### Battery Replacement

When the low battery indicator appears on the display, replace the 2 AAA alkaline batteries.

1. To replace batteries, gently pull the front cover of the thermostat forward to access the battery compartment.
2. Insert new batteries, ensuring correct polarity.
3. Snap the front cover back into place.

### Cleaning

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

## TROUBLESHOOTING

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Problem	Possible Cause	Solution
Display is blank	No power (batteries dead or C-wire disconnected)	Replace batteries or check C-wire connection and circuit breaker.
Heating/Cooling system not responding	Incorrect system mode; wiring issue; power off	Check SYSTEM switch setting. Verify wiring connections. Ensure power is on at the breaker.
Inaccurate temperature reading	Thermostat location; calibration needed	Ensure thermostat is not in direct sunlight or near heat sources. Perform temperature calibration.
System cycles too frequently/infrequently	Swing setting adjustment	Adjust the heating/cooling swing setting to a desired differential.

If problems persist after attempting these solutions, please contact customer support.

## SPECIFICATIONS

Feature	Detail
Brand	Mroinge
Model Number	M701
Product Dimensions	0.99"D x 4.92"W x 3.74"H
Controller Type	Push Button
Special Feature	Large Display
Color	Blue Backlight
Specific Uses For Product	Furnace
Temperature Control Type	Manual
Included Components	Temperature Sensor
Power Source	Dual (24VAC or 2 AAA Batteries)
Item Weight	5.8 ounces
Voltage	24.0V
Display Type	LCD
Screen Size	3 Inches
Control Type	Button Control
Control Method	Touch

Feature	Detail
Mounting Type	Wall Mount
Backlight	Yes
Date First Available	August 1, 2023

## WARRANTY AND SUPPORT

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### Warranty Information

This Mroinge M701 Thermostat comes with a **2-year warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use.

Please retain your proof of purchase for warranty claims.

### Customer Support

For technical assistance, troubleshooting, or warranty inquiries, please contact Mroinge customer support. Refer to the contact information provided with your product packaging or visit the official Mroinge website.

[Visit the Mroinge Store on Amazon](#) for more product information.