



USER GUIDE

MWCB and MWHB Series Units

Table of Contents

- General.....1
- Optimal Performance.....1
- Unit Parts.....2
- Features3
 - Auto Restart.....3
 - Louver Angle Memory.....3
 - Refrigerant Leakage Detection.....3
- Louver Adjustment.....3
- Return Air Filters.....3
 - Cleaning Return Air Filters.....3
- Operation (Manual) - Force Cooling Mode.....4
- Operation (Wireless Remote Controller)4
 - Requirements4
 - Remote Control Specifications4
 - Wireless Remote Controller Button Functions.....5
 - Wireless Remote Controller Screen Indicators.....6
 - Wireless Remote Controller Operation.....7
 - Wireless Remote Controller Set Button Function.....7
- Troubleshooting.....8
- FCC Compliance Statement — PART 15.19.....8

SINGLE-ZONE MINI-SPLIT SYSTEM
(115V and 208/230V)
508242-01 1/2022

THIS MANUAL MUST BE LEFT WITH THE OWNER FOR FUTURE REFERENCE

Optimal Performance

Optimal performance for the COOL, HEAT and DRY modes can be achieved in the following temperature ranges. When your system is used outside of these ranges, certain safety protection features will activate and cause the unit to perform less than optimally.

Table 1. Cool, Heat and Dry Modes Optimal Performance Ranges

| Temp Location | COOL | HEAT (Heat Pump Units Only) | DRY |
|---------------|--------------------------------|-------------------------------|------------------------------|
| Room | 60°F - 90°F (16°C - 32°C) | 32°F - 86°F (0°C - 32°C) | 50°F - 90°F (10°C - 32°C) |
| Outdoor | 5°F - 122°F (-15°C to 50°C) | 5°F - 86°F (-15°C to 30°C) | 32°F - 122°F (0°C - 50°C) |

To further optimize the performance of your unit, do the following:

- Keep doors and windows closed.
- Limit energy usage by using TIMER ON and TIMER OFF functions.
- Do not block air inlets or outlets.
- Regularly inspect and clean air filters.

⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life.

Installation and service must be performed by a licensed professional HVAC installer (or equivalent) or a service agency.

General

This wall-mounted indoor unit is matched with an outdoor air conditioner unit to create a mini-split system that uses HFC-410A refrigerant.

⚠ CAUTION

As with any mechanical equipment, contact with sharp sheet metal edges can result in personal injury. Take care while handling this equipment and wear gloves and protective clothing.

Unit Parts

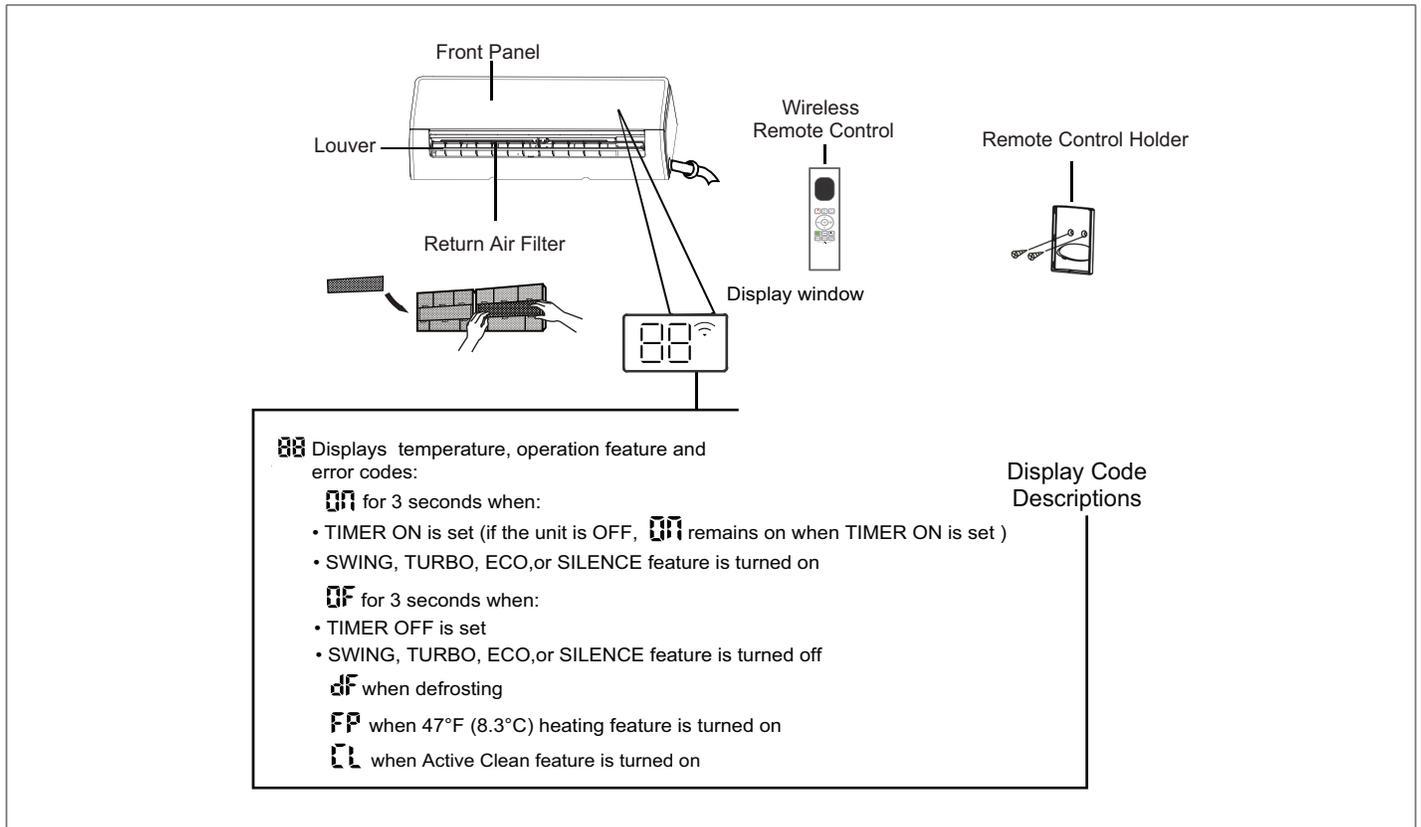


Figure 1. Components

! WARNING

ELECTRICAL SHOCK, FIRE, OR EXPLOSION HAZARD.
 DO NOT spray water on the indoor unit for any reason.
 Do not touch the unit or the controller if your hands are wet.
 Do not insert your hands, tools or any other item into the air intake or air outlet at either the indoor or outdoor unit.
 Do not remove the outdoor unit fan guard for any reason.

! CAUTION

If outdoor unit is installed on a raised stand, check condition of stand occasionally to ensure that it remains stable.
 Do NOT install sprinklers or soaker hoses where they can expose the outdoor unit to treated water. Prolonged exposure to treated water will corrode the surface of the steel and aluminum parts and will diminish the performance of the unit.

IMPORTANT

System operation is controlled by either the provided wireless or optional wired remote control. Refer to the manual provided with the control for system operation.
 To ensure comfort, make sure that temperature selection has been properly set at the unit controller or wireless remote control.
 To ensure efficient operation, do not block air intake or outlet at either the indoor or outdoor unit.
 Do not stand on outdoor unit or store items on top of unit.
 Make sure that indoor unit directional louvers are properly adjusted.

Features

Auto Restart

If the unit loses power, it will automatically restart with the prior settings once power has been restored.

Louver Angle Memory

When turning on your unit, the louver will automatically resume its former angle operation.

Refrigerant Leakage Detection

The indoor unit will automatically display “EC” when it detects refrigerant leakage. For a detailed explanation of your unit’s advanced functionality (such as TURBO mode and its self-cleaning functions), refer to “Operation (Wireless Remote Controller)” on page 4.

Louver Adjustment

IMPORTANT

DO NOT adjust the louvers by hand. Louvers are adjustable only by using the furnished wireless remote controller or optional wired controller.

Use the furnished wireless remote control or optional wired controller to set the position of the discharge air louvers. The louvers may be set to automatically swing between the outward and downward positions, OR you may set the louvers so that they are stationary in a single position. It is always recommended to direct the horizontal discharge air louvers outward while cooling.

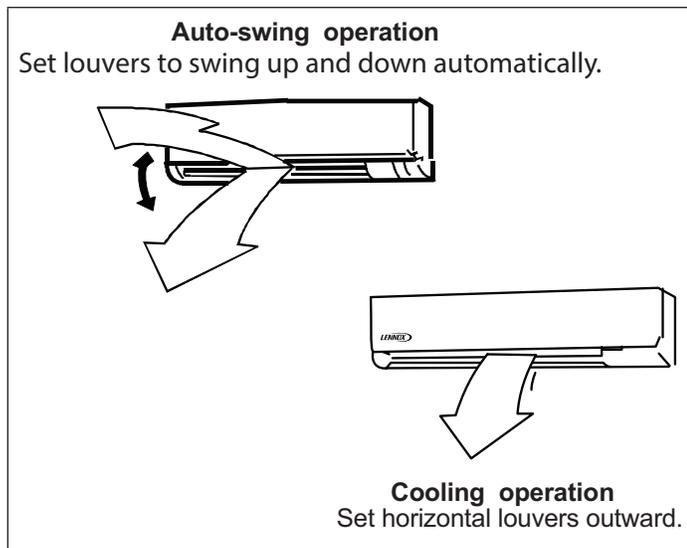


Figure 2. Louver Operation

Refer to the wireless remote control section on using the swing and direct buttons.

Return Air Filters

Blocked or dirty return air filters affect system operation and efficiency. Air filters should be checked monthly in order to ensure proper air flow to the indoor unit. It may be necessary to check the filter more frequently if the unit is installed in an area with a large amount of dust.

The filter may be removed and cleaned, or it should be replaced with a filter of like kind and size if it is impossible to clean the filter.

Cleaning Return Air Filters

Check return air filters every two weeks and clean as necessary. Lift the front panel of the indoor unit.

1. Grip the tab on the end of the filter, lift it up, then pull it towards yourself.
2. Pull the filter out.
3. Clean the return air filters with warm soapy water. Use only mild detergent.

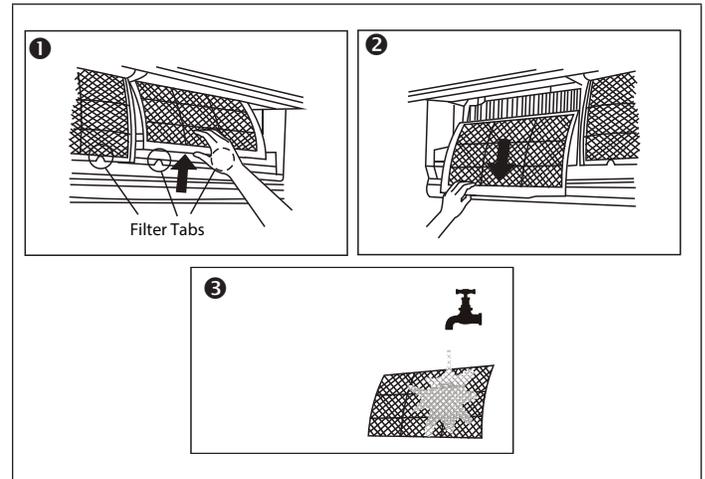


Figure 3. Filter Removal and Service

4. Rinse the return air filter with fresh water and then shake off excess water.
5. Dry filter in a cool and dry place. Refrain from exposing filter to direct sunlight.
6. Slide return air filters back into the indoor unit.
7. Close the front panel.

Operation (Manual) - Force Cooling Mode

In the event that your remote control fails to work, your unit can be operated manually with the MANUAL CONTROL button located on the indoor unit.



Figure 4. AUTO/COOL Control Button

IMPORTANT

Unit must be turned off before using AUTO/COOL operation procedures.

To operate your unit manually:

1. Open the front panel of the indoor unit.
2. Locate the **AUTO/COOL** button on the right-hand side of the unit.
3. Press the **AUTO/COOL** button to activate **FORCED AUTO** mode. Both **FORCE HEATING** and **COOLING** is preset to 75°F (24°C) and cannot be manually adjusted.
4. Press the **AUTO/COOL** button second time to five seconds to activate **FORCED COOLING** mode. The compressor and outdoor fan keep running (fixed at rated frequency), and the indoor fan runs at high speed (80%). Force cooling mode is preset to 75°F (24°C) and cannot be manually adjusted.

NOTE: When system receives signals, such as switch on, switch off, timer on, timer off, mode setting, fan speed setting, sleep mode setting and follow me setting, the forced operation will stop.

5. Press the **AUTO/COOL** button a third time for five seconds to activate **FORCE DEFROSTING** mode (applicable to heat pump systems only). Indoor fan will stop, defrosting lamp will light on.
6. Press the **AUTO/COOL** button again for 5 seconds to turn the unit off.
7. Close the front panel.

Operation (Wireless Remote Controller)

IMPORTANT!

Frequent changes to operating mode may cause system malfunction. Allow at least one minute between mode changes for the system to stabilize.

Requirements

Using the remote controller

- Point the remote controller directly at the indoor unit.
- Stand within 26 feet (8 meters) of the indoor unit.
- Do not block the signal between the remote controller and indoor unit.

NOTE: The remote controller will not function without a clear line of sight to the indoor unit.

- Do not submerge the remote controller in liquid.
- Do not expose to direct sunlight.
- Do not drop or step on remote controller.

Remote control holder

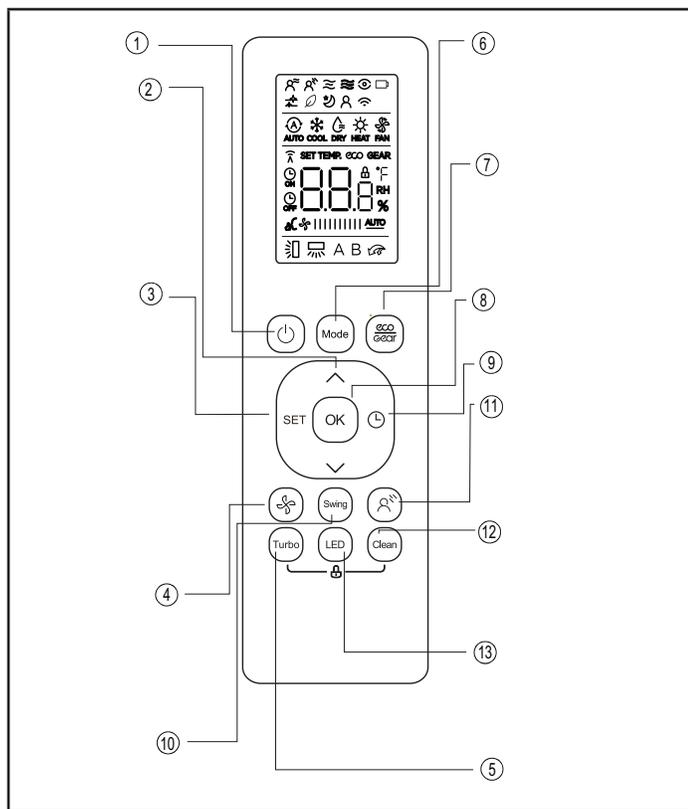
Use field-provided fasteners to attach the remote controller holder to any suitable vertical surface such as a wall.

Remote Control Specifications

Table 2. Specifications

| | |
|---------------------------------------|----------------------------|
| Rated voltage | 3.0 VDC (2 AAA batteries) |
| Min voltage for sending signal to CPU | 2.4 VDC |
| Effective transmitting distance | 26 feet (8 meters) |
| Operation conditions | 23°F to 140°F (-5 to 60°C) |

Wireless Remote Controller Button Functions



1. ON/OFF Button

Turns system on and off

2. UP/DOWN Buttons ^ v

Increase or decrease the indoor temperature in one degree increments (maximum 86°F, minimum 60°F)

NOTE: Temperature cannot be adjusted in FAN mode.

NOTE: Press and hold both buttons for three seconds to alternate the temperature display between the °C and °F scale.

3. SET Button

Scrolls through unit operations in this order:

- Sleep
- Follow Me

The selected symbol will flash on the display area, press the **OK** button to confirm.

4. FAN Button

Cycles fan speeds in the following order:

AUTO - 20% - 40% - 60% - 80% - 100%

NOTE: Holding Fan button down for 2 seconds will activate Silence feature.

5. TURBO Button

Enables the unit to reach the preset temperature during cooling or heating operation in the shortest time

6. MODE Button

- Select system operation modes
- Press button to cycle through each setting as follows: **AUTO > COOL > DRY > HEAT > FAN.**

NOTE: HEAT setting is only available on heat pump models.

7. ECO / GEAR Button

Controls temperature/energy efficiency of the unit

NOTE: Only available in cooling mode.

ECO Operation

- Sets unit to 75°F unit operation if setpoint is lower
- Sets fan to Auto operation if setpoint is over 75°F

NOTE: If setpoint is manually changed to less than 75°F, ECO operation is canceled.

GEAR Operation

Reduces electrical consumption to 75% or 50%

8. OK Button

Confirms selected function

9. TIMER Button

- Initiates an auto-on or auto-off time sequence
- Press **TIMER** button to initiate the ON time sequence
- Press the **UP / DOWN** buttons multiple times to set the desired time to turn on the unit
- Press **TIMER** button to initiate the off time sequence.
- To cancel, set timer to 0.0 or turn remote off and on.

NOTE: Each press of the button increases or decreases the time (depending on function) in 30 minute increments up to 10 hours.

Above 10 hours each press of the button will increase or decrease the auto-timed setting by 60 minutes up to 24 hours.

10. SWING Button

Used to stop or start louver auto swing feature.

11. Breeze Away Button

This feature avoids direct air flow blowing on the body.

NOTE: This feature is available under Cool, Fan and Dry modes only

12. Clean Button

Used to start/stop the Active Clean function

13. LED Button

Turns the LCD display back-light on the indoor unit on or off

NOTE: Press and hold the button for five seconds to display the actual room temperature. Press more than five seconds to revert back to display set temperature.

Wireless Remote Controller Screen Indicators

Information is displayed when the Wireless Remote Controller is powered on.

-  **Breeze Away** feature display
-  **Follow Me** feature display
-  **Active Clean** feature display
-  Not applicable for this unit
-  **Sleep** feature display
-  Low battery detection (flashing)

Transmission Indicator
Lights up when remote sends signal to indoor unit

-  **ON**
TIMER ON display
-  **OFF**
TIMER OFF display

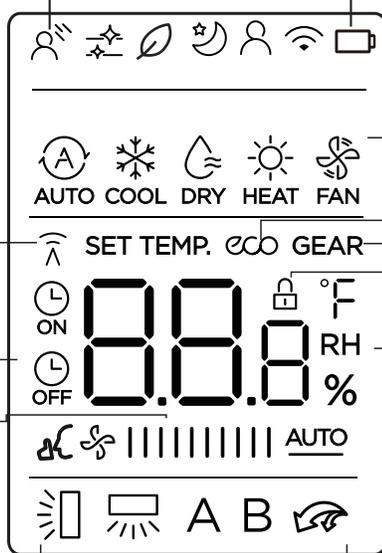
 **Silence** feature display

FAN SPEED display

Displays selected fan speed:

| | | |
|---------|---|-------------|
| Silence |  | 1% |
| |  | 2%-20% |
| LOW |  | 21%-40% |
| MED |  | 41%-60% |
| HIGH |  | 61%-80% |
| |  | 81%-100% |
| AUTO |  | <u>AUTO</u> |

NOTE - Fan speed cannot be adjusted in AUTO or DRY mode.



MODE display
Displays the current mode, including:
    
AUTO COOL DRY HEAT FAN

ECO display
Displays when ECO feature is activated

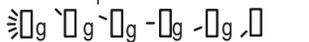
GEAR display
Displays when GEAR feature is activated

LOCK display
Displays when LOCK feature is activated.

Temperature/Timer/Fan speed/Relative Humidity display
Displays the set temperature by default, or fan speed or timer setting when using TIMER ON/OFF functions.

- Temperature range: 60-86°F / 16-30°C
- Timer setting range: 0-24 hours
- Fan speed setting range: AU -100%

This display is blank when operating in FAN mode.


Up/Down louver swing display

 Not applicable to this model.

 **TURBO** mode display

A Not applicable for this unit
B

Note:

All icons are shown for display purposes only.

During actual unit operation, only active icons are displayed.

Troubleshooting

If any of the following faults codes appear on your indoor unit, please contact your licensed professional HVAC installer (or equivalent) or a service agency.

Table 3. Indoor Display Alert and Status Codes and Outdoor Unit LED

| Unit Error and Operation Codes | Indoor Unit Display |
|---|-------------------------|
| System Error Codes | |
| Indoor unit EEPROM error | EH 00 |
| Indoor unit EEPROM parameter error | EH 0A |
| Communication error between indoor unit and outdoor units | EL 01 |
| Indoor fan speed error (DC motor) | EH 03 |
| Indoor room temperature sensor error (T1) | EH 60 |
| Indoor coil temperature sensor error (T2) | EH 61 |
| Refrigerant leakage detection (Cooling mode only) | EL 0C |
| Outdoor current overload protection | PC 08 |
| Outdoor ambient temperature sensor error (T4) | EC 53 |
| Outdoor coil temperature sensor error (T3) | EC 52 |
| Compressor discharge temperature sensor error (T5) | EC 54 |
| Outdoor unit EEPROM error | EC 51 |
| Outdoor unit fan speed error (DC fan motor) | EC 07 |
| Inverter module IPM error | PC 00 |
| High or Low voltage protection | PC 01 |
| Outdoor low ambient temperature protection | PC 0L |
| Compressor drive error | PC 04 |
| Communication error between main control board and display board | EH 0b |
| Operational Status Codes | |
| 46F heat mode (available on heat pump systems only) | FP |
| Force Cooling | FC |
| Remote or Wired controller Lock | LL |
| Defrost (available on heat pump systems only) | dF |
| Active clean | CL |
| Time On | On |
| Time Off | OF |
| Anti-cold Air Flow (available on heat pump systems only) | cF |
| Remote On/Off | CP |
| ECO mode | On display 3 seconds |
| Outdoor Unit LED: Slow flash: Flashing at 1Hz Fast flash: Flashing at 2Hz | |

FCC Compliance Statement — PART 15.19

PART 15.19 This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation. FCC Interference Statement — PART 15.105 (B).
3. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
4. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:
 - Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.

RF Exposure Information

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm during normal operation.