



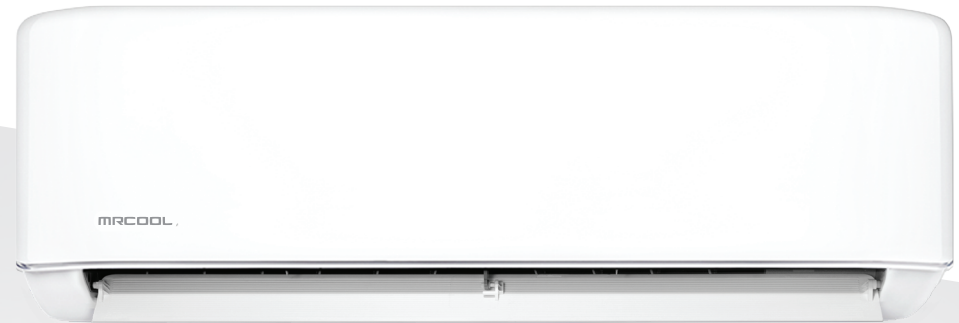
Easy Do-It-Yourself installation  
with our Quick Connect® line set\*

Installing the MRCOOL DIY® does not require specialized tools or training. However, it does require basic technical skills. You are assuming the risk by handling materials containing refrigerants under pressure, that if not handled properly, can cause bodily injury. If you do not feel comfortable conducting this installation process yourself, we recommend you retain the services of a qualified HVAC professional.

\*Pat. <https://mrcool.com/mrcool-patents/>

# QUICK START Setup Guide DIY® E Star™ Series

4th GEN Do-It-Yourself Ductless Mini-Split Heat Pump A/C



works with the  
Google Assistant

JUST ASK  
amazon alexa

SMART CONTROLLER



**\*\*\*\*\*Note\*\*\*\*\***  
**This guide is for convenience. Please refer to the installation manual for more detailed instructions and descriptions.**

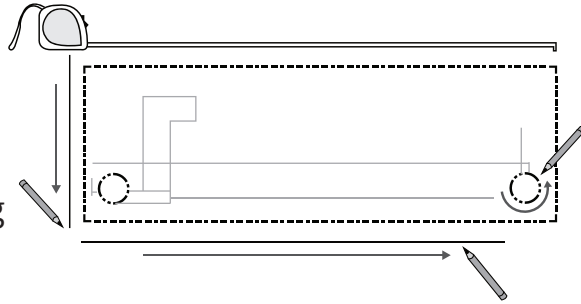
**Version Date: 10-14-21**

[www.mrcool.com](http://www.mrcool.com)



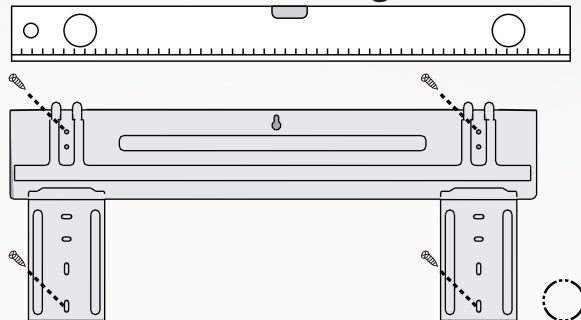
## STEP 1 - inside

1. Locate the cardboard wall template.
2. Place the template on the wall at the installation location.
3. Use the template to mark the location of the drill points for the mounting screws and wall hole. Make sure that the drill points for the mounting screws are located on wall studs.
4. Remove the template.



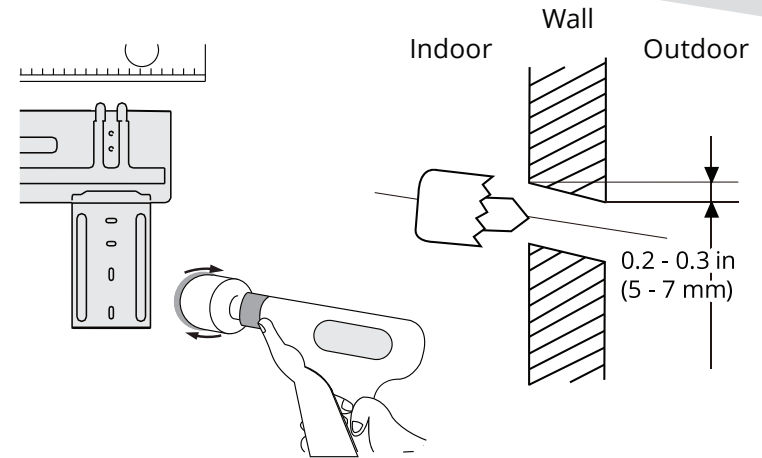
## STEP 2 - inside

1. Drill screw holes at the indicated points into the wall studs.
2. Remove the mounting bracket from the rear of the interior air handler by removing the screw(s) holding it in place.
3. Screw the metal bracket to the wall according to the template.
4. Use a level to ensure the mounting plate is flush and level.

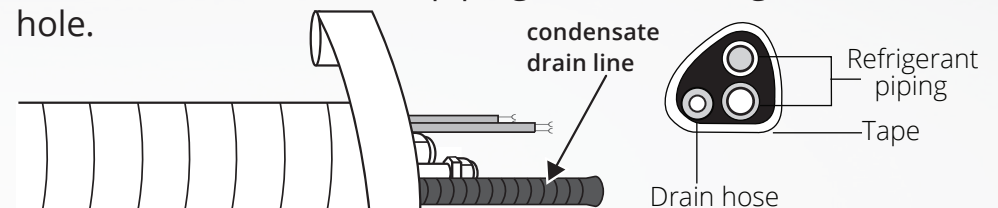


## STEP 3 - inside

1. Drill a 3.5 inch diameter hole through the wall, at a slightly downward angle (to ensure proper drainage), to accommodate the line set, condensate drain line, and MC cable to the exterior condenser.



2. Carefully bend piping at the back of the air handler until it is sticking straight out from behind the unit.
3. Using electrical tape, lightly tape the refrigerant piping & condensate drain line at the back of the indoor unit into a bundle (this will make it easier to pass through the wall hole). The drain pipe **MUST** be on the bottom. **DO NOT wrap the end of the piping (connectors & drain hose) you will need access to them for later steps.**
4. Insert wall hole sleeve into wall hole.
5. Push the MC cable and piping bundle through the wall hole.



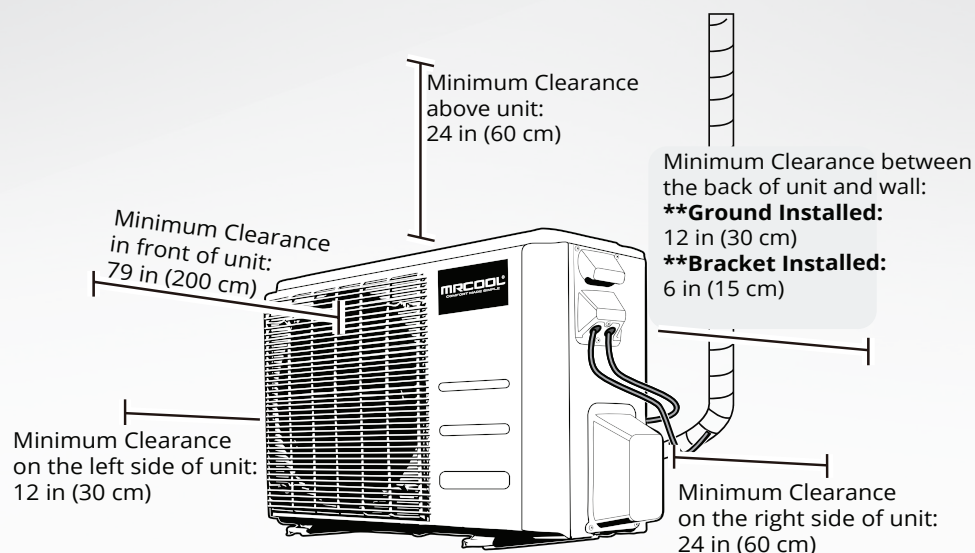
## STEP 3 - Continued

4. Snap the air handler onto the wall bracket by leaning the top towards the wall and hooking it on the top of bracket. Then, apply pressure to the bottom half to snap it to the bracket.



## STEP 4 - Outside

1. Place outside condenser unit firmly on the ground or attach it to a secure metal wall bracket or pad. A drain pipe underneath the unit is not required unless the unit is elevated. Please refer to the manual for more information.



## STEP 4 - Continued

2. Install the wall hole finishing cap/seal. Then, carefully bend the piping coming out of the exterior wall hole (from the indoor unit) down towards the wall.

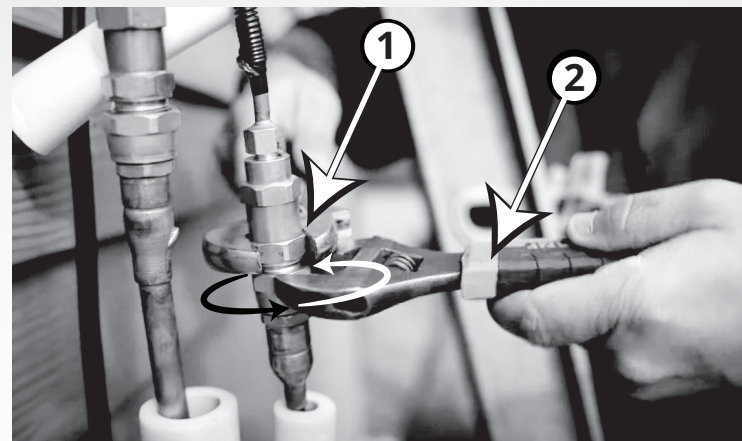
3. Remove the plastic seals from the indoor handler refrigerant lines.

4. Carefully unroll one end of the Quick Connect® line set\*. Only unroll the amount needed to connect to the indoor handler fittings. Leave the remainder coiled.

5. Align the Quick Connect® fittings of the refrigerant line set to the matching indoor handler fittings. Tighten the first few threads by hand.

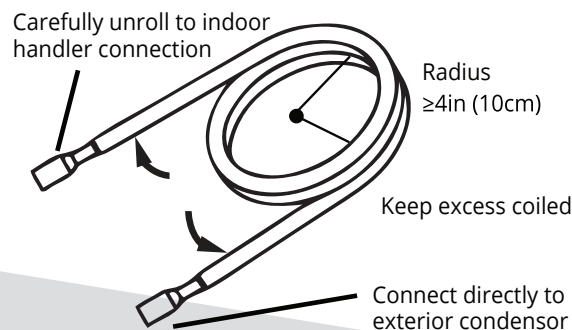
6. Using two open-ended wrenches, or crescent (adjustable-type) wrenches, and the image below as a guide: place the wrenches on points marked "1" & "2," only turning the nut at the point marked "2." Ensure that the screw connector does not become crooked while working quickly to tighten it. Tighten the connector until snug.

7. Then, tighten the connector slightly beyond that point to apply torque to the connector. Repeat the same steps for the second line. Please refer to the manual for information about torque requirements for the connectors.

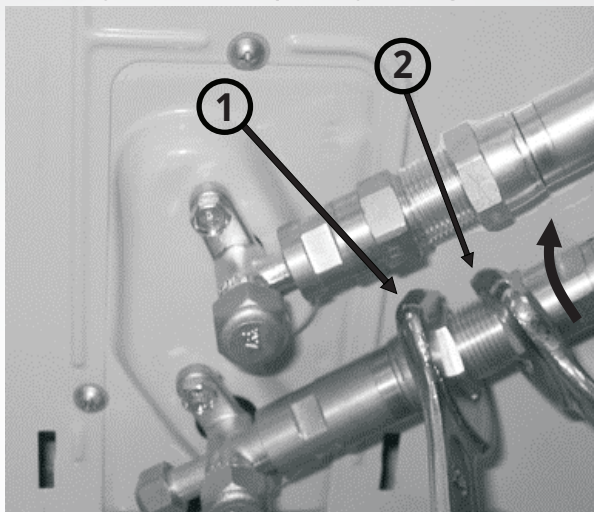


## STEP 5 - Outside

1. Carefully roll the excess tubing and place it behind the condenser, lying flat on the ground.
2. Align the line set connectors to the outside condenser and tighten the first few threads by hand. **NOTE: Make sure the piping connection to outside unit has plenty of slack and line set is not stressed.**



3. Using two open-ended wrenches, or crescent (adjustable-type) wrenches, and the image below as a guide: you will now tighten the bottom screw connector. Place wrenches on points marked "1" & "2," only turning the nut at the point marked "2." Ensure the screw connector does not become crooked as you work quickly to tighten it. Tighten the connector until it is snug.



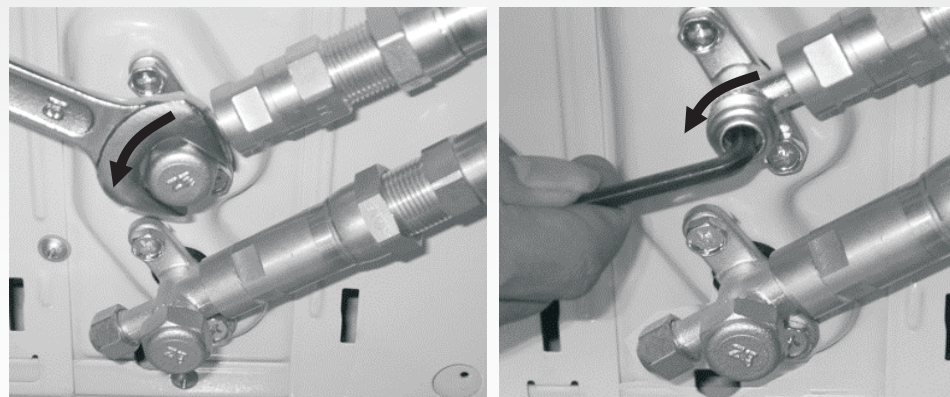
4. Then, tighten the connector slightly beyond that point to apply torque to the connector. Please refer to the manual for information about torque requirements. Repeat the same steps for the top screw connector.

## STEP 6 - Outside

1. Starting with the top valve, using an open-ended wrench, or crescent (adjustable-type) wrench, remove the brass cap from the valve on the outside unit.
2. Then, insert a 5 mm Allen wrench to open the valve by turning it counter-clockwise until it stops turning. ***DO NOT* force it.**

**NOTE: When opening the valves you may hear a soft hissing sound as a slight amount of R-410a refrigerant exits the condenser.**

3. Reinstall the cap and tighten securely.
4. Repeat the same steps for the bottom valve.
5. Using soapy water (in a spray bottle or with a brush), or leak detection spray, apply to the Quick Connect<sup>®</sup> fittings at the indoor air handler and outdoor condenser to check for leaks. If you see bubbles begin to form, this indicates there is a leak. If so, retighten the connection accordingly until the bubbles are gone. Please refer to the manual for more detailed information on checking for leaks.

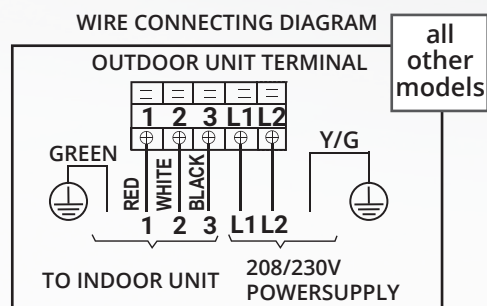
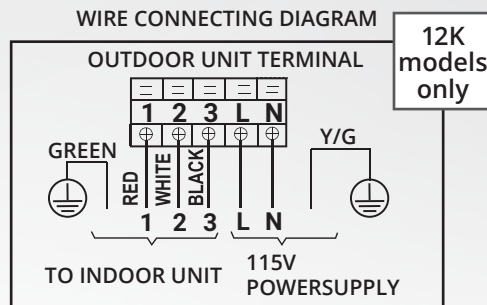
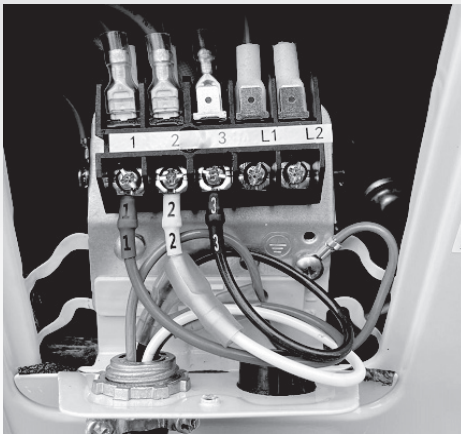


## STEP 7 - Outside

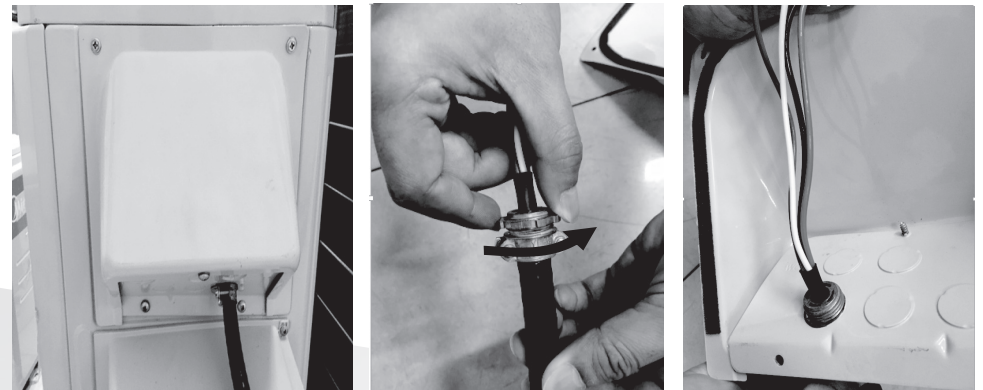
### **WARNING**

**BEFORE PERFORMING ANY ELECTRICAL WORK, TURN OFF ALL POWER TO THE SYSTEM.**

1. Wire colors of this series / model may differ from previous models, other series and general conventions.
2. All wiring must be performed in accordance with the wiring diagrams shown here and all municipal, state and federal regulations.
4. Be sure to know whether your unit is 115 volt (12K only) or 208/230 volt (all other sizes). Incorrect voltage can cause serious damage to the system and void the warranty.
5. A certified electrician is required to supply power from a disconnect of an appropriate rating - see manual.



1. Remove the screws that attach the electrical cover to the outdoor condenser.
2. Remove the large retaining nut from the end of the MC Cable coming from the indoor air handler.
3. Now push the threaded end of the MC Cable through the hole in the electrical cover you removed from the outdoor condenser. Then, thread the retaining nut back onto the end of the MC cable. Please refer to the images below.



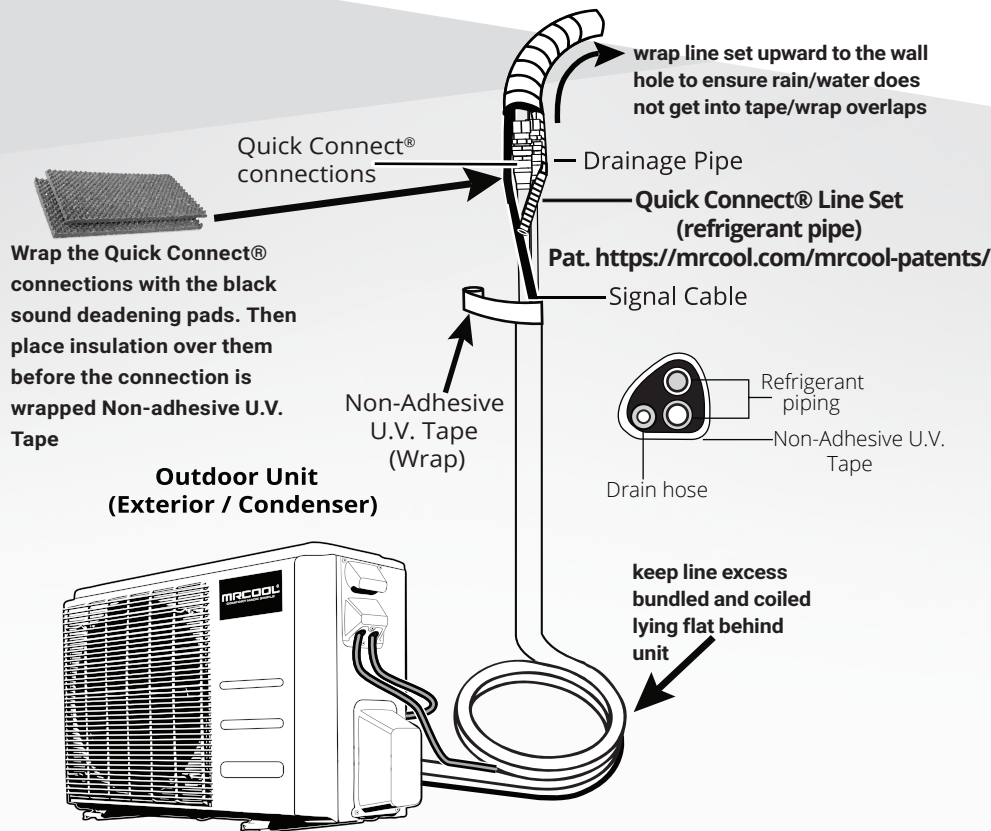
4. Now, firmly and securely connect the wires of the MC cable to the appropriate terminals of the outdoor condenser by screwing the U-lug connector of each wire to the correct terminal. **NOTE: Wires and terminals that are numbered should be matched and connected accordingly. If the unit is a 115 volt system (12K), hook to terminals L and N and Ground. If the unit is a 208/230 volt system (all other sizes), hook to terminals L1 and L2 and Ground. Use the image and wiring illustrations to the bottom left as a guide.**

## STEP 7 - Continued

5. Finally, reinstall the electrical wiring cover and secure it by reinstalling the screws you previously removed.



## STEP 8 - Outside



1. Pack the wall hole with the supplied Neoprene (or Spray Foam), filling any space not taken up by the piping & lines, in order to seal the hole.

2. To protect Quick Connect® connections and reduce vibration, wrap them with the black sound deadening pads. Then install the white pipe insulation over the pads.

3. Now, starting where the line set is not covered with the factory plastic (close to the indoor air handler connection, you will wrap the line set upward, using the supplied Non-adhesive U.V. tape to the wall hole. This will cover the insulated line set connections, cables, and drain hose. The drain pipe will need to be at the bottom of the bundle. Refer to the diagram on the previous page. **DO NOT wrap the end of the drain hose.**

4. To further improve overall appearance and long-term durability of the line set, it is recommended to install an optional MRCOOL® LineGuard® (sold separately).

## STEP 9 - Inside

1. Install the provided batteries into the remote control.
2. Press the Power button on the remote control.
3. The MRCOOL® DIY® Series should activate automatically.
4. To use the MRCOOL® Smartphone App, refer to the Smart Controller Module instructions included in the box.