



Carrier/Bryant Crossover Quick Start 2024

Technical Services/ 11-19-2024

- | | |
|-------------|--|
| Scenario #1 |  |
| Scenario #2 |  |
| Scenario #3 |  |



24Vac

40MUAA

S1/S2 Communication
16/2 wireHA HB /Communication
16/2 wire

40MUAA

S1/S2 Communication
16/2 wire

24Vac

Tradition
Fan Coil or
40MUAA

24Vac



Note for ALL Scenarios: Do Not Remove Indoor TXV/EXV!!

Set dip switches as needed, then proceed to the listed page # for wiring & setup notes.

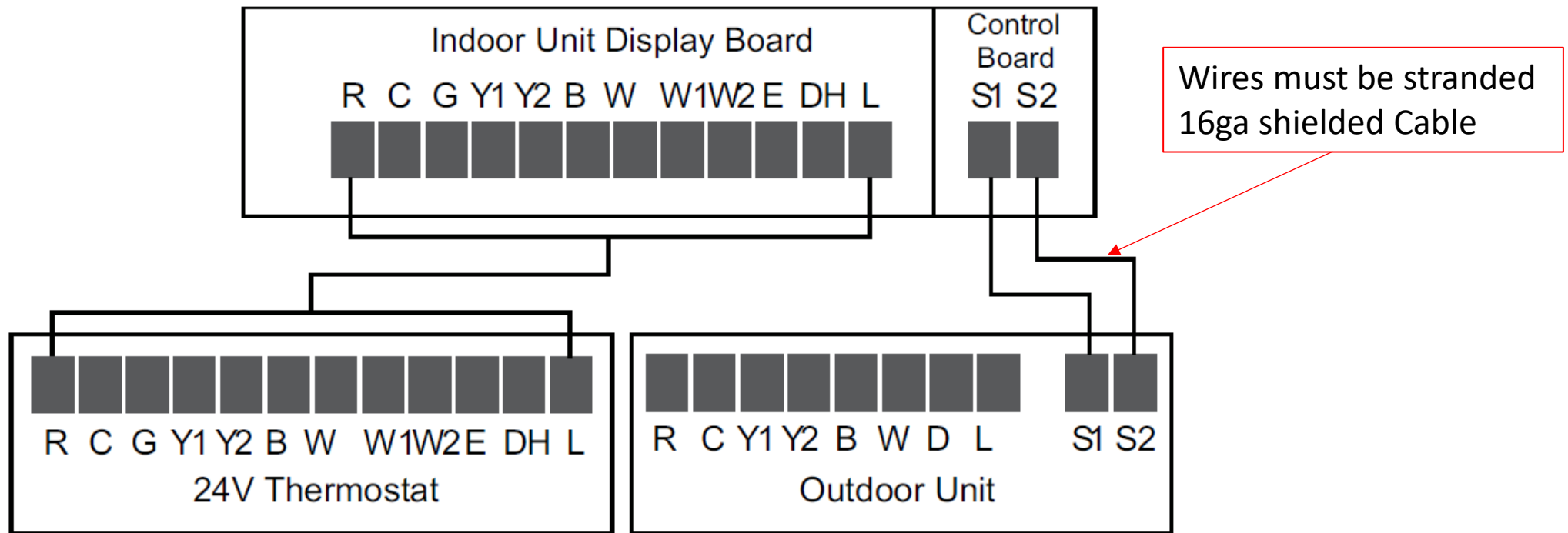
	Scenario #1 Pages #4-6	Scenario #2 Page #7-8	Scenario #3 Page #9-13+
Indoor unit 40MU	Turn SW1-1 on Turn off S4-2 for Dehum	Turn SW1-1 off (all off)	Turn on SW1-1 & SW1-4 Turn off S4-2 for Dehum
Outdoor unit 38MU	All off	All off	Turn on #2

Scenario 1 Wiring



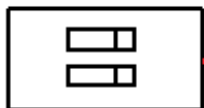
Scenario 1 - Non-Polarity RS485 Communication + 24V Thermostat

This is the preferred method when using a 24V thermostat and when the indoor unit communicates with the outdoor unit via RS485 protocol.



Scenario 1 Wiring

- (R) 24VAC Power
- (C) 24VAC Common
- (G) Fan
- (Y1) Low Stage Blower Operation
- (Y/Y2) High Stage Blower Operation
- (B) Reversing Valve (Energized in Heat)
- (W1) First Stage Electric Heat
- (W2) Second Stage Electric Heat
- (DH) Dehumidification (during cool modes only)

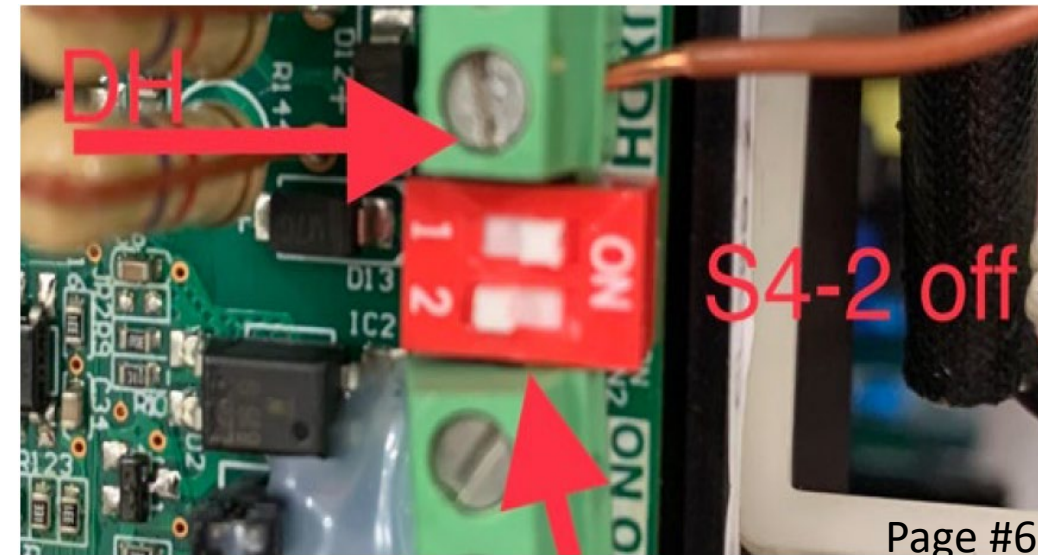
 **S4** S4 1: ON W1 and W2 Jumped / OFF=Separate
S4 2: ON DH Terminal Disabled / OFF=Enabled



Scenario 1 Notes

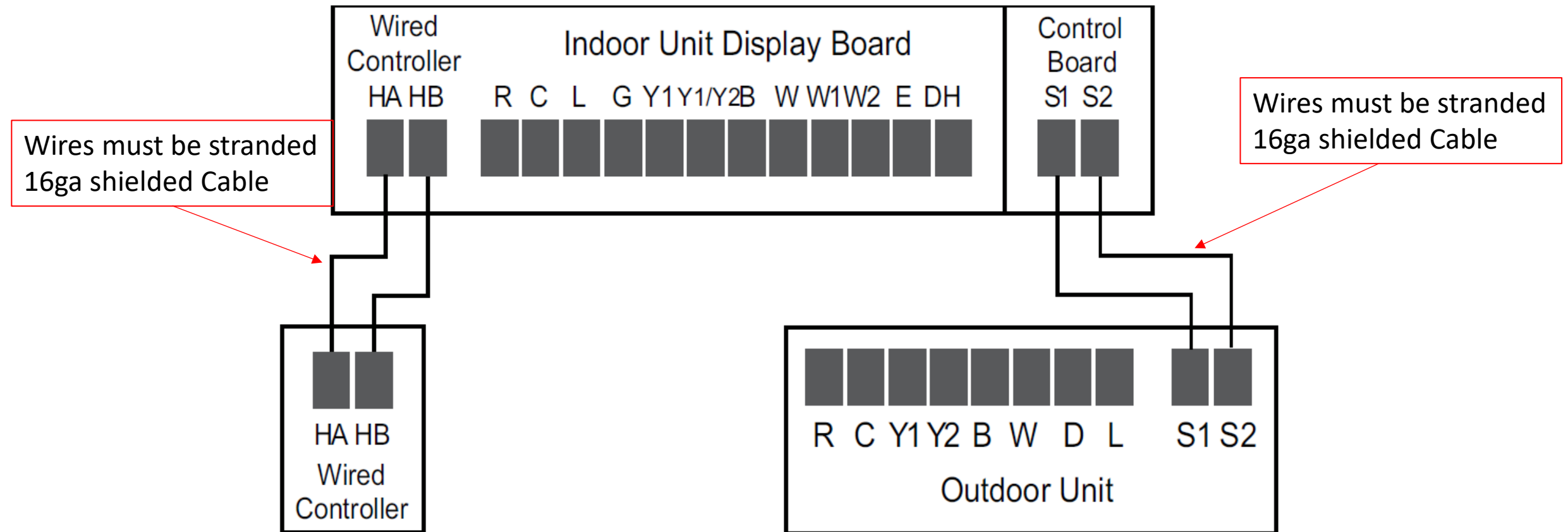


- Heatpump Tstat should be setup for B not O
- If electric heat is installed, then airflow dip switches need to be set
 - SW4-1, SW4-2, SW4-3
 - Install manual has indoor unit sizes crossed with electric heater sizes
- S4-2 is Default On (jumps R & DH) - turn OFF for dehumidification
 - DH terminal and S4-2 shown in picture
- D terminal from ODU goes to W1 on IDU
- Ecobee setup starts on Page #18



Scenario 2 - Non-Polarity RS485 Communication

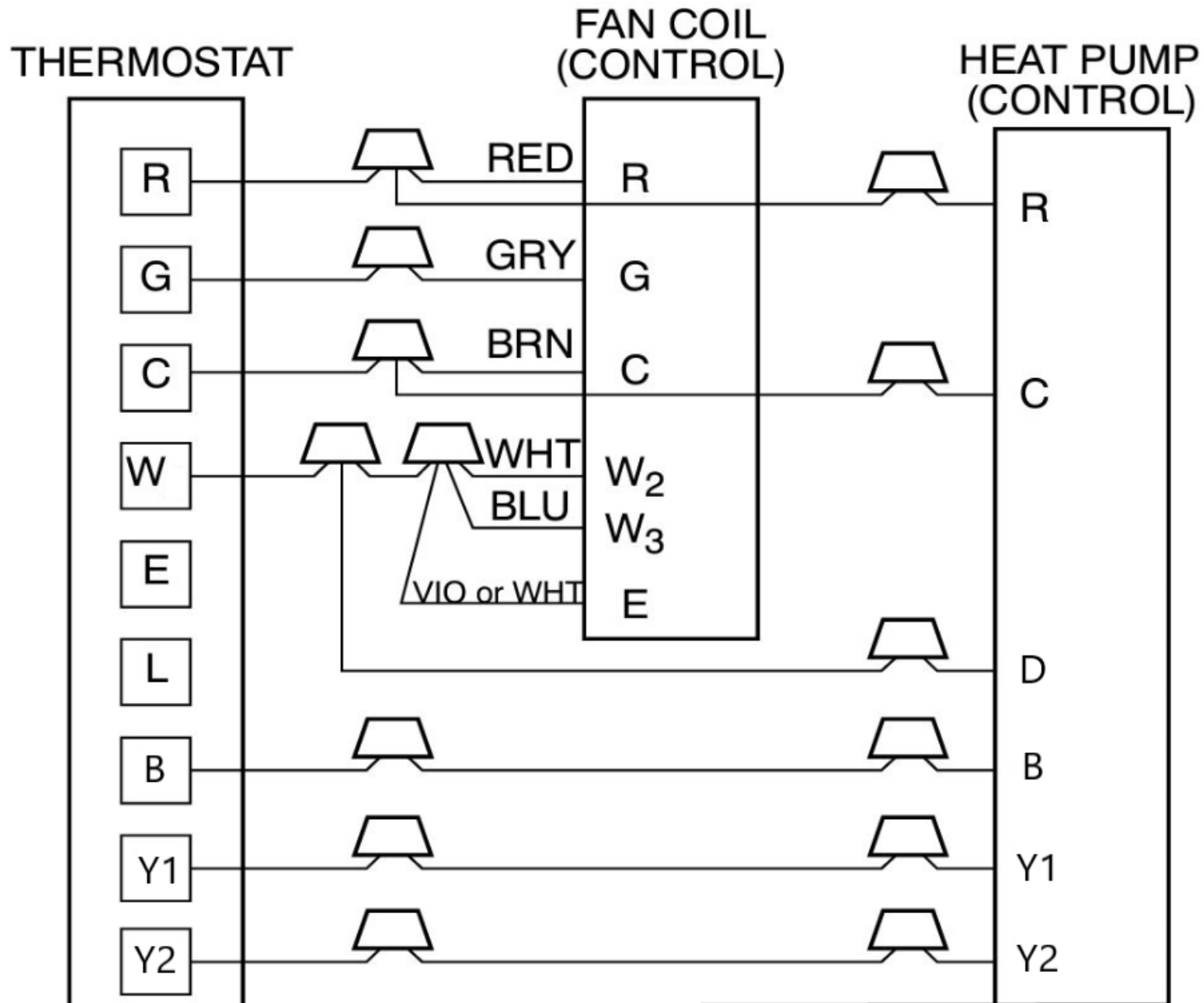
This is the preferred method of control with wired controller KSACN1001(Not included)



- If electric heat is installed, then airflow dip switch need to be set
 - SW4-1, SW4-2, SW4-3
- Install manual has indoor unit sizes crossed with electric heater sizes

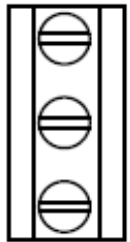
- Scenario 3 (24vac to indoor / 24vac to outdoor)
- Can be 18-gauge Tstat wire
- Shown below will be examples of connections with:
 - FJ4 fan coil (page #10)
 - FT4 fan coil (page #11)
 - 40MUAA fan coil (page #12)
- D on outdoor is Defrost NOT Dehum.
- Do not land white (heat strip) wire on W on outdoor

Scenario 3 / FJ4 wiring

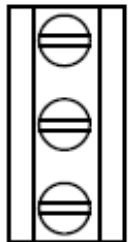


- Outdoor unit to be wired as pictured:
 - D is Defrost NOT Dehum
 - Do not land white wire on W
-
- For wiring the indoor fan control board, refer to the Ecobee 6 setup guide starting on page #14.

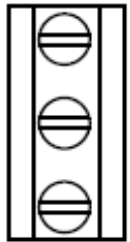




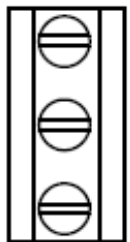
- (R) 24VAC Power
- (C) 24VAC Common



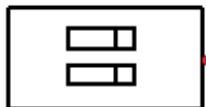
- (G) Fan
- (Y1) Low Stage Blower Operation
- (Y/Y2) High Stage Blower Operation



- (B) Reversing Valve (Energized in Heat)
- (W1) First Stage Electric Heat



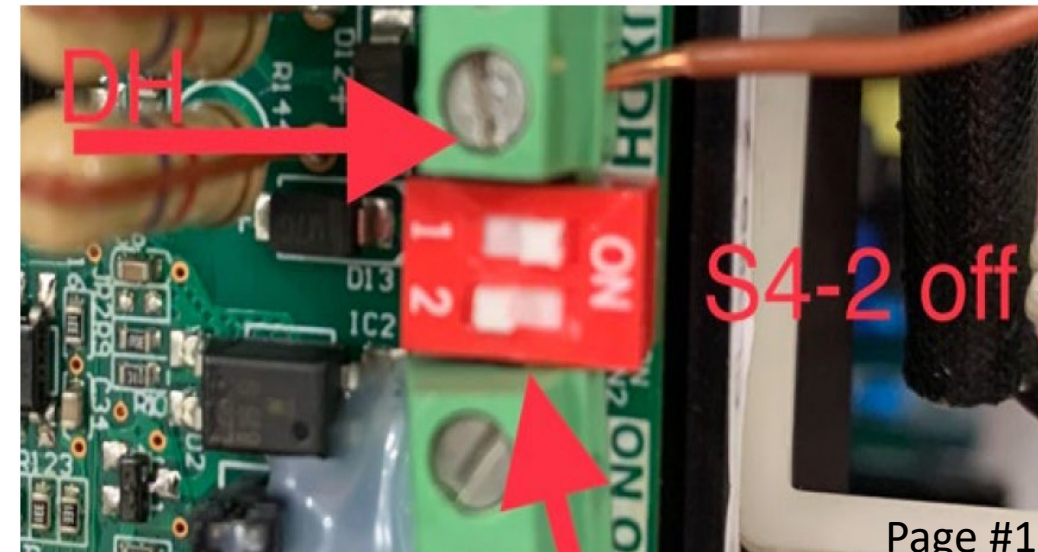
- (W2) Second Stage Electric Heat
- (DH) Dehumidification (during cool modes only)



S4 S4 1: ON W1 and W2 Jumped / OFF=Separate
S4 2: ON DH Terminal Disabled / OFF=Enabled



- Heatpump Tstat should be setup for B not O
- If electric heat is installed, then airflow dip switches need to be set
 - SW4-1, SW4-2, SW4-3
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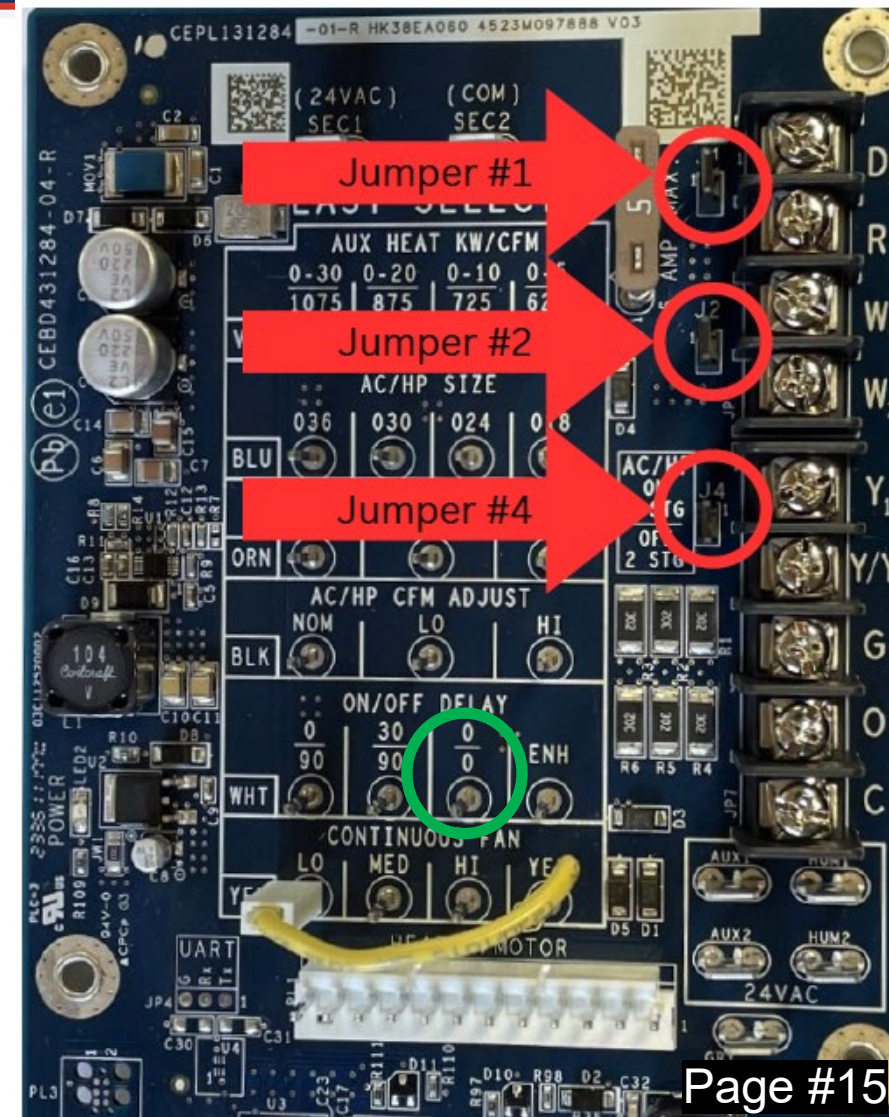
Ecobee 6 Setup Guide Begins Here

JUMPER LOCATIONS AND DESCRIPTIONS

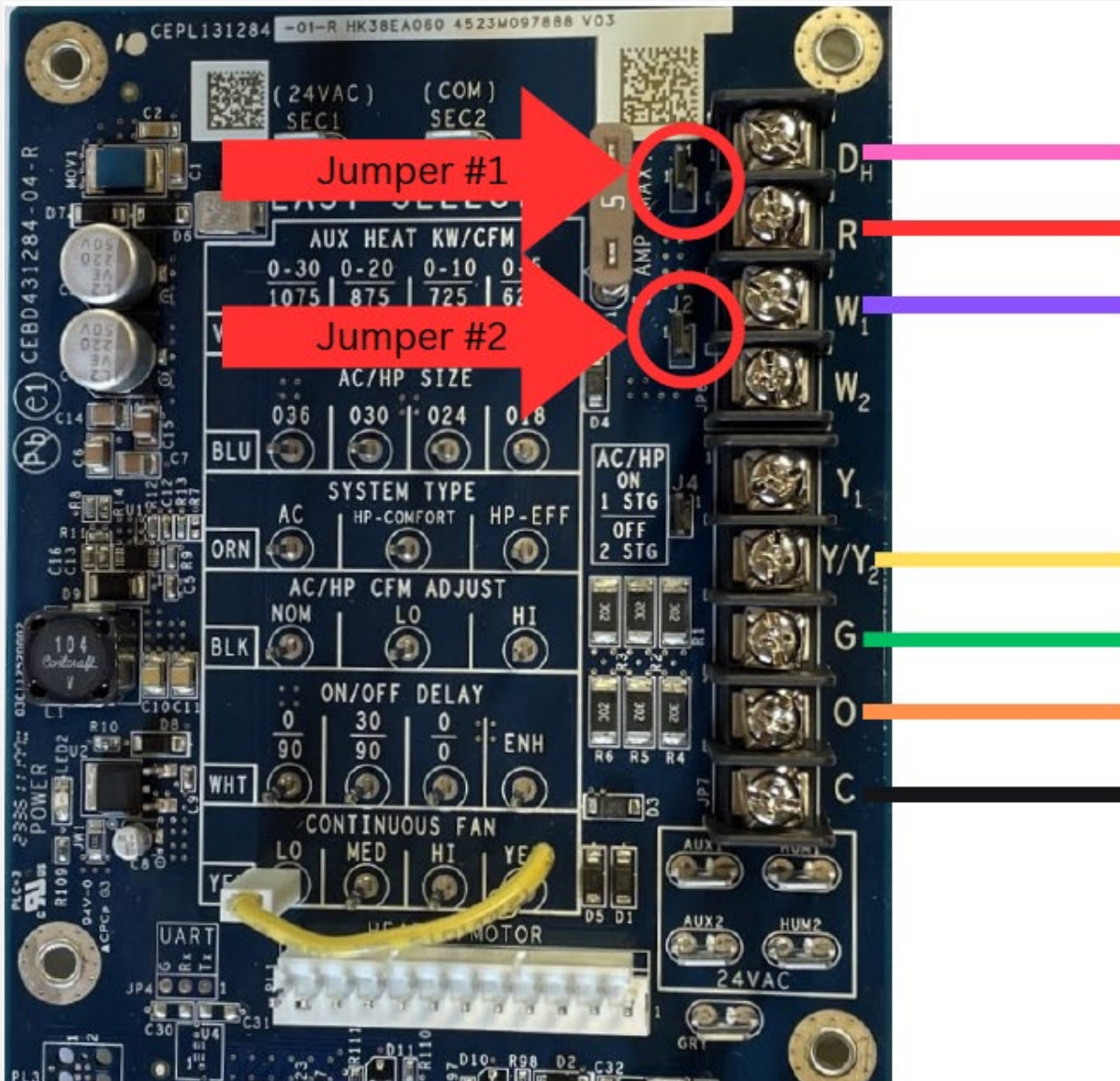
- Jumper #1
 - Removal allows airflow reduction for de-humification
- Jumper #2
 - Removal allows for 2 separate electric heat inputs (W1&W2)
- Jumper #4
 - Removal allows for two speed operation (Y/Y2 & Y1)
- Move white wire for On/off Delay to 0/0. Shown in **Green** Circle.
- -Put Orange Jumper wire on “HP-EFF”



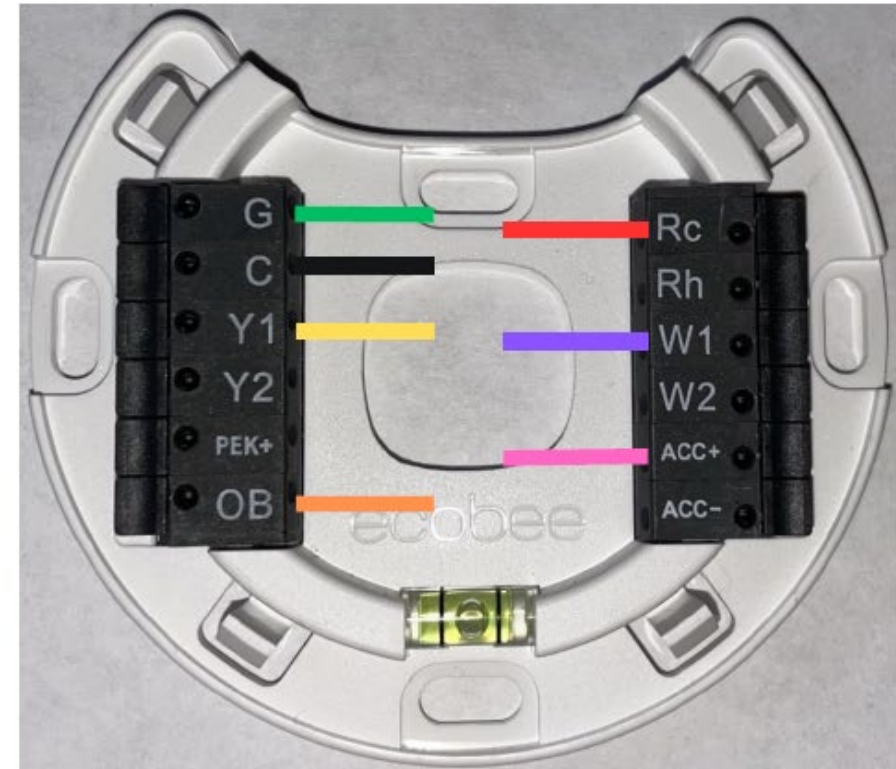
- Jumper closeup:



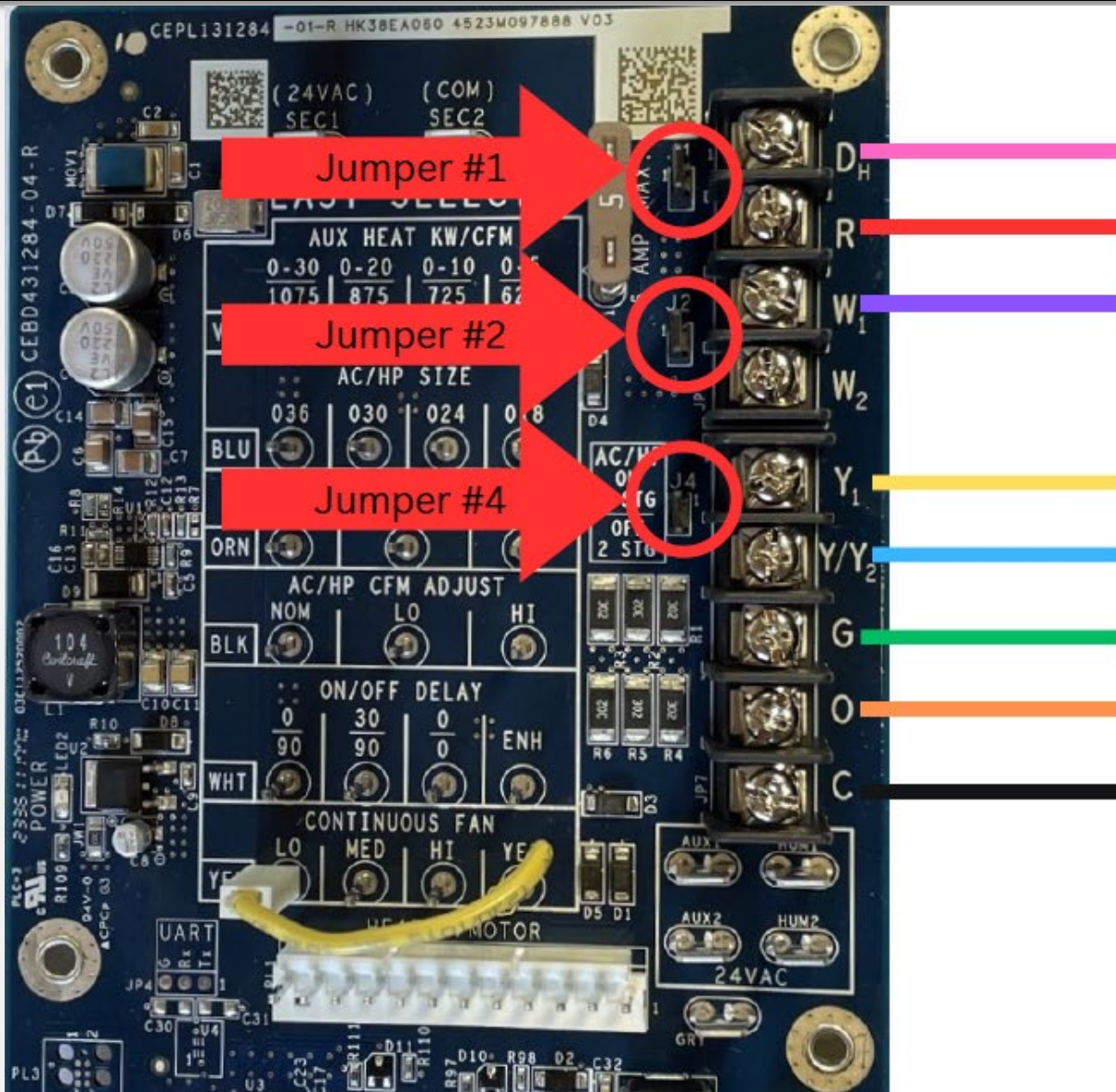
WIRING FOR 1 STAGE



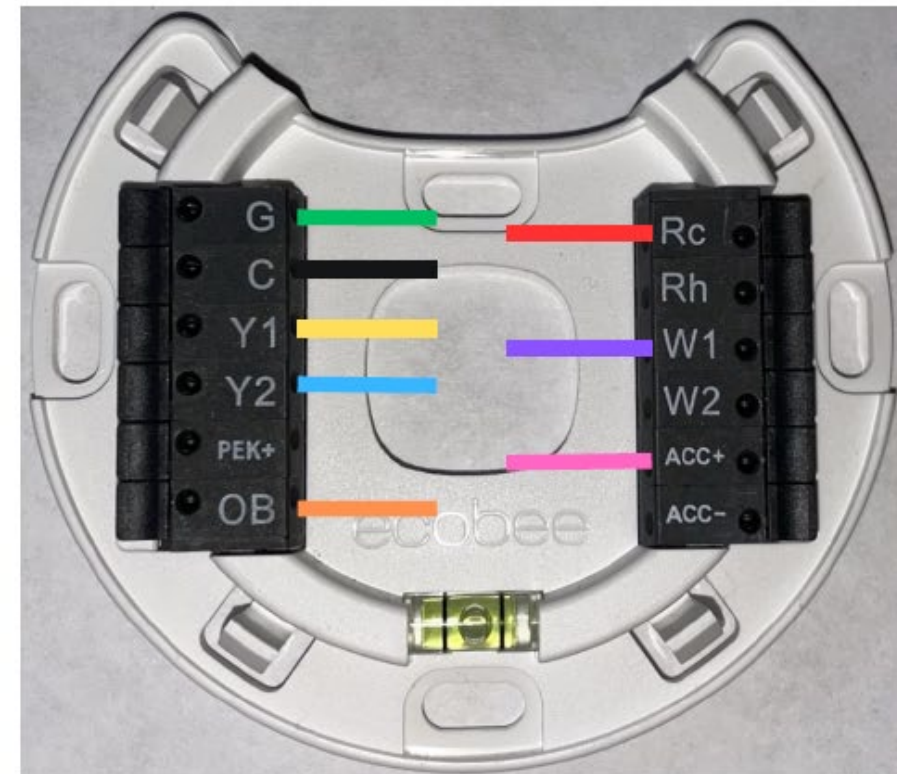
- For dehum remove J1 jumper
- For 2 AUX heat stages remove J2 Jumper
- Put Orange Jumper wire on "HP-EFF"



WIRING FOR 2 STAGE



- For dehum remove J1 jumper
- For 2 AUX heat stages remove J2 Jumper
- For 2 stage outdoor units remove J4 Jumper
- Put Orange Jumper wire on "HP-EFF"



ACCESS SETUP SCREENS

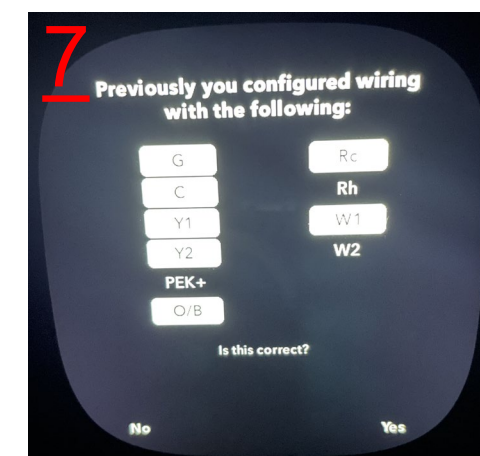
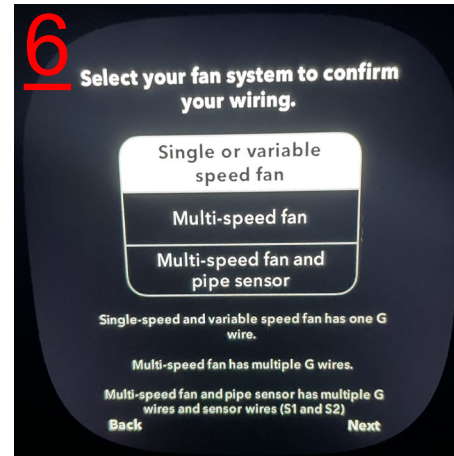
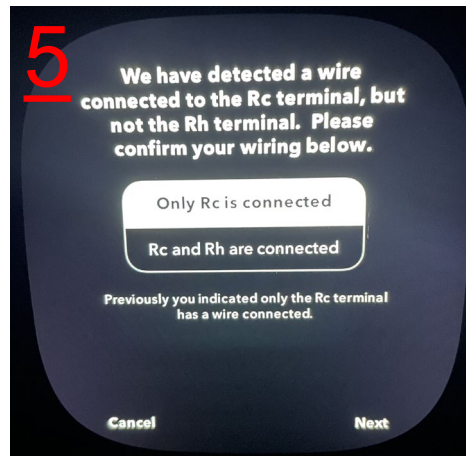
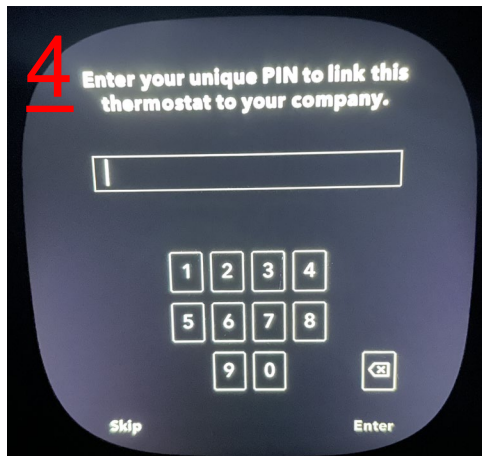
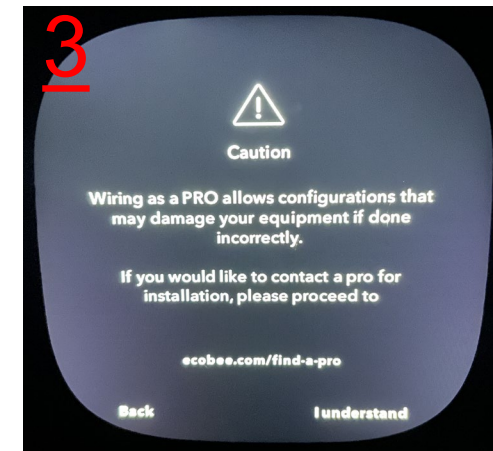
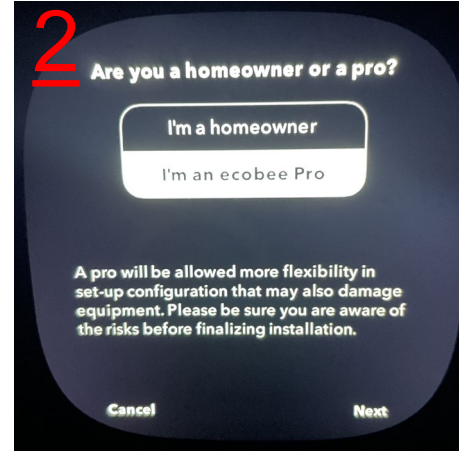
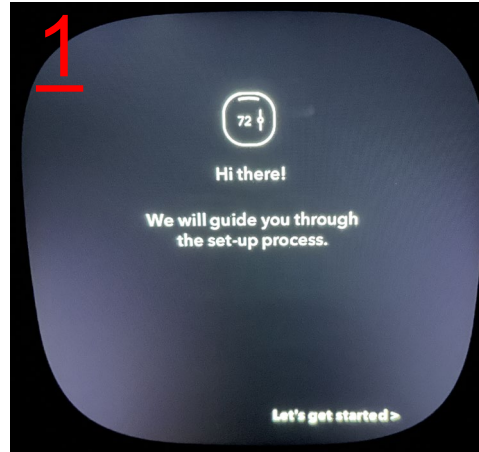
- On FIRST power up, thermostat starts the setup process on the (Hi there/ Let's get started>) screen.
- If the thermostat has already been “programed”, to return to the setup screens needed click:
 - (3 Lines in top right), Gear Cog, Setting, Installation Setting, Equipment, Reconfigure Equipment.





SETUP-FIRST POWER UP

1. Let's get started
2. I'm an Ecobee pro
3. I understand
4. Skip/ enter your pin
5. Only RC
6. Single or Variable
7. Wire selection/
If not correct choose
No/ and modify.

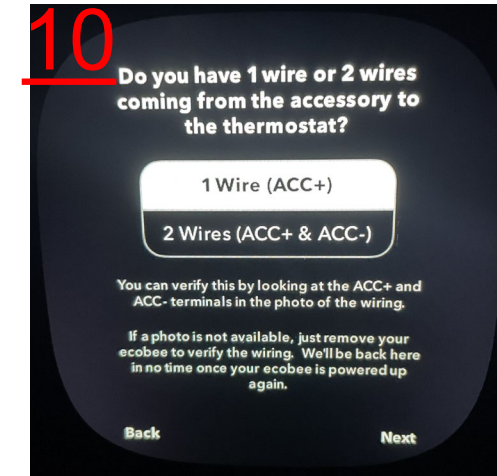
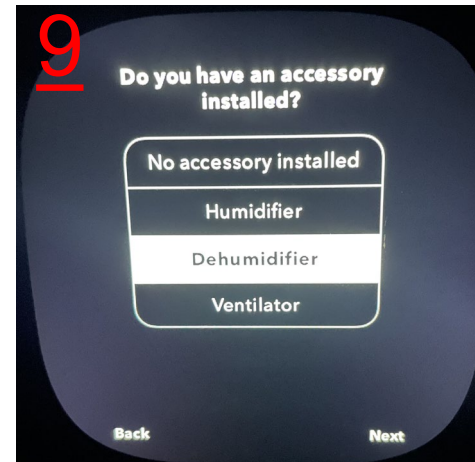




SETUP-FIRST POWER UP CONTINUED

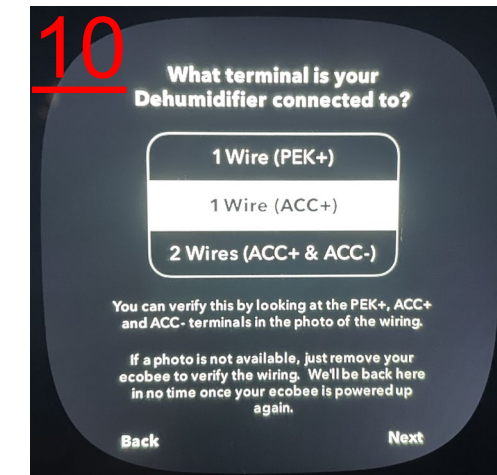
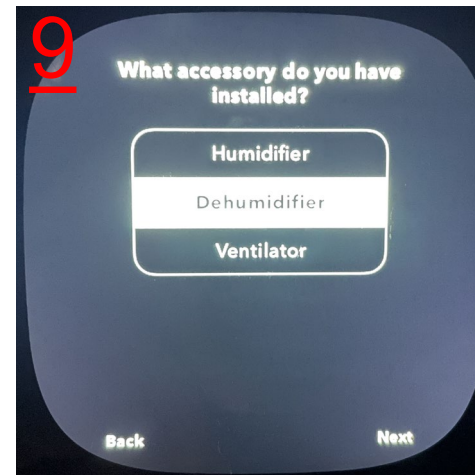
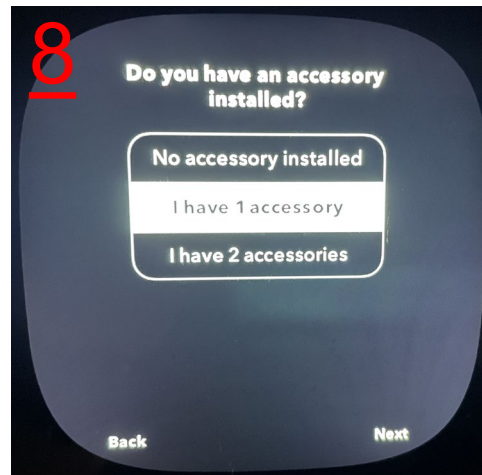
LEGACY SOFTWARE

- 8. <Not Relevant>
- 9. Dehumidifier
- 10. 1 Wire (ACC+)



UPDATED SOFTWARE

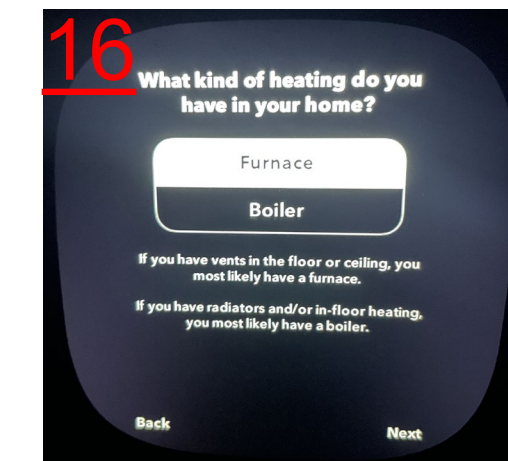
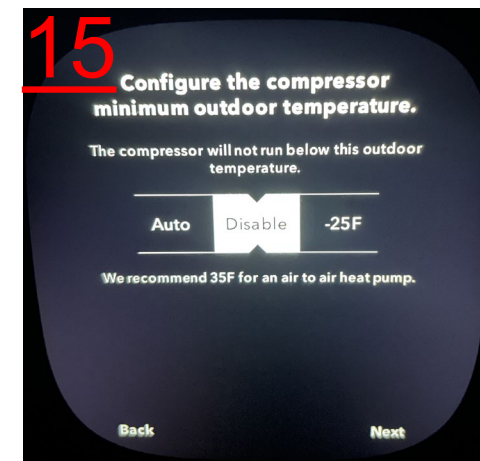
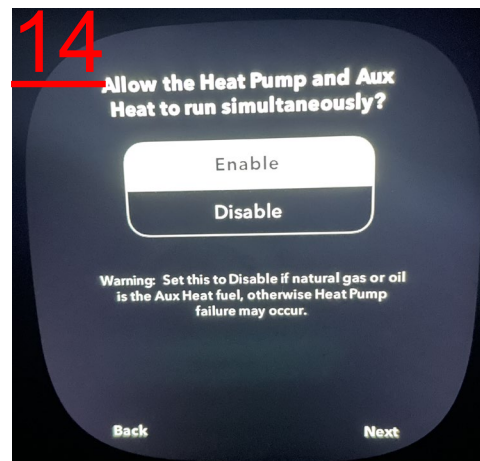
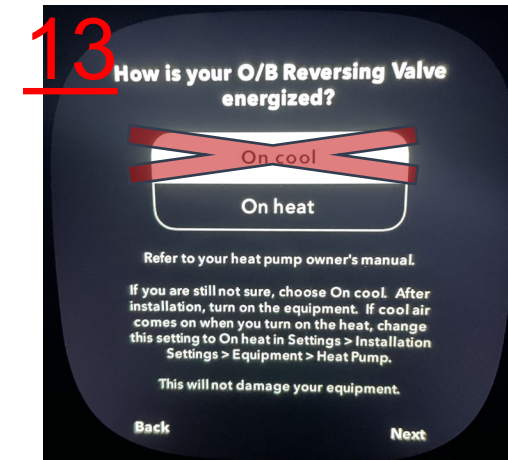
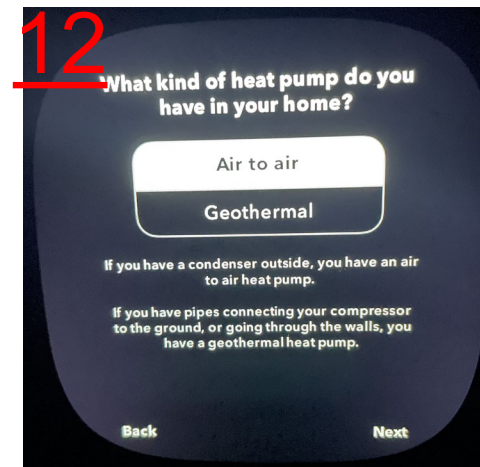
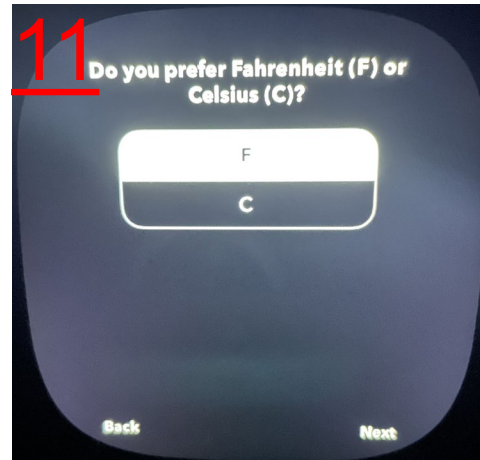
- 8. I Have One Accessory
- 9. Dehumidifier
- 10. 1 wire (ACC+)





SETUP-FIRST POWER UP CONTINUED

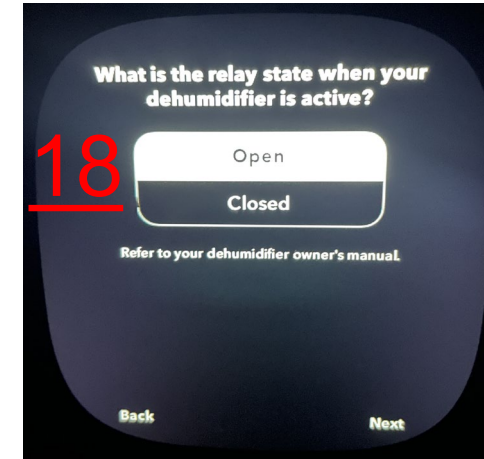
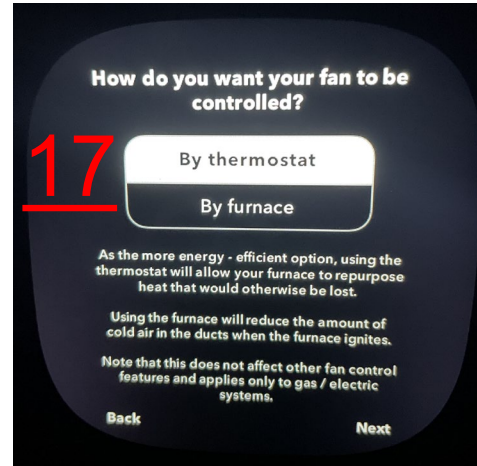
- 11. Fahrenheit
- 12. Air to Air
- 13. **On HEAT**
- 14. Enable
- 15. Disable
- 16. Furnace





SETUP-FIRST POWER UP CONTINUED

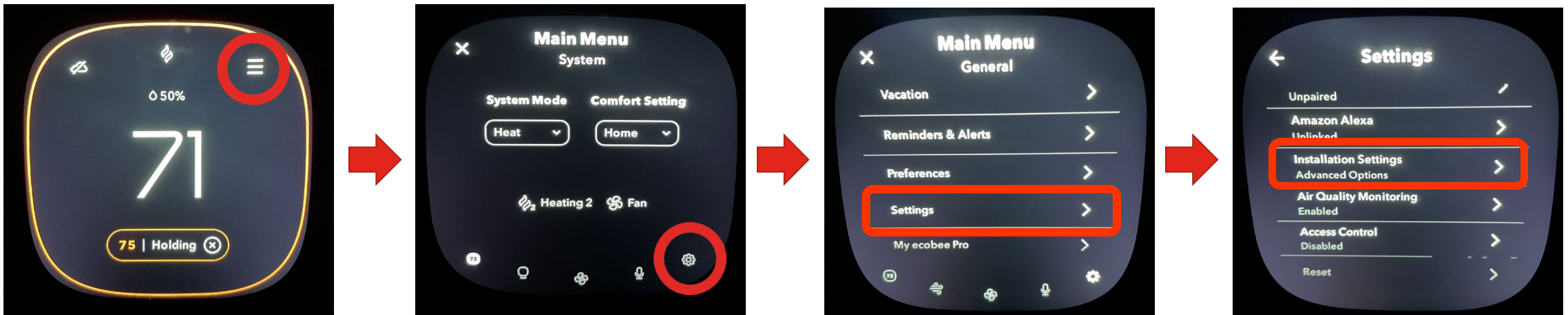
17. By thermostat
18. Open
19. The rest will be Naming thermostat, Pairing sensors, Wi-Fi, Setting Mode & temperatures, Setting time, Finish.



Now, the next screens will help
Setup the thermostat to control
For Customer Comfort.

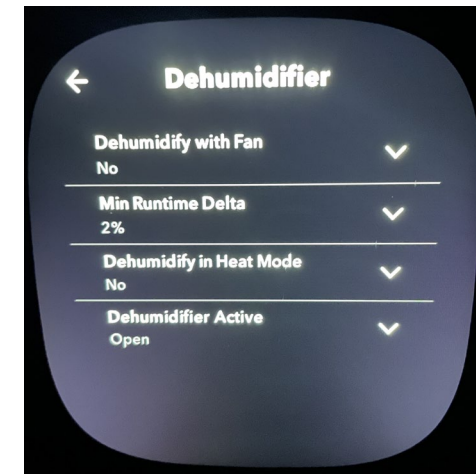
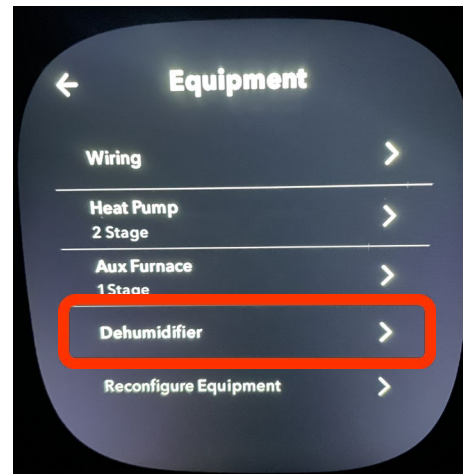
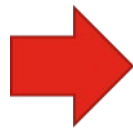
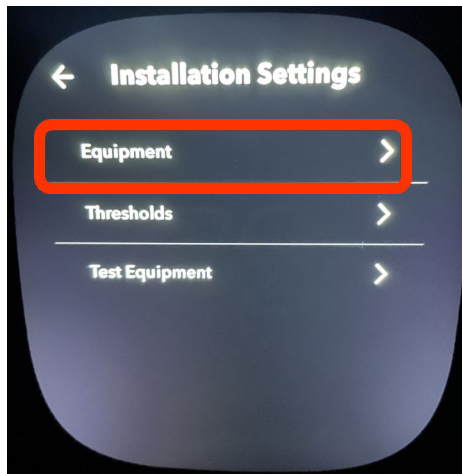
ACCESSING INSTALLATION SETTINGS

- Begin by pressing the 3 lines, Gear, Settings, Installation Settings.
- The next few pages will begin from the “Installation Settings” screen.
- After following this flow, proceed to the following pages to make needed changes.



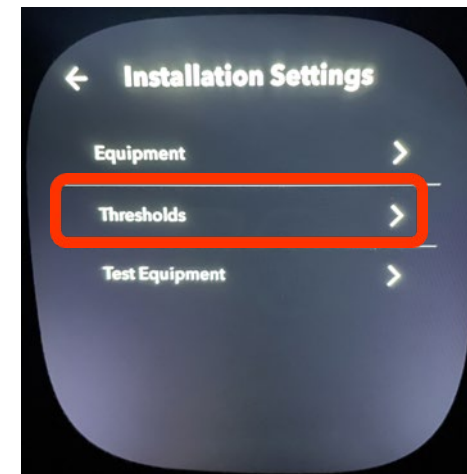
PARAMETERS-DEHUM

- From Installation Settings screen, See Flow Below
 - Within equipment> select Dehumidifier.
1. Change Dehum with fan to NO
 2. Change Min Runtime Delta from 5% to 2%



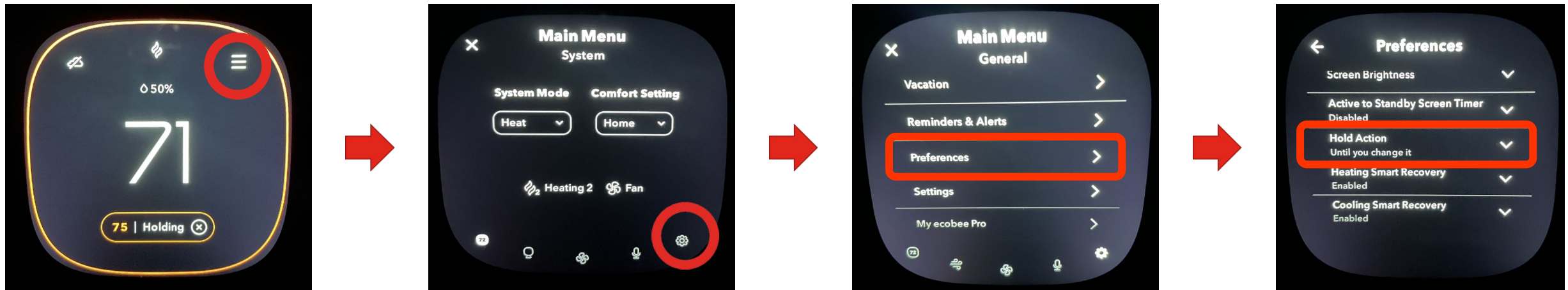
PARAMETERS-STAGING

- From Installation Settings screen, See screen to the right
- Within the Thresholds
 1. Configure Staging- Change to Manually
 2. Aux heat max outdoor temp-Change to 40f-50F
 3. AC Overcool Max- Change from 1F-3F
 4. Compressor Reverse Staging- Change to ON for 2 stage equipment
 5. Compressor Stage 2 Temp delta- Change to 1F (if equipped)
 6. Compressor to Aux Temp Delta- Set: 2F for 2 stage and 1F for 1 stage equipment



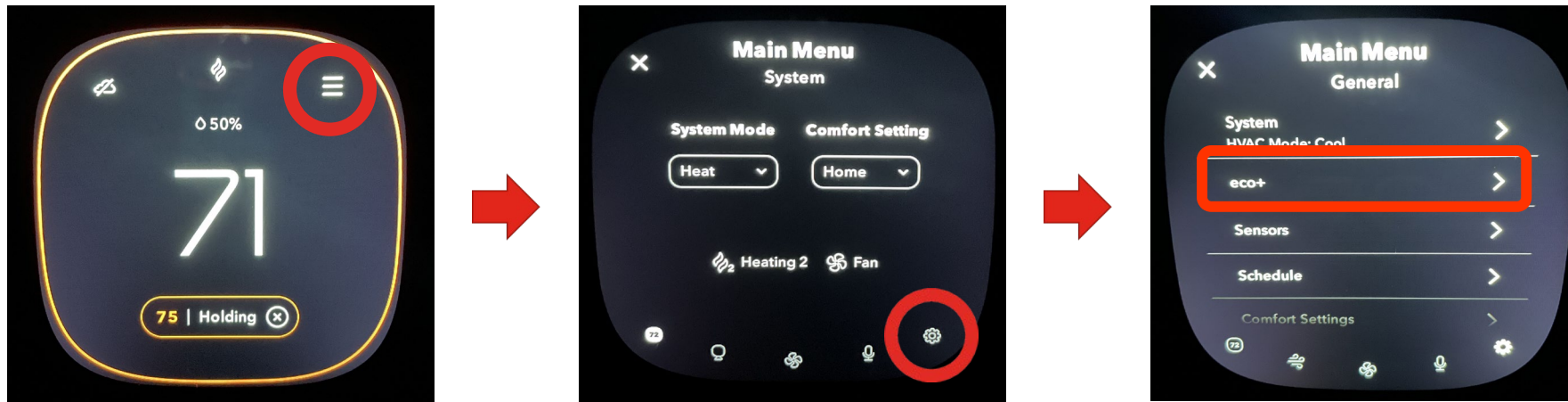
HOLD PREFERENCE

- Use the flow chart below to access the Hold Action
- Make the change that best suits the customers needs.



DISABLING ECO+

- What is eco+ ?
 - It will allow the thermostat to sense occupancy. When motion is not detected, thermostat will allow room to deviate from setpoint.
- change eco+ from Enable to Disable



FT4 DEHUMIDIFICATION SEQUENCE OF OPERATION

- Installing the Ecobee 6 on a FT AHU does not turn it into a Dehumidification machine; however, it does give the ability to lower the airflow when there is a call for cooling to provide a colder coil. This allows the unit to remove more moisture from the space during a cooling call.
- When the DH terminal is deenergized on the AHU, it will provide ~20% less airflow of which ever stage it is running (Y1, Y/Y2)
- When dehum is required, the DH/ACC+ terminals will DE-energize and the Ecobee will wait for a cooling call
- With a demand for dehum alone, the unit will not turn on; UNLESS the Ecobee is utilizing the “AC Overcool Max” feature
- **dehumidifying/lowering the humidity in a space is variable to how much moisture is penetrating the space.*



THANK YOU