Controls

37MU(R,H)A & Crossover Applications

General Installation Notes:

- Indoor unit is NOT powered from outdoor unit.
- O/B Energized on Heating.
- Y2 Terminal at outdoor unit can be utilized instead of Y1 for faster ramp up rate, diagrams to follow.
- For FT5 applications – Recommend "HP-EFF" setting on Easy Select Board.
- Must use dual fuel thermostat for all furnace combinations. Simultaneous Heat Pump and Furnace operation not permitted.
- No wiring diagrams shown will operate a Furnace during Defrost.
- For Furnace applications – Indoor Fan will NOT shut off during Defrost unless a relay is added.
- Furnace applications require outdoor sensor or Wi-Fi weather data.

37MURA* 18, 24, 30, 36, 48, 60K
37MUHA* 18, 24, 30, 36, 48K

37MUHA 60K

*NOTE: Single Fan ODU height varies by capacity

Air Handlers	Gas Furnaces C / B
FE5B	59MN7C / 987M
FT5	59TN6C / 926S
FJ5	59CU5B / 986T
FG5	59TP6C / 926T
F55	59SP6B / 926S
FMA5X	59SC6A / 916S
FMU(C)5X	59SC2E / 912S
FMU(C)5Z	59SU5 / 935S
FMA5L	58TN0B / 880TB
Coils	58CU0B / 830CB
CVAVA	58TP0B / 821TB
CVAMA	58SP0B / 820SB
CAAMP	58SC0B / 800SB
CSAHP	58SB0B / 912S
	58SU0B / 830SB
	Oil Furnaces Hi (M) / Lowboy (L)
	OVM / OVL
	OBM / OBL

Controls

Attention:
Thermostat must sense Outdoor temp for Dual Fuel Applications.

37MU(R,H)A & Crossover Application Thermostat Choices:

- Most 24-Volt thermostats will work for Crossover Applications, refer to the Application/Installation instructions for specific details for the model installing.
- We strongly recommend that these systems are always wired as a Heat Pump, not Conventional.
- NOTE: Dual Fuel Crossover Applications require the thermostat to sense outside temperature to operate correctly.

ecobee

Cielo

Nest

No outside temperature sensor required, uses Wi-Fi weather data, stores up to 5 days

Honeywell

VIVE

Hard wired outside temperature sensor must be installed

Controls

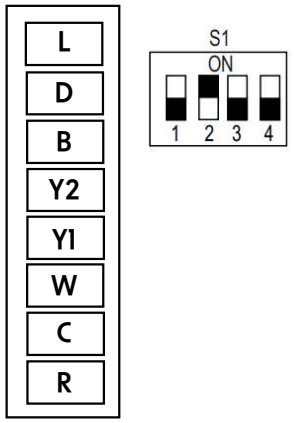
37MU(R,H)A – Applications Requiring Defrost or Error Signal from Outdoor Unit ODU

Only in applications where a Defrost (D-terminal ODU) or Error (L-terminal ODU) signal is needed, an R wire from the Indoor Unit to the Outdoor would be required.

Applications would include:

- Thermostats that accept a 24-Volt Error signal from outdoor unit (L-terminal).
- Applications that use a Defrost signal (D-terminal) to activate a relay to shut down the indoor fan during defrost.
- Applications that use a Defrost signal (D-terminal) to bring on the electric heat kit or other heat source, field supplied relay may be required.

Set S1-2 to ON at ODU
for 24-Volt Connections



Outdoor Unit
MU(R,H)A

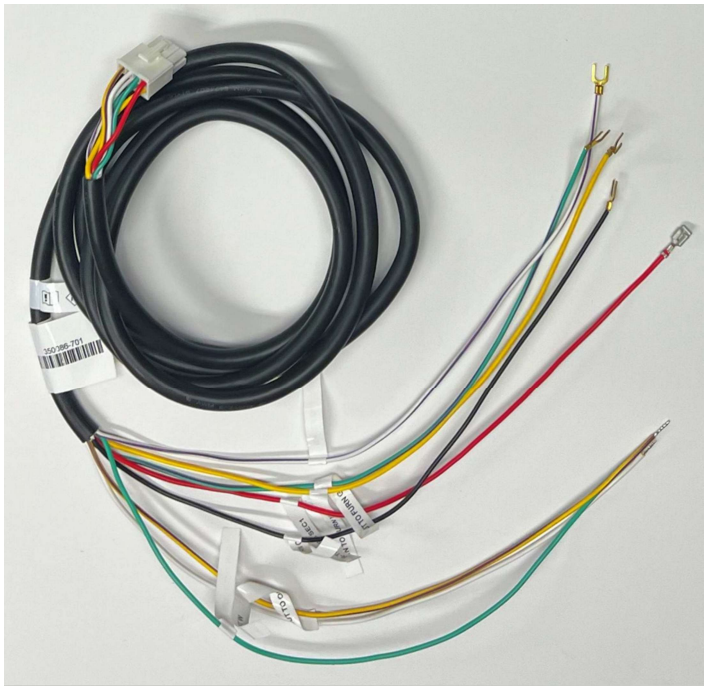
Control

Res. Indoor Coil Dissipation Board Overview

Main components:

Dissipation Board

Main Harness



Leak Sensor

Control

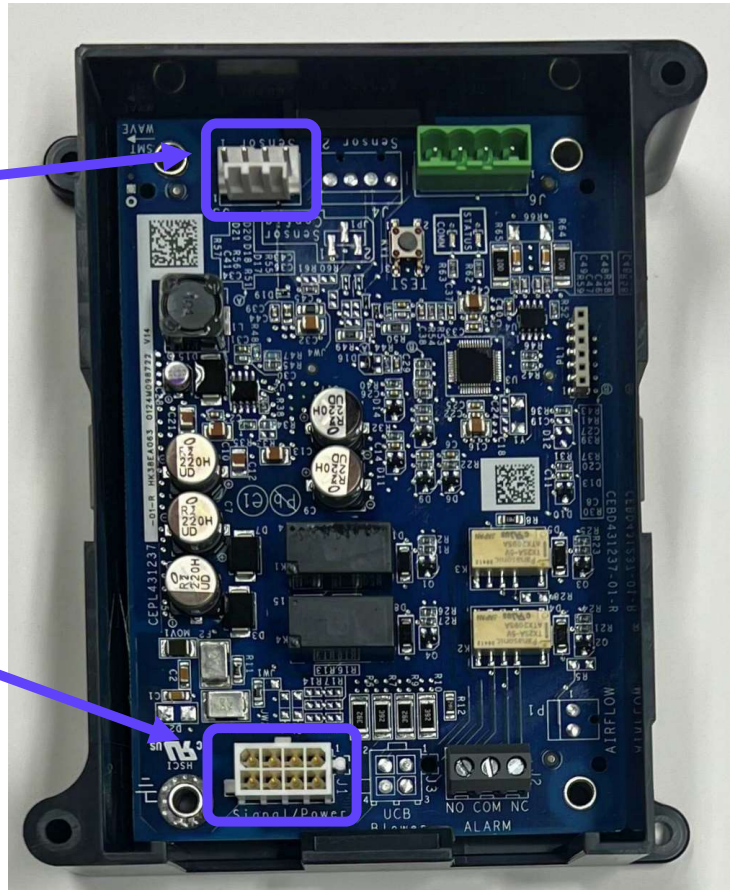
Dissipation Board Overview

Dissipation Board:

Sensor connection

Main harness connection

FLASH CODE CHART		
Yellow LED	**Reason**	**Mode**
Solid	Normal Operation	Normal Operation
Flashing 1	Sensor >= 20% LFL	Dissipation
Flashing 2	Sensor Open	Dissipation
Flashing 3	Normal Dissipation After Leak	Dissipation
Flashing 4	No Power to G Output	Dissipation w/o Blower
Flashing 5	Fault with A2L Digital Sensor	Dissipation
Flashing 6	Test Button Stuck (>30s)	Dissipation
Flashing 7	Y or W Wiring Inverted	Normal Operation
Flashing 8	Y or W Shorted	Normal Operation



Control

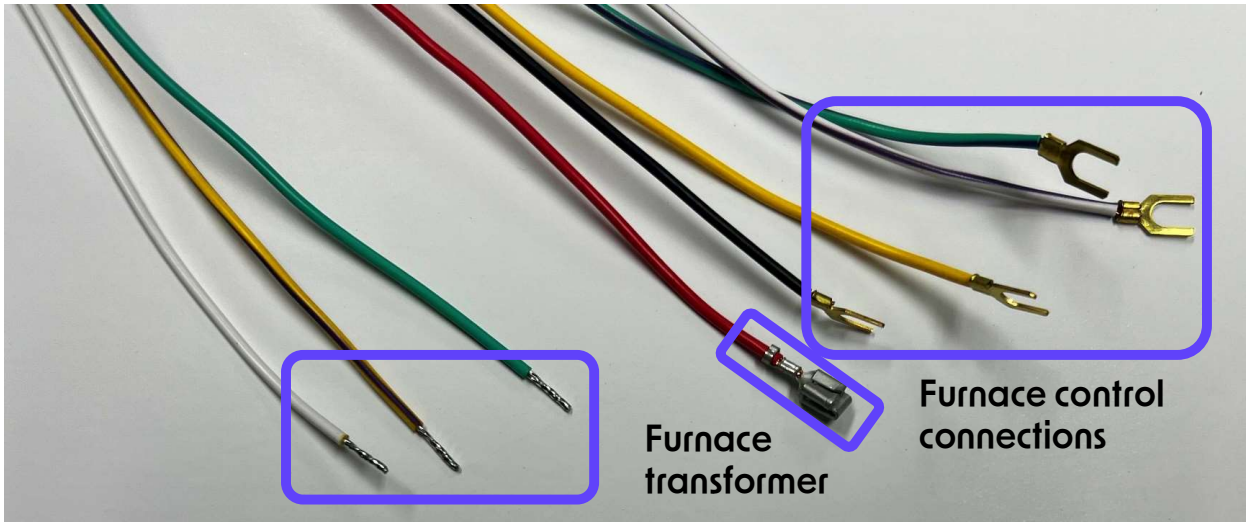
Dissipation Board Overview

Wire connections:

- Shipped with Indoor Coil.
- Designed to work with a Carrier or Bryant furnace.
- Make sure to review Installation Manual prior to connecting device.

PIN	COLOR	1-Stage Label	2-Stage Label
1	Red	to Furnace SEC1	to Furnace SEC1
2	Grn/Vio	to Furnace G	to Furnace G
3	White	to TSTAT W	to TSTAT W1
4	Yel/Vio	to OD unit Y	to OD unit Y1
5	Yellow	to Furnace Y	to Furnace Y1
6	Green	to TSTAT G	to TSTAT G
7	White/Vio	to Furnace W	to Furnace W1
8	Black	to Furnace C	to Furnace C
See Installation Instructions For Specific Details**			

350110-701 REV. C



Stat connections

Controls

Attention:
Thermostat must have Outdoor temp sensor for Dual Fuel Applications.

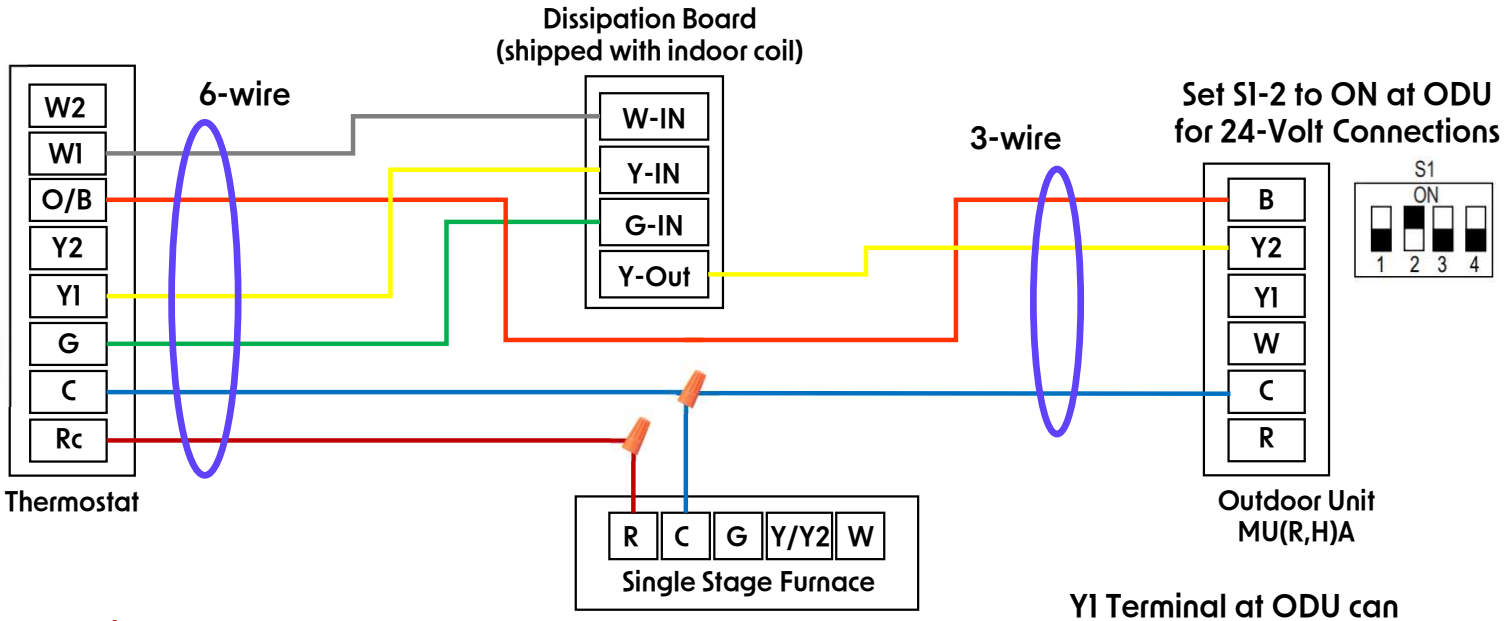
37MU(R,H)A & 1-Stage Furnace – Dual Fuel Applications

Includes Carrier/Bryant 2-Stage Gas Furnaces utilizing Comfort Heat Technology® or Adaptive Mode.

When setting up thermostat make sure to disable furnace and heat pump running at same time.

ecobee Cielo

2 Stage Heat & 1 Stage Cool
1 Stage Heat Pump
1 Stage Gas Furnace



Notes:
Factory wires from Diss. Board to Furnace not shown.
High Voltage wiring to equipment not shown.
Indoor Fan ON during Defrost.
Furnace will NOT operate during Defrost.

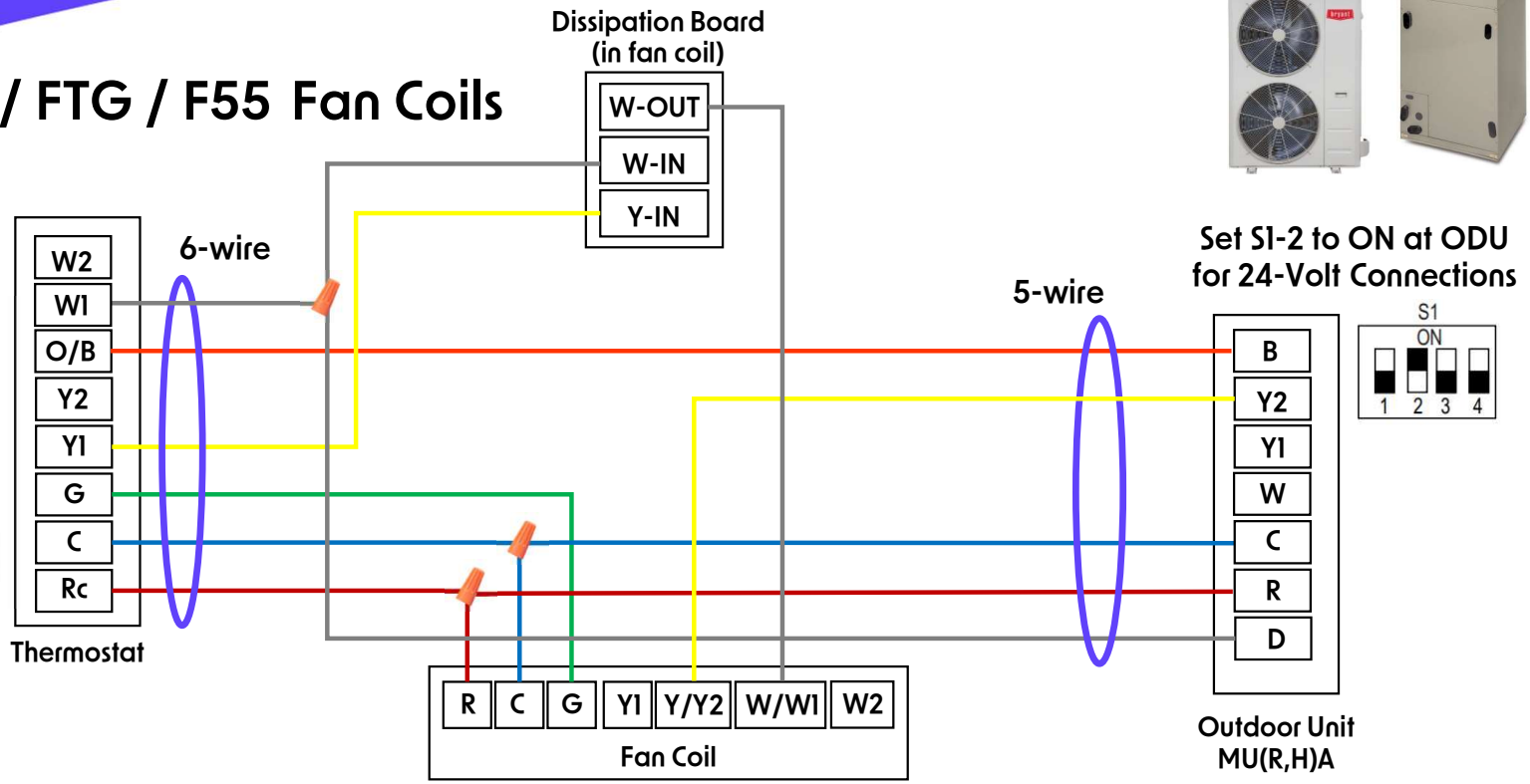
Y1 Terminal at ODU can be utilized instead of Y2 for slower ramp up rate.

Controls

37MU(R,H)A & FT5 / FTG / F55 Fan Coils

ecobee Cielo

2 Stage Heat & 1 Stage Cool
1 Stage Heat Pump
1 Stage Electric Heat



Set S1-2 to ON at ODU for 24-Volt Connections

Recommend "HP-EFF" setting on Easy Select Board during initial set up.

Y1 Terminal at ODU can be utilized instead of Y2 for slower ramp up rate.

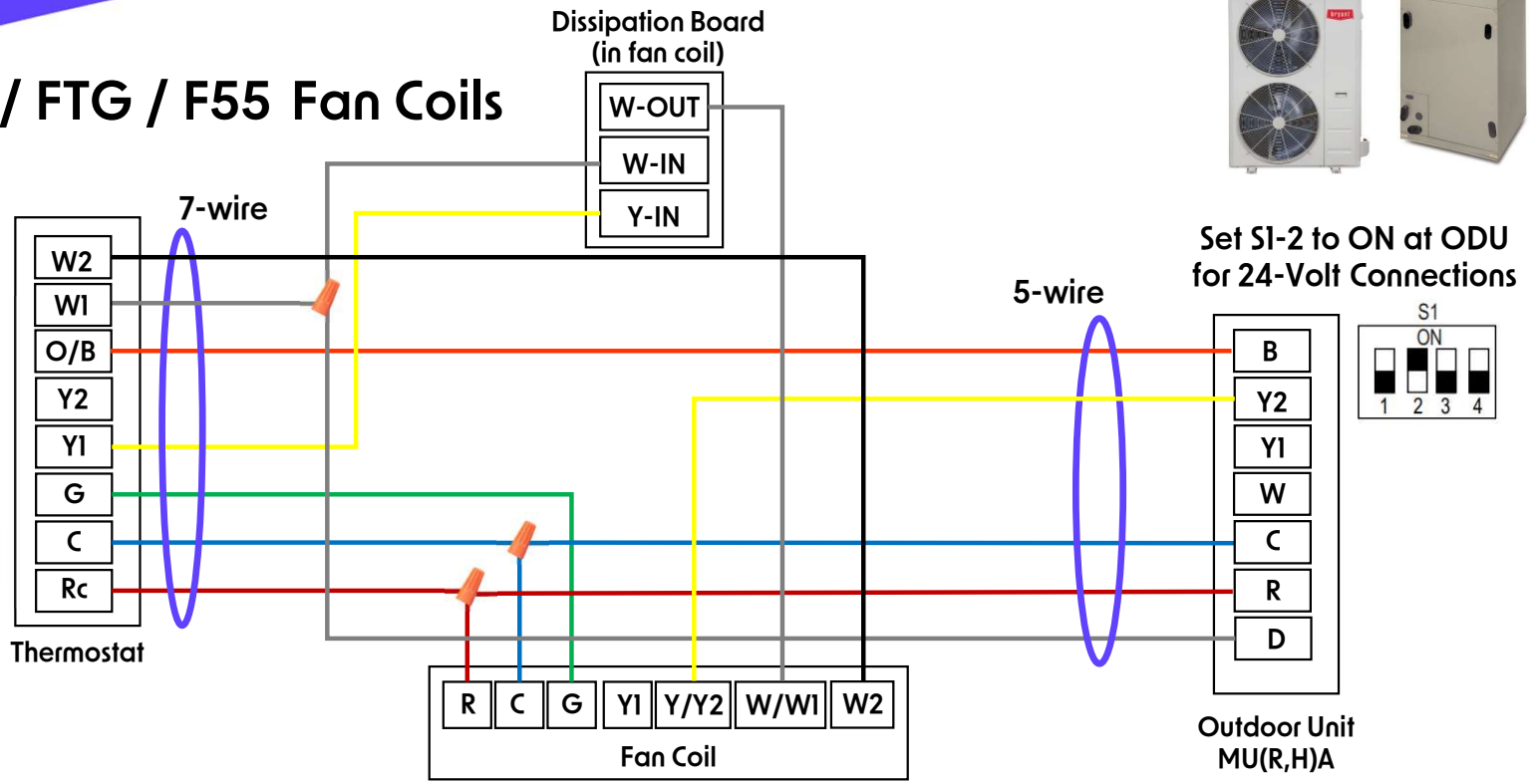
Notes:
Factory wires from Diss. Board to Fan Coil not shown.
High Voltage wiring to equipment not shown.
Indoor Fan ON during Defrost.
Electric Heat ON during Defrost.

Controls

37MU(R,H)A & FT5 / FTG / F55 Fan Coils

ecobee Cielo

3 Stage Heat & 1 Stage Cool
1 Stage Heat Pump
2 Stage Electric Heat



Recommend "HP-EFF" setting on Easy Select Board during initial set up.

Y1 Terminal at ODU can be utilized instead of Y2 for slower ramp up rate.

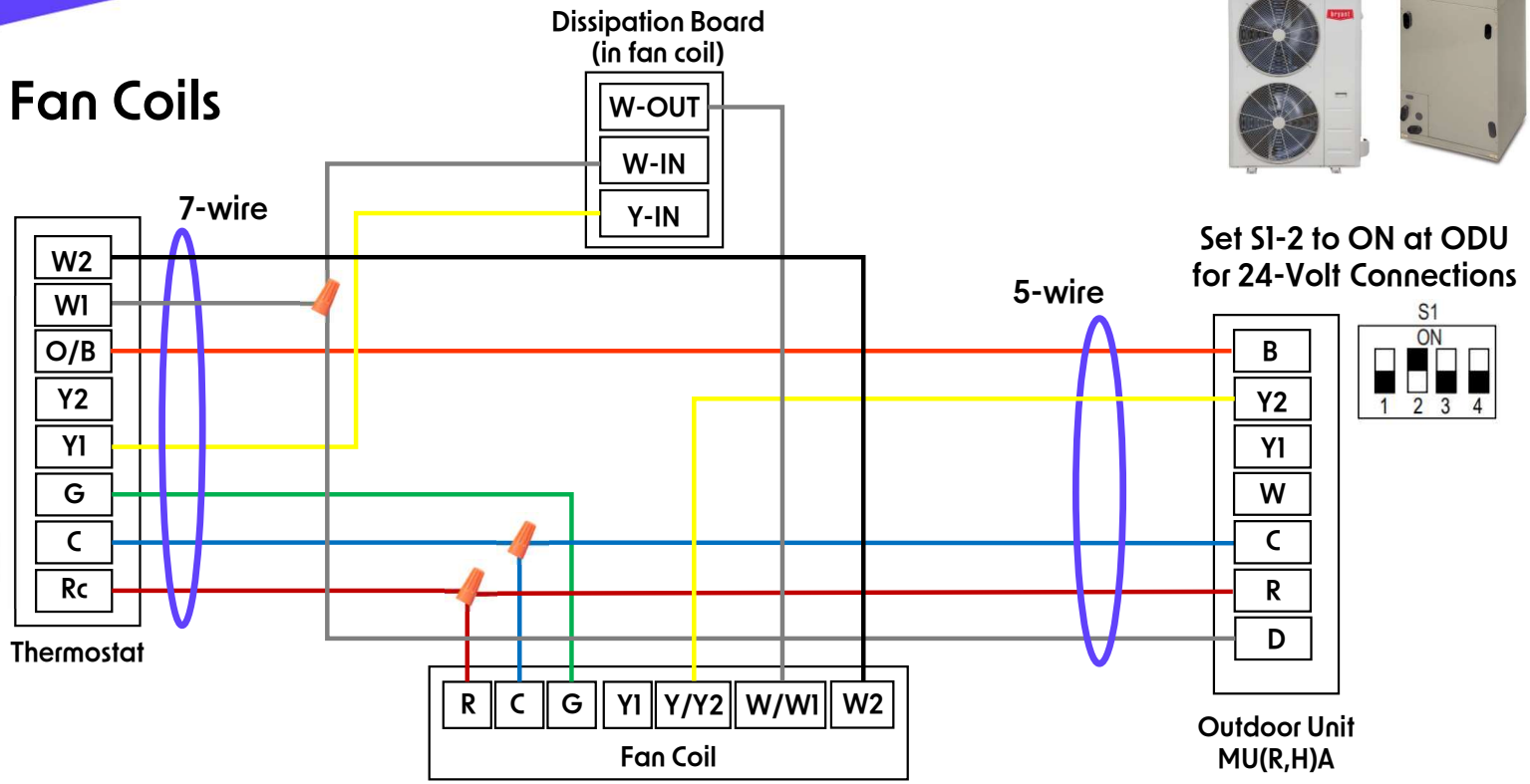
Notes:
Factory wires from Diss. Board to Fan Coil not shown.
High Voltage wiring to equipment not shown.
Indoor Fan ON during Defrost.
Electric Heat ON during Defrost.

Controls

37MU(R,H)A & F55 Fan Coils

ecobee Cielo

3 Stage Heat & 1 Stage Cool
1 Stage Heat Pump
2 Stage Electric Heat



Notes:
Factory wires from Diss. Board to Fan Coil not shown.
High Voltage wiring to equipment not shown.
Indoor Fan ON during Defrost.
Electric Heat ON during Defrost.

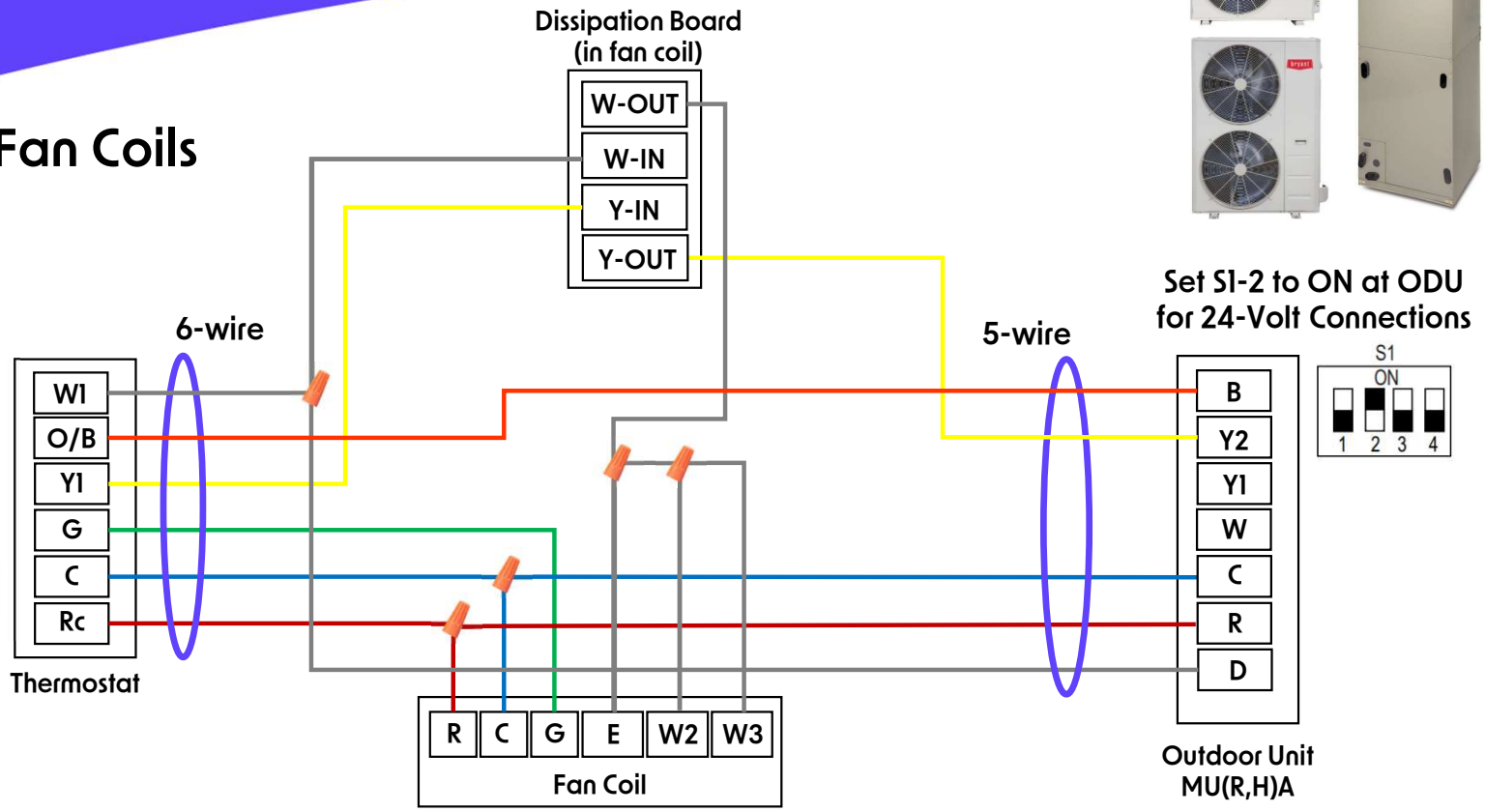
Y1 Terminal at ODU can be utilized instead of Y2 for slower ramp up rate.

Controls

37MU(R,H)A & FJ5 Fan Coils

ecobee Cielo

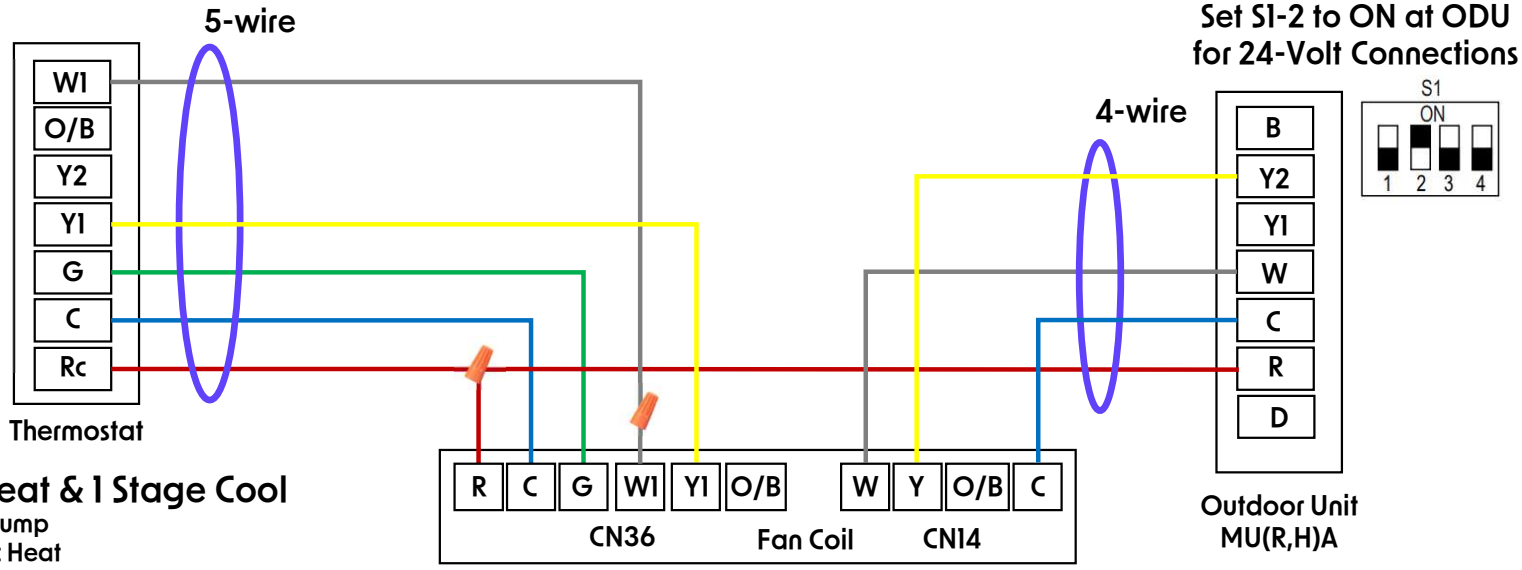
2 Stage Heat & 1 Stage Cool
1 Stage Heat Pump
1 Stage Electric Heat



Notes:
Factory wires from Diss. Board to Fan Coil not shown.
High Voltage wiring to equipment not shown.
Indoor Fan ON during Defrost.
Electric Heat ON during Defrost.

Controls

37MU(R,H)A & Multi-family Indoor Units
FMA5L(X) / FMC5X(Z) / FMU5X(Z) Fan Coils



Notes:
Dissipation board built-in to main PCB in fan coil.
High Voltage wiring to equipment not shown.
Indoor Fan ON during Defrost.
Electric Heat ON during Defrost.

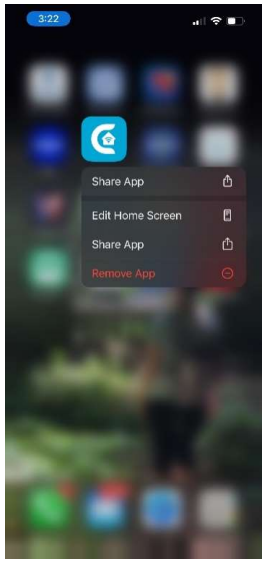
Y1 Terminal at ODU can be utilized instead of Y2 for slower ramp up rate.

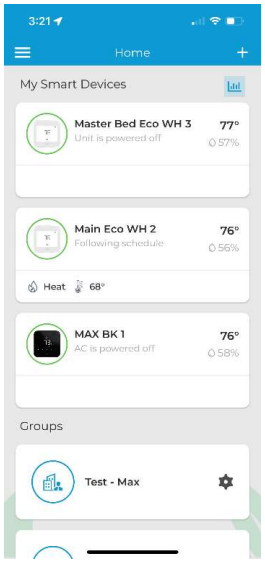
Controls

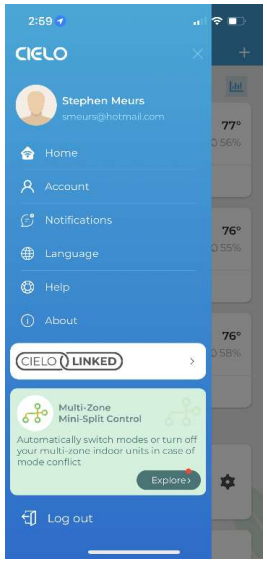
Ductless systems and Residential systems can talk without wires

Cielo's Linked feature can talk through the Cielo App
Decisions can change the other based on outdoor temp or state of other system and more.

Cielo Smart Thermostat
(24-Volt)







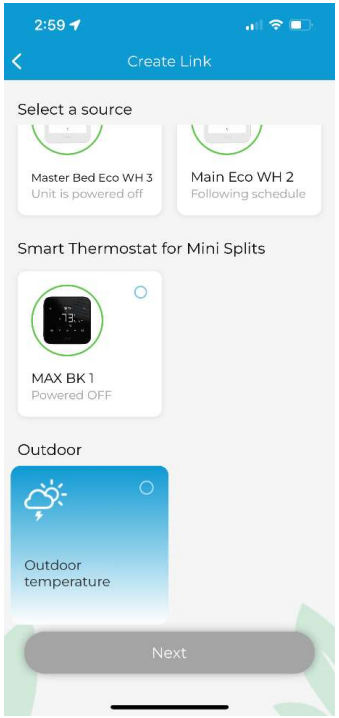
Cielo Breez Max
(DLS)

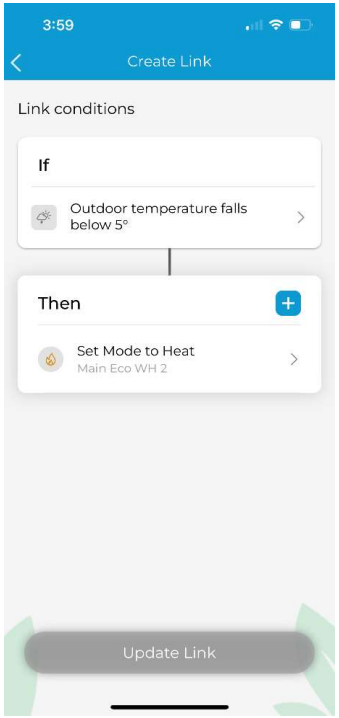
Controls

Ductless systems and Residential systems can talk without wires (end)

As you work your way through the decision-making process takes a few screens, but in the end a "Link conditions" screen shows you the rule. Think of it as "If this, then that". The rule can be toggled ON and OFF.

Cielo Smart Thermostat
(24-Volt)





Cielo Breez Max
(DLS)