

24V+485 AHU Wiring Connecting Guide

Technical Bulletin No. TB230427-03

Comfortstar AHU-SG2 wiring connecting guide

Scenario	Controller	Indoor unit	Connection between Indoor and outdoor	Outdoor unit	Comfortstar AHU-SG2 DIP switch		Comfortstar CPR ODU DIP switch
					SW1-1	SW1-4	S1-2
Scenario 1 (Recommend)	Comfortstar Wired controller (Standard)	Comfortstar AHU-SG2	RS485: S1/S2	Comfortstar CPR ODU	OFF (Default)	OFF (Default)	OFF (Default)
Scenario 2	24V Thermostat	Comfortstar AHU-SG2	RS485: S1/S2	Comfortstar CPR ODU	ON	OFF (Default)	OFF (Default)
Scenario 3	24V Thermostat	Comfortstar AHU-SG2	24V: R/C/B/Y1/Y2/G/ W	Comfortstar CPR ODU	ON	ON	ON
Scenario 4	24V Thermostat	Comfortstar AHU-SG2	24V: R/C/B/Y1/Y2/G/ W	The third party ODU	ON	ON	n/a
Scenario 5	24V Thermostat	The third party AHU or A-COIL	24V: R/C/B/Y1/Y2/G/ W	Comfortstar CPR ODU	n/a	n/a	ON

TECHNICAL BULLETIN

Scenario 1: Standard and Recommend

Comfortstar
Wired controller
(Standard)

HA/HB
+

Comfortstar AHU-
SG2 Indoor unit

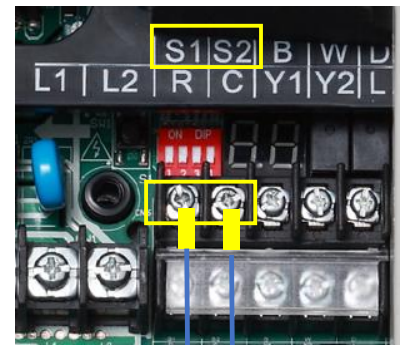
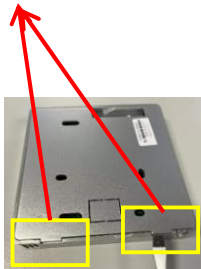
S1/S2
+

Comfortstar CPR
Outdoor unit



Package with indoor unit

Open the
rear cover



S1/S2



HA/HB

ComfortStar®

Air Conditioning & Heating Products

TECHNICAL BULLETIN

Scenario 2:

24V Thermostat

24V
+

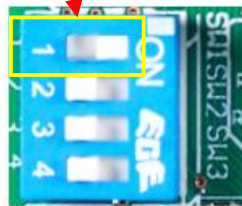
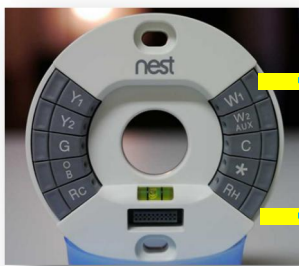
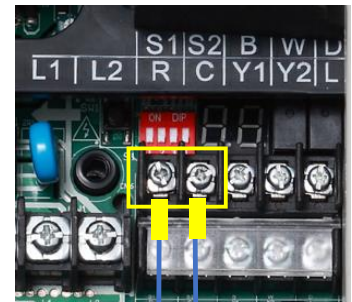
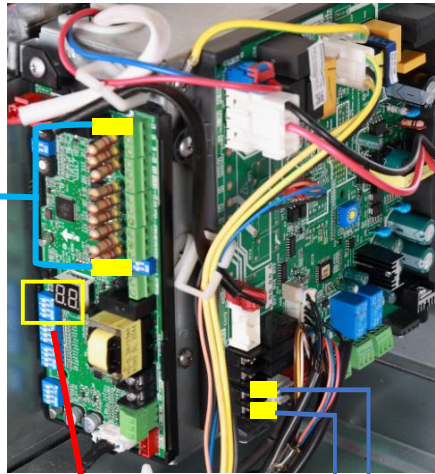
Comfortstar AHU-
SG2 Indoor unit

S1/S2
+

Comfortstar CPR
Outdoor unit



24V



SW1-1 dip switch to be "ON"

Note: Need to set the dip switch before the unit power on.

Nest 24V thermostat as a example

Scenario 3:

24V Thermostat

24V
+

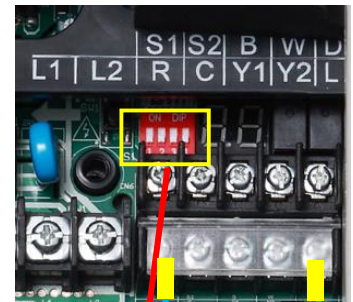
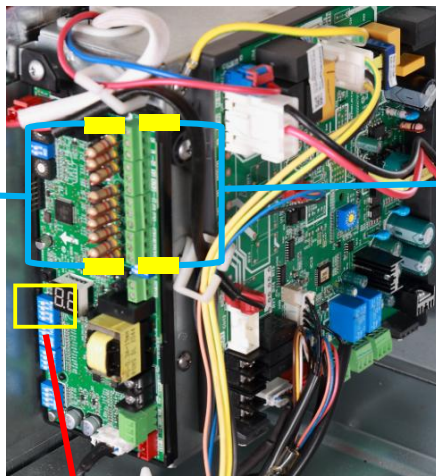
Comfortstar AHU-
SG2 Indoor unit

24V
+

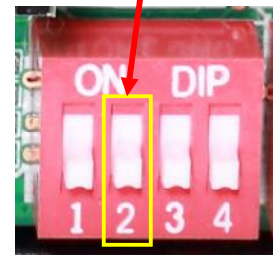
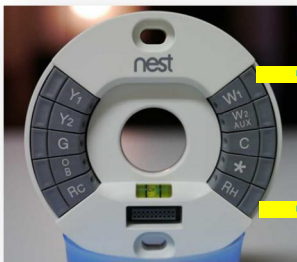
Comfortstar CPR
Outdoor unit



24V



24V



**Nest 24V thermostat
as a example**

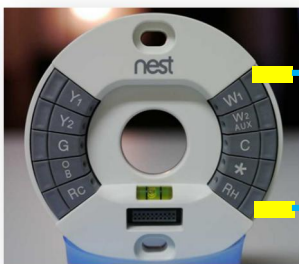
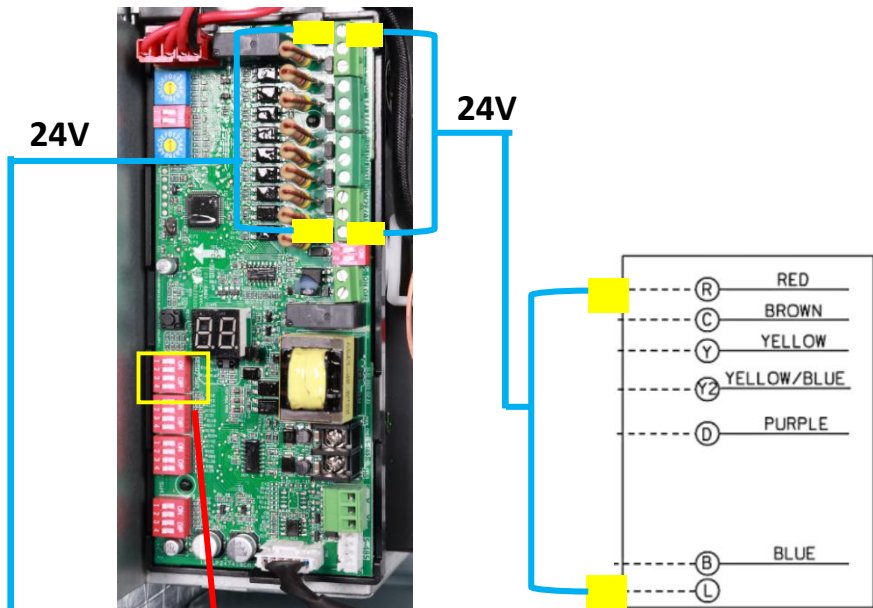
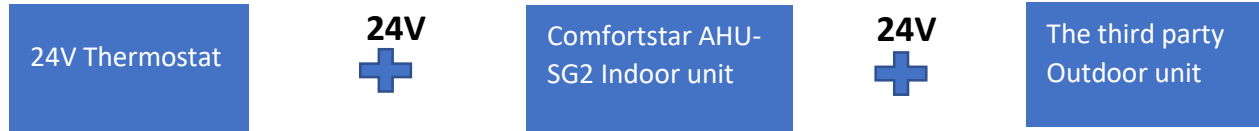
**SW1-1 dip switch to be "ON"
SW1-4 dip switch to be "ON"**

**S1-2 dip switch to
be "ON"**

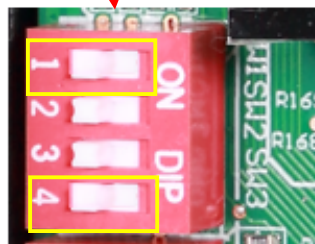
**Note: Need to set the dip switch
before the unit power on.**

TECHNICAL BULLETIN

Scenario 4:



Nest 24V thermostat as a example



**SW1-1 dip switch to be "ON"
SW1-4 dip switch to be "ON"**

Note: Need to set the dip switch before the unit power on.

TECHNICAL BULLETIN

Scenario 5:

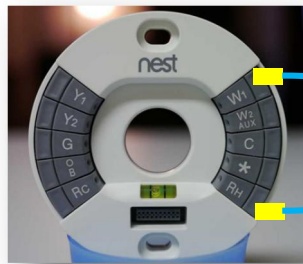
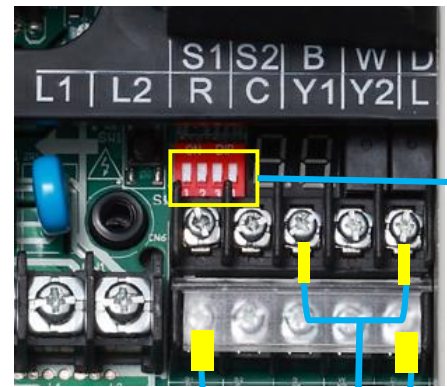
24V Thermostat

24V
+

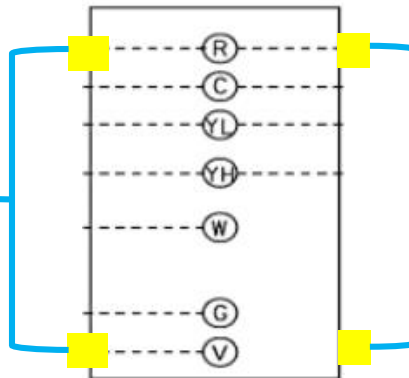
The third party
Indoor unit

24V
+

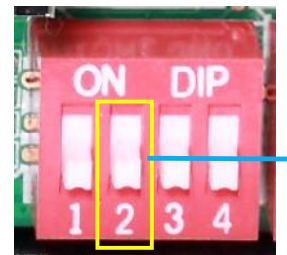
Comfortstar CPR
Outdoor unit



24V



24V



S1-2 dip switch to be "ON"

Note: Need to set the dip switch before the unit power on.