SERVICE AND APPLICATION NOTES
Setting Blower Operation and Relocating T1 Sensor

Issue: SW2 located on the Indoor Units PCB can be configured to cycle the blower during periods of Thermal Off.
When SW2 is set so that the blower cycles during periods of Thermal Off, it is necessary to relocate the return air sensor (T1) to a location inside of the conditioned space. During heating mode, the T1 sensor can still read trace amounts of hot gas circulating through the indoor coil providing satisfactory room temperature readings to the IDU PCB.

Solution: Whenever the indoor unit blower is set to cycle during periods of Thermal Off, relocate the return air senor (T1).

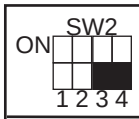
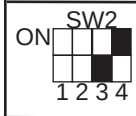
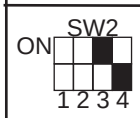
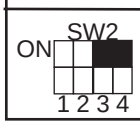
Setting Blower Operation

Phase 1 Indoor Unit Blower Configuration

For phase 1 indoor units, SW2 located on the Indoor Units PCB can be configured to cycle the blower during periods of Thermo OFF.
NOTE - *To ensure room temperature accuracy The T1 sensor (room temperature sensor) should be relocated when cycling the blower as the indoor unit can no longer sample the air temperature.*

1. Select the appropriate dip switch configuration using the table below.

SW2 Blower Cycle Setting

	Cooling Thermo OFF - Blower ON Heating Thermo OFF - Blower ON
	Cooling Thermo OFF - Blower ON Heating Thermo OFF - Blower OFF
	Cooling Thermo OFF - Blower OFF Heating Thermo OFF - Blower ON
	Cooling Thermo OFF - Blower OFF Heating Thermo OFF - Blower OFF

NOTE - *Dip switch handle location is shown as a solid black box in the table above.*

2. Locate SW2 on the main board.
3. Move the SW2 dip switch handles to match the chosen configuration.

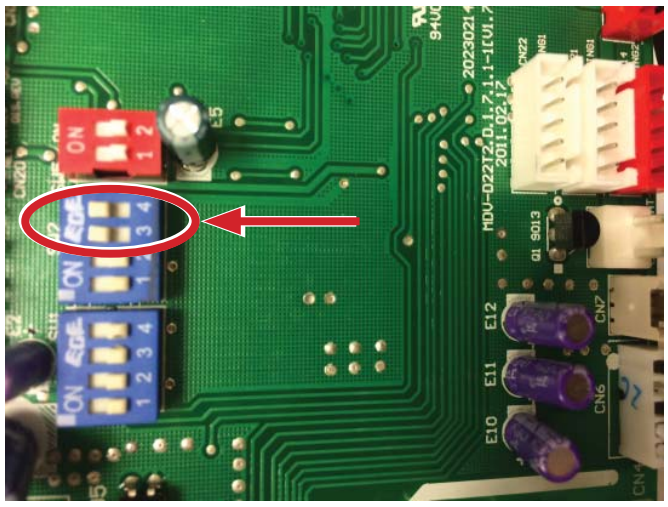


Photo shown is configured to cycle the blower during periods of heating and cooling thermal off.

Figure 1. SW2 Dip Switch

Phase 2 Indoor Unit Blower Configuration
Blower cycling must be configured at the phase 2 controller. SW2 cannot be configured at the indoor unit PCB.

V0STAT51P-2 Instructions

1. Tap the Menu button on the Home screen.
2. Tap the Service button and then enter your password.
3. Tap the Indoor Fan button.
4. **Cooling -** Tap the Fan ON button (default) to make the indoor unit fan continue to run when the cooling setpoint is satisfied. Tap the Fan OFF button to make the indoor unit fan stop running when the cooling setpoint is satisfied. ***NOTE -*** *The default setting, Fan On, is recommended for highest efficiency.*
5. **Heating -** Tap the Fan ON button (default) to make the indoor unit fan continue to run when the heating setpoint is satisfied. Tap the Fan OFF button to make the indoor unit fan stop running when the heating setpoint is satisfied.

   NOTE - *The default setting, Fan On, is recommended for highest efficiency.*

   NOTE - *Controller requires confirmation that fan operation may stop when using alternate heat connected through the HHE Relay Kit Four Dry-Contact board.*

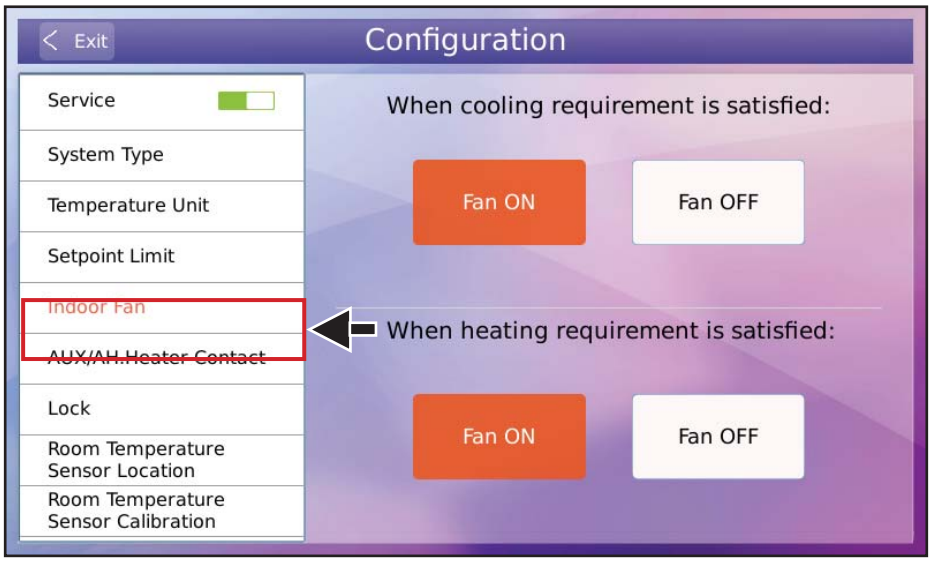


Figure 2. Set Fan Control

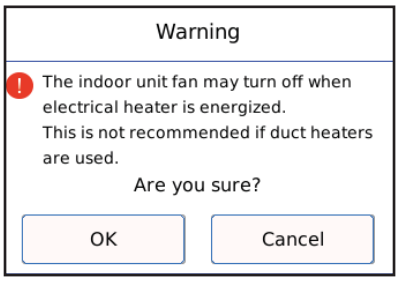


Figure 3. Confirm Heating Fan Off

V0STAT54P-2 Instructions

1. Press and hold the Fan speed button and the Mode button for 5 seconds to access the controller settings.
2. Press the Up-arrow or Down-arrow buttons until FC (Cooling Thermo OFF) or FH (Heating Thermo OFF) is displayed. See table below.
3. Press the Up-arrow or Down-arrow buttons to toggle between settings.
4. Press the Fan speed button to accept the setting.
5. Press the Power button to restart controller.

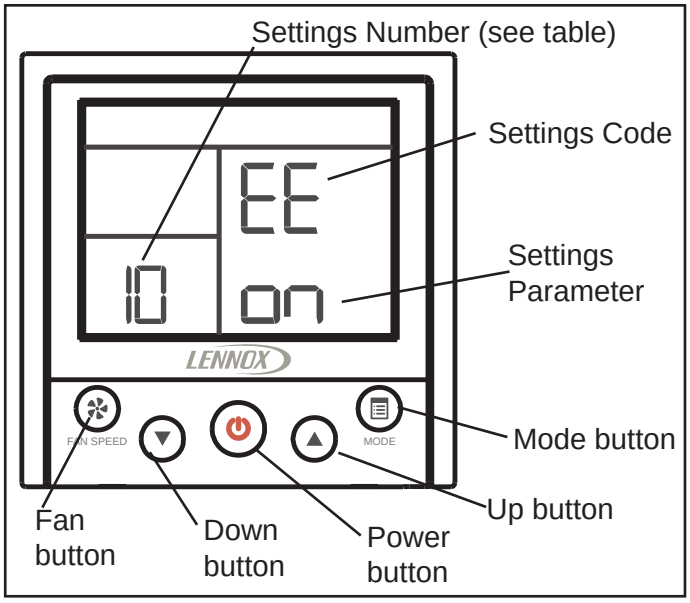


Figure 4. Adjust Blower Settings

Code	Function	Settings No.	Value	Note
FC	Set indoor unit fan ON/OFF when cooling requirement is satisfied.	A0	on (default)	Keeps the indoor fan on when cooling setpoint is satisfied.
		A1	off	Turns the indoor fan off when cooling setpoint is satisfied.
FH	Set indoor unit fan ON/OFF when heating requirement is satisfied.	b0	on (default)	Keeps the indoor fan on when heating setpoint is satisfied.
		b1	--	Turns the indoor fan off when heating setpoint is satisfied.

NOTE - FH code only. *Simultaneously press the Fan Speed, Down-Arrow, Up-Arrow and Mode buttons to toggle between "on" and "--".*

Relocate T1 Sensor

Relocate T1 Sensor

This sensor can be extended with 18 AWG stranded shielded cable.

1. Identify the T1 connection on the main board - CN4.(white wires soldered to PCB)

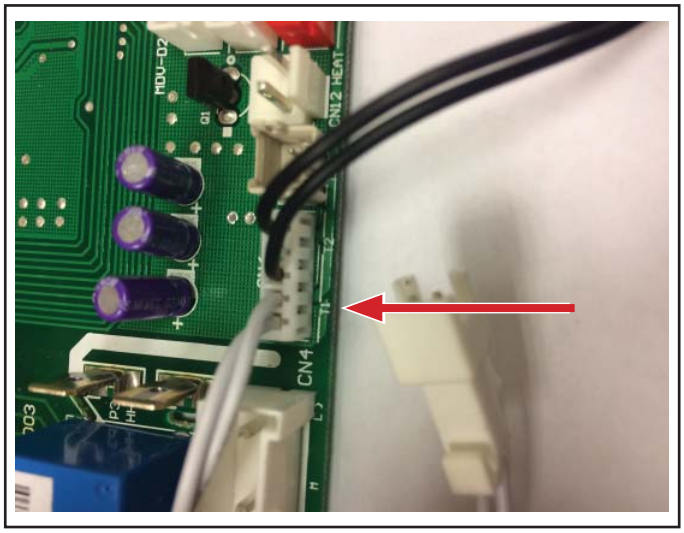


Figure 5. Identify T1 Sensor Connection on PCB

2. Identify where the white wire is plugged into the black wire.

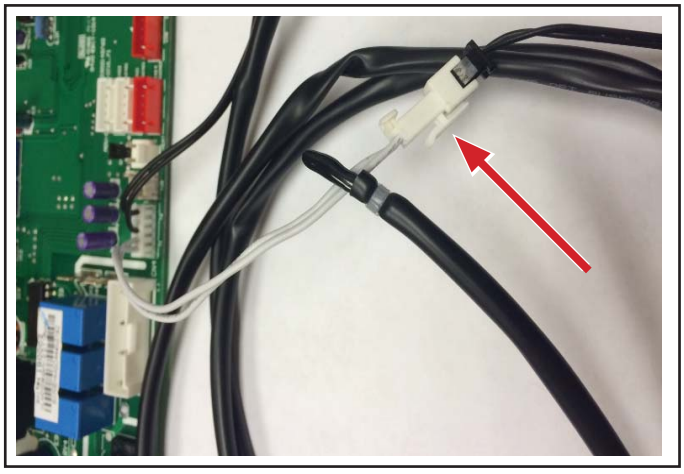


Figure 6. Identify White Plug into Black Wire

3. Cut the black wire between the plug and the sensor thermistor. Leave adequate room for making wiring connections on each end.

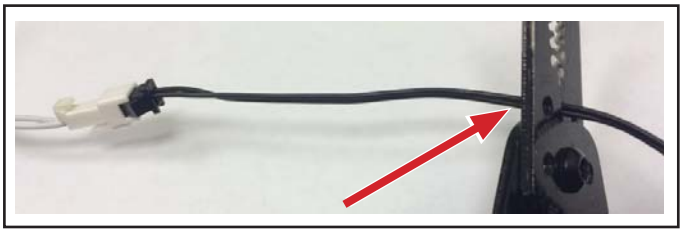


Figure 7. Cut the Black Wire

4. Prepare the 18 AWG stranded shielded extension cable.
5. Solder the extension cable to the black wire on each end or use the VRF accessory V0SN-SR00P to splice in the extension cable.
6. Locate the thermistor to the conditioned area of which the indoor unit serves.

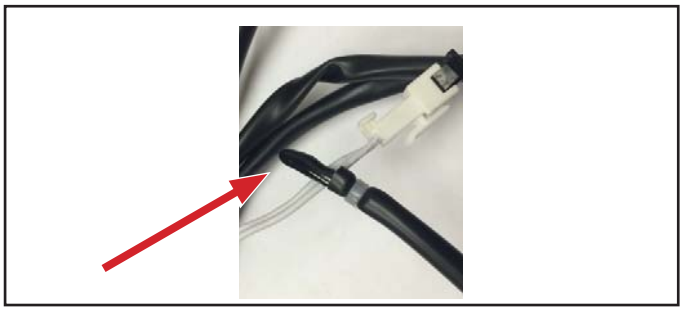
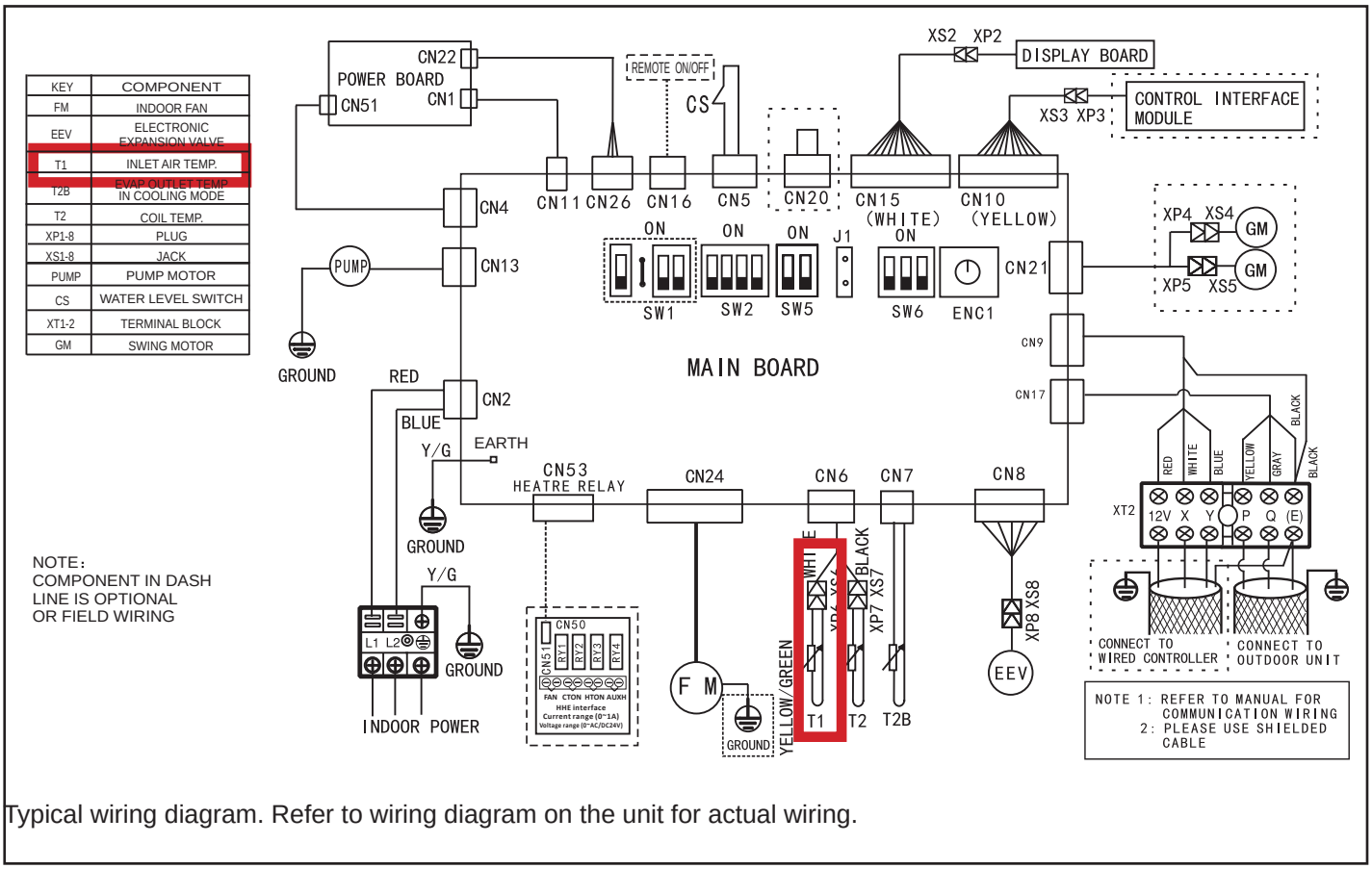


Figure 8. Sensor Thermistor

⚠ IMPORTANT

Avoid installing sensor in high load or heat loss areas such as exterior walls or walls that are against unconditioned spaces,
near entry doors and windows, or where direct sunlight may be present.



Typical wiring diagram. Refer to wiring diagram on the unit for actual wiring.

Figure 9. Typical Indoor Unit Wiring Diagram

V33A Shown

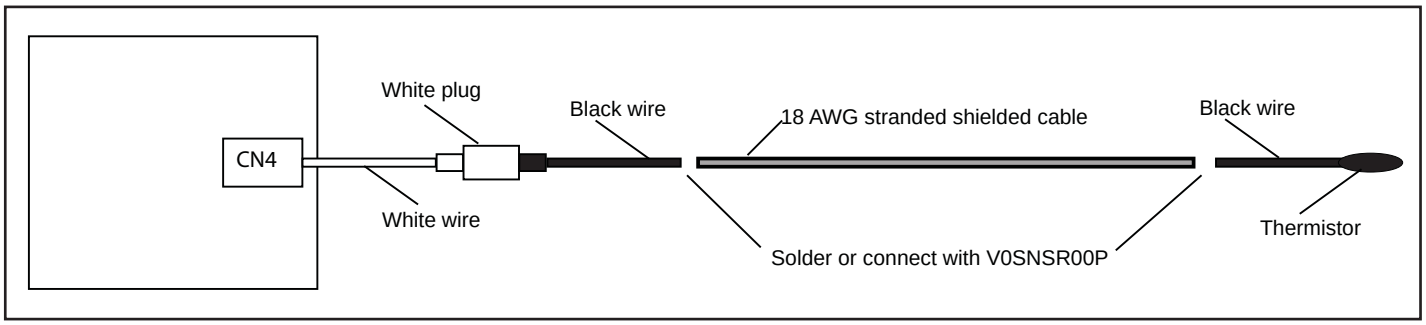


Figure 10. Typical Wiring Connections