

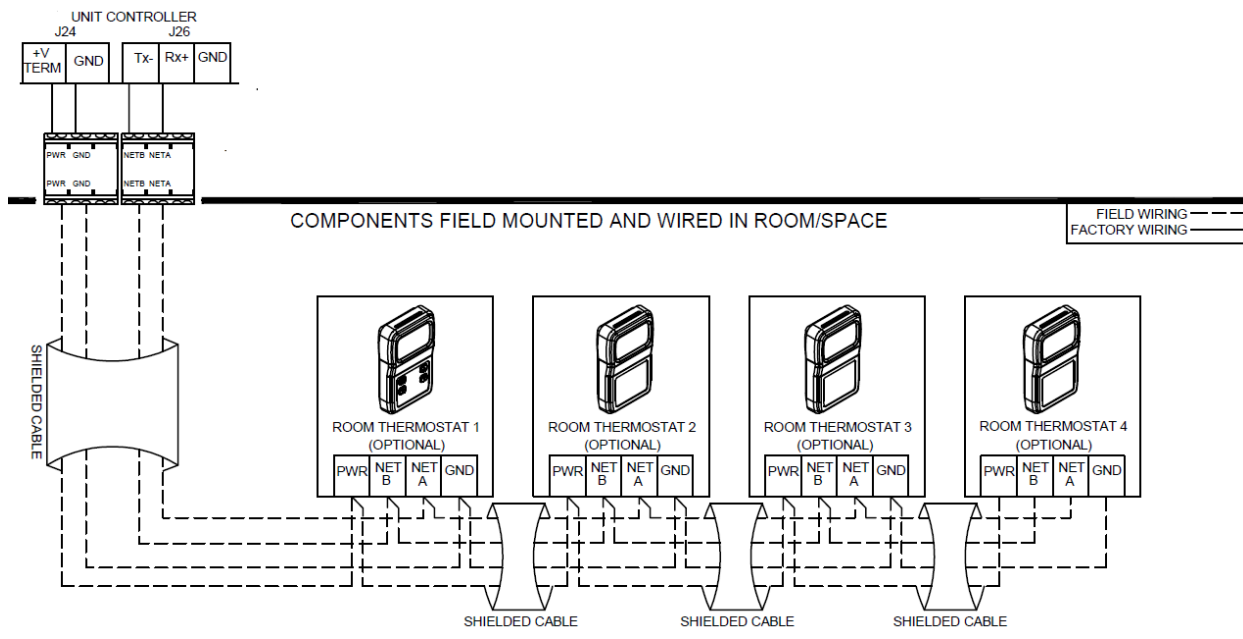
Frequently Asked Questions

How do I install my BAPI Modbus space thermostats?

Wiring:

Notes:

- Use twisted, shielded pair of at least 22AWG and sealant-filled connectors for all wire connections.
 - o A larger gauge wire may be required for long runs.
- All wiring must comply with local codes and National Electric Code (NEC).
- Do NOT run this device’s wiring in the same conduit as AC power wiring.
 - o BAPI’s tests show that fluctuating and inaccurate signal levels are possible when AC power wiring is present in the same conduit as the signal lines. If you are experiencing any of these difficulties, please contact your BAPI representative.



1. If the unit was ordered with a Modbus stat, there will be a set of terminal blocks in the controls section for wiring the first thermostat to. These will be labeled PWR, GND, NET A, and NET B. There will matching terminations on the BAPI stat. Connect PWR on the thermostat to PWR on the terminal block, GND on the thermostat to GND on the terminal block, etc.

2. If the unit was NOT ordered with the thermostat, and it is being added in the field, there will be no terminal blocks provided. This means the wiring will need to be landed directly at the controller. If you have a c.pCO controller by Carel (not the c.pCO mini), the wiring will be as follows.
 - a. PWR and GND will land on J24 of the controller. PWR goes to +Vterm and GND goes to GND.
 - b. NET A and NET B land on J26 of the controller. NET A lands on Rx (+) and NET B lands on Tx (-)
3. If you are installing more than one thermostat, the thermostats should be wired in a daisy chain per the diagram above. This will average the thermostats' temperatures. Thermostat 1 should be wired to the controller, thermostat 2 to thermostat 1, thermostat 3 to thermostat 2, etc.

Thermostat Addressing/Setup:

1. All Modbus thermostats require their address to be set via dipswitches on the back of the thermostat.
 - a. To access these dipswitches, the Allen screw on the bottom of the thermostat must be loosened.
2. Thermostat addresses should be set based on the table below.
 - a. **NOTE:** The table mentions switch numbers. These are the ADDRESS switch numbers (highlighted in the picture below), NOT the dip switch numbers that increase down the left-hand side of the switches.

Space Thermostat Modbus Address				
	T-Stat 1 (Display)	T-Stat 2	T-Stat 3	T-Stat 4
Address in Microprocessor	10	11	12	13
Dip Switch Set on Stat	Sw 2 + Sw 8	Sw 1 + Sw 2 + Sw 8	Sw 4 + Sw 8	Sw 1 + Sw 4

3. Units ordered with Modbus thermostats will have microprocessor settings set at the factory to allow the microprocessor to communicate with the thermostat. If the BAPI stats were not ordered with the unit and these are being added in the field, then these settings will need to be adjusted manually. To add Modbus thermostats to the microprocessor:
 - a. Press the Main Menu button (Middle Left - Bullseye)
 - b. Use the Up/Down arrows to select Ctrl Variables, and hit Enter (Middle Right – Between Up/Down Buttons)
 - c. Use the Up/Down arrows to select Temp Control and hit Enter
 - d. Use the Up/Down arrows to go to the page that says “Modbus Thermostats”
 - e. Press Enter to select the quantity of thermostats, then use Up/Down to select the appropriate amount. Hit Enter to save your settings.

