

Air Conditioning/Heat Pump Coils with A2L Sensor

ACIQ-24-ACL-B ACIQ-24-ACL-14-B ACIQ-36-ACL-B
ACIQ-36-ACL-17-B ACIQ-48-ACL-B ACIQ-60-ACL-B

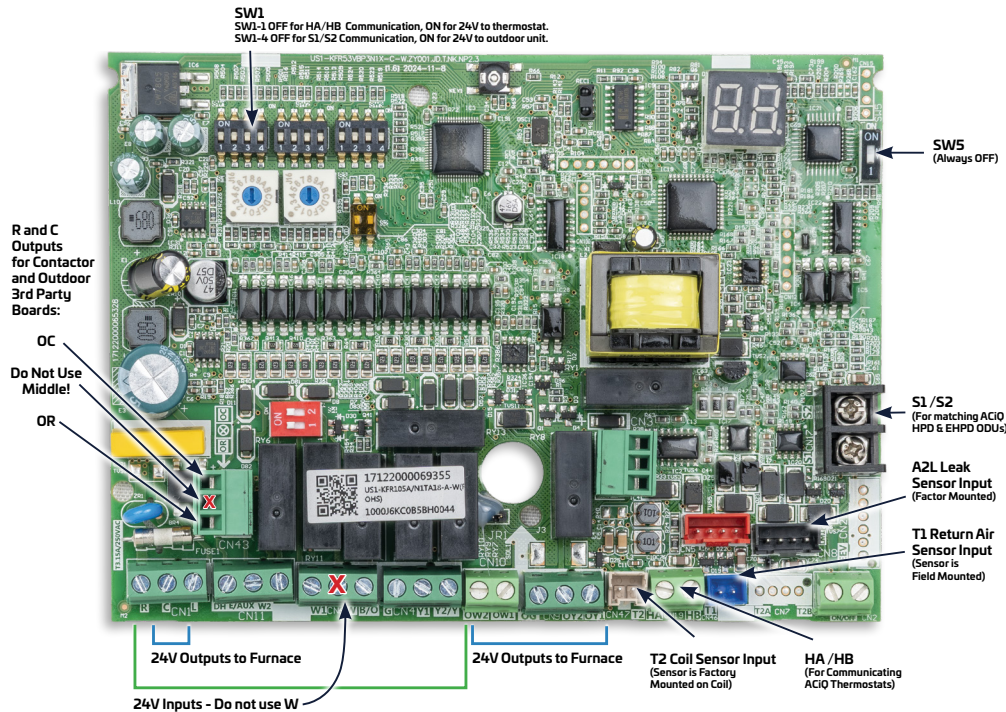


This Quick Start Guide covers the basics on how to connect the thermostat, condenser, and gas furnace to the A2L mitigation board that came with your AC Coil ensure proper communication. It is not meant to replace the entire installation manual. Please reference install manual for in depth instructions or use the QR code.



Wiring Diagrams and Connections

The ACIQ A2L Mitigation Board supports multiple wiring configurations based on the thermostat, indoor equipment, and outdoor unit being installed. This guide covers the three most common installation methods: 2-Wire to 2-Wire, 7-Wire to 2-Wire, and 7-Wire to 7-Wire. Select the method that matches your system, then follow the corresponding wiring diagram and DIP switch settings. For applications outside of these common wiring scenarios, contact ACIQ Tech Support for additional installation options.



OPTION A: 2 wire Indoor/mit | 2 wire Stat | 2 wire Outdoor

2-WIRE TO 2-WIRE INSTALLATION: COMMUNICATING THERMOSTAT & ACIQ OUTDOOR UNIT

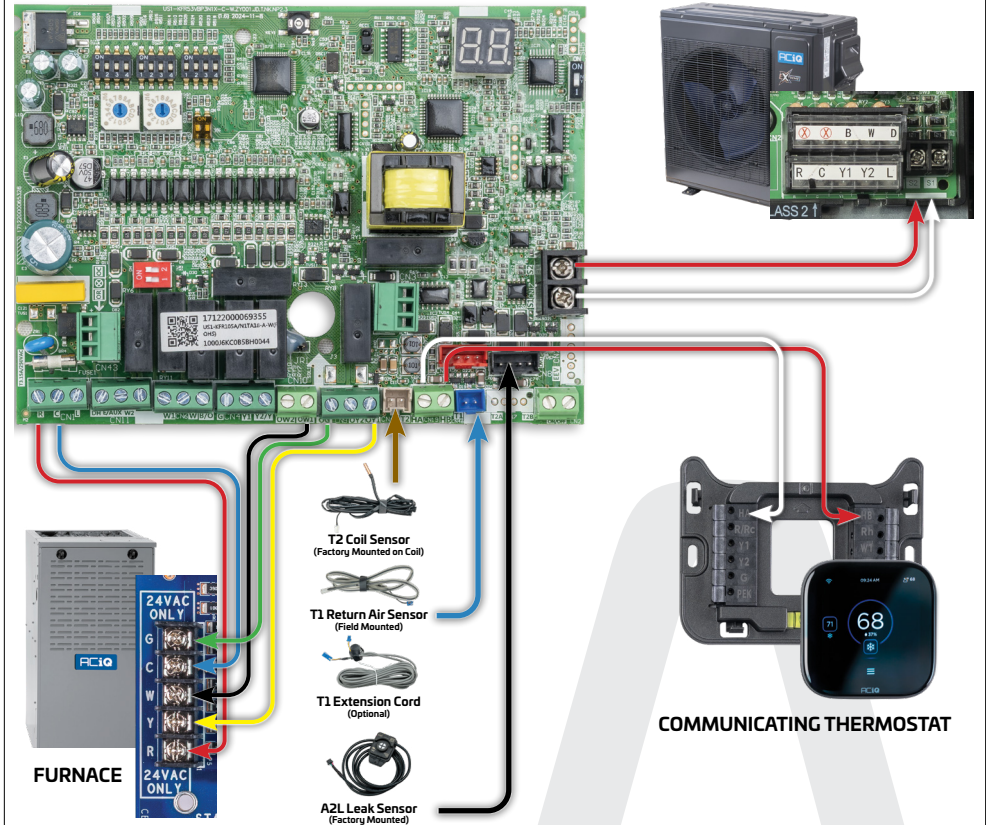
This is the simplest installation method, with 2 wires from the thermostat to the mitigation board, and to the ODU. 5 wires connect between the mitigation board and furnace.

- STEP 1** Connect the T2 coil sensor, A2L leak detection sensor, and field mounted T1 sensor to A2L board.
- STEP 2** Connect 2-wire cable to the HA/HB terminals to the thermostat.
- STEP 3** Connect 2-wire cable to the S1/S2 terminals on the condenser.
- STEP 4** Connect 24V wires to the furnace, starting with OW1, OG, OY, then R,C.

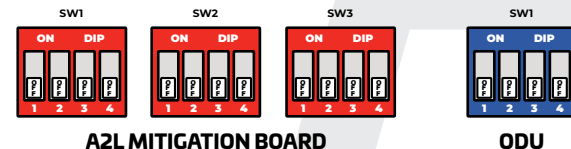
INSTALLATION SITUATION	THERMOSTAT CONTROLLER	CONNECTION BETWEEN MITIGATION BOARD & T-STAT	CONNECTION BETWEEN MITIGATION BOARD & ODU	CONNECTION BETWEEN MITIGATION BOARD & FURNACE	MITIGATION BOARD DIP SWITCH		ODU DIP SWITCH
					SW1-1	SW1-4	
2-WIRE/2-WIRE INSTALLATION	ACIQ COMMUNICATING THERMOSTATS (KJR-120N, KJR-120X, TL04-1)	2-wire (HA/HB)	2-wire (S1/S2)	5-wire (24V) G/C/W/Y/R	OFF	OFF	S1-2 (OFF (Default))

A2L MITIGATION CONTROL BOARD/COIL

ACIQ INVERTER CONDENSER



STEP 5 Set the dip switches.



IMPORTANT! Power must be OFF before DIP switch changes.

OPTION B: 7 wire Indoor/mit | 7 wire Stat | 2 wire (Communication) Outdoor

7-WIRE TO 2-WIRE INSTALLATION: 24V THERMOSTAT & ACIQ INVERTER OUTDOOR UNIT

This installation method uses a standard 24V thermostat with an ACIQ inverter outdoor unit. Seven wires connect the thermostat to the mitigation board, two communication wires connect the mitigation board to the outdoor unit, and five wires connect between the mitigation board and furnace.

STEP 1 Connect the T2 Coil Sensor, A2L leak Detection Sensor, and field mounted T1 Sensor to A2L Board.

STEP 2 Connect 7-wire cable to the R, Y1, G, W1, C, O/B terminals to the thermostat.

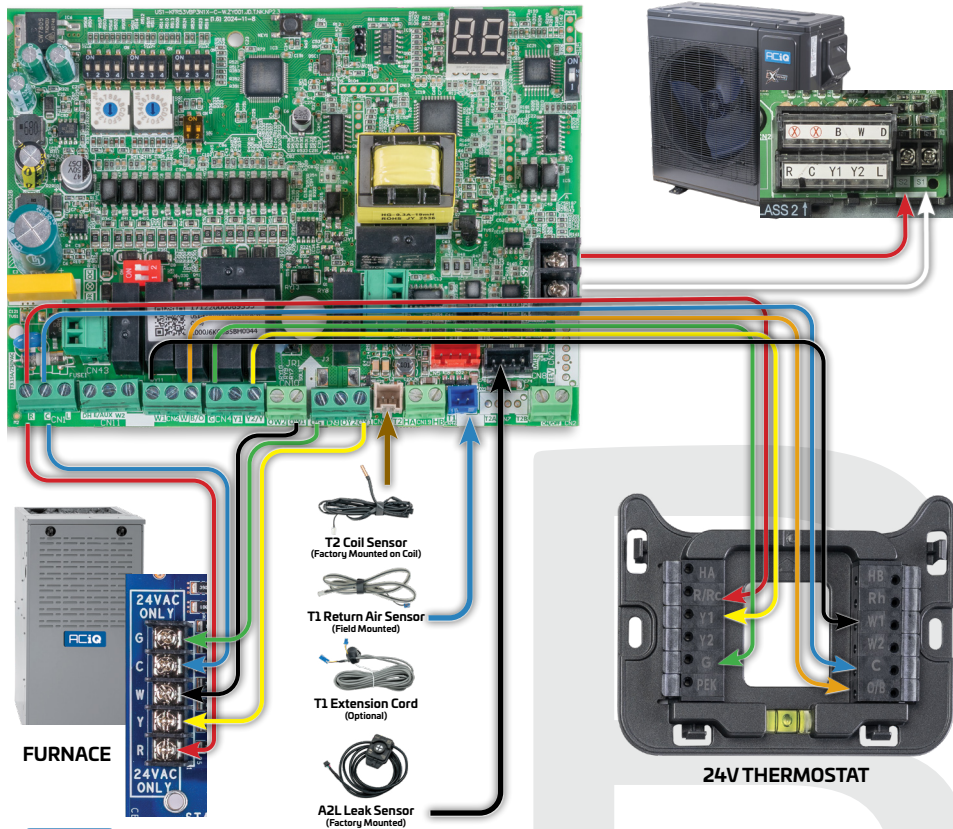
STEP 3 Connect 2-wire cable to the S1/S2 terminals on the condenser.

STEP 4 Connect 24V wires to the furnace, starting with OW1, OG, OY, then R, C.

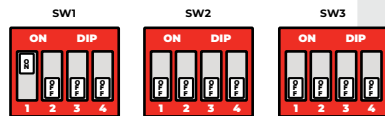
INSTALLATION SITUATION	THERMOSTAT CONTROLLER	CONNECTION BETWEEN MITIGATION BOARD & T-STAT	CONNECTION BETWEEN MITIGATION BOARD & ODU	CONNECTION BETWEEN MITIGATION BOARD & FURNACE	MITIGATION BOARD DIP SWITCH		ODU DIP SWITCH
					SW1-1	SW1-4	
7-WIRE/2-WIRE INSTALLATION	24V STANDARD THERMOSTAT	7-wire (24V) R/Y1/G/W1/C/O(B)	2-wire (S1/S2)	5-wire (24V) G/C/W/Y/R	ON	OFF	OFF (Default)

AL2 MITIGATION CONTROL BOARD/COIL

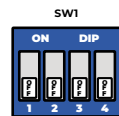
ACIQ INVERTER CONDENSER



STEP 5 Set the dip switches.



A2L MITIGATION BOARD



ODU

IMPORTANT! Power must be OFF before DIP switch changes.

OPTION C: 7 wire Indoor/mit | 7 wire Stat | 2 wire (Non-Communication) Outdoor

7-WIRE TO 7-WIRE INSTALLATION: 24V THERMOSTAT & 3RD PARTY OUTDOOR UNIT

This installation method uses a standard 24V thermostat with a conventional 24V outdoor unit. Seven wires connect the thermostat to the mitigation board, two wires connect the mitigation board to the outdoor unit, and five wires connect between the mitigation board and furnace.

STEP 1 Connect the T2 Coil Sensor, A2L leak detection sensor, and field mounted T1 Sensor to A2L Board.

STEP 2 Connect 7-wire cable to the R, Y1, G, W1, C, O/B terminals to the thermostat.

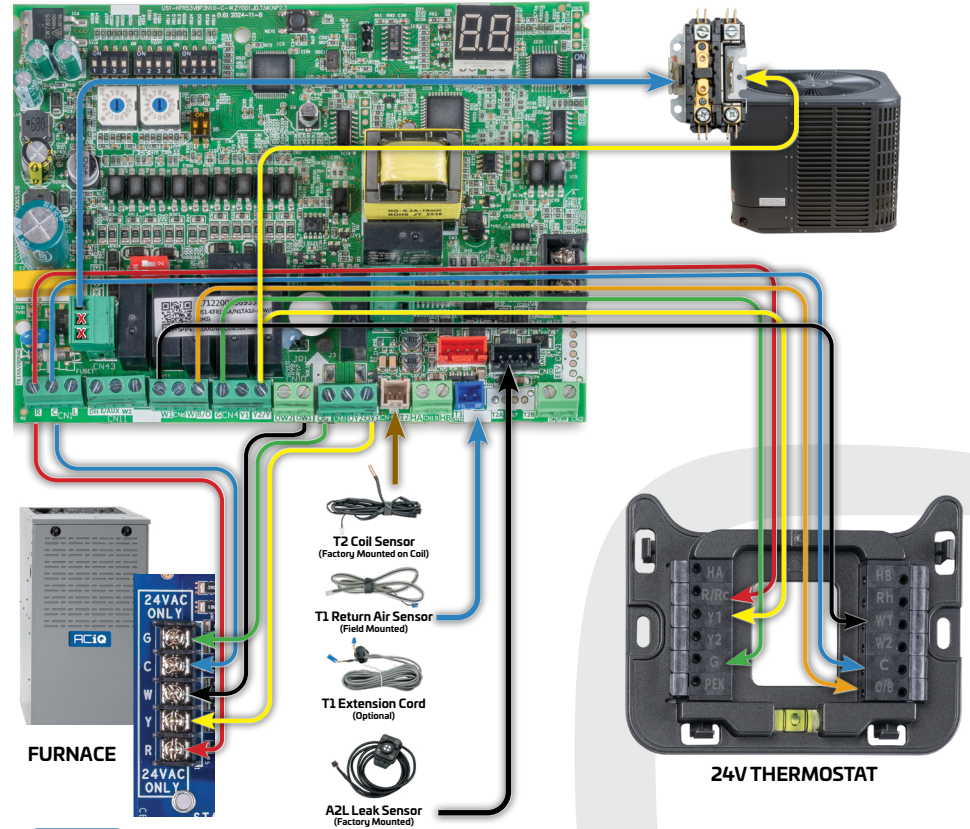
STEP 3 Connect 7-wire cable to the condenser terminals on the condenser.

STEP 4 Connect 24V wires to the furnace, starting with OW1, OG, OY, then R, C.

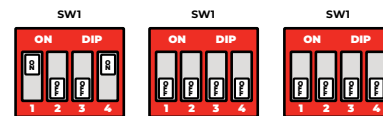
INSTALLATION SITUATION	THERMOSTAT CONTROLLER	CONNECTION BETWEEN MITIGATION BOARD & T-STAT	CONNECTION BETWEEN MITIGATION BOARD & ODU	CONNECTION BETWEEN MITIGATION BOARD & FURNACE	MITIGATION BOARD DIP SWITCH		ODU DIP SWITCH
					SW1-1	SW1-4	
7-WIRE/7-WIRE INSTALLATION	24V STANDARD THERMOSTAT	7-wire (24V) R/Y1/G/W1/C/O(B)	2-wire (AC Only Contactor)	5-wire (24V) G/C/W/Y/R	ON	ON	ON

AL2 MITIGATION CONTROL BOARD/COIL

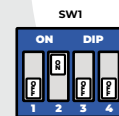
AC ONLY CONDENSER CONTACTOR



STEP 5 Set the dip switches.



A2L MITIGATION BOARD



ODU

NOTE: If using ACIQ outdoor matched system in 24 volt mode then all dip switches off except 1-2 is set to ON.

IMPORTANT! Power must be OFF before DIP switch changes.