SALUS®
OPTIMA S THERMOSTAT INSTALLATION GUIDE
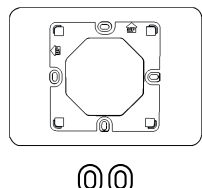
IN THE BOX YOU WILL FIND THE FOLLOWING:

Thermostat with Mounting Plate	Wall Plate 2 x Wall Plate Spacers	2 x Wood Screws 2 x Wall Anchors 2 x Locking Pins	Wire Labels	2 x AA Alkaline Batteries	User Manual	Installation Guide
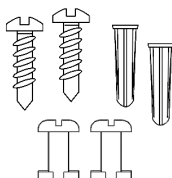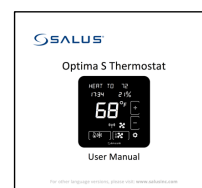
Wire Labels table:

| Heat Pump HP (Wiring label)		Gas or Electric Non-HP (Wiring label)	
R	R	RC	RC
C	C	RH	RH
L	L	C	C
Y1	Y1	Y1	Y1
Y2	Y2	Y2	Y2
W1	W1	W1	W1
O/B	O/B	W2	W2
G	G	G	G

YOU WILL NEED THE FOLLOWING TOOLS:

- #1 Phillips or flathead screwdriver
- Drill with 3/16" bit
  (only if you cannot mount the thermostat using the existing holes)

Optional Tools
- Smartphone or digital camera to take picture of wiring for later reference
- Screwdriver to disconnect wires from old thermostat
- Pencil

STEP 1
TURN OFF POWER TO THE HVAC SYSTEM

or
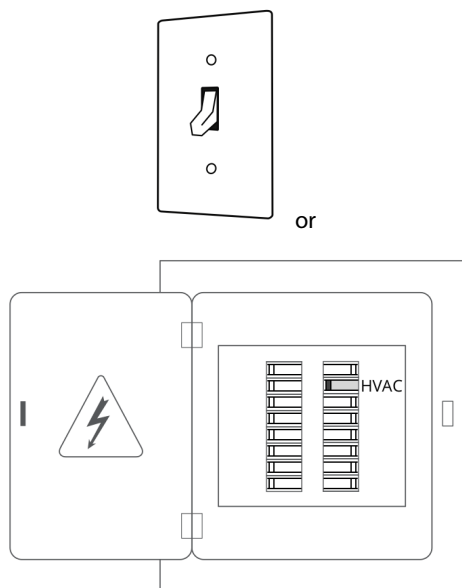
STEP 2
DETERMINE WIRING CONFIGURATION

Use the Wire Labels and the following table to keep track of wire colors on the old thermostat or on the heat pump / furnace / air conditioner.

HP	NON-HP	Wire Color
R	R or RH	
---	RC	
C		
Y or Y1		
Y2		
AUX	W or W1	
O/B	W2	
G		
L	---	

For new installations, refer to Appendix A and the "Install Mounting Plate" sections of the *Optima S User Manual*.

STEP 3
REMOVE OLD THERMOSTAT

Remove the old thermostat from the wall, taking care not to allow the wiring to fall inside the wall.

TIP: Wrap the wire ends around a long stick (such as a pencil) to keep the wires from falling into the wall.

Wrap wires around a pencil

Label each wire to the corresponding terminal
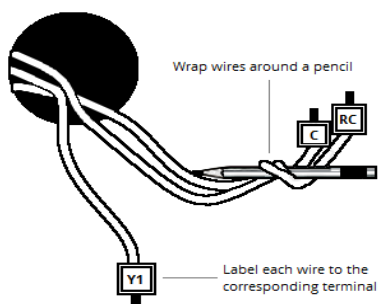
STEP 4
INSTALL MOUNTING PLATE

If there is space on the wall that needs to be covered, insert the Wall Plate between the Mounting Plate and the wall, and mount both plates using the same screws.

Make sure the wires run through the center opening.

or

Spacers
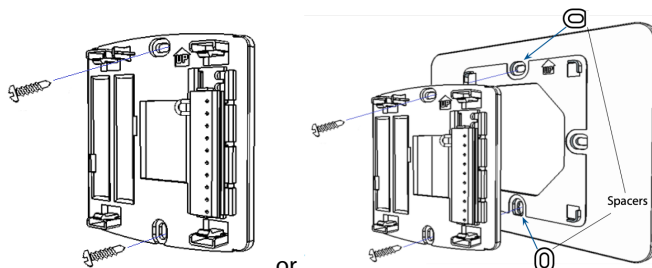
STEP 5
ATTACH WIRING

- Using the labels, match the wires to the appropriate terminal.
- For each wire, press the terminal button and fully insert the wire into the side hole.
- Release the terminal button to secure the wire.
- If you have RC and RH wires, remove the jumper betweeen RC and RJP.
- ST898ZBR works as a router and requires RH/RC and C-wire.
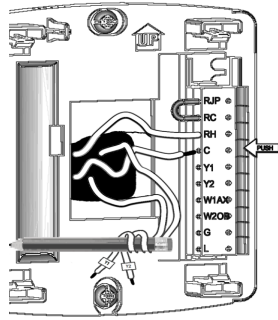
STEP 6
CONNECT THE BATTERIES

Pull the battery tab from the back of the thermostat to activate the batteries.

- If the C wire is connected, the thermostat will draw power from the AC connection and use the batteries as backup.
- Battery-only operation typically lasts 18 months.
- ST898ZBR works as a router and cannot run on batteries.
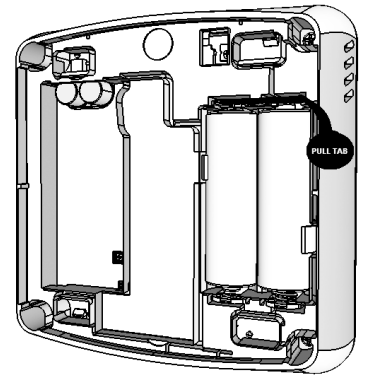
## STEP 7
ATTACH THERMOSTAT TO MOUNTING PLATE

After the initial configuration, the home screen will be displayed, and the thermostat is ready to be attached to the Mounting Plate.

Align the connector pins and the plastic retention posts, then push the thermostat onto the Mounting Plate.

Make sure the connector pins are not bent and that the **thermostat is fully seated** on the Mounting Plate.

STEP 8
TURN POWER BACK ON TO THE HVAC SYSTEM
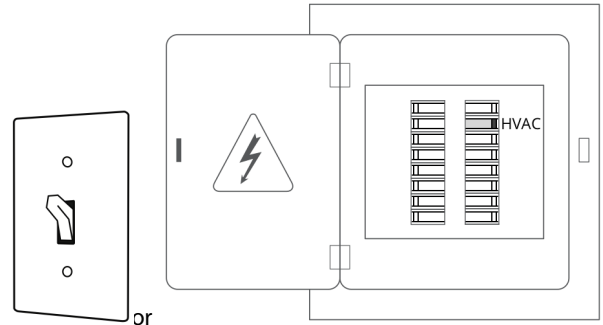
STEP 9
INITIAL CONFIGURATION

After initial power-up, the thermostat will attempt to pair with a network for 10 minutes. **You may need to initiate scanning for devices in your connected home system.** Once paired, canceled with the Down button (X), or timed out, the device will ask for the following initial settings.

To move forward and back through the Settings menu and make any changes to the settings, the buttons function as follows:

Touch Button	Type	Action
⚙ Settings	--	Enter Settings menu, Save and go to next parameter setup
+ or ⬆/⬇	Short	Increment parameter value by 1
	Long	After long press time, increment by 1 at 4 Hz rate while key remains down
-	Short	Decrement parameter value by 1
	Long	If applicable, decrement value by 1. After long press time, decrement by 1 at 4 Hz rate while key remains down
▬ Back	--	Save and go to previous parameter setup

After 30 seconds of no user input, changes will be saved, and the device will return to Home screen.

Configuration Parameters

See "Configuring the Thermostat" section in the *Optima S User Manual* for more details.

EQPT TYP-	Choose HVAC Type
REVERS VALVE-	Set Reversing Valve
FAN CNTL-	Select fan control
AUX FUNC-	Auxiliary Relay function
AUX ACTIVE-	Auxiliary Relay operation
TEMP SEL-	Internal or remote temperature sensor
INT TEMP OFFST	Internal temperature sensor offset
RMT TEMP OFFST	Remote temperature sensor offset
DLTA 1ST STAGE	Heating differential 1st stage
DLTA 2ND STAGE	Heating differential 2nd stage
DLTA 1ST STAGE	Cooling differential 1st stage
DLTA 2ND STAGE	Cooling differential 2nd stage °

OPTIONAL STEP
CONFIGURE THE NEW THERMOSTAT

Settings that can be changed include:

Y1Y2 MIN OFF T	Compressor protection.
FAN DELAY	Fan Delay after cooling stops.
HEAT MAX SETPT	Max Heating Set point
COOL MIN SETPT	Min Cooling Set point
DEAD BAND	Dead band value is used for Auto mode.
SET FROST TEMP	Frost setpoint
HEAT PROTECT	Heat Protect Setpoint
LOCK SRC-	Key Lock Source (Device+App or App Only)
LCK-	Key Lock Type (Mode / FAN / Set Pt / Param / Combinations)
DEGREE UNITS	C/F Selection
BRIGHTNESS	Set display brightness
DISPLAY ON-	Display On Time in seconds
LANGUAGE-	Language Selection
24 HOUR CLOCK	Time Display Format
SHOW HUMIDITY	Show or hide humidity reading
HUMIDITY SETPT	Humidity Set Point
TIME	Set Time and Date (see note)
DST ADJUST	Enable Day Light Saving (see note)
SET YEAR	Set Year (see note)
DATE M/D-	Set Month and Date (see note)
EDIT-	Display current schedule mode:
LOCK KEYS?	To lock and unlock the keypad
IDENTIFY?	Identify devices on the shared channel
JOIN NETWORK?	Initiate Join to available network
NEW NETWORK?	Delete network and Join new network
FACTORY RESET?	Reset to Factory default settings

Note: These settings will not appear if you are connected to the Internet.