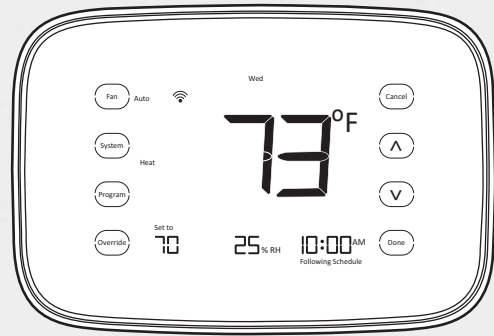**autani** building controls

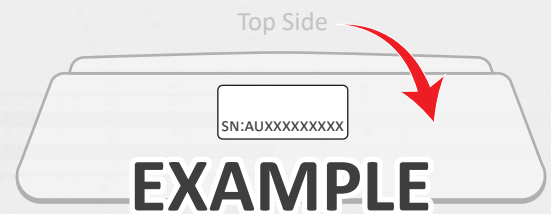### Model #
1000172-01

1

On the provided list of thermostat serial numbers, document the location for each thermostat.
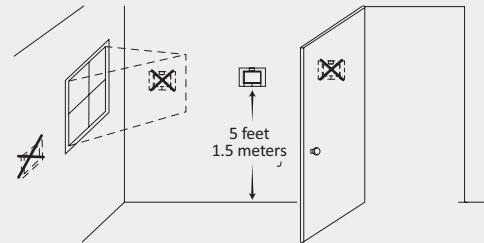
Top Side

SN:AUXXXXXXXX

EXAMPLE

2
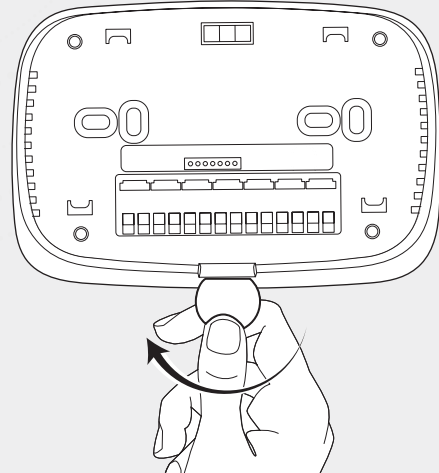
Insert a small coin (dime) in the release slot on the bottom of the thermostat and gently twist the coin to release the thermostat from the wall plate.

3

Selecting Location for Mounting

Install the thermostat about 5 feet (1.5m) above the floor in an area with good air circulation at average temperature.


5 feet
1.5 meters

Do not install the thermostat where it can be affected by:

☐ Drafts or dead spots behind doors & in corners.
☐ Hot or cold air from ducts.
☐ Radiant heat from sun or appliances
☐ Concealed pipes and chimneys.
☐ Unheated or uncooled areas such as an outside wall behind the thermostat.

4

Installing Wall Plate

⚠ **Electrical hazard can cause electrical shock or equipment damage. Disconnect power before wiring.**

Wall
Mounting Screws (2)
Wire through wall And wire slot
UP
Wall anchors
Mounting Holes (2)
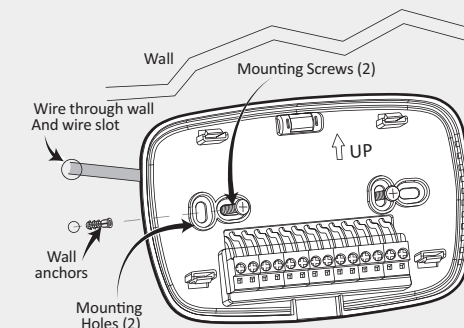
The thermostat can be mounted horizontally on the wall.

1. Position and level the wall plate.
2. Use a pencil to mark the mounting holes.
3. Remove the wall plate from the wall and drill two holes in the wall as marked. If necessary, use the provided anchors by gently tapping them into the drilled holes until flush with the wall.
4. Position the wall plate over the holes, pulling wires through the wiring opening.
5. Insert the mounting screws into the holes and tighten.

5

Wiring

☐ See Table in back page for terminal designation descriptions.
☐ Insert wires in the terminal block under the loosened screw.
☐ Securely tighten each screw.
☐ Push excess wire back into the hole.
☐ Plug the hole with nonflammable insulation to prevent drafts from affecting the thermostat.

Inserting wires in terminal block

Important: Use 18-gauge thermostat wire.

Notes

1. If used in single-transformer system, leave metal jumper wire in place between RC and R. In two-transformer system, remove metal jumper wire between RC and R.
2. In a two-transformer system, connect the common from the secondary side of the heating system transformer.
3. If thermostat is configured for a heat pump system, configure changeover valve for cool or heat.
4. L terminal is an input port as system monitor.

| C | R | RC | W1 | W2/G3 | L | Y2/G2 | Y1 | G1 | | S1 | S2 | ← Conventional |
← Screw Terminals
| C | R | RC | E | O/B | AUX | L | Y2/G2 | Y1 | G1 | | S1 | S2 | ← Heat Pump |

6

Wiring 24VAC Common

Single-Transformer System

Connect the common side of the transformer to the C screw terminal of the thermostat wall plate. Leave the metal jumper wire in place between RC & R.

Two-Transformer System

Connect the common side of the heating transformer to the C screw terminal of the thermostat wall plate. Remove the metal jumper wire between RC and R.

7

Mount Thermostat to Wall Plate

Align the terminal screw blocks with the pins on the back of the thermostat. Push the thermostat straight onto the wall plate until it snaps into place.

Wall plate
UP
Terminal screw block
Pins on back of thermostat
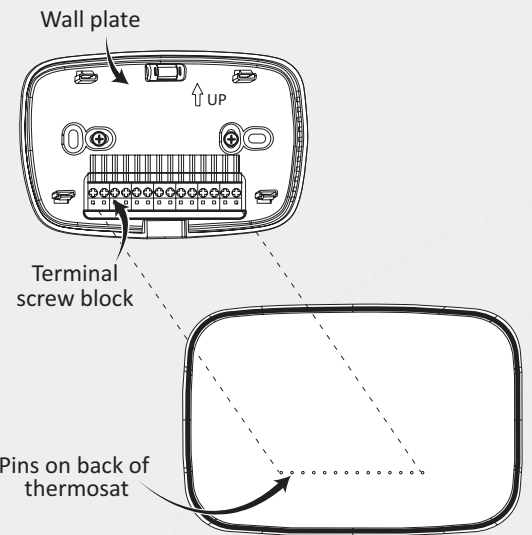
Factory Reset Instruction

1. Access advanced installers menu via pressing "system" once, and then holding once equipment type begins to flash.
2. Navigate to advanced installer setting 0680 and change setting to different number between 1 and 10.
3. Press Done until Menu has been exited.
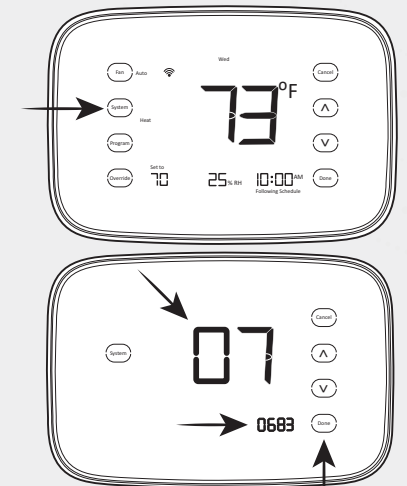
Once the Factory Reset is performed successfully, the device will search for a network and can be added through EnergyCenter®.

Continued.....

autani
building controls

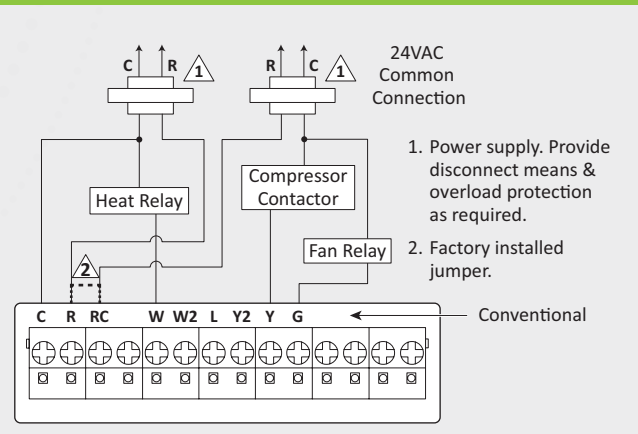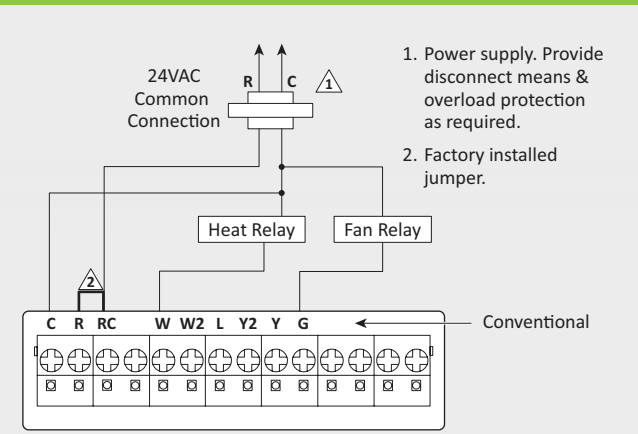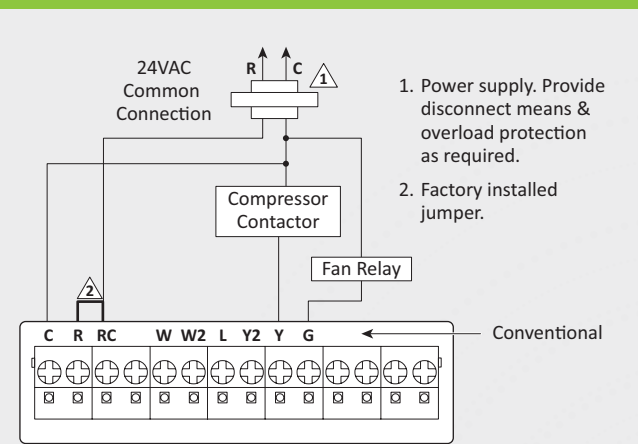| Terminal	Designation
RC (see note 1)	Power for cooling - connect to secondary side of cooling system transformer
R (see note 1)	Power for heating - connect to secondary side of heating system transformer
C (see note 2)	Common wire from secondary side of heating system transformer
Y1	Compressor contactor
G1	Fan relay or low fan speed
Y2/G2	Second stage cooling or medium fan speed
O/B/W1 (see note 3)	Changeover valve for heat pump systems or heat relay
W2/AUX/G3	Auxiliary heat relay for heat pump systems, 2nd stage heat relay, high fan speed
E	Emergency heat relay for heat pump systems
L (see note 4)	Equipment monitor for heat pump systems
S1, S2	External temperature sensor

TYPICAL HOOKUP OF CONVENTIONAL SINGLE-STAGE HEAT AND COOL SYSTEM WITH SINGLE TRANSFORMER (1H/1C CONVENTIONAL)
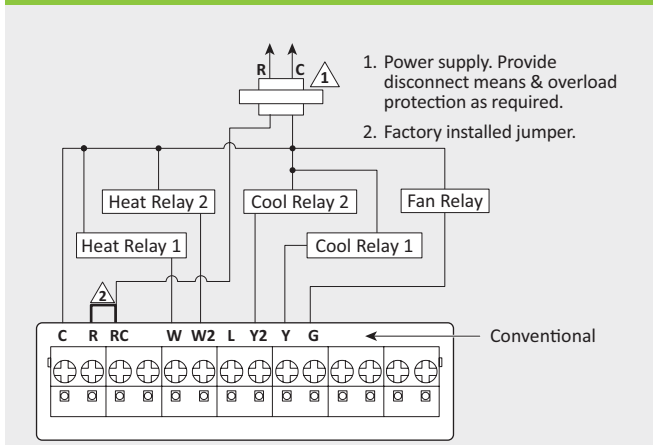

24VAC Common Connection

1. Power supply. Provide disconnect means & overload protection as required.
2. Factory installed jumper.

Compressor Contactor
Heat Relay   Fan Relay
Conventional

TYPICAL HOOKUP OF CONVENTIONAL SINGLE-STAGE HEAT AND COOL SYSTEM WITH TWO TRANSFORMERS (1H/1C CONVENTIONAL)

24VAC Common Connection

1. Power supply. Provide disconnect means & overload protection as required.
2. Factory installed jumper.

Heat Relay   Compressor Contactor   Fan Relay
Conventional

TYPICAL HOOKUP OF HEAT ONLY SYSTEM WITH FAN (1H CONVENTIONAL)

24VAC Common Connection

1. Power supply. Provide disconnect means & overload protection as required.
2. Factory installed jumper.

Heat Relay   Fan Relay
Conventional

TYPICAL HOOKUP OF COOL ONLY SYSTEM (1C CONVENTIONAL)

24VAC Common Connection

1. Power supply. Provide disconnect means & overload protection as required.
2. Factory installed jumper.

Compressor Contactor
Fan Relay
Conventional

TYPICAL HOOKUP OF CONVENTIONAL MULTISTAGE TWO-STAGE HEATING & TWO-STAGE COOLING IN A SINGLE-TRANSFORMER SYSTEM (2H/2C, 2H/1C OR 1H/2C CONVENTIONAL)

1. Power supply. Provide disconnect means & overload protection as required.
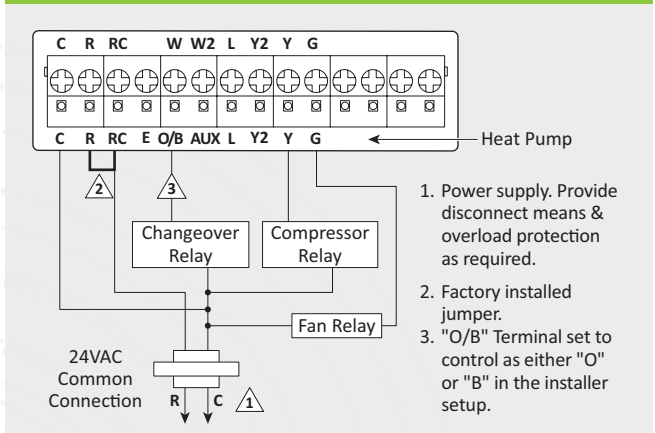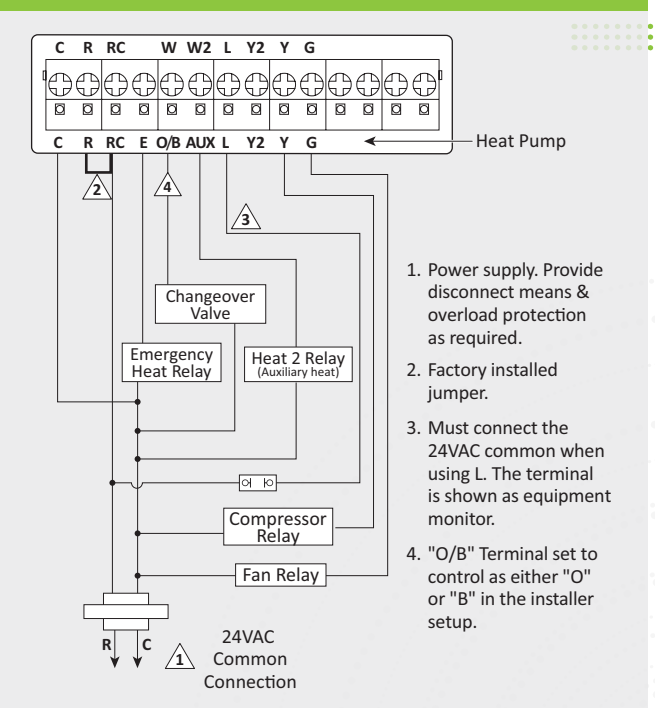2. Factory installed jumper.

Heat Relay 2   Cool Relay 2   Fan Relay
Heat Relay 1   Cool Relay 1
Conventional

TYPICAL HOOKUP OF CONVENTIONAL MULTISTAGE TWO-STAGE HEATING AND TWO-STAGE COOLING IN A TWO-TRANSFORMER SYSTEM (2H/2C, 2H/1C OR 1H/2C CONVENTIONAL)
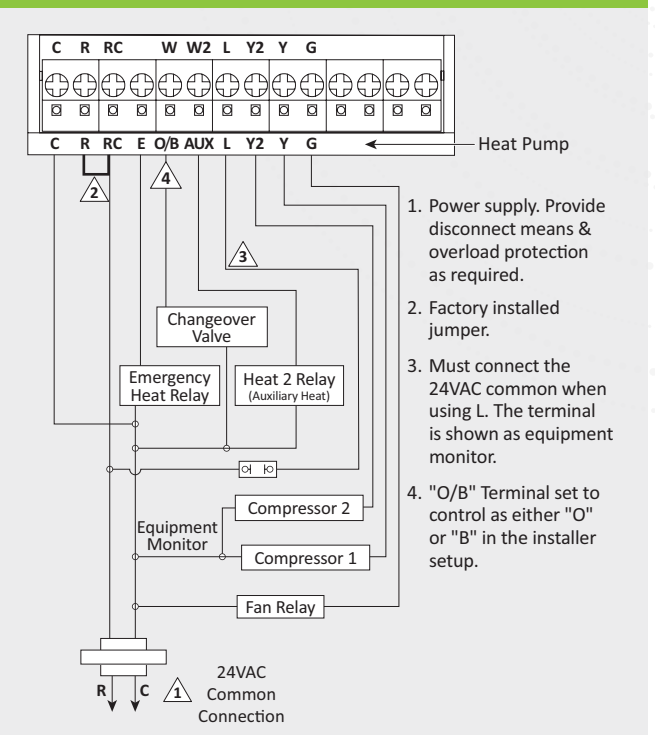

1. Power supply. Provide disconnect means & overload protection as required.
2. Factory installed jumper.

Heat Relay 2   Cool Relay 2   Fan Relay
Heat Relay 1   Cool Relay 1
Conventional
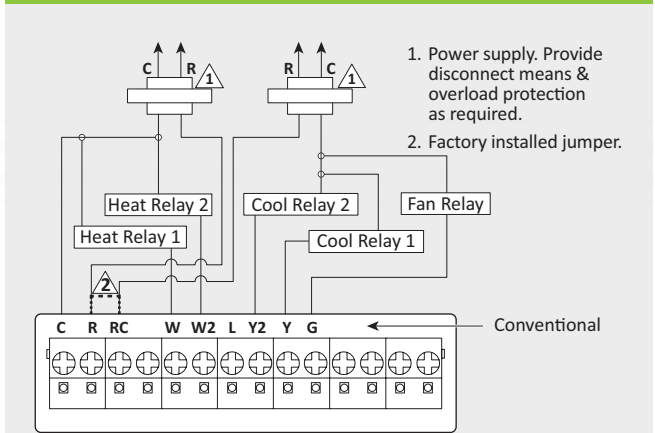
TYPICAL HOOKUP OF SINGLE-STAGE HEAT PUMP WITH NO AUXILIARY/BACKUP HEAT (1H/1C HEAT PUMP)

Heat Pump

1. Power supply. Provide disconnect means & overload protection as required.
2. Factory installed jumper.
3. "O/B" Terminal set to control as either "O" or "B" in the installer setup.

Changeover Relay   Compressor Relay
Fan Relay
24VAC Common Connection

TYPICAL HOOKUP OF SINGLE-STAGE HEAT PUMP WITH AUXILIARY/BACKUP HEAT (2H/1C HEAT PUMP)

Heat Pump

Changeover Valve
Emergency Heat Relay   Heat 2 Relay (Auxiliary heat)
Compressor Relay
Fan Relay
24VAC Common Connection

1. Power supply. Provide disconnect means & overload protection as required.
2. Factory installed jumper.
3. Must connect the 24VAC common when using L. The terminal is shown as equipment monitor.
4. "O/B" Terminal set to control as either "O" or "B" in the installer setup.

TYPICAL HOOKUP OF MULTISTAGE HEAT PUMP WITH AUXILIARY/BACKUP HEAT (3H/2C HEAT PUMP)

Heat Pump

Changeover Valve
Emergency Heat Relay   Heat 2 Relay (Auxiliary Heat)
Equipment Monitor   Compressor 2
Compressor 1
Fan Relay
24VAC Common Connection

1. Power supply. Provide disconnect means & overload protection as required.
2. Factory installed jumper.
3. Must connect the 24VAC common when using L. The terminal is shown as equipment monitor.
4. "O/B" Terminal set to control as either "O" or "B" in the installer setup.

Serial Number Information and Tracking

The serial number or ID of a device is used to track device installation locations and details for the commissioning process. The identification information for each device should be tracked in a meaningful way, many devices include duplicate 'stickers' with this information. Autani provides an iOS app to assist with the process.

For help getting starting with the iOS Commissioning App please see Autani's User Guide for the iOS Commissioning App.

Once commissioning details are collected, either through the iOS Commissioning App, or by tracking identifiers on drawings/spreadsheets. Please provide this information to support@autani.com to begin the commissioning process.