

EZwire AS30 Auxiliary Switch Installation Guide

Missing Common Wire on Single transformer HVAC System

The EZwire AS30 Auxiliary Switch facilitates the installation of a thermostat where there is no common wire connection from the heating and/or cooling equipment to the thermostat.

The **single transformer** instructions on this page should be used with a Heat-only HVAC installation or an integrated Heat/Cool installation using a single transformer servicing both Heat and Cool parts of the equipment. For installations with separate Heating and Cooling equipment, each with its own transformer, please refer to the instructions on Page 2.

The EZwire is installed on or close to the equipment so that the five wire cable reaches the control terminals inside. If the EZwire is installed inside the HVAC equipment, it should be installed in a cavity where there is no excess heat or high voltage wires present. Otherwise, this may void the HVAC UL certification.

Before Starting the Installation:

Check that the package includes 1 EZwire Unit, 1 signal coupler and 5 Splice Wire Caps.

Turn off the power to the furnace, air conditioning and/or heat pump, either at the shut-off switch, or at the electrical panel.

Thermostat site:

Step 1 - Remove the old thermostat from the backplate. If there is no backplate then remove the thermostat from the wall to access the wiring. Next, label the wires according to which terminal block they connect to (R,Y1,W1,G). Then disconnect the wires and remove the existing backplate.

Step 2 – Mount the new backplate and connect the wire marked R to the R terminal block. Also connect the wires labelled W1 and Y1 to the corresponding terminal blocks.

Step 3 – Install the signal coupler provided with the EZwire between G and C terminal blocks on the backplate. Twist the signal coupler wire with the wire labelled G to ensure that it is held securely.

Connect the wire labelled G to the C terminal block. Any remaining wires should be connected as per their installation instructions.

Step 4 – Make note of the color and/or labels on the wires attached to each of the terminal blocks. Attach the thermostat to the backplate.

Equipment site:

Step 5 – In the equipment area, find a convenient location to mount the EZwire. The location should be **outside** the equipment but close enough so that the five wire cable reaches the thermostat connections inside. Mount the EZwire using 2 screws or adhesive pad provided.

Step 6 – Before disconnecting wires at the equipment, label them according to which equipment terminal block they are connected, verifying that these labels match the labels you attached in step 1.

Step 7 – Pass the five wire cable through a convenient access hole in the equipment.

Step 8 – The wire labelled G must be spliced to the EZwire cable using a wire cap as follows:

- Wire labelled G to the EZwire **WHITE** wire.

Step 9 – Connect the blue and green wires from the EZwire to the equipment as follows:

- **BLUE** wire to the equipment C terminal.
- **GREEN** wire to the equipment G terminal.

Step 10 – Connect the remaining two wires from the EZwire and the wire labelled R from the thermostat as follows:

- EZwire **YELLOW** and **RED** wires and the wire labelled R to the equipment R terminal.

Step 11 – Restore power to the equipment and follow the equipment configuration instructions in the thermostat user manual for testing.

Step 12 - Record the serial number of the unit, name and address of the owner, and make and model of the heating and/or cooling equipment. Install the Connection Diagram sticker (AW001102) on a visible place on the HVAC cabinet or on the wall close to the EZwire.

Note: If the old thermostat has no connection to G, but instead to W, then connect the W wire to C at the thermostat and the signal coupler between W and C at the thermostat location. At the equipment location, connect the Auxiliary Switch green wire to W instead of G at the equipment. Connect the Auxiliary Switch White wire to the W wire with a wire cap at the equipment location.

