# Aviexx
Data Driven Business Growth

Installation and Wiring:

1. Remove Power from equipment and confirm that 24VAC circuit is de-energized

2. Locate Aviexx Edge Node in a convenient place on the exterior of the equipment that is safe, dry, and secure. Using self-tapping screws (field-supplied) attached the node to the equipment. (Ideally, the Indicator LEDs should be easily visible after the device is completely

3. Mount Air Temperature Sensors by drilling a 5/16" (0.625" or 16mm) hole in the sheet metal. Install using self-tapping screws
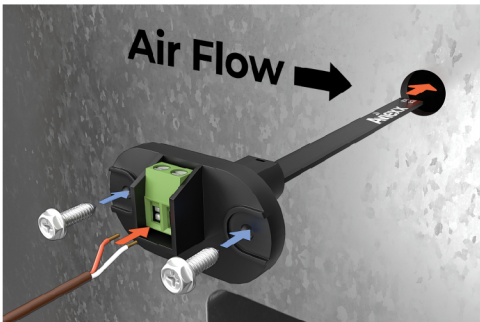
ensuring that the flat edge of the sensor probe is parallel with the direction of airflow in the duct.   (Air Temperatures Sensors are interchangeable.)

    a.Supply Air Sensor should be located at least 48" (120 cm) away from the heat exchanger/cooling coil in the equipment to ensure a thorough mixing of air and accurate measurement

    b.Return Air Sensor should be located before the filter on the return plenum of the equipment
    c.Wiring (field supplied) is not polarity sensitive. Virtually any gauge will work, but we recommend 2-conductor 22 Ga.

4. Mount Refrigerant Sensors as closely as possible to the cooling coil on the exterior of the equipment using cable-ties provided.

5. Connect Thermostat terminals on the Edge Node to the Thermostat terminal on the equipment main control. Do not alter the main thermostat connections.
6. Connect the sensors to the Edge Nodes following the markings on the label
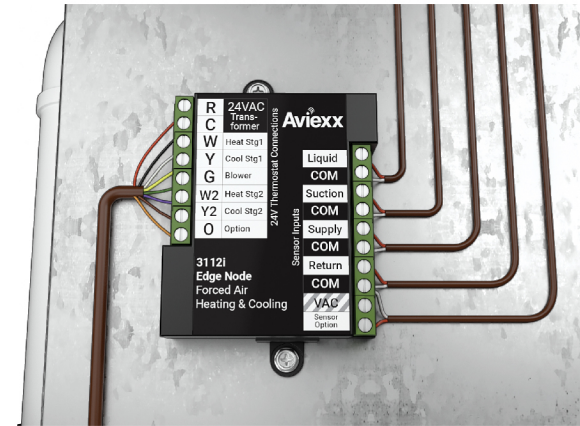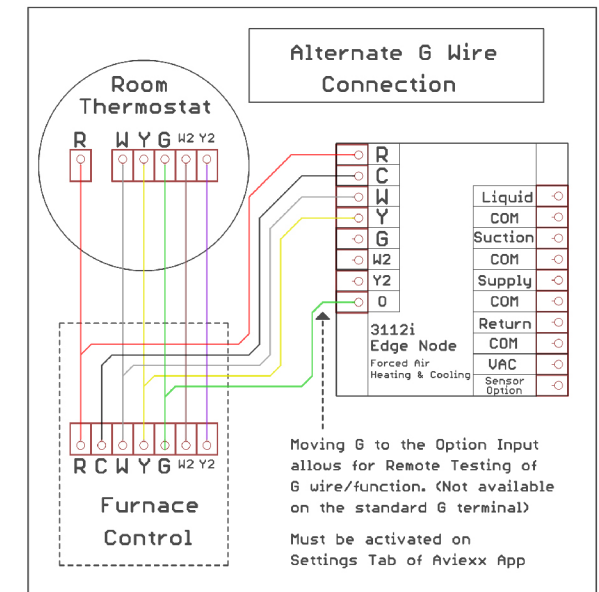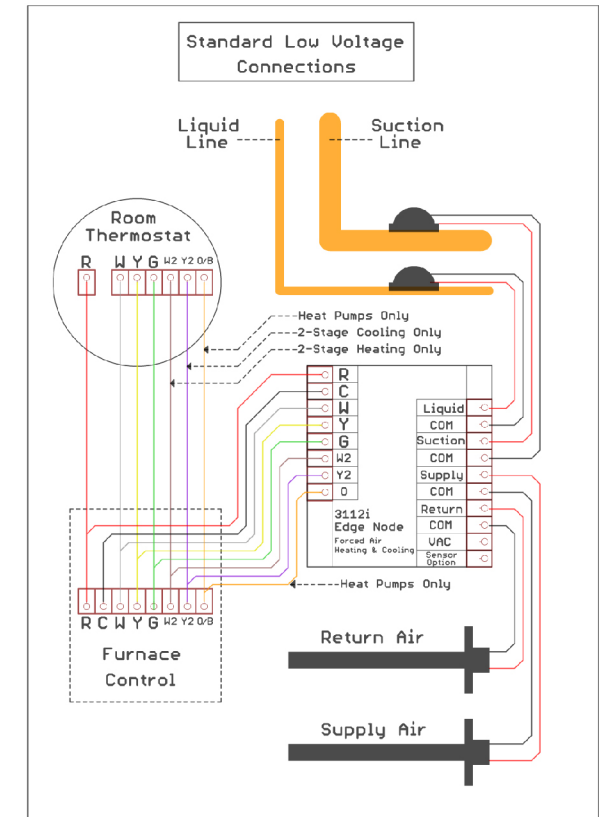

7. Options:
    a. 24VAC Option Input (thermostat side of Edge Node). This terminal marked "O" can be used for a variety of inputs. Most commonly it is used for:

        i. Heat Pump Reversing Valve (O/B)
        ii. Condensate Alarm
        iii. W3 (3rd Stage Heat)
        iv. Alternate G Input
        v. Burner Alarm (Oil)

    b. Sensor Option (Sensor side of Edge Node). This terminal allows for a variety of optional sensor inputs:
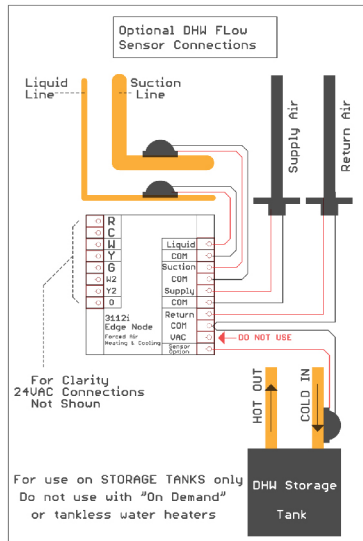   i. Fuel Oil Tank Ultrasonic Level Sensor
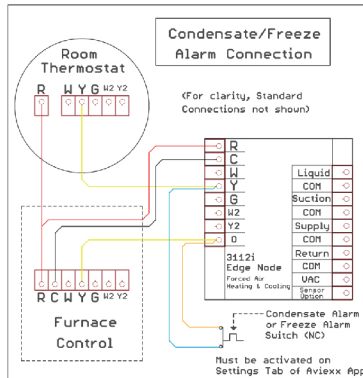   ii. Domestic Hot Water Tank Flow Sensor

Standard Wiring
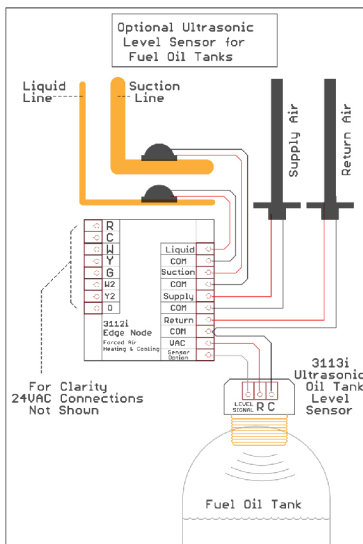
Optional Sensors & Connections

DHW Flow Sensor

Condensate /Freeze-Switch

Oil Tank Level Sensor (Ultrasonic)

Connecting Edge Node to Aviexx Cloud:

1. Confirm that all wiring connections are complete and according to instructions.

2. Energize the Edge Node by applying power to the HVAC Equipment

3. Check LEDs on node for the following:
   a. RED, solid: Power OK
   b. ORANGE, fade in/out: Data
   c. BLUE, solid: Ready to Connect

4. Using a mobile phone navigate to your Wi-Fi Settings and select the Aviexx node showing in the available connections list
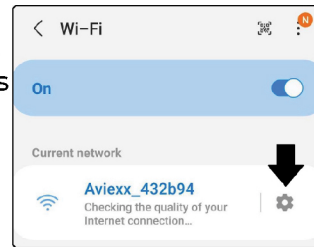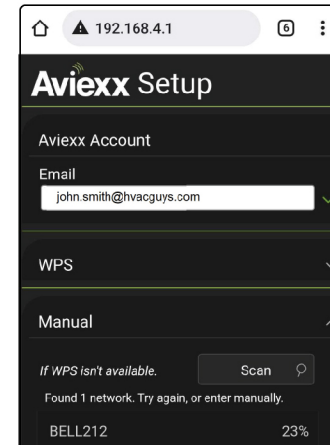

5. Select "Manage Router". This will allow the Aviexx Edge node to display the remaining setup pages on your mobile device.
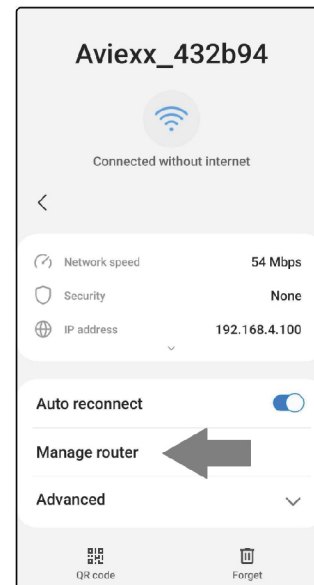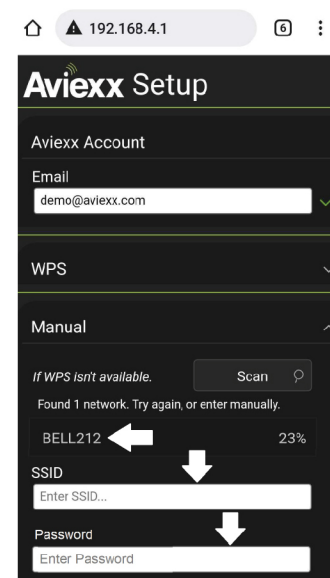

6. The Edge Node will display this page. Please note that Aviexx will only connect to 2.4GHz Wi-Fi routers. Like all IoT devices, 5GHz is not supported.
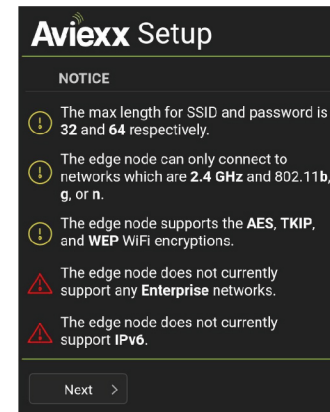

7. Enter your Aviexx Login email.

8. Select Local Router (SSID) and enter the password. (Optionally you can select the WPS function and connect to WiFi using the WPS button on the router without a password)

9. Connection status is updated in real-time. Once the node has connected to the Aviexx Cloud your phone will be disconnected from the Node and return to its default data connection.
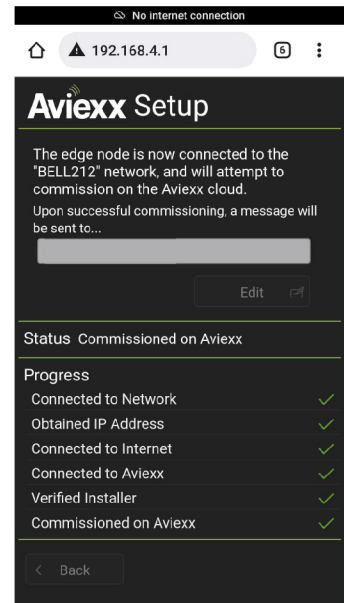
10. Commissioning is complete.
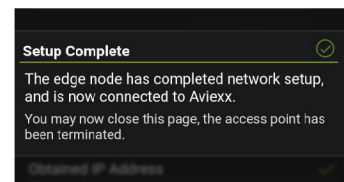
Note:
To change WiFi SSID or Password at any time, press the RESET button 7 times and then start at step 4 of Connecting Edge Node.

11. Within a few moments you will receive a message from Aviexx via text/email that will contain a link to complete the registration of the Edge Node on the Aviexx Cloud. Be sure to have the HVAC equipment information ready to enter into the database. Specifically, you will need to know:
   a. Equipment Type
   b. Manufacturer
   c. Model Number
   d. Serial Number
   e. Installation Date
   f. Various energy ratings

The Equipment is now fully accessible on your Aviexx Service Pro home page