Package Contents	Tools Required
▪ HVAC Setback Module ▪ Double-sided adhesive pad	▪ Owner's manual for the HVAC model ▪ Wiring connectors, type varies per HVAC model

Product Description

The HVAC Setback Module is a simple way to save energy by switching HVAC units between normal and setback modes.

It is low voltage, mounts easily in a typical HVAC enclosure, and communicates wirelessly with wireless occupancy detection and lighting control products.

Features Include:

▪ Switches HVAC to setback mode to save energy

▪ Powered by HVAC via standard 24 VAC connection

▪ Receives wireless messages from based devices to determine room occupancy

▪ Controls setback range by built-in temperature sensor

▪ Provides simple input signal by dry contact to compatible HVAC systems

▪ Concealed easily within HVAC enclosure

▪ Sends wireless messages to other controlled devices; configurable transceiver

Specifications

Power Supply	9-30 VAC, 12-40 VDC
Maximum Load	1A @ 24 VAC/VDC
Dimensions	2.57" H x 1.65" W x 1.10" D (6.5 cm x 4.2 cm x 2.8 cm)
Environment	• Indoor use only • 32° to 104°F (0° to 44°C) • 20% to 95% relative humidity (non-condensing)

1. Planning

Take a moment to plan for the module's successful operation and optimal communication with other system components.

▪ Always use a qualified installer

▪ Review HVAC unit's manual to assess control compatibility

▪ Identify the high voltage wiring and how to disconnect it locally and at the circuit breaker panel

▪ Identify a location in the HVAC enclosure that is free from housing obstructions and as far away as possible from the HVAC unit's control panel to avoid signal interference

▪ Make sure the wires are straight (avoid loops and coils)

▪ Take care not to damage the radio antenna that runs in a groove on the front side of the module

▪ Consider the construction materials in the space and obstacles that may interfere with RF signals

2. Installing

estimated time: 10 minutes

Read and understand instructions completely before starting.

| ⚠	ELECTRICAL SHOCK HAZARD High Voltage. This device must be installed by a qualified installer or electrician. Follow all applicable electrical codes for installation.

1. Turn off power at the circuit breaker or unplug the HVAC unit and test that power is off.

2. Consult the HVAC unit's manual to:

   A. Safely remove the enclosure and any obstructions that prevent access to the wiring.

   B. Confirm the HVAC unit has the required control input, typically called, front desk or energy management.

   C. Identify low voltage output to power the module.

   D. Identify the type and the number of control terminals. Each HVAC brand uses their own terminal codes, e.g.: FD1, FD2, CDC1, CDC2, or EMS1, EMS2.

   E. Identify the appropriate electrical connectors: terminal screws or pins, butt splice connectors, wire nuts.

3. Connect the module's Red and Black wires to the low voltage power output from the HVAC unit.

4. Connect the module's Yellow wires to the appropriate control terminals of the HVAC unit.
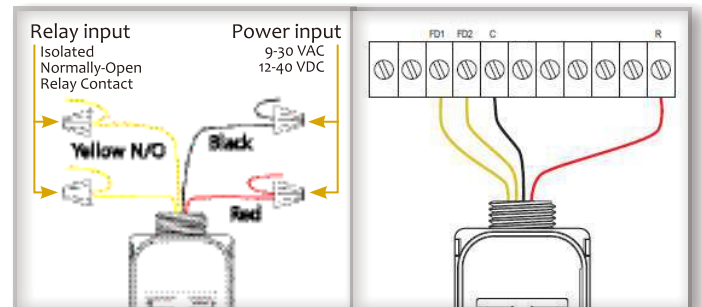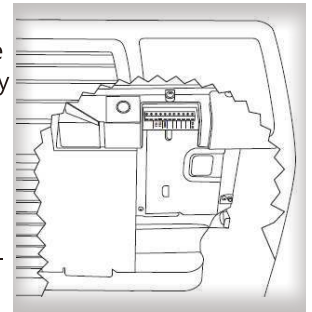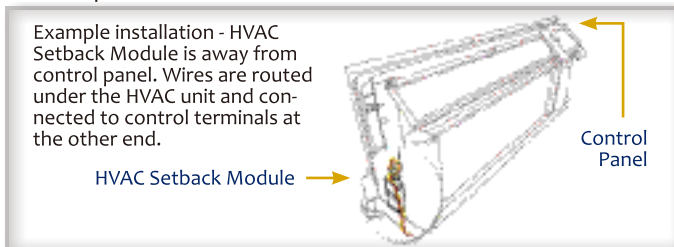
5. Apply double-sided adhesive pad to the back of the module.
   TIP: To avoid distorting the temperature sensor, do not install the module in the path of blowing air.
   NOTE: It may be easier to link and configure devices before mounting the module, see the Linking and Configuring sections.

6. Attach the module to the inside wall of the HVAC enclosure and position it so you can access the setup interface (buttons/LEDs).
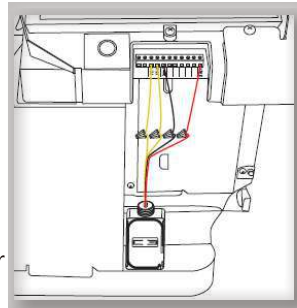
   TIP: To limit the potential risk of signal interference, position the module within the enclosure as far away as possible from the unit's control panel.

Example installation - HVAC Setback Module is away from control panel. Wires are routed under the HVAC unit and connected to control terminals at the other end.

HVAC Setback Module →

Control Panel

7. Restore power to the circuit.

   The LEDs on the module will blink and then the right LED will display solid red when the relay is open, or green when the relay is closed (setback engaged).

3. Linking

The HVAC Setback Module is a Receiver
(transmits & receives)

To link the occupancy sensor to a transceiver; the transceiver must first be powered, within wireless range of the controls it is to be linked to, and set to accepts links.

Next, the desired transmitter, or another transceiver, is triggered to send a special link message. The awaiting transceiver receives and stores the link permanently so the devices can interact to provide a variety of intelligent control options.
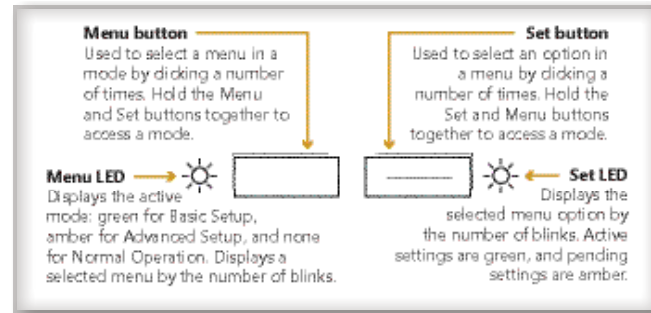
About the Setup Interface

The setup interface has two buttons, Menu and Set, that each have a corresponding 3-color LED (green, amber, red). This simple interface is used to link and configure devices as a system.

The buttons and LEDs are used to navigate and select linking and setup options through a 3-tier menu system consisting of different Modes > Menus > Options.

To use the interface, hold the module so both thumbs can click the buttons without obscuring the LEDs. The illustration and legend below describe how the buttons are used and the meaning of the LED responses.

To exit from anywhere in a menu, hold both buttons at the same time for 2 seconds.

Menu button — Used to select a menu in a mode by clicking a number of times. Hold the Menu and Set buttons together to access a mode.

Set button — Used to select an option in a menu by clicking a number of times. Hold the Set and Menu buttons together to access a mode.

Menu LED → Displays the active mode: green for Basic Setup, amber for Advanced Setup, and none for Normal Operation. Displays a selected menu by the number of blinks.

Set LED ← Displays the selected menu option by the number of blinks. Active settings are green, and pending settings are amber.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1)this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Warning
This device complies with part 15 of the FCC Rules.Operation is subject to the following two conditions: (1)This device may not cause harmfulinterference, and (2) this device must accept any interference received,including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limitsfor a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates,uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.

Note: The Grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. such modifications could void the user's authority to operate the equipment. The device has been evaluated to meet general RF exposure requirement.
To maintain compliance with FCC' s RF exposure guidelines, the distance must be at 1east 20 cm between the radiator and your body, and fully supported by the operating and installation configurations of the transmitter and its antenna(s).