

INSTALLATION AND SETUP



Smart Heating Solutions

ECO PRO RF PIR OCCUPANCY SENSOR



The ECO PRO PIR OCCUPANCY SENSOR works with the ECO PRO CONTROLLER for automatic temperature setback when the room is unoccupied. Setback Options: 45°F, 55°F, 60°F (default), or 65°.

It sends signals to the heater via RF (radio frequency) for automatic triggering of a temperature setback when the contacts are open. It can monitor whether a room is occupied and set back the temperature automatically to a predefined temperature. An ECO PRO CONTROLLER is required to set the parameters of the RF sensor and for the system to function.

Technical Specifications:

Protocol: Wireless 2.4G
Transmit Distance: 98'
Working Voltage: DC 3V (battery);

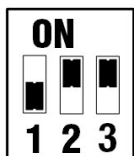
COMPATIBLE WITH THESE MODELS + ECO PRO CONTROLLER



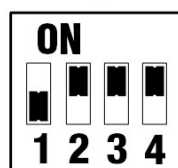
HEATER DIP SWITCH SETTINGS

In order for your heater to be recognized and pair an RF sensor with the ECO PRO Controller, Dip Switch #1 on the back of the Heater display must be set to OFF. Once set to OFF the heater will be able to receive signals from the ECO Pro Controller.

MODELS:
PX EC02S / LPW EC02S



MODELS:
KBP EC02S+ / KBP PlatinumX
KB EC02S+ BMS / KB PlatinumX BMS

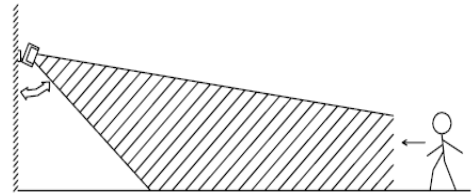



RF AUXILIARY PIR SENSOR (OPTIONAL)

The ECO PRO OCCUPANCY SENSOR communicates with the heater via RF (radio frequency) signals for automatic triggering of a temperature setback when the contacts open. It can monitor whether there are people in the detectable range and when the sensor detects no movement, set back to a predefined temperature.

PAIRING AND USEAGE GUIDE

Since it is possible that more than one heater/PRO Controller would be used in a home, you must first pair the RF auxiliary sensor to a specific heater. Each RF auxiliary sensor has a unique ID number, which will be used in the pairing process. When installing the RF auxiliary sensor the first time, users need to pair the RF auxiliary sensor with heater, so the heater can learn and save the remote sensor's ID.



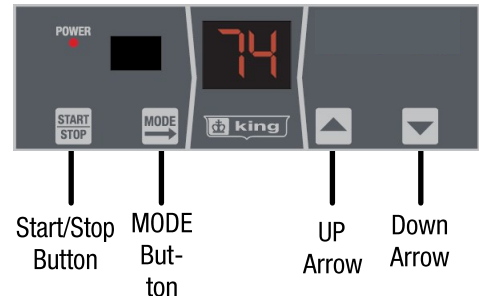
Step 1: On the Heater's Display Press **START STOP** and  buttons at the same time for 5 seconds. The LED display will flash "id". Release buttons.

Step 2: Put the Rf auxiliary PIR sensor within 3 feet of the heater and then press and hold the pair button on the sensor to enter pairing mode.

Step 3: The heater's display indicator lights will illuminate (LED tubes show 88) for 1 second and then turn off. The indicator light on the RF PIR sensor will flash three times.

This means the RF auxiliary sensor and the heater have paired with each other successfully.

Heater Display Control Panel



SET DELAY OFF TIME

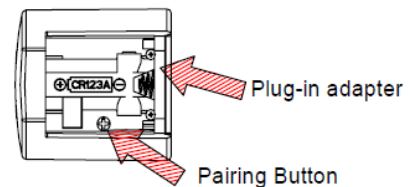
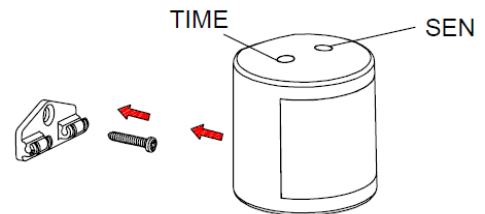
Step 1: Press the TIME button to set the delay off time as per the below table:

Press Button Times	Green Indicator Flash Times	Delay Off Time
Once	Once	10 Minutes
Twice	Twice	30 Minutes
Three Times	Three Times	60 Minutes

SET SENSOR DETECTION SENSITIVITY

Step 1: Press the SEN button to set the detection sensitivity as per the below table. When set to the high sensitivity, the max detection range is 16 feet.

Press Button Times	Green Indicator Flash Times	Sensitivity
Once	Once	LOW
Twice	Twice	Middle
Three Times	Three Times	High




BATTERY INSTALLATION

Remove back cover, install battery (CR123A/3V) or plug-in adapter (Purchased Separately).

LOW BATTERY

In a low battery condition a blue indicator light will flash 5 times. Once battery dies, heater will automatically enter Freeze Protection Mode. The Heater display will show "FP" until the batteries are replaced.

OPERATION

If there is no activity in the room for the set time period, the heater will automatically setback to the setback temperature preset set on Step #7 in the Initial setup (See ECO Pro Controller Manual Page 7) The display on the ECO Pro Controller will display  and the heater displays "FP" for Freeze Protection Mode.

ECO PRO Display –PIR Setback



Setback Options: 45°F, 55°F, 60°F (default), or 65°F Set on Step #7 in the Initial setup (See ECO Pro Controller Manual Page 7)

When someone enters the room and the PIR sensor senses activity, the heater resumes operating at previous temperature settings.

RF SENSOR CONFIGURATION OPTIONS (OPTIONAL)

Each heater can be paired to a maximum of 1 x PIR Sensors. When heater(s) are paired to auxiliary RF sensor, there are 2 configuration options.

OPTION 1: Multiple heaters can be configured to a single ECO PRO Controller and separate auxiliary sensors can be assigned to each heater.

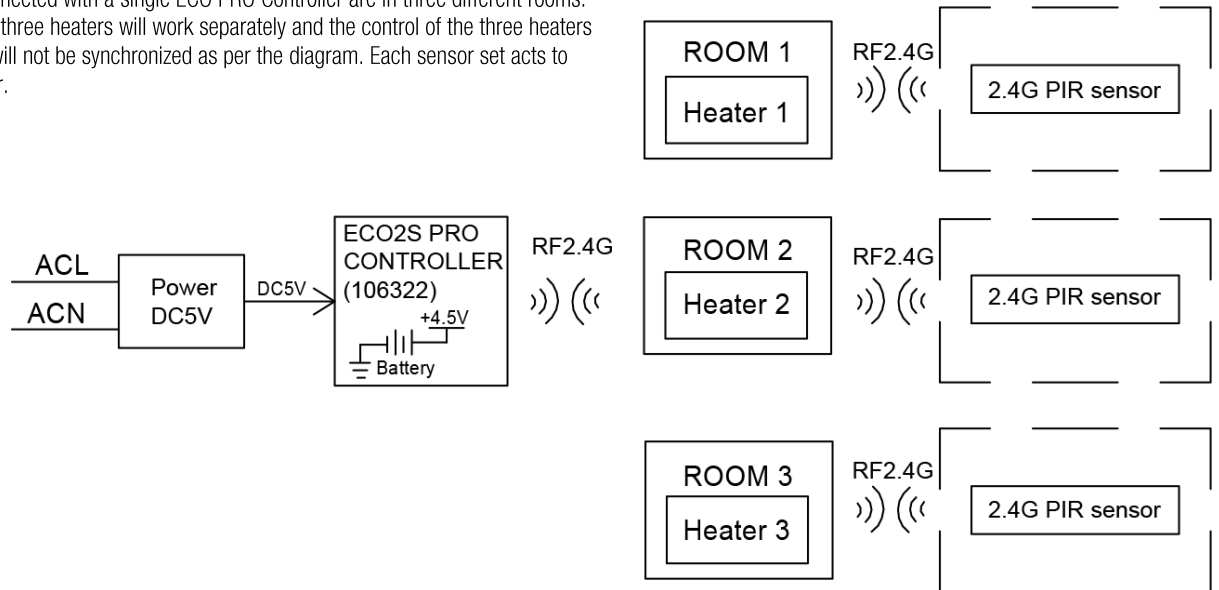
OPTION 2: One sensor can be assigned to control multiple heaters as a heating zone.

See below for details of each setup.

OPTION 1:

Multiple Heaters Controlled By Separate Sensor Sets

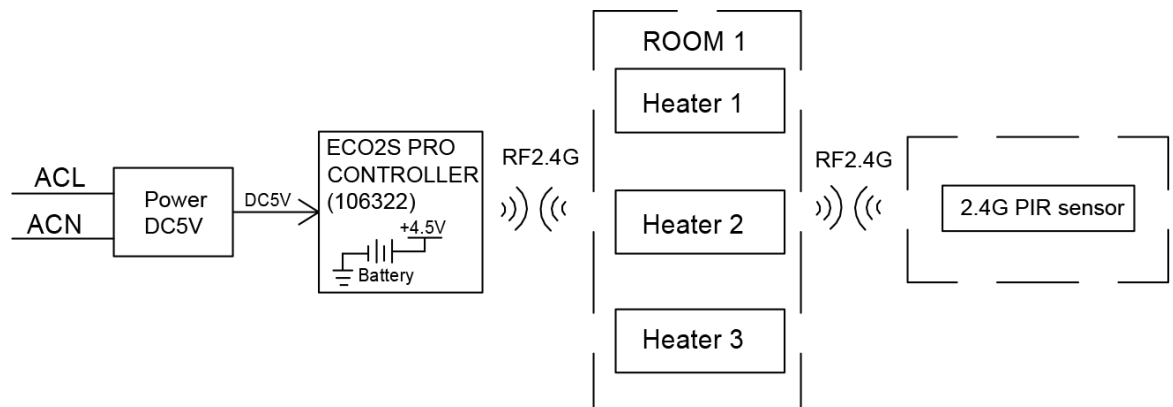
The three heaters connected with a single ECO PRO Controller are in three different rooms. On this condition, the three heaters will work separately and the control of the three heaters via auxiliary sensors will not be synchronized as per the diagram. Each sensor set acts to control a single heater.



OPTION 2:

Multiple Heaters Controlled By A Single Sensor

When the three heaters are in the same room, only one heater need to be connected with the RF PIR Motion sensors and door sensors, and the control of this heater will be synchronized to the other two heaters as per below diagram.



INSTALLATION AND SETUP



Smart Heating Solutions

ECO PRO RF WINDOW/DOOR SENSOR



The ECO PRO WINDOW/DOOR SENSOR works with the ECO PRO CONTROLLER for automatic temperature setback when window or door is left open. Setback Options: 40°F (default), 45°F, 50°F, or 55°F

It sends signals to the heater via RF (radio frequency) for automatic triggering of a temperature setback when the contacts are open. It can monitor whether a window or door is left open and set back the temperature automatically to a predefined temperature. An ECO PRO CONTROLLER is required to set the parameters of the RF sensor and for the system to function.

Technical Specifications:

Protocol: Wireless 2.4G
Transmit Distance: 98'
Working Voltage: DC 3V (battery);

COMPATIBLE WITH THESE MODELS + ECO PRO CONTROLLER



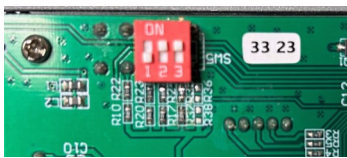
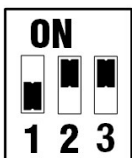
REQUIRES:
ECO PRO CONTROLLER



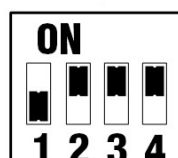
HEATER DIP SWITCH SETTINGS

In order for your heater to recognize and pair an RF sensor with the ECO PRO Controller, Dip Switch #1 on the back of the Heater display must be set to OFF. Once set to OFF the heater will be able to receive signals from the ECO Pro Controller.

MODELS:
PX EC02S / LPW EC02S



MODELS:
KBP EC02S+ / KBP PlatinumX
KB EC02S+ BMS / KB PlatinumX BMS



RF AUXILIARY WINDOW/DOOR SENSOR (OPTIONAL)

The ECO PRO WINDOW/DOOR SENSOR communicates with the heater via RF (radio frequency) signals for automatic triggering of a temperature setback when the contacts open. It can monitor whether a window or door has been left open and set back the temperature automatically to a predefined temperature.

PAIRING AND USEAGE GUIDE

Since it is possible that more than one heater/PRO Controller would be used in a home, you must first pair the RF auxiliary sensor to a specific heater. Each RF auxiliary sensor has a unique ID number, which will be used in the pairing process. When installing the RF auxiliary sensor the first time, users need to pair the RF auxiliary sensor with ECO2S Pro heater, so the heater can learn and save the remote sensor's ID.

Step 1: On the Heater's Display Press  and  buttons at the same time for 5 seconds. The LED display will flash "id". Release buttons.

Step 2: Put the Rf auxiliary Window/Door sensor within 3 feet of the heater and then press and hold the pair button on the sensor for 5 seconds to enter pairing mode.

Step 3: The heater's display indicator lights will illuminate (LED tubes show 88) for 1 second and then turn off. The indicator light on the RF Window/Door sensor will flash three times.

This means the RF auxiliary sensor and the heater have paired with each other successfully.

OPERATION

When paired with an optional Window/Door sensor, if the window or door is opened for longer than 3 minutes, the heater will automatically setback to the setback temperature preset under Step #6 in the Initial setup of the ECO Pro Controller user manual (See Page 7).

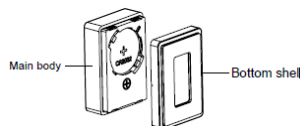
The display on the ECO Pro Controller will display  and the heater displays "FP" for Freeze Protection Mode.

Setback Options: 40°F (default), 45°F, 50°F, or 55°F Set on Step #6 in the Initial setup (See ECO Pro Controller Manual Page 7)

When Window/Door Sensor is CLOSED, after 3 minutes the heater resumes operating at previous temperature settings.

BATTERY INSTALLATION

Remove back cover, install battery (CR2032/3V)

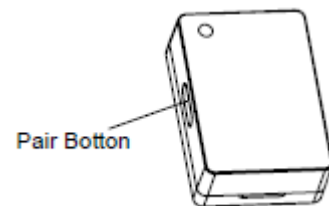


LOW BATTERY

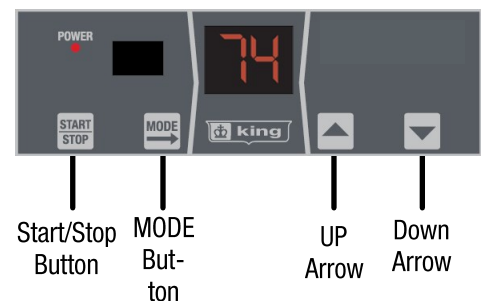
In a low battery condition a blue indicator light will flash 5 times. Once battery dies, heater will automatically enter Freeze Protection Mode. The Heater display will show "FP" until the batteries are replaced.



Heater Display
Window/Door Setback

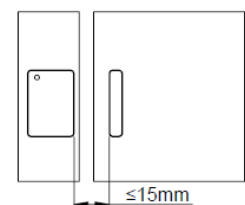
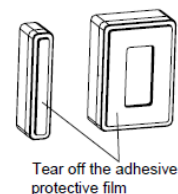


Heater Display
Control Panel



INSTALLATION

Remove adhesive protective film on the bottom shell and fix it on the door or window, as shown.



ECO2S PRO Controller - Window/Door Setback

RF SENSOR CONFIGURATION OPTIONS (OPTIONAL)

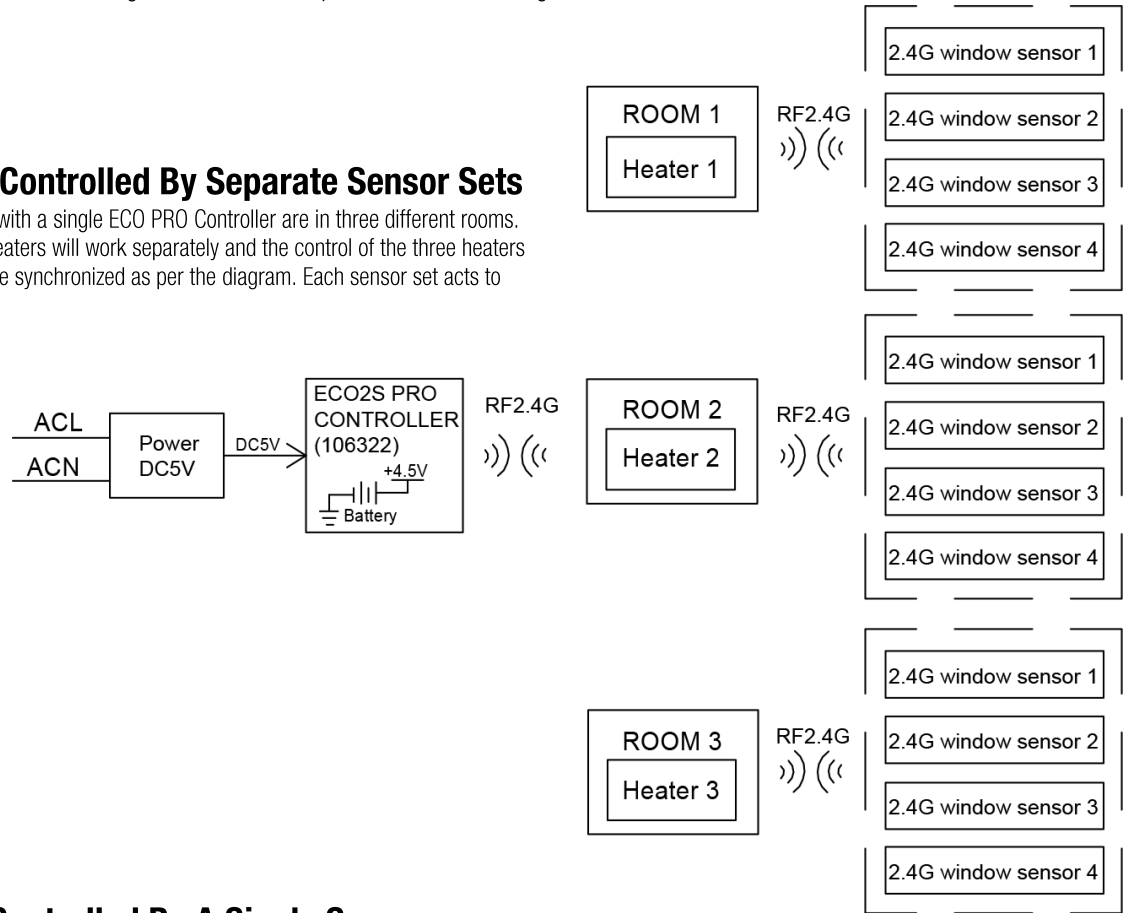
Each heater can be paired to a maximum of 4 x Window/Door Sensors. When heater(s) are paired to auxiliary RF sensors, there are 2 configuration options.

OPTION 1: Multiple heaters can be configured to a single ECO PRO Controller and separate auxiliary sensors can be assigned to each heater.

OPTION 2: One set of sensor can be assigned to control multiple heaters as a heating zone.

OPTION 1: Multiple Heaters Controlled By Separate Sensor Sets

The three heaters connected with a single ECO PRO Controller are in three different rooms. On this condition, the three heaters will work separately and the control of the three heaters via auxiliary sensors will not be synchronized as per the diagram. Each sensor set acts to control a single heater.



OPTION 2: Multiple Heaters Controlled By A Single Sensor

When the three heaters are in the same room, only one heater need to be connected with the RF PIR Motion sensors and door sensors, and the control of this heater will be synchronized to the other two heaters as per below diagram.

