



Model: RFI-E Radio Frequency Interface - Enocean

Installation Guide and Owner's Manual



FUNCTION

The RFI-E, Radio Frequency Interface – Enocean is a plug-in interface that receives a discreet RF code from any Enocean enabled device. Each RF code is translated into a UPB signal which is transmitted on the existing powerline. This allows control from any location with any optional RF switch, Hand-held Key Fob remote or Occupancy Sensor. Enocean is an RF communication and hardware standard that uses kinetic energy to charge a built in capacitor which in turn broadcasts the RF code. This means... **No Batteries, ever!**

TYPICAL USES

- The RFI-E and RF switches are perfect for adding a switch to any location where a powerline is not available.
- No need to add a J-Box and pull wire in any installation.
- The handheld Key Fob allows the user to control lights from inside or outside anywhere around the home
- Add wireless scene control to every room in the house.

INSTALLATION

The RFI-E is designed for indoor use with devices that are permanently wired into a homes electrical system.

To install the RFI-E module

1. Locate an open outlet with-in 50' in the area where any Enocean device will be deployed.
2. Actual communication distance will vary depending on environment. Enocean enabled devices will transmit 50'-60' direct line of site.
3. Objects like walls, doors and furniture can affect the reliability of any RF transmission. Located on the bottom of the unit is an extendable antenna that can be used to increase distance and reliability.

CONFIGURATION

Once your RFI-E is installed it is highly recommended to use UPStart Setup Software Version 5.1 Build 18 or higher for configuration.

The RFI-E is capable of responding up to as many as eight different Enocean enabled devices including, but not limited to; Decora style rocker switches, split rocker switches and handheld 4 button remotes and occupancy sensors.

PCS has developed a Powerline Interface Module (PIM) and free UPB Setup Tool software (UPStart) to help you configure all of your PulseWorx Lighting System devices. User's Guides are available on the PulseWorx web site: www.PulseWorx.com to explain how to configure your system.

SETUP MODE

When configuring, it will be necessary to place the RFI-E in SETUP mode. To do this:

- Press the Program Button (see illustration) **five** times rapidly. (Note; you may not exceed a .75 second interval prior to the next press. If you do the device will not go into SETUP mode, start again.)
- The Status LED will continuously blink Blue when the device is in SETUP mode.
- To exit SETUP mode, press the Program Button twice or wait five minutes for it to time out.

REGISTERING REMOTES

The RFI-E can learn the ID of up to eight different remotes follow these steps to register each RF Remote

1. On the RFI-E: Enter Learn mode by pressing and holding the push button until the Status LED blinks.
2. On the RFI-E: Tap the push button the number of times that correspond to the remote number you want to assign. IE; if you want to learn remote #3 then tap the button 3 times.
3. The RFI-E Status LED will blink red the remote number selected.
4. On the RF Remote: Single-tap one of the buttons so it transmits a signal to the RFI-E.
5. On the RFI-E: If it successfully received the signal and learned the remote, it will continuously blink the Status LED magenta.
6. Repeat steps 2 through 5 for any other remotes you want to learn.
7. On the RFI-E: Exit Learn mode by pressing and holding its push button until the Status LED stops blinking.
8. **IMPORTANT...** On UPstart: Press the Read Device button so that the Remote IDs are stored in the file.
9. In UPStart you may now modify the Link transmitted, the button Mode and the action for a Single-Tap, Double-Tap, Hold and Release



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OPERATION

The RFI-E can accept Enocean commands from 8 independent remotes. Each remote can be programmed to control any UPB command. The button Mode may be customized with separate actions for single tap, double tap, press and hold, release.

TEST MODE

Using UPStart the *Communication* tab allows a comtest to be run from the PIM to the RFI-E; this includes signal level, noise and average noise.

The *Test* tab displays a Receive Test window which allows you to verify and view button presses from Enocean devices along with ensuring that the RFI-E is transmitting the proper UPB commands on the powerline. A log is included that shows what specific code was received and transmitted from the RFI-E.

ADVANCED

Using UPStart, the *Advanced* tab allows for adjustment of the Receive Sensitivity. In a high noise environment dropping the sensitivity to low allows the device to ignore more noise. If the RFI-E is having trouble controlling UPB devices that are a long distance away, you may want to raise the sensitivity to High.

FACTORY DEFAULT

To restore the following default settings place the RFI-E into SETUP mode and press the Program Button ten times rapidly. The Status LED will blink red to indicate that factory defaults have been restored. Press the Program Button twice more to stop the blinking.

The Factory Defaults of the first 3 remotes are preset with the following commands:

- Remote 1 = Hand-held Remote... Link 1 and Link 8
- Remote 2 = Wall Switch Split-Rocker... Link 3 and Link 4
- Remote 3 = Wall Switch Single Rocker... Link 1

Note: In some default systems the RFI-E can be used in the factory default mode; however we highly suggest you use UPStart and program the device properly. If you have any questions, please contact Technical Support at 818.701.9831.



IMPORTANT SAFETY INSTRUCTIONS

When using electrical products, basic safety precautions should always be followed, including the following:

1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
2. Keep away from water. If the product comes in contact with water or other liquid, turn off the circuit breaker and unplug the product immediately.
3. Never use products that have been dropped or damaged.
4. Do not use this product outdoors.
5. Do not use this product for other than its intended purpose.
6. To avoid any risk of fire, burns, personal injury or electric shock, install this product out of the reach of small children.
7. Do not cover this product with any material when in use.
8. This product uses grounded plugs and sockets to reduce the risk of electric shock. These plugs and sockets fit only one way. If they do not fit, consult an electrician.

SAVE THESE INSTRUCTIONS

LIMITED WARRANTY

Seller warrants this product, if used in accordance with all applicable instructions, to be free from original defects in materials and workmanship for a period of five years from the date of purchase. Refer to the warranty information on the PulseWorx website (www.PulseWorx.com) for exact details.



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