ERUSB-CC user guide

Product Overview

Echoflex's ERUSB-CC is a wireless Passive Infra-Red (PIR) occupancy sensor and switch in a small package perfect for cubicle switch station applications. Powered through a USB connection and mounting at desk level or on a cubicle partition wall, the ERUSB-CC detects motion and transmits the occupancy status via an EnOcean telegram.

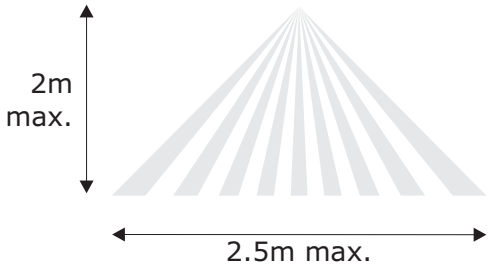
The cubicle switch station can be linked to any of Echoflex's line of embedded controllers or other EnOcean receivers. Assigning the ERUSB-CC to overhead lighting fixtures or task lighting can automate each cubicle space with individual lighting control. The built-in toggle switch allows manual override and can be used to set dimming levels when used with Echoflex's SmartSpace controller and dimming ballasts.

The ERUSB-CC comes with a 1m USB cable for connection to laptops and computers or the included 120V to USB plug adaptor.

Using the Cubicle Controller

The cubicle controller can be used as a manual light switch and as a cubicle occupancy sensor. The button switch on the cubicle controller sends PTM switch telegrams (press and release) alternating between On and Off telegrams. Pressing the button once simulates pressing a EnOcean wall switch On. Pressing the button again sends and Off telegram.

The occupancy sensor is a passive infrared (PIR) sensor and is designed for small areas like an office or cubicle space. The sensors range is cone shaped, 2m (6½ feet)in length from the sensor and 2.5m (8 feet) in diameter.



Within this range small movements such as hand gestures or picking up the phone or coffee mug will trigger occupancy.

⇨ The cubicle controller will transmit on a change of occupancy state immediately when changing from un-occupied to an occupied state.

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Part # 8DC-5151 | Revision 1.0

⇨ The sensor will pause 20 seconds after last occupancy before transmitting on un-occupied state.

⇨ A 100 second heartbeat timer will transmit the sensors current state.

Planning the Installation

The ERUSB-CC is a wireless transmitter intended to be used with Echoflex lighting control products. Locating the wireless transmitters to work with the lighting controller requires planning. Careful consideration should be made for locating the controllers and transmitters based on the construction materials in the space and possibility of tenant's furniture disrupting the transmissions. Fire doors, elevator shafts or any large metal products will disrupt wireless transmissions.

On floor-plan drawings, draw 30 m (100 feet) diameter circles to identify optimal transmitter and controller locations. Refer to the table below for range considerations with other building materials.

Material	Signal Range-typical
Line of site:	30m corridors
	100m open halls
Plasterboard:	30m, through 5 walls
Brick, Aerated Concrete:	20m, through 3 walls
FerroConcrete, Ceiling:	10m, 1 ceiling

An alternative method to onsite location planning is the EPM100C hand-held range testing device. The EPM100C provides the convenience of a hand-held device indicating EnOcean signal strength from transmitters. The EPM100C will verify proper signal reception at your intended controller locations.

For more information about range planning, please refer to the range planning guide downloaded from

"http://www.echoflexsolutions.com/files/downloads/Reliable Range Planning_0308.pdf"

Installing the ERUSB-CC

The cubicle controller is powered through a USB port. The cubicle controller comes with a USB cable type A to type mini-B plus a 120VAC to USB plugin adaptor.

1) Plug the USB cable's mini-B end into the ERUSB and the other end into a computers USB port or alternatively into the wall plug adaptor.

2) If the controller is plugged into a computer download the USB driver from http://www.echoflexsolutions.com/node/202 and install.

3) The controller can be mounted with double-sided tape or Velcro™. Adhere to the cubicle wall facing the work station or underneath the desk where the occupants legs rest.

Linking the ERUSB-CC to a Receiver

The cubicle controller can send two data telegrams. The button sends a PTM switch telegram and the occupancy sensor which sends a STM telegram. Each telegram must be linked to a receiver separately.

Linking the occupancy sensor

⇨ Place the receiver in LINK mode, consult the manufactures instructions if necessary.

⇨ Press and hold the button on the ERUSB for five (5) seconds. The ERUSB will transmit the TEACH command for the occupancy sensor.

⇨ Exit LINK mode

Linking the switch

⇨ Place the Echoflex receiver in LINK mode, consult the receivers instructions if necessary.

⇨ Press the button on the ERUSB three (3) times quickly. The ERUSB will transmit the TEACH command for the switch.

⇨ Exit LINK mode

Specifications

EnOcean Equipment Profiles	
EEP: 07-07-01	Occupancy Sensor
EEP: 05-02-02	Light & Blind Control
Communications	315 MHz EnOcean radio
Power	USB 2.0 Port
Weight	1.2 oz. (34 gms.)
Dimensions	3.2"x 2.1"x 0.7" (82 x 54 x 17 mm)
Antenna	Integrated
Input	Button Switch
Output	Power LED

Agency Listing and Compliance

Radio Frequency	FCC Part 15.231
	IC RSS-210