ERCII



4 CHANNEL CONTACT INPUT INTERFACE

Installation Guide



Overview

This guide covers model number ERCII-AU equipped with a 902 MHz radio. .

The ERCII interface is intended for indoor use only.

The interface uses wireless technology to transmit wireless events based on the status of the input channels.

The interface provides a convenient method of integrating your wireless controls with hard-wired systems like fire alarm systems, lighting panels, and building automation controllers.

Interface Operation

The interface receives dry contact closures from external devices to trigger a wireless signal. The inputs can be configured to send switch or sensor commands to wireless controllers or gateways.

The interface has 4 individual channels, each can be configured separately to transmit:

- Key Card Switch action
- Rocker Switch action
- Occupancy Sensor state
- Window/Door Contact, proximity switch state

The interface channels each have a pair of terminals labeled "5 VDC" and "IN". When these two terminals are shorted or bridged together, the interface will transmit a telegram based on the profile for the channel. The interface will transmit when the input is closed and when it is opened.

The interface appears as a switch or sensor to the receiver. The interface is not intended to be used for Simple Tap. If you must use the interface with Simple Tap to change a receivers configuration, contact Echoflex Solutions.

Interface as a Key Card Switch

The interface will transmit the "card-in" or "occupied" telegram when the input is closed. The "card-out" or "vacant" telegram is sent when the input is opened.

Interface as a Rocker Switch

The interface will transmit the "on" event when the input is closed. This simulates the pressing of the ON paddle of a standard rocker switch which includes two telegrams, the press and release of the switch. The "off" telegram is sent when the input is opened, again 2 telegrams are sent.

Interface as a Occupancy Sensor

The interface will transmit the "occupied" event when the input is closed. The "vacant" telegram is sent when the input is opened. The interface will send out a heartbeat every 100 seconds indicating the channel state.

Interface as a Window or Door Switch

The interface will transmit the "open" event when the input is closed. The "closed" telegram is sent when the input is opened. The interface will send out a heartbeat every 100 seconds indicating the channel state.

Preparing to Install the Interface

The interface can be mounted to a wall, DIN rail, standard three-gang back box, or panel using two screws (not supplied). To insure the receivers can receive the linked interface channel telegrams, it is recommended to complete a site audit before installing.

NOTE: Installation inside a metal back box will reduce radio range and is not recommended.

The remote receivers and the interface should be within 80' of each other laterally. Do not locate the interface where there are concrete or brick walls or any large metal obstructions between the remote transmitters and the interface.

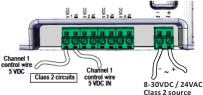
NOTE: Follow all local code requirements for wire termination.

CAUTION: For indoor use only.

Installing the Interface

Review these instructions completely before installing the interface. For the best results, the interface should be mounted on a wall with no metal obstructions, brick or concrete between the remote devices and the interface. Consult your local electrical code requirements for the installation of low voltage devices.

- 1. To wall mount the interface hold in the desired mounting location.
- 2. Use a pencil to mark the two mounting holes.
- 3. Remove the station and drill the required mounting holes.
- 4. Install anchors (if required).
- 5. Using screws (not provided), attach the controller to the wall. The controllers mounting holes accept screws sized #4 through #10.
- 6. Connect power to the interface at the two pole terminal strip. Power requirements are 8-30VDC or 24VAC, minimum 250mA, Class 2.
- 7. Strip both wires from your control device, removing 1/4" (6mm) of wire insulation.
- Insert the stripped control wires into the channel terminals labeled 5 VDC and "IN" and tighten both screw terminals with a small flathead screwdriver.
- 9. Repeat for each channel used.



Buttons

Channel Select - Allows you to scroll through the four programmable channels.

Input Type (EEP) - Allows you to select one of four equipment profile telegrams for the selected channel. Press and hold for 3 seconds to change the type.

Teach - Allows you to "teach" the interface channel to remote receivers that are currently in "Learn" mode. Press and hold for 3 seconds to send a teach message.

Status LEDs

Channel State - When the channel terminals are bridged, the LED will be lit green. When the channel terminals are open, the LED will be lit red.

Channel Mode - Each channel has a mode LED that blinks a code indicating the selected profile for that channel per the table below. Only 1 channel can be selected at an time.

Blinks	Device
1 Blink	Key card station
2 Blinks	Single rocker station
3 Blinks	Occupancy sensor
4 Blinks	Window/door contact station
Continuous Blinking	No assigned profile

Linking the Interface to Receivers

- 1. Select the channel you wish to link by pressing the Channel button on the Interface.
- 2. To change the EEP, press and hold the **EEP Select** button on the Interface until the channel's mode LED remains ON solid, about 3 seconds. Refer to the table above describing the status LED blink codes. Continue changing the EEP until the blink pattern matches the desired EEP.
- 3. Place the receiver in Learn or Link mode by pressing the Learn button on the receiver. If necessary, consult the manufacturers documentation.
- 4. Press and hold the **Teach** button on the Interface for 3 seconds. The selected channels Channel Mode LED will light solid for 2 seconds to confirm the request.

NOTE: For the Key Card and Rocker Switch teach-in sequence, the interface will transmit three consecutive sets of a switch press and release.

5. Exit Learn mode at the receiver.

Status Message- enable or disable the status messaging

The interface will send heartbeat messages every 100 seconds for channels defined as an occupancy sensor or window/door contact. In some gateway applications it may be necessary to transmit a status message.

- 1. Press and hold the **EEP Select** button.
- 2. While holding, press the **Teach** button, twice to enable status messaging, once to disable.
- 3 Release the **FFP Select** button

Repeating - enable or disable the telegram repeating

- 1. Press and hold the **Teach** button.
- 2. While holding, press the **EEP Select** button, twice to enable repeating, once to disable.
- 3. Release the **Teach** button.

Status Message -

Type = MSC, manufacturer specific communication

Byte 2 = 04

Byte 3 = FF

Byte 4 = [Channel 1 EEP] & [Channel 1 state]

Byte 5 = [Channel 2 EEP] & [Channel 2 state]

Byte 6 = [Channel 3 EEP] & [Channel 3 state]

Byte 7 = [Channel 4 EEP] & [Channel 4 state]

EEP	State
0 - No EEP	0 - Open
1 - Keycard Switch	1 - Close

- 2 Rocker Switch
- 3 Occupancy Sensor
- 4 Window/Door Contact

FCC and IC Certifications

Contains FCC ID: SZV-STM300U



The enclosed device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (I.) this device may not cause harmful interference and
- (ii.) this device must accept any interference received, including interference that may cause undesired operation.

Contains IC: 5713A-STM300U

Copyright 2015-2016 Echoflex Solutions, Inc. | Specifications subject to change without notice. Revision 1.3 | Document 7188M5001 | Rev C

Echoflex Solutions, Inc.

#1, 38924 Queens Way | Squamish | BC | Canada | V8B 0K8 Toll Free: 888-324-6359 | Phone: (778) 733-0111 | Fax: (604) 815-0078 Email: info@echoflexsolutions.com | www.echoflexsolutions.com



