



UNIVERSITY OF MICHIGAN
COLLEGE OF ENGINEERING
THE RADIATION LABORATORY
DEPARTMENT OF ELECTRICAL ENGINEERING
AND COMPUTER SCIENCE

3228 EECS BUILDING
1301 BEAL AVENUE
ANN ARBOR, MICHIGAN 48109-2122
734 764-0500 FAX 734 647-2106
<http://www.eecs.umich.edu/RADLAB/>

Re: Certification for JCI FN145 Series Transmitter
Models: FN145-AB, BB,DB,EB,FB,JB
FCC ID: CB2FN145HL3
CANADA: to be provided by IC

USER'S MANUAL INFORMATION

(PRELIMINARY)

The User's Manual is in preparation. The following material will be contained in the manual:

FCC ID: CB2FN145HL3

CANADA: to be provided by IC

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. 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.

WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The Owners Manual for the Homelink® series Universal Garage Door Opener is reproduced here.

HomeLink® Universal Transceiver
Suggested Owner's Manual Text
October, 2000

HomeLink® Universal Transceiver

The HomeLink® Universal Transceiver in your vehicle provides a convenient way to replace up to three hand-held transmitters with a single built-in component. This innovative feature will learn the radio frequency codes of most current transmitters used to activate devices such as garage doors, entry door locks, estate gates, security systems, and home or office lighting. For additional information on HomeLink and/or HomeLink compatible products, call **1-800-355-3515** or refer to the *HomeLink web site at www.homelink.jci.com*.

Precautions

When programming the HomeLink Universal Transceiver to a garage door opener or entry gate, make sure that people and objects are out of the way to prevent potential harm or damage.

Do not use the HomeLink Universal Transceiver with any garage door opener that lacks the safety stop and reverse feature as required by federal safety standards. (This includes any garage door opener model manufactured before April 1, 1982.) A garage door opener which cannot detect an object, signaling the door to stop and reverse, does not meet current federal safety standards. Using a garage door opener without these features increases risk of serious injury or death. For more information, call **1-800-355-3515** or on the internet at **www.homelink.jci.com**.

Retain the original transmitter for future programming procedures (i.e., new vehicle purchase). It is also suggested that upon the sale of the vehicle, the programmed HomeLink Universal Transceiver buttons be erased for security purposes (follow step 1 in the "Programming" portion of this text).

Programming

Note: For best results, replace the battery in the hand-held transmitter with a ***new*** battery before programming. If your garage door opener receiver (located in the garage) is equipped with an antenna, make sure the antenna is completely uncoiled and hangs straight down.

1. Press and hold the two outside buttons - releasing *only* when the indicator light begins to flash *after 20 seconds*. (This procedure erases the factory set default codes and does not have to be followed to program additional hand-held transmitters.)
2. Hold the end of the hand-held transmitter of the device you wish to train approximately one to three inches away from the HomeLink surface - *keeping the indicator light in view*. (For placement questions, please contact HomeLink at **1-800-355-3515** or on the internet at **www.homelink.jci.com**.)
3. Using both hands, simultaneously push the hand-held transmitter button *and* the desired HomeLink button. **Do not release the buttons until step 4 has been completed.**

Note: Some entry gates and garage door openers may require you to *replace this programming step (#3) with the procedures noted in the “Canadian Programming / Gate Programming” section.*

4. The HomeLink indicator light will flash, first slowly and then rapidly. When the indicator light flashes rapidly, release both buttons. (The rapid flashing light indicates successful programming of the new frequency signal.)

If, after 20 seconds, the indicator light does not flash rapidly, release both the HomeLink and the hand-held transmitter buttons and repeat steps two through four. ***However, position the hand-held transmitter at a different length and/or angle*** until the indicator light begins to flash rapidly. Release both buttons after the indicator light flashes rapidly.

Refer to “Rolling Code Programming” and/or “Canadian Programming/Gate Programming” for additional procedures if necessary.

To activate the garage door or other programmed device upon successfully completing the steps above, press and hold the HomeLink button - releasing when the device ***begins*** to activate.

To program the remaining two buttons, follow steps 2 through 4.

If you do not successfully program the HomeLink Universal Transceiver to learn the signal of the hand-held transmitter, refer to “Rolling Code Programming” within this text *or call toll-free for customer assistance at 1-800-355-3515* or on the internet at **www.homelink.jci.com**.

Canadian Programming / Gate Programming

Canadian frequency laws, and the technology of some entry gates, require you to “cycle” (press and re-press the hand-held transmitter button every two seconds) during programming.

Continue to press and hold the desired HomeLink button (note steps 3 through 5 in the “Programming” portion of this text) while you “cycle” your hand-held transmitter until the frequency signal has been learned. The indicator light will flash slowly and then rapidly upon successful training.

Note: When programming a garage door opener or gate, it is advised to unplug the device during the “cycling” process to prevent possible motor burn-up

Operating the HomeLink® Universal Transceiver

To operate, simply press the programmed HomeLink button. Activation will now occur for the trained product (garage door, security system, entry door lock, estate gate, or home or office lighting). For convenience, the hand-held transmitter of the device may also be used at any time.

Rolling Code Programming

Rolling code garage door openers (or other rolling code devices) which are “code protected” and manufactured after 1996, may be determined by the following:

- A. Reference the garage door opener owner’s manual for verification.
- B. The hand-held transmitter appears to program the HomeLink Universal Transceiver but HomeLink does not activate the garage door.
- C. Press and hold the trained HomeLink button. The garage door opener has the rolling code feature if the HomeLink *indicator light* flashes rapidly and then turns solid after 2 seconds.

To train a garage door opener with the rolling code feature, follow these instructions after completing the “Programming” portion of this text (the aid of a second person may make the following training procedures quicker and easier.)

1. Locate the training button on the *garage door opener receiver (in the garage)*. Exact location and color of the button may vary by garage door opener brand. If there is difficulty locating the training button, reference the garage door opener owner’s manual or contact HomeLink at **1-800-355-3515** or on the internet at **www.homelink.jci.com**.
2. Press the “training” button on the garage door opener receiver (*which will activate the “training” light*).

Note: Following step 2, there are **30 seconds** in which to initiate step 3.

3. Firmly press and release the programmed HomeLink button. Press and release the HomeLink button *a second time* to complete the training process. (Some garage door openers may require you to do this procedure a *third time* to complete the training.)

The garage door opener should now recognize the HomeLink signal and activate when the HomeLink button is pressed. The remaining two buttons may now be programmed if this has not previously been done. Refer to the “Programming” portion of this text.

Erasing Programmed HomeLink® Buttons

Individual buttons cannot be erased, however, to erase the three programmed buttons:

1. Press and hold the two outside buttons until the indicator light begins to flash after 20 seconds.
2. Release both buttons.

The HomeLink Universal Transceiver is now in the train (or learning) mode and can be programmed at any time following steps 2 through 4 in the “Programming” portion of this text.

Reprogramming a Single HomeLink® Button

To program a device to HomeLink using a button previously trained, follow these steps:

1. Press and hold the desired HomeLink button. **Do NOT** release until **step 4** has been completed.
2. When the indicator light begins to flash slowly (after 20 seconds), position the hand-held transmitter 1 to 3 inches away from the HomeLink surface.
3. Press and hold the hand-held transmitter button.
4. The HomeLink indicator light will flash, first slowly and then rapidly. When the indicator light begins to flash rapidly, release both buttons.

The previous device has now been erased and the new device can be activated by pushing the HomeLink button that has just been programmed. This procedure will not affect any other programmed HomeLink buttons.

This device complies with FCC rules part 15. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference that may be received including interference that may cause undesired operation. **WARNING:** The transmitter has been tested and complies with FCC and DOC/MDC rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

DOC: XXXX XXXX XXX XXX JCI MODEL/FCC ID: CB2XXXXXX

HomeLink® is a registered trademark owned by Johnson Controls, Inc.