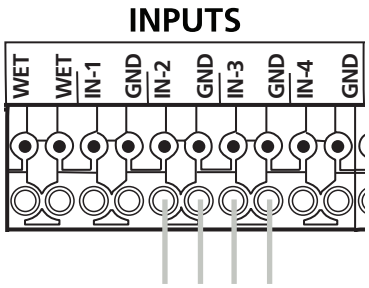
APPLICATION NOTE

RETROFIT: LE21 to BR3-X

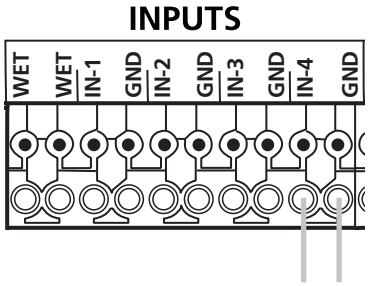
The purpose of this Application Note is to define the procedure for how to retrofit an application from an LE21 to a BR3-X logic module.

RE-WIRE

1. REWIRE ACTIVATION
   a) Locate the LE21's blue wires connecting to the activation source (e.g. push plates, motion sensor, wireless receiver).
   b) Disconnect the device's wires from the LE21, noting which are N.O. and COM.
   c) Wire to the BR3-X at IN-2 / GND and/or IN-3 / GND terminal points.

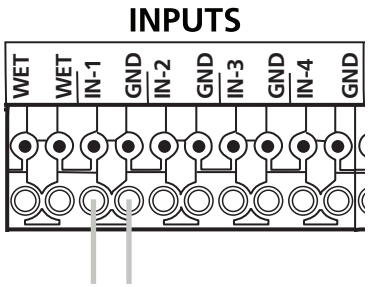


2. REWIRE DOOR POSITION SWITCH
   a) Locate the LE21's gray wires connecting to the DPS.
   b) Disconnect the device's wires from the LE21, noting which are N.O. and COM.
   c) Wire to the BR3-X at IN-4 and GND terminal points.



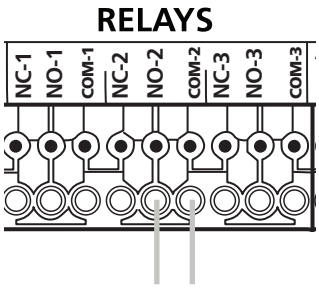
3. REWIRE REACTIVATION
   a) Locate the LE21's red and green wires connecting to the door control.
   b) Disconnect the device's wires from the LE21, noting which are N.O. and COM.
   c) Wire to the BR3-X at NO-2 and COM-2 terminal points.

LE21 WIRE COLORS
N.O. = red
COM = green



4. WIRE TO DOOR CONTROL
   a) Obtain a new green wire and a new yellow wire.
   b) Using these new wires, connect one end of the yellow wire to the door control activation, and the free end to the BR3-X at NO-2 and COM-3.

LE21 WIRE COLORS
N.O. = yellow
COM = green

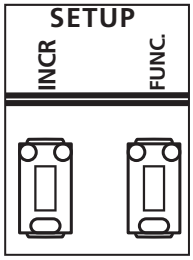


RE-WIRE (cont.)

5. REWIRE TO POWER
   a) Locate the LE21's orange and brown wires connecting to power.
   b) Disconnect the device's wires from the LE21.
   c) Wire to the BR3-X at <u>both</u> power (AC/DC) terminal points.

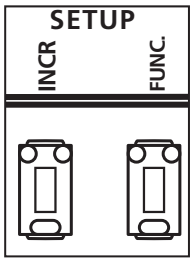
PROGRAM BR3-X

1. The BR3-X must bet set to Function 22. To do so, first press and hold the INCR and FUNC buttons for 3 seconds until the display toggles between FF and 00.
2. Press the INCR button repeatedly until you reach "22".



DETERMINE BR3-X PARAMETERS

1. Using the chart in Appendix 1, observe the DIP switch configuration on the LE21.
2. On the BR3-X, press FUNC to reach the h2 parameter, then use the INCR button to reach the appropriate value for hold time.



Refer to the BR3-X full User's Guide (75.5871) for more information.

BEA, INC. INSTALLATION/SERVICE COMPLIANCE EXPECTATIONS

BEA, Inc., the sensor manufacturer, cannot be held responsible for incorrect installations or incorrect adjustments of the sensor/device; therefore, BEA, Inc. does not guarantee any use of the sensor/device outside of its intended purpose.

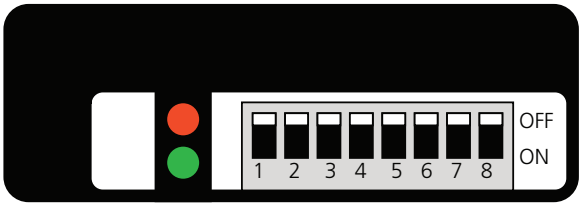
BEA, Inc. strongly recommends that installation and service technicians be AAADM-certified for pedestrian doors, IDA-certified for doors/gates, and factory-trained for the type of door/gate system.

Installers and service personnel are responsible for executing a risk assessment following each installation/service performed, ensuring that the sensor/device system performance is compliant with local, national, and international regulations, codes, and standards.

Once installation or service work is complete, a safety inspection of the door/gate shall be performed per the door/gate manufacturer's recommendations and/or per AAADM/ANSI/DASMA guidelines (where applicable) for best industry practices. Safety inspections must be performed during each service call – examples of these safety inspections can be found on an AAADM safety information label (e.g. ANSI/DASMA 102, ANSI/DASMA 107, UL294, UL325, and International Building Code).

Verify that all appropriate industry signage, warning labels, and placards are in place.

APPENDIX: LE21 DIP CONFIGURATIONS



TIME DELAY (sec)	DIP 1 (1 sec)	DIP 2 (2 sec)	DIP 3 (4 sec)	DIP 4 (8 sec)	DIP5 (16 sec)
1	ON	OFF	OFF	OFF	OFF
2	OFF	ON	OFF	OFF	OFF
3	ON	ON	OFF	OFF	OFF
4	OFF	OFF	ON	OFF	OFF
5	ON	OFF	ON	OFF	OFF
6	OFF	ON	ON	OFF	OFF
7	ON	ON	ON	OFF	OFF
8	OFF	OFF	OFF	ON	OFF
9	ON	OFF	OFF	ON	OFF
10	OFF	ON	OFF	ON	OFF
11	ON	ON	OFF	ON	OFF
12	OFF	OFF	ON	ON	OFF
13	ON	OFF	ON	ON	OFF
14	OFF	ON	ON	ON	OFF
15	ON	ON	ON	ON	OFF
16	OFF	OFF	OFF	OFF	ON
17	ON	OFF	OFF	OFF	ON
18	OFF	ON	OFF	OFF	ON
19	ON	ON	OFF	OFF	ON
20	OFF	OFF	ON	OFF	ON
21	ON	OFF	ON	OFF	ON
22	OFF	ON	ON	OFF	ON
23	ON	ON	ON	OFF	ON
24	OFF	OFF	OFF	ON	ON
25	ON	OFF	OFF	ON	ON
26	OFF	ON	OFF	ON	ON
27	ON	ON	OFF	ON	ON
28	OFF	OFF	ON	ON	ON
29	ON	OFF	ON	ON	ON
30	OFF	ON	ON	ON	ON
31	ON	ON	ON	ON	ON