# APPLICATION NOTE

RETROFIT: MC25 to BR3-X

The purpose of this Application Note is to define the procedure for how to retrofit an application from an MC25 to a BR3-X logic module.

RE-WIRE


1. REWIRE ACTIVATION

   a) Locate the MC25's gray wires connecting to the activation source (e.g. push plates, motion sensor, wireless receiver).

   b) Disconnect the device's wires from the MC25, noting which are N.O. and COM.

   c) Wire to the BR3-X at IN-1 and GND terminal points.

INPUTS
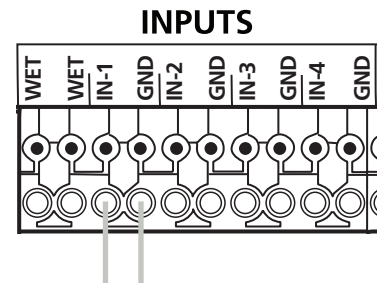
2. REWIRE LOCK

   a) Locate the MC25's purple, red, and black wires connecting to the lock.

   b) Disconnect the device's wires from the MC25, noting which are N.C. (or N.O.) and COM.

   c) Wire to the BR3-X at NC-1 (or NO-1) and COM-1 terminal points.

RELAYS

MC25 WIRE COLORS		
N.C.	=	purple
N.O.	=	black
COM	=	red

OR
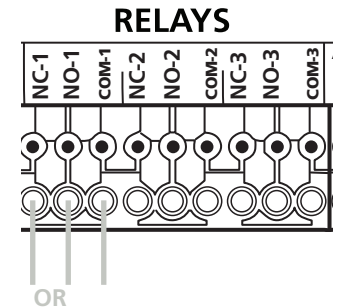
3. REWIRE TO DOOR CONTROL

   a) Locate the MC25's green, yellow, and blue wires connecting to the door control.

   b) Disconnect the device's wires from the MC25, noting which are N.C. (or N.O.) and COM.

   c) Wire to the BR3-X at NC-2 (or NO-2) and COM-2 terminal points.

RELAYS

| MC25 WIRE COLORS		
N.C.	=	green
N.O.	=	blue
COM	=	yellow

OR
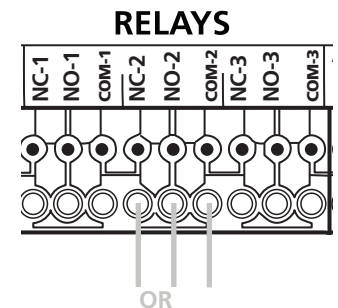
4. REWIRE TO POWER

   a) Locate the MC25's orange and brown wires connecting to power.

   b) Disconnect the device's wires from the MC25.

   c) Wire to the BR3-X at <u>both</u> power (AC/DC) terminal points.

AC/DC
12-24V

ADJUST JUMPERS

1. Observe the position of the DRY/WET and AC/DC jumpers on the MC25, noting their configuration for WET or DRY input.

2. The BR3-X is already configured for a DRY input, so if your MC25 shows a WET input configuration, switch the jumper to WET.

3. The BR3-X is already configured for DC output, so if your application is requiring AC output, switch the jumper to AC.

MC25 JUMPERS

BR3-X JUMPERS
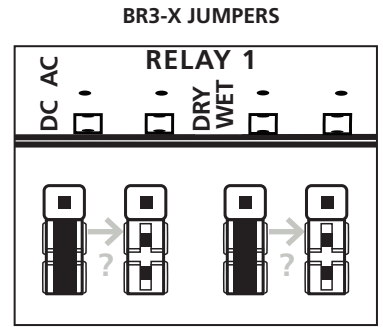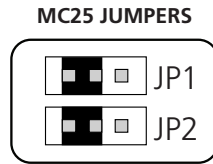
IMPORTANT NOTES:

* If previous application involved bridge rectifier, note that the BR3-X has built-in rectifier, so choice of jumper automatically rectifies if needed.

* When using a WET output and rectifying AC to DC, the BR3-X output will be ~40% higher than input.

PROGRAM BR3-X

1. The BR3-X must bet set to Function 28. 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 "28".
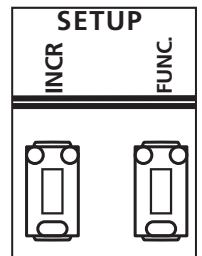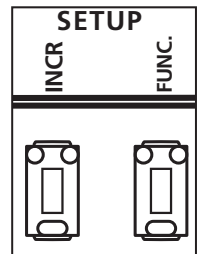

DETERMINE BR3-X PARAMETERS

1. Using the charts in the Appendix, observe the DIP switch configurations on the MC25.

	Relay 1	Relay 2	Delay
MC25 DIP switches	1, 2, 3	4, 5, 6, 7	8
BR3-X parameters	h1	h2	d1

2. On the BR3-X, press FUNC to cycle through the parameters, then use the INCR button to reach the appropriate value. Repeat this for h2 and d1 parameters.

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

Tech Support & Customer Service: 1-800-523-2462 | General Tech Questions: techservices-us@BEAsensors.com | Tech Docs: www.BEAsensors.com

RELAY 1

TIME DELAY (sec)	DIP 1 (1 sec)	DIP 2 (2 sec)	DIP 3 (4 sec)
1	ON	OFF	OFF
2	OFF	ON	OFF
3	ON	ON	OFF
4	OFF	OFF	ON
5	ON	OFF	ON
6	OFF	ON	ON
7	ON	ON	ON

RELAY 2

TIME DELAY (sec)	DIP 4 (1 sec)	DIP 5 (2 sec)	DIP 6 (4 sec)	DIP 7 (8 sec)
1	ON	OFF	OFF	OFF
2	OFF	ON	OFF	OFF
3	ON	ON	OFF	OFF
4	OFF	OFF	ON	OFF
5	ON	OFF	ON	OFF
6	OFF	ON	ON	OFF
7	ON	ON	ON	OFF
8	OFF	OFF	OFF	ON
9	ON	OFF	OFF	ON
10	OFF	ON	OFF	ON
11	ON	ON	OFF	ON
12	OFF	OFF	ON	ON
13	ON	OFF	ON	ON
14	OFF	ON	ON	ON
15	ON	ON	ON	ON

DELAY

TIME DELAY (sec)	DIP 8
0.5	OFF
1.5	ON