QUICK GUIDE

BR3-X

Visit website for full User's Guide and language options.
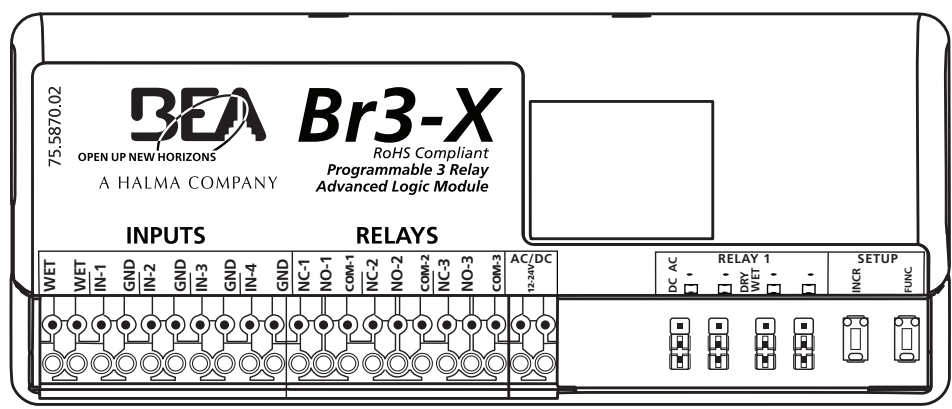
## ! READ BEFORE BEGINNING INSTALLATION & SET-UP !

- Shut off all power going to header before attempting any wiring procedures.

- Maintain a clean and safe environment when working in public areas.

- Constantly be aware of pedestrian traffic around the door area.

- Always stop pedestrian traffic through the doorway when performing tests that may result in unexpected reactions by the door.

- ESD (electrostatic discharge): Circuit boards are vulnerable to damage by electrostatic discharge. Before handling any board ensure you dissipate your body's ESD charge.

- Always check placement of all wiring before powering up to ensure that moving door parts will not catch any wires and cause damage to equipment.

- Ensure compliance with all applicable safety standards (i.e. ANSI A156.10) upon completion of installation.

- DO NOT attempt any internal repair of the components. All repairs and/or component replacements must be performed by BEA, Inc. Unauthorized disassembly or repair:

  1. May jeopardize personal safety and may expose one to the risk of electrical shock.

  2. May adversely affect the safe and reliable performance of the product resulting in a voided warranty.

SET-UP / WIRING

Set jumpers.

RELAY 1 OUTPUT	DRY/WET JUMPER[2]	AC OUTPUT VOLTAGE[1]	DC OUTPUT VOLTAGE[2]
DRY	both jumpers set to DRY	N/A	N/A
WET[1]	both jumpers set to WET	both jumpers set to AC	both jumpers set to DC

Wiring according to desired function (reference full User's Guide for complete set of wiring diagrams).
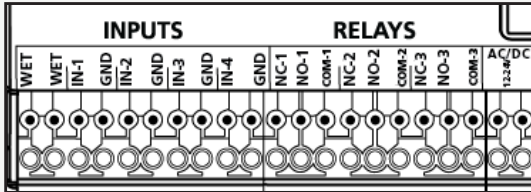
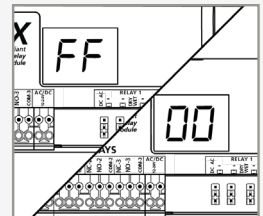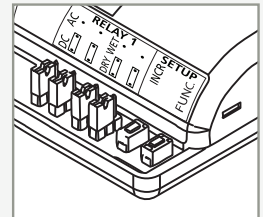**NOTES:**
1. If voltage Input at the Br3-X is AC, then output selection can be AC or DC.
2. When DC 'WET' output is selected, COM terminal is positive (+) and the ground (-) is switched between NO and NC.

PROGRAMMING

1. Press and hold INCR + FUNC for 3 seconds.
2. Display will toggle between *FF* / *00* for 5 seconds.[1,2]
3. While *FF* / *00* is displayed, press INCR to cycle through functions.
4. Once desired function is selected, press FUNC to cycle through parameters.
5. Display will toggle between parameter and its current value for 5 seconds.
6. Press[3] INCR to cycle through parameter's values.
7. Repeat steps 4-7 until all function parameters are set.
8. Wait 5 seconds for Br3-X to save and display function.
9. Test the device to ensure that all function parameters are working correctly and as intended for the specific application.

NOTES:
1. Function 00 disables the BR3-X.
2. "nP" = no parameters are applicable for the selected function.
3. Relay hold time(s) and delay time(s) MUST be set for any relay that is to be utilized. Ex: For function 36, if using only relay 1, h1 must be set… if using relay 1 and relay 2, h1, h2, and d1 must be set.
4. Pressing and holding INCR will rapid cycle.

FUNCTIONS REFERENCE

FUNCTION	DESCRIPTION	LOGIC
10	timer	• activation of relay 1 via trigger of input 1 • reverse logic available
11	ratchet / latching	• ratchet/latching of relay 1 via trigger of input 1
22	2-relay sequencer + inhibitor	• sequence of relay 1 and relay 2 with inhibiting of input 1 until input 2, input 3, or WET input is triggered • activation of input 4 reinhibits input 1
28	2-relay sequencer + door position	• sequence of relay 1 and relay 2 via trigger of input 1 or WET input • input 2 allows delay to run when open but not when closed
29	deactivation timer	• sequence of relay 1 and relay 2 via trigger of input 1 or WET input • input 2, once opened after sequence, allows relay 1 to deactivate • input 2 allows delay to run when open but not when closed • input 3 disables sequence, reverse logic available
36	3-relay sequencer + '1-shot'	• sequence of relay 1 and relay 2 and relay 3 via trigger of input 1 or WET input • relay 1, relay 2, and relay 3 can be maintained or '1-shot'
37	3-relay sequence with 'independent relay'	• sequence of relay 1 and relay 2 and relay 3 via trigger of input 1 or WET input • relay 1, relay 2, and relay 3 can be 'independent' or sequenced
50	interlock timer	• interlock of relay 1 and relay 2 via trigger of input 1 and input 2, respectively
55	interlock ratchet / latching	• interlock ratchet of relay 1 and relay 2 via trigger of input 1 and input 2, respectively
65	2-way 2-relay sequence	• sequence of relay 1 and relay 2 via trigger of input 1 • sequence of relay 2 and relay 1 via trigger of input 2 • input 3 triggers relay 1 individually, input 4 triggers relay 2 individually
nL	normally locked restroom	• sequence of relay 1 (lock), relay 2 (door), and relay 3 (occupied indicators) for normally locked, single occupancy restrooms
nU	normally unlocked restroom	• sequence of relay 1 (lock), relay 2 (door), and relay 3 (occupied indicators) for normally unlocked, single occupancy restrooms
dn	3-relay sequencer + 'day / night mode'	• sequence of relay 1 and relay 2 and relay 3 via trigger of input 1 or WET input • input 2 operation dependent upon input 4 ('day / night mode')
00	disable	• Br3-X disabled • 00 is the default setting and has no assigned function

PARAMETERS REFERENCE

PARAMETER	DESCRIPTION	LOGIC	
h1*	relay 1 hold time	00 - 60 seconds countdown begins AFTER release of input 1 or WET input	
h2*	relay 2 hold time	00 - 60 seconds countdown begins AFTER d1 (delay between relay 1 & relay 2) expires	
h3*	relay 3 hold time	00 - 60 seconds countdown begins AFTER d2 (delay between relay 1 & relay 3) expires	
d1	delay between relay 1 & relay 2	00 - 60, _1 (1/4), _2 (1/2), _3 (3/4) seconds delay begins AT activation of input 1 or WET input	
d2	delay between relay 1 & relay 3	00 - 60, _1 (1/4), _2 (1/2), _3 (3/4) seconds delay begins AT activation of input 1 or WET input	
rL	reverse logic	00 = normal logic input 1 trigger must be NO and close its contact to trigger	01 = reverse logic input 1 trigger must be NC and open its contact to trigger
nP	no parameters	no parameters available for selected function	

* When using Function 36 as "one-shot," countdown begins as soon as input 1 or WET input is triggered.

TECHNICAL SPECIFICATIONS

Supply Voltage	12 – 24 VAC/VDC ±10%
Current Consumption	30 – 130 mA (DRY output)

Input
  Input 1, 2, 3, 4
  WET input
	
	DRY contact
	5-24 VAC/VDC ±10%

Contact Rating
  Relay 1 (DRY)
  Relay 1 (WET)
  Relay 2
  Relay 3
	
	3 A @ 24 VAC or 30 VDC
	1 A
	3 A @ 24 VAC or 30 VDC
	1 A @ 24 VAC or 30 VDC

Specifications are subject to change without prior notice.
All values measured in specific conditions.

BEA INSTALLATION/SERVICE COMPLIANCE EXPECTATIONS

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

BEA 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 system installation 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 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).

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

AAADM   ANSI   DASMA   DHI   IDA   BEA

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General Tech Questions: Tech_Services@beainc.com | Tech Docs: www.BEAinc.com

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