

## **APPLICATION NOTE**

## DOOR CONTROL WIRING MATRIX

LZR-FLATSCAN SW

LZR-FLATSCAN 3D SW





## 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 quarantee 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.









Control Harness: 20.5433	R	Bk	E	31	Br	G W	Gy	Gy	P P
	POWER <sup>1</sup>	(	O1: N.O.	O1: N.C.	O1: COM	O2: REACTIVATION <sup>2</sup>	O2: ACT (COM)	O3: VPB <sup>3</sup>	MONITORING <sup>4</sup>
Besam ETIK <sup>5</sup>	30.5558			15/17	16/18	Logic Module	12	13	Not supported.
Besam MP/CUP	30.5558		5		4	Logic Module	4	3	Not supported.
Besam PowerSwing/EXB	30.5558			TB4-29	TB4-26	Logic Module	TB3-20	TB3-21	Not supported.
Besam SM	30.5558		TB1-7		3	Logic Module	3	1	Not supported.
Assa Abloy SW 100/200, DITEC HA9 <sup>6</sup>	24V+ (	ind		EXU-SA 3	EXU-SA1	EXU-SA 1 and 2 (N.C.)	CU-ESD 1	CU-ESD 2	Refer to BEA product User's Guide and OEM manual.
CONDOR	30.5558		DMS O		COMMON N	V and W	COM 16	ACTIVATE 17	Not supported.
DCU DC700 Access Auto. ES500 Quad Systems ES500	30.5558	CI	N6 GREEN		CN6 BLACK	AUX CN7 (AF = 2)	CN2 #3	CN2 #2	Not supported.
Detex BS1000S/UDC100	30.5558		5		1	J2-3 and 1	1	2	Not supported.
Dor-O-Matic	30.5558		PURPLE		GRAY	Logic Module	GRAY	YELLOW	Not supported.
Dorma 400/700	30.5558		SWING		GND	APPR and GND	GND	TRIGGER	Not supported.
Dorma ED 100/250 <sup>7</sup>	1	3		15	3	11 (N.C.)	3	42	Refer to BEA product User's Guide and OEM manual.
Gyrotech/Nabco Magnum	30.5558		3 VIOLET		5 RED	Logic Module	5 RED	6 BLACK	Not supported.
Gyrotech/Nabco Opus	30.5558		5		2	2 and 4	2	3	1 and 7
Gyrotech/Nabco U19	30.5558	V	WHITE 6B		RED 7	Logic Module	RED 7	61/62	Not supported.
Gyrotech 300/400 <sup>8</sup>	30.5558		WHITE		RED	Logic Module	RED	BLACK	Not supported.
Horton 4160-3 <sup>9</sup>	30.5558	DAUG	GHTER BOARD		DAUGHTER BOARD	Logic Module	WHITE	BLACK	Not supported.
Horton 4190 <sup>10</sup>	30.5558		10		3	11 and 8	3	2	Not supported.
Horton 5190	+24 VDC	O V CN16	6 ORANGE (10)		CN16 YELLOW (9)	CN16 GREEN (8)	CN16 BROWN (7)	CN20: 2 = interior, 3 = exterior CN7 COM	CN16 PURPLE (13), BLUE (14)
Hunter HA, DITEC HA8	30.5558		SAFE 2		RTN	ACT 2 and return	RTN	ACT	Not supported.
Keane-Monroe K	30.5558		YELLOW		WHITE	Logic Module	WHITE	GREEN	Not supported.
LCN Digital / Senior Swing	30.5558	P	P2 GREEN		P2 WHITE	P3 white and green	P6 GRAY	P6 YELLOW	Not supported.
Record 6000/8000 <sup>11</sup>	4	6		10	11	11 and 12 (N.C.)	1	2	Refer to BEA product User's Guide and OEM manual.
Stanley "L" <sup>12</sup>	30.5558		BLUE		YELLOW	Logic Module	YELLOW	ORANGE	Not supported.
Stanley MP	30.5558		7		8	Logic Module	8	2	Not supported.
Stanley MC 521 <sup>13</sup>	30.5558		TB3-4		TB3-3	TB5 3 and 4	TB4-3	TB4-4	Refer to BEA product User's Guide and OEM manual.
Stanley MC 521 Pro and IQ <sup>13</sup>	TB4-5 T	34-6	TB3-4		TB3-3	TB5 3 and 4	TB4-3	TB4-4	Refer to BEA product User's Guide and OEM manual.
Tucker	30.5558			J4-14	J4-8 jumped to 12 & 13	N.C. contact between J4 13 and COM	J4-8 jumped to 12 & 13	J4-10	Not supported.
Tormax 1301Motion	30.5558		AFETY A #2		SAFETY A #1	A6	A5	INPUT C #2	Refer to BEA product User's Guide and OEM manual.
Tormax TDA	30.5558		7		8	C4 and C8	8	2	Not supported.
Tormax TTX II	30.5558				14	17 and 18	4	5	Not supported.

Note 1	If only VAC power is available, a 12V transformer paired with a rectifier must be used. Do not use a 24V transformer and rectifier as this will cause damage to the product.							
Note 2	LE21 function or BR3-X programmed to function 22							
Note 3	FS3D only.							
Note 4	Monitoring consists of two purple and two blue wires. If monitoring is not used, cap off unused purple and blue wires. Wire as follows:							
	Door Type	System Harness	Control Monitoring					
	Single -	1 blue + 1 purple	1 <sup>st</sup> leg					
	Single	1 blue + 1 purple	2 <sup>nd</sup> leg					
	Pair / Dual Egress	1 blue + 1 purple	1 <sup>st</sup> leg					
	Tall / Dual Egless	1 blue + 1 purple	2 <sup>nd</sup> leg					
	Pair / Dual Egress	2 blues	1st control					
	(independent controls)	2 purples	2 <sup>nd</sup> control					
	Effective November 11, 2017: Monitoring is required for ANSI 156.10 compliance.							
Note 5	Jump 17+18, if not used.							
(BESAM ETIK)								
Note 6	Set EXU-SA jumper to "Door open/closed" indication.							
(BESAM SW 100/200)	Jump 1+2 on EXU-SA board.							
100/200)	Blanking Potentiometer must be set fully counterclockwise.							
	Auxiliary switch may be used for home switch.							
Note 7	Jump 11+3 on ontrol.							
(DORMA ED	Use ON/OFF/H.O. jumper. Control switches must be used.							
100/250)	Make certain Home Switch Control Function "Sr" is set to 1.							
Note 8	Set control to "swing-safe."							
(GYROTECH 300/400)								
Note 9	Must have daughter boar	d.						
(HORTON 4160-3)								
Note 10	PNP harness p/n: 20.5322							
(HORTON 4190)								
Note 11	Jump 11+12 and 14+15.							
(RECORD 6000/8000)								
Note 12	The older Stanley, all meta		rol does not have stall. A					
(STANLEY "L")	control with stall must be used.							
Note 13	Jump TB2 2+3 (if not using factory On/Off/Hold Switch).							
(STANLEY MC521 / MC521 PRO)								