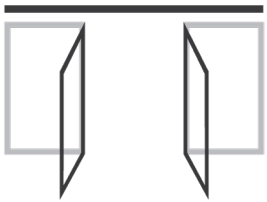
APPLICATION NOTE

GENERAL DOOR CONTROL WIRING MATRIX FOR SWING DOORS



PURPOSE STATEMENT:

The purpose of this document is to provide a matrix of swing door controls and their associated wiring terminals to assist in the proper field connections of BEA products.

HOW TO USE THIS WIRING MATRIX:

1. Determine which door control is being used and locate it on the following page.

2. Make proper wire connections based on the description of each column.

   EX: When wiring the activation sensor to a Besam ETIK door control, connect the sensor's N.O. ACT wire to terminal 13 on the door control for Primary Activation.

	POWER		ACTIVATION		ACTIVATION COM.
			PRIMARY	SECONDARY	
Besam ETIK	9 / +24 VDC	8 / 0 VDC *	13 (N.O.)	Logic Module *	12
Besam MP/CUP	17 / +24 VDC	16 / 0 VDC *	3 (N.O.)	Logic Module *	4

3. If you are unsure which wire connects with which terminal, check the product's User's Guide for a Wiring Color Guide that can be used to pair with the top row of the matrix. Simply align the color guide from the User's Guide with the top of the matrix on the following page to reveal the wire color associated with the description.

PLACE COLOR BAR HERE

	POWER			ACTIVATION		ACTIVATION COM.	SAFETY N.O. / N.C.	SAFETY COM.	STALL N.O. / N.C.	STALL COM.	MONITORING
				PRIMARY	SECONDARY						
Besam ETIK	9 / +24 VDC	8 / 0 VDC	*	13 (N.O.)	Logic Module *	12	11 (N.O.)	12	15/17 (N.C.)	16/18	*Not supported.*
Besam MP/CUP	17 / +24 VDC	16 / 0 VDC	*	3 (N.O.)	Logic Module *	4	9 (N.O.)	4	5 (N.O.)	4	*Not supported.*
Besam PowerSwing/EXB			*	TB3-21	Logic Module *	TB3-20	TB4-30 (N.C.)	TB4-26	TB4-29 (N.C.)	TB4-26	*Not supported.*
Besam SW 900/CU2	11 / +24 VDC	12 / 0 VDC	*	1 (N.O.)	Logic Module *	3	2 (N.O.)	3	TB1-7 (N.O.)	3	*Not supported.*
Besam SW 100/200	24V+	GND		CU-ESD 2 (N.O.)	EXU-SA 1 and 2	CU-ESD 1	CU-ESD 4 (N.O.)	CU-ESD 1	EXU-SA 3 (N.C.)	EXU-SA1	*Refer to BEA product User's Guide and OEM manual.*
CONDOR	F / 12 VAC	G / 12 VAC	*	ACTIVATE 17 (N.O.)	V and W	COM 16	HMS 1 (N.O.)	COMMON H	DMS O (N.O.)	COMMON N	*Not supported.*
DCU DC700 Access Auto. ES500 Quad Systems ES500	CN2 / +24 VDC	CN2 / COM	*	CN2 #2 (N.O.)	Logic Module *	CN2 #3	CN6 WHITE (N.O.)	CN6 BLACK	CN6 GREEN (N.O.)	CN6 BLACK	*Not supported.*
Detex BS1000S/ UDC100	12 – 24 VAC	13 – 24 VAC	*	2 (N.O.)	J2-3 and 1	1	4 (N.O.)	1	5 (N.O.)	1	*Not supported.*
Dor-O-Matic	N/A	N/A	*	YELLOW (N.O.)	Logic Module *	GRAY	BLUE (N.O.)	GRAY	PURPLE (N.O.)	GRAY	*Not supported.*
Dorma 400/700	+24 VDC	COM	*	TRIGGER (N.O.)	APPR and GND	GND	PRESENCE (N.O.)	GND	SWING (N.O.)	GND	*Not supported.*
Dorma ED 100/250	1	3		42 (N.O.)	11 and 3	3	43 (N.C.)	3	15 (N.C.)	3	*Refer to BEA product User's Guide and OEM manual.*
Gyrotech/Nabco Magnum	ORANGE / 24 VDC	BROWN / 24 VAC	*	6 BLACK (N.O.)	Logic Module *	5 RED	4 WHITE (N.O.)	5 RED	3 VIOLET (N.O.)	5 RED	*Not supported.*
Gyrotech/Nabco Opus	1 / 12 VDC	2 GND	*	3 (N.O.)	2 and 4	2	5 (N.O.)	2	5 (N.O.)	2	*Refer to BEA product User's Guide and OEM manual.*
Gyrotech/Nabco U19	BROWN / +12 VDC	RED / COM	*	61/62 (N.O.)	Logic Module *	RED 7	GREEN H (N.O.)	RED 7	WHITE 6B (N.O.)	RED 7	*Not supported.*
Gyrotech 300/400	N/A	N/A	*	BLACK (N.O.)	Logic Module *	RED			WHITE (N.O.)	RED	*Not supported.*
Horton 4160-3	N/A	N/A	*	BLACK (N.O.)	Logic Module *	WHITE	GREEN (N.O.)	WHITE	DAUGHTER BOARD (N.O.)	DAUGHTER BOARD	*Not supported.*
Horton 4190	CN3 / 24 VDC	CN3 / 24 VAC	*	2 (N.O.)	Logic Module *	3	4 (N.O.)	3	10 (N.O.)	3	*Not supported.*
Hunter HA	+24 VDC	-24 VDC	*	ACT (N.O.)	ACT 2 and return	RTN	SAFE 1 (N.O.)	RTN	SAFE 2 (N.O.)	RTN	*Not supported.*
Kean-Monroe K	24 VDC	24 VAC	*	GREEN (N.O.)	Logic Module *	WHITE	RED (N.O.)	WHITE	YELLOW (N.O.)	WHITE	*Not supported.*
LCN Digital	P RED / 24 VAC	P BLACK 24 VAC	*	P6 YELLOW (N.O.)	P3 white and green	P6 GRAY			P2 GREEN (N.O.)	P2 WHITE	*Not supported.*
Record 6000/8000	4	6		2 (N.O.)	11 and 12	1	12 (N.C.)	11	10 (N.C.)	11	*Refer to BEA product User's Guide and OEM manual.*
Stanley "L"			*	ORANGE (N.O.)	Logic Module *	YELLOW	RED (N.O.)	YELLOW	BLUE (N.O.)	YELLOW	*Not supported.*
Stanley MP	4 / 12 VDC	5 / 12 VAC	*	2 (N.O.)	Logic Module *	8	7 (N.O.)	8	7 (N.O.)	8	*Not supported.*
Stanley MC 521	TB4-5	TB4-6	*	TB4-4 (N.O.)	TB5 3 and 4	TB4-3	TB3-8 (N.O.)	TB3-7	TB3-4 (N.O.)	TB3-3	*Refer to BEA product User's Guide and OEM manual.*
Stanley MC 521 Pro	TB4-5	TB4-6	*	TB4-4 (N.O.)	TB5 3 and 4	TB4-3	TB3-8 (N.O.)	TB3-7	TB3-4 (N.O.)	TB3-3	*Refer to BEA product User's Guide and OEM manual.*
Tucker	9 / +24 VDC	8 GND	*	J4-10 (N.O.)	N.C. contact between J4 13 and COM	J4-8 jumped to 12 & 13			J4-14 (N.C.)	J4-8 jumped to 12 & 13	*Not supported.*
Tormax 130iMotion	24 VDC	GND	*	INPUT C #2 (N.O.)	SAF A-5 and 6	INPUT C #1	SAFETY B #2 (N.O.)	SAFETY B #1	SAFETY A #2 (N.O.)	SAFETY A #1	*Refer to BEA product User's Guide and OEM manual.*
Tormax TDA	C10 / +24 VDC	C8 GND	*	2 (N.O.)	C4 and C8	8	9 (N.O.)	8	7	8	*Not supported.*
Tormax TTX II	+24 VDC	-24 VDC	*	5 (N.O.)	17 and 18	4	18 (N.O.)	19		14	*Not supported.*

***** *do not power from door control*

***** *LE21 function or BR3-X programmed to function 22*

BEA, INC. INSTALLATION/SERVICE COMPLIANCE EXPECTATIONS

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

BEA, Inc. strongly recommends that installation and service technicians be AADM-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 AADM/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 AADM safety information label (e.g. ANSI/DASMA 102, ANSI/DASMA 107).

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

AADM ANSI DASMA DHI IDA

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