



TECHNICAL BULLETIN #53 LZR-microscan T Wiring Matrix

DISTRIBUTE TO ALL FIELD TECHNICIANS

DOOR CONTROL HARNESS (P/N: 20.5222)

POWER HARNESS
(P/N: 20.5095)

SYSTEM HARNESS (P/N: 20.5304)

Wire color	Green	Yellow	White	Green	Yellow	White	Green	Yellow	White	Red	Black	Orange	Orange	Gray	Purple	NOTES	PACKAGE TO USE (P/N)	
				Black	Black	Black	Red	Red	Red					Gray	Blue			
Signal	ACT. N.O.	ACT. N.C.	ACT. COM.	SAFE N.O.	SAFE N.C.	SAFE COM.	STALL N.O.	STALL N.C.	STALL COM.	POWER	POWER	HOME	HOME	PUSHPLATE	MONITORING		Single	Pair (Sim / DE)
Besam ETIK	13		12	11		12		15/17	16/18	LZR-microscan T power supply		DPS ³				see note 6	10MICROSCAN1U	10MICROSCAN2U
Besam MP/CUP	3		4	9		4	5		4	LZR-microscan T power supply		DPS ³					10MICROSCAN1U	10MICROSCAN2U
Besam SW 900/CU2	1		3	2		3	TB1 - 7		3	LZR-microscan T power supply		DPS ³					10MICROSCAN1U	10MICROSCAN2U
Besam SW 100/200	CU-ESD 2		CU-ESD 1	CU-ESD 4		CU-ESD 1		EXU-SA 3	EXU-SA 1	24V +	GND	EXU-SA 7 ³	EXU-SA 8 ³			see notes 2 and 10	10MICROSCAN1	10MICROSCAN2
CONDOR	Activate 17		Common 16	HMS I		Common H	DMS O		Common N	LZR-microscan T power supply		DPS ³					10MICROSCAN1U	10MICROSCAN2U
DC700 (Door Cont.) Access Auto. ES500 Quad Systems ES500	CN2 #2		CN2 #3	CN6 (white)		CN6 (black)	CN6 (green)		CN6 (black)	LZR-microscan T power supply		DPS ³					10MICROSCAN1U	10MICROSCAN2U
Detex BS1000S/UDC100	2		1	4		1	5		1	LZR-microscan T power supply		DPS ³					10MICROSCAN1U	10MICROSCAN2U
Dor-O-Matic	Yellow		Gray	Blue		Gray	Purple		Gray	LZR-microscan T power supply		DPS ³					10MICROSCAN1U	10MICROSCAN2U
Dorma 400/700	Trigger		GND	Presence		GND	Swing		GND	LZR-microscan T power supply		DPS ³					10MICROSCAN1U	10MICROSCAN2U
Dorma ED 100/250	42		3		43	3		15	3	1	3	97 ³	98 ³			jump 11 and 3 on Control ^{1,7}	10MICROSCAN1	10MICROSCAN2
GT/Nabco Magnum	6 Black		5 Red	4 White		5 Red	3 Violet		5 Red	LZR-microscan T power supply		DPS ³					10MICROSCAN1U	10MICROSCAN2U
GT Nabco Opus	3		2	5		2	5		2	LZR-microscan T power supply		DPS ³					10MICROSCAN1U	10MICROSCAN2U
GT Nabco U19	61/62		Red 7	Green H		Red 7	White 6B		Red 7	LZR-microscan T power supply		DPS ³					10MICROSCAN1U	10MICROSCAN2U
Gyrotech 300/400	Black		Red				White		Red	LZR-microscan T power supply		DPS ³				set Control to "swing-safe"	10MICROSCAN1U	10MICROSCAN2U
Horton 4160-3	Black		White	Green		White	Daughter Board		Daughter Board	LZR-microscan T power supply		DPS ³				must have daughter board	10MICROSCAN1U	10MICROSCAN2U
Horton 4190	2		3	4		3	10		3	LZR-microscan T power supply		DPS ³				PNP Harness P/N: 20.5322	10MICROSCAN1	10MICROSCAN2
Hunter HA	Act.		RTN	Safe 1		RTN	Safe 2		RTN	LZR-microscan T power supply		DPS ³					10MICROSCAN1U	10MICROSCAN2U
Kean Monroe K	Green		White	Red		White	Yellow		White	LZR-microscan T power supply		DPS ³					10MICROSCAN1U	10MICROSCAN2U
LCN Digital	P6 Yellow		P6 Gray				P2 Green		P2 White	LZR-microscan T power supply		DPS ³					10MICROSCAN1U	10MICROSCAN2U
Record 6000/8000	2		1	8		4		10	11	4	6	DPS ^{3,8}				jump 11 and 12, 14 and 15 on control ¹	10MICROSCAN1	10MICROSCAN2
Stanley "L" ¹²	Orange		Yellow	Red		Yellow	Blue		Yellow	LZR-microscan T power supply		DPS ³				see note 3	10MICROSCAN1U	10MICROSCAN2U
Stanley MP	2		8	7		8	7		8	LZR-microscan T power supply		DPS ³				see note 3	10MICROSCAN1U	10MICROSCAN2U
Stanley MC 521	TB4 - 4		TB4 - 3	TB3 - 8		TB3 - 7	TB3 - 4		TB3 - 3	LZR-microscan T power supply		see note 3				see notes 3 and 9	10MICROSCAN1U	10MICROSCAN2U
Stanley MC 521 Pro	TB4 - 4		TB4 - 3	TB3 - 8		TB3 - 7	TB3 - 4		TB3 - 3	TB4 - 5	TB4 - 6	see note 3				see notes 3 and 9	10MICROSCAN1	10MICROSCAN2
Tucker	J4-10		J4-8 jumped to 12 & 13					J4-14	J4-8 jumped to 12 & 13	LZR-microscan T power supply		J5 - 4 & 5				see note 9	10MICROSCAN1U	10MICROSCAN2U
Tormax 1301iMotion	Input C #2		Input C #1	Safety B #2		Safety B #1	Safety A #2		Safety A #1	LZR-microscan T power supply		DPS ³					10MICROSCAN1U	10MICROSCAN2U
Tormax TDA	2		8	9		8	7		8	LZR-microscan T power supply		DPS ³					10MICROSCAN1U	10MICROSCAN2U
Tormax TTX II	5		4	18		19		15	14	LZR-microscan T power supply		DPS ³					10MICROSCAN1U	10MICROSCAN2U

Connect any dry-contact, "knowing act" device to the two gray wires.
Be certain to turn on Knowing Act at the hub.Monitoring consists of two purple and two blue wires.
If monitoring is not used, cap off unused purple and blue wires.
Wire according to the table on the following page (note 5).

NOTES

Note 1	Use ON/OFF/H.O. jumper. Control switches must be used.																					
Note 2	Set EXU-SA jumper to “Door open/closed” indication. Jumper required on EXU-SA board terminals 1 & 2. Blanking Potentiometer must be set fully counterclockwise. Auxiliary switch may be used for home switch.																					
Note 3	Auxiliary Switch: If installing onto a pair or double-egress, ensure to series both home switches. Switches must close when door is closed.																					
Note 4	Connect any dry-contact, “knowing act” device to the two gray wires. Be certain to turn on Knowing Act at the hub.																					
Note 5	Monitoring consists of two purple and two blue wires. If monitoring is not used, cap off unused purple and blue wires. Wire as follows:																					
	<table><tr><th>Door Type</th><th colspan="2">Single</th><th colspan="2">Pair / Double Egress</th><th colspan="2">Pair / Dual Egress (independent controls)</th></tr><tr><td>System Harness</td><td>1 blue + 1 purple</td><td>1 blue + 1 purple</td><td>1 blue + 1 purple</td><td>1 blue + 1 purple</td><td>2 blues</td><td>2 purples</td></tr><tr><td>Door Control Monitoring</td><td>1st leg</td><td>2nd leg</td><td>1st leg</td><td>2nd leg</td><td>1st control</td><td>2nd control</td></tr></table>	Door Type	Single		Pair / Double Egress		Pair / Dual Egress (independent controls)		System Harness	1 blue + 1 purple	1 blue + 1 purple	1 blue + 1 purple	1 blue + 1 purple	2 blues	2 purples	Door Control Monitoring	1 st leg	2 nd leg	1 st leg	2 nd leg	1 st control	2 nd control
	Door Type	Single		Pair / Double Egress		Pair / Dual Egress (independent controls)																
	System Harness	1 blue + 1 purple	1 blue + 1 purple	1 blue + 1 purple	1 blue + 1 purple	2 blues	2 purples															
Door Control Monitoring	1 st leg	2 nd leg	1 st leg	2 nd leg	1 st control	2 nd control																
Effective Novemeber 11, 2017, monitoring will be required for ANSI 156.10 compliance.																						
Note 6	Insert a jumper into 17 and 18, if not used.																					
Note 7	Make certain <i>Home Switch Control Function “Sr”</i> is set to 1.																					
Note 8	Auxiliary home switch available from Record.																					
Note 9	TB2 #2 and 3 must be jumped for door to run (if not using factory On/Off/Hold Switch).																					
Note 10	Terminals 1 and 2 must be jumped on the EXU-SA board.																					
Note 11	Terminals 1 and 2 must be jumped on the EXU-SA board.																					
Note 12	The older Stanley, all metal (silver), “L” shape control does not have stall. A control with stall must be used.																					

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, UL 325).

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

