



SBM TROUBLESHOOTING TABLE

<i>Issue</i>	<i>Module(s) Involved</i>	<i>Possible Cause</i>	<i>Corrective Action</i>	
PWR LED does not illuminate	SBMM & SBMS	1) improper wire connection	1a) Connect BROWN wire to +12-24VDC 1b) Connect BLUE wire to GND or 0VDC	
		2) improper voltage supply	2a) Measure voltage input to SBMM. 2b) Adjust voltage supply to SBMM to 12-24VDC (±10%)	
		3) Damaged/Severed Cable	3a) Inspect cable for major damage/disconnection	
		4) Faulty Module	4a) Replace Module	
	SBMS	1) incomplete connection to adjacent modules	1a) Disassemble unit to first module with no PWR LED 1b) Inspect pins on functional module for damage/debris 1c) Inspect contacts on malfunctioning module for damage/debris 1d) Reassemble SBM assembly	
		2) Faulty Module	2a) Replace Module	
	N.C. LED does not illuminate (N.C. output received on white wire)	SBMM	1) Faulty LED	1a) Replace Module
	N.O. LED does not illuminate (N.O. output received on black wire)	SBMM	1) Faulty LED	1a) Replace Module
N.O. Output not received (all sensors ON)	SBMM & SBMS	1) improper switch position(s)	1a) Inspect SBMM switch positions. PNP: PU/PD switch set to PD, N/'P/2' switch set to P/2 NPN: PU/PD switch set to PU, N/'P/2' switch set to N	
		2) improper/damaged wire or connection	2a) Inspect wires from SBMM for damage. Verify proper wire connection BROWN: 12-24VDC BLUE: 0VDC or GND BLACK: N.O. Signal Wire	
			3) Missing Contact Plate in SBMK End Unit	3a) Disassemble SBM completely. Verify two contact plates present. 3b) If contact plate(s) missing, replace contact plate(s). Reassemble Unit
				4a) Disassemble SBM completely.
		4) Contaminated Contact Plate in SBMK End Unit	4b) Inspect contact plates for contaminants that would prevent electrical contact 4c) Clean contact plates if possible, otherwise replace contact plate(s). Reassemble Unit	
			5) Incomplete connection to adjacent modules	5a) Disassemble SBM completely. 5b) Inspect all pins on each module for damage. Pins should all be identical in height and spring loaded. 5c) Replace any module with damaged pins. Reassemble SBM Unit.
		6) Faulty SBMM Module		6a) Replace Module

Additional Questions? Contact Us: Phone: 216-535-4848 | Email: Sales@EMICorp.com



Issue	Module(s) Involved	Possible Cause	Corrective Action		
N.C. Output received (at least one sensor ON)	SBMM & SBMS	1) improper switch position(s)	1a) Inspect SBMM switch positions. PNP: PU/PD switch set to PD, N/'P/2' switch set to P/2 NPN: PU/PD switch set to PU, N/'P/2' switch set to N		
		2) improper/damaged wire or connection	2a) Inspect wires from SBMM for damage. Verify proper wire connection BROWN: 12-24VDC BLUE: 0VDC or GND WHITE: N.C. Signal Wire		
		3) Missing Contact Plate in SBMK End Unit	3a) Disassemble SBM completely. Verify two contact plates present. 3b) If contact plate(s) missing, replace contact plate(s). Reassemble Unit		
		4) Contaminated Contact Plate in SBMK End Unit	4a) Disassemble SBM completely. 4b) Inspect contact plates for contaminants that would prevent electrical contact 4c) Clean contact plates if possible, otherwise replace contact plate(s). Reassemble Unit		
		5) Incomplete connection to adjacent modules	5a) Disassemble SBM completely. 5b) Inspect all pins on each module for damage. Pins should all be identical in height and spring loaded. 5c) Replace any module with damaged pins. Reassemble SBM Unit.		
		6) Faulty SBMM Module	6a) Replace Module		
		OUT LED does not illuminate	SBMS	1) improper switch position(s)	1a) inspect SBMS switch positions. RV/DR switch: Set to DR for Direct Response (sensor on, SBMS OUT On) or RV for Reverse Response (sensor on, SBMS OUT Off) N/'P/2' switch: Set to N for NPN sensor input (NPN sensor connected to SBMS unit) or P/2 for PNP or 2-wire REED sensor input (PNP/REED sensor connected to SBMS unit)
				2) Improper sensor connection	2a) inspect M8 Connection between SBMS and sensor.
				3) Faulty Sensor	3a) inspect sensor for damage. Verify sensor operation. 3b) replace sensor if needed.
				4) Faulty Module	4a) Replace Module