



## SD500-LIM (Line Isolator Module) Installation Instructions

The following are instruction on how to install the SD500-LIM (Line Isolator Module) to a Silent Knight Analog/Addressable control panel.

### Style 7 (Class A) Configuration

An isolator module is used to isolate a short circuit wiring fault on a Style 7 (Class A) SLC loop. Normally if the control panel detects a short on the SLC loop the entire loop is disabled. When isolator modules are used (as shown in Figure 1) and a short, open or ground fault occurs on the SLC loop, it will be detected as a trouble but all the SLC devices will continue to operate.

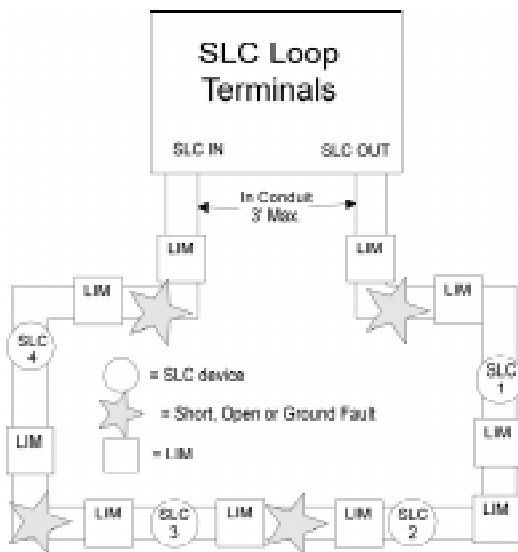


Figure 1: LIM Style 7 (Class A) Example

### Class B (Style 4) Configuration

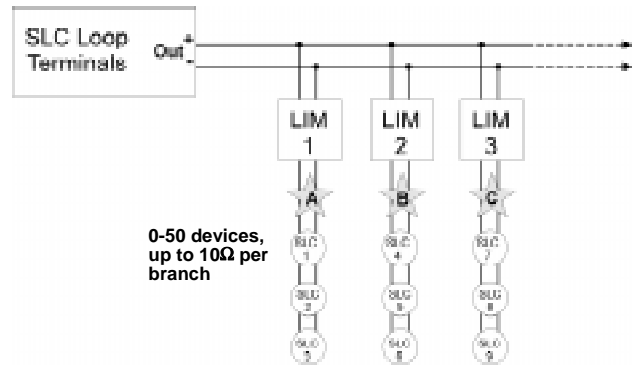


Figure 2: LIM Style 4 (Class B) Example

1. If a short occurs at point A, line isolator 1 will activate, isolating SLC devices 1 through 3 from the rest of the loop.
2. If a short occurs at point B, line isolator 2 will activate, isolating SLC devices 4 through 6 from the rest of the loop.
3. If a short occurs at point C, line isolator 3 will activate, isolating SLC devices 7 through 9 from the rest of the loop.

### SD500-LIM Specifications

Specification Parameter	Rating	
Operating Temperature:	32° - 120° F (0° - 49° C)	
Dimensions:	Length:	4-7/8"
	Width:	4-7/8"
	Depth:	7/8"
Operating Voltage:	32 VDC	
Battery Current Draw during AC loss:	Alarm/Standby:	92 uA
SLC Current:		50 uA
Max. SLC Loop Resistance:		50Ω
For indoor use only		

## Wiring the SD500-LIM

**Note:** Installation and wiring of this device must be done in accordance with NFPA 72 and local ordinances.

**Important!:** All wiring is supervised and power limited.

**Important!:** No more than 127 isolator devices (LIM or SD505-6IB) can be used on a SLC loop.

### Wiring the SD500-LIM to the SLC Terminals

The SD500-LIM connections for the SLC loop internal and external are the same. Wire as shown in Figure 3 or Figure 4. Notice that “Out Terminals” wire to “In Terminals”.

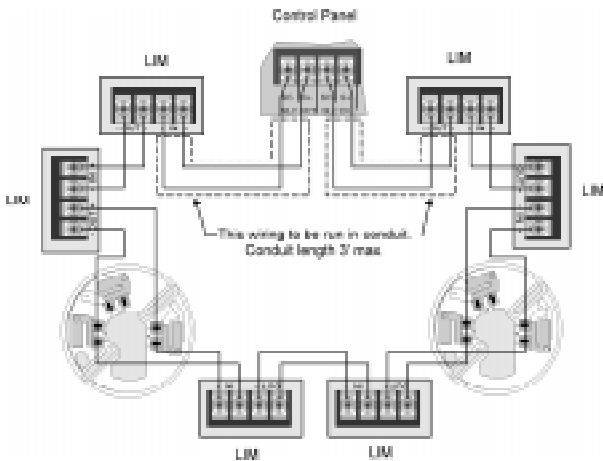


Figure 3: LIM Style 7 (Class A) Wiring for SLC loop

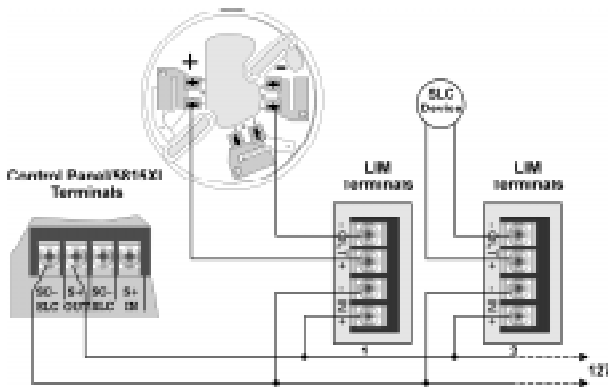


Figure 4: LIM Style 4 (Class B) Wiring for SLC Loop

## Mounting the SD500-LIM

The SD500-LIM mounts in a standard dual gang electrical switch box.

Follow these steps to mount the SD500-LIM:

1. Make sure that the SD500-LIM is properly wired to the control panel. See Figure 3 or Figure 4.
2. Place the SD500-LIM into the dual gang electrical switch box. See Figure 5.
3. Mount the SD500-LIM to the dual gang electrical switch box using two screws as shown in Figure 5.
4. Insert the two cover plate screws through the cover plate and screw into the holes on the SD500-LIM mounting bracket.

**Note:** Do Not over tighten screws.

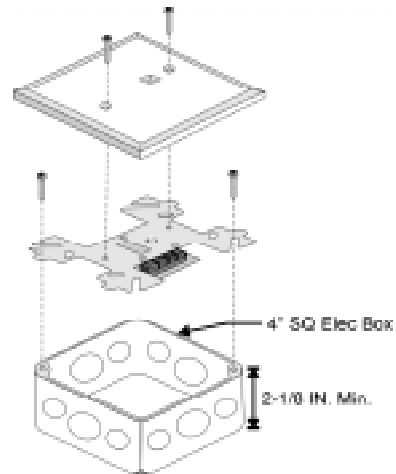


Figure 5: SD500-LIM Mounting



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