Create a Muting Solution for the EZ-SCREEN LS

Follow these steps to create a turn-key muting solution for your EZ-SCREEN LS Safety Light Curtain with a 300 mm (1 ft) PVC-jacketed cable with an 8-pin M12 male quick-disconnect connector.

Figure 1. L Configuration (Right Side)

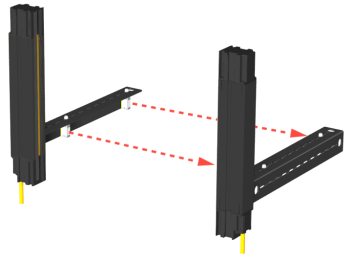


Figure 2. L Configuration (Left Side)

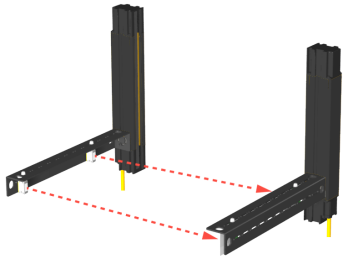


Figure 3. T Configuration

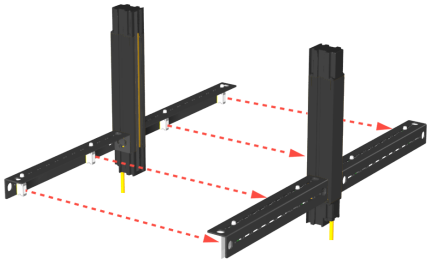
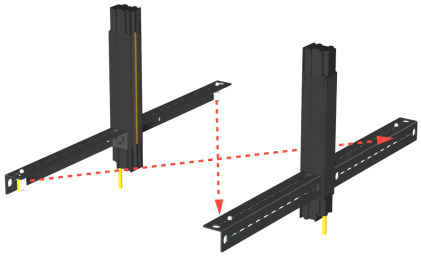


Figure 4. X Configuration



1. Select and order one of the following SGS Muting Arm Kits.
   - L-Configuration (Right Side): **SGSA-ML-R-LPQ20**
   - L-Configuration (Left Side): **SGSA-ML-L-LPQ20**
   - T-Configuration: **SGSA-MT-LPQ20**
   - X-Configuration: **SGSA-MX-LPQ20**
2. Order the EZ-SCREEN LS Hardware Adaptor Kit **EZLSA-MCB-HW**.
3. Order the appropriate connection cable(s). (See System Diagram on page 2.)
   - LS muting connection cable (A) **CSM4-M1281M1251M1281** and one connection cable (F) **DEE2R-5XXD** where XX is the length in feet.
   - SGS mute arm kit connection cable (select one): For T-Muting (B1) **CSA4-M1251M1251M1251M1251** or for L-Muting or X-Muting (B2) **CSA-M1241M1241**.
   - LS emitter connection cable (C) **DEE2R-8XXD** where XX is the length in feet
   - Safety controller connection cable (D) **QDEG-12XXE** where XX is the length in feet
4. Order a mute light and cable.
   - Select a mute light (E1) from EZ-LIGHT® Mute Lights on page 3.
   - Mute light cable (E2) **DEE2R-5XXD** where XX is the length in feet.
5. Order a Banner SC/XS Safety Controller.

Table 1: Safety controller models

Non-Expandable Models	Expandable Models	Description
SC26-2	**XS26-2**	26 convertible I/O and 2 redundant solid state safety outputs
SC26-2d	**XS26-2d**	26 convertible I/O and 2 redundant solid state safety outputs with display
SC26-2e	**XS26-2e**	26 convertible I/O and 2 redundant solid state safety outputs with Ethernet
SC26-2de	**XS26-2de**	26 convertible I/O and 2 redundant solid state safety outputs with display and Ethernet
SC10-2roe		10 inputs, 2 redundant relay safety outputs (3 contacts each) (ISD and Ethernet compatible)
	XS26-ISDd	26 inputs, 2 redundant solid state safety outputs with display, Ethernet, and 8 ISD channels

Original Document
206632 Rev. E

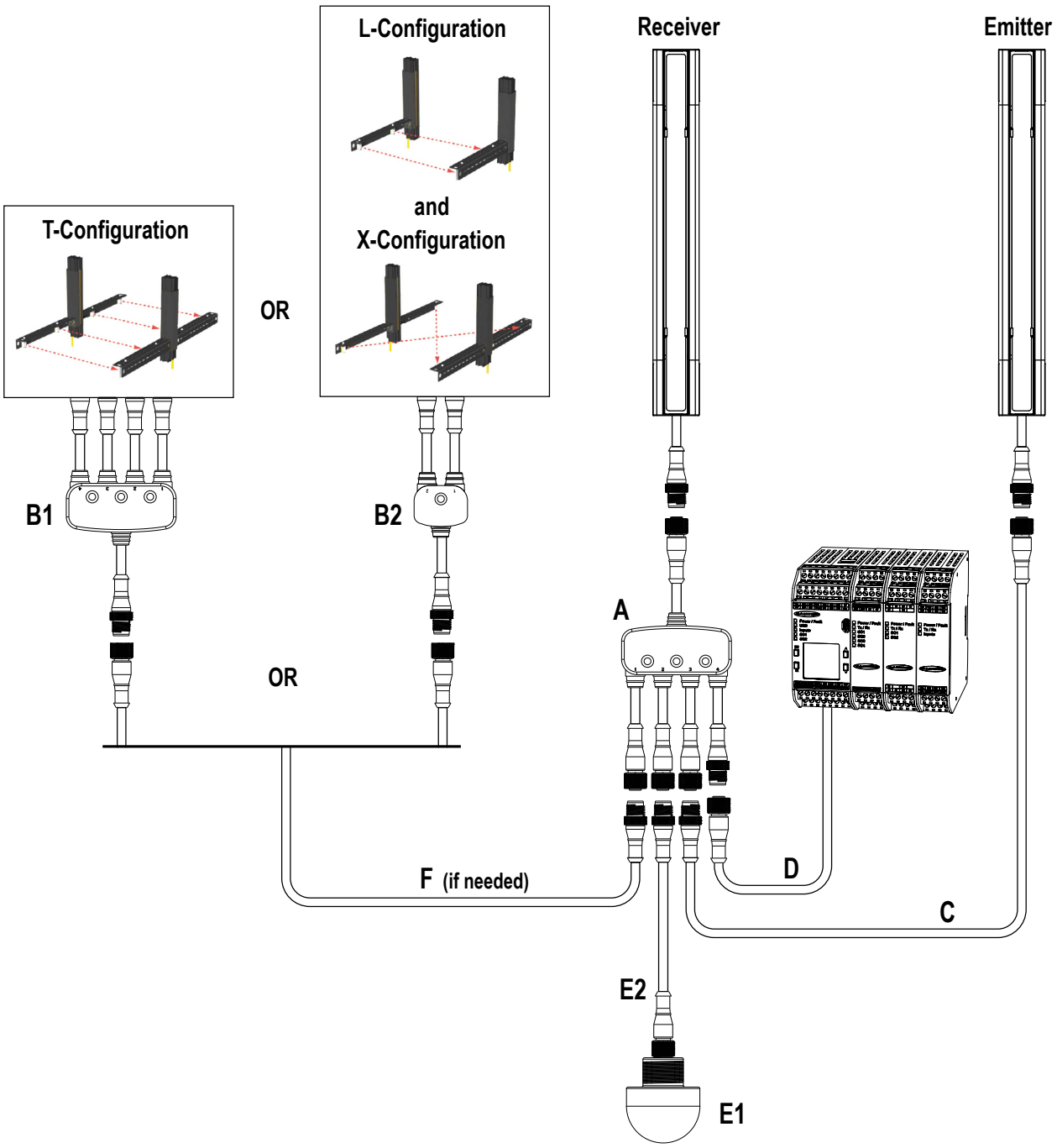
6 October 2022

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System Diagram

Figure 5. EZ-SCREEN LS muting system diagram



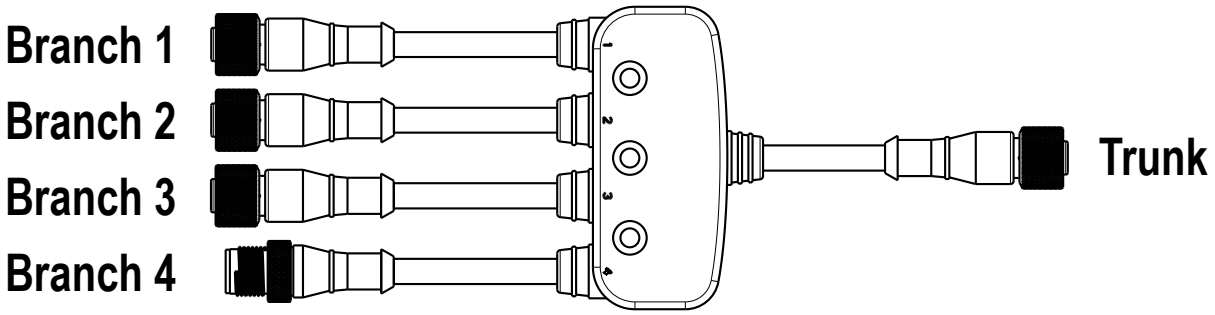
EZ-LIGHT® Mute Lights

Models		Construction	Connection/ Recommended Cordset	LED Function
	**TL50WQ** **TL50YQ**	• Bases and Covers: ABS • Light Seg.: Polycarbonate • 30 mm base mount • IP67 • Indicates Mute Status	DEE2R-5XXXD (where XXX is the length in feet)	White Yellow
	**K50LWXXPQ** **K50LYXXPQ**	• Polycarbonate housing, 50 mm thermoplastic dome, 30 mm base mount • Fully encapsulated, IP67 • Indicates Mute Status		White Yellow
	**K50FLWXXPQPMA** **K50FLYXXPQPMA**	• Polycarbonate base, translucent polycarbonate dome, flat mount. • Fully encapsulated, IP67, IP69K • Indicates Mute Status		White Yellow
	**K80LWXXPQPMA** **K80LYXXPQPMA**	• Polycarbonate housing, 50 mm thermoplastic dome, flat or DIN mount • Fully encapsulated, IP67 • Indicates Mute Status		White Yellow

See Cordset Accessories for cordset information.

Wiring Diagrams

Figure 6. Splitter cordset branches and trunk



Splitter Cordset CSM4-M1281M1251M1281	Description
Trunk	EZ-SCREEN LS 8-pin Receiver; refer to the EZ-SCREEN LS Instruction Manual (p/n 179480) for the receiver pinout
Branch 1	SGS mute arm kit connection cable
Branch 2	Mute light cable
Branch 3	EZ-SCREEN LS 8-pin Emitter connection cable; refer to the EZ-SCREEN LS Instruction Manual (p/n 179480) for the emitter pinout
Branch 4	To the Safety Controller (QDEG-12xxE) and electrical cabinet using a 12-pin cable

Pin	Branch 1: 5-pin M12 Female (M1)	Branch 2: Mute Light with 5-pin M12 Female (M2)	Branch 4: 12-pin M12 Male (QDEG-12xxxE wire color)
1	+ 24 V DC	+ 24 V DC	OSSD 2 (white)
2	Mute 2	-	+ 24 V DC (brown)
3	0 V DC	0 V DC	Ground (green)

Pin	Branch 1: 5-pin M12 Female (M1)	Branch 2: Mute Light with 5-pin M12 Female (M2)	Branch 4: 12-pin M12 Male (QDEG-12xxxE wire color)
4	Mute 1	Mute light	Mute 2 (yellow)
5	Ground	Ground	No connection
6			No connection
7			0 V DC (dark blue)
8			Mute light (red)
9			EDM (orange)
10			Mute 1 (light blue)
11			OSSD 1 (black)
12			Scan code select (violet)

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