

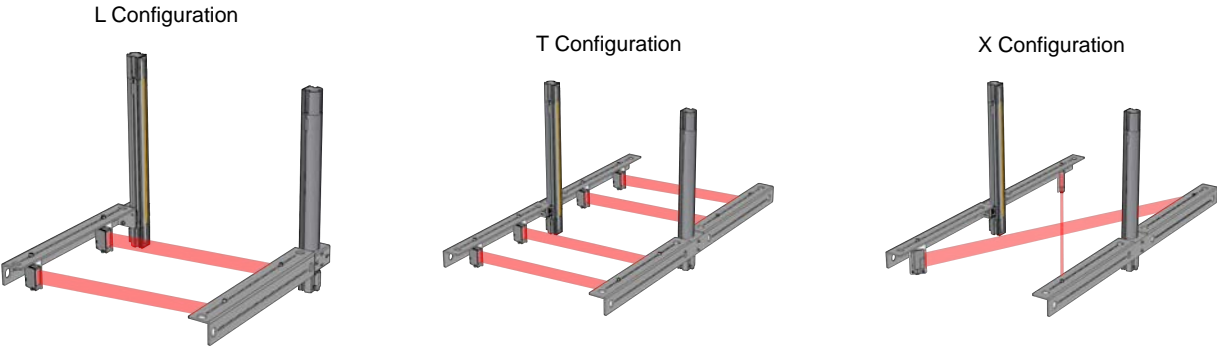


Datasheet

Use the S4BA Mute Arm Sensor Kit to create a mute system with a pair of S4B safety light curtains and a Banner Safety Controller.

The S4BA Mute Arm Sensor Kit is available in four configurations:

- L Configuration (right and left sides)
- T Configuration
- X Configuration



The S4B Mute Arm Sensor Kit can be mounted directly to a flat surface. The kit can also be mounted to the S4B Safety Light Curtain system's mounting brackets, S4BA-MBK-16. Or, for the T and X system, the kit can be mounted directly to a stand. Connect the included Q76 sensors and the curtains to the muting device. The use of an appropriate molded junction block, such as R95-6M125-M128-S4BM, can simplify wiring.

Standard Banner Q76E-KP-ZLVC-Q5 sensors are included with the Mute Arm Sensor Kit along with retroreflective targets (reflectors).

Refer to the Q76 datasheet (p/n [216637](#)) for the specifications and more information.

Models

Model	Description	Sensor Arms	Reflector Arms	Q76 Sensors	Reflectors
S4BA-ML-Q76	S4BA L-Configuration Left Side Mute Arm Sensor Kit	1	1	2	2
S4BA-MT-Q76	S4BA T-Configuration Mute Arm Sensor Kit	2	2	4	4
S4BA-MX-Q76	S4BA X-Configuration Mute Arm Sensor Kit	2	2	2	2

Hardware is included to attach the Q76 sensors and reflectors to the mute arms. Hardware to attach the mute arms to the S4B bracket and/or mounting surface is supplied by the user.

Mounting Instructions

Use the following instructions to mount the S4BA Q76 Mute Arm Sensor Kit using an L mute arm or a T and X mute arm.

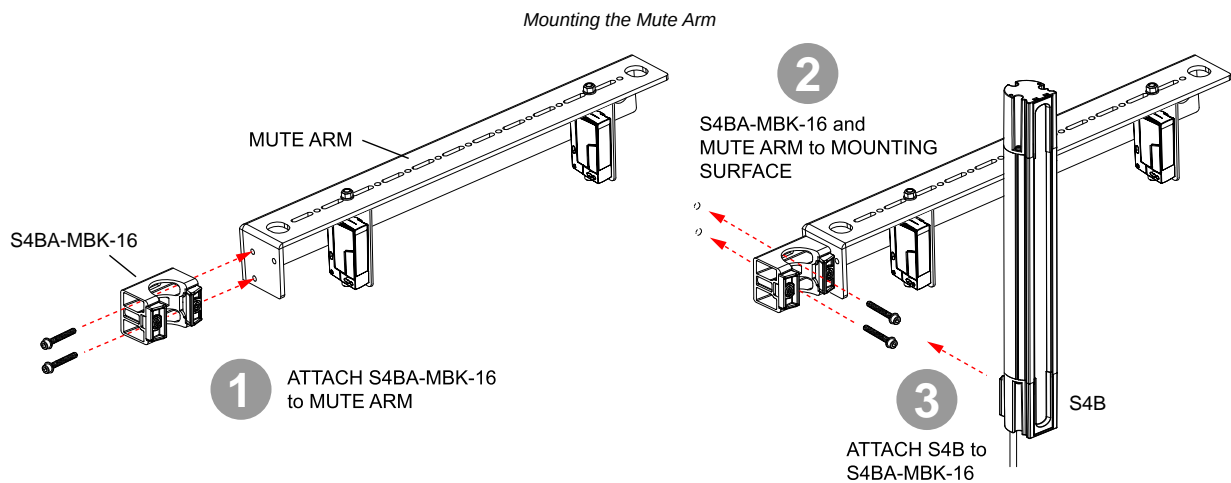
M4 mounting hardware is user-supplied.

Mounting the L Mute Arm

Mounting to a S4BA-MBK-16 bracket.

1. Review and follow all mechanical installation considerations in the S4B manual, p/n 230287.
2. Align and mount the S4BA-MBK-16 brackets as described in the *Mounting the S4BA-MBK-16 Side-Mount Bracket* section of the manual. The mute arm can be mounted to one of the brackets that will be used to mount the S4B, or an extra bracket can be used.





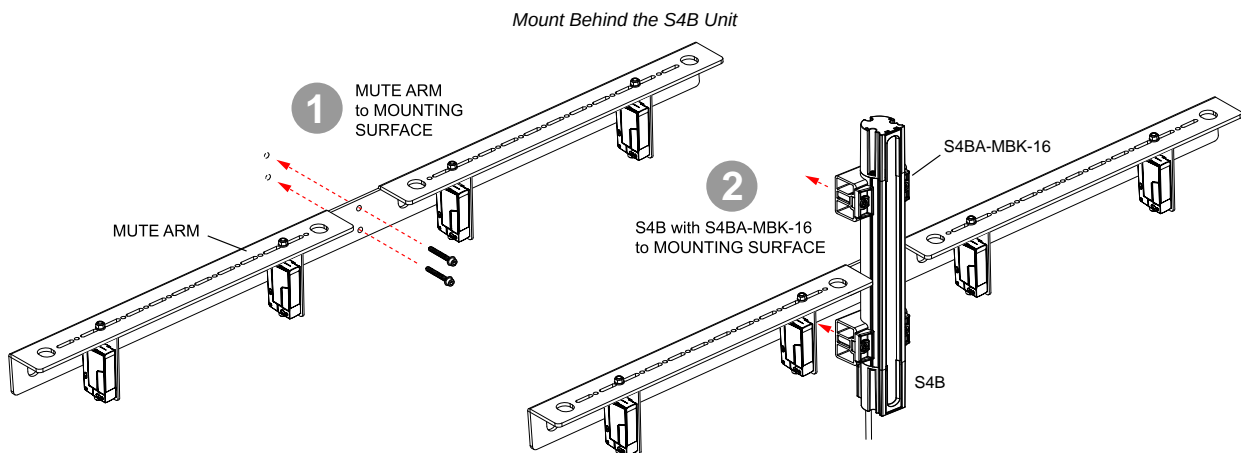
3. Attach the mute arm to the side of the bracket with the user-supplied M4 hardware.
4. Insert the S4B unit into the brackets and finish mounting the S4B.
5. Attach the Q76 units and the reflectors to the mute arms with the supplied hardware.

## Mount Using T and X Mute Arm

Mount the T and X mute arms in conjunction with the S4BA-MBK-16 brackets or separate from the brackets. This first mounting option is separate from the brackets. The second option is in conjunction with the brackets.

### Option 1: Mount Behind the S4B

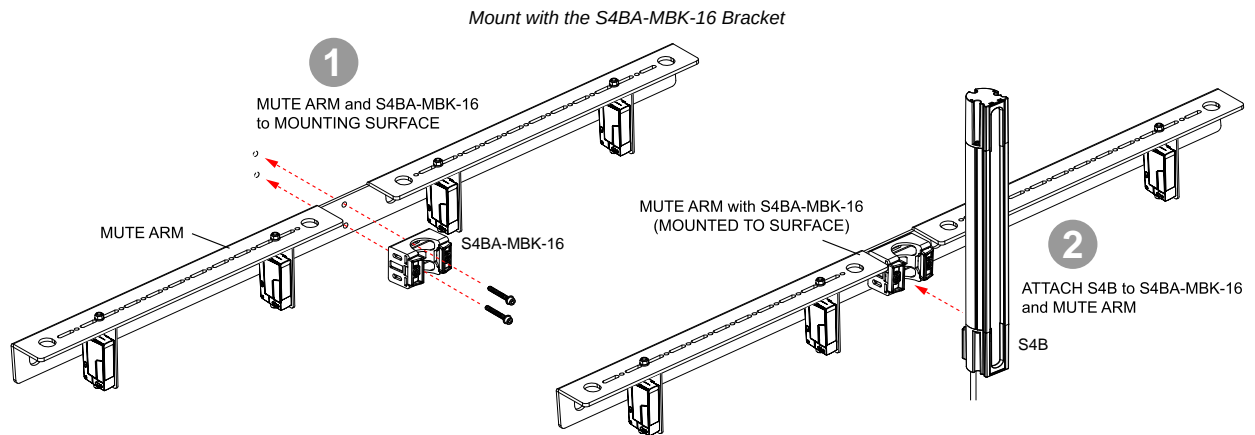
1. Review and follow all mechanical installation considerations in the S4B manual, p/n 230287.
2. Align and mount the mute arm bracket in the same line as the centerline holes of the S4BA-MBK-16 brackets, as described in the *Mounting the S4BA-MBK-16 Side-Mount Bracket* section of the manual.



3. Mount the mute arm bracket behind the S4B unit.
4. Place the S4BA-MBK-16 brackets where needed to mount the unit (above or below the mute arm bracket, but not on it).
5. Attach the Q76 units and the reflectors to the mute arms with the supplied hardware.

### Option 2: Mount with the S4BA-MBK-16

1. Review and follow all mechanical installation considerations in the S4B manual, p/n 230287.
2. Align and mount the mute arm bracket in the same line as the centerline holes of the S4BA-MBK-16 brackets, as described in the *Mounting the S4BA-MBK-16 Side-Mount Bracket* section of the manual.

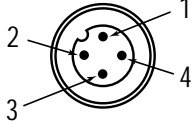


3. Mount the S4BA-MBK-16 bracket and the mute arm bracket by placing the S4BA-MBK-16 on the mute arm bracket and attaching it to the mounting surface.
4. Mount the other S4BA-MBK-16 brackets in line with the mute arm by placing them on the spacer plates included with the Mute Arm Sensor Kit and securing them to the mounting surface.
5. Insert the S4B unit into the brackets and finish the mounting process per the S4B instructions.
6. Attach the Q76 units and the reflectors to the mute arms with the supplied hardware.

### Alternate Mounting Method

Mount the mute arms directly on a solid surface via the holes and slots in the mute arm bracket.

### Wiring

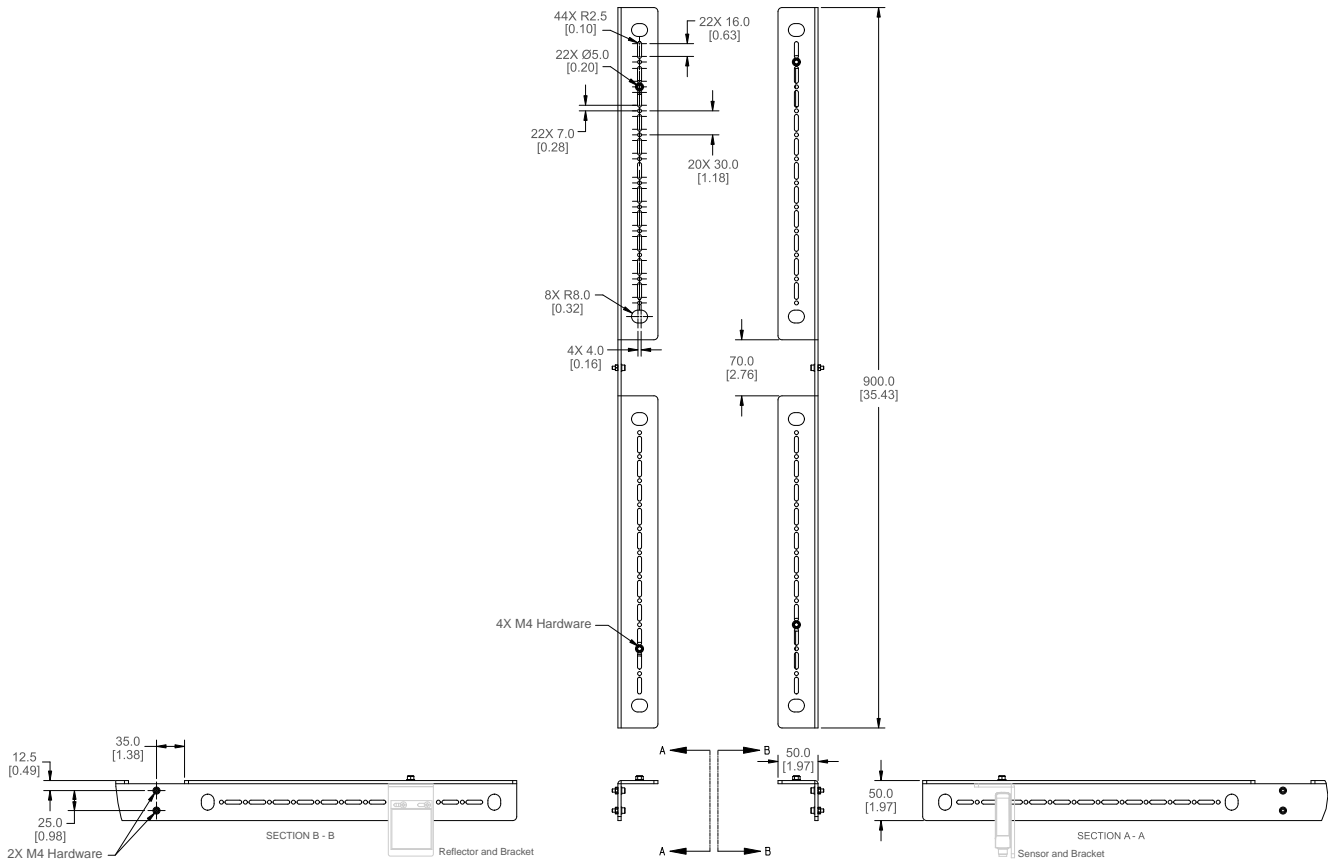
4-pin M12 Male	Pin	Wire Color	Description
	1	Brown	24 V
	2	White	When set to DO, turns on when Q76 does not see reflector
	3	Blue	0 V
	4	Black	When set to DO, turns on when Q76 sees the reflector

### Specifications

**Construction**

Material: 8 GA Cold Rolled Steel  
Finish: Zinc Plate, Black Chromate

Dimensions



Accessories for the Mute Arm Sensor Kit

Model	Description
R95-6M125-M128-S4BM	Muting connection box
Q76E-KP-ZLVC-Q5	Q76 retroreflective mute sensor with 200 mm M12 quick disconnect connector
BRT-60x40C	Retroreflective target (reflector) for use with mute sensor

5-Pin Double-Ended M12 Female to M12 Male Cordsets					
Model	Length	Style	Dimensions	Pinout (Male)	Pinout (Female)
MQDEC-501SS	0.31 m (1.02 ft)	Male Straight/Female Straight			
MQDEC-503SS	0.91 m (2.99 ft)			<p>1 = Brown 2 = White 3 = Blue</p>	<p>4 = Black 5 = Gray</p>
MQDEC-506SS	1.83 m (6 ft)				
MQDEC-512SS	3.66 m (12 ft)				
MQDEC-515SS	5 m (16.4 ft)				
MQDEC-530SS	9 m (29.5 ft)				
MQDEC-550SS	15 m (49.2 ft)				

4-Pin Double-Ended M12 Female to M12 Male Cordsets				
Model	Length	Style	Dimensions	Pinout
MQDEC-401SS	0.31 m (1 ft)	Male Straight / Female Straight		<p>Female</p> <p>Male</p> <p>1 = Brown 2 = White 3 = Blue 4 = Black</p>
MQDEC-403SS	0.91 m (2.99 ft)			
MQDEC-406SS	1.83 m (6 ft)			
MQDEC-412SS	3.66 m (12 ft)			
MQDEC-415SS	4.58 m (15 ft)			
MQDEC-420SS	6.10 m (20 ft)			
MQDEC-430SS	9.14 m (30.2 ft)			
MQDEC-450SS	15.2 m (49.9 ft)			
MQDEC-403RS	0.91 m (2.99 ft)	Male Right-Angle / Female Straight		<p>Male</p> <p>1 = Brown 2 = White 3 = Blue 4 = Black</p>
MQDEC-406RS	1.83 m (6 ft)			
MQDEC-412RS	3.66 m (12 ft)			
MQDEC-420RS	6.10 m (20 ft)			
MQDEC-430RS	9.14 m (30.2 ft)			
MQDEC-450RS	15.2 m (49.9 ft)			
MQDEC-403RR	0.9 m (2.9 ft)	Male Right-Angle / Female Right-Angle		<p>Male</p> <p>1 = Brown 2 = White 3 = Blue 4 = Black</p>
MQDEC-406RR	1.8 m (5.9 ft)			
MQDEC-412RR	3.6 m (11.8 ft)			
MQDEC-420RR	6.1 m (20 ft)			

4-Pin Single-Ended M12 Female Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	2 m (6.56 ft)	Straight		<p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Not used</p>
MQDC-415	5 m (16.4 ft)			
MQDC-430	9 m (29.5 ft)			
MQDC-450	15 m (49.2 ft)	Right-Angle		<p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Not used</p>
MQDC-406RA	2 m (6.56 ft)			
MQDC-415RA	5 m (16.4 ft)			
MQDC-430RA	9 m (29.5 ft)			
MQDC-450RA	15 m (49.2 ft)			

## Safety Controllers

Safety Controllers provide a fully configurable, software-based safety logic solution for monitoring safety and non-safety devices.

For additional models and XS26 expansion modules, see instruction manual p/n [174868](#).

### *Safety controller models*

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

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