TL70 with IO-Link Modular Tower Light Product Manual

Original Instructions
p/n: 244496 Rev. D
27-Oct-26
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Chapter 1 Features



Banner's TL70 with IO-Link Tower Light is a 70 mm, modular LED indicator with bright and uniform light. The modularity gives the user flexibility to customize tower lights as needed and change segment positions in the field. It is also available preassembled for easy installation.

- Light segments have user-selectable solid ON or flashing
- Up to five LED segments, or four LED segments plus one audible segment, in one device
- Rugged, water-resistant IP65 and IP66 housing with UV-stabilized material
- Bright, uniform indicator segments appear gray when off to eliminate false indications from ambient light
- Simple and fast connection with M12 quick-disconnect connector

Models

Model Key: Base Module

Housing	-	Connection
B-TL70BK	-	Q
		Q = Integral 4-pin M12 male quick-disconnect connector

Model Key: Color Modules

Housing	-	Color
SG-TL70B	-	G
		G = Green
		Y = Yellow
		R = Red
		B = Blue
		W = White
		O = Orange
		V = Violet

Model Key: Audible Modules

Housing	-	Alarm
SG-TL70B	-	A
		Blank = No audible
		A = Audible

TL70 with IO-Link Pre-Assembled Models

TL70B-GYRKQ
TL70B-GYRAKQ

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Chapter 2 IO-Link Data Map

TL70 with IO-Link Modular Tower Light

Vendor ID	451 (0x01c3)
Vendor Name	Banner Engineering Corporation
Vendor Text	More Sensors. More Solutions.
Vendor URL	www.bannerengineering.com/io-link
Device ID	393239 (0x060017)
Device Family	Tower Light

Features

Block Parameter	Yes
Data Storage	Yes
Supported Access Locks	Parameter: Yes Data Storage: Yes Local Parameterization: No Local User Interface: No

Communication

IO-Link Revision	V1.1
Transmission Rate	38400 bit/s (COM2)
Minimum Cycle Time	11.2 ms
SIO Mode Supported	No
M-Sequence Capability	PREOPERATE = TYPE_0 with 1 octet on-request data OPERATE = TYPE_2_V with 1 octet on-request data ISDU supported

Device Variant

Description	TL70 IO-Link
Product ID	TL70B*K*Q
Connection Type	4-pin M12 male
- Pin 1	Brown: L+
- Pin 2	White: Not used
- Pin 3	(light) Blue: L-
- Pin 4	Black: C/Q

Process Data Out: Segment Mode

Bit Length: 40

Data Type: 40-bit record

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Subindex	Bit Offset	Data Type	Allowed Values	Default Value	Name	Description
1	32	Boolean	false = Off true = On	false	Segment 1	The state of the segment. Related parameters are defined in Segment Parameter Data.
2	33	Boolean	false = Off true = On	false	Segment 2	The state of the segment. Related parameters are defined in Segment Parameter Data.
3	34	Boolean	false = Off true = On	false	Segment 3	The state of the segment. Related parameters are defined in Segment Parameter Data.
4	35	Boolean	false = Off true = On	false	Segment 4	The state of the segment. Related parameters are defined in Segment Parameter Data.
5	36	Boolean	false = Off true = On	false	Segment 5	The state of the segment. Related parameters are defined in Segment Parameter Data.

Process Data Out: Advanced Mode

Bit Length: 40

Data Type: 40-bit record

Subindex	Bit Offset	Data Type	Allowed Values	Default Value	Name	Description
1	32	3-bit UInteger	0 = Off 1 = Steady 2 = Flash	0	Segment 1 Animation Type	The Animation type
2	35	2-bit UInteger	0 = Medium 1 = Fast 2 = Slow 3 = Custom Flash Rate	0	Segment 1 Speed	The speed of the Animation
3	37	3-bit UInteger	0 = Normal 1 = Strobe 2 = Three Pulse 3 = SOS 4 = Random	0	Segment 1 Pulse Pattern	The pattern of Animation
4	24	3-bit UInteger	0 = Off 1 = Steady 2 = Flash	0	Segment 2 Animation Type	The Animation type
5	27	2-bit UInteger	0 = Medium 1 = Fast 2 = Slow 3 = Custom Flash Rate	0	Segment 2 Speed	The speed of the Animation
6	29	3-bit UInteger	0 = Normal 1 = Strobe 2 = Three Pulse 3 = SOS 4 = Random	0	Segment 2 Pulse Pattern	The pattern of Animation

Continued on page 6

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Subindex	Bit Offset	Data Type	Allowed Values	Default Value	Name	Description
7	16	3-bit UInteger	0 = Off 1 = Steady 2 = Flash	0	Segment 3 Animation Type	The Animation type
8	19	2-bit UInteger	0 = Medium 1 = Fast 2 = Slow 3 = Custom Flash Rate	0	Segment 3 Speed	The speed of the Animation
9	21	3-bit UInteger	0 = Normal 1 = Strobe 2 = Three Pulse 3 = SOS 4 = Random	0	Segment 3 Pulse Pattern	The pattern of Animation
10	8	3-bit UInteger	0 = Off 1 = Steady 2 = Flash	0	Segment 4 Animation Type	The Animation type
11	11	2-bit UInteger	0 = Medium 1 = Fast 2 = Slow 3 = Custom Flash Rate	0	Segment 4 Speed	The speed of the Animation
12	13	3-bit UInteger	0 = Normal 1 = Strobe 2 = Three Pulse 3 = SOS 4 = Random	0	Segment 4 Pulse Pattern	The pattern of Animation
13	0	3-bit UInteger	0 = Off 1 = Steady 2 = Flash	0	Segment 5 Animation Type	The Animation type
14	3	2-bit UInteger	0 = Medium 1 = Fast 2 = Slow 3 = Custom Flash Rate	0	Segment 5 Speed	The speed of the Animation
15	5	3-bit UInteger	0 = Normal 1 = Strobe 2 = Three Pulse 3 = SOS 4 = Random	0	Segment 5 Pulse Pattern	The pattern of Animation

Index 0: Direct Parameters 1

Data Type: 128-bit Record

Access Rights: RW

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Subindex	Bit Offset	Data Type	Allowed Values	Default Value	Acc. Restr.	Name	Description
1	120	8-bit UInteger		0	RO	Reserved	
2	112	8-bit UInteger		0	RO	Master Cycle Time	
3	104	8-bit UInteger		0	RO	Min Cycle Time	
4	96	8-bit UInteger		0	RO	M-Sequence Capability	
5	88	8-bit UInteger		17	RO	IO-Link Version ID	
6	80	8-bit UInteger		0	RO	Process Data Input Length	
7	72	8-bit UInteger		0	RO	Process Data Output Length	
8	64	8-bit UInteger		0	RO	Vendor ID 1	
9	56	8-bit UInteger		0	RO	Vendor ID 2	
10	48	8-bit UInteger		0	RO	Device ID 1	
11	40	8-bit UInteger		0	RO	Device ID 2	
12	32	8-bit UInteger		0	RO	Device ID 3	
13	24	8-bit UInteger		0	RO	Reserved	
14	16	8-bit UInteger		0	RO	Reserved	
15	8	8-bit UInteger		0	RO	Reserved	
16	0	8-bit UInteger	130 = Restore Factory Settings	0	WO	Standard Command	

Index 1: Direct Parameters 2

Data Type: 128-bit Record

Access Rights: RW

Subindex	Bit Offset	Data Type	Allowed Values	Default Value	Acc. Restr.	Name	Description
1	120	8-bit UInteger		0		Device Specific Parameter 1	
2	112	8-bit UInteger		0		Device Specific Parameter 2	
3	104	8-bit UInteger		0		Device Specific Parameter 3	
4	96	8-bit UInteger		0		Device Specific Parameter 4	
5	88	8-bit UInteger		0		Device Specific Parameter 5	
6	80	8-bit UInteger		0		Device Specific Parameter 6	
7	72	8-bit UInteger		0		Device Specific Parameter 7	
8	64	8-bit UInteger		0		Device Specific Parameter 8	
9	56	8-bit UInteger		0		Device Specific Parameter 9	
10	48	8-bit UInteger		0		Device Specific Parameter 10	
11	40	8-bit UInteger		0		Device Specific Parameter 11	
12	32	8-bit UInteger		0		Device Specific Parameter 12	

Continued on page 8

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Continued from page 7

Subindex	Bit Offset	Data Type	Allowed Values	Default Value	Acc. Restr.	Name	Description
13	24	8-bit UInteger		0		Device Specific Parameter 13	
14	16	8-bit UInteger		0		Device Specific Parameter 14	
15	8	8-bit UInteger		0		Device Specific Parameter 15	
16	0	8-bit UInteger		0		Device Specific Parameter 16	

Index 2: Standard Command

Data Type: 8-bit UInteger

Allowed Values: 130 = Restore Factory Settings

Access Rights: WO

Modifies other variables.

Index 12: Device Access Locks

Data Type: 16-bit Record (subindex access not supported)

Access Rights: RW

Subindex	Bit Offset	Data Type	Allowed Values	Default Value	Acc. Restr.	Name	Description
1	0	Boolean		FALSE		Parameter (write) Access Lock	
2	1	Boolean		FALSE		Data Storage Lock	
3	2	Boolean				Local Parameterization Lock	
4	3	Boolean				Local User Interface Lock	

Index 16: Vendor Name

Data Type: 64-octet String UTF-8

Default Value: "Banner Engineering Corporation"

Access Rights: RO

Index 17: Vendor Text

Data Type: 64-octet String UTF-8

Default Value: "More Sensors. More Solutions."

Access Rights: RO

Index 18: Product Name

Data Type: 64-octet String UTF-8

Access Rights: RO

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Index 19: Product ID

Data Type: 64-octet String UTF-8

Access Rights: RO

Index 20: Product Text

Data Type: 64-octet String UTF-8

Access Rights: RO

Index 21: Serial Number

Data Type: 16-octet String UTF-8

Access Rights: RO

Index 22: Hardware Version

Data Type: 64-octet String UTF-8

Access Rights: RO

Index 23: Firmware Version

Data Type: 64-octet String UTF-8

Access Rights: RO

Index 24: Application Specific Tag

Data Type: 32-octet String UTF-8

Access Rights: RW

Index 36: Device Status

Data Type: 8-bit UInteger

Allowed Values:

0 = Device is OK
1 = Maintenance required
2 = Out of specification
3 = Functional check
4 = Failure
5..255 = Reserved

Access Rights: RO

Dynamic

Index 37: Detailed Device Status

Data Type: Array[6] of 3-octet OctetString (subindex access not supported)

Access Rights: RO

Dynamic

Index 41: Process Data Output

Data Type: See ProcessDataOut!

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Access Rights: RO

Dynamic

Index 64: Operating Mode Selection

Description: Operating Mode Selection

Data Type: 8-bit UInteger

Allowed Values:

0 = Basic Segment Mode
1 = Advanced Segment Mode

Default Value: 1

Access Rights: RW

Index 83: Flash Rate Customization (dHz)

Description: Customization for Flash timings

Data Type: 8-bit UInteger

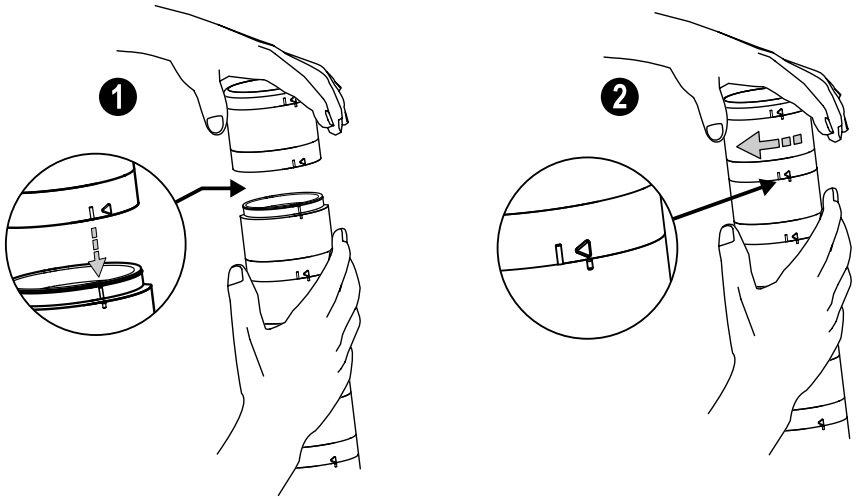
Allowed Values: 1..255

Default Value: 10

Access Rights: RW

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Chapter 3 Assembling the Modules



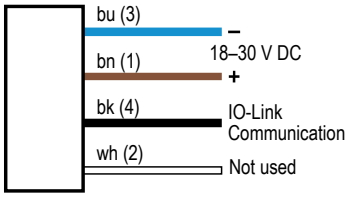
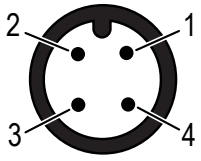
IMPORTANT:
- Do not assemble or swap segments while the unit is powered on.
- Ensure power is off when assembling or swapping segments.

To assemble the modules:

1. Align the notches on each module and press together.
2. Rotate the top module clockwise to lock into place (notches shown in the locked position).

NOTE: DIP switches should remain in the default off position.

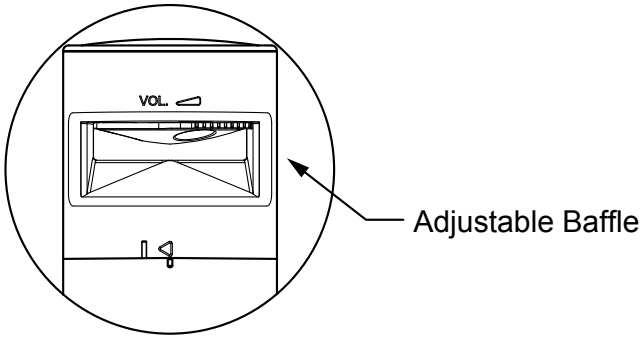
Wiring

Wiring Diagram	4-pin M12 Male Pinout
	

1 = Brown (bn)
2 = White (wh)
3 = Blue (bu)
4 = Black (bk)

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Adjustable audible baffle - for audible models only



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Chapter 4 Specifications

Supply Voltage and Current
18 V DC to 30 V DC

Indicator Color or Audible Model	Typical Current (mA)		
	at 18 V DC	at 24 V DC	at 30 V DC
Base	20	15	12
Blue, White, Orange, and Violet	125	100	80
Red, Yellow, and Green	100	75	60
Standard Audible	30	25	20

Supply Protection Circuitry
Protected against reverse polarity and transient voltages

Indicators
1 to 5 colors depending on model (Green, Red, Yellow, Blue, White, Orange, and Violet)

Indicator Response Time
On/Off Response Time: 25 ms (maximum)

Connections
Integral 4-pin M12 male quick-disconnect connector

Operating Conditions
–40 °C to +50 °C (–40 °F to +122 °F)

95% at +50 °C maximum relative humidity (non-condensing)

Environmental Rating
IP65, IP66

Audible Alarm
2.7 kHz ± 250 Hz oscillation frequency; maximum intensity (typical) 104 dB at 1 m (3.3 ft)

Audible Adjustment
Rotate the audible baffle until the desired volume is reached

Typical Reduction in Sound Intensity with Audible Adjustment (maximum to minimum): 13 dB

Construction
Bases, Segments, Covers: polycarbonate

Vibration and Mechanical Shock
Vibration: 10 Hz to 55 Hz, 0.5 mm peak-to-peak amplitude per IEC 60068-2-6

Shock: 15G 11 ms duration, half sine wave per IEC 60068-2-27

Indicator Characteristics

Color	Dominant Wavelength (nm) or Color Temperature (CCT)	Color Coordinates[1]		Lumen Output (Typical at 25 °C)
		x	y	
Green	525 nm	–	–	67
Red	625 nm	–	–	24
Yellow	590 nm	–	–	55
Blue	475 nm	–	–	25
White	5000 K	–	–	107
Orange	605 nm	–	–	29
Violet	–	0.214	0.133	28

Required Overcurrent Protection

WARNING: Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

Overcurrent protection is required to be provided by end product application per the supplied table.

Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.

Supply wiring leads < 24 AWG shall not be spliced.

For additional product support, go to www.bannerengineering.com.

Supply Wiring (AWG)	Required Overcurrent Protection (A)	Supply Wiring (AWG)	Required Overcurrent Protection (A)
20	5.0	26	1.0
22	3.0	28	0.8
24	2.0	30	0.5

Certifications
Banner Engineering BV
Park Lane, Culliganlaan 2F bus 3
1831 Diegem, BELGIUM

[1] Refer to CIE 1931 chromaticity diagram or color chart, to show equivalent color with indicated color coordinates.

FCC Part 15 Class B for Unintentional Radiators

(Part 15.105(b)) This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

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- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

(Part 15.21) Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

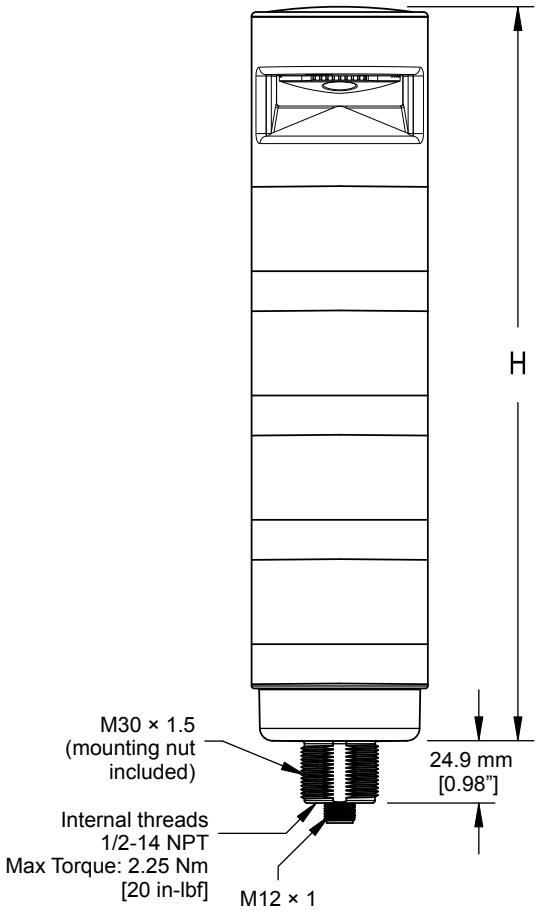
Industry Canada ICES-003(B)

This device complies with CAN ICES-3 (B)/NMB-3(B). Operation is subject to the following two conditions: 1) This device may not cause harmful interference; and 2) This device must accept any interference received, including interference that may cause undesired operation.

Cet appareil est conforme à la norme NMB-3(B). Le fonctionnement est soumis aux deux conditions suivantes : (1) ce dispositif ne peut pas occasionner d'interférences, et (2) il doit tolérer toute interférence, y compris celles susceptibles de provoquer un fonctionnement non souhaité du dispositif.

Dimensions

All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.



Model	Height (H)
1 light module	87.6 mm (3.45 in)
1 light module, 1 audible module	144.3 mm (5.68 in)
2 light modules	137.3 mm (5.41 in)
2 light modules, 1 audible module	194 mm (7.64 in)
3 light modules	187 mm (7.36 in)
3 light modules, 1 audible module	243.7 mm (9.59 in)

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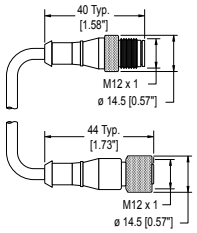
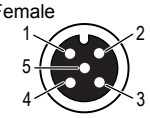
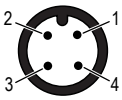
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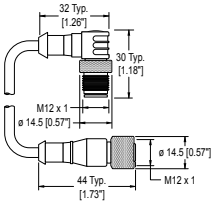
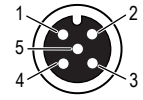
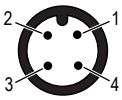
Model	Height (H)
4 light modules	236.7 mm (9.32 in)
4 light modules, 1 audible module	293.4 mm (11.55 in)
5 light modules	286.4 mm (11.28 in)

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Chapter 5 Accessories

Cordsets

4-Pin A-Code Double-Ended M12 Female to M12 Male Cordsets (datasheet p/n 236186)				
Model	**Length**	**Dimensions (mm)**	**Pinouts**	
BC-M12F4-M12M4-22-1	1 m (3.28 ft)		Female  Male 	1 = Brown 2 = White 3 = Blue 4 = Black 5 = Unused c UL us LISTED
BC-M12F4-M12M4-22-2	2 m (6.56 ft)			
BC-M12F4-M12M4-22-3	3 m (9.84 ft)			
BC-M12F4-M12M4-22-4	4 m (13.12 ft)			
BC-M12F4-M12M4-22-5	5 m (16.4 ft)			
BC-M12F4-M12M4-22-10	10 m (30.81 ft)			
BC-M12F4-M12M4-22-15	15 m (49.2 ft)			

4-Pin A-Code Double-Ended M12 Female to M12 Male Right-Angle Cordsets (datasheet p/n 236186)				
Model	**Length**	**Dimensions (mm)**	**Pinouts**	
BC-M12F4-M12M4A-22-1	1 m (3.28 ft)		Female  Male 	1 = Brown 2 = White 3 = Blue 4 = Black 5 = Unused c UL us LISTED
BC-M12F4-M12M4A-22-2	2 m (6.56 ft)			
BC-M12F4-M12M4A-22-5	5 m (16.4 ft)			
BC-M12F4-M12M4A-22-8	8 m (26.25 ft)			
BC-M12F4-M12M4A-22-10	10 m (30.81 ft)			
BC-M12F4-M12M4A-22-15	15 m (49.2 ft)			

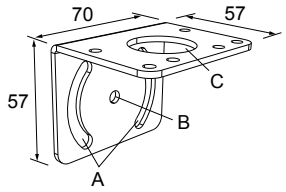
Mounting Brackets

All measurements are listed in millimeters, unless noted otherwise. The measurements provided are subject to change.

SMB30MM

- 12-gauge stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
- CAD Files: DXF, PDF, IGS, STP

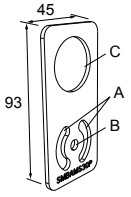
Hole center spacing: A=51, A to B=25.4
Hole size: A=42.6 × 7, B=ø 6.4, C=ø 30.1



SMBAMS30P

- Flat SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90°+ rotation
- 12-gauge 300 series stainless steel
- CAD Files: DXF, PDF, IGS, STP

Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 × 7.0, B=ø 6.5, C=ø 31.0

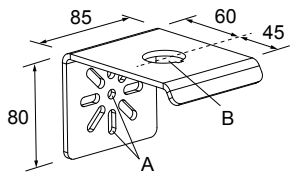


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SSA-MBK-EEC1

- Single 30 mm hole
- 8 gauge steel, black finish (powder coat)
- Front surface for customer-applied labels
- CAD Files: DXF, PDF, IGS, STP

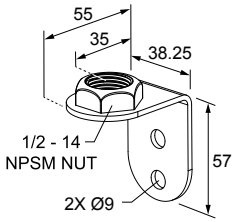
Hole size: A = ø 7 , B = ø 30



LMBE12RA35

- Direct mounting of stand-off pipe, with common bracket type
- Zinc-plated steel
- 1/2-14 NPSM nut
- Mounting distance from the wall to the center of the 1/2-14 NPSM nut is 35 mm
- CAD Files: DXF, PDF, IGS, STP

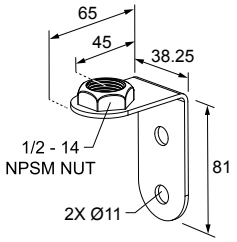
Hole center spacing: 20.0



LMBE12RA45

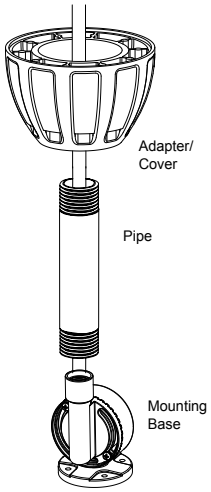
- Direct mounting of stand-off pipe, with common bracket type
- Zinc-plated steel
- 1/2-14 NPSM nut
- Mounting distance from the wall to the center of the 1/2-14 NPSM nut is 45 mm
- CAD Files: DXF, PDF, IGS, STP

Hole center spacing: 35.0



Elevated Mount System

Example Assembly for a TL70 Tower Light



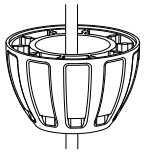
This example uses:

1. Adapter/Cover (SA-M30 shown)
2. Pipe
3. Mounting Base (SA-FFB12 shown)

Other compatible parts are listed in the following tables.

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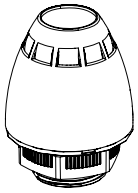
Adapters/Covers

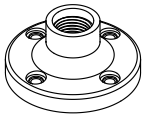
Adapter/Cover Model	Description	
SA-M30 - Black polycarbonate **SA-M30C** - Gray polycarbonate	• Streamlined black PC or Gray PC thread cover • Covers the outer M30 threads on the light's base • Typically used for the TL70 Tower Light and K90 series • Mounting hardware included • CAD files: DXF, PDF, IGS, STP	

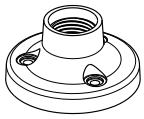
Pipes

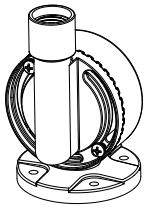
Black Anodized Aluminum, ½ in. NPT Pipe Models	Clear Anodized Aluminum, ½ in. NPT Pipe Models	Description
SOP-E12-150A, 150 mm (6 in) long	**SOP-E12-150AC**, 150 mm (6 in) long	• Elevated-use stand-off pipe • Threaded at both ends • Compatible with most industrial environments • CAD Files: ◦ **SOP-E12-150A**: DXF, PDF, IGS, STP ◦ **SOP-E12-300A**: DXF, PDF, IGS, STP ◦ **SOP-E12-600A**: DXF, PDF, IGS, STP ◦ **SOP-E12-900A**: DXF, PDF, IGS, STP
SOP-E12-300A, 300 mm (12 in) long	**SOP-E12-300AC**, 300 mm (12 in) long	
SOP-E12-600A, 600 mm (24 in) long	-	
SOP-E12-900A, 900 mm (36 in) long	**SOP-E12-900AC**, 900 mm (36 in) long	

Bottom Covers and Mounting Bases

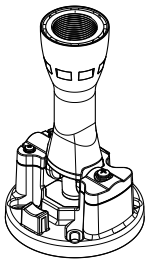
Mounting Base Model	Description	
SA-E12M30 - Black acetal **SA-E12M30C** - White UHMW	• Streamlined black acetal or white UHMW mounting base adapter/cover • Adapter from ½ in. NPSM/DN15 pipe to 30 mm (1-3/16 in) drilled hole • Mounting hardware included • CAD files: DXF, PDF, IGS, STP	

Mounting Base Model	Description	
SA-F12	• Die-cast zinc base with black paint • Elevated-use stand-off pipes (½ in, NPSM/DN15) • M5 mounting hardware and nitrile gasket included • CAD files: DXF, PDF, IGS, STP	

Mounting Base Model	Description	
SA-F12-3	• Black polycarbonate • Elevated-use stand-off pipes (½ in, NPSM/DN15) • M4 mounting hardware and nitrile blend gasket included • CAD files: DXF, PDF, IGS, STP	

Mounting Base Model	Description	
SA-FFB12 - Black polycarbonate **SA-FFB12C** - Gray polycarbonate	• For use with ½ in. stand-off pipes • 110° rotation • Stainless steel hardware • CAD files: DXF, PDF, IGS, STP	

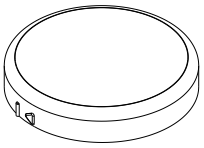
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Mounting Base Model	Description	
SOKTL150R4	• Black polycarbonate • Foldable stand model with upright and 90° folding states • Elevated-use stand-off pipes (½ in, NPSM/DN15) • Mounting hardware included • CAD files: DXF, PDF, IGS, STP	

LMB Sealed Right Angle Bracket

Model	Description	Construction	
LMB30RA CAD Files: DXF, PDF, IGS, STP	**Direct-Mount Models:** Bracket kit with base, 30 mm adapter, set screw, fasteners, O-rings, and gaskets.	Black polycarbonate	
LMBE12RA CAD Files: DXF, PDF, IGS, STP	**Pipe-Mount Models:** Bracket kit with base, ½-14 pipe adapter, set screw, fasteners, O-rings, and gaskets. For use with stand-off pipe (listed and sold separately).	Black polycarbonate	

Top Replacement Cover

C-TL70 Replacement Top Cover • Black polycarbonate housing • Fits TL70 tower lights • IP65 rated • CAD Files: DXF, PDF, IGS, STP	

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Chapter 6 Product Support and Maintenance

Clean with Mild Detergent and Warm Water

Wipe down the device with a soft cloth dampened with a mild detergent and warm water solution. Do not use any other chemicals for cleaning.

Repairs and Translations (No Field-Replaceable Parts)

English

Contact Banner Engineering for troubleshooting of this device. **Do not attempt any repairs to this Banner device; it contains no field-replaceable parts or components.** If the device, device part, or device component is determined to be defective by a Banner Applications Engineer, they will advise you of Banner's RMA (Return Merchandise Authorization) procedure.

```
IMPORTANT: If instructed to return the device, pack it with care. Damage that occurs in return
shipping is not covered by warranty.
```

Obtain assistance with product repairs by contacting your local Banner Engineering Corp distributor or by calling Banner directly at (763) 544-3164. Access literature translated into your native language on the Banner website at www.bannerengineering.com or contact Banner directly at (763) 544-3164.

Deutsch

Wenden Sie sich zur Fehlerbehebung dieses Geräts an Banner Engineering. **Versuchen Sie nicht, Reparaturen an diesem Banner-Gerät vorzunehmen. Das Gerät enthält keine am Einsatzort auszuwechselnden Teile oder Komponenten.** Wenn ein Banner-Anwendungstechniker zu dem Schluss kommt, dass dieses Gerät, ein Teil oder eine Komponente davon defekt ist, erhalten Sie von dem Techniker Erläuterungen zu Banners RMA-Verfahren (Return Merchandise Authorization) für die Warenrückgabe.

```
WICHTIG: Wenn Sie der Techniker anweist, das Gerät zurückzusenden, verpacken Sie es bitte
sorgfältig. Transportschäden bei der Rücksendung werden von der Garantie nicht abgedeckt.
```

Unterstützung bei Produktreparaturen erhalten Sie von Ihrem örtlichen Banner Engineering Corp Händler oder direkt von Banner unter Tel. (763) 544-3164. Die in Ihre Muttersprache übersetzte Literatur finden Sie auf der Banner-Website unter www.bannerengineering.com oder kontaktieren Sie Banner direkt unter Tel. (763) 544-3164.

Français

Pour plus d'informations sur le dépannage du produit, contactez Banner Engineering. **Ne tentez pas de réparer ce dispositif Banner. Il ne contient aucun composant ou pièce qui puisse être remplacé sur place.** Si un ingénieur de Banner conclut que le dispositif ou l'une de ses pièces ou composants est défectueux, il vous informera de la procédure à suivre pour le retour des produits (RMA).

```
Important : Si vous devez retourner le dispositif, emballez-le avec soin. Les dégâts
occasionnés pendant le transport de retour ne sont pas couverts par la garantie.
```

Pour vous aider lors de la réparation de produits, contactez votre distributeur Banner local our appelez directement Banner au (763) 544-3164. La documentation traduite dans votre langue est disponible sur le site internet de Banner www.bannerengineering.com ou contactez directement Banner au (763) 544-3164.

Italiano

Per le procedure di individuazione e riparazione dei guasti di questo dispositivo, contattare Banner Engineering. **Non tentare di riparare questo dispositivo Banner, in quanto non contiene parti o componenti sostituibili dall'utente.** Se il dispositivo, una parte del dispositivo o un componente del dispositivo viene riscontrato difettoso da un tecnico Banner, il nostro personale vi comunicherà la procedura da seguire per ottenere l'autorizzazione al reso.

```
Importante: Se si ricevono istruzioni di rispedire il dispositivo al produttore, imballarlo con
cura. I danni dovuti al trasporto non sono coperti dalla garanzia.
```

Per assistenza nelle riparazioni dei prodotti, contattare il distributore locale Banner Engineering Corp o contattare direttamente Banner al numero (763) 544-3164. È possibile accedere alla documentazione tradotta nella propria lingua madre sul sito Web Banner all'indirizzo www.bannerengineering.com o contattare direttamente Banner al numero (763) 544-3164.

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Español

Comuníquese con Banner Engineering para solucionar de problemas de este dispositivo. **No intente ninguna reparación a este dispositivo de Banner, contiene piezas o componente que no se pueden cambiar en terreno.** Si algún ingeniero de aplicaciones de Banner determina que el dispositivo, alguna de las piezas o alguno de los componentes del dispositivo está defectuoso, le informará el procedimiento de autorización de devolución de mercancía (RMA, por sus siglas en inglés) de Banner.

Importante: Si se le solicita devolver el dispositivo, empáquelo con cuidado. Puede haber daños durante el envío de devolución que no estén cubiertos por la garantía.

Para reparaciones de productos, por favor contacte a su distribuidor local de Banner Engineering o llame a Banner directamente al 00 1 (763) 544-3164. Vea la literatura traducida en su idioma en el sitio web Banner en www.bannerengineering.com o comuníquese con Banner directamente al 00 1 (763) 544-3164.

中国人

如需对本装置进行故障排查，请联系邦纳。**请勿尝试自行维修该邦纳装置；本装置不包含任何可在现场更换的部件或组件。** 若经邦纳应用工程师确认设备、设备部件或组件存在缺陷，他们将告知您邦纳退货授权 (RMA) 流程。

重要注意事项： 如被要求退回装置，请妥善包装后寄回。退货运输过程中发生的损坏不在保修范围内。

请联系当地的 Banner Engineering Corp 经销商或直接致电 Banner +1 (763) 544-3164，以获得产品维修帮助。请访问邦纳网站 www.bannerengineering.com 或直接拨打 +1 (763) 544-3164 联系邦纳，获取翻译成您母语的资料。

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製品の修理については、最寄りのBanner Engineering Corp代理店にお問い合わせいただくか、米国+1 (763) 544-3164まで直接お電話でお問い合わせください。バナーのウェブサイト（www.bannerengineering.com）でお客様の言語に翻訳された資料にアクセスするか、米国+1 (763) 544-3164まで直接お電話でお問い合わせください。

čeština

Pro řešení problémů se zařízením kontaktujte společnost Banner Engineering. **Neprovádějte žádné opravy zařízení Banner. Neobsahují žádné komponenty nebo části, které by byly vyměnitelné.** Pokud je zařízení, jeho část nebo díl označen technikem společnosti Banner jako poškozený, bude Vám doporučeno vyplnit reklamační RMA protokol.

Důležité: Pokud byl vydán požadavek na vrácení zařízení, pečlivě ho zabalte. Poškození vzniklé při dopravě není považováno za záruční opravu.

Pokud produkt potřebuje opravu, vyžádejte si pomoc od místního distributora společnosti Banner Engineering Corp nebo přímo na telefonním čísle (763) 544-3164. Dokumentaci přeloženou do vašeho jazyka si vyhledejte na webových stránkách společnosti Banner na adrese www.bannerengineering.com nebo se obraťte přímo na společnost Banner na telefonním čísle (763) 544-3164.

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Polski

W celu rozwiązania problemów z urządzeniem należy skontaktować się z działem technicznym firmy Banner Engineering. **Pod żadnym pozorem nie próbuj naprawiać tego urządzenia firmy Banner; nie zawiera ono części ani elementów, które można wymieniać samodzielnie.** Jeśli urządzenie, jego część lub element zostaną uznane za wadliwe przez inżyniera technicznego Banner, poinformuje on użytkownika o firmowej procedurze zwrotu towaru (RMA) firmy Banner.

Ważne: Jeśli urządzenie ma zostać zwrócone, należy je starannie zapakować. Uszkodzenia powstałe podczas odsyłki nie są objęte gwarancją.

Aby uzyskać pomoc w zakresie naprawy produktu, należy skontaktować się z lokalnym dystrybutorem Banner Engineering Corp lub zadzwonić bezpośrednio do firmy Banner pod numer (763) 544-3164. Dostęp do literatury przetłumaczonej na swój język ojczysty można uzyskać na stronie internetowej firmy Banner pod adresem www.bannerengineering.com lub kontaktując się bezpośrednio z firmą Banner pod numerem (763) 544-3164.

Português

Entre em contato com a Engenharia da Banner para a solução de problemas deste dispositivo. **Não tente fazer nenhum reparo neste dispositivo Banner; ele não contém peças ou componentes substituíveis em campo.** Se um técnico de aplicações da Banner determinar que o dispositivo, peça ou componente do dispositivo está com defeito, ele o informará sobre o procedimento de RMA (Autorização de Devolução de Mercadoria) da Banner.

Importante: Se for instruído a devolver o dispositivo, embale-o com cuidado. Os danos ocorridos no transporte de devolução não são cobertos pela garantia.

Obtenha assistência para reparos do produto entrando em contato com o distribuidor local da Banner Engineering Corp ou ligando diretamente para a Banner no telefone (763) 544-3164. Acesse a literatura traduzida para seu idioma nativo no site da Banner em www.bannerengineering.com ou entre em contato diretamente com a Banner pelo telefone (763) 544-3164.

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Contact Us

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