

TWS-BC WIRING (base/cap module) Page 235

Mechanical

Degree of protection: **IP66**
Operating temperature: -22°F+140°F
Recommended wire size: .5-2.5mm
Cover lock ring tightening torque: Nm 4 (Kgm 0.4)
Terminal tightening torque: Nm 0.5 (Kgm 0.05)

Electrical

Voltage: 240 maximum

Materials

Housing/cover/locking: Polycarbonate grey Ral 7035
Gaskets: EPDM
Screws: Zinc coated steel
Base printed circuit: FR4
Terminal board: 6 way, PA 6.6
Cable clamp: Nylon 6.6

TWS-A (horn module) Page 238

Mechanical

TWS-A (IP54) NEMA 12
Degree of protection: TWS-A - IP65 - NEMA 4, 4X
TWS-AM (IP54) NEMA 12

Operating temperature: -22°F+140°F
Cover lock ring tightening torque: Nm 4 (Kgm 0.4)

Electrical

Voltage: 12/24V AC/DC, 110/240V AC

mA: 2.7 (12V), 6 (24V), 4 (110V), 8.5 (240V)

Materials

Housing/locking: Polycarbonate grey Ral 7035
Gaskets: EPDM
Screws: Zinc coated steel
Vertical printed circuit: FR4

dB Ratings @ 1M: 76 (12V), 82 (24V)
83 (110V), 86 (240V)

TWS-F/L/X (light modules) Pages 235,236

Mechanical

Degree of protection: **IP66, NEMA 4/4X**
Operating temperature: F, L (-22°+140°F) x (+14°-122°F)
Cover lock ring tightening torque: Nm 4 (Kgm 0.4)

Electrical

24 Volt to 240 Volt, see page S 6

150 ± 20 flashes per minute, see page S 6

Materials

Lens: Polycarbonate
Light separator, lampholder & locking: Ral 7035
Gaskets: EPMD
Screws: Zinc coated steel
Vertical printed circuit: FR4

MOUNTING ACCESSORIES Page 239

Mechanical

Tightening torque: Nm 0.5 (Kgm 0.05)

Materials

Housing: Polycarbonate grey Ral 7035
Base gaskets/O-rings: EPDM

RATINGS

IP66, NEMA 4X

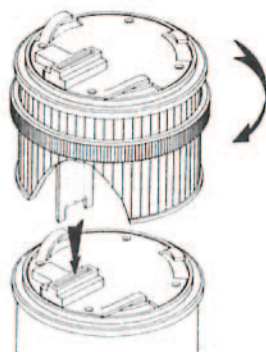


totally protected
against dust

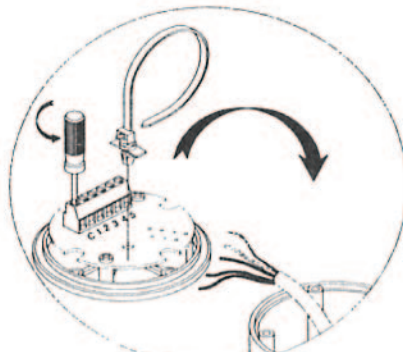


protected against
strong jets of water
from all directions

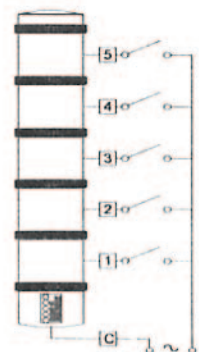
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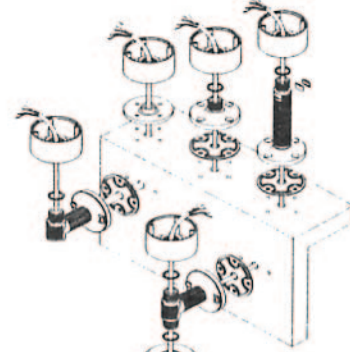
Quick Assembly



Base Wiring #TWS-BC



Circuit



Selected Mounting
Options



SERIES TWS TYPE LD-TWS LED INTEGRATED

SIRENA

COMPLETE TOWER (TWS) - ORDER INFORMATION

Wiring Base
with Cover



#TWS-BC

- ♦ # LD-TWS
LD Integrated
(see below pg.256)
- ♦ # TWS
Tower Sector less
bulb (pg. 239)
Add filament bulb
or LED bulb
(pg. 257)

Select Tower
Sectors / Options



- ♦ XENON Sector
(pg. 258)
- ♦ Flashing Beacon
can be added to
stack (pg. 265)



Mounting
Options



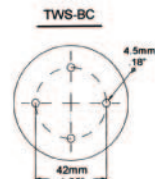
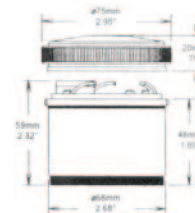
(pg. 243)



BASE & CAP MODULE

Required for use with light modules and / or horn.

Part Number	Description	List Price
TWS-BC	Base Module/cap	\$47.00



TOWER SECTORS LD-TWS

LED INTEGRATED SECTORS LD-TWS



Black housing is
also available.
Contact factory.



All LED's are Included

Continuous Lights

Part Number	Lens Color	List Price
LD-TWS-F2-*	amber	\$66.00
LD-TWS-F3-*	red	\$66.00
LD-TWS-F5-*	yellow	\$66.00
LD-TWS-F4-*	green	\$104.00
LD-TWS-F1-*	blue	\$104.00
LD-TWS-F6-*	clear	\$130.00

Number Example:
LD-TWS-F1-GN

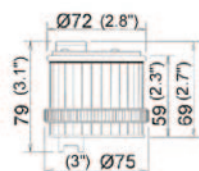
* Must specify voltage suffix...
*GN (24VAC/DC), *O (48VAC/DC),
*A (110VAC), *C (240VAC)



All LED's are Included

Flashing Lights

Part Number	Lens Color	List Price
LD-TWS-L2-*	amber	\$122.00
LD-TWS-L3-*	red	\$122.00
LD-TWS-L5-*	yellow	\$122.00
LD-TWS-L4-*	green	\$163.00
LD-TWS-L1-*	blue	\$163.00
LD-TWS-L6-*	clear	\$186.00



	V ---	24	48	—	—
	V ~			110	240
● ● ● ●	mA	90	65	20	20
● ● ● ●	mA	80	65	20	20

Power used per color.

150 ± 20 Flashes per min.

Temperature:
°C -30 to +50°C

Gaskets:
EPDM

Housing:
Polycarbonate RAL7035

Discount Schedule TS

TOWER SECTOR OPTIONS= (NOT LED INTEGRATED)

For use with: 1. **Filament Bulbs Option** (Not type LD, not LED Integrated)
2. **Separate LED Bulbs Option** (Not type LD, not LED Integrated)

The lens/light modules can be stacked in any configuration up to 5, or 4 with optional acoustic horn. For example, the top position could be a red xenon module, followed by an amber flashing module in the middle with a green continuous module on the bottom. If require, an acoustic horn module can be added to the top position.


Continuous Light Modules

Part Number	Lens Color	List Price
TWS-F2	amber	\$30.00
TWS-F3	red	\$30.00
TWS-F5	yellow	\$30.00
TWS-F4	green	\$30.00
TWS-F1	blue	\$30.00
TWS-F6	clear	\$30.00

Bulbs not included.

Flashing Light Modules

Part Number	Lens Color	List Price
TWS-L2	amber	\$87.00
TWS-L3	red	\$87.00
TWS-L5	yellow	\$87.00
TWS-L4	green	\$87.00
TWS-L1	blue	\$87.00
TWS-L6	clear	\$87.00

Flashes/Min. 110 ± 20

FOR USE WITH INCANDESCENT BULB 5W OR LED BULB (see below).

INCANDESCENT BULBS or SEPARATE LED BULBS

(Not for LED Integrated Sector Modules)

Purchase as separate items or include with above Sector Module.

Filament Type Bulb

* Add voltage suffix to above module.
Add \$4.00 List

*** Must specify voltage suffix...**

*M (12VAC/DC), *G (24VAC), *N (24VDC),
*A (110VAC), *C (240VAC)


Separate Filament Bulb

Part Number	Bulb Type	List Price
TWS-BA15D-*	Incandescent (5 watt)	\$4.00



Part Number	Bulb Type	List Price
TWS-LRX2J	Xenon	\$60.00

Above xenon part number covers all voltage ranges,
24-240V, when used in Xenon TWS-X Sectors on
page237 (above).

LED Type Bulb

* Add voltage suffix to above module.
Add extra cost per below.

*** Must specify voltage suffix...**

*LM (12VAC/DC), *LG (24VAC), *LN (24VDC),
*LA (110VAC), *LC (240VAC/DC)

Contact factory on availability of other voltages.


Separate Led Bulb

Part Number	Bulb Type	List Price
TWS-LED1-*	blue led	\$60.00
TWS-LED2-*	amber led	\$60.00
TWS-LED3-*	red led	\$60.00
TWS-LED4-*	green led	\$60.00
TWS-LED6-*	clear led	\$60.00

Not usable with Series LD LED Integrated.

Lens / Light Stack Modules

Xenon strobe flash sector

Part Number	Lens Color	List Price
TWS-X1-*	blue	\$146.00
TWS-X2-*	amber	\$130.00
TWS-X3-*	red	\$130.00
TWS-X4-*	green	\$130.00
TWS-X5-*	yellow	\$130.00
TWS-X6-*	clear	\$146.00

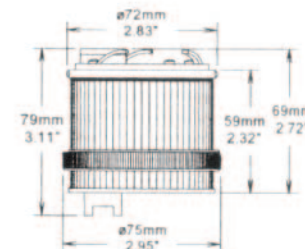
*** Must specify voltage suffix...**
 *G (24VAC), *N (24VDC),
 *A (110VAC), *C (240VAC)
 Xenon not available in
 suffix M (12VAC/DC)



Xenon Tube
Included.

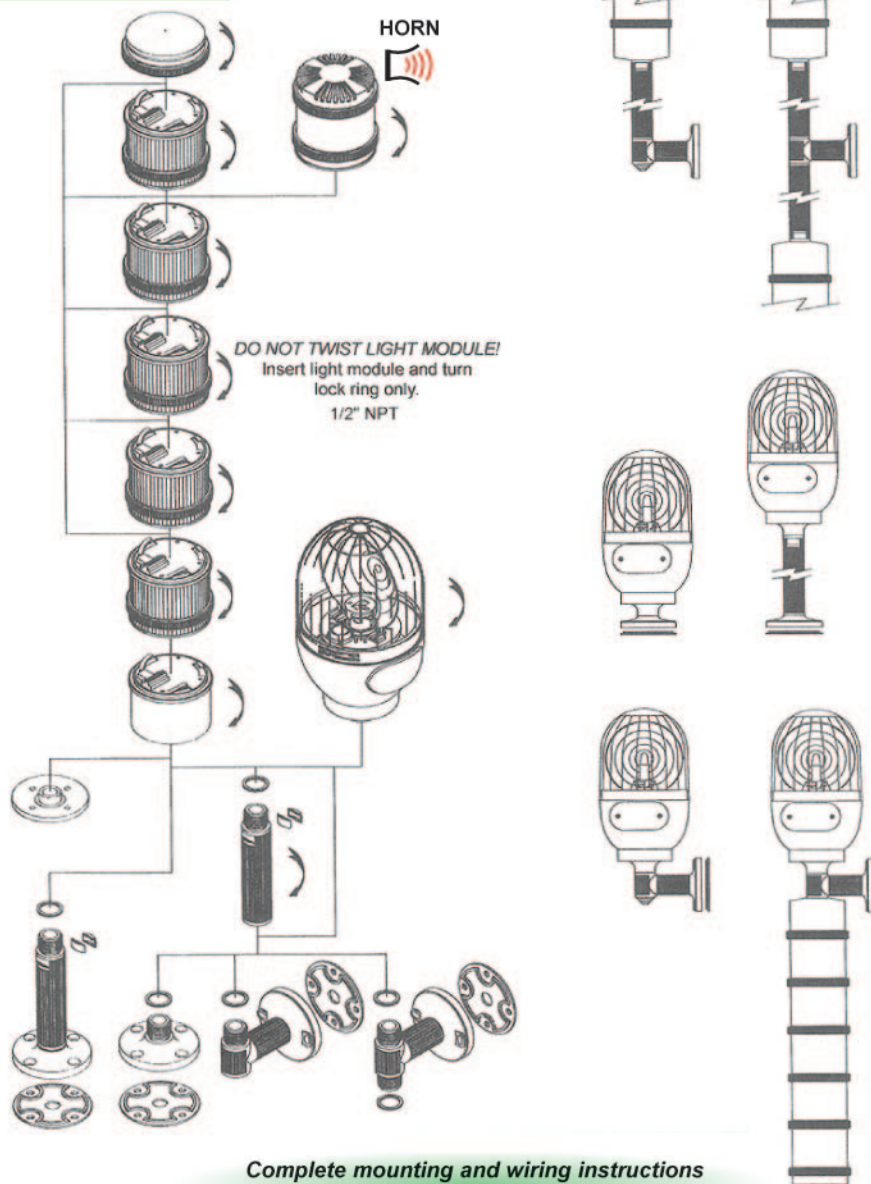


Xenon Module can be placed in any
location in the Tower Sector stack.

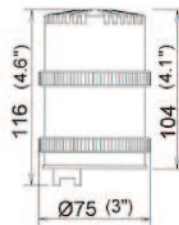


Requires base cup module
found on page 256.

Assembly & Mounting



Complete mounting and wiring instructions
shipped with each TWS-BC base and module ordered.


TWS A
**IP54
NEMA 12**


VDC	12 / 24 / 48			—	—	—
VAC				110 / 230 / 240		
mA	2.7	6	13	4	8	8.5
Hz	2500			(± 100 Hz)		

Part Number	List Price
TWS-A-*	\$82.00

Horns require base cup module on p.257 for connection.

°C -30, +60°C

*** Must specify voltage suffix...**

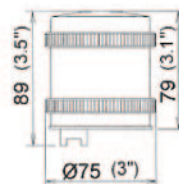
***GN** (12 to 48 VAC/DC)

***A** (110 to 240 VAC)

DIP SWITCH - 6 SOUNDS

	SLOW INTERMITTENT SOUND REDUCED OUTPUT	T ON 310 mS T OFF 260 mS	V 	12	24	48	-	-	-
			V 	12	24	48	110	230	240
			dB(A)1m	72	77	79	76	78	78
	SLOW INTERMITTENT SOUND MAXIMUM OUTPUT	T ON 310 mS T OFF 260 mS	V 	12	24	48	-	-	-
			V 	12	24	48	110	230	240
			dB(A)1m	77	84	85	81	85	85
	FAST INTERMITTENT SOUND REDUCED OUTPUT	T ON 70 mS T OFF 50 mS	V 	12	24	48	-	-	-
			V 	12	24	48	110	230	240
			dB(A)1m	74	79	81	76	78	79
	FAST INTERMITTENT SOUND MAXIMUM OUTPUT	T ON 70 mS T OFF 50 mS	V 	12	24	48	-	-	-
			V 	12	24	48	110	230	240
			dB(A)1m	78	85	87	81	85	85
	CONTINUOUS SOUND REDUCED OUTPUT	-	V 	12	24	48	-	-	-
			V 	12	24	48	110	230	240
			dB(A)1m	75	81	83	75	80	81
	CONTINUOUS SOUND MAXIMUM OUTPUT	-	V 	12	24	48	-	-	-
			V 	12	24	48	110	230	240
			dB(A)1m	79	85	89	81	86	87


TWS A IP65
Piezoelectric
Acoustic Module

**IP65
NEMA 4, 4X**


V DC	12 / 24 / 48			-	-	-
VAC				110 / 230 / 240		
mA	2,7	6	13	4	8	8,5
Hz	2500			(± 100 Hz)		

Part Number	List Price
TWS-A- IP65-*	\$87.00

Horns require base cup module on p.257 for connection.

°C -30, +60°C

*** Must specify voltage suffix...**

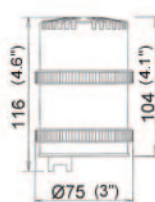
***GN** (12 to 48 VAC/DC)

***A** (110 to 240 VAC)

DIP SWITCH

	SLOW INTERMITTENT SOUND REDUCED OUTPUT	T ON 310 mS T OFF 260 mS	V 	12	24	48	-	-	-
			V 	12	24	48	110	230	240
			dB(A)1m	64	69	71	68	70	70
	SLOW INTERMITTENT SOUND MAXIMUM OUTPUT	T ON 310 mS T OFF 260 mS	V 	12	24	48	-	-	-
			V 	12	24	48	110	230	240
			dB(A)1m	69	76	78	73	77	77
	FAST INTERMITTENT SOUND REDUCED OUTPUT	T ON 70 mS T OFF 50 mS	V 	12	24	48	-	-	-
			V 	12	24	48	110	230	240
			dB(A)1m	66	71	73	68	70	71
	FAST INTERMITTENT SOUND MAXIMUM OUTPUT	T ON 70 mS T OFF 50 mS	V 	12	24	48	-	-	-
			V 	12	24	48	110	230	240
			dB(A)1m	70	77	79	73	77	77
	CONTINUOUS SOUND REDUCED OUTPUT	-	V 	12	24	48	-	-	-
			V 	12	24	48	110	230	240
			dB(A)1m	67	73	75	67	72	73
	CONTINUOUS SOUND MAXIMUM OUTPUT	-	V 	12	24	48	-	-	-
			V 	12	24	48	110	230	240
			dB(A)1m	71	77	81	73	78	79


TWS AM
Magnetodynamic
Acoustic Module 32 Sounds
selected by means of Dip Switch

**IP54
NEMA 12**


V DC	12/24	-	-	-	-
V AC		48	110	230/240	
mA	see table next page.				
Hz	see table next page.				

Part Number	List Price
TWS-AM-*	
12/24V	\$160.00
110/240V	\$160.00

Horns require base cup module on p.257 for connection.

°C -30, +60°C

*** Must specify voltage suffix...**

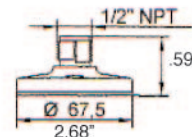
***GN** (12 to 24VAC/DC), ***O** (48VAC),

***A** (110VAC), ***C** (240VAC)

Discount Schedule TS

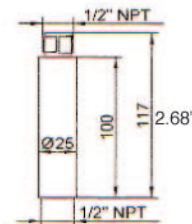
FOOT - with O-Ring and base gasket Use with Series TWS and OVOLUX


Part Number	Description	List Price
TWS-BS	Base with gaskets	\$11.00

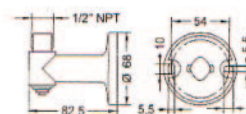

EXTENSION STEM - with O-Ring and two removable snap-shut stoppers


Part Number	Description	List Price
TWS-PR	4" extension stem	\$9.00

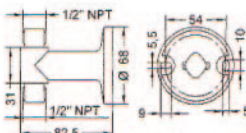
Multiple extension pieces may be coupled to desired length.


1 THREAD WALL SUPPORT - with O-Ring and base gasket

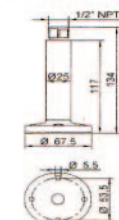

Part Number	Description	List Price
TWS-BP1	Wall mount, single	\$17.00


2 THREAD WALL SUPPORT - with O-Ring and base gasket


Part Number	Description	List Price
TWS-BP2	Wall mount, double	\$18.00


1 PR + 1BS - with O-Ring, base gasket and two removable snap-shut stoppers

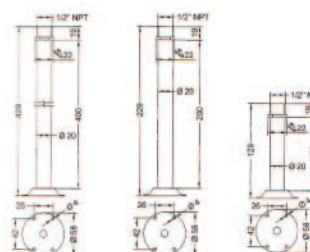

Part Number	Description	List Price
TWS-KIT	Base & extension stem	\$21.00



SSE3 SSE2 SSE1

Stainless Steel Extension Stem with O-Ring

Part Number	Description	List Price
TWS-SSE1	Stainless steel extension w/base	\$42.00
TWS-SSE2	Stainless steel extension w/base	\$50.00
TWS-SSE3	Stainless steel extension w/base	\$65.00


PVC Extension Stem with Base

Part Number	Description	List Price
TWS-J-12	12" extension w/base	\$12.00
TWS-J-24	24" extension w/base	\$18.00
TWS-J-36	36" extension w/base	\$25.00
TWS-J-90D	90° elbow	\$ 9.00


Flexible Steel Extension Stem

Part Number	N TWS PF2
Description	Flexible Steel Extension stem
List Price	\$74.00

