

Bulletin 855E 50 mm Control Tower™ Lights

Light Modules

$$855E - \frac{10}{a} \frac{FN}{b} \frac{4}{c}$$



Flashing Incandescent

a

Voltage	
Code	Description
00	0...250V AC/DC (no-lamp module★)
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

b

Light Module Type	
Code	Description
XN	Steady no lamp★
DN	Steady incandescent
FN	Flashing incandescent
TL	Steady socket - mount LED
GL	Flashing socket - mount LED
BR	Strobe

c

Lens Color	
Code	Description
3	Green
4	Red
5	Amber
6	Blue
7	Clear
8	Yellow

★ Can only be selected with module type **XN**, voltage code **00**. Accepts socket mount LED and incandescent lamp types.

Sound Modules

Sound modules have continuous and pulsing tones. Maximum sound output is 103 dB @ 1 meter. A reduced volume setting is available by changing the position of the volume dipswitch, producing a sound output of 88 dB @ 1 meter.

$$855E - \frac{B}{a} \frac{10}{b} \frac{TA3}{c}$$



Black Two-Tone Sound Module

a

Housing Color	
Code	Description
B	Black
G	Grey

b

Voltage	
Code	Description
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

c

Module Type	
Code	Description
SA3	Single circuit/single tone piezo style (continuous or pulsing tones modified by dip switch)
TA3	Two circuit/two tone piezo style (continuous or pulsing tones modified by energizing one or two circuits of sound module)

Standard Stack Light Bases



Surface-Mount Base with Cap



Vertical-Mount Base with Cap



Pole-Mount Bases



Quick-Release Base

855E – B VM C
 a b c

a

Housing Color	
Code	Description
B	Black
G	Grey

b

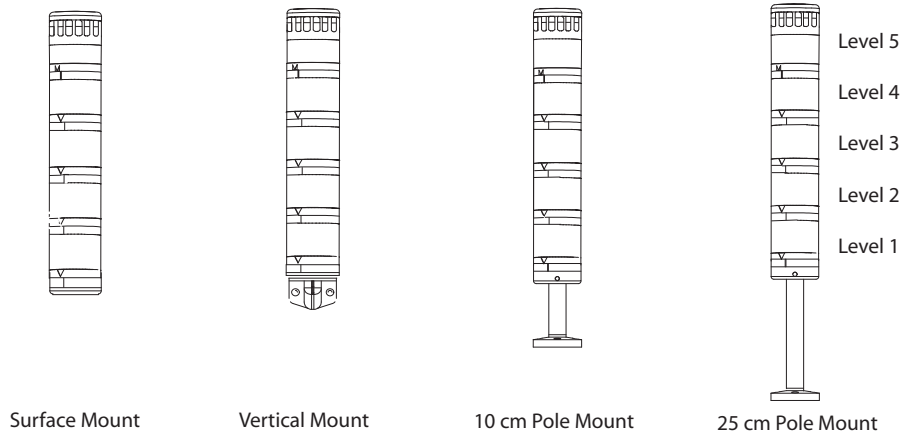
Base Type	
Code	Description
CB	Surface mount with 1/2 in. NPT threading
RB	Surface mount with M20 metric threading
SB	Surface mount with PG16 threading
TM	25 mm tube mount
VM	Vertical mount
PM10	10 cm aluminum pole mount base
PM25	25 cm aluminum pole mount base
PM40	40 cm aluminum pole mount base
PM60	60 cm aluminum pole mount base
PM80	80 cm aluminum pole mount base
MM10	10 cm quick release base
MM25	25 cm quick release base
MM40	40 cm quick release base

c

Cap Option§	
Code	Description
Blank	No cap
C	Cap included

§ Quick-release bases always include a cap.

Pre-configured Tower Lights, One to Five Modules



855 EC – B 10 Y 3 L 5 B 3 F 7 Y 6
a *b* *c* *d* *e* *d* *e* *d* *e* *d* *e* *d* *e*
 (Level 1) (Level 2) (Level 3) (Level 4) (Level 5)
d+e *d+e* *d+e* *d+e* *d+e*

a

Base Type	
Code	Description
EC	Surface mount - 1/2 in. NPT threading
ES	Surface mount - PG16
EV	Vertical mount
EM	25 mm tube mount
EP	10 cm pole mount
EE	25 cm pole mount

b

Base & Cap Color	
Code	Description
B	Black
G	Grey

c

Voltage	
Code	Description
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

d

Module Type	
Code	Description
D	Steady incandescent
F	Flashing incandescent
Y	Steady LED
L	Flashing LED
B	Strobe
P	Single-circuit piezo sound module
Q	Two-circuit piezo sound module§

e

Lens Color	
Code	Description
1	Sound module‡
3	Green
4	Red
5	Amber
6	Blue
7	Clear
8	Yellow

‡ Sound module option can only be selected with Module Type options P or Q in table e. They must be located in the top position of the stack.
 § If the two-circuit sound module (option Q in Table d) is selected, the maximum number of light modules allowed is three.

Specifications

Mechanical Ratings					
Shock and Vibration		Based on the weight and style of mounting; tower lights are subject to damage from shock and vibration. Listed below are reference guidelines for maximum acceptable conditions.			
		1 Module Stack	3 Module Stack	5 Module Stack	
Standard Bases	Surface Mount Base or 10 cm Aluminum Pole Base	150 G Shock 5 G Vibration	45 G Shock 1.5 G Vibration	35 G Shock 0.75 G Vibration	
	Vertical Base or 25 cm Aluminum Pole Base	95 G Shock 3.5 G Vibration	30 G Shock 1.25 G Vibration	20 G Shock 0.5 G Vibration	
Recommended Wire Sizes		0.5...1.5 mm ² (22...16 AWG)			
Recommended Terminal Torque		0.87 N•m (7 lb•in)			
Environmental Ratings					
Ingress Ratings	Light Modules with Cap	UL Type 4/4X/13, IP65			
	Sound Modules	UL Type 4/4X/13, IP65			
	Surface, Vertical, Tube Mount Bases	UL Type 4/4X/13, IP65			
	Pole Mount Bases	UL Type 4/4X/13, IP65			
Temperature Ratings — All Products	Operating Temperature	-25...+50 °C (-13...+122 °F)			
	Storage Temperature	-40...+85 °C (-40...+185 °F)			
Materials					
Bases, Caps, Lens Covers, Sound Module Housings, Lenses		Polycarbonate			
Lamp Socket		Polycarbonate			
Rubber Seals and Gaskets		Nitrile Rubber			
Pole (for aluminum pole assembly)		Aluminum			
Pole Base Footing (for aluminum pole base)		Polycarbonate			
Insulation Sleeve (for pole insulation)		Polyolefin			
Mounting Screw Washers		Polypropylene			
Performance Ratings					
Description		12V AC/DC	24V AC/DC	120V AC	240V AC
Light Output	Steady Incandescent	0.5 MSCP 6.3 Lumens	2.5 MSCP 31.4 Lumens	3.0 MSCP 37.7 Lumens	0.49 MSCP 6.2 Lumens
	Flashing Incandescent	0.5 MSCP 6.3 Lumens	2.5 MSCP 31.4 Lumens	3.0 MSCP 37.7 Lumens	0.49 MSCP 6.2 Lumens
	Strobe	1 Joule per lamp			
	Steady, Flashing Socket Mount LED Red	900...2240 mcd			
	Steady, Flashing Socket Mount LED Green	900...1800 mcd			
	Steady, Flashing Socket Mount LED Amber	1400...3550 mcd			
	Steady, Flashing Socket Mount LED Blue	224...560 mcd			
	Steady, Flashing Socket Mount LED White and Yellow	900...1800 mcd			
Operating Voltage					
Description		12V AC/DC	24V AC/DC	120V AC	240V AC
Light Modules and Sound Modules		12V AC/DC (± 10%)	24V AC/DC (± 10%)	110V AC 50Hz (± 10%) 120V AC 60Hz (± 10%)	230V AC 50 Hz (± 10%) 240V AC 60 Hz (± 10%)
Lamp Life Ratings (Design Life) Average Life Under Static, No Vibration, Conditions					
Description		12V AC/DC	24V AC/DC	120V AC	240V AC
Incandescent Modules†§		8 000 hrs	7 000 hrs	3 000 hrs	1 600 hrs
LED Modules		100 000 hrs			
Strobe Modules		15 000 hrs			
Sound Modules		20 000 hrs			

† First failures at about 35% of average life. Severe vibration may reduce life to 44% of average life.
 § Flashing applications may reduce life to 50% of average life.

Standards Compliance

UL 508
 CSA C22.2 No. 14
 EN/IEC 60947-1
 EN/IEC 60947-5-1

Certifications

cULus Listed (File No. E14840,
 Guides NKCR, NKCR7)
 CE Marked

		Current Consumption			
Description		12V AC/DC	24V AC/DC	120V AC	240V AC
Light Only Modules	Steady Incandescent	208 mA	271 mA	58 mA	23 mA
	Flashing Incandescent	208 mA	271 mA	58 mA	23 mA
	Steady or Flashing LED	42 mA	29 mA	21 mA	20 mA
	Strobe	95 mA	60 mA	55 mA	30 mA
Sound Modules	Single-Tone Sound Module	12 mA	25 mA	33 mA	33 mA
	Two-Tone Sound Module				
Flashing Frequency (Light Only Modules)					
Flashing Incandescent Modules		12V module approximately 1.5 Hz 24V, 120V, and 240V modules approximately 2 Hz Time ON/Time OFF = 1:1			
Flashing LED Modules		Flashing frequency approximately 1.5 Hz Time On/Time OFF = 1:1			
Strobe Modules		Flashing frequency approximately 2 Hz (flash duration 1/50,000 second)			
Flashing and Tone frequency (Light Modules/with Sound Set at Continuous Tone)					
Tone Frequency		Tone frequency is preset at 2800 Hz			
Flashing and Tone Pulsing Frequencies (Light Modules/with Sound Set at Pulsing Tone)					
Tone Frequency		Tone Frequency is preset at 2800 Hz			
dB Rating (Sound Modules)					
All dB(A) ratings determined at a distance of 1 meter from sound module					
Single Tone Sound Module (SA3)		Maximum volume ranges from 88 or 103 dB(A) (volume adjustable by dipswitch)			
Two Tone Sound Module (TA3)					
Leakage Current Impact					
All light modules and sound modules are capable of absorbing up to 3 mA of leakage from solid-state outputs without module activation					

Approximate Dimensions

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

