

# Altech Corp.®

Serving the Automation & Control Industry since 1984



ISO 9001  
QMI-SAI Global



## TOWER LIGHTS

# Altech Corp.®

Since 1984, Altech Corporation has grown to become a leading supplier of automation and industrial control components. Headquartered in Flemington, NJ, Altech has an experienced staff of engineering, manufacturing and sales personnel to provide the highest quality products with superior service. This is the Altech Commitment!

With experienced Product Engineers and Customer Service personnel, Altech provides solutions to your most pressing application challenges. All with one thought in mind - *to ensure that we solve your problem the first time!*



## Altech's Commitment

*Altech's Automation and Control components meet applicable national and international standards, such as UL, NEC, CSA, IEC and VDE. Altech provides these products with superior customer service and delivery through a ISO 9001 Quality Management system, which stresses continuous process improvement. We perform these services with honesty and integrity. All Altech employees are trained in this Quality Management System and are dedicated to achieve these goals. Altech's quality system has been ISO approved since 1999.*



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# Switch Colors Easily and Set Your Own Combination



- Sleek & Stackable Design
- SMD LED technology
- Uniform & bright illumination
- Continuous, Flashing and Rotary Integrated LED Light Modules available
- Flexibility to upgrade from Single LED Unit to multiple LED Units
- IP 65 protection
- Wide voltage range from 12V AC/DC to 240V AC
- Optional feature of Buzzer with dual sound mode - continuous or intermittent with 80 dB output.

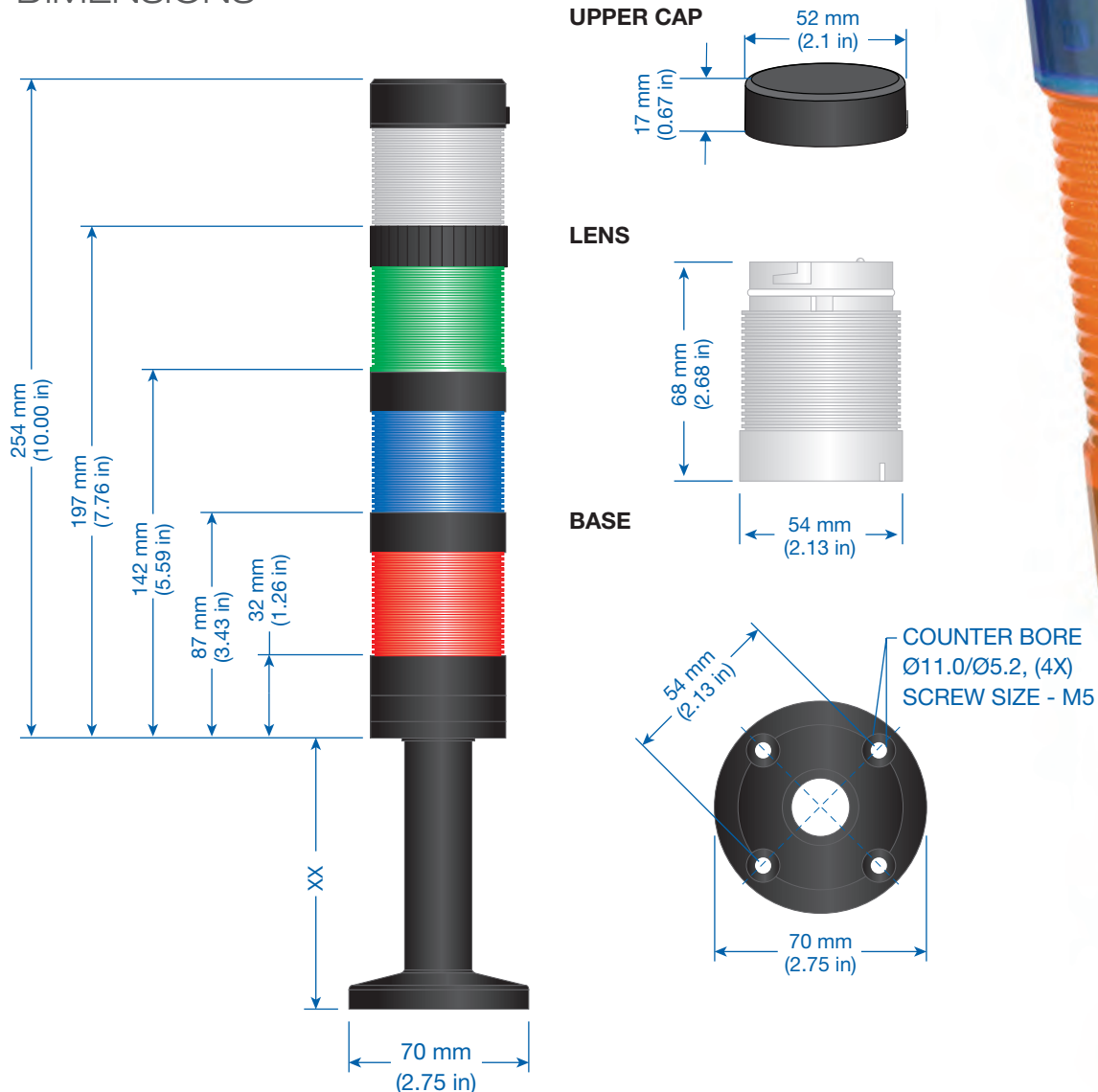


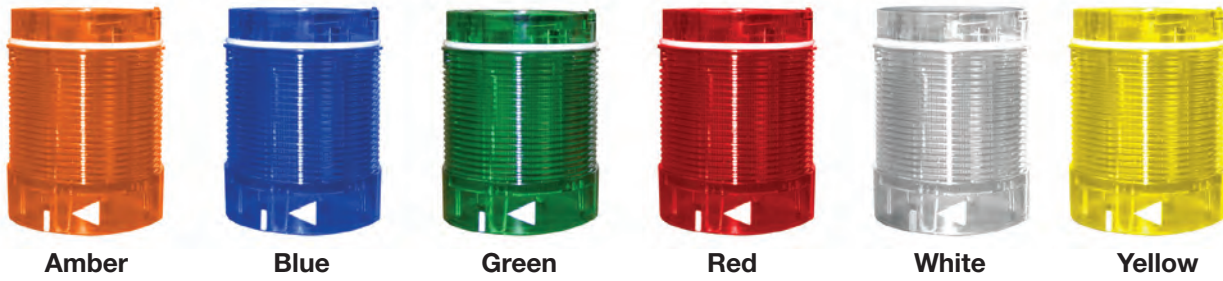
The UL standard extends to: 1 | 2 | 3 | 3R | 4 | 4X | 12 | 13  
Indoor or outdoor use primarily to provide a degree of protection against corrosion, windblown dust and rain, splashing water, hose-directed water, and damage from external ice formation.

# TECHNICAL INFORMATION

Outer Diameter	Ø50mm
Degree of Protection	IP65, NEMA Type 4X and 13, UL 508
LED Type	SMD
Unit Color	Red / Green / Amber / Blue / White
Unit Signalling Effect	Continuous, Blinking & Revolving
Buzzer Color	Black
Buzzer Mode	80dB ± 5dB
Sounding Mode	Continuous or Intermittent
Available Voltages	12V AC/DC; 24V AC/DC 120V AC; 240V AC
Voltage Tolerance	±10% of rated voltage
Operating Temperature	-30°C to 60°C
Surge Test	2 KV
HV Test for 60 Seconds	1.5 KV
Current Rating	20-40mA for 12V AC/DC; 24V AC/DC 10-20mA for 120V AC & 240V AC

## DIMENSIONS





## Lens with Integrated LED

Voltage	Mode	Amber	Blue	Green	Red	Yellow	White
<b>12V AC/DC</b>	Continuous LED	TL50LA1T	TL50LB1T	TL50LG1T	TL50LR1T	TL50LY1T	TL50LW1T
	Flashing LED	TL50LA2T	TL50LB2T	TL50LG2T	TL50LR2T	TL50LY2T	TL50LW2T
	Rotating LED	TL50LA3T	TL50LB3T	TL50LG3T	TL50LR3T	TL50LY3T	TL50LW3T
<b>24V AC/DC</b>	Continuous LED	TL50LA1U	TL50LB1U	TL50LG1U	TL50LR1U	TL50LY1U	TL50LW1U
	Flashing LED	TL50LA2U	TL50LB2U	TL50LG2U	TL50LR2U	TL50LY2U	TL50LW2U
	Rotating LED	TL50LA3U	TL50LB3U	TL50LG3U	TL50LR3U	TL50LY3U	TL50LW3U
<b>110V AC</b>	Continuous LED	TL50LA1W	TL50LB1W	TL50LG1W	TL50LR1W	TL50LY1W	TL50LW1W
	Flashing LED	TL50LA2W	TL50LB2W	TL50LG2W	TL50LR2W	TL50LY2W	TL50LW2W
	Rotating LED	TL50LA3W	TL50LB3W	TL50LG3W	TL50LR3W	TL50LY3W	TL50LW3W
<b>240V AC</b>	Continuous LED	TL50LA1X	TL50LB1X	TL50LG1X	TL50LR1X	TL50LY1X	TL50LW1X
	Flashing LED	TL50LA2X	TL50LB2X	TL50LG2X	TL50LR2X	TL50LY2X	TL50LW2X
	Rotating LED	TL50LA3X	TL50LB3X	TL50LG3X	TL50LR3X	TL50LY3X	TL50LW3X

## TOWER LIGHTS LENS DECODING

### Luminous Lens Selection Decoding

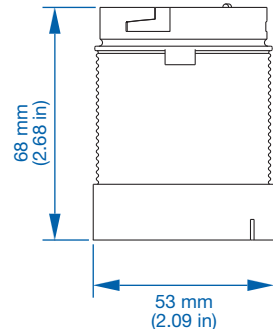


**I - Series**  
TL50L-TL Series  
with 50 mm dia  
Luminous Lens

**II - Color**  
A - Amber  
B - Blue  
G - Green  
R - Red  
W - White  
Y - Yellow

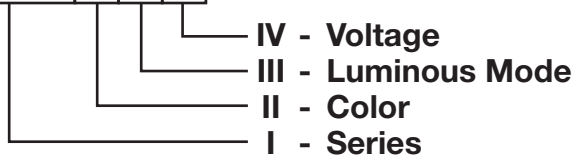
**III - Luminous Mode**  
1 - Continuous Light  
2 - Blinking Light  
3 - Revolving Light  
Z1 - Continuous Light + Continuous Buzzer  
Z2 - Flashing Light + Intermittent Buzzer

**IV - Voltage**  
T - 012V AC/DC  
U - 024V AC/DC  
W - 110V AC  
X - 240V AC

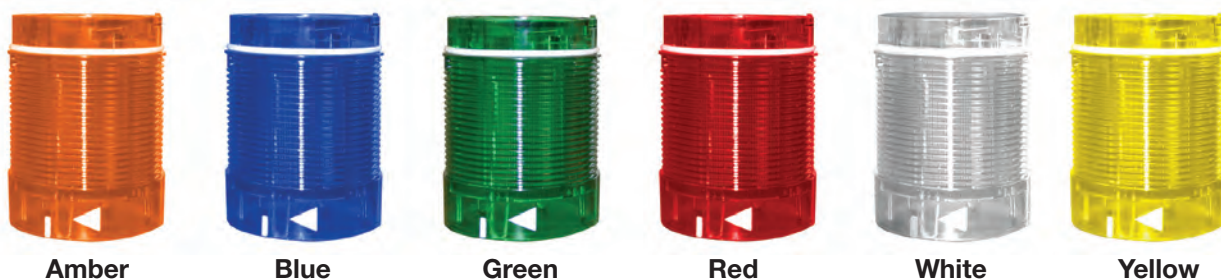


For example:

Cat. No. **TL50L A 1 X**



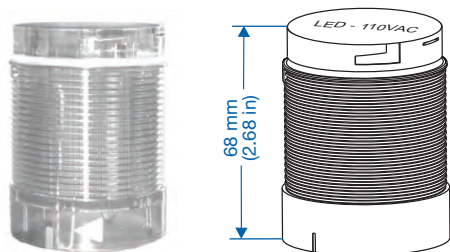
**IV - Voltage**  
**III - Luminous Mode**  
**II - Color**  
**I - Series**



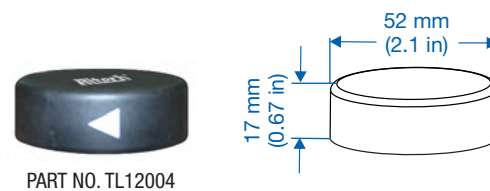
## Lens with Built-In Buzzer, 80db

Voltage	Mode	Amber	Blue	Green	Red	Yellow	White
<b>12V AC/DC</b>	Continuous Buzzer	TL50LAZ1T	TL50LBZ1T	TL50LGZ1T	TL50LRZ1T	TL50LYZ1T	TL50LWZ1T
	Intermittent Buzzer	TL50LAZ2T	TL50LBZ2T	TL50LGZ2T	TL50LRZ2T	TL50LYZ2T	TL50LWZ2T
<b>24V AC/DC</b>	Continuous Buzzer	TL50LAZ1U	TL50LBZ1U	TL50LGZ1U	TL50LRZ1U	TL50LYZ1U	TL50LWZ1U
	Intermittent Buzzer	TL50LAZ2U	TL50LBZ2U	TL50LGZ2U	TL50LRZ2U	TL50LYZ2U	TL50LWZ2U
<b>110V AC</b>	Continuous Buzzer	TL50LAZ1W	TL50LBZ1W	TL50LGZ1W	TL50LRZ1W	TL50LYZ1W	TL50LWZ1W
	Intermittent Buzzer	TL50LAZ2W	TL50LBZ2W	TL50LGZ2W	TL50LRZ2W	TL50LYZ2W	TL50LWZ2W
<b>240V AC</b>	Continuous Buzzer	TL50LAZ1X	TL50LBZ1X	TL50LGZ1X	TL50LRZ1X	TL50LYZ1X	TL50LWZ1X
	Intermittent Buzzer	TL50LAZ2X	TL50LBZ2X	TL50LGZ2X	TL50LRZ2X	TL50LYZ2X	TL50LWZ2X

### LENS

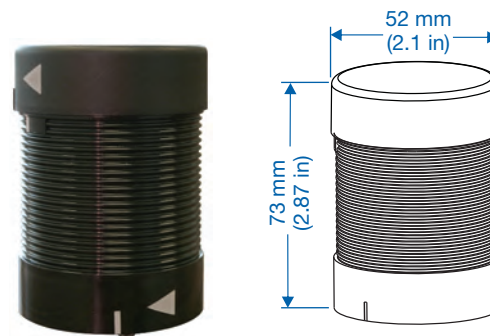


### CAP



## Sound Module\*, 80db, black

Voltage	Continuous Sound	Intermittent Sound
<b>12V AC/DC</b>	TL50Z1T	TL50Z2T
<b>24V AC/DC</b>	TL50Z1U	TL50Z2U
<b>110V AC</b>	TL50Z1W	TL50Z2W
<b>240V AC</b>	TL50Z1X	TL50Z2X



\* CAP INCLUDED WITH SOUND MODULE AND IS NOT REMOVABLE.

# BASES

(Accessories Included)



**Short Base**

TL5001

Length 60 mm with upper cap  
(cap included)



**Tall Base**

TL5002

Length 110 mm with upper cap  
(cap included)



**Flush Mount Base**

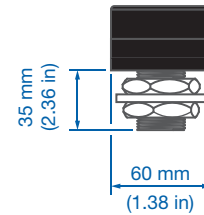
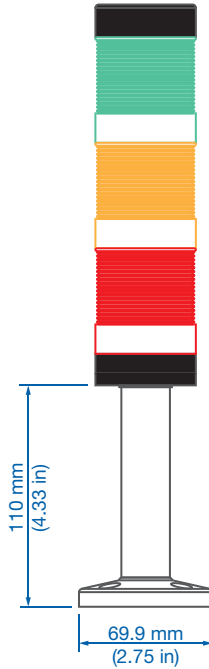
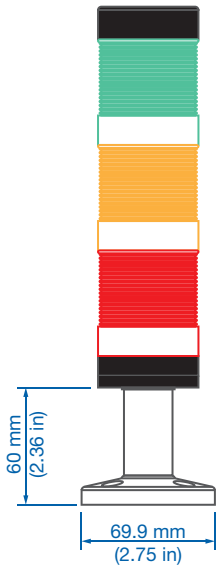
TL80101

24 mm thread

**Flush Mount Base**

TL5019

18 mm thread



# ACCESSORIES (included with each base)



**Cap**

TL12004



**Terminal Holder**

TL122002



**Terminal Holder Cover**

TL122003



**BASES**



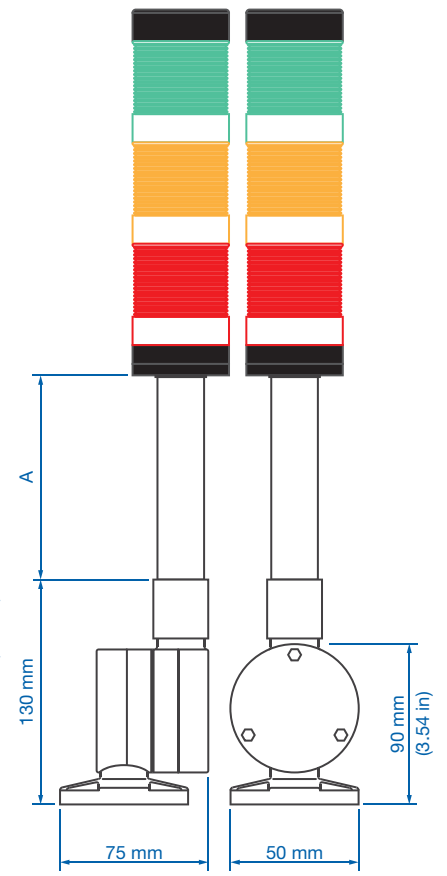
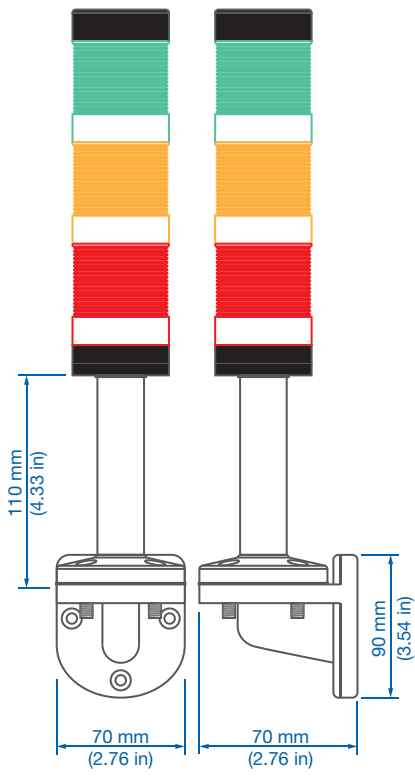
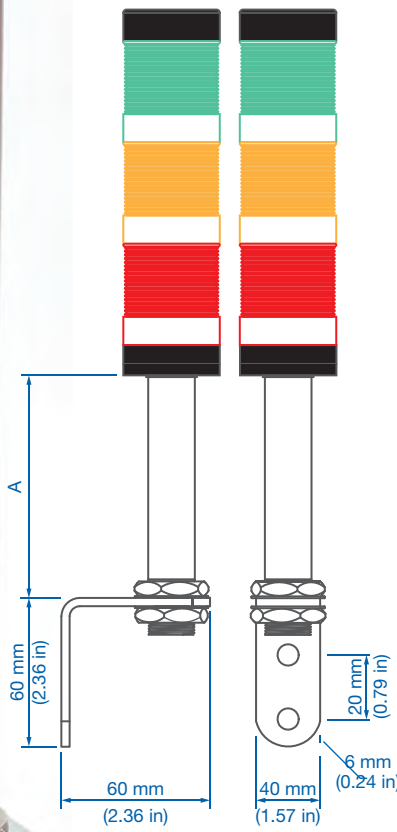
- Aluminum Base**
- TL70006 - 200 mm
  - TL70010 - 400 mm
  - TL70014 - 600 mm
  - TL70018 - 800 mm
  - TL70022 - 1000 mm



- Wall Mount  
Base Adapter**
- TL122012A  
(base not included)



- Adjustable Base**
- TL60003 - 60 mm
  - TL60004 - 100 mm
  - TL60006 - 200 mm
  - TL60010 - 400 mm



# Tower Lights Selection

	DESCRIPTION	Code
Tower Light		<b>TW</b>
Base	Special Base	0
	Small Base (SB)	1
	Big Base (BB)	2
Voltage	12V AC/DC	T
	24V AC/DC	U
	110V AC/DC	W
	240V AC/DC	X
Unit color	Red	R
	Green	G
	Amber	A
	Blue	B
	White	W
	Yellow	Y
Luminous mode	Continuous	1
	Blinking	2
	Revolving	3
Buzzer / Light Combination	Continuous Light + Continuous Buzzer	4
	Flashing Light + Intermittent Buzzer	5
	Buzzer*	Z1 Z2

**TW 1 X R 1 G 1 A 2 \*B 1**

For example:  
**Cat. No. TW1XR1G1A2B1**

Description:  
Tower Light with small base  
240 VAC with Red, Green continuous,  
Amber blinking & Blue continuous  
illumination

## Standard Available Combinations

### Tower Light Without Buzzer

Type	Description	Part No.
Single Stack	Tower light with small base 120V AC with red continuous illumination	TW1WR1
Single Stack	Tower light with small base 120V AC with red blinking illumination	TW1WR2
Two Stack	Tower light with small base 120V AC with red continuous & green continuous illumination	TW1WR1G1
Two Stack	Tower light with small base 24V AC/DC with red continuous & green continuous illumination	TW1UR2G2
Three Stack	Tower light with small base 120V AC with red continuous, green continuous & blue continuous illumination	TW1WR1G1B1
Three Stack	Tower light with small base 240V AC with green continuous, blue continuous and red blinking illumination	TW1XG1B1R2
Four Stack	Tower light with small base 120V AC with red continuous, green continuous, blue continuous & amber continuous illumination	TW1WR1G1B1A1

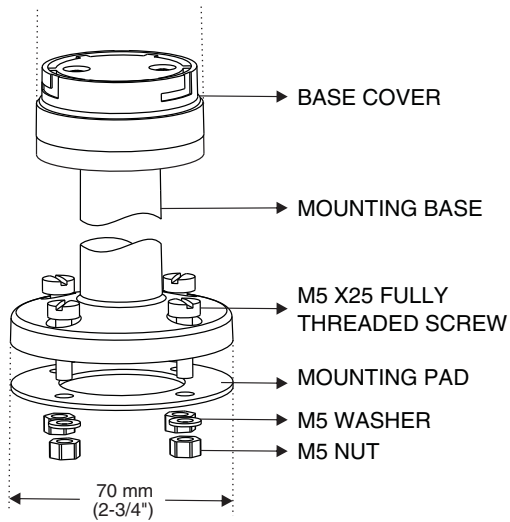
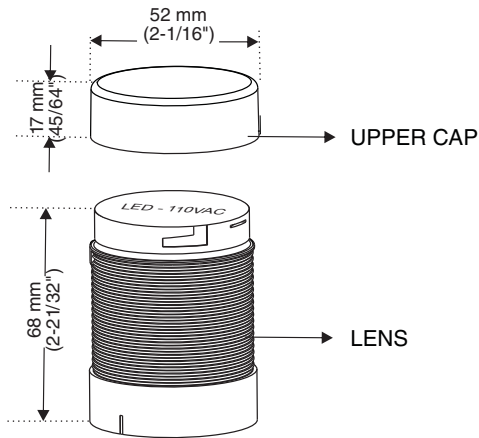
### Tower Light With Buzzer

Type	Description	Part No.
Single Stack	Tower light with small base 120V AC with buzzer continuous	TW1WZ1
Two Stack	Tower light with small base 120V AC with red continuous illumination & buzzer continuous	TW1WR1Z1
Two Stack	Tower light with small base 24V AC/DC with red blinking illumination & buzzer continuous	TW1UR2Z1
Three Stack	Tower light with small base 120V AC/DC with red continuous, green continuous illumination & buzzer continuous	TW1WR1G1Z1
Three Stack	Tower light with small base 24V AC/DC with red blinking, green continuous illumination & buzzer continuous	TW1UR2G1Z1
Four Stack	Tower light with small base 120V AC with red continuous, green continuous, blue continuous & buzzer continuous	TW1WR1G1B1Z1
Four Stack	Tower light with small base 24V AC/DC with green continuous, blue continuous, red blinking illumination & buzzer continuous	TW1UG1B1R2Z1

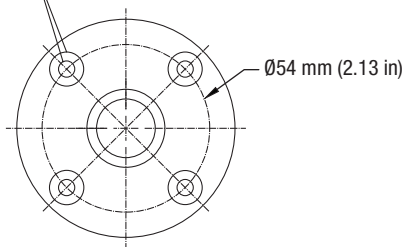
Note: Mentioned products are available as ex-stock, for any special requirement please refer to ordering information or contact Altech Corp.®.

# Installation Instructions

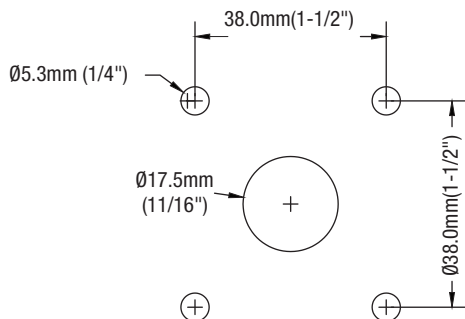
## Dimensions



COUNTER BORE Ø1.0/Ø5.2, 4Nos.  
(SCREW SIZE - M5)

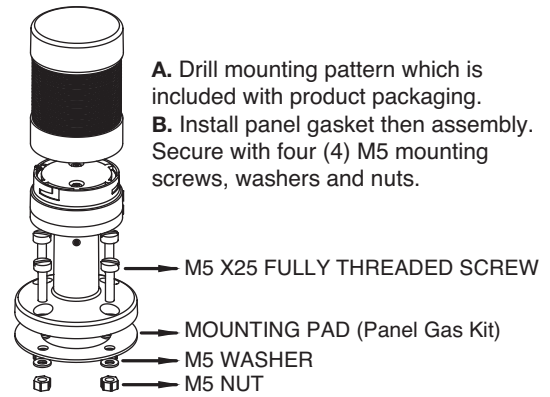


**BOTTOM VIEW**



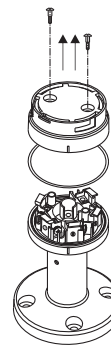
**PANEL CUTOUT MOUNTING DIMENSIONS**

## Assembly Mounting

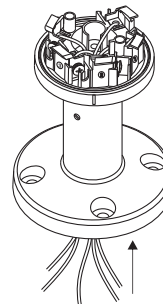


## Electrical Wiring

### STEP 1



### STEP 2

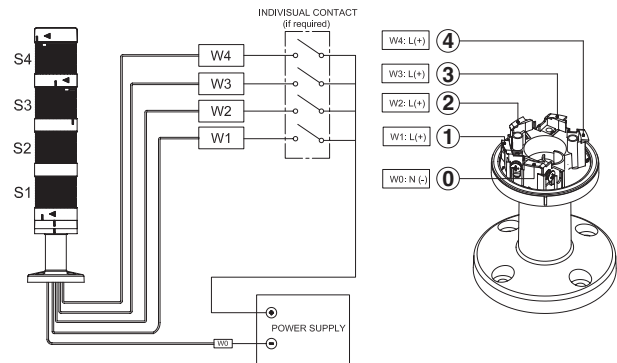


- B. Insert the wires from the bottom of the base through the center hole in the base.  
C. The terminals are numbered and correspond to the module position.

0	common or negative (AC / DC)
1	module position 1
2	module position 2
3	module position 3
4	module position 4

- D. Insert the wires into the required terminations for the tower light and tighten to 0.5Nm (5lb\* in).

## Wiring Diagram



For proper installation and operation of the Tower Light please follow the instructions on both sides of product sheet included with each tower light.



## Multi-Color LED Light

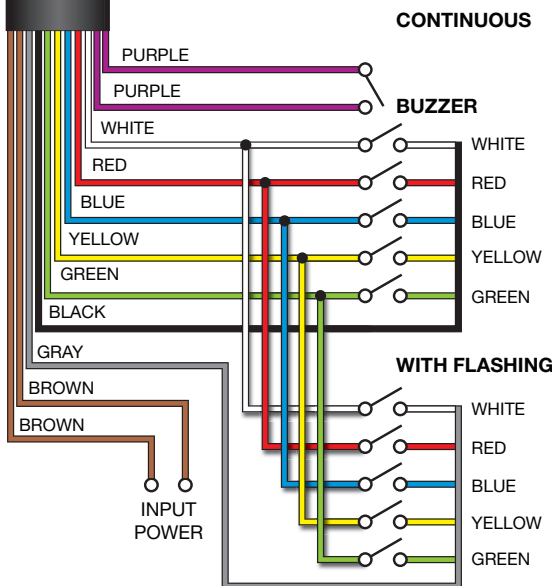
Multi-function LED signal tower  
5 colors, Ø55mm  
with Buzzer and Flasher



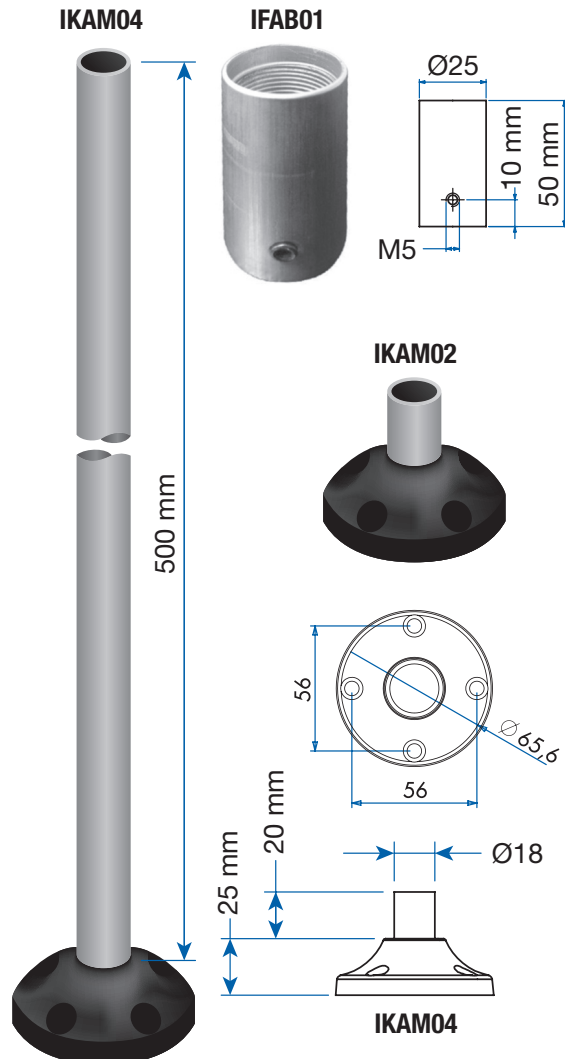
- **Single Unit** - 5 colors: White, Red, Blue, Yellow, Green.

*One unit can light up in 5 different colors.*

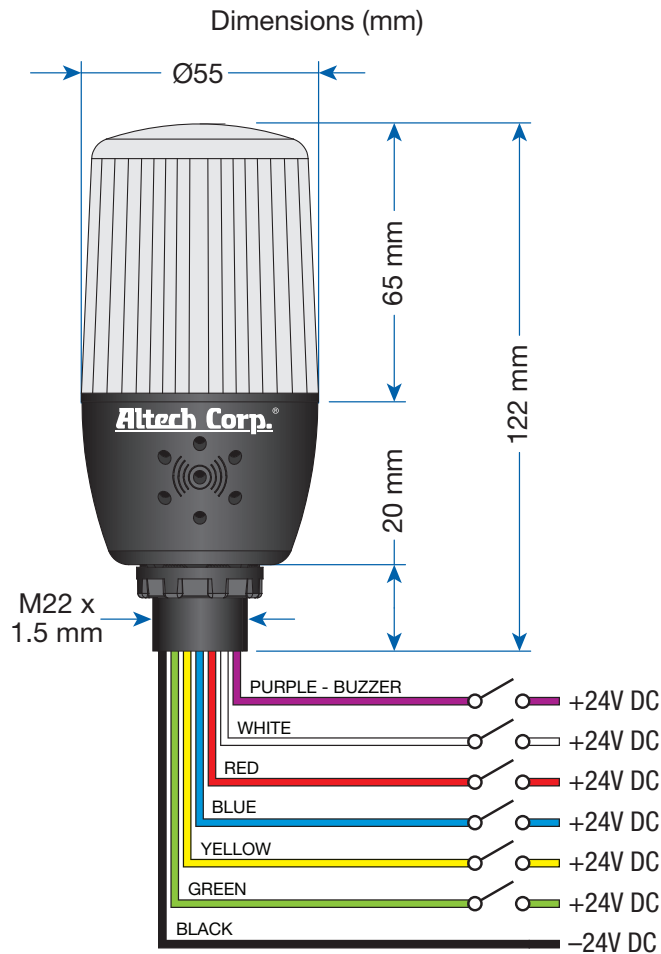
- Single color unit is also available (24V only)
- Flashing and normal LED mode available in same module.
- 90 dB Buzzer
- Multi-function LED signal tower.
- Continuous mode or flashing mode.
- M22x1.5 mm mounting option
- Direct mounting on the cabinet
- Pole mounted for better viability



## Pole Connection Accessories



# Multi-Colored LED Light for PLC Applications



## Technical Information

- Heat resistant, clear vision polycarbonate signal modules
- Easy to install
- Easy wiring, 1 meter long standard cable
- Operating Temperature: -5 / +40 °C
- Electrical Life: 100,000 hours
- Protection Degree: IP65

## Electrical Information

Operating Voltage (PLC version)	24V DC ± 20%
Insulation Voltage	300V
Sound Level	80-90 dB
Power Consumption (Red)	408 mW
Power Consumption (Yellow)	552 mW
Power Consumption (Blue)	360 mW
Power Consumption (Green)	360 mW
Power Consumption (White)	960 mW
Power Consumption (Buzzer)	480 mW

## Ordering Information

Part No.	Illumination	Features	Nominal Voltage	Std. Pk.
IF5M024ZM05-1	Multi-color LED	with Buzzer	24V AC/DC	1
IF5M110ZM05-1	Multi-color LED	with Buzzer	110V AC	1
IF5M220ZM05-1	Multi-color LED	with Buzzer	230V AC	1
IF5M024XM05-1	Multi-color LED	-	24V AC/DC	1
IF5M110XM05-1	Multi-color LED	-	110V AC	1
IF5M220XM05-1	Multi-color LED	-	230V AC	1
* IF5_024X05-1	Single Color LED		24V AC/DC	1
* IF5_024Z05-1	Single Color LED	with Buzzer	24V AC/DC	1
IF5P024XM05-1	Multi-color LED	for PLC Applications	24V DC	1
IF5P024ZM05-1	Multi-color LED	for PLC Applications with Buzzer	24V DC	1
IFAB01	-	Pipe Adapter	-	1
IKAM02	-	20mm Aluminum pole with Base (used with IFAB01)	-	1
IKAM04	-	500mm Aluminum pole with Base (used with IFAB01)	-	1

\*Add LED Color Codes: W- White R- Red B- Blue Y- Yellow G- Green

# LED Inspection Light

## Features

- Light weight & Maintenance free.
- 24 bright LED's offering a spectrum of illumination
- LED's with Long life of close to 100,000 continuous burning hours.
- IP 54 Protection
- Product made of robust, impact proof, corrosion resistance and fire retardant engineering plastic
- Low power consumption - less than 3 watts
- Designed with mounting hook
- LED inspection light is devoted to offering the light with the highest quality during elevator maintenance and panel inspections.

## Technical Specifications

<b>Rated Voltage</b>	240V AC, 110V AC, 24V AC/DC, 12V DC
<b>Limit of Operating Voltage</b>	-20% to + 10% of rated voltage
<b>LED</b>	5 mm through hole LED
<b>Colors</b>	White light / black handle
<b>Life</b>	0.1 million hours
<b>LED Arrangement</b>	Cluster
<b>Color Temperature</b>	6000°K - 7000°K
<b>Number of LEDs</b>	24
<b>Operating Temperature</b>	-25°C to 65°C
<b>Storage Temperature</b>	-30°C to 70°C
<b>Surge Test</b>	2 KV
<b>HV Test for 60 seconds</b>	2.5 KV
<b>EMI/EMC Protection</b>	2 KV
<b>IP Protection</b>	IP 54
<b>Power Consumption (240V)</b>	< 3W
<b>Cable Type</b>	3x 0.75 sq. mm
<b>Cable Length</b>	3 meter (10 ft.)*
<b>Mounting</b>	Molded plastic hook



\* Other lengths available. Contact Altech.

## Ordering Information

Part No.	Color	Voltage	Plug**	Std. Pk.
IL24D31W240A	Cool White LED	240 VAC	Not provided	1
IL24D31W110A	Cool White LED	110 VAC	Standard US plug	1
IL24D31W024C	Cool White LED	24 V AC/ DC	Not provided	1
IL24D31W012D	Cool White LED	12 V DC	Not provided	1
IL24E31W240A	Warm White LED	240 VAC	Not provided	1
IL24E31W110A	Warm White LED	110 VAC	Standard US plug	1
IL24E31W024C	Warm White LED	24 V AC/ DC	Not provided	1
IL24E31W012D	Warm White LED	12 V DC	Not provided	1

\*\* Plugs available. Contact Altech.

# Index

Part No.	Page	Part No.	Page	Part No.	Page
IF5_024X05-1	13	TL50LBZ1T	7	TL50LWZ1T	7
IF5_024Z05-1	13	TL50LBZ1U	7	TL50LWZ1U	7
IF5M024XM05-1	13	TL50LBZ1W	7	TL50LWZ1W	7
IF5M024ZM05-1	13	TL50LBZ1X	7	TL50LWZ1X	7
IF5M110XM05-1	13	TL50LBZ2T	7	TL50LWZ2T	7
IF5M110ZM05-1	13	TL50LBZ2U	7	TL50LWZ2U	7
IF5M220XM05-1	13	TL50LBZ2W	7	TL50LWZ2W	7
IF5M220ZM05-1	13	TL50LBZ2X	7	TL50LWZ2X	7
IF5P024XM05-1	13	TL50LG1T	6	TL50LY1T	6
IF5P024ZM05-1	13	TL50LG1U	6	TL50LY1U	6
IFAB01	13	TL50LG1W	6	TL50LY1W	6
IKAM04	13	TL50LG1X	6	TL50LY1X	6
IKAM06	13	TL50LG2T	6	TL50LY2T	6
IL24D31W012D	14	TL50LG2U	6	TL50LY2U	6
IL24D31W012D	14	TL50LG2W	6	TL50LY2W	6
IL24D31W024C	14	TL50LG2X	6	TL50LY2X	6
IL24D31W110A	14	TL50LG3T	6	TL50LY3T	6
IL24D31W240A	14	TL50LG3U	6	TL50LY3U	6
IL24E31W024C	14	TL50LG3W	6	TL50LY3W	6
IL24E31W110A	14	TL50LG3X	6	TL50LY3X	6
IL24E31W240A	14	TL50LGZ1T	7	TL50LYZ1T	7
TL12004	8	TL50LGZ1U	7	TL50LYZ1U	7
TL122002	8	TL50LGZ1W	7	TL50LYZ1W	7
TL122003	8	TL50LGZ1X	7	TL50LYZ1X	7
TL122012A	9	TL50LGZ2T	7	TL50LYZ2T	7
TL5001	8	TL50LGZ2U	7	TL50LYZ2U	7
TL5002	8	TL50LGZ2W	7	TL50LYZ2W	7
TL5019	8	TL50LGZ2X	7	TL50LYZ2X	7
TL50LA1T	6	TL50LR1T	6	TL50Z1T	7
TL50LA1U	6	TL50LR1U	6	TL50Z1U	7
TL50LA1W	6	TL50LR1W	6	TL50Z1W	7
TL50LA1X	6	TL50LR1X	6	TL50Z1X	7
TL50LA2T	6	TL50LR2T	6	TL50Z2T	7
TL50LA2U	6	TL50LR2U	6	TL50Z2U	7
TL50LA2W	6	TL50LR2W	6	TL50Z2W	7
TL50LA2X	6	TL50LR2X	6	TL50Z2X	7
TL50LA3T	6	TL50LR3T	6	TL60003	9
TL50LA3U	6	TL50LR3U	6	TL60004	9
TL50LA3W	6	TL50LR3W	6	TL60006	9
TL50LA3X	6	TL50LR3X	6	TL60010	9
TL50LAZ1T	7	TL50LRZ1T	7	TL70006	9
TL50LAZ1U	7	TL50LRZ1U	7	TL70010	9
TL50LAZ1W	7	TL50LRZ1W	7	TL70014	9
TL50LAZ1X	7	TL50LRZ1X	7	TL70018	9
TL50LAZ2T	7	TL50LRZ2T	7	TL70022	9
TL50LAZ2U	7	TL50LRZ2U	7	TL80101	8
TL50LAZ2W	7	TL50LRZ2W	7	TW1UG1B1R2Z1	10
TL50LAZ2X	7	TL50LRZ2X	7	TW1UR2G1Z1	10
TL50LB1T	6	TL50LW1T	6	TW1UR2G2	10
TL50LB1U	6	TL50LW1U	6	TW1UR2Z1	10
TL50LB1W	6	TL50LW1W	6	TW1WR1	10
TL50LB1X	6	TL50LW1X	6	TW1WR1G1	10
TL50LB2T	6	TL50LW2T	6	TW1WR1G1B1	10
TL50LB2U	6	TL50LW2U	6	TW1WR1G1B1A1	10
TL50LB2W	6	TL50LW2W	6	TW1WR1G1B1Z1	10
TL50LB2X	6	TL50LW2X	6	TW1WR1G1Z1	10
TL50LB3T	6	TL50LW3T	6	TW1WR1Z1	10
TL50LB3U	6	TL50LW3U	6	TW1WR2	10
TL50LB3W	6	TL50LW3W	6	TW1WZ1	10
TL50LB3X	6	TL50LW3X	6	TW1XG1B1R2	10