



Your "Safety"

Your "Life"

Your "Property"

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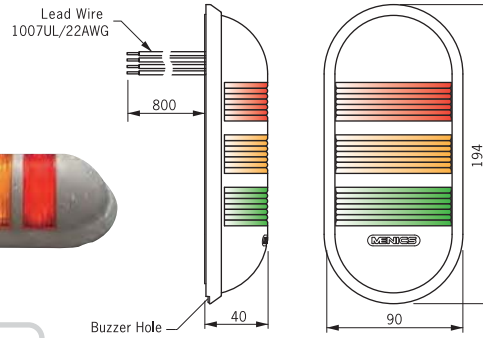
PWE Series Slim LED Wall Mount Signal Light



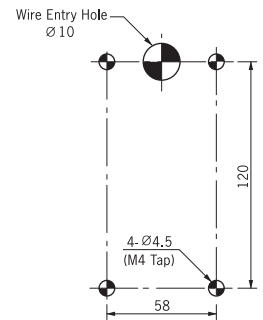
Ultra-Slim Signal Lights that offer seamless integration with equipment.



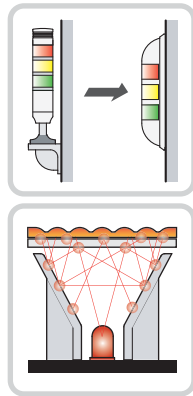
Dimensions < unit: mm >



Mounting Holes

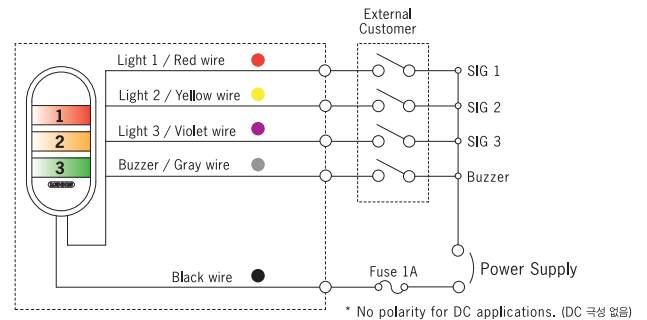


- Slim Profile Wall Mount
- Easy Mounted vertically and horizontally
- Equivalent brightness in every angle
- Steady and flashing lights
- Vibration and moisture resistant
- Chrome is also available as special order



Wiring Diagram

12VAC/DC , 24VAC/DC Steady Lights (with Buzzer)



Ordering Information

PWE C F - 302 - RYG
① ② ③ ④ ⑤

1. Body Color

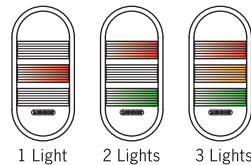
	White Ivory (Beige)
C	Chrome Painting

2. Light Style

	Steady
F	Steady + Flashing
B	Steady + Buzzer
Z	Steady + Flashing + Buzzer

3. Number of Stacks

1	1 Light
2	2 Lights
3	3 Lights



4. Power Supply

01	12VAC/DC
02	24VAC/DC
FF	90~240VAC (50/60Hz)

5. LED Colors (Top to bottom)

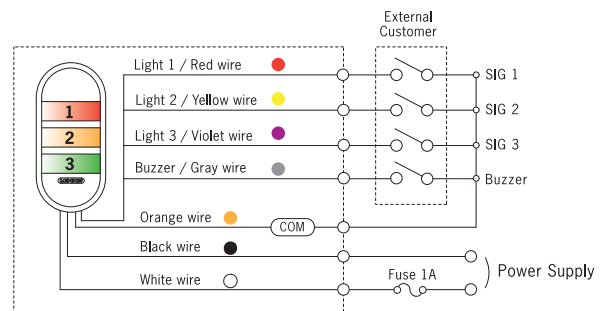
R	Red
RG	Red, Green
RYG	Red, Yellow, Green
RBG	Red, Blue, Green



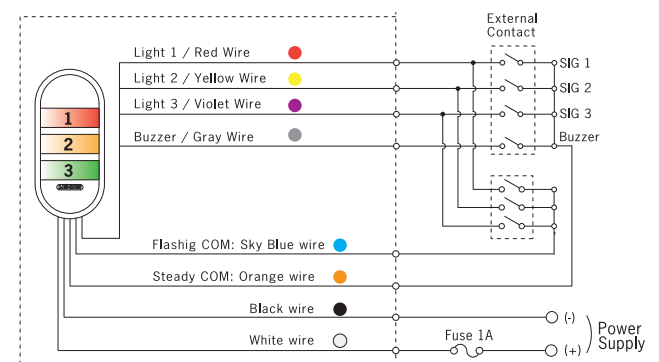
Specifications (Maximum current consumption when LED is lit.)

Power Supply	12V	24V	90~240VAC	Buzzer
Current Draw	Red LED	55 mA	70 mA	10~50 mA 24V, 90~240VAC 30mA
	Yellow LED	55 mA	75 mA	
	Green LED	60 mA	90 mA	
	Blue LED	60 mA	85 mA	
Flashing rate	80times/minute ±10%			12V
Sound Level	80±5dB (at 1m)			200mA
Approvals	UL , CE , RoHS			
Degree of Protection	IP-65 / IP-52 (with Buzzer)			

90 ~ 240VAC Steady Lights (with Buzzer)



12VAC/DC , 24VAC/DC , 90 ~ 240VAC Steady & Flashing Lights (with Buzzer)





MWE Series display natural and detail color of the LED Lighting. The diffusion and transmission ratio of the LED Lighting are very good regardless of angle.



Clear-white lens

Milky lens



Product Features

- 3 Colors (Red , Green , Blue) / 4 Colors (Red , Yellow, Green, Blue)
- Large LED Light-emitting lens - Length : 93mm
- 40mm thick, slim product offers seamless integration with the equipments
- Optional built-in Buzzer
- IP65 (Buzzer type : IP52)
- Letters , Symbols and Company logos can be carved and attached to the Front lens using sheet

Specifications

Functions	Steady , Flashing , Buzzer
Power Supply	12 ~ 24VAC/DC , 110 ~ 220VAC (AC. 50/60Hz)
LED Colors	3 Colors (Red, Green, Blue) / 4 Colors (Red, Yellow, Green, Blue)
Product Size	Width : 90mm, Thickness : 40mm, Length : 194mm
Flashing Rate	12VDC : 80±5times/minute 12VAC , 24VAC/DC : 85±5times/minute 90 ~ 240VAC : 85±5times/minute
Buzzer Sound Level	75±5dB (at 1m, Sound Level is maximum)
Front lens Colors	Standard - Clear white , Option - Ivory white
Mounting	Wall mounting only (Upright , Reverse , Sideways)
Wiring Method	Lead wire connection
Ambient Temperature	-20 to 40°C
Storage Temperature	-20 to 70°C
Ambient Humidity	45~85% RH
Vibration resistance	0.75mm at 10~55Hz
Recommended Wire Size	UL1007 , 22AWG
Approvals	CE , RoHS
Degree of Protection	IP65 (IP52-Buzzer type)
Weight (Buzzer type)	AC type - about 300g , DC type - about 293g

Note : Life of the LED varies according to operating conditions and environment.

Ordering Information

MWE - F - 4 00 - RYGB (H) * Options

① ② ③ ④ ⑤ ⑥

1. Model

MWE Cream-colored Body

2. Functions

F Steady + Flashing
B Steady + Flashing + Buzzer

3. LED Signals

3 3 Color signals
4 4 Color signals

4. Power Supply

00 12 ~ 24VAC/DC
FF 110 ~ 220VAC

5. LED Colors

RGB Red + Green + Blue
RYGB Red + Yellow + Green + Blue

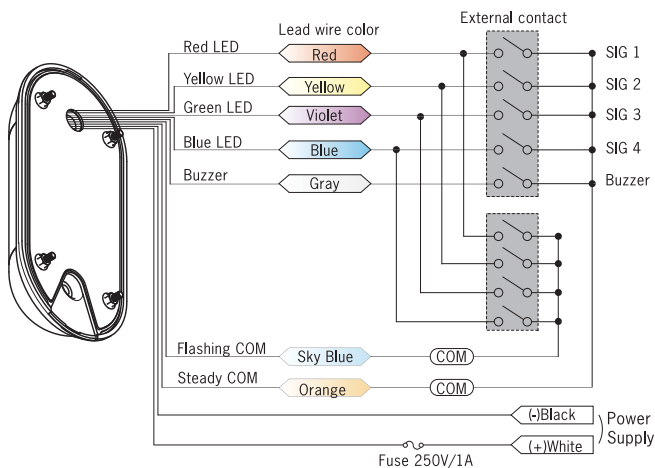
6. Color of Front lens (Option)

(H) Clear-white lens
(M) Milky lens

Current consumption (RMS value ±10%)

Operating condition of both LED lighting and Buzzer	12 - 24VAC	110 - 220VAC
	Max.0.60A	Max.0.07A

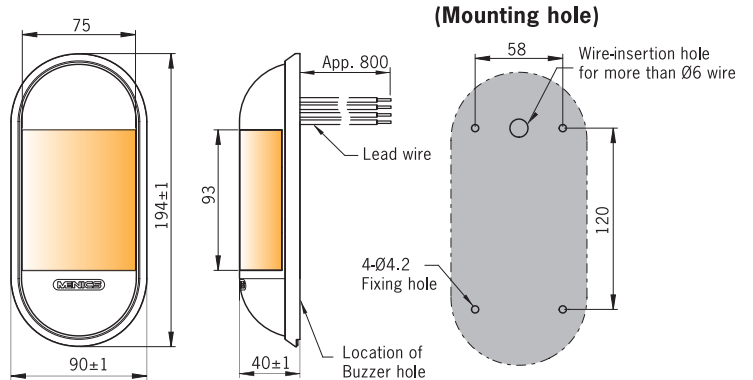
Wiring Diagram



⚠ Pay attention to the polarity if it is DC-type

* Above specifications are changeable at anytime without notice.

Dimensions (unit: mm)



Note : If you want to get IP52 grade, be sure to place the Buzzer side down. (For Buzzer type product)



MS56L Series D56mm Dome head LED Signal Light



Compact LED Warning Light featuring enhanced illumination. Ideal for use with conveyors and electrical control panels.



Ordering Information

MS56L - F 0 2 - R
 ① ② ③

1. Light Style

	Steady
F	Steady + Flashing
R	Rotating

2. Power Supply

01	12VAC/DC
02	24VAC/DC
10	110VAC
20	220VAC

3. Lens Colors

R	Red	B	Blue
Y	Yellow	C	Clear
G	Green		

Specifications

Operation/Function	Steady, Steady + Flashing, Rotating
Power Supply	12VAC/DC, 24VAC/DC, 110VAC, 220VAC (AC: 50/60Hz)
Lens Diameter	56mm
Flashing Function	Dip switch in the internal PCB board controls
Rotating Function	Volume in the internal PCB board controls (40~300rpm)
Lens Color	Red, Yellow, Green, Blue, Clear
Material	Lens - PC resin, Base - ABS resin
Vibration	0.75mm at 10~55Hz
Ambient Temperature	-15 to 40°C
Storage Temperature	-20 to 70°C
Ambient Humidity	45~85% RH
Degree of Protection	IP65 (front)
Approvals	RoHS
Wire Size	UL1007 / 22AWG
Weight	Approx.66g

Flashing Rate (per minute ±10%)

Rated Voltage	AC Power	DC Power
12V	110 times	60 times
24V	80 times	80 times
110V	80 times	
220V	80 times	

Current Consumption (±10%)

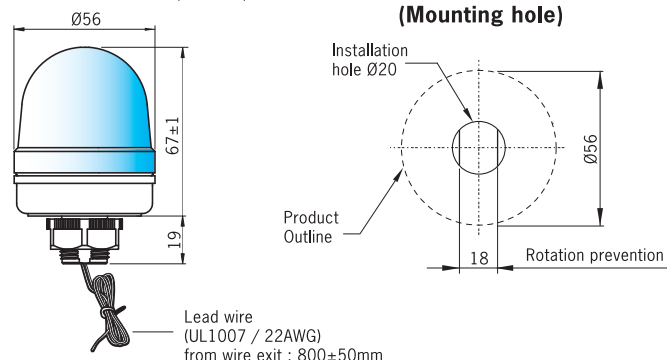
Rated Voltage	12VAC	24VAC	110VAC	220VAC
Steady	0.1A	0.12A	0.03A	
Rotating	0.8A	0.07A	0.03A	0.04A

Note : 12V, 24VDC Current Consumption : 0.06A

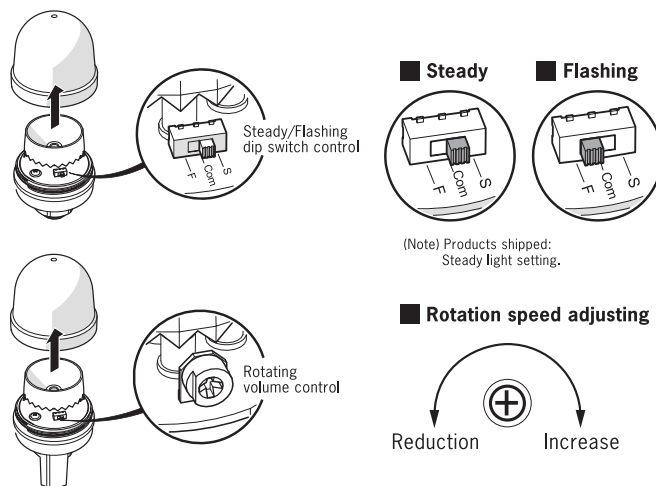
Product Features

- Steady + Flashing Light, Rotating Light
- Power Supply : 12/24VAC/DC, 110/220VAC
- M20 plastic Nut panel mounting
- Rotating speed is adjustable
- IP65 rated

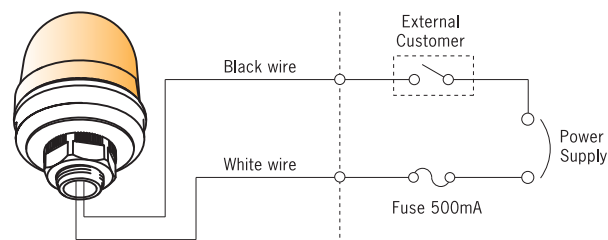
Dimensions (unit: mm)



Feature Setting



Wiring Diagram



Optional Parts

Wall mounting Bracket



MAM-DS11
Steel

See Page 45 - 47 for Mounting Options and Accessories.

MS66 Series D66mm Compact, Low-power LED Signal Light



Compact, Dome-head, Long life Signal Light with Red, Yellow, Green, Blue and White lens.



Ordering Information

MS66 **G** - **B** **00** - **R** **(V)** * Options

① ② ③ ④ ⑤

1. Mounting Options

M	Body direct mounting - Plastic M20 Screw
P	Aluminum Pole + Fixed plastic mount base
G	Fixed plastic mount base

2. Functions

F	Steady + Flashing
B	Steady + Flashing + Buzzer
R	Rotating
T	Rotating + Buzzer

3. Operating Voltages

00	12 ~ 24VAC/DC
FF	110 ~ 220VAC

4. Lens Colors

R	Red	B	Blue
Y	Yellow	C	Clear
G	Green		

5. Option

(V)	Consecutive Flashing 240±5times/minute
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Product Features

- Steady + Flashing , Rotating
- Rotating speed is adjustable
- Built-in high-powered Buzzer
- Various operating voltages
- 3 mounting options
- Lead wire connection



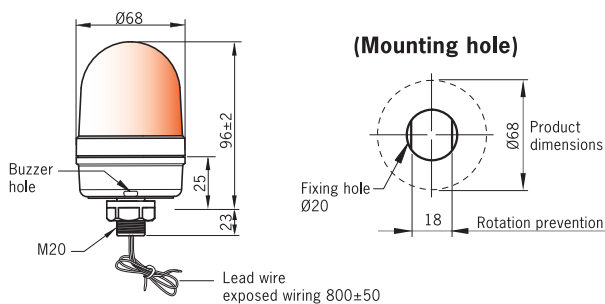
Specifications

Functions	Steady + Flashing + Buzzer , Rotating + Buzzer
Power Supply	12 ~ 24VAC/DC , 110 ~ 220VAC (AC. 50/60Hz)
Size	68mm diameter
Light Source	LED
Lens Colors	Red , Yellow , Green , Blue , Clear
Rotating Speed	Volume Control : 60~300rpm (Clockwise Rotation)
Rotating type Buzzer control	When the power is on, LED Rotation and Buzzer will be operated immediately
Buzzer Sound Level	80±5dB (Alternating Buzzer : pi-pi-pi)
Mounting	MS66M / MS66P type - Upward only MS66G type - Forward , Reverse , Moving direction (Buzzer type : Only indoor)
Wiring method	Lead wire connection
Ambient Temperature	-20 to 40°C
Storage Temperature	-20 to 70°C
Ambient Humidity	45~85% RH
Insulation Resistance	100MΩ min. at 500VDC
Vibration Resistance	0.75mm at 10~55Hz
Wire Size	UL1007 / 22AWG
Approvals	CE , RoHS
Degree of Protection	IP65 (IP52-Buzzer type)
Weight (AC + Buzzer type)	MS66M - App.168g , MS66G - App.180g , MS66P - App.233g

Note : Life of the LED varies according to operating conditions and environment.

Dimensions (unit: mm)

▼ MS66M type



Dimensions (MS66G/MS66P) , Wiring Diagram

Note : See page 26

Current consumption (RMS value at AC type ±10%)

R/Y/G/B/C	12 - 24VAC		110 - 220VAC	
	General	Buzzer	General	Buzzer
Steady / Flashing type	0.30A	0.32A	0.03A	0.04A
Rotating type	0.20A	0.22A	0.03A	

Note (Current consumption) : Steady / Flashing type , 12VDC : 0.08A (average)
24VDC : 0.06A (average)

Note (Current consumption) : Rotating type,
12VDC : 0.06A (average)
24VDC : 0.04A (average)

Flashing Rate

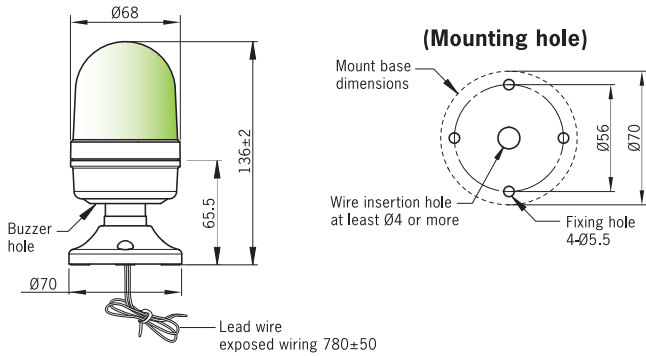
	General type	Continuous Flashing type
12 ~ 24VAC/DC 110 ~ 220VAC	80±5times/minute	240±5times/minute



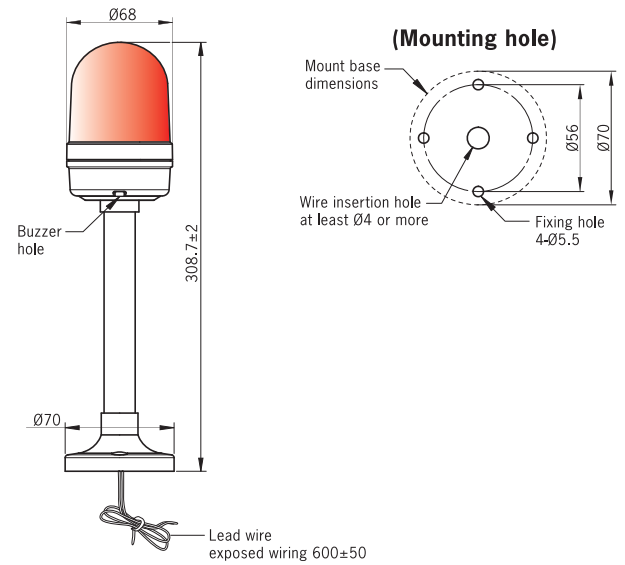
MS66 Series D66mm Compact, Low-power LED Signal Light

Dimensions (unit: mm)

▼ MS66G type



▼ MS66P type



Optional Parts

1. Wall mounting Bracket



MS66M only apply
MAM-DS11
Steel

2. Aluminum mount base



MS66P only apply
MAM-DS32
Aluminum

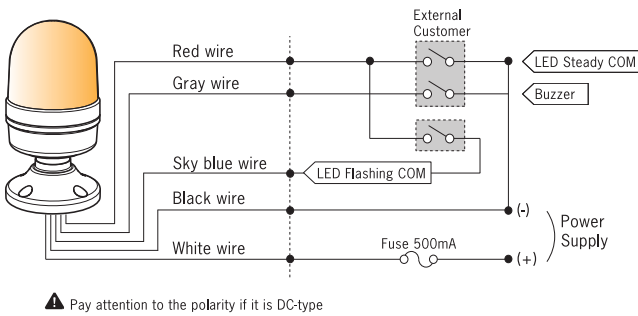
See Page 45 - 47
for Mounting Options and Accessories.

※ Note : MAM-DS32 type
In case of P type, there is no change in total length
if the Aluminum mount base replaces the Plastic mount base

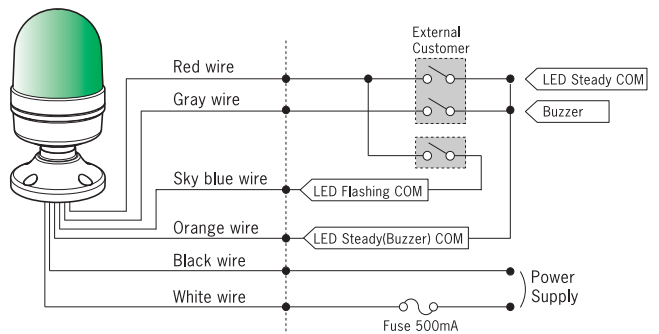
Wiring Diagram

▶ Steady + Flashing Light (with Buzzer)

12 ~ 24VAC/DC

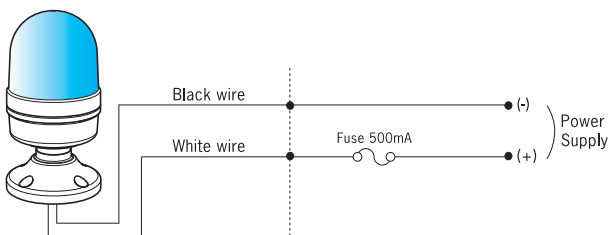


110 ~ 220VAC



▶ Rotating Light (with Buzzer)

12 ~ 24VAC/DC , 110 ~ 220VAC



※ Note : Buzzer type
When the power is on, LED Rotating or Buzzer will be operated immediately
(on/off switch built-in)

▲ Pay attention to the polarity if it is DC-type

MW86T Series D86mm Wall mounting Signal Light (Multi Sound)



MW86T Series combines LED Signal Light and Sound.

It can be easily fixed on the wall without extra equipments.

- Steady, Flashing, Rotating functions from high-bright LED
- 2 Types of Flashing function - Regular flashing, Urgency signal flashing
- Built-in Button for sound volume adjusting and rotating speed adjusting
- Built-in Speaker for 3 sounds
- Removable Horn is offered



Ordering Information

MW86T - R 00 - Y - M3 (B) ※ Options

① ② ③ ④ ⑤ ⑥

1. Series

MW86T	LED unicolor multi-functional product
-------	---------------------------------------

2. Functions

R	Steady + Flashing + Rotating
---	------------------------------

3. Power Supply

00	12 ~ 24VDC
FF	90 ~ 240VAC

4. Lens Colors

R	Red	B	Blue
Y	Yellow	C	Clear
G	Green		

5. Select Sound type

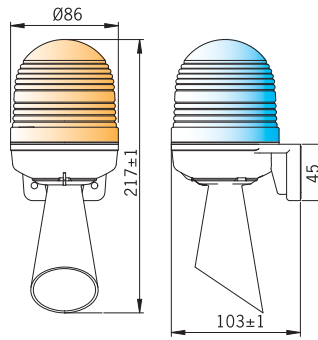
M3	3 Melody sounds
S3	3 Siren sounds
▶ 3 Melody	For Elise Home, Sweet Home Cuckoo Walts
▶ 3 Siren	Fire siren Police siren Ambulance siren

6. Body Color (Option)

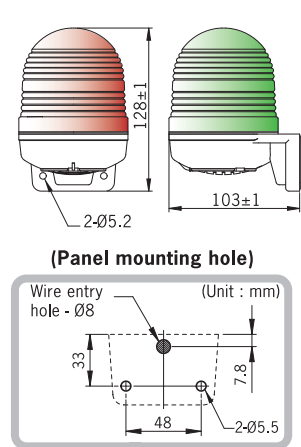
	Ivory
(B)	Black

Dimensions (unit: mm)

▼ Horn type



▼ General type



Specifications

LED Functions	Steady + Flashing + Rotating	
Power Supply	12 ~ 24VDC, 90 ~ 240VAC (AC: 50/60Hz)	
Wiring	Lead wire	
Rotating Rate	Internal PCB board dip switch / volume control mode min60 ~ max300rpm ±10% (Clockwise rotation)	
Flashing Rate	F1 : 80 flashing per minute (±5) F3 : 240 flashing per minute (±10)	
Material	Body - ABS, Lesn Cap - PC	
Mounting	Wall mounting (upright only)	
Ambient Temperature	-20 to 40°C	Storage Temperature -20 to 70°C
Ambient Humidity	45~85% RH	
Inner Vibration	0.75mm at 10~55Hz	
Wire specifications	1007UL / 22AWG, Sound wire - 2464UL / 22AWG	
Approvals	RoHS	

	General Type	Horn Type
Sound volume (1m)	55 ~ 85±5dB	55 ~ 90±5dB
Degree of Protection	IP43	IP54
Weight (AC type basis)	App. 279g	App. 306g

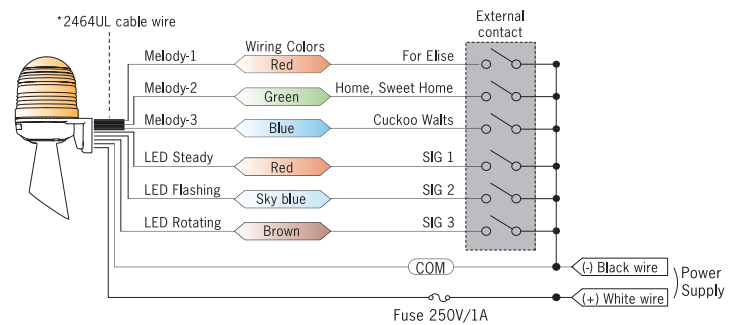
Note : Life of the LED varies according to operating conditions and environment.

Current consumption (Combined current consumption of both LED light and sound)

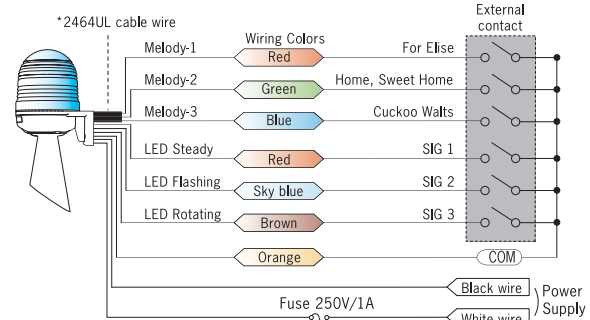
	12 ~ 24VDC	90 ~ 240VAC
Red, Yellow, Green, Blue and White LED	Max. 0.32A±10%	Max. 0.10A±10%
Only sound operation	Max. 0.20A±10%	Max. 0.06A±10%

Wiring Diagram

▶ Melody type / 12 ~ 24VDC



▶ Melody type / 90 ~ 240VAC



Wiring Diagram (Siren type), Sound Setting table

Note: See page 29

MW86M Series D86mm Wall Mounting LED 3 Colors in 1 Signal Light (Multi Sound)



MW86M Series combines LED Signal Light and Sound.
It can be easily fixed on the wall without extra equipments.

- 3 Colors in 1 Signal Light
- Steady, Flashing functions from high-bright LED
- 2 Types of Flashing functions
 - Regular flashing, Urgency signal flashing
- Built-in Speaker for 3 sounds
- Removable Horn is offered



Ordering Information

MW86M - F 00 - RYG - M3 (B)

① ② ③ ④ ⑤ ⑥

1. Series

MW86M | 3 Colors in 1 Signal Light

2. Functions

F | Steady + Flashing

3. Power Supply

00 | 12 ~ 24VDC
FF | 90 ~ 240VAC

4. Lens Colors

RYG | Red, Yellow, Green
RGB | Red, Green, Blue

5. Select Sound type

M3 | 3 Melody sounds
S3 | 3 Siren sounds

▶ **3 Melody** | For Elise, Home, Sweet Home, Cuckoo Walts

▶ **3 Siren** | Fire siren, Police siren, Ambulance siren

6. Body Color (Option)

| Ivory
(B) | Black

Specifications

LED Functions	Steady + Flashing		
Power Supply	12 ~ 24VDC, 90 ~ 240VAC (AC: 50/60Hz)		
Light Source	LED		
Wiring	Lead wire		
Flashing Rate (Internal PCB board dip switch)	F1 : 80 flashing per minute (±5) F3 : 240 flashing per minute (±10)		
Material	Body - ABS, LensCap - PC (Lens Color : Clear)		
Mounting	Wall mounting (upright only)		
Ambient Temperature	-20 to 40°C	Storage Temperature	-20 to 70°C
Ambient Humidity	45~85% RH		
Inner Vibration	0.75mm at 10~55Hz		
Wire specifications	1007UL / 22AWG, Sound wire - 2464UL / 22AWG		
Approvals	RoHS		

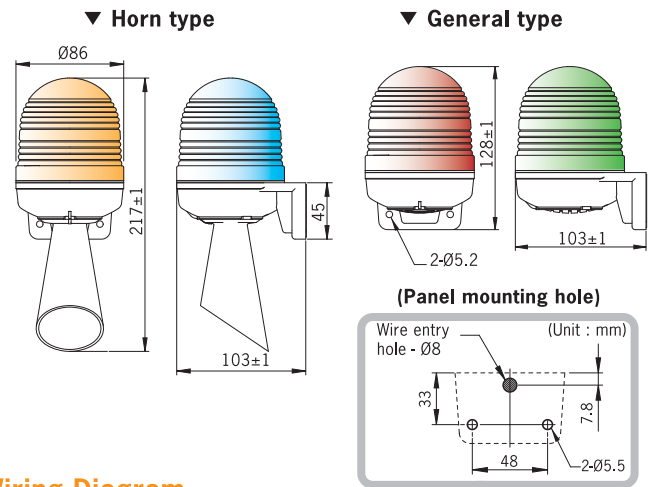
	General Type	Horn Type
Sound volume (1m)	55 ~ 85±5dB	55 ~ 90±5dB
Degree of Protection	IP43	IP54
Weight (AC type basis)	App. 286g	App. 313g

Note : Life of the LED varies according to operating conditions and environment.

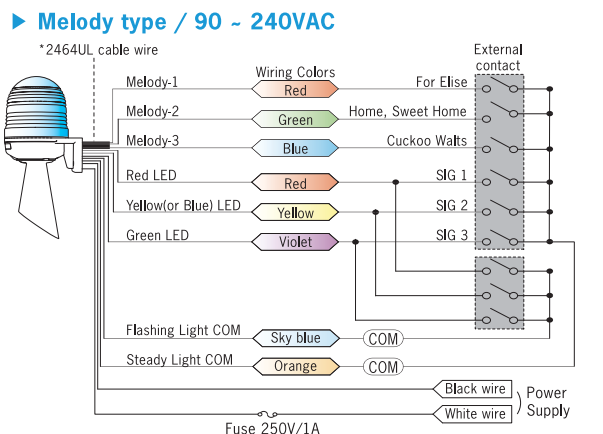
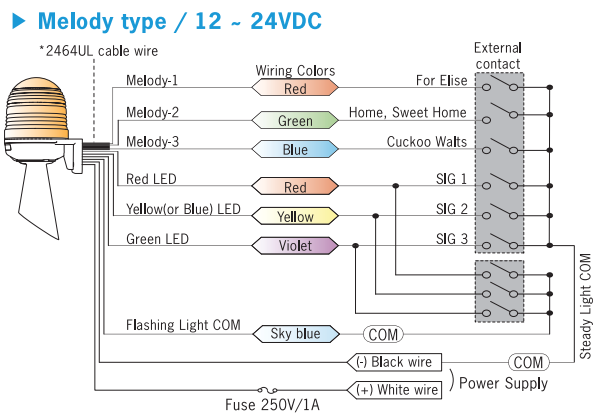
Current consumption (Combined current consumption of both LED light and sound)

	12 - 24VDC	90 - 240VAC
Red, Yellow, Green and Blue LED	Max. 0.40A±10%	Max. 0.12A±10%
Only sound operation	Max. 0.20A±10%	Max. 0.06A±10%

Dimensions (unit: mm)



Wiring Diagram



Wiring Diagram (Siren type), Sound Setting table
Note: See page 29

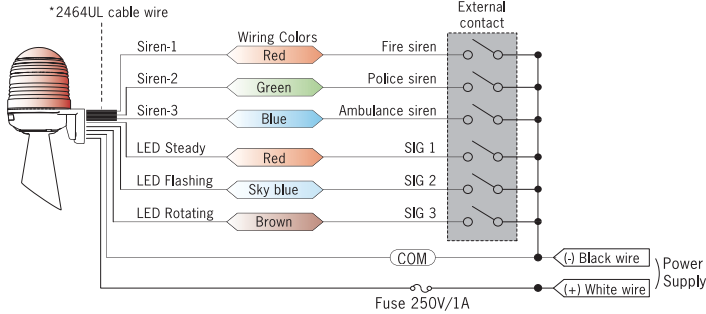


MW86T, MW86M Series Wiring Diagram

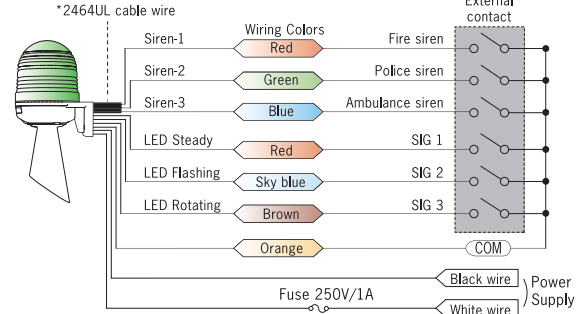
Wiring Diagram

MW86T Series

► Siren type / 12 ~ 24VDC

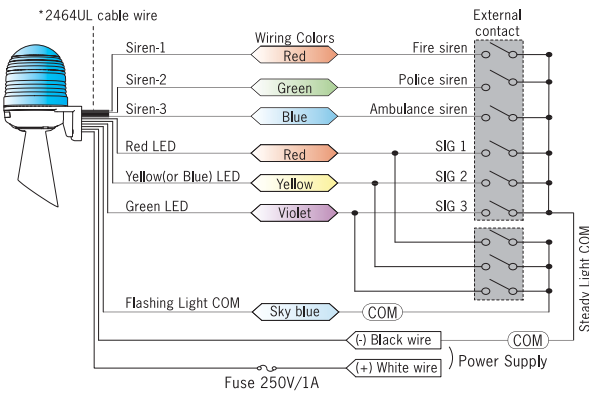


► Siren type / 90 ~ 240VAC

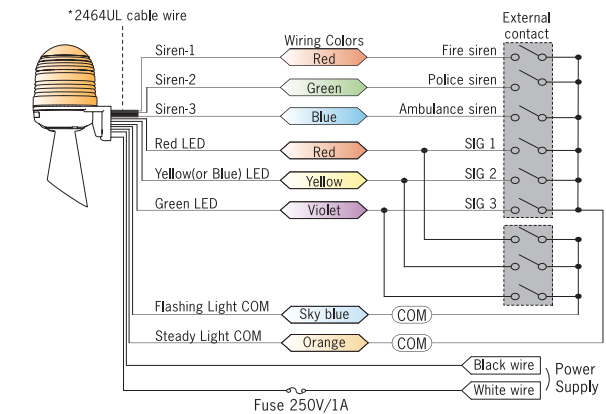


MW86M Series

► Siren type / 12 ~ 24VDC



► Siren type / 90 ~ 240VAC



Sound setting and operation (MW86T, MW86M, MW86N Series)

► Melody sound

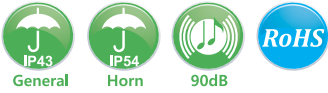
Wiring Colors	Red wire	Green wire	Blue wire	Melody reaction	Notes
Normal entry conditions	1	1	1	Notes	1. If you don't select any signal (Under this condition, 111 is displayed), or select three signals at the same time (Under this condition, 000 is displayed), then the melody doesn't play.
	0	1	1	For Elise	
	1	0	1	Home, Sweet Home	
	1	1	0	Cuckoo Walts	
Priority entry conditions	1	0	0	For Elise (priority-1)	2. Priority order of melody-playback (1) Red wire - For Elise (2) Green wire - Home, Sweet Home (3) Blue wire - Cuckoo Walts
	0	1	0	Home, Sweet Home (priority-2)	
	0	0	1	Cuckoo Walts (priority-3)	

► Siren sound

Wiring Colors	Red wire	Green wire	Blue wire	Melody reaction	Notes
Normal entry conditions	1	1	1	Notes	It's impossible to input two or three signals at the same time ※ If you connect several wires at the same time, sounds will be played sequentially according to the priority order. Fire siren → Police siren → Ambulance siren
	0	1	1	Fire siren	
	1	0	1	Police siren	
	1	1	0	Ambulance siren	



MW86N Series - 3 Types of built-in Sounds

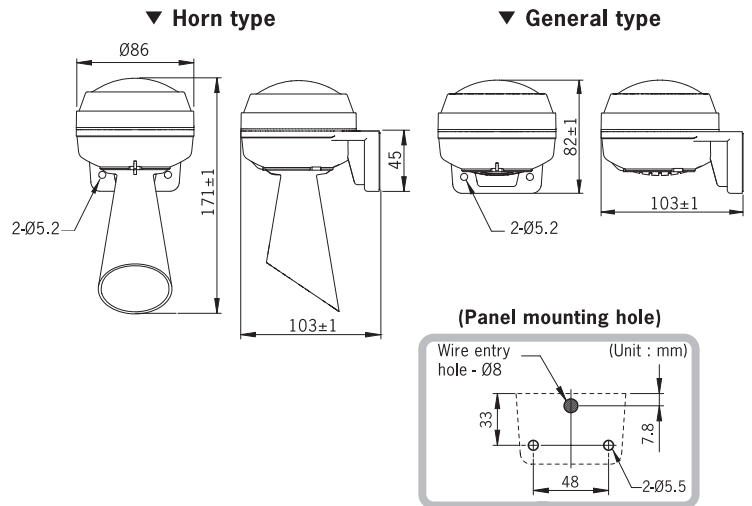


MW86N Series is electronic Horn which has beautiful appearance and outputs high quality sound. It can be easily fixed on the wall without extra equipments even in the narrow space.



- Built-in Button for sound volume adjusting
- Built-in Speaker for 3 Sounds
- Removable Horn is offered

Dimensions (unit: mm)



Ordering Information

MW86N - FF - M3 (B) * Options

① ② ③ ④

1. Series

MW86N	Electronic siren
-------	------------------

3. Select Sound type

M3	3 Melody sounds
S3	3 Siren sounds

▶ 3 Melody For Elise
Home, Sweet Home
Cuckoo Walts

▶ 3 Siren Fire siren
Police siren
Ambulance siren

2. Power Supply

00	12 ~ 24VAC/DC
FF	90 ~ 240VAC

4. Body Color (Option)

	Ivory
(B)	Black

Specifications

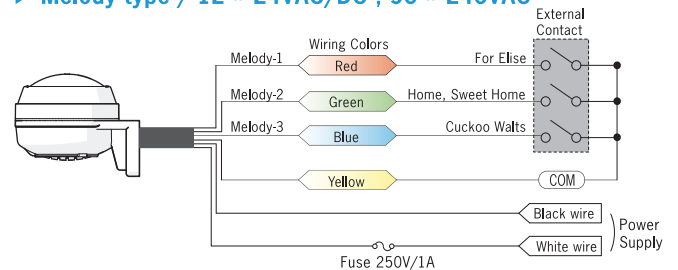
Power Supply	12 ~ 24VAC/DC , 90 ~ 240VAC (AC: 50/60Hz)	
Wiring	Lead wire	
Material	Body , Cap - ABS resin	
Mounting	Wall mounting (upright only)	
Ambient Temperature	-20 to 40°C	
Storage Temperature	-20 to 70°C	
Ambient Humidity	45~85% RH	
Inner Vibration	0.75mm at 10~55Hz	
Wire specifications	2464UL / 22AWG	
Approvals	RoHS	
	General Type	Horn Type
Sound volume (1m)	55 ~ 85±5dB	55 ~ 90±5dB
Degree of Protection	IP43	IP54
Weight (AC type basis)	App. 198g	App. 224g

Current consumption

12 ~ 24VAC	90 ~ 240VAC
Max. 0.52A ±10%	Max. 0.06A ±10%

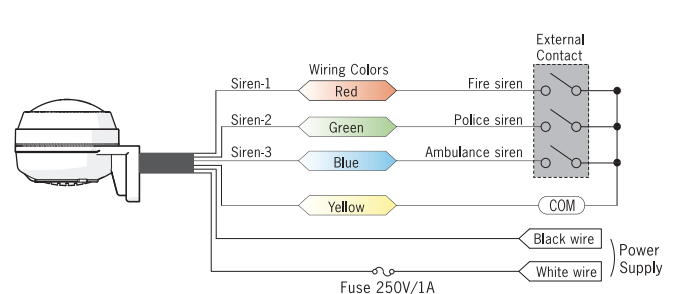
Wiring Diagram

▶ Melody type / 12 ~ 24VAC/DC , 90 ~ 240VAC



* No polarity for DC applications. (DC 극성 없음)

▶ Siren type / 12 ~ 24VAC/DC , 90 ~ 240VAC



* No polarity for DC applications. (DC 극성 없음)

Sound Setting table

Note: See page 29



MS86L Series D86mm LED Steady / Flashing Signal Lights



MS86L series LED Dome indicator light .The dome shape provides increased visibility and the LEDs provide years of maintenance-free operation.



◀ Dome head type

- Ultra bright LED
- Wide light distribution with prism-cut dome-shaped lens
- Outstanding visibility at distance
- Selectable Steady or Flashing Modes for LED lights
- Red, Yellow, Green, Blue and Clear lens available
- IP65 rated

▼ Low head type



Ordering Information

MS86L - F 02 - R - F
 ① ② ③ ④

1. Light Style

F	LED Steady + Flashing
B	LED Steady + Flashing + Buzzer

2. Power Supply

02	24VAC/DC
FF	90 ~ 240VAC

3. Lens Colors

R	Red
Y	Yellow
G	Green
B	Blue
C	Clear

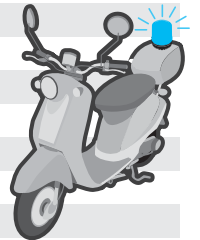
4. Lens cap Style

	Dome type lens cap
F	Low head type lens cap



Specifications

Operation/Function	Steady , Flashing , Buzzer
Power Supply	24VAC/DC , 90 ~ 240VAC (50/60 Hz)
Buzzer Sound Level	Approx. 80±5dB (at 1M)
Lens Colors	Red, Yellow, Green, Blue & Clear
Lens Diameter	86 mm
Flash Rate	80 times/minute ±10%
Vibration	0.75mm at 10~55Hz
Ambient Temperature	-20 to 40°C
Storage Temperature	-20 to 70°C
Ambient Humidity	45~85% RH
Degree of Protection	IP65
Approvals	UL , RoHS
Recommended Wire Size	UL2464 , 22AWGx2C
Weight	Approx. 150g

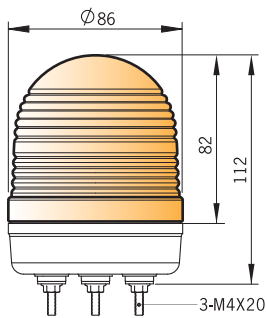


Current consumption (Maximum current consumption when LED is lit.)

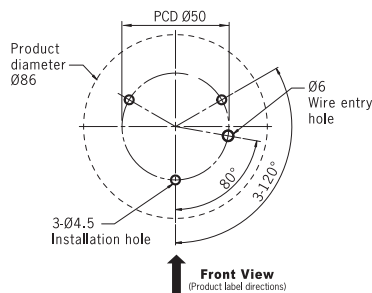
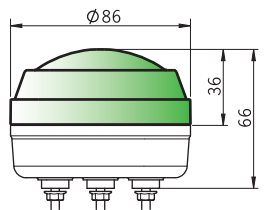
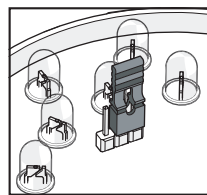
Power Spec	24V	90 ~ 240VAC	Buzzer
Red LED	330mA	30~50mA	30mA
Yellow LED			
Green LED	460mA		
Blue LED			
White LED			

※ Outside dimension and performance of the product are subject to change without notice to improve the product.

Dimensions (unit: mm)

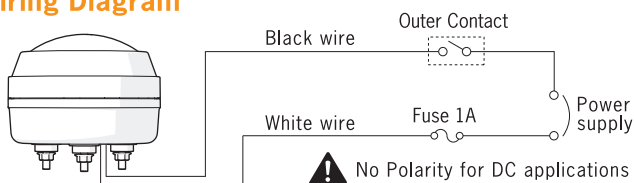


Lights or Flashing Conversion dip Switch



▲ Stud Mount hole layout

Wiring Diagram



Optional Orders

1. Mounting Pole



SAM-T31



SAM-D31



SAM-M31



2. Wall Mount Brackets



MAP-DS30
ABS resin



MAM-DS26
Steel

See Page 45 - 47
for Mounting Options and Accessories.

MS86W Series

Low-head Multi-function indicator Light D86mm LED Steady/Flashing/Rotating Lights



The MS86W series is an LED beacon featuring three selectable light patterns of Flashing or rotation for diversified uses. The clear lens makes it easier to see the light, even in bright ambient conditions.



Product Features

- Flashing, Rotation, Continuous
- Enhanced Illumination: Use of long-life, super bright LED.
- Energy Efficient: Low power consumption.
- Main Body: heat resistant ABS resin.
- Lens Cap: impact and heat resistant polycarbonate resin.
- Installation: Indoor & Outdoors
- Available Colors: Red, Yellow, Green, Blue, Clear

Ordering Information

MS86W - R 00 - R
 ① ② ③

1. Light Style

R	LED Steady + Flashing + Rotating
B	LED Steady + Flashing + Rotating + Buzzer <Buzzer function - 24V Only>

2. Power Supply

00	12 ~ 24VAC/DC
-----------	---------------

3. Lens Colors

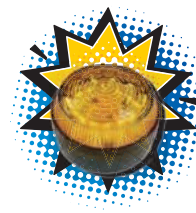
R	Red	B	Blue
Y	Yellow	C	Clear
G	Green		



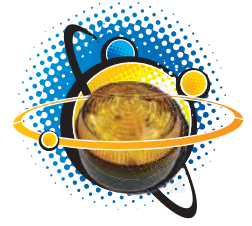
Max 80dB at 1m
24V Only



■ Steady light



■ Flashing light



■ Rotating light

Functional Specifications

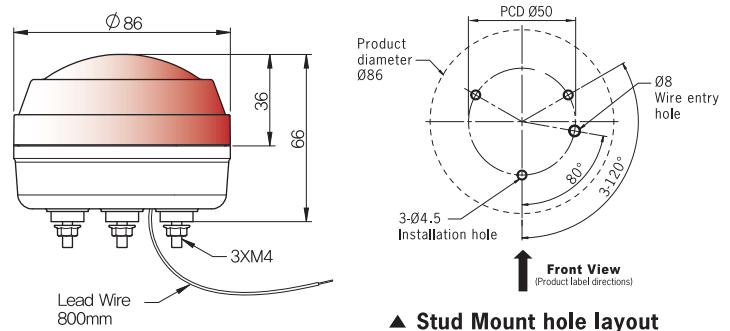
LED Color Code		R (red), Y (yellow), G (green), B (blue), C (Clear)					
Current	Illumination Color	Red	Yellow	Green	Blue	Clear	Buzzer
	12 ~ 24V (Maximum value)	500mA	500mA	305mA	350mA	375mA	30mA
Flashing Rate		F1 : 80±10times per minute F3 : 240±10times per minute (Emergency signal light)					
Rotating Rate		Approx. 130 ±20 rpm (Clockwise rotation)					
Buzzer sound level		80dB ±5dB (at 1M)					

Note: Life of the LED varies according to operating conditions and environment.

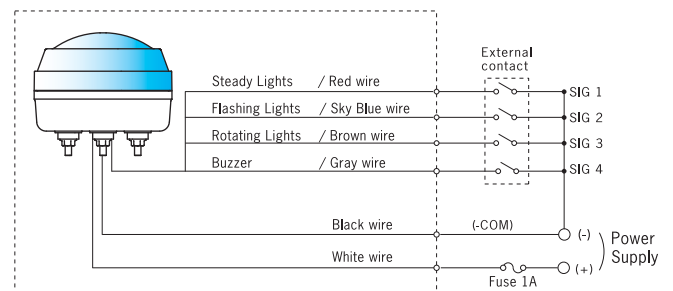
General Specifications

Size	86mm diameter
Input Voltage Options	12 ~ 24VAC/DC
Functions Available	Continuous + Flashing + Rotating + Buzzer
Operating Humidity	45 to 85% RH (no condensation)
Ambient Temperature	-15 to 40°C (no freezing)
Storage Temperature	-20 to 70°C (no freezing)
Insulation Resistance	100MΩ minimum (500VDC megger)
Vibration Resistance	10 to 55Hz, amplitude 0.75mm
Body Color	Black
Material	- Body: ABS resin - Lens cap: PC resin - Fixing bolt: Steel
Mounting Options	- Body direct mounting - L-shaped bracket - Installation: Indoor & Outdoor Use
Available Colors	Red / Yellow / Green / Blue / Clear
Approvals	UL, RoHS
Degree of Protection	IP65
Function control	Lead wire
Wire specifications	22AWG (UL1007)
Weight	170g

Dimensions (Unit:mm)



Wiring Diagram



Optional Parts See page 45~47 for dimension

1. Mounting Pole



2. Wall Mount Bracket



MS86T Series

Multi-functional D86mm LED Steady/Flashing/Rotating Signal Light

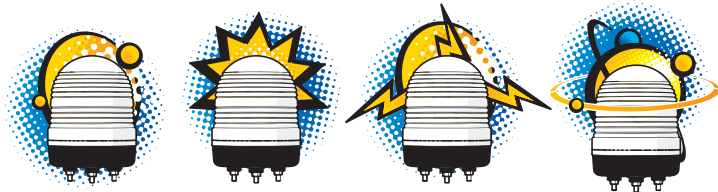


LED Strobe Light of High Brightness, Excellent Visibility from a Distance. Improving Visibility by Employing Special Scattering Lens.



- Extremely high light output using unique LED technology
- Wide light distribution with prism-cut dome-shaped lens
- Outstanding visibility at distance
- Flashing Cycles: 2 patterns (Selectable by a switch)
- Adjustable flashing or rotating cycles
- Built-in buzzer (adjustable volume)
- Red, Yellow, Green, Blue and Clear lens available

Min10 ~Max 100dB at 1m
(Volume Adjustable)



■ Steady light ■ Flashing light-1 ■ Flashing light-2 ■ Rotating light



Ordering Information

MS86T - F 00 - R

① ② ③

1. Light Style

F	Steady + Flashing
R	Steady + Flashing + Rotating
B	Steady + Flashing + Rotating + Buzzer

2. Power Supply

00	12 ~ 24VAC/DC	FF	90 ~ 240VAC
-----------	---------------	-----------	-------------

3. Lens Colors

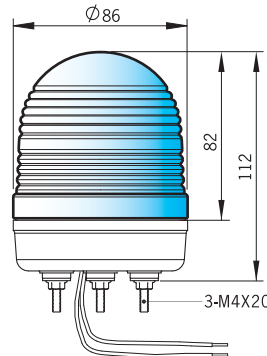
R	Red	G	Green	C	Clear
Y	Yellow	B	Blue		

Specifications

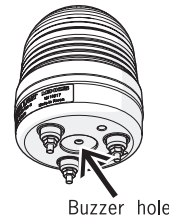
Operation/Function	Steady, Flashing, Rotating, Buzzer	
Power Supply	12 ~ 24VAC/DC, 90 ~ 240VAC (50/60Hz)	
Lens Diameter	86mm	
Material	Lens: PC resin, Body: ABS resin	
Buzzer Sound Level	10 ~ 100 ±5dB (at 1m) volume adjustable	
Flashing Rate (Internal PCB board is dip switch controls)	F1: 80 times per minute ±10% F3: 240 times per minute ±10% (Emergency Signal lights)	
Rotating Rate	Min.60 ~ Max.300rpm (±10%) (Clockwise rotation)	
Feature set	Lead wire Connection	
Insulation Resistance	100MΩ minimum (500VDC megger)	
Ambient Temperature	-20 to 40°C (no freezing)	
Storage Temperature	-20 to 70°C (no freezing)	
Ambient Humidity	45 ~ 85% RH (no condensation)	
Degree of Protection	IP65	Vibration
Approvals	UL, RoHS	0.75mm at 10~55Hz
Recommended Wire Size	1007UL / 22AWG	
Weight	Approx. 360g	

Note: Life of the LED varies according to operating conditions and environment.

Dimensions (unit: mm)

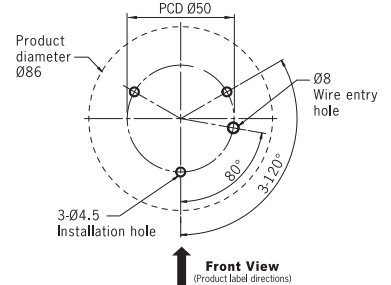


Power supply wire From wire exit 800mm

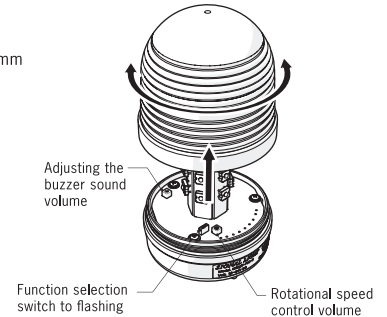


Buzzer hole

Stud Mount hole layout



Front View
(Product label directions)



Wiring diagram

Note: See page 37 for MS115T wiring diagram

Optional Parts

1. Mounting Pole



SAM-T31

SAM-D31

SAM-M31

2. Wall Mount Bracket



MAP-DS30
Plastic

MAM-DS26
Steel

Note: See page 45~47 for dimension

Current Draw (Steady standards and current value)

Power Supply	Red	Yellow	Green	Blue	Clear	Buzzer	
Curr (mA)	12 ~ 24V	200~400	185~335	170~300	220~370	160~275	150mA
	90 ~ 240V	32~55	30~50	30~50	23~40	27~45	



MS86M Series LED Multi Color D86mm LED 3 Colors in 1 Signal Strobe Light



With high-brightness LED as its light source, the flashing light has a high effect of radiating signal light to ensure an accurate signal transmission even under worse conditions such as permanent fog and dust.



Min10 ~Max 100dB at 1m (Adjustable volume)

- 3 colors in 1 LED modular components
- High Brightness LED light distribution through prism-cut lenses
- multi-voltage version (12 ~ 24VAC/DC)
- Shockproof and vibration resistant
- The streamlined warning light is suitable for patrol cycles, emergency, vehicles and ambulance cars.
- Extremely high light intensity

Extremely high light output using unique LED technology



Ordering Information

MS86M - F 00 - RYG

① ② ③

1. Light Style

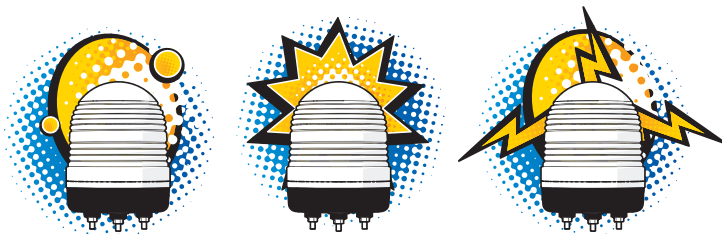
F	Steady + Flashing
B	Steady + Flashing + Buzzer

2. Power Supply

00	12 ~ 24VAC/DC
FF	90 ~ 240VAC

3. LED Colors

RYG	Red, Yellow, Green
RGB	Red, Green, Blue

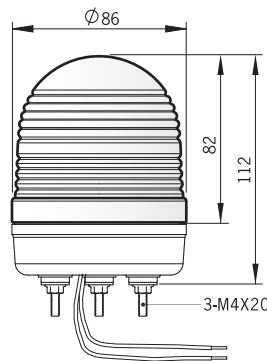


Steady light

Flashing light-1

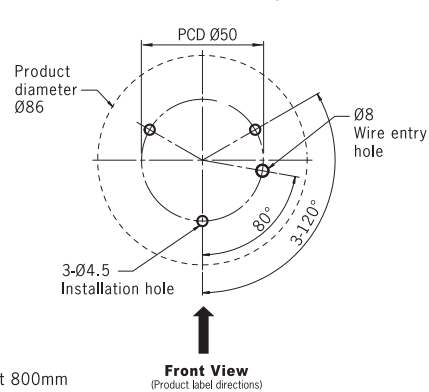
Flashing light-2

Dimensions (unit: mm)



Power supply wire From wire exit 800mm

Stud Mount hole layout



General Specifications

Operation/Function	Steady, Flashing, Buzzer	
Power Supply	12 ~ 24VAC/DC, 90 ~ 240VAC	
Buzzer Sound Level	10 ~ 100±5dB (at 1M), volume adjustable	
Lens Diameter	86 mm	Lens Color: Clear
Materials	Body: ABS, Cap: PC	
Flashing Rate (Internal PCB board is dip switch controls)	F1: 80 times/minute ±10% F3: 240 times/minute ±10% (Emergency Signal Lights)	
Feature set	Lead wire Connection	
Insulation Resistance	100 MΩ minimum (500V DC megger)	
Vibration	0.75mm at 10~55Hz	
Ambient Temperature	-20 to 40°C	
Storage Temperature	-20 to 70°C	
Ambient Humidity	45 ~ 85% RH	
Degree of Protection	IP65	
Approvals	UL, RoHS	
Recommended Wire Size	1007 UL / 22AWG	
Weight	Approx. 150g	

Current Draw (Steady standards and current value)

Volt.	LED	Red/Yellow/Green	Red/Green/Blue	Buzzer
12 ~ 24V		400 ~ 600mA		150mA
90 ~ 240V		30 ~ 80mA		

See Page 45 ~ 47 for Mounting Options and Accessories.

Wiring diagram

Note: See page 38 for MS115M wiring diagram

Optional Parts

1. Mounting Pole



SAM-T31

SAM-D31

SAM-M31

2. Wall Mount Bracket



MAP-DS30 Plastic

MAM-DS26 Steel

MS86S Series D86mm Xenon lamp Strobe Light



Strobe Light of High Brightness, Excellent Visibility from a Distance
Improving Visibility by Employing Special Scattering Lens



- Xenon light
- Wide light distribution with prism-cut dome-shaped lens
- Outstanding visibility at distance
- PCB module style Xenon lamp
- Fast and easy replacement of lamp
- Red, Yellow, Green, Blue and Clear lens available
- IP65 rated

Ordering Information

MS86S - S 0 0 - R
① ② ③

1. Light Style

S	Xenon Strobe Lamp (molding type)
N	Xenon Strobe Lamp (Not molding type)

2. Power Supply

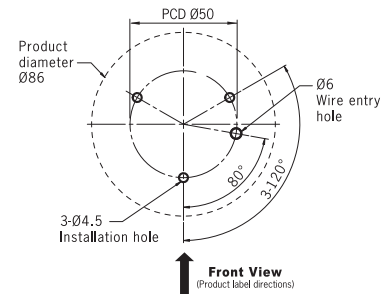
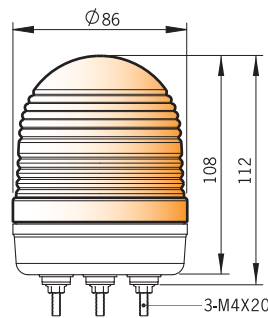
00	12 ~ 24VAC/DC
10	110VAC (Not molding type)
20	220VAC (Not molding type)

3. Lens Colors

R	Red
Y	Yellow
G	Green
B	Blue
C	Clear



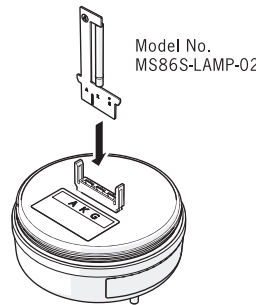
Dimensions (unit: mm)



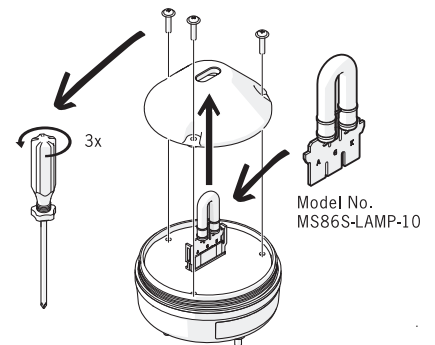
▲ Stud Mount hole layout

Xenon lamp Application

▶ 12 ~ 24VAC/DC Type
3W Lamp



▶ 110V, 220VAC Type
6W Lamp

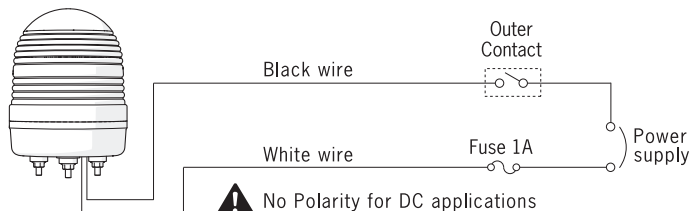


Specifications

Size	86mm
Light source	Xenon strobe
Power Supply (50/60Hz)	12 ~ 24VAC/DC , 110VAC , 220VAC
Mounting	Body direct mounting , L-shaped bracket
Lens colors	Red, Yellow, Green, Blue, Clear (Material: PC resin)
Flash per minute	Approx. 60 times/minute ±10%
Power Current (±10%)	- 12 ~ 24V: 0.078~0.15A - 110V: 0.03A - 220V: 0.03A
Vibration	0.75mm at 10~55Hz
Ambient Temperature	-20 to 40°C
Storage Temperature	-20 to 70°C
Ambient Humidity	45 ~ 85% RH
Degree of Protection	IP65
Approvals	UL, RoHS
Recommended Wire Size	UL2464, 22AWGx2C
Weight	Approx.300g - Mold type , Approx.200g - Standard

※ Specifications are subject to change without notice.

Wiring Diagram



Optional Orders

1. Mounting Pole



SAM-T31

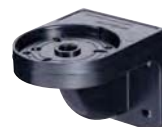


SAM-D31



SAM-M31

2. Wall Mount Brackets



MAP-DS30
ABS resin



MAM-DS26
Steel

See Page 45 ~ 47
for Mounting Options and Accessories.



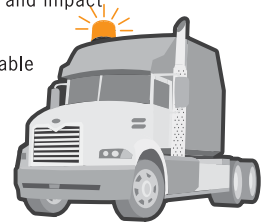
MS115L Series D115mm LED Steady / Flashing Signal Light



LED Multi Signal Light
featuring two flashing patterns for diverse use.



- Newly Developed Triple-reflection System: For enhanced visibility and low power consumption.
- Enhanced Illumination: Use of long-life, super bright LED
- Semi-permanent in the self-life of light source and suitable for machines having lots of vibration and impact
- Option : Buzzer , Volume : 80dB
- Red, Yellow, Green, Blue and Clear lens available
- Energy Efficient: Low power consumption



Ordering Information

MS115L - F 0 2 - R
① ② ③

1. Light Style

F	Steady + Flashing
B	Steady + Flashing + Buzzer

2. Power Supply

02	24VAC/DC
FF	90 ~ 240VAC

3. Lens Colors

R	Red
Y	Yellow
G	Green
B	Blue
C	Clear

Specifications

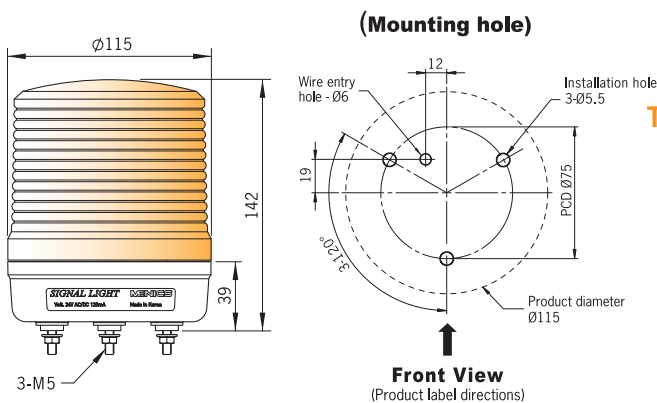
Operation/Function	Steady , Flashing , Buzzer
Power Supply	24VAC/DC , 90 ~ 240VAC (50/60 Hz)
Buzzer Sound Level	Approx. 80±5 dB (at 1M)
Lens Color	Red, Yellow, Green, Blue & Clear
Lens Diameter	115mm
Flash Rate	80 times/minute ±10%
Vibration	0.75mm at 10~55Hz
Ambient Temperature	-20 to 40°C
Storage Temperature	-20 to 70°C
Ambient Humidity	45~85% RH
Degree of Protection	IP65
Approvals	UL, RoHS
Recommended Wire Size	UL 2464, 22AWGx2C
Weight	Approx. 325g

* Specifications are subject to change without notice.

Current consumption (Maximum current consumption when LED is lit.)

Power Spec	24V	90 - 240VAC	Buzzer
Red LED	130mA	30~70mA	30mA
Yellow LED	110mA		
Green LED	250mA		
Blue LED	250mA		
White LED	285mA		

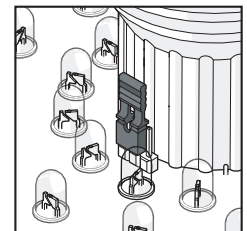
Dimensions



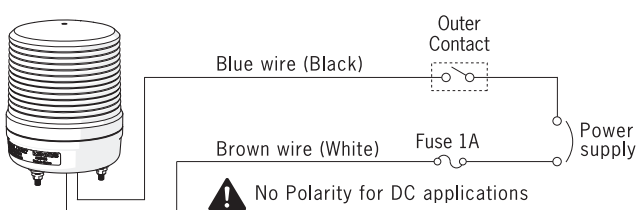
Triple Reflection system



Lights or Flashing Conversion dip Switch



Wiring Diagram

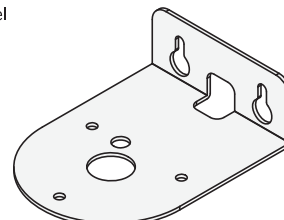


Optional Orders (unit: mm)

Wall Mount Bracket

MAM-DS29

Steel

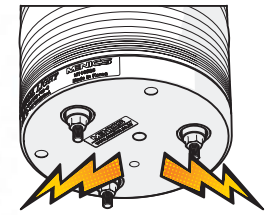


* See page 45-47 for dimensions

MS115T Series Multi-functional D115mm LED Steady/Flashing/Rotating Signal Light



LED Strobe Light of High Brightness, Excellent Visibility from a Distance. Improving Visibility by Employing Special Scattering Lens.



Min10 ~Max 100dB at 1m (Adjustable volume)

- Extremely high light output using unique LED technology
- Wide light distribution with prism-cut dome-shaped lens
- Outstanding visibility at distance
- Flashing Cycles: 2 patterns (Selectable by a switch)
- Adjustable flashing or rotating cycles
- Built-in buzzer (adjustable volume)
- Red, Yellow, Green, Blue and Clear lens available

Ordering Information

MS115T - F 0 0 - R - L

① ② ③ ④

1. Light Style

F	Steady + Flashing
R	Steady + Flashing + Rotating
B	Steady + Flashing + Rotating + Buzzer

2. Power Supply

00	12 ~ 24VAC/DC
FF	90 ~ 240VAC

3. Lens Colors

R	Red	G	Green	C	Clear
Y	Yellow	B	Blue		

4. Base Body Style

	20mm Base Body	L	40mm Base Body
--	----------------	----------	----------------

Specifications

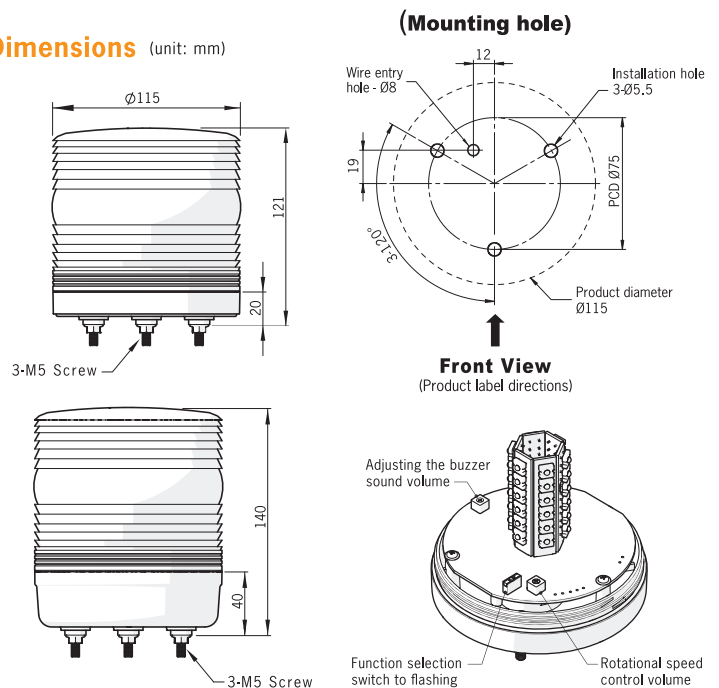
Operation/Function	Steady, Flashing, Rotating, Buzzer		
Power Supply	12 ~ 24VAC/DC, 90 ~ 240VAC		
Lens Diameter	115mm		
Materials	Lens : PC resin, Body : ABS resin		
Buzzer Sound Level	10 ~ 100±5dB (at 1m) volume adjustable		
Flashing Rate (Internal PCB board is dip switch controls)	F1: 80 flashes per minute ±10% F3: 240 flashes per minute ±10% (Emergency Signal Lights)		
Rotating Rate	Min.60 ~ Max.300rpm±10% (Clockwise rotation)		
Feature set	Lead wire Connection		
Insulation Resistance	100MΩ minimum (500V DC megger)		
Ambient Temperature	-20 to 40°C (no freezing)		
Storage Temperature	-20 to 70°C (no freezing)		
Ambient Humidity	45 ~ 85% RH (no condensation)		
Degree of Protection	IP65	Vibration	
Approvals	UL, RoHS	0.75mm at 10~55Hz	
Recommended Wire Size	1007UL / 22AWG		
Weight	Approx. 360g		

Note: Life of the LED varies according to operating conditions and environment.

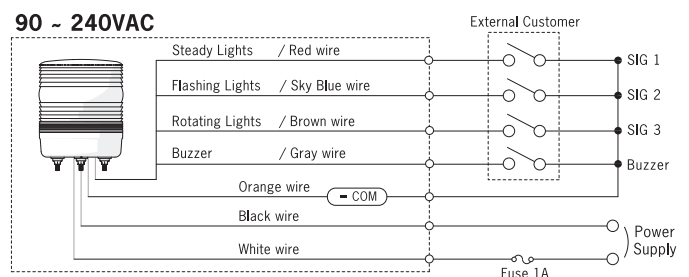
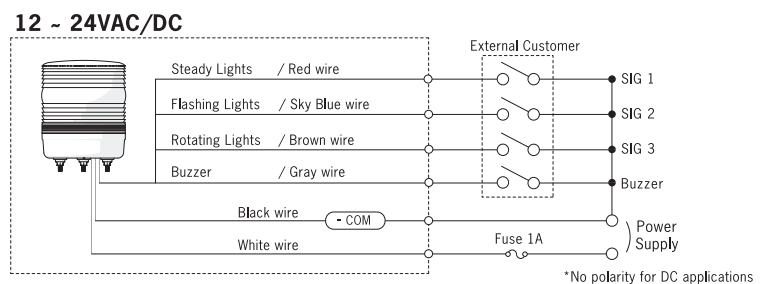
Current Draw (Maximum current consumption when LED is lit.)

Power Supply	Red	Yellow	Green	Blue	Clear	Buzzer
Curr (mA) 12 ~ 24V	370~540	370~530	150~245	370~540	150~240	150mA
90 ~ 240V	50~75	50~70	25~40	50~75	25~40	

Dimensions (unit: mm)

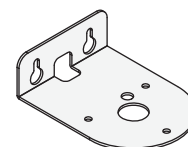


Wiring Diagram



Accessories

Wall Mount Bracket
MAM-DS29
Steel

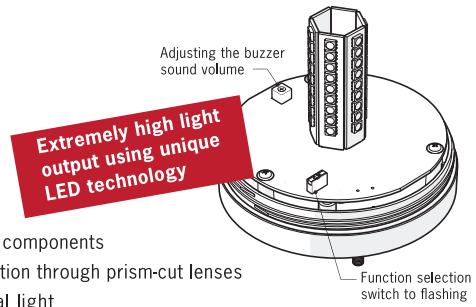


* See page 45-47 for dimensions

MS115M Series LED Multi Color D115mm LED 3 Colors in 1 Signal Strobe Light

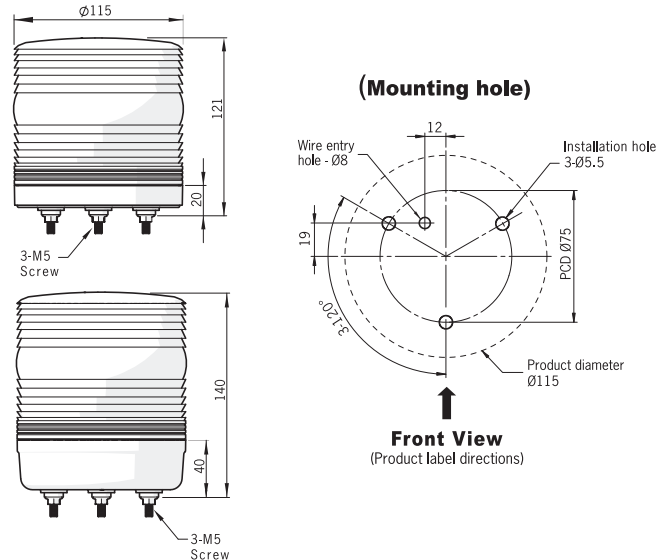


Strobe Light of High Brightness, Excellent Visibility from a Distance. Improving Visibility by Employing Special Scattering Lens.



- 3 colors in 1 LED modular components
- Bright & even light distribution through prism-cut lenses
- Multi-functional LED signal light
- Flashing Cycles: 2 patterns (Selectable by a switch)
- Optional 100dB Buzzer (adjustable volume)
- IP65 rated
- RoHS compliant

Dimensions (unit: mm)



Ordering Information

MS115M - BFF - RYG - L



1. Light Style

F	Steady + Flashing
B	Steady + Flashing + Buzzer

2. Power Supply

00	12 ~ 24VAC/DC
FF	90 ~ 240VAC

3. LED Colors

RYG	Red, Yellow, Green
RGB	Red, Green, Blue

4. Base Body Style

	20mm Base Body	L	40mm Base Body
--	----------------	---	----------------

Specifications

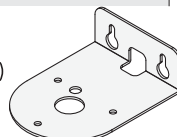
Operation/Function	Steady, Flashing, Buzzer	
Power Supply	12 ~ 24VAC/DC 90 ~ 240VAC (50/60Hz)	
Buzzer Sound Level	10 ~ 100 ±5 dB (at 1M), volume adjustable	
Lens Diameter	115 mm	Lens Color: Clear
Body Materials	ABS	Cap Materials: PC
Flashing Rate (Internal PCB board is dip switch controls)	F1: 80 flashes per minute ±10% F3: 240 flashes per minute ±10% (Emergency Signal lights)	
Feature set	Lead wire Connection	
Insulation Resistance	100 MΩ minimum (500V DC megger)	
Vibration	0.75mm at 10~55Hz	
Ambient Temperature	-20 to 40°C	
Storage Temperature	-20 to 70°C	
Ambient Humidity	45 ~ 85% RH	
Degree of Protection	IP65	
Approvals	UL, RoHS	
Recommended Wire Size	1007 UL / 22AWG	
Weight	Approx. 360g	

Current Consumption (Maximum current consumption when LED is lit.)

Volt.	LED	Red/Yellow/Green, Red/Green/Blue	Buzzer
12 ~ 24V		435 ~ 605mA ±10%	150mA
90 ~ 240V		60 ~ 130mA ±10%	

Accessories

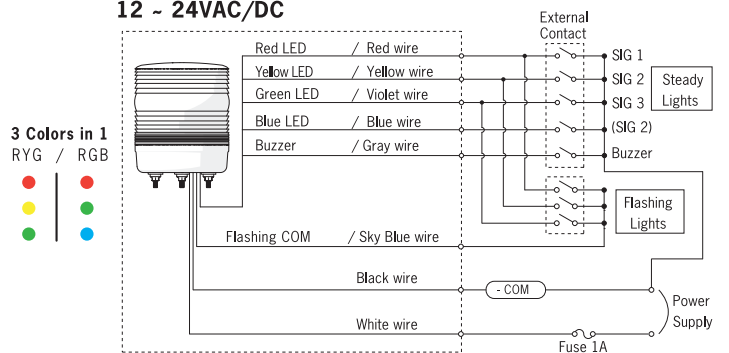
Wall mount bracket (MAM-DS29)
Steel



See page 45~47 for dimensions

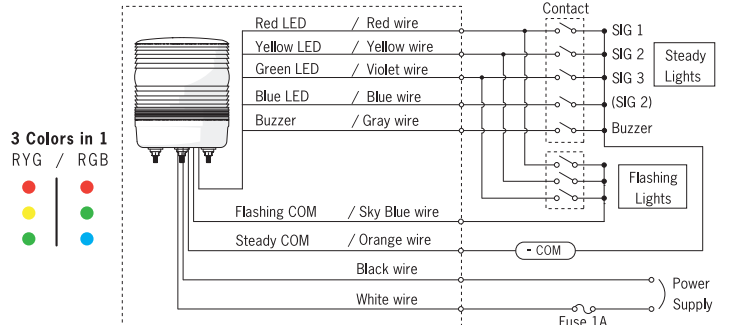
Wiring Diagram

12 ~ 24VAC/DC



*No polarity for DC applications

90 ~ 240VAC



MS115C Series D115mm LED Only Flashing Signal Light



LED Strobe Light of High Brightness, Excellent Visibility from a Distance. Improving Visibility by Employing Special Scattering Lens. Semi-permanent in the lifespan of light source and suitable for machines having.



- Apply a low body (20mm)
- Semi-permanent in the lifespan of light source and suitable for machines having
- Wide light distribution with prism-cut dome-shaped lens
- Flashing Cycles: 2 patterns (Selectable by a switch)
- Red, Yellow, Green, Blue and Clear lens available
- Installation: upright, inverted, sideways
- IP65 rated

Ordering Information

MS115C - F 0 0 - Y

1. Light Style / Power Supply

F00	Only LED Flashing type 12 ~ 24VDC
------------	--------------------------------------

2. Lens Colors

R	Red	G	Green	C	Clear
Y	Yellow	B	Blue		

Specifications

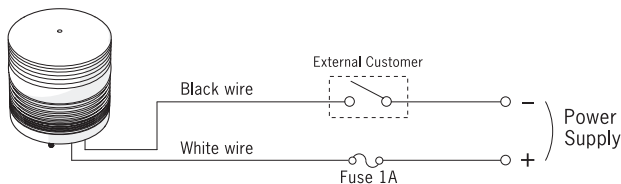
Operation/Function	Flashing	
Power Supply	12~24VDC	
Lens Diameter	115 mm	
Lens Materials	PC resin	
Body Materials	ABS resin	
Flashing Rate (Internal PCB board is dip switch controls)	F1: 80 flashes per minute ±10% F3: 240 flashes per minute ±10% (Emergency Signal lights)	
Ambient Temperature	-20 to 40°C	
Storage Temperature	-20 to 70°C	
Ambient Humidity	45 ~ 85% RH	
Degree of Protection	IP65	Vibration
Approvals	UL, RoHS	0.75mm at 10~55Hz
Recommended Wire Size	UL1007, 22AWG	
Weight	325g	

Note: Life of the LED varies according to operating conditions and environment.

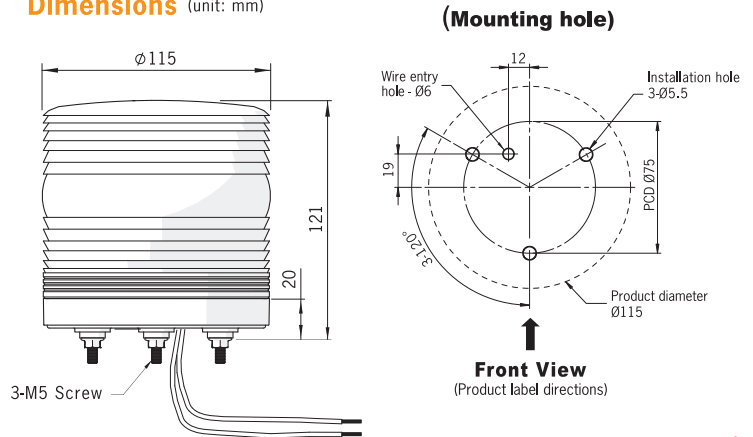
Current Draw

Volt.	LED.	Red	Yellow	Green	Blue	Clear
12 ~ 24V		565 ~ 900mA				

Wiring Diagram

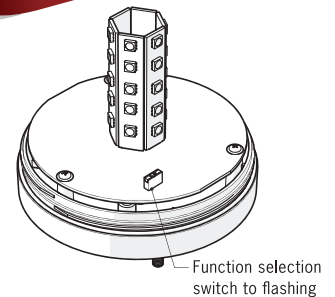


Dimensions (unit: mm)



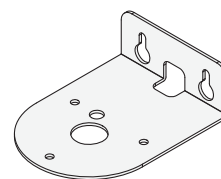
2 flashing options

Extremely high light output using unique LED technology

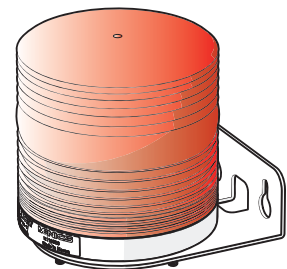


Optional Orders

Wall Mount Bracket



MAM-DS29
Steel



*See page 45~47 for dimensions



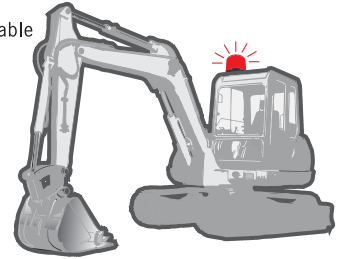
MS115S Series D115mm Xenon lamp Signal Light



Strobe Light of High Brightness, Excellent Visibility from a Distance.
Improving Visibility by Employing Special Scattering Lens



- Xenon light
- Wide light distribution with prism-cut dome-shaped lens
- Outstanding visibility at distance
- PCB module style Xenon lamp
- Fast and easy replacement of lamp
- Red, Yellow, Green, Blue and Clear lens available
- IP65 rated



Ordering Information

MS115S - S 20 - R
 ① ② ③

1. Light Style

S	Xenon Strobe Lamp
---	-------------------

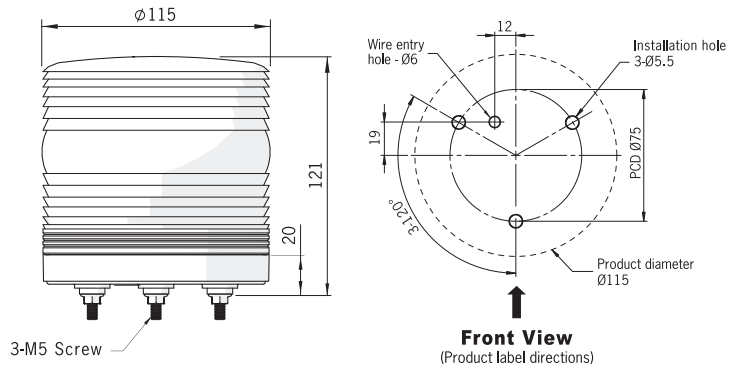
2. Power Supply

00	12 ~ 24VAC/DC
10	110VAC
20	220VAC

3. Lens Colors

R	Red
Y	Yellow
G	Green
B	Blue
C	Clear

Dimensions (unit: mm)



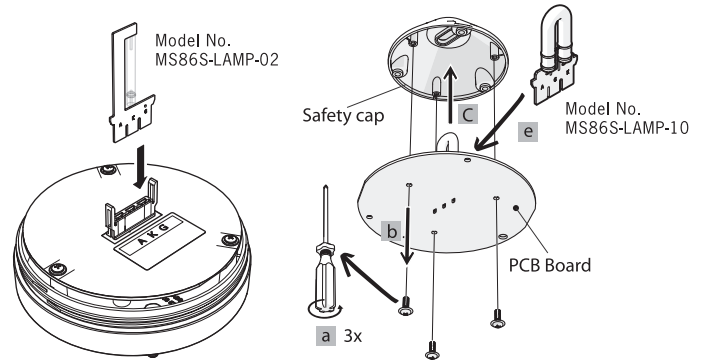
(Mounting hole)

Front View
(Product label directions)

Xenon lamp Application (Replacement PCB Module)

▶ 12 ~ 24 AC/DC Type
3W Lamp

▶ 110V, 220V AC Type
6W Lamp

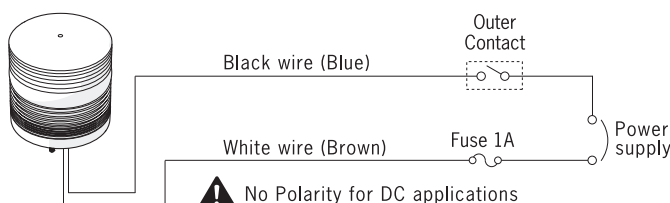


Specifications

Size	115mm
Light source	Xenon strobe
Power Supply	12 ~ 24VAC/DC, 110VAC, 220VAC
Mounting	Body direct mounting, L-shaped bracket
Lens colors	Red, Yellow, Green, Blue, Clear (Material: PC resin)
Flash per minute	60 ±10%times/minute
Current Consumption (±10%)	12 ~ 24V: 78 ~ 150mA 110V: 30mA 220V: 30mA
Vibration	0.75mm at 10~55Hz
Ambient Temperature	-20 to 40°C
Storage Temperature	-20 to 70°C
Ambient Humidity	45 ~ 85% RH
Degree of Protection	IP65
Approvals	UL, RoHS
Recommended Wire Size	UL 2464, 22AWGx2C
Weight	Approx.315g

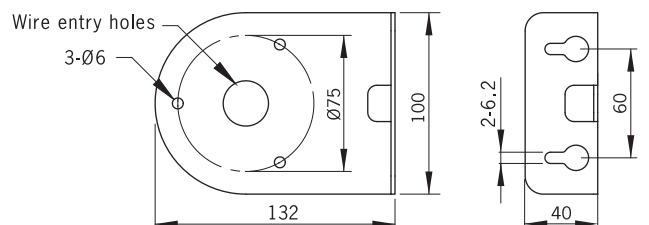
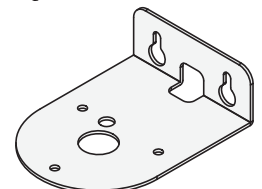
* Specifications are subject to change without notice.

Wiring Diagram



Optional Orders (unit: mm)

Wall Mount Bracket
MAM-DS29
Steel



ML Series D66mm Bulb Revolving Warning Signal Light



Compact Revolving Warning Light perfectly designed for small devices.



- Incandescent or Xenon type
- Red, Yellow, Green and Blue lens available
- Smooth lens or Prism lens
- Stud mounted or Pole mounted
- Optional Wall Mounting Brackets available
- Wide range of power supply

Ordering Information

MLG F - 20 - R

① ② ③ ④

1. Mounting Style

MLG	Ø66mm Dome top lens Signal Light (Stud mount)
MLP	Ø66mm Dome top lens Signal Light (Pole mount)

2. Light Style

	Rotating Light (Smooth Lens)
F	Flashing Light (Prism Lens) - *Note
S	Strobe Light with Xenon Lamp (110VAC or 220VAC only)

3. Power Supply

01	12VAC/DC
02	24VAC/DC
10	110VAC
20	220VAC

4. Lens Colors

R	Red
Y	Yellow
G	Green
B	Blue

Note - Flashing types of DC power only

Specifications

Bulb Lights

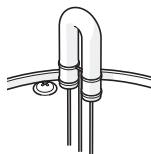
Operation/Function	Rotating , Flashing
Power Supply	12VAC/DC , 24VAC/DC , 110VAC , 220VAC (50/60Hz)
Lens Diameter	66 mm
Lens Color	Red, Yellow, Green, Blue (Lens Type :Smooth)
Rotation Rate	130rpm ±10%
Flash Rate	80 times/minute ±10%
Ambient Temperature	-15° to 40°C
Storage Temperature	-25° to 70°C
Ambient Humidity	45 ~ 85% RH
Degree of Protection	IP42
Approvals	CE, RoHS
Recommended Wire Size	AC 110/220V: VSF / 0.75mm ² (Power supply wire only) AC/DC 12/24V: 1007 UL / 22AWG

Current Draw

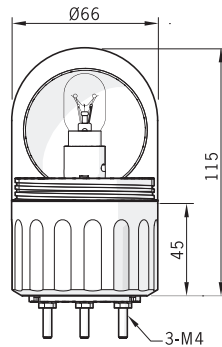
Power Supply	12V	24V	110V	220V
Current Draw	0.6A, 8W	0.3A, 8W	0.07A, 8W	0.03A, 8W

Xenon Strobe Lights

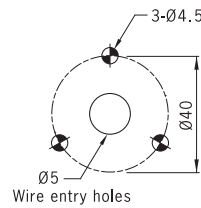
Power Supply	110VAC , 220VAC (50/60Hz)
Current	110VAC : 0.22A , 220VAC : 0.11A
Lens Color	Red, Yellow, Green, Blue (Lens Type : Prism)
Strobe Pulse	80 times/minute ±10%
Degree of Protection	IP42
Approvals	CE, RoHS
Recommended Wire Size	VSF / 0.75mm ² (Power supply wire only)
Lamp Wattage	6W Lamp



Dimensions (unit: mm)



▶ Hole Mounting



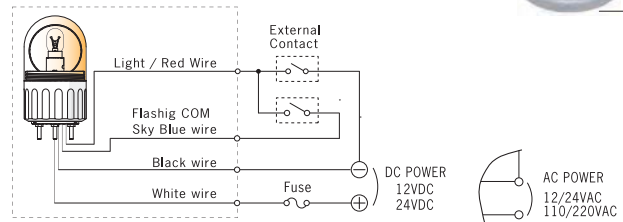
▶ MLP



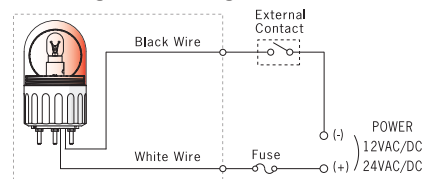
▶ Mount Base MAM-DS32

Wiring Diagram

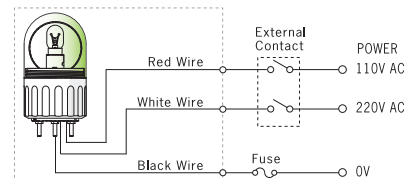
▶ Flashing Lights



▶ Rotating & Strobe Lights



▶ Rotating & Strobe Lights



Wall Mount Brackets



MAP-DS30
ABS resin



MAM-DS26
Steel

Replacement Parts

Rated Voltage	Bulb	Rated Voltage	Bulb
12VDC	12V 8W	110VAC	130V 8W
24VDC	24V 8W	220VAC	240V 8W

▶ See page 44 for Replacement Bulbs product

See Page 45 ~ 47 for Mounting Options and Accessories.



ASG/APG Series D86mm Bulb Revolving Warning Signal Light



Compact Revolving Warning Light perfectly designed for small devices.



- Incandescent or Xenon type
- Red, Yellow, Green and Blue lens available
- Smooth lens or Prism lens
- Stud mounted or Pole mounted
- Optional Wall Mounting Brackets available
- Wide range of power supply

Ordering Information

ASG B - 2 0 - R

① ② ③ ④

1. Lens Style

ASG	Ø86mm Dome top lens Signal Light (Stud mount)
APG	Ø86mm Flat top lens Signal Light (Stud mount)

2. Light Style

	Rotating Light (Smooth Lens)
F	Flashing Light (Prism Lens) - *Note
B	Rotating Light + Buzzer
S	Strobe Light + Xenon Lamp (110VAC or 220VAC only)

3. Power Supply

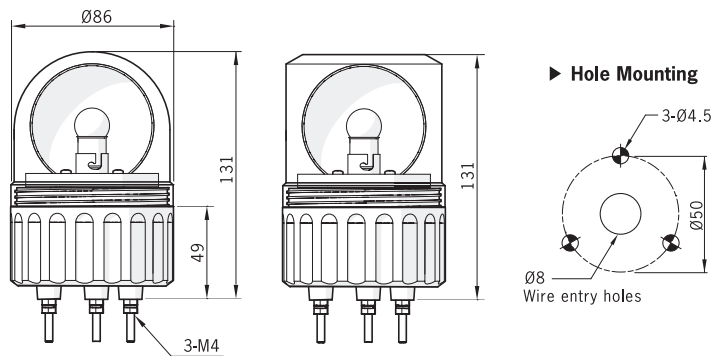
01	12VAC/DC
02	24VAC/DC
10	110VAC
20	220VAC
FF	110/220VAC * Except for Flashing type - F function

4. Lens Colors

R	Red
Y	Yellow
G	Green
B	Blue

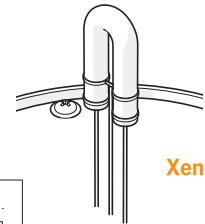
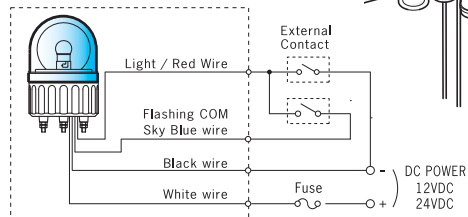
Note - Flashing type DC power is only

Dimensions (unit: mm)



Wiring Diagram

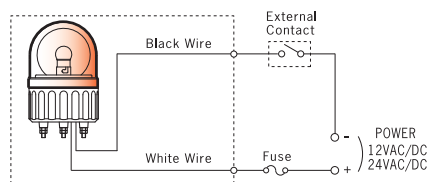
► Flashing Lights



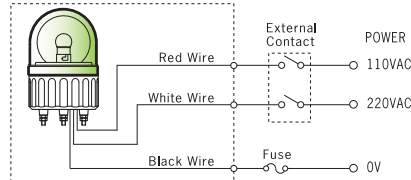
Xenon Strobe

AC POWER
110VAC
220VAC

► Rotating & Strobe Lights



► Rotating & Strobe Lights



Wall Mount Brackets



MAP-DS30
ABS resin



MAM-DS26
Steel

Specifications

Bulb Lights

Operation/Function	Rotating, Flashing, Buzzer
Power Supply	12VAC/DC, 24VAC/DC 110VAC, 220VAC, 110/220VAC (50/60Hz)
Lens Diameter	86 mm
Lens Color	Red, Yellow, Green, Blue (Lens Type :Smooth)
Rotation Rate	app.130rpm ±10%
Flash Rate	80times/minute ±10%
Buzzer Sound Level	80±5dB (at 1M)
Ambient Temperature	-15 to 40°C
Storage Temperature	-25 to 70°C
Ambient Humidity	45 ~ 85% RH
Degree of Protection	IP42
Approvals	CE, RoHS
Recommended Wire Size	AC 110/220V: VSF / 0.75mm ² (Power supply wire only) AC/DC 12/24V: 1007 UL / 22AWG

Current Draw

Power Supply	12V	24V	110V	220V	110/220V
Current Draw	0.67A, 8W	0.33A, 8W	0.07A, 8W	0.03A, 8W	0.4A, 8W

Xenon Strobe Lights

Power Supply	110VAC, 220VAC (50/60Hz)
Current	110VAC : 0.22A, 220VAC : 0.11A
Lens Color	Red, Yellow, Green, Blue (Lens Type : Prism)
Strobe Pulse	80times/minute ±10%
Degree of Protection	IP42
Approvals	CE, RoHS
Recommended Wire Size	VSF / 0.75mm ² (Power supply wire only)
Lamp Wattage	6W Lamp

Replacement Parts

Rated Voltage	Bulb	Rated Voltage	Bulb (Flashing type)	Bulb (Rotating type)
12V DC	12V 8W	110V AC	130V 8W	12V 5W
24V DC	24V 8W	220V AC	240V 8W	12V 5W
		110/220V AC		12V 5W

► See page 44 for Replacement Bulbs product

See Page 45 - 47
for Mounting Options and Accessories.

AVG Series D135mm Large Revolving Warning Signal Light



Rust-free plastic Revolving Warning Light for a wide range of applications. Ideal for large machines, construction sites, parking systems and more.



- Incandescent type
- Red, Yellow, Green and Blue lens available
- Smooth lens
- Extended Product Life
- Stud mounted
- Optional Wall Mounting Brackets available
- Buzzer(80dB) Model available

Ordering Information

AVG B - 20 - R

① ② ③

1. Light Style

	Rotating Light
B	Rotating Light + Buzzer

2. Power Supply

01	12VDC
02	24VDC
10	110VAC
20	220VAC

3. Lens Colors

R	Red
Y	Yellow
G	Green
B	Blue

Optional Orders

Replacement Bulb

Rated Voltage	Bulb	Rated Voltage	Bulb
12V DC	12V 25W	110V AC	130V 25W
24V DC	24V 25W	220V AC	240V 25W

▶ See page 44 for Replacement Bulbs product

Wall mount bracket for AVG series.

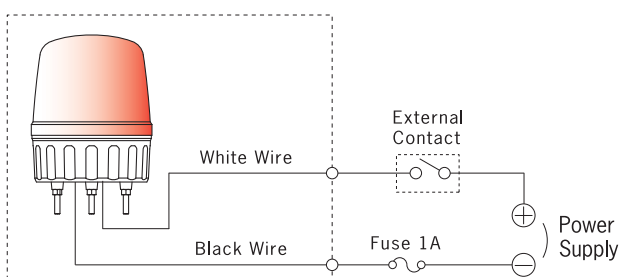


MAM-DS27
Steel

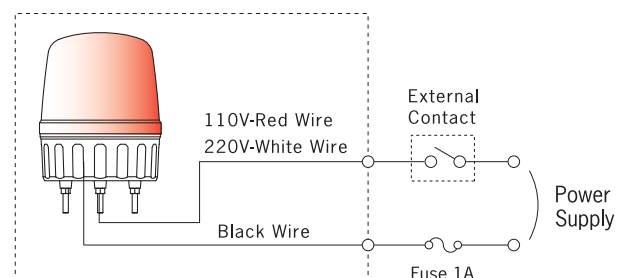
See Page 45 ~ 47 for Mounting Options and Accessories.

Wiring Diagram

▶ 12VDC , 24VDC



▶ 110VAC , 220VAC



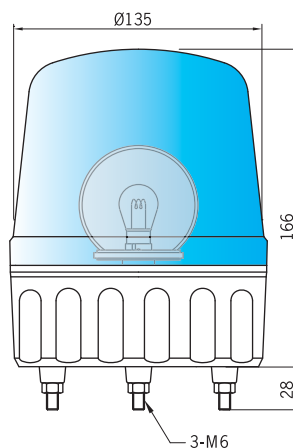
Specifications

Operation/Function	Rotating , Buzzer
Power Supply	12VDC , 24VDC 110VAC (50/60Hz) , 220VAC (50/60Hz)
Lens Diameter	135 mm
Lens Color	Red, Yellow, Green, Blue (Lens Type : Smooth)
Rotation Rate	150times/minute ±10%
Buzzer Sound Level	80±5dB (at 1M)
Ambient Temperature	-15 to 40°C
Storage Temperature	-20 to 70°C
Ambient Humidity	45 ~ 85% RH
Degree of Protection	IP42
Approvals	UL, CE, RoHS
Recommended Wire Size	110/220V: 1007 UL / 18AWG 12/24V: 1007 UL / 22AWG

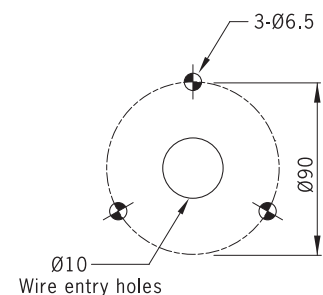
Current Draw

Power Supply	12VDC	24VDC	110VAC	220VAC
Current Draw	2.08A, 25W	1.04A, 25W	0.22A, 25W	0.11A, 25W

Dimensions (unit: mm)



▶ Hole Mounting



Replacement Bulbs

Bulb Type	No	Wattage	Item No.	Product Series
 T10 / BA9S	1	12V 5W	MAB-T09-S-012-05	45mm MT4 series PS / PL series
	2	24V 5W	MAB-T09-S-024-05	
	3	130V 5W	MAB-T09-S-130-05	
	4	240V 5W	MAB-T09-S-240-05	
 G19 / BA15S	5	12V 5W	MAB-T15-S-012-05	86mm AS series SL series
 T16 / BA15S	6	12V 8W	MAB-T15-S-012-08	56mm PR /PO series 66mm ML series 86mm AS series 86mm SL series
	7	24V 8W	MAB-T15-S-024-08	
	8	130V 8W	MAB-T15-S-130-08	
	9	240V 8W	MAB-T15-S-240-08	
 T16 / BA15D	10	12V 10W	MAB-T15-D-012-10	56mm MT5 series 86mm MT8 series
	11	24V 10W	MAB-T15-D-024-10	
	12	130V 10W	MAB-T15-D-130-10	
	13	240V 10W	MAB-T15-D-240-10	
 T22 / BA15D	14	12V 25W	MAB-T15-D-012-25	AVG series MSGS series
	15	24V 25W	MAB-T15-D-024-25	
	16	130V 25W	MAB-T15-D-130-25	AVG series
		17	240V 25W	
	18	Xenon Lamp 3W	MS86S-LAMP-02 AC/DC 12 ~ 24V I-Type Lamp life: 2,000 hours	MS86S series MS115S series
	19	Xenon Lamp 6W	MS86S-LAMP-10 AC 110V, 220V U-Type Lamp life: 2,000 hours	MS86S series MS115S series

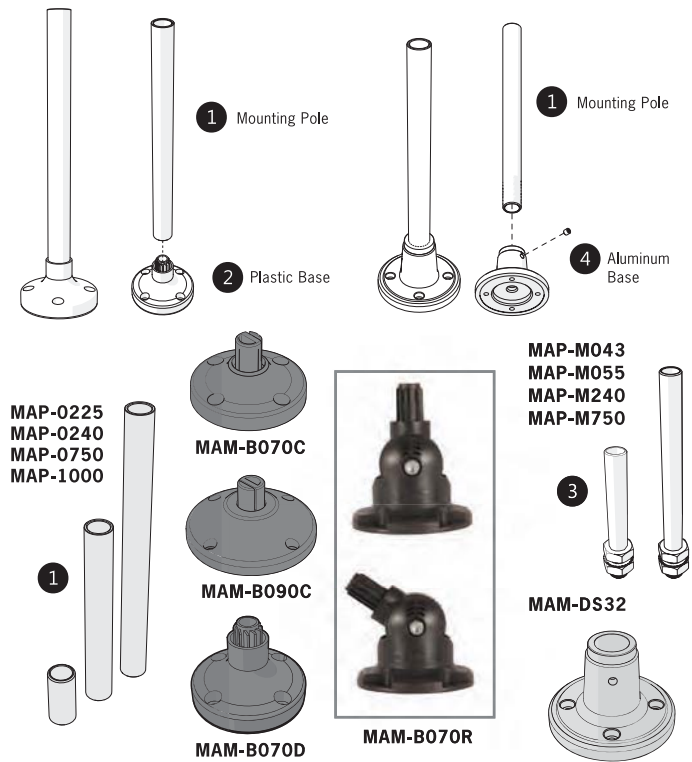
Tower Light Mounting Options

PTE , PTM , PTD , PME , MT5C/8C , MT4B/5B/8B

Pole Mounting with Base

No	Part #	Description
1	MAM-B070C	Ø70mm Plastic Base
	MAM-B070D	Ø70mm Plastic Base With Water-Proof Rubber Gasket
	MAM-B070R	Ø70mm Plastic Base With 180° Rotating Pole Base
	MAM-B090C	Ø90mm Plastic Base
3	MAP-M043	Ø20mm, 1.69 in (Length 43mm) Pole Threaded pole With 2 Nut (M20 x 1.5Pitch)
	MAP-M055	Ø20mm, 2.17 in (Length 55mm) Pole Threaded pole With 2 Nut (M20 x 1.5Pitch)
	MAP-M240	Ø20mm, 9.45 in (Length 240mm) Pole Threaded pole With 2 Nut (M20 x 1.5Pitch)
	MAP-M750	Ø20mm, 29.53 in (Length 750mm) Pole Threaded pole With 2 Nut (M20 x 1.5Pitch)
4	MAM-DS32	Ø20mm Aluminum pole mount base - Die Casting

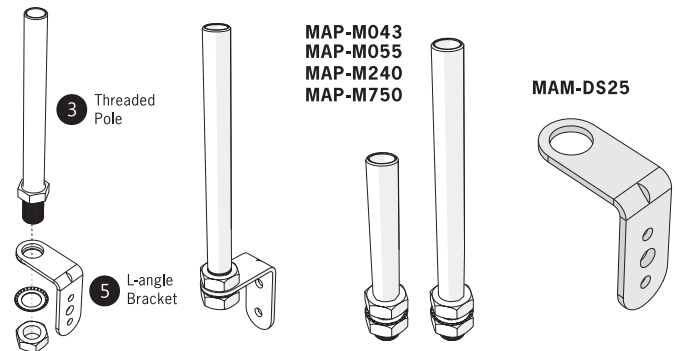
* Aluminum Pole Length Options



L-angle Mounting with Bracket

No	Part #	Description
3	MAP-M043	Ø20mm, 1.69 in (Length 43mm) Pole Threaded pole With 2 Nut
	MAP-M240	Ø20mm, 9.45 in (Length 240mm) Pole Threaded pole With 2 Nut
	MAP-M750	Ø20mm, 29.53 in (Length 750mm) Pole Threaded pole With 2 Nut
5	MAM-DS25	L-angle Bracket

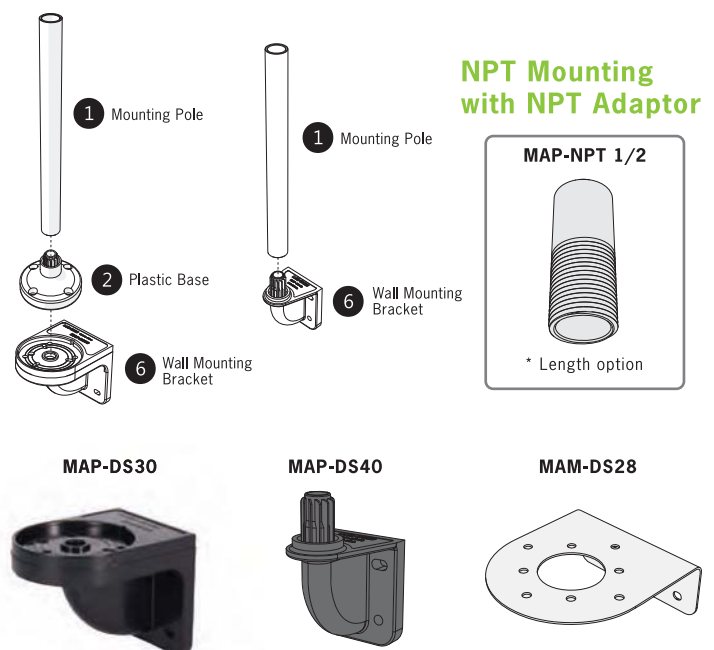
* Aluminum Pole Length Options



Wall Mounting with Bracket

No	Part #	Description
1	MAM-B070C	Ø70mm Plastic Base
	MAM-B070D	Ø70mm Plastic Base With Water-Proof Rubber Gasket
	MAP-DS30-BLK	Plastic Wall Mounting Bracket, Black Color (Pole & Base required)
	MAP-DS30-BGE	Plastic Wall Mounting Bracket, Beige Color (Pole & Base required)
6	MAP-DS40-BLK	Plastic Wall Mounting Bracket, Black Color (Pole & Base required)
	MAP-DS40-BGE	Plastic Wall Mounting Bracket, Beige Color (Pole & Base required)
	MAM-DS28	Metal Wall Mounting Bracket (Pole & Base required)

* Aluminum Pole Length Options



ACCESSORIES

Accessories

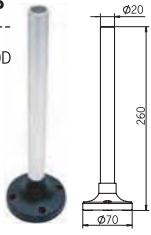
Ordering information and Dimensions (UNIT : mm)

Semi-assembled pole mounting base

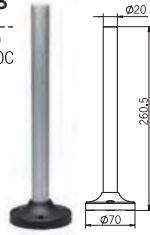
LED type: PTE, PTM, PTD, PME series

Bulb type: MT4, MT5, MT8 series

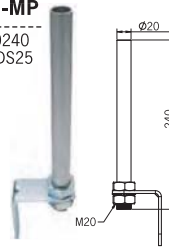
SAM-DP
MAP-0240
MAM-B070D



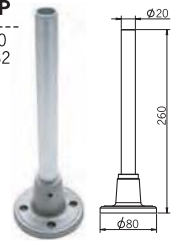
SAM-CP
MAP-0240
MAM-B070C



SAM-MP
MAP-0240
MAM-DS25



SAM-TP
MAP-0240
MAM-DS32



MS86 series dedicated part

SAM-D31
SAM-DP
MAM-DS31



SAM-M31
SAM-MP
MAM-DS31

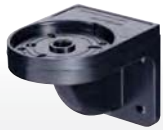


SAM-T31
SAM-TP
MAM-DS31



Wall Mounting Bracket

MAP-DS30
Plastic



MAP-DS40
Plastic



MAM-DS25
Steel



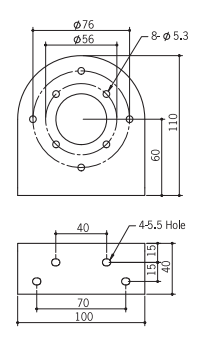
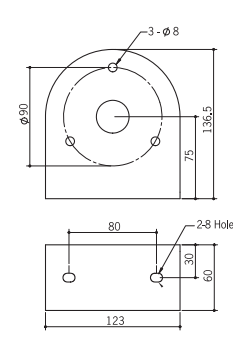
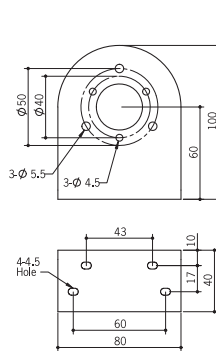
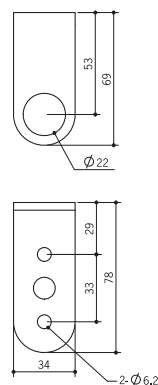
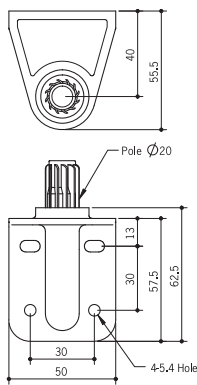
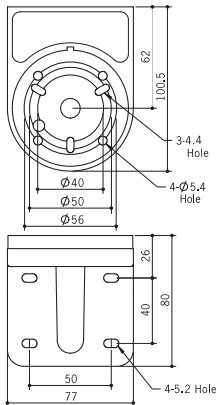
MAM-DS26
Steel



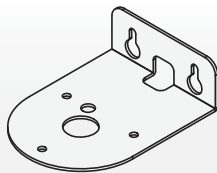
MAM-DS27
Steel



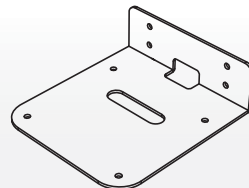
MAM-DS28
Steel



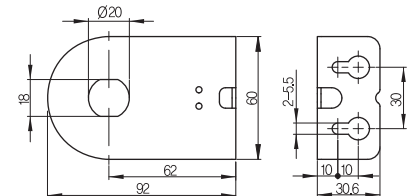
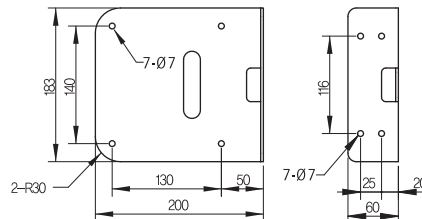
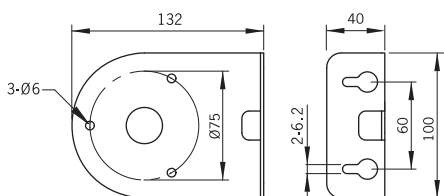
MAM-DS29
Steel



MAM-DS33
Steel



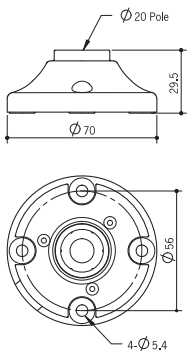
MAM-DS11
Steel



Mount Base

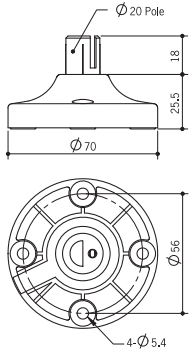
MAM-B070B

Plastic



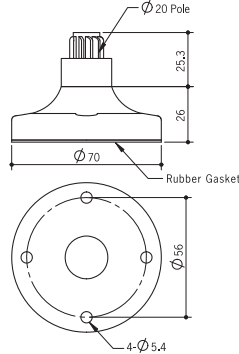
MAM-B070C

Plastic



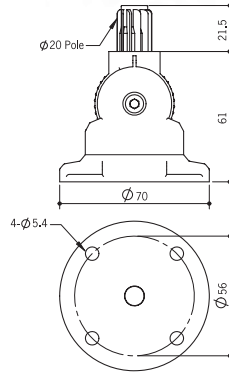
MAM-B070D

Plastic



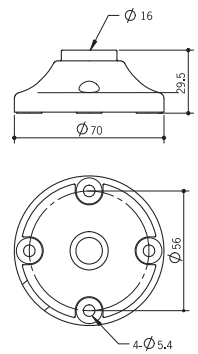
MAM-B070R

Plastic



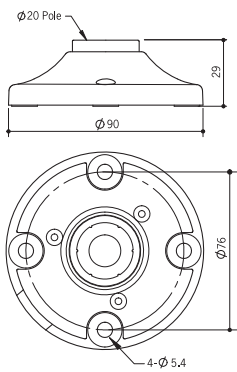
MAM-B070F

Plastic



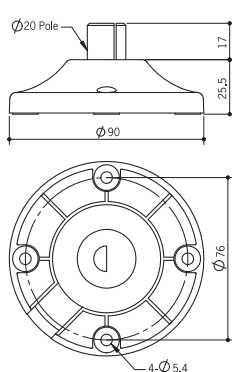
MAM-B090B

Plastic



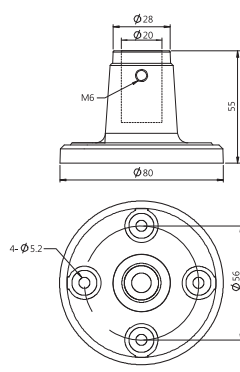
MAM-B090C

Plastic



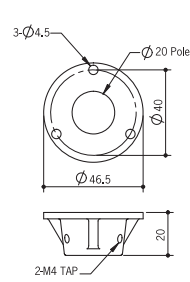
MAM-DS32

Aluminum



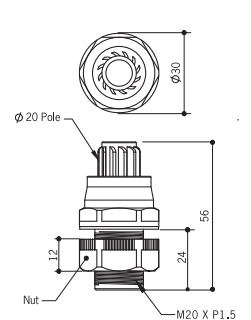
MAM-DS24

Aluminum



MAM-I025

Plastic



PTE - Mounting 'J' type Product Whole Length

PTE - AJ type

	Product Length (Min ~ Max ±3mm)					Adjusting range	Exposed wiring (±50mm)
	1s	2s	3s	4s	5s		
A	307~347	347~387	387~427	427~467	467~507	40mm	708~598
B	327~387	367~427	407~467	447~507	487~547	65mm	668~728
C	377~457	417~497	457~537	497~577	537~617	80mm	598~678
D	462~647	502~687	542~727	582~767	622~807	185mm	408~593
E	602~896	642~936	682~976	722~1016	762~1056	295mm	159~453

*Buzzer type: Add 23mm to the figures above (1~4tiers can be stacked)

PTE - DJ type

	Product Length (Min ~ Max ±3mm)					Adjusting range	Exposed wiring (±50mm)
	1s	2s	3s	4s	5s		
A	240~280	280~320	320~360	360~400	400~440	40mm	625~665
B	260~320	300~360	340~400	380~440	420~480	65mm	585~645
C	310~390	350~430	390~470	430~510	470~550	80mm	515~595
D	395~580	435~620	475~660	515~700	555~740	185mm	580~660
E	535~830	575~870	615~910	655~950	695~990	295mm	226~520

*Buzzer type: Add 24mm to the figures above (1~4tiers can be stacked)