



# MS86L Series

Ø86mm LED Signal Lights

- Wide light distribution with prism-cut lens
- Selectable Steady/Flashing modes by jumper

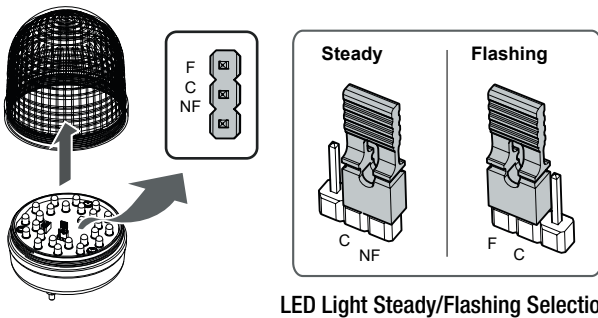


## Ordering Information

MS86L - F 02 - R  
 ①      ②      ③

① Light Style	<b>F</b>	Steady & Flashing
	<b>B</b>	Steady & Flashing w/Audible Alarm
② Power Supply	<b>02</b>	24V AC/DC
	<b>FF</b>	90-240V AC
③ Lens Colors	<b>R</b>	Red
	<b>Y</b>	Yellow
	<b>G</b>	Green
	<b>B</b>	Blue
	<b>C</b>	Clear

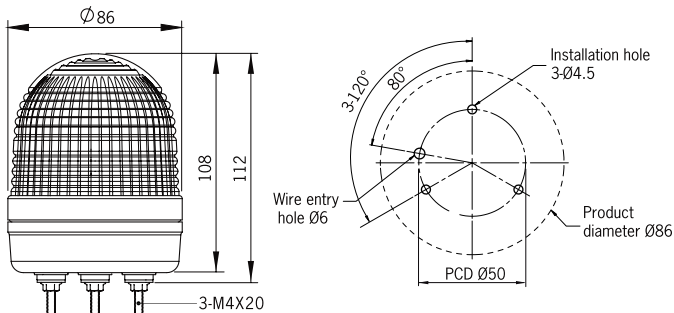
## Jumper setting



LED Light Steady/Flashing Selection

## Dimensions

unit: mm

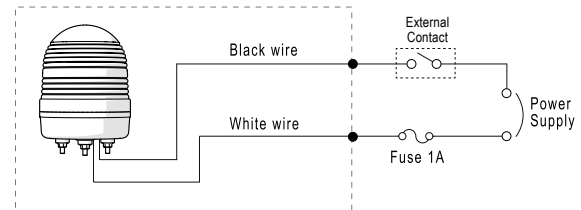


Mounting hole layout

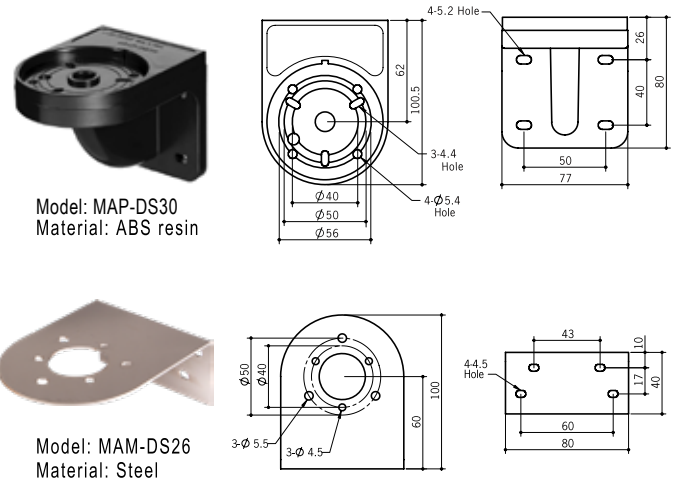
## Specifications

Functions		Steady/Flashing/Alarm	
Power Supply		24V AC/DC	90~240VAC
Current Consumption	R	0.33A (W/Alarm : 0.36A)	0.05A (W/Alarm : 0.08A)
	Y		
	G		
	B	0.49A (W/Alarm : 0.49A)	
	C		
Flash Rate		80 ±10 time/min	
Alarm Sound Level		80 ±5 dB	
Vibration		0.75mm h at 10~55 Hz	
Insulation Resistance		100 MΩ minimum (500VDC mega)	
Ambient Temperature		-20~40°C	
Storage Temperature		-20~70°C	
Ambient Humidity		45~85% RH	
Degree of Protection		IP65	
Recommended Wire Size		UL 2464, 22AWGx2C	
Weight		150g	
Certificate/Compliance		RoHS, UL	

## Wiring Diagram



## Wall mounting options (for all MS86 Series)



See page 19 - 21 for mounting options and accessories



# MS86S Series

Ø86mm Xenon Strobe Lights

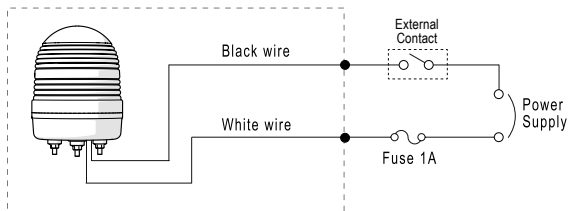


- Outstanding visibility from distance
- PCB module style Xenon lamp
- Fast and easy replacement of lamp

## Specifications

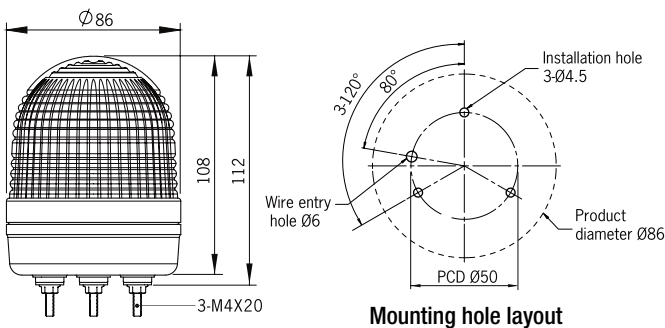
Lighting type	Xenon strobe		
Models	S00	N10	N20
Power Supply	12~24VAC/DC	110VAC	220VAC
Current Consumption	0.08~0.15A	0.07A	0.03A
Flash Rate	80 ± 10 times/minute		
Vibration	0.75mm at 10~55 Hz		
Insulation Resistance	100 MΩ minimum (500VDC mega)		
Ambient Temperature	-20~40°C		
Storage Temperature	-20~70°C		
Ambient Humidity	45~85% RH		
Degree of Protection	IP65		
Recommended Wire Size	UL 2464, 22 AWG X 2C		
Weight	300g	200g	
Certificate/Compliance	RoHS, UL		

## Wiring Diagram



## Dimensions

unit: mm



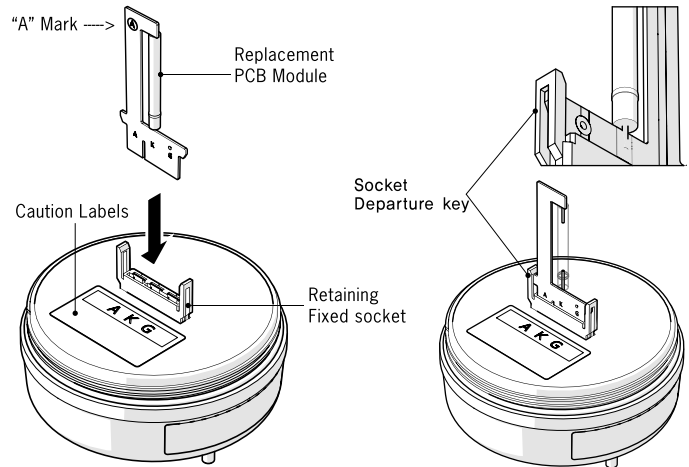
Mounting hole layout

## Ordering Information

MS86S - S00 - R  
① ②

① Power Supply	<b>S00</b>	12-24V AC/DC
	<b>N10</b>	110V AC
	<b>N20</b>	220V AC
② Lens Colors	<b>R</b>	Red
	<b>Y</b>	Yellow
	<b>G</b>	Ground
	<b>B</b>	Black
	<b>C</b>	Clear

## How to install Xenon bulb



The new lamp should be inserted firmly to match the same signal **A K G** (or **A G K**) mark. Printed "A" in circuit and label.

- ⚠ - If you insert reverse direction, the lamp can not operate.
- Insert the lamp circuit board correctly. not to inclined.

Supplier No.	MS86S-LAMP-02	MS86S-LAMP-10
	Description. Xenon Lamp I - Type, 3W 12~24V Lamp life: 1,000,000 Frequency. (2,000 hours)	
		Description. Xenon Lamp U - Type, 6W AC110V Lamp life: 1,000,000 Frequency. (2,000 hours)

See page 19 - 21 for mounting options and accessories



# MS86W Series

Ø86mm LED Low-head  
Multi-Function indicator light

- 2 flashing patterns(Selectable by DIP switch)
- Energy efficient: Low power consumption
- Main body: heat resistant ABS resin
- Good for both indoor or outdoor



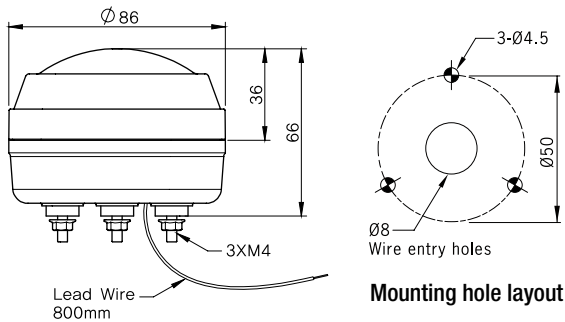
## Ordering Information

MS86W - R 00 - R  
① ② ③

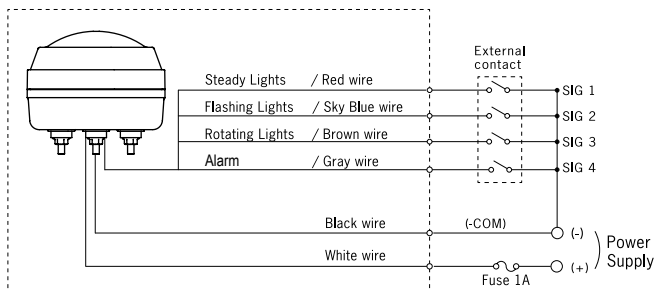
① Style	R	Steady + Flashing + Rotating
	B	Steady + Flashing + Rotating + Alarm
② Power	00	12-24V AC/DC(R-type only)
	02	24VAC/DC(B-type only)
③ Lens Colors	R	Red
	Y	Yellow
	G	Green
	B	Blue
	C	Clear

## Dimensions

unit: mm



## Wiring Diagram



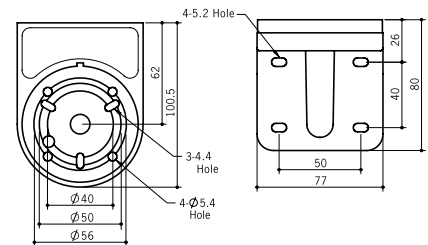
## Specifications

Functions	Steady, Flashing, Rotating w/Audible Alarm	
Input Voltate Options	12~24V AC/DC	
Current Consumption (RMS value ±10%)	LED	w/Alarm
	R	0.50A / 0.53A
	Y	0.50A / 0.53A
	G	0.30A / 0.34A
	B	0.35A / 0.38A
	C	0.38A / 0.40A
Flashing Rate	F1: 80 ±10 flashes/minute	
	F3: 240 ±10 flashes/minute(Emergency Signal)	
Rotating Rate	Approx. 130 ±20 rpm (clockwise rotation)	
Alarm Sound Level	80 ±5dB at 1m	
Vibration	Operating extremes:10~55 Hz, amplitude 0.75mm	
Insulation Resistance	100 MΩ minimum (500VDC mega)	
Ambient Temperature	-15~40°C	
Storage Temperature	-20~70°C	
Ambient Humidity	45~85% RH	
Degree of Protection	IP65	
Recommended Wire Size	UL1007/22AWG	
Weight	170g	
Certificate/Compliance	RoHS, UL	

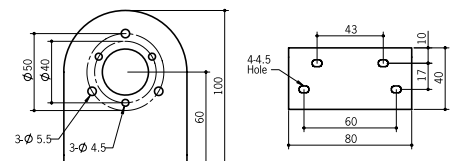
## Wall mounting options (for all MS86 Series)



Model: MAM-DS30  
Material: ABS resin



Model: MAM-DS26  
Material: Steel



See page B1 - B2  
for mounting options and accessories



# MS86T Series

Ø86mm High Intensity LED  
Multi Function Signal Lights



- Extremely high light output using unique LED technology
- Outstanding visibility at distance
- Flashing Cycles : 2 patterns (Selectable by a switch)
- Adjustable flashing or rotating cycles
- Built-in audible alarm with adjustable volume

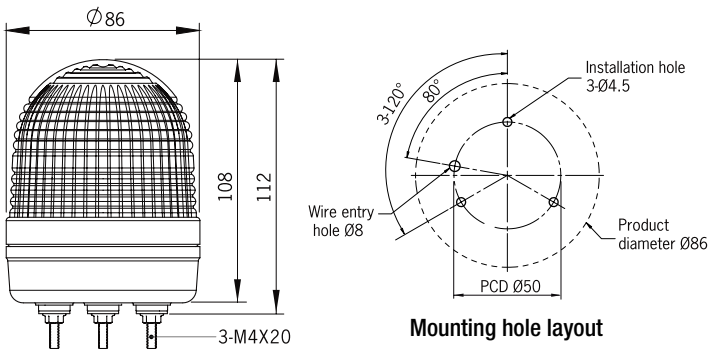
## Ordering Information

MS86T - R 02 - R  
① ② ③

① Light Style	<b>R</b>	Steady, Flashing & Rotating
	<b>B</b>	Steady, Flashing & Rotating w/Alarm
② Power Supply	<b>00</b>	12-24V AC/DC
	<b>FF</b>	90-240V AC
③ Lens Colors	<b>R</b>	Red
	<b>Y</b>	Yellow
	<b>G</b>	Green
	<b>B</b>	Blue
	<b>C</b>	Clear

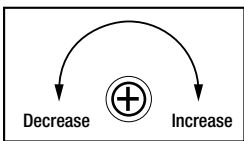
## Dimensions

unit: mm

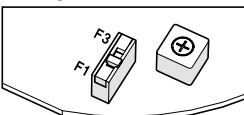


## Feature settings

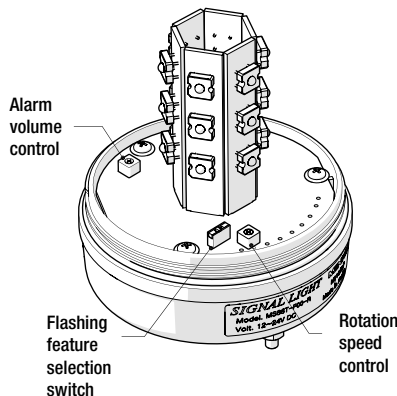
- Alarm volume control
- Rotation speed control



- Flashing feature selection



F1: 80±10 times per minute  
F3: 240±10 times per minute  
(emergency signal display light)

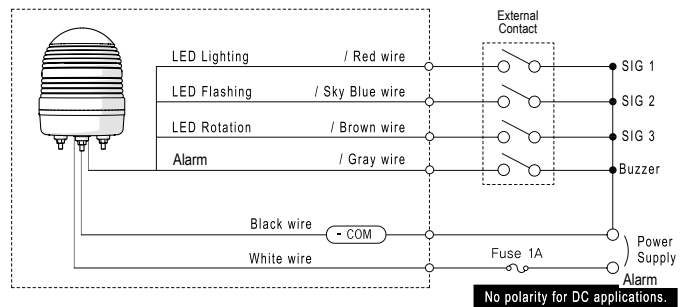


## Specifications

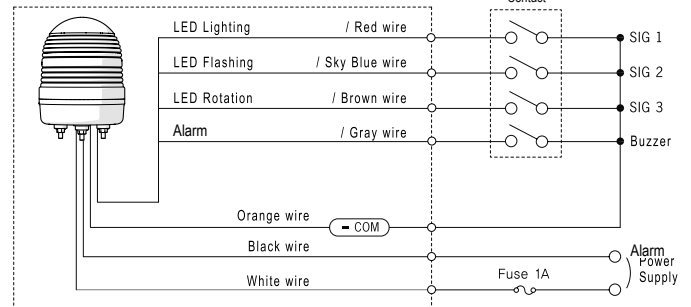
Lighting type	Steady/Flashing/Rotating/Alarm	
Power Supply	12~24VAC/DC	90~240VAC
Current Consumption	3 Sound type	Max. 0.52A±10%
	4 Sound type	Max. 0.65A±10%
	Alarm	150mA
Flash Rate	F1: 80 ±10 flashes/minute F3: 240 ±10 flashes/minute(emergency)	
Rotation Rate	Min 60 ~ Max 300rpm (clockwise)	
Alarm Sound Level	10-100 ±5dB at 1m	
Vibration	0.75mm at 10~55 Hz	
Insulation Resistance	100 MΩ minimum (500VDC mega)	
Ambient Temperature	-20~40°C	
Storage Temperature	-20~70°C	
Ambient Humidity	45~85% RH	
Degree of Protection	IP65	
Recommended Wire Size	UL1007/22AWG	
Weight	Approx. 230g	
Certificate/Compliance	RoHS, UL	

## Wiring Diagram

### 12-24V AC/DC



### 90-240V AC



See page 19 - 21  
for mounting options and accessories



# MS86M Series

Ø86mm 3 color in 1 High Intensity LED Signal Lights

- 3 color in 1 LED Modular Component
- High brightness LED light
- Adjustable Sound level 10 ~ 100dB
- Flashing cycles : 2 patterns (selectable by a switch)



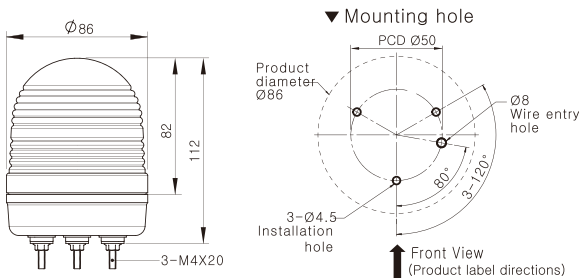
## Ordering Information

MS86M F 00 - RYG  
 ① ② ③

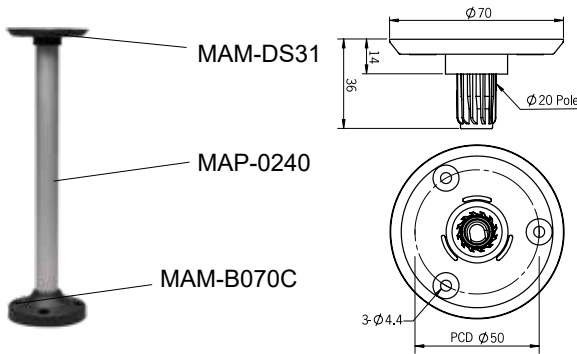
① Light Style	<b>F</b>	Steady & Flashing
	<b>B</b>	Steady & Flashing w/Audible Alarm
② Power Supply	<b>00</b>	12-24V AC/DC
	<b>FF</b>	90 ~240V AC
③ Colors	<b>RYG</b>	Red, Yellow and Green
	<b>RGB</b>	Red, Green and Blue

## Dimensions

unit: mm



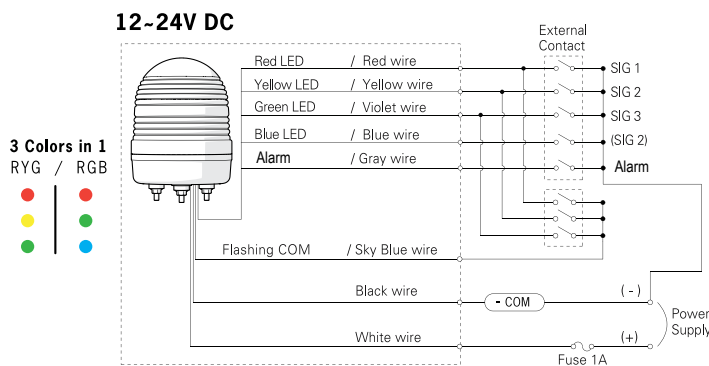
## MS86 Pole Mounting Option MAM-DS31 Dimensions



## Specifications

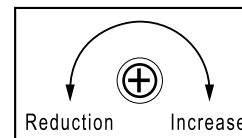
Lighting type	Steady+Flashing w/Audible Alarm	
Power Supply	12~24VAC/DC	90~240VAC
Current Consumption	LED	0.6A
	w/Alarm	0.23A
Flash Rate	F1: 80 ±10 flashes/minute F3: 240 ±10 flashes/minute	
Alarm Sound Level	10-100 ±5dB at 1m: Volume adjustable	
Vibration	0.75mm at 10~55Hz	
Insulation Resistance	100 MΩ minimum (500VDC mega)	
Ambient Temperature	-20~40°C	
Storage Temperature	-40~70°C	
Ambient Humidity	45~85% RH	
Degree of Protection	IP65	
Recommended Wire Size	UL1007/22AWG	
Weight	270g	

## Wiring Diagram

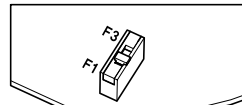


## Feature settings

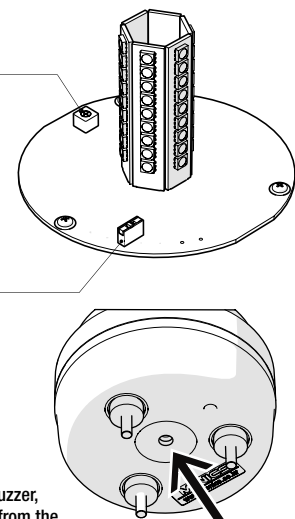
- Alarm volume control



-Flash settings



F1: 80 ±10 flashing per minute  
F3: 240 ±10 flashing per minute



Alarm hole

\* When installing a light with built in buzzer, please allow minimum of 5mm space from the surface to the base of unit.

See page 19 - 21  
for mounting options and accessories

# MW86T/M Series

Ø86mm LED/Multi Function Signal Lights

- High intensity LED
- 2 flashing mode: Standard and Emergency Signaling
- Adjustable Sound volume and Rotating speed
- 3 Melody & 3 siren modes
- Removable horn included



Horn Type



Standard Type



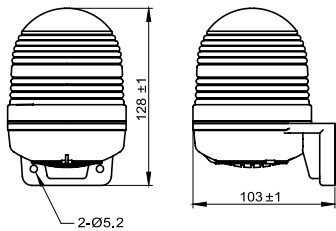
## Ordering Information

MW86 - T - R - 00 - Y - M3 (B)  
 ① ② ③ ④ ⑤

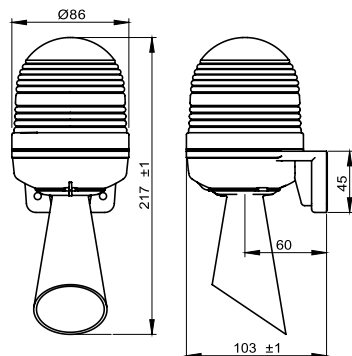
① Model	<b>T - R</b>	Steady/Flashing/Rotating	
	<b>M - F</b>	3 color in 1 Steady/Flashing	
② Power	<b>00</b>	12 ~ 24VDC	
	<b>FF</b>	90 ~ 240VAC	
③ Lens Colors	<b>MW86T</b>	<b>R</b>	Red
		<b>Y</b>	Yellow
		<b>G</b>	Green
		<b>B</b>	Blue
		<b>C</b>	Clear
	<b>MW86M</b>	<b>RYG</b>	Red, Yellow, Green
<b>RGB</b>		Red, Green, Blue	
④ Sound Type	<b>M3</b> (melody)		Fur Elise
			Home, Sweet home
			The Cuckoo Waltz
	<b>S3</b> (Siren)		Fire truck
			Police car
		Ambulance	
⑤ Body color	<b>no mark</b>	Ivory	
	<b>B</b>	Black	

## Dimensions (Unit: mm)

Standard Type



Horn Type

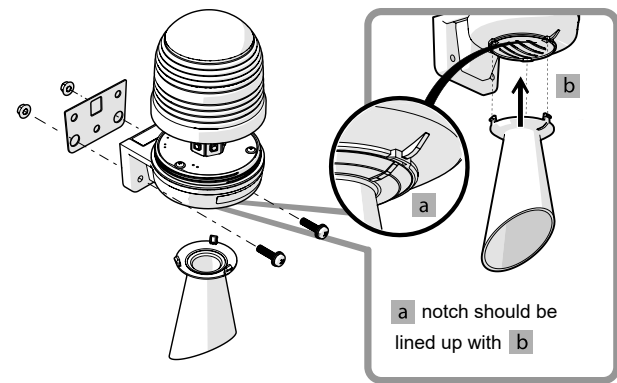
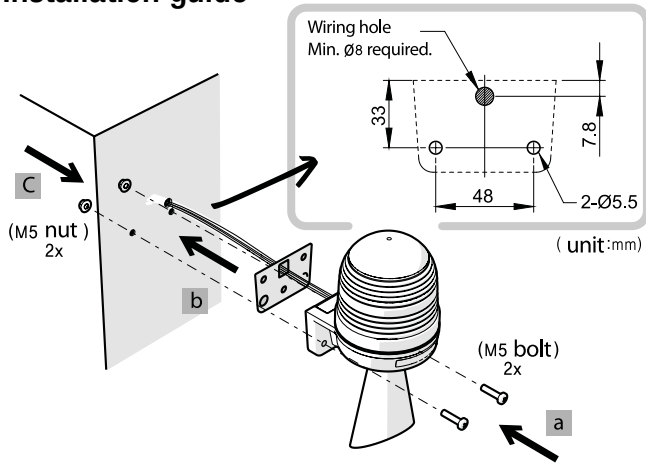


## Specifications

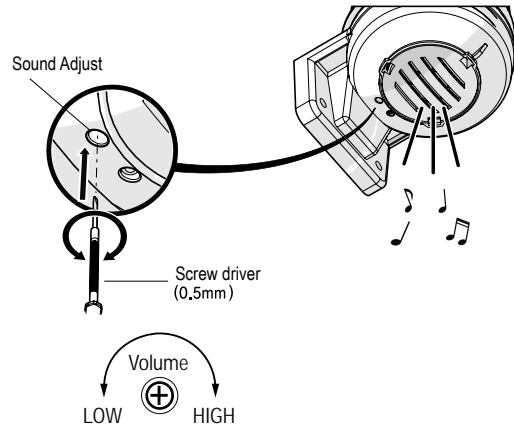
Model	MW86T		MW86M	
Lighting type	Steady / Flashing / Rotating		Steady / Flashing	
Power Supply	12 ~ 24VDC	90 ~ 240VAC(50~60Hz)	12 ~ 24VDC	90 ~ 240VAC(50~60Hz)
Current Consumption	Light	Max 0.32A ±10%	Max 0.10A ±10%	Max 0.40A ±10%
	w/Sound	Max. 0.52A±10%	Max 0.16A ±10%	Max 0.20A ±10%
Flash Rate	80 times/min ± 5 (F1), 240 times /min ± 10 (F3)			
Rotation Rate	60 ~ 300 ± 10 RPM(clock wise)		N/A	
Alarm Sound Level	Standard Type	55 ~ 85±5dB	Standard Type	55 ~ 85±5dB
	Horn Type	55 ~ 90±5dB	Horn Type	55 ~ 90±5dB
Material	Body: ABS, Lens: PC			
Insulation Resistance	100 MΩ minimum (500VDC mega)			
Ambient Temperature	-20~40°C			
Storage Temperature	-20~70°C			
Ambient Humidity	45~85% RH			
Degree of Protection	Standard Type	IP43	Standard Type	IP43
	Horn Type	IP54	Horn Type	IP54
Recommended Wire Size	UL1007/22AWG			
Weight	Standard Type	Approx. 279g	Standard Type	Approx. 286g
	Horn Type	Approx. 306g	Horn Type	Approx. 313g
Certificate/Compliance	UL, RoHS			

# Installation guide

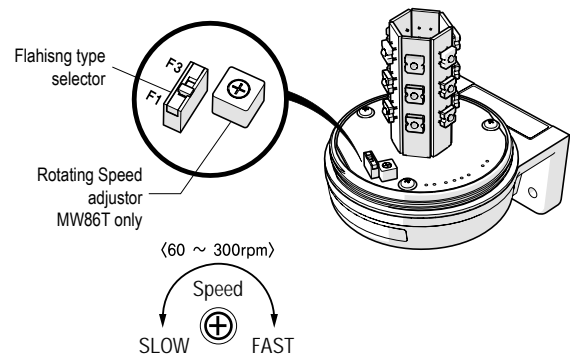
## Installation panel drawing



# Volume Control



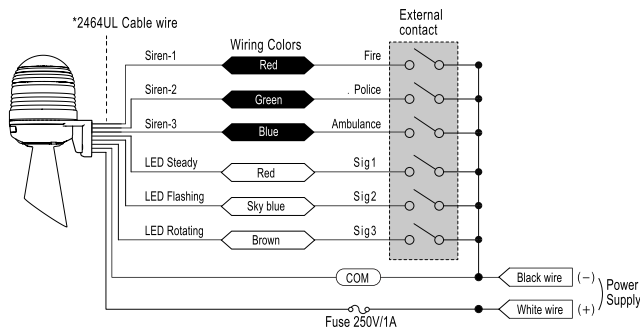
# Flashing/Rotating setting



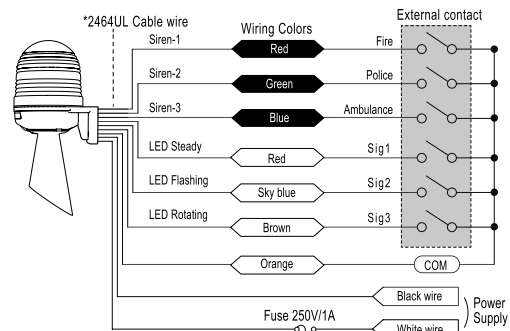
# Wiring Diagram

## MW86T

12 ~ 24V

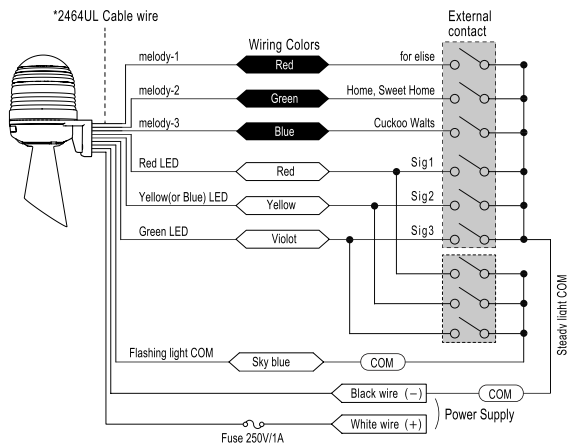


## 90 ~ 240V



## MW86M

12 ~ 24V



## 90 ~ 240V

