# **OPERATING MANUAL**



## SHDL / SHD2L

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Heavy duty LED Steady/Flashing Light with Phone

Thank you for purchasing Q.Light product.

Please read this manual carefully before installing this system for safe and long use of the product.

## 1 Product Feature

- Aluminum housing product with long shelf-life of light source by employing high-brightness LED.
- Excellent in diffusing signal light by employing unique direct-diffusion system.
- Possible to select sound tone and volume by using built-in sound tone selection switch and volume controller.
- Material: Lens-PC, Body-DIECAST AL, Horn Housing-SUS316L, Horn Housing-SUS316L, Protection Cage(Option)-SUS316L
- Flashes(Flashing Type): 60-80/Min.
- Volume : SHDL 113-118dB(1m), SHD2L 113-118dB x 2(1m)
- Protection Class: IP56
- Certificate : CE, ABS, KIMM

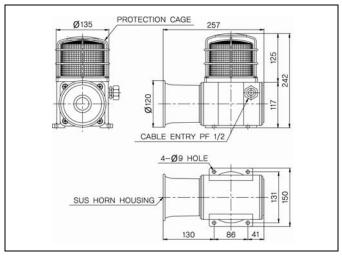
## 2 Specification & External View Drawing

## 1) SHDL

#### Product Specification

Model	Rated Voltage	Current	Weight	Flashes	Color
SHDL	DC12V	1.305A	3.02Kg	60-80/Min.	0 P
	DC24V	1.095A	3.02Kg		Green-R Amber-A
	AC110V	0.372A	3.39Kg		Green-G
	AC220V	0.181A	3.39Kg		Blue-B

## · External View Drawing

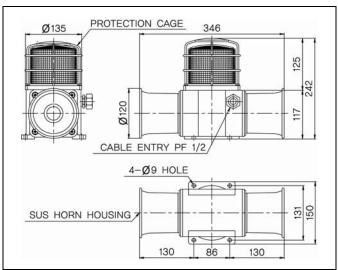


## 2) SHD2L

#### Product Specification

	Model	Rated Voltage	Current	Weight	Flashes	Color
	SHD2L	DC12V	2.375A	4.07Kg	60-80/Min.	Green-R
		DC24V	2.025A	4.07Kg		Amber-A
		AC110V	0.548A	4.13Kg		Green-G
		AC220V	0.264A	4.13Kg		Blue-B

### • External View Drawing



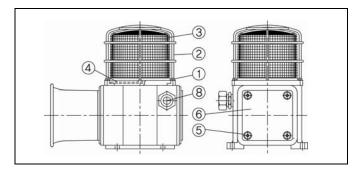
## 3 Sound Tone Specification

Туре	Main Built-in Sound	СН	Sound Tone	Volume
		ch1	Fire A-ANG(Wail)	118dB
		ch2	Emergency WA-U(Yelp)	(SHDL)
WS	5 Warning	ch3	Ambulance PI-PO(High-Low)	118dB x 2
WS	Sounds	ch4	Machinery Fault( PI-PI-PI-)	(SHD2L)
		ch5	Foam Release Alarm	
			(PI~Continuous)	



WP	5 Special Warning Sounds	ch2	Fire A-ANG(Wail) Abandon Alarm Machinery Fault(PI-PI-PI-) Foam Release Alarm (PI~Continuous) General Alarm (Long PI~+ 7 Short PI.)	118dB (SHDL) 118dB x 2 (SHD2L)
WM	5 Melodies	ch3	Sweet Home For Elise Cuckoo's Waltz Piano Sonata Turkish March	118dB (SHDL) 118dB x 2 (SHD2L)
WA	5 Alarms	ch1 ch2 ch3 ch4 ch5	Beep(Intermittent) Door Chime Phone Ring Machinery Fault(PI PI PI PI.) Tripping Bead Sound	116dB (SHDL) 116dB x 2 (SHD2L)
WV	3 Voice Signals	ch1 ch2 ch3	Reproduction of Voice Recording 3 Channels	113dB(SHDL) 113dB x 2 (SHD2L)

## 4 Structure Drawing



## 5 Steady / Flashing Selection

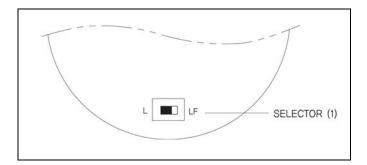
This product has a built-in switch(1) on assembling board for steady/flasing selection. Refer to above structure drawing, following drawing and explanation for right operating.

#### 1) Lens(Protection Cage) Removal

Remove Protection Cage② and Lens③ from the product by loosening bolt(M4-4EA)① and make sure assembling board④.

## 2) Selecting Steady/Flashing Type

Choose steady light or flashing light by using Steady/Flashing selection switch(1). "L" mode of the switch is steady type and "LF" mode is flashing type.



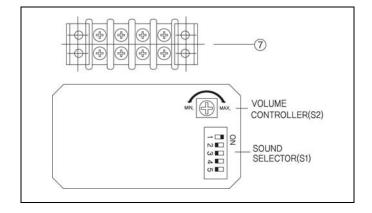
# RusAutomation

#### 3) Lens(Protection Cage) Assembling

Assemble the lens(or Lens and Protection Cage) in reverse order of separating.

## 6 Sound Tone Selection, Volume Control, Wiring

Refer to structure drawing together with below drawing and explanation for right operating.



## 1) Body Cover Removal

Remove body cover<sup>®</sup> by loosening body cover bolt(M5 4EA)<sup>®</sup> and make sure related parts on phone control board.

## 2) Sound Tone Selection

- 5 Warning sound tones are built-in this product. In case of standard product, select preferable sound tone by using internal sound tone selection switch(S1).
- In case of LC Type(Custom-Made) product,refer to below explanation and drawing.

#### 3) Volume(dB) Control

 Volume controller(S2) is built-in this product. Turn it clockwise for increasing volume or turn it counterclockwise for decreasing volume

## 4) Wiring Power Line

- ${\color{red} \bullet}$  Make sure terminal plate  ${\color{gray} \overline{ \mathbb{T}}}$  inside the body of the product.
- Treat the end of power cable by using "O" or "U" type terminal for safe wiring.
- Connect power cable to terminal plate.
- In case of product using AC voltage, connect the line without polarity(wire color).
- In case of product using DC voltage, black line is negative(-).

#### 5) Treating Power Entry

- Keep the tightness of power entry® by using water-proof connector(flexible connector #16 is supplied as a standard specification) or cable grand.
- Product can be damaged by water or dust if the cable entry is exposed outdoor without airtightening.



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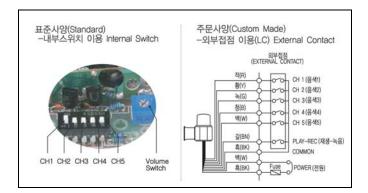


#### 6) Body Cover Assembling

Assemble the body cover in reverse order of separating.

#### ■ Wiring for LC(External Contact) Type - Custome Made

- In case of LC type which selets sound tone by external contact, power line and signal line come out. Connect each line as below.
- Power Line: UL1015-NO.16(1.25sq) x 2C 400mm
- Signal Line: UL1007-NO.22(0.3sq) 400mm
- In case of product using AC voltage, do not allow power supply either to common line or to signal line..



#### 5) Treating Power Entry

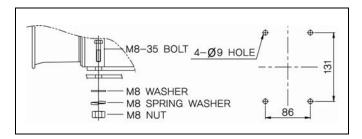
- Keep the tightness of power entry® by using water-proof connector(flexible connector #16 is supplied as a standard specification) or cable grand.
- Product can be damaged by water or dust if the cable entry is exposed outdoor without airtightening.

#### 6) Body Cover Assembling

Assemble the body cover in reverse order of separating.

## 7 Mounting

- This product is water-proof and anti-corrosion type for outdoor use. But, install with vertical direction at a place or machine where exists no big vibration and no strong impact as long as possible.
- Refer to below information and drill necessary mounting holes on profitable part of the product.
  - (Make sure PCD from external view drawing.)
- Fix the product by using mounting bolt(M8-4EA).



## 8 Caution

- This product is explosion-proof, water-proof and anti-corrosion type. When separate and assemble the product for wiring, repair or check, keep the airtightnees of the product by tightening each bolt and nut.
- If using voltage is seriously higher or lower than rated voltage, it can reduce the self-life of the product or can cause a problem on product operating. Make sure the using voltage does not exceed +/- 5% of the rated voltage.
- If lens or body of the product is contaminated by chemicals such as thinner, benzene, the product can be damaged, discolored or deformed. Please be careful.
- Keep airtightness of cable entry by using water-proof cable grand or water-proof connector. Product can be damaged by water or dust if the cable entry is exposed outdoor without airtightening
- Do not give strong impact to the product. It can be a reason of part(s) damage or short circuit.
- Do not strongly pull the wire out from the product. It can cause a disorder.

## 9 Troubleshooting

Situation	Main Cause	Solution	
Non- Lighting Partly	LED is Partly Damaged Supplying Higher Voltage than Rated Voltage	Making Sure Using Voltage	
Abnormal Higher Sound Output	Supplyinhg Voltage Higher Than Rated Voltage		
Feeble Lighting Bad Sound Quality	Supplyinhg Voltage Lower Than Rated Voltage		
Lighting but	Wrong Operating L/LF Selection Switch	Convert L/LF Select on Switch	
Non-Flashing	Problem L/LF Selection Switch	Contact Q.Light or Their Agent	
Double Sound	Short Circuit of Sound Tone Signal Line	Making Sure Wiring	
Tone	Error on Sound Tone Selection Switch	Contact Q.Light or Their Agent	
	Wrong Wiring	Making Sure Wiring	
No Sound	Problem with Horn	Contact Q.Light or Their Agent	
No Lighting/Flashing	No power Supply	Making Sure Power Supply	
No Sound	Wrong Wiring	Making Sure Wiring	

## - For A/S & Information on Porduct

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