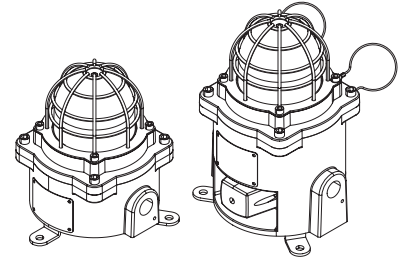
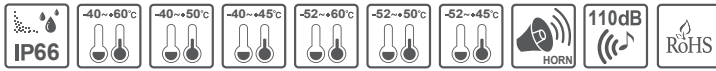


# Explosion Proof LED Signal/ Warning Light and Electric Sounder Combination

## QNE(S)/ QNE(S)-CR



Thank you for purchasing Qlight's products. Please read this user manual carefully prior to installation and operation to ensure safe and correct use.

### Safety Precautions for Explosion Proof Products

Please follow the instruction below to ensure safe and correct use of explosion proof products.

1. Explosion proof products should be managed according to explosion proof regulations. Do not disassemble, assemble, alter or repair the product arbitrarily.
2. The temperature rating of the product is the temperature the product will experience at the applied rated voltage and ambient temperature indicated.
3. Use cable glands that satisfy the product's explosion proof grade and temperature grade.
4. Unused cable entries must be filled with material that meets the explosion proof grade and temperature rating.
5. Before installing the product, please make sure all cautions indicated on the labels, packaging, and operation manual of the product are fully understood.
6. Installation, maintenance and repair of the product must be performed by experts in the explosion proof field, or persons who have received relevant training.
7. For safety, the product should be installed and operated in environments that avoid high temperature and high pressure.
8. Please follow general safety precautions and avoid installing the product in locations that may generate excessive heat.
9. When installing the product in places where chemicals are located, please make sure that the environment does not have two or more incompatible chemicals mixed. For safety, please read the instruction manual carefully and be mindful of the chemical compositions where the product is used.
10. This product requires grounding.
11. Please note that special conditions shall be applied if the sign "X" is placed after the certificate number.
  - 1) For safe use, regular overpressure test must be carried out in accordance with EN 60079-1, clause 15.2.3.
  - 2) For safe use, tempered glass must be protected from strong impact
12. When using NPT cable glands (plugs), it is recommended to use them after applying non-hardening grease to maintain protective performance.

### Precaution for Safety

Failure to follow the instructions below may cause a loss of life or serious physical injury.

1. During wiring or maintenance, please completely turn off the power of the product. (Failure to follow this may lead to an electric shock.)
2. Do not install the product in locations that subjects it to excessive dust or water other than the conditions designated by the IP protection ratings indicated for each product. (Failure to follow these instructions may cause a fire to the product, electric shock, physical injury, malfunction or damage to the product.)
3. Do not alter or repair this product. If maintenance or repair service is required, please contact your local Qlight contact point. (Failure to follow these instructions may lead to fire, electric shock, or product damage.)
4. Please apply the correct voltage to the product. (Failure to follow these instructions may lead to fire, electric shock, or product damage.)
5. When the product is applied to a condition that may impact lives or property, please make sure to have a double safety device. (Failure to follow this may cause damage to property, fire, electric shock and loss of life.)

### Precautions for Correct Use

Failure to follow the proper instructions may cause damage to property, the product, or malfunction of the product that would void the warranty.

1. Please remove any objects that can interrupt ventilation around the product.
2. Please turn off the power of the product immediately if it fails to operate properly.
3. Carefully wire the product according to each product's specification.
4. Please be careful in preventing chemicals such as thinner, benzene, etc. in contact with the surface of the product.
5. Do not apply excessive force/impact to the product.
6. Failure to follow any of the instructions above may cause malfunction or damage to the product, fire, and electric shock.



Please scan the QR code for more detailed product information.

[www.qlight.com](http://www.qlight.com)

## Ordering Specifications



<b>QNE</b>	-	<b>110/230</b>	-	<b>R</b>	-	<b>SUS</b>
[Model number]		[Voltage]		[Color]		[Housing material]
• QNE • QNE-CR • QNE-SUS • QNE-CR-SUS		• 12/24-DC12V-24V • 110/230-AC110V-230V		R-Red A-Amber G-Green B-Blue		• None - Al • SUS - STS316L



<b>QNES</b>	-	<b>WS</b>	-	<b>110/230</b>	-	<b>R</b>	-	<b>SUS</b>
[Model number]		[Sound]		[Voltage]		[Color]		[Housing material]
• QNES • QNES-CR • QNES-SUS • QNES-CR-SUS		• WS-Warning sounds • WP-Special warning sounds • WM-Melodies • WA-Alarms • WV-Customizable sounds		• 12/24-DC12V-24V • 110/230 -AC110V-230V		R-Red A-Amber G-Green B-Blue		• None - Al • SUS - STS316L



## Product Specifications

### Explosion Proof Specifications

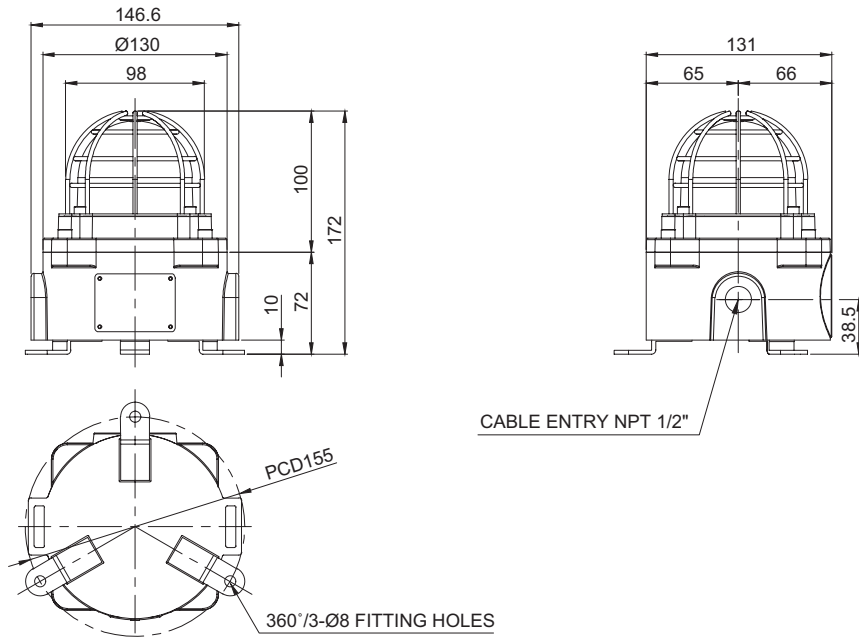
Model number	QNE(Al/ SUS)	Zone definitions(Gas)	Zone 1	High risk gas/vapour(Gas)
	QNE-CR(Al/ SUS)		Zone 2	Medium risk gas/vapour(Gas)
	QNE(Al/ SUS)	Group definitions(Gas)	GROUP II A	Acetone, Petrol, Methanol, Propane, Toluene
	QNES-CR(Al/ SUS)		GROUP II B	Ethylene, City gas
Range of operating voltage	DC 12V or 24V AC 110V or 230V		GROUP II C	Hydrogen, Acetylene, Carbon sulphide
		Maximum surface temperature of electrical equipment	T1	450°C
Ex mark	QNE/ QNES IECEX - Ex db IIC T6/T5 Gb ATEX -  II2G Ex db IIC T5/T6 Gb KCs - Ex d IIC T6/T5 NEPSI,CCC - Ex db IIC T5/T6 Gb		T2	300°C
			T3	200°C
	QNE-CR/ QNES-CR IECEX - Ex db IIC T5/T6 Gb ATEX -  II2G Ex db IIC T5/T6 Gb	Zone definitions(Dust)	T4	135°C
			T5	100°C
Ambient operating temperature	QNE -40°C ≤ Tamb ≤ +60°C (T5) -40°C ≤ Tamb ≤ +50°C (T6)	Group definitions(Dust)	T6	85°C
	QNE-CR -52°C ≤ Tamb ≤ +60°C (T5) -52°C ≤ Tamb ≤ +50°C (T6)		Zone 21	High risk powder/dust(Dust)
	QNES -40°C ≤ Tamb ≤ +60°C (T5) -40°C ≤ Tamb ≤ +45°C (T6)		Zone 22	Medium risk powder/dust(Dust)
	QNES-CR -52°C ≤ Tamb ≤ +60°C (T5) -52°C ≤ Tamb ≤ +45°C (T6)	Group definitions(Dust)	GROUP II A	Ignitable fibers/flyings(more than 0.5mm)
Explosion proof Zone	Zone1, Zone2		GROUP II B	Non-conductive dusts
Material	ALDC12.1, SUS316L		GROUP II C	Conductive dusts
Protection rating	IP66			

## ■ General Product Specifications

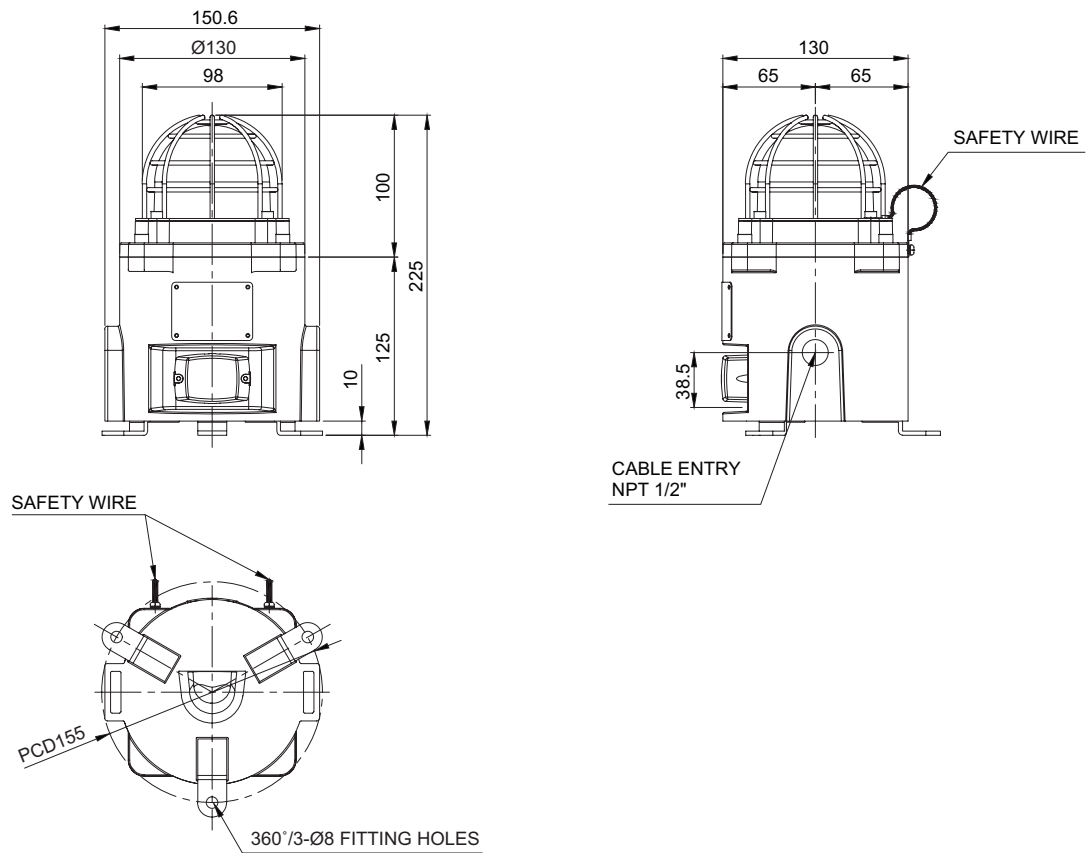
Model number	Voltage	Current	Certificates	Weight	Color
QNE	DC12-24V	Max.350mA		2.05kg	R-Red A-Amber G-Green B-Blue
	AC110-230V	Max.110mA			
QNE-SUS	DC12-24V	Max.350mA		4.65kg	
	AC110-230V	Max.110mA			
QNE-CR	DC12-24V	Max.350mA		2.05kg	
	AC110-230V	Max.110mA			
QNE-CR-SUS	DC12-24V	Max.350mA		4.65kg	
	AC110-230V	Max.110mA			

Model number	Voltage	Current	Sound pattern and volume	Certificates	Weight	Color
QNES	DC12-24V	Max.1.6A	<ul style="list-style-type: none"> <li>• WS-5 Warning sounds : Max.110dB</li> <li>• WP-5 Special warning sounds : Max.110dB</li> <li>• WM-5 Melodies : Max.105dB</li> <li>• WA-5 Alarms : Max.105dB</li> <li>• WV-5 Customizable voices : 99-106dB</li> </ul>		3.15kg	R-Red A-Amber G-Green B-Blue
	AC110-230V	Max.300mA				
QNES-SUS	DC12-24V	Max.1.6A			7.60kg	
	AC110-230V	Max.300mA				
QNES-CR	DC12-24V	Max.1.6A			3.15kg	
	AC110-230V	Max.300mA				
QNES-CR-SUS	DC12-24V	Max.1.6A			7.60kg	
	AC110-230V	Max.300mA				

## QNE/ QNE-SUS/ QNE-CR/ QNE-CR-SUS

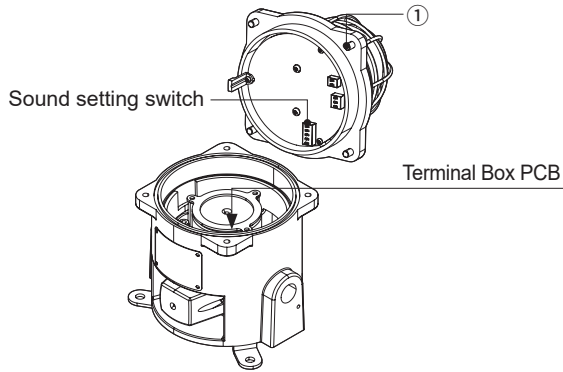


## QNES/ QNES-SUS/ QNES-CR/ QNES-CR-SUS

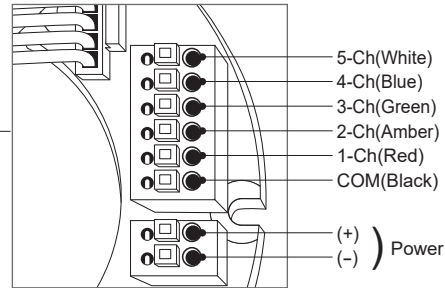


## Terminal Block Instructions

- Disassemble the cover assembly set.
  - Loosen four M6 bolts.
- For detailed wiring instructions, please refer to image below. Please assemble the cover set in reverse order of disassembly.

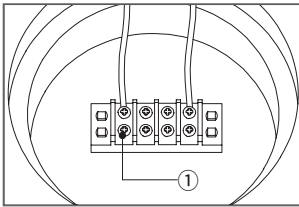


### Terminal Box Wiring Instructions(QNES)



- ※ Please be careful of signal line jams during reassembly of the cover set.
- ※ Applicable cable range: AWG16~AWG22

### Terminal Box Wiring Instructions(QNE)

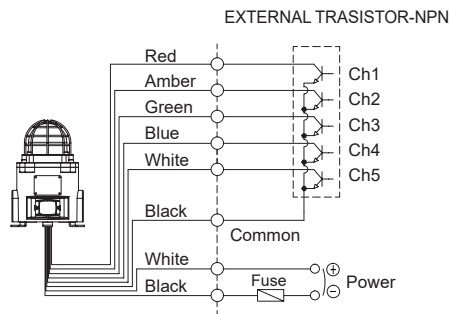
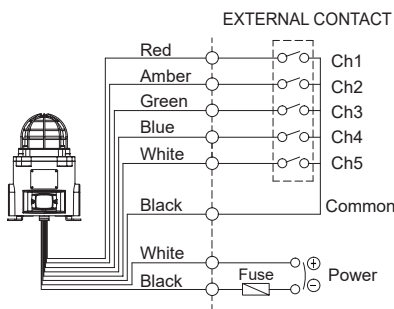


- Terminal block is located inside of the QNE.
- Please apply fork (U-type) or ring (O-type) locking spade terminal at naked tip of the wire for secure connection.
- Please wire the power line to terminal ①
- For AC type products, wire regardless of polarity.
- For DC type products, wire terminal of black line to (-) polarity.
- External signal line - UL1015 AWG18(0.75sq) x 2C

## Sound Setting - Select using External contact(LC)(QNES(-CR) only).

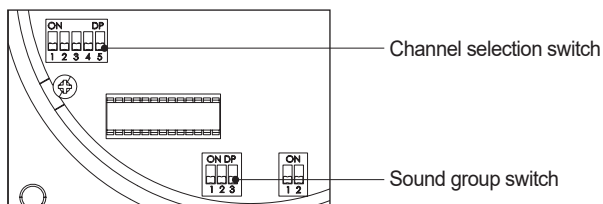
- Customized wiring available to select the sound tone via external contact or transistor wiring type (Model number : -LC)

### QNES/ QNES-CR-DC/AC



- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line - UL1007 AWG22(0.3sq) 400mm

## Sound Setting - Select using the switch inside of the unit(QNES(-CR) only).



- The standard type product has a sound setting switch built-in inside the product.
- For standard type, once the unit is powered on, light and sound are working simultaneously.
- Select the desired channel using the channel selection switch
- For tone group settings, refer to the website [Customer Support] - [Technical Data] - [Types of Tone and Combination of General Tone products].

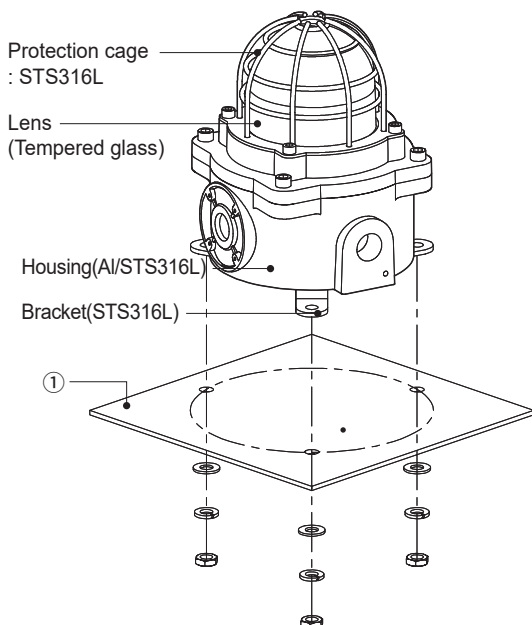
### ■ Channel selection switch configuration

Category	Sound pattern	Channel	Sound Tone	volume (Max.)
WS	5 Warning sounds	Ch1	Fire.A-ANG	110dB
		Ch2	Emergency WA-U	
		Ch3	Ambulance PI-PO	
		Ch4	Machinery Fault	
		Ch5	High Expansion	
WP	5 Special Warning sounds	Ch1	Fire.A-ANG	110dB
		Ch2	Abandon Alarm	
		Ch3	Machinery Fault	
		Ch4	High Expansion	
		Ch5	7 Short Pl. / 1 Long	
WM	5 Melodies	Ch1	Sweet Home	105dB
		Ch2	For Elise	
		Ch3	Cuckoo's Waltz	
		Ch4	Piano Sonata	
		Ch5	Turkish March	
WA	5 Alarms	Ch1	Beep Intermittent	105dB
		Ch2	Door Chime	
		Ch3	Phone Ring	
		Ch4	Pl.PI.PI Short	
		Ch5	Tripping Beat	
WV	5 Customizable sounds	Ch1-Ch5	Available upon request(customized voice type)	103dB

※ In case of customized WV 5 tone type, there may be difference of volume depending on user's audio file type.

## Parts Definition/ Installation/ Light Function Selection

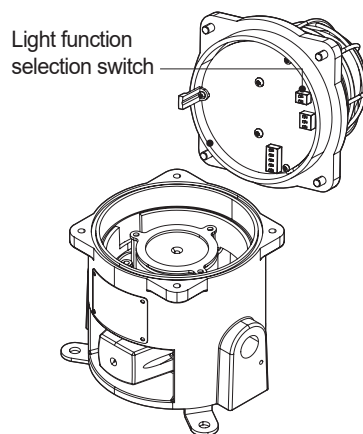
### ■ Parts Definition/ Installation



- First, machine taps or holes on the mounting surface ①.
- The mounting hole of this product is 8mm in diameter.
- When machining taps, fasten the bolt through the mounting hole of the product.
- When machining holes, insert the bolt through the hole of the product, and tighten the nut from the opposite side of the mounting surface.

### ■ Light Function Selection

- Please refer to the chart below to use light function selection switch located inside the product.



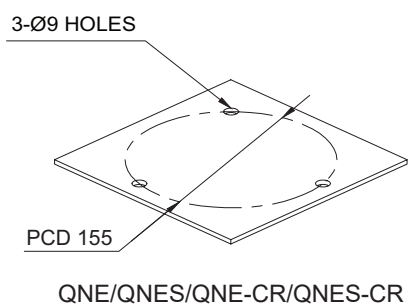
No.	Light function		Operation
	1	2	
0	0	0	Steady LED
1	0	1	Flashing LED
2	1	0	Strobe LED
3	1	1	Simulated revolving/ flashing LED

- Select the desired function for your application during installation.

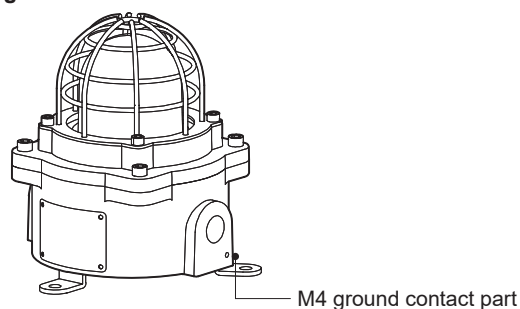
## Mounting Hole Specifications/ Grounding Instructions

### ■ Mounting Hole Specifications

- Machine holes on the mounting surface referring to the diagram below.



### ■ Grounding Instructions



- Please use an M4 bolt at the location marked in the diagram above to ground the product.
- When connecting the grounding cable, please use a ring terminal.
- Please use a ring terminal made of C5212 material as it has the same electrical properties of the conductor.
- Please use a grounding cable with a diameter greater than 4mm.

## Installation Environment and Protection Rating

- This product is designed for use with protection rating of IP66.
- If the product is installed in locations that subject it to excessive dust or water other than the designated IP protection rating indicated (IP66), it may cause malfunction or damage to the product.
- For further information, please visit our website ([www.qlight.com](http://www.qlight.com)).



For your safety

Specification and dimensions listed in this catalogue subject to change without notice for product quality improvement.  
The newest product information is available on our website.(www.qlight.com)  
Please read the instruction manual attached to the product carefully before installation and use.

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You can expect prompt service if you have exact information such as model name, symptom, telephone number and address.

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