Explosion Proof Warning Light/ Signal Light and Electric Horn Combinations

SESA/ SESAS/ SESAL/ SESALR















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.

Precaution for Safety

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

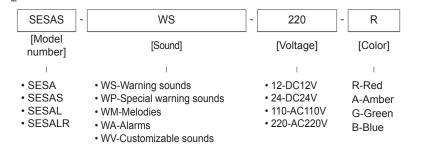
- 1. During wiring or maintenance, please completely turn off the power of the product. (Failure to follow this may lead to an electric shock.)
- 2. Do not install the product in locations that subjects it to excessive dust or water other than the conditions designated by the IP protection ratings indicated 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.

Ordering Specifications





Please scan the QR code for more detailed product information.

www.qlight.com

Product Specifications

■ Explosion Proof Specifications

Model number	SESA			
	SESAL			
	SESALR			
	SESAS			
Range of	DC 12V or 24V			
operating voltage	AC 110V or 220V			
Ex mark	IECEX - Ex d IIC T6 Gb ATEX - ⟨ □ ⟩ II 2G Ex d IIC T6 KCs - Ex d IIC T6 IP66 Ex tD A21 T85°C IP66 Ex d II B+H2 IP66 T6 NEPSI - Ex d II C T6 Gb Ex tD A21 IP66 T80°C			
Ambient operating temperature	–40°C ≤ Ta ≤ 55°C			
Explosion proof Zone	Zone1, Zone2, Zone21, Zone22			
Protection rating	IP66			

Zone	Zone 1	High risk gas/vapour		
definitions(Gas)	Zone 2	Medium risk gas/vapour		
Group definitions(Gas)	GROUP II A	Acetone, Petrol, Methanol, Propane, Toluene		
	GROUP II B	Ethylene, City gas		
delimitions(Gas)	GROUP II C	Hydrogen, Acetylene, Carbon sulphide		
	T1	450°C		
Maximum	T2	300°C		
surface temperature of electrical equipment	T3	200°C		
	T4	135°C		
	T5	100°C		
	T6	85°C		
Zone	Zone 21	High risk powder/dust		
definitions(Dust)	Zone 22	Medium risk powder/dust		
Group definitions(Dust)	GROUP II A	Ignitible fibers/flyings(mzore than 0.5mm)		
	GROUP II B	Non-conductive dusts		
	GROUP II C	Conductive dusts		

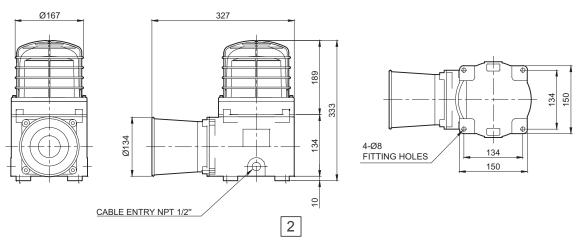
■ General Product Specification

Model number Voltage		Bulb specifications		าร					
	Voltage	e Current	Volts/ Watts	Configuration	Part#	Sound pattern and volume	Certificate	Weight	Color
	DC12V	3.755A	12V15W	G23 15S	17	WS-5 Warning sounds Max.118dB WP-5 Special warning sounds		0.57149	R-Red A-Amber
SESA	DC24V	1.788A	24V15W	G23 15S	18		ATEX CCS CS	8.57kg	
SESA	AC110V	0.422A	12V15W	G23 15S	17			9.27kg	
	AC220V	0.211A	12V15W	G23 15S	17	: Max.118dB			
	DC12V	2.933A				• WM-5 Melodies : Max.118dB	_ 0 10	0.4514	G-Green
CECAC	DC24V	1.411A	200V	EUB0641	48	WA-5 Alarms: Max.116dB WV-5 Customizable sounds	IECEX EX CS	8.45kg	B-Blue
SESAS	AC110V	0.360A	-550V	, -1A(G) U type	(0) 40	: Max.113dB	Ex NEPSI CCS	8.86kg	
	AC220V	0.220A							

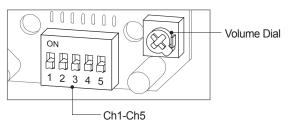
Model number	Voltage	Current	Sound pattern and volume	Certificate	Weight	Color
SESAL -	DC12V	2.511A	WS-5 Warning sounds Max.118dB WP-5 Special warning sounds Max.118dB WM-5 Melodies: Max.118dB WA-5 Alarms: Max.116dB WV-5 Customizable sounds Max.113dB	RCEX EX	8.42kg	R-Red A-Amber G-Green B-Blue
	DC24V	1.222A				
	AC110V	0.286A		NETSI) CCS (Ss	9.02kg	
	AC220V	0.143 A				
SESALR -	DC12V	2.633A		IECEX EX CS	8.31kg	
	DC24V	1.288A				
	AC110V	0.308A		NEPS) CCS	7.92kg	
	AC220V	0.154A				

Dimensions (Units: mm)

SESA/ SESAL/ SESALR/ SESAS



Sound Setting - Select using the switch inside of the unit.



 Standard unit has 5 built-in sound tones. Select different built-in sounds using the sound setting switch.

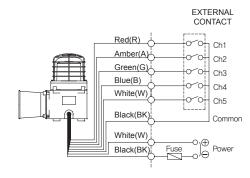
■ Sound Type by Group

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Category	Sound pattern	Channel	Sound Tone	Volume (Max.)		
	5 Warning	Ch1	Fire.A-ANG			
1440		Ch2	Emergency WA-U			
WS		Ch3	Ambulance PI-PO	118dB		
	sounds	Ch4	Machinery Fault			
		Ch5	High Expansion			
		Ch1	Fire.A-ANG			
	5 Special	Ch2	Abandon Alarm			
WP	warning	Ch3	Machinery Fault	118dB		
	sounds	Ch4	High Expansion			
		Ch5	7 Short Pl. / 1 Long			
	5 Melodies	Ch1	Sweet Home			
		Ch2	For Elise			
WM		Ch3	Cuckoo's Waltz	118dB		
		Ch4	Piano Sonata			
		Ch5	Turkish March			
	5 Alarms	Ch1	Beep Intermittent			
		Ch2	Door Chime			
WA		Ch3	Phone Ring	116dB		
		Ch4	PI.PI.PI Short			
		Ch5	Tripping Beat			
WV	5 Customizable sounds	Ch1- Ch5	Available upon request (customized voice type)	113dB		

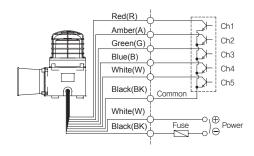
Sound Setting - Select using External contact(LC).

 LC type product with exposed sound selection signal line is avaliable upon request. Please refer to the diagram below for wiring.

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EXTERNAL TRANSISTOR-NPN



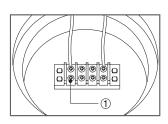
- External power line UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line UL1007 AWG22(0.3sq) 400mm

Volume Adjustment



- The volume output of this product is adjustable.
- Turn the volume dial clockwise to increase the volume, and turn counter clockwise to decrease the volume.
- There will be no sound when the dial is put at MIN.

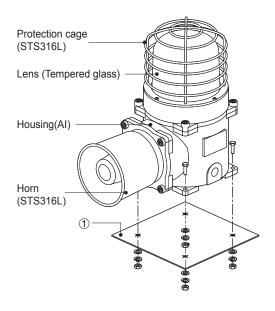
Terminal Box Wiring Instructions



- Terminal block is located inside of the product. Unscrew the 4 bolts located in the upper body to get rid of the upper lighting element of the unit.
- 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.

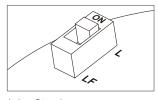
Parts Definition/ Installation/ Light Function Selection

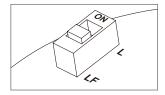
■ Parts Definition



■ Light Function Selection(SESAL only)

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





▶L: Steady

▶LF: Flashing

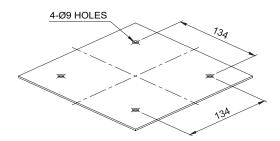
• Default function is set at steady LED. Select the desired function for your application during installation.

■ Installation

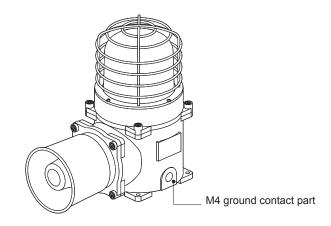
- First, machine holes on the mounting surface ①.
- The mounting hole of this product is 8mm in diameter.
- When machining taps, fasten the bolt through the mounting hole of the bracket.
- When machining holes, insert the bolt through the hole of the product, and tighten the nut from the opposite side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

Mounting Hole Specifications

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



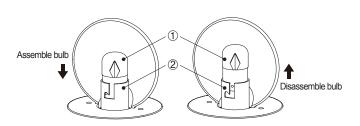
Grounding Instructions



- 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 grounding cable with a diameter greater than 4mm.

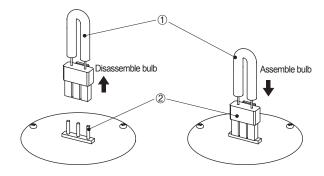
Bulb/Xenon Bulb Replacement Instructions

■ Bulb Replacement Instructions(SESA only)



- Please wait at least 1 minute after turning off the power before replacing the bulb.
- In order to dissemble the bulb, please push down the bulb(①) lightly and screw it counterclockwise.
- In order to put the bulb in to the unit, please place the bulb(1) in the socket(2) and screw it clockwise while lightly pushing down the bulb.

■ Xenon Bulb Replacement Instructions(SESAS only)



- Please wait at least 30 minutes after turning off the power before replacing the xenon bulb.
- Please pull out the entire xenon bulb structure ① to disassemble while pushing the hook down.
- For xenon bulb assembly, please push down the connector portion of the xenon bulb structure to the connector pin location ② until it makes "clark" sound.

Installation Environment and Protection Rating

- This product is designed to be explosion proof.
- Please make sure to use the product in an environment that meets the specified explosion proof rating and regulations.
- For further information, please visit our website (www.qlight.com).

• Qlight products are designed to meet strict quality and technical standards. Thus, the Qlight brand is widely recognized for its high quality and technical innovations from leading institutions around the world.



ISO International Organization for Standardization

Qlight quality assurance systems have been certified by ISO by applying the ISO 9001:2008, KS Q ISO 9001:2009 regulation.



ATEX The European Regulatory
Framework or Manufacture,
Installation and Use of Equipment in Explosive Atmospheres

Qlight's explosion proof products comply with ATEX Directives 94/9/EC.



KCs Explosion Proof Device Safety Certification System

The safety performance of machines and equipment subject to safety certification and Technical capability and production system have been certified safety certification standards.



ABS American Bureau of Shipping

Qlight's design and quality assurance system has been certified by the American Bureau of Shipping.



CCS China Classification Society

Qlight's design and quality assurance system has been certified by the China Classification Society.



LR Lloyd's Register

Qlight's design and quality assurance system has been certified from Lloyd's Register.



KC Korea Safety Certification

Qlight's products are certified by KC for preventing accident caused by fire.



CCC China Compulsory Certificate

Qlight's has obtained CCC which guarantees safety, protection against fraud, environment, etc.



UL Underwriters Laboratories

Qlight's design and quality assurance system has been certified from UL to ensure the stability of consumption goods and to protect consumers.



ICAO International Civil Aviation Organization

Qlight guarantees our products satisfy the criteria regulated by the International Civil Aviation Organization(ICAO, FAA).



IECEx International Explosion Proof Certification (IECEx)

Certified that Qlight's products are being manufactured and manage according to international standards.



NEPSI National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation

Qlight's design and manufacturing system meets the People's Republic of China National explosion proof Standard. (Chinese Standard-GB3836/GB12476)



TIIS Japan Explosion-proof Certification

TIIS is a Japanes explosion proof test and certification system accordance with the Ministry of Health, Labour and Welfare Notice and the explosion proof guidelines for factory electrical equipment. Qlight's explosion proof products hasve been tested and certified by TIIS.



RMRS Russian Maritime Register of Shipping

Qlight's design and quality assurance system has been certified from Russian Maritime Register of Shinning



KR Korean Register of Shipping

Qlight's design and quality assurance system has been certified by the Korean Register of Shipping.



E-mark Commission Directive Regarding Vehicle Industry

Qlight has obtained EU mark for approved vehicles and vehicle components sold into the EU(EEA: European Fconomic Area)



KCC Conformity Assessment of Broadcasting Communication Equipment

Qlight has been certified to protect the electromagnetic environment that causes unwanted electromagnetic waves from the device, communication failure due to other devices or external radio waves, and malfunction of the device



CCCF China Certification Center for Security & Protection

Qlight has passed the rigorous examination process of "Passing Fire Protection Products Centering" In order to sell fire-fighting products such as fire alarm equipment to Chinese market.



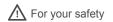
CE European Commission

Qlight has been certified by the European Commission.



RoHS2 Restriction of Hazardous Substances Directive

Qlight c omplies with the Restriction of Hazardous Substances Directive by limiting its use of hazardous materials.



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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