Explosion Proof Warning Light/ Signal Light and Electric Horn Combinations

SA/ 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.
- 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

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

Ordering Specifications

SESAS	-	WS	-	220	-	R
[Model number]	-	[Sound]		[Voltage]		[Color]
I		I		I		I
• SESA		 WS-Warning sounds 		• 12-DC12V		R-Red
• SESAS		 WP-Special warning sounds 		• 24-DC24V		A-Amber
 SESAL 		 WM-Melodies 		• 110-AC110V		G-Green
 SESALR 		 WA-Alarms 		• 220-AC220V		B-Blue
		 WV-Customizable sounds 				

Product Specifications

■ Explosion Proof Specifications

	SESA
Model number	SESAL
Model Hullibel	SESALR
	SESAS
Range of	DC 12V or 24V
operating voltage	AC 110V or 220V
Ex mark	IECEX - Ex db IIC T6 Gb ATEX - (a) II2G Ex db IIC T6 Gb KCs - Ex d IIC T6 IP66 Ex tD A21 T85°C IP66 Ex d IIB+H2 IP66 T6 NEPSI - Ex d IIC T6 Gb Ex tD A21 IP66 T80°C CCC - Ex d IIC T6 Gb
Ambient operating temperature	-40°C ≤ Ta ≤ 55°C(KCs) -40°C ≤ Ta ≤ 60°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 II A	Acetone, Petrol, Methanol, Propane, Toluene
Group definitions(Gas)	GROUP II B	Ethylene, City gas
delimitions(Gas)	GROUP II C	Hydrogen, Acetylene, Carbon sulphide
	T1	450°C
Maximum	T2	300°C
surface	T3	200°C
temperature of electrical	T4	135°C
equipment	T5	100°C
	Т6	85°C
Zone	Zone 21	High risk powder/dust
definitions(Dust)	Zone 22	Medium risk powder/dust
_	GROUP II A	Ignitible fibers/flyings(mzore than 0.5mm)
Group definitions(Dust)	GROUP II B	Non-conductive dusts
delimitions(Dust)	GROUP II C	Conductive dusts

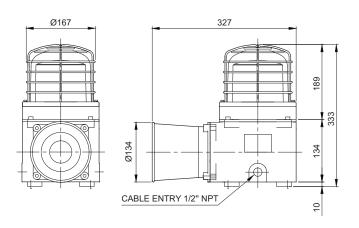
■ General Product Specification

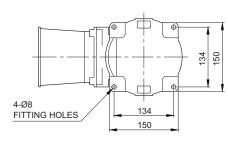
Model number Voltage Cur			Bulb specifications		าร	Sound pattern and volume	Certificate	Weight	Color	
		Current	Volts/ Watts	Configuration Part#						
	DC12V	3.755A	12V15W	G23 15S	17			8.57kg		
SESA	DC24V	1.788A	24V15W	G23 15S	18	WS-5 Warning sounds	CCS (\$\mathbb{G}\$s	6.57 Kg		
SESA	AC110V	0.422A	12V15W	G23 15S	17	: Max.118dB • WP-5 Special warning sounds		Max.118dB	9.27ka	R-Red
	AC220V	0.211A	12V15W	G23 15S	17	: Max.118dB		9.27 Kg	A-Amber	
	DC12V	2.933A				• WM-5 Melodies : Max.118dB		0.4514	G-Green	
SESAS AC	DC24V	1.411A	200V	-1A(G) U type	48	• WA-5 Alarms: Max.116dB • WV-5 Customizable sounds : Max.113dB	IEČEK EX ES	8.45kg	B-Blue	
	AC110V	0.360A	-550V					8.86kg		
	AC220V	0.220A								

Model number	Voltage	Current	Sound pattern and volume	Certificate	Weight	Color
	DC12V	2.511A			0.401.4	
SESAL	DC24V	1.222A	WS-5 Warning sounds Max.118dB WP-5 Special warning sounds Max.118dB	IEĈEX (EX) (III)	8.42kg	R-Red A-Amber
	AC110V	0.286A		CCS (Ss	9.02kg	
	AC220V	0.143 A				
	DC12V	2.633A	WM-5 Melodies : Max.118dB		0.2414	G-Green
SESALR -	DC24V	1.288A	WA-5 Alarms: Max.116dB WV-5 Customizable sounds : Max.113dB	EGEX EX Cs	8.31kg	B-Blue
	AC110V	0.308A		CCS CCS	7.92kg	
	AC220V	0.154A				

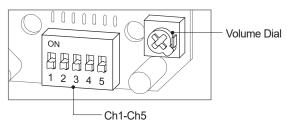
Dimensions (Units : mm)

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.

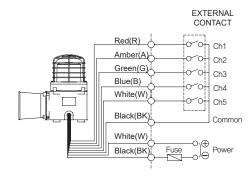
■ Sound Type by Group

Category	Sound pattern	Channel	Sound Tone	Volume (Max.)		
		Ch1	Fire.A-ANG			
14/0	5 Warning sounds	Ch2	Emergency WA-U			
WS		0	Ch3	Ambulance PI-PO	118dB	
		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			
		Ch1	Beep Intermittent			
	5 Alarms	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		

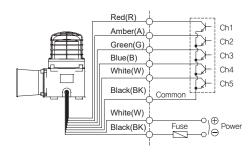
Sound Setting - Select using External contact(LC).

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

SESA/ SESAL/ SESALR/ SESAS



EXTERNAL TRANSISTOR-NPN



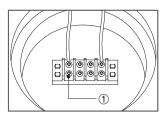
- • External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line UL1007 AWG22(0.3sq) 400mm

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.

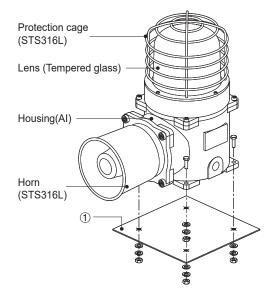
Terminal Box Wiring Instructions



- 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.
- For standard type, once the unit is powered on, light and sound are working simultaneously.

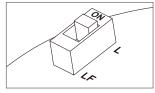
Parts Definition/ Installation/ Light Function Selection

■ Parts Definition



■ Light Function Selection(SESAL only)

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



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▶L: Steady

▶LF : Flashing

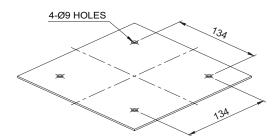
 Default function is set at steady LED. Select the desired function for your application during installation.

■ Installation

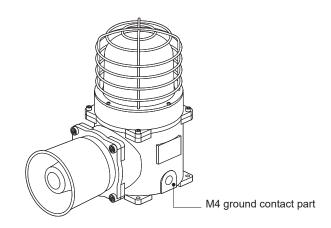
- First, machine holes on the mounting surface ①.
- The mounting hole of this product is 8mm in diameter.
- When machining taps, fasten the bolt through the mounting hole of the bracket.
- When machining holes, insert the bolt through the hole of the product, and tighten the nut from the opposite side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

Mounting Hole Specifications

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



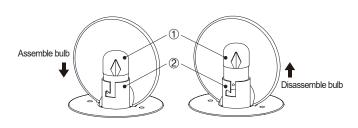
Grounding Instructions



- 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.

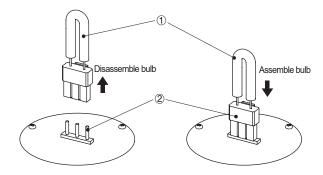
Bulb/Xenon Bulb Replacement Instructions

■ 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.



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.



ICAO International Civil Aviation Organization

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



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.



CCC China Compulsory Certificate

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



RoHS2 Restriction of Hazardous Substances Directive

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



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 Economic 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



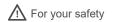
CCCF China Certification Center for Security & Protection

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.



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.

**ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE

RELIABILITY FUNCTION OR DESIGN OR OTHERWISE

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