Explosion Proof Electric Horn

SPNA



















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.
- 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.
- 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.

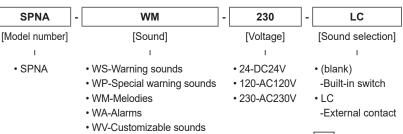
- 1. During wiring or maintenance, please completely turn off the power of the product. (Failure to follow this may lead to an electric shock.)
- 2. Do not install the product in locations that subjects it to excessive dust or water other than the conditions designated by the IP protection ratings indicated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

Ordering Specifications





Please scan the QR code for more detailed product information.

www.qlight.com

Product Specifications

■ Explosion Proof Specifications

Model number	SPNA	
Range of	DC 24V	
operating voltage	AC 120V or 230V	
Ex mark	IECEx - Ex db IIC T6 Gb, IP66 ATEX - ⟨ II 2G Ex db IIC T6 Gb, IP66 NEPSI, CCC - Ex db IIC T6 Gb, IP66 KCs - Ex d IIB+H2 IP66 T6(SPNA) Ex d IIC T6 IP66(SPNAKC) Ex tD A21 IP65 T85°C(SPNAKC) TS - Ex db IIC T6 IP66 Gb	
Ambient operating temperature	-20°C ≤ Tamb ≤ +60°C(TS) -40°C ≤ Tamb ≤ +55°C(KCs) -40°C ≤ Tamb ≤ +60°C	
Explosion proof Zone	Zone1, Zone2, Zone21, Zone22	
Protection rating	IP66	

Zone definitions(Gas)	Zone 1	High risk gas/vapour(Gas)		
	Zone 2	Medium risk gas/vapour(Gas)		
Group definitions(Gas)	GROUP II A	Acetone, Petrol, Methanol, Propane, Toluene		
	GROUP II B	Ethylene, City gas		
	GROUP II C	Hydrogen, Acetylene, Carbon sulphide		
	T1	450°C		
Maximum	T2	300°C		
surface temperature of electrical Equipment	Т3	200°C		
	T4	135°C		
	T5	100°C		
	Т6	85°C		
Group definitions(Dust)	Zone 21	High risk powder/dust(Dust)		
	Zone 22	Medium risk powder/dust(Dust)		
Group definitions(Dust)	GROUP II A	Ignitible fibers/flyings(more than 0.5mm)		
	GROUP II B	Non-conductive dusts		
	GROUP II C	Conductive dusts		

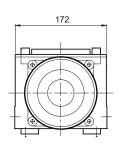
■ General Specifications

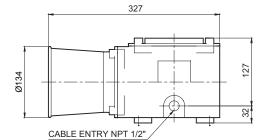
Model number	Voltage	Current	Sound pattern and volume	Certificates	Weight
	DC24V	830mA	WS-5 Warning sounds: Max.118dB WP-5 Special warning sounds: Max.118dB WM-5 Melodies: Max.118dB WA-5 Alarms: Max.116dB WV-5 Customizable sounds: 110-115dB	FCEX EX EX CES COS	6.09kg
SPNA	AC120V	190mA			6.44kg
	AC230V	110mA			6.44kg

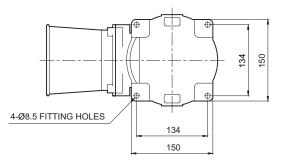
- * Voltage AC120V: AC110V-120V, AC230V: AC220V-230V
- \divideontimes In case of customized WV 5 tone type, there may be difference of volume depending on user's audio file type.

Dimensions (Units : mm)

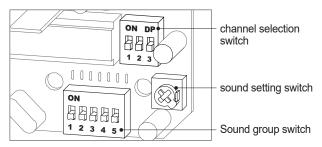
SPNA







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.
- For tone group settings, refer to the website [Customer Support] -[Technical Data] - [Types of Tone and Combination of General Tone products].

■ Sound Type by Group

Category	Sound pattern	Channel	Sound tone	volume (Max.)	
		Ch1	Fire.A-ANG		
WS	5 Warning sounds	Ch2	Emergency WA-U		
		Ch3	Ambulance PI-PO	Max. 118dB	
		Ch4	Machinery Fault		
		Ch5	High Expansion		
		Ch1	Fire.A-ANG		
	5 Special	Ch2	Abandon Alarm		
WP	Warning	Ch3	Machinery Fault	Max. 118dB	
	sounds	Ch4	High Expansion	TIOUD	
		Ch5	7 Short Pl. / 1 Long		
WM	5 Melodies	Ch1	Sweet Home	May	
		Ch2	For Elise		
		Ch3	Cuckoo's Waltz	Max. 118dB	
		Ch4	Piano Sonata		
		Ch5	Turkish March		
WA	5 Alarms	Ch1	Beep Intermittent	May	
		Ch2	Door Chime		
		Ch3	Phone Ring	Max. 116dB	
		Ch4	PI.PI.PI Short	TIOUD	
		Ch5	Tripping Beat		
WV	5 Customiz- able sounds	Ch1-Ch5	Available upon request (customized voice type)	110- 115dB	

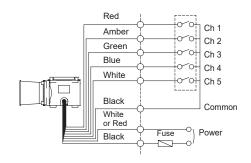
※ In case of customized WV 5 tone type, there may be difference of volume depending on user's audio file type.

Wiring Instruction for LC Type

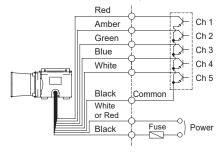
 LC type product with exposed sound selection signal line is available upon request. Please refer to the diagram below for wiring.

SPNA-DC/AC

(External contact)

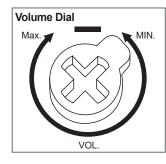


(EXTERNAL TRASISTOR-NPN)



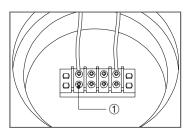
- External power line UL1015 AWG18(0.75sq) x 2C 400mm
 External signal line UL1007 AWG22(0.3sq) 400mm
- This product can be wired regardless of polarity.

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.

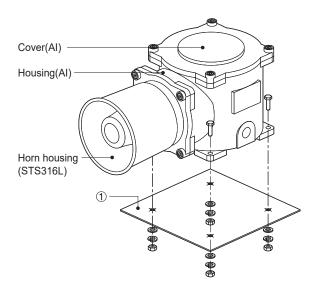
Terminal Box Wiring Instructions



- 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.
- * Applicable cable range : AWG16-AWG22

Parts Definition/Installation

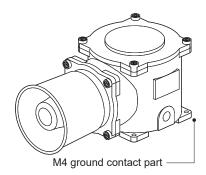
■ Parts Definition



■ Installation

- First, machine holes on the mounting surface ①
- The mounting hole of this product is 8.5mm 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.

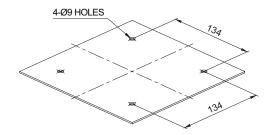
Grounding Instructions



- 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.

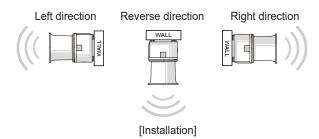
Mounting Hole Specifications

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



Precautions for installation

 In case of outdoor applications, install the product in the upright position. Do not install the product horizontal or upside-down positions where water can potentially penetrate into the product and impact it's operation.



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).

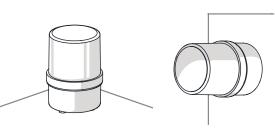
Product installation direction

■ Install the product in accordance with the manual. Otherwise rainwater or moisture may penetrate into the product.

· BEACON/SIGNALING LIGHT

* For products with a protection rating of less than IPX4, please install it vertically.

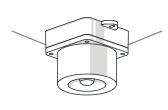
Power cord inlet part shall not be facing the sky.

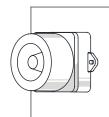




· ELECTRONIC SOUNDER/SIGNAL HORN

Sounder part shall not be facing the sky.







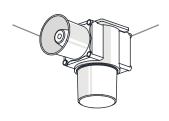


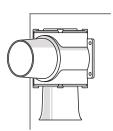




· HEAVY-DUTY & EXPLOSION PROOF SIGNALINGS

Sounder part shall not be facing the sky.







· SIGNAL TOWER LIGHTS

* For products with a protection rating of less than IPX4, please install it vertically.

Power cord inlet part shall not be facing the sky.

