# **USB LED Tower Lights**

# ST45(M)L/ST56(M)EL/ST80(M)EL-USB











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

### Precautions 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, and 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 Specification**

### • ST45(M)L-USB

ST45L-USB-BZ	- 3	RAG	- LW18
[Model number]	[Layer]	[Color]	[Mount bracket]
1	i	1	I
<ul> <li>ST45L-USB-BZ</li> </ul>	• Layer1-1	R-Red	• (Blank)
<ul> <li>ST45L-USB-WS</li> </ul>	<ul><li>Layer2-2</li></ul>	A-Amber	<ul> <li>Standard type</li> </ul>
<ul> <li>ST45L-USB-WM</li> </ul>	• Layer3-3	G-Green	<ul> <li>Mounting type</li> </ul>
<ul> <li>ST45L-USB-WA</li> </ul>	• Layer4-4	B-Blue	-LB18 -LW18
<ul> <li>ST45ML-USB-BZ</li> </ul>	• Laver5-5	W-White	- QZ18 - SZ18
<ul> <li>ST45ML-USB-WS</li> </ul>	,		- QL18 - SL18
<ul> <li>ST45ML-USB-WM</li> </ul>			- QLA18
<ul> <li>ST45ML-USB-WA</li> </ul>			

### • ST80(M)EL-USB

ST80EL-USB-BZ	- 3	- RAG	- LW24
[Model number]	[Layer]	[Color]	[Mount bracket]
1	1	I	1
• ST80EL-USB-BZ	• Layer1-1	R-Red	• (Blank)
<ul> <li>ST80EL-USB-WS</li> </ul>	<ul><li>Layer2-2</li></ul>	A-Amber	<ul> <li>Standard type</li> </ul>
<ul> <li>ST80EL-USB-WM</li> </ul>	<ul> <li>Layer3-3</li> </ul>	G-Green	<ul> <li>Mounting type</li> </ul>
<ul> <li>ST80EL-USB-WA</li> </ul>	<ul> <li>Layer4-4</li> </ul>	B-Blue	- LB24 - LW24
<ul> <li>ST80MEL-USB-BZ</li> </ul>	• Layer5-5	W-White	- QZ24 - SZ24
<ul> <li>ST80MEL-USB-WS</li> </ul>	,		- QL24 - SL24
<ul> <li>ST80MEL-USB-WM</li> </ul>			- QLA24
<ul> <li>ST80MEL-USB-WA</li> </ul>			

### ST56(M)EL-USB

ST56L-USB-BZ	- 3 -	RAG	- LW18
[Model number]	[Layer]	[Color]	[Mount bracket]
I	ı	1	1
<ul> <li>ST56EL-USB-BZ</li> </ul>	<ul><li>Layer1-1</li></ul>	R-Red	• (Blank)
<ul> <li>ST56EL-USB-WS</li> </ul>	<ul><li>Layer2-2</li></ul>	A-Amber	<ul> <li>Standard type</li> </ul>
<ul> <li>ST56EL-USB-WM</li> </ul>	• Layer3-3	G-Green	<ul> <li>Mounting type</li> </ul>
<ul> <li>ST56EL-USB-WA</li> </ul>	• Layer4-4	B-Blue	-LB18 -LW18
<ul> <li>ST56MEL-USB-BZ</li> </ul>	• Laver5-5	W-White	- QZ18 - SZ18
<ul> <li>ST56MEL-USB-WS</li> </ul>	,		-QL18 - SL18
<ul> <li>ST56MEL-USB-WM</li> </ul>			- QLA18
<ul> <li>ST56MFL-LISB-WA</li> </ul>			



Please scan the QR code for more detailed product information.

www.aliaht.com

# **Product Specifications**

### •ST45(M)L-USB

Model nur	mber	Layer	Certificate	Color
		1		R-Red
ST45L-USB-BZ		2		R-Red G-Green
ST45L-USB-WS ST45L-USB-WM ST45L-USB-WA	5 Buzzer sounds 5 Warning sounds	3		R-Red A-Amber G-Green
ST45ML-USB-BZ ST45ML-USB-WS ST45ML-USB-WM ST45ML-USB-WA	5 Melodies 5 Alarms	4	-	R-Red A-Amber G-Green B-Blue
ST4SIVIL-USD-VVA		5		R-Red A-Amber G-Green B-Blue W-White

### • ST56(M)EL-USB

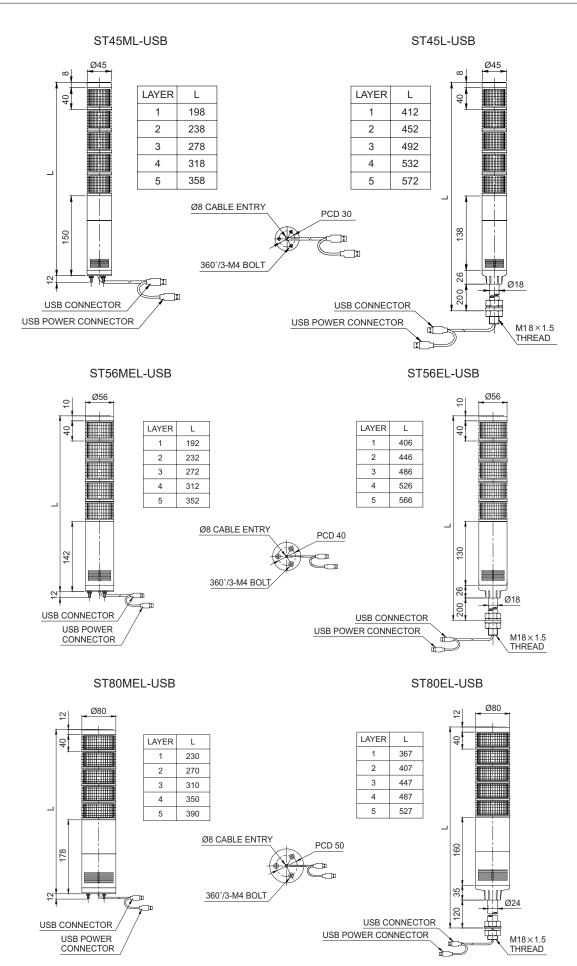
Model nu	mber	Layer	Certificate	Color
		1		R-Red
ST56EL-USB-BZ		2		R-Red G-Green
ST56EL-USB-WS ST56EL-USB-WM ST56EL-USB-WA	5 Buzzer sounds 5 Warning sounds	3		R-Red A-Amber G-Green
ST56MEL-USB-BZ ST56MEL-USB-WS ST56MEL-USB-WM ST56MEL-USB-WA	5 Melodies 5 Alarms	4	C€	R-Red A-Amber G-Green B-Blue
O TOOMEL TOOL TWA		5		R-Red A-Amber G-Green B-Blue W-White

### • ST80(M)EL-USB

Model nu	mber	Layer	Certificate	Color
		1		R-Red
ST80EL-USB-BZ		2		R-Red G-Green
ST80EL-USB-WS ST80EL-USB-WM ST80EL-USB-WA	5 Buzzer sounds 5 Warning sounds	3		R-Red A-Amber G-Green
ST80MEL-USB-BZ ST80MEL-USB-WS ST80MEL-USB-WM ST80MEL-USB-WA	5 Melodies 5 Alarms	4	-	R-Red A-Amber G-Green B-Blue
3100IVILL-U3D-VVA		5		R-Red A-Amber G-Green B-Blue W-White

• Protection rating : IP23
• Ambient operating temperature : -30°C to + 50°C

**Dimensions** (Units: mm)



### **USB Cable Wiring Instructions**

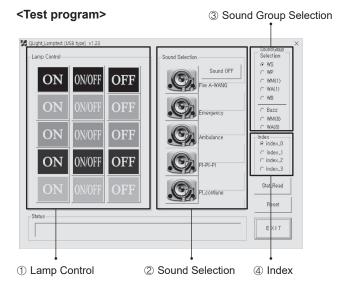


- Connect both USB power connector and USB signal control connector that are connected to each other to USB ports of a PC.
- Product does not run in case of USB power connector connection only.

### **Test Instructions**

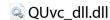
### <For Connecting Method with pc>





- 1. Please connect USB Tower Lamp and PC as above figure <How to connect with PC>
- 2. Please download test program(USB.zip) from Qlight website or blog.qlight.com
- 3. The downloaded sample program will be saved as "USB Test Program.zip". When you unzip the file, there will be a file with the names below.

### QLight\_Lamptest\_USB.exe



lest program

Required library for test program

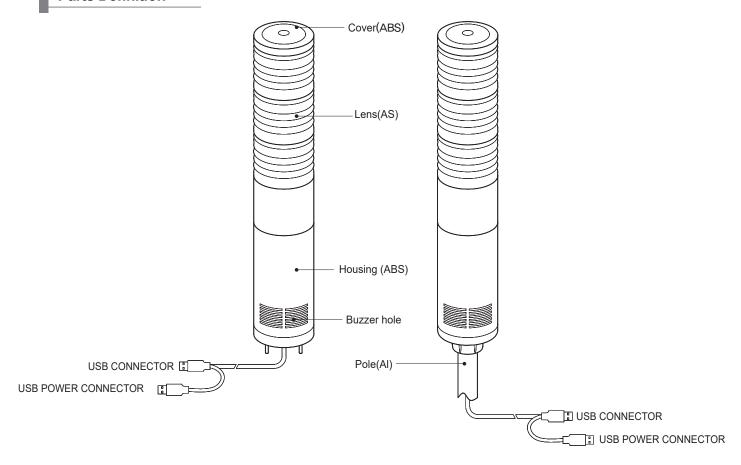
- \* When developing the program, please download and refer to the file "manual and library" (sample programs and manuals for developers).
- 4. When you run the "QLight lamptest\_usb.exe"file, a test programs will show up as above.

  Products sound options are classified as WS / WA / WM / BZ. The product will only play the sound option selected when the order was placed.

### ■ How to use program

Article	Detailed specification
① Lamp control	- ON: Lamp turns on when the button is clicked - ON/OFF: Lamp flashes when the button is clicked - OFF: Lamp turns off when the button is clicked
② Sound selection	- 1ch-5ch: Has 5 sounds per model, turns on the chosen sound - Click "Sound off" button to turn off the sound
③ Sound group selection	- WS : 5 warning sounds(mono) - WP : 5 special warning sounds(mono) - WM(1) : 5 Melodies(mono) - WA(1) : 5 alarms(mono) - WB : Software Buzzer 5 sounds(speaker type) - Buzzer : 5 Buzzer sounds
④ Index	- You can connect up to a maximum of 4 USB Tower lights per PC - Must be controlled by selecting Index0 - Index3 for controlling the USB tower light. The default is set to Index0

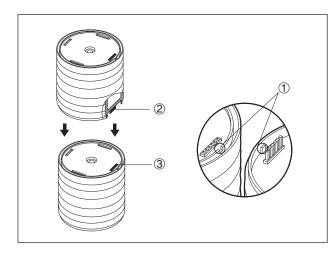
### **Parts Definition**



### **Installation Environment and Protection Rating**

- This product is designed for use with protection rating of IP23.
- If the product is installed in locations that subject it to excessive dust or water other than the designated IP protection rating indicated(IP23), it may cause malfunction or damage to the product.
- For further information, please visit our website (www.qlight.com).

### **How to Change Lens Kit**



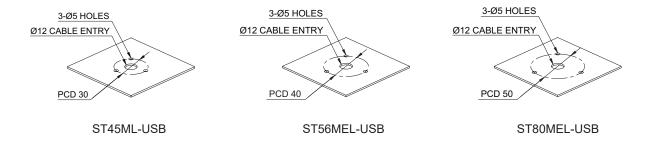
- When rearranging or replacing the lens kits, please be aware of the contact point ① and the connector pin ② marked in the diagram on the left.
- Press down to assemble the lens kits while making sure that connector pin ② and connector ③ aligns correctly.
- Please make sure that the rubber spacer placed on the top of each lens kit is tightly secured to the bottom of the other lens kit.

### **\*** Cautions

Lens modules are connected via the contact point of each module. In case the contact point is damaged, it may cause contact failure.

### **Mounting Hole Specifications**

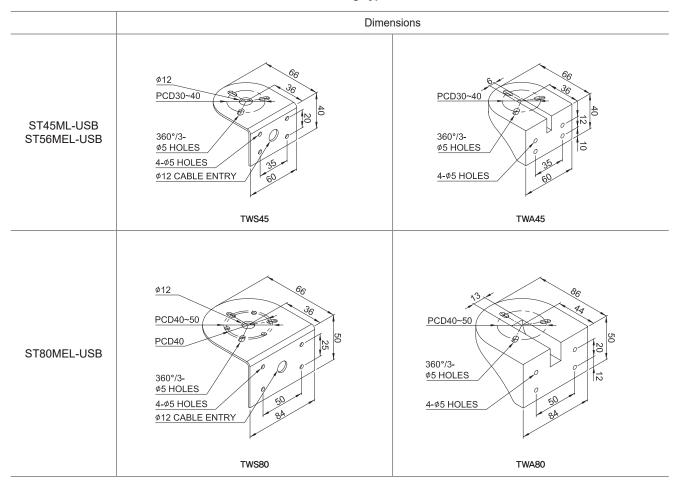
① Machine holes on the mounting surface referring to the diagram below.



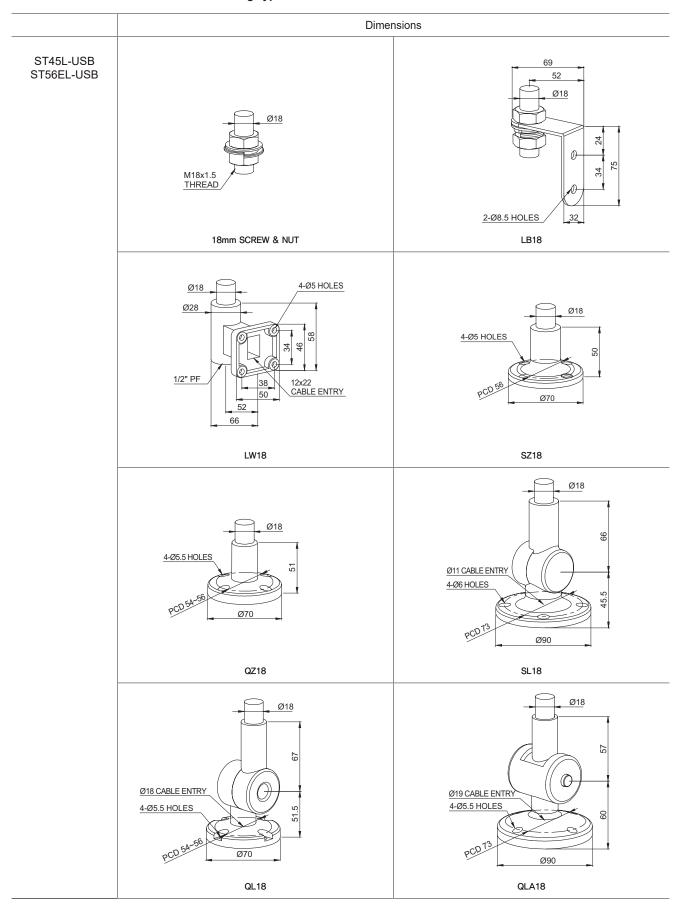
- ② Remove the flange nuts from bolts and place the product through the mounting surface holes.
- ③ Fasten the flange nuts on the opposite side of the mounting surface until the product is tightened securely.

### **Mounting Accessories (Sold Separately)**

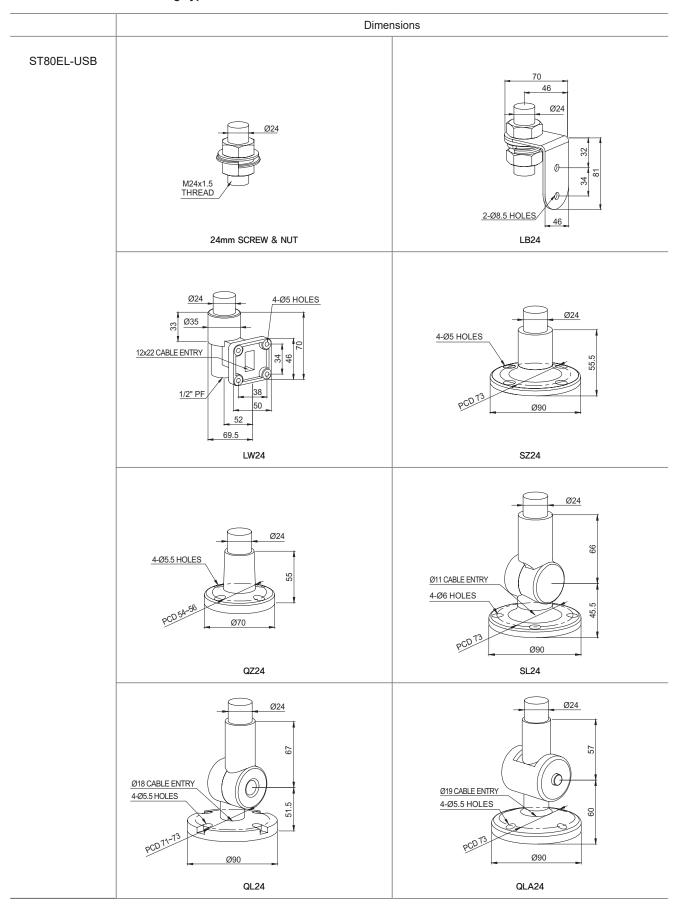
- · Please refer to the dimensions below for installation of mounting brackets
- ST45ML-USB/ ST56MEL-USB/ ST80MEL-USB Direct mounting Type Model



### ■ ST45L-USB/ ST56EL-USB - Pole Mounting Type Model



### ■ ST80EL-USB - Pole Mounting Type Model



• 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 Shipping.



#### **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

RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

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