Ethernet LED Tower Light
QTC50(M)L/ QTC60(M)L/ QTC70(M)L-ETN

IP54	IP65	-30~+50℃	BUZZER	90dB (((♪	RoHS2
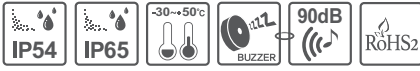
Thank you for purchasing Qlight's products. Please read this user manual carefully prior to installation and operation to ensure safe and correct use.
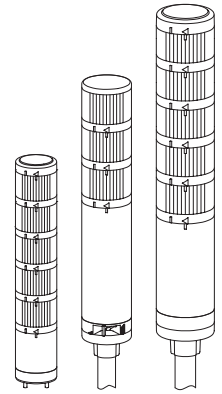
⚠ Precautions for Safety

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, 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

• **QTC50(M)L-ETN**

QTC50L-ETN-BZ	-	3	-	24	-	RAG	-	LW18
[Model number]		[Layer]		[Voltage]		[Color]		[Mounting option]

[Model number]	[Layer]	[Voltage]	[Color]	[Mounting option]
• QTC50L-ETN	• Layer1-1	• 12-DC12V	R-Red	• (Blank)
• QTC50L-ETN-BZ	• Layer2-2	• 24-DC24V	A-Amber	- Standard type
• QTC50ML-ETN	• Layer3-3	• 110/220-AC110V~220V	G-Green	• Mounting type
• QTC50ML-ETN-BZ	• Layer4-4		B-Blue	
• QTCA50L-ETN	• Layer5-5		W-White	- LB18 - LW18
• QTCA50L-ETN-BZ				- QZ18 - SZ18
• QTCA50ML-ETN				- QL18 - SL18
• QTCA50ML-ETN-BZ				

Please scan the QR code for more detailed product information.

www.qlight.com

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Ordering Specifications

• QTC60(M)L-ETN

QTC60L-ETN-BZ	-	3	-	24	-	RAG	-	LW18
[Model number]		[Layer]		[Voltage]		[Color]		[Mounting option]

[Model number]
- QTC60L-ETN
- QTC60L-ETN-BZ
- QTC60ML-ETN
- QTC60ML-ETN-BZ
- QTCA60L-ETN
- QTCA60L-ETN-BZ
- QTCA60ML-ETN
- QTCA60ML-ETN-BZ

[Layer]
- Layer1-1
- Layer2-2
- Layer3-3
- Layer4-4
- Layer5-5

[Voltage]
- 12-DC12V
- 24-DC24V
- 110/220-AC110V~220V

[Color]
- R-Red
- A-Amber
- G-Green
- B-Blue
- W-White

[Mounting option]
- (Blank)
  - Standard type
- Mounting type
  - LB18 - LW18
  - QZ18 - SZ18
  - QL18 - SL18

• QTC70(M)L-ETN

QTC70L-ETN-BZ	-	3	-	24	-	RAG	-	LW24
[Model number]		[Layer]		[Voltage]		[Color]		[Mounting option]

[Model number]
- QTC70L-ETN
- QTC70L-ETN-BZ
- QTC70ML-ETN
- QTC70ML-ETN-BZ
- QTCA70L-ETN
- QTCA70L-ETN-BZ
- QTCA70ML-ETN
- QTCA70ML-ETN-BZ

[Layer]
- Layer1-1
- Layer2-2
- Layer3-3
- Layer4-4
- Layer5-5

[Voltage]
- 12-DC12V
- 24-DC24V
- 110/220-AC110V~220V

[Color]
- R-Red
- A-Amber
- G-Green
- B-Blue
- W-White

[Mounting option]
- (Blank)
  - Standard type
- Mounting type
  - LB24 - LW24
  - QZ24 - SZ24
  - QL24 - SL24

Product Specifications

• QTC50(M)L-ETN

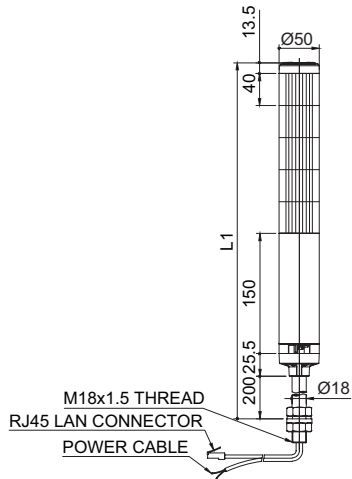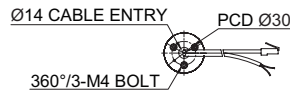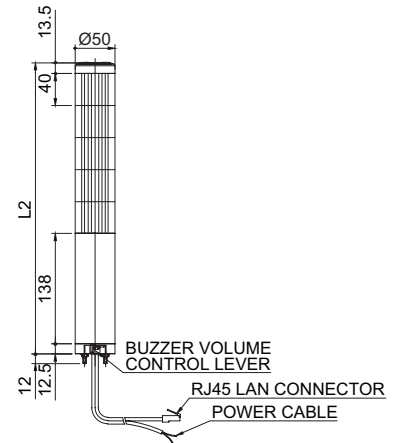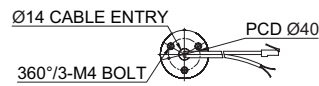| Model number	Layer	Voltage	Current	Certificate	Color
QTC50(M)L-ETN QTCA50(M)L-ETN QTC50(M)L-ETN-BZ QTCA50(M)L-ETN-BZ (BZ: 5 Tone Buzzer)	1	DC12V DC24V AC110V~220V	0.225A 0.155A Max. 0.070A	CE	R-Red
	2	DC12V DC24V AC110V~220V	0.300A 0.200A Max. 0.090A		R-Red G-Green
	3	DC12V DC24V AC110V~220V	0.375A 0.245A Max. 0.110A		R-Red A-Amber G-Green
	4	DC12V DC24V AC110V~220V	0.450A 0.290A Max. 0.130A		R-Red A-Amber G-Green B-Blue
	5	DC12V DC24V AC110V~220V	0.525A 0.335A Max. 0.150A		R-Red A-Amber G-Green B-Blue W-White

• QTC60(M)L-ETN

Model number	Layer	Voltage	Current	Certificate	Color
QTC60(M)L-ETN QTCA60(M)L-ETN QTC60(M)L-ETN-BZ QTCA60(M)L-ETN-BZ (BZ: 5 Tone Buzzer)	1	DC12V DC24V AC110V~220V	0.245A 0.155A Max. 0.070A	CE	R-Red
	2	DC12V DC24V AC110V~220V	0.300A 0.200A Max. 0.090A		R-Red G-Green
	3	DC12V DC24V AC110V~220V	0.375A 0.245A Max. 0.110A		R-Red A-Amber G-Green
	4	DC12V DC24V AC110V~220V	0.450A 0.290A Max. 0.130A		R-Red A-Amber G-Green B-Blue
	5	DC12V DC24V AC110V~220V	0.525A 0.335A Max. 0.150A		R-Red A-Amber G-Green B-Blue W-White

• QTC70(M)L-ETN

Model number	Layer	Voltage	Current	Certificate	Color
QTC70(M)L-ETN QTCA70(M)L-ETN QTC70(M)L-ETN-BZ QTCA70(M)L-ETN-BZ (BZ: 5 Tone Buzzer)	1	DC12V DC24V AC110V~220V	0.225A 0.155A Max. 0.070A	CE	R-Red
	2	DC12V DC24V AC110V~220V	0.300A 0.200A Max. 0.090A		R-Red G-Green
	3	DC12V DC24V AC110V~220V	0.375A 0.245A Max. 0.110A		R-Red A-Amber G-Green
	4	DC12V DC24V AC110V~220V	0.450A 0.290A Max. 0.130A		R-Red A-Amber G-Green B-Blue
	5	DC12V DC24V AC110V~220V	0.525A 0.335A Max. 0.150A		R-Red A-Amber G-Green B-Blue W-White

Dimensions

QTC(A)50L-ETN-BZ

13.5
Ø50
40
L1
150
200 25.5
Ø18

M18x1.5 THREAD
RJ45 LAN CONNECTOR
POWER CABLE

LAYER	L1	L2
1	432	204
2	472	244
3	512	284
4	552	324
5	592	364

Ø14 CABLE ENTRY
PCD Ø30
360°/3-M4 BOLT

QTC(A)50ML-ETN-BZ

13.5
Ø50
40
L2
138
12
12.5

BUZZER VOLUME
CONTROL LEVER
RJ45 LAN CONNECTOR
POWER CABLE

QTC(A)60L-ETN-BZ

13.5
Ø60
50
L1
135
200 26.5
Ø18

M18x1.5 THREAD
RJ45 LAN CONNECTOR
POWER CABLE

LAYER	L1	L2
1	435	199
2	485	249
3	535	299
4	585	349
5	635	399

Ø14 CABLE ENTRY
PCD Ø40
360°/3-M4 BOLT

QTC(A)60ML-ETN-BZ

13.5
Ø60
50
L2
123
12
12.5

BUZZER VOLUME
CONTROL LEVER
RJ45 LAN CONNECTOR
POWER CABLE

QTC(A)70L-ETN-BZ

13.5
Ø70
50
L1
135
28.5
120
Ø24

M24x1.5 THREAD
RJ45 LAN CONNECTOR
POWER CABLE
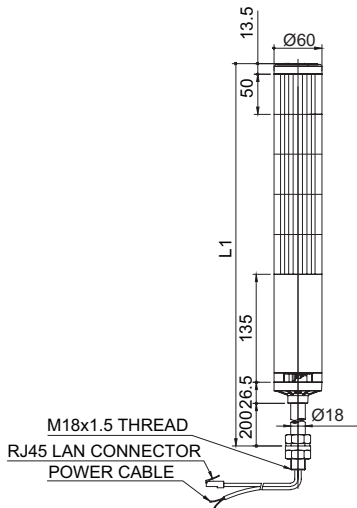
LAYER	L1	L2
1	357	199
2	407	249
3	457	299
4	507	349
5	557	399

Ø14 CABLE ENTRY
PCD Ø50
360°/3-M4 BOLT

QTC(A)70ML-ETN-BZ

13.5
Ø70
50
L2
123
12
12.5

BUZZER VOLUME
CONTROL LEVER
RJ45 LAN CONNECTOR
POWER CABLE

Wiring Instructions

DC

White

Black

Fuse

LAN CABLE
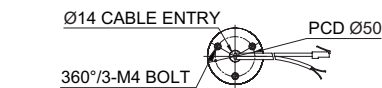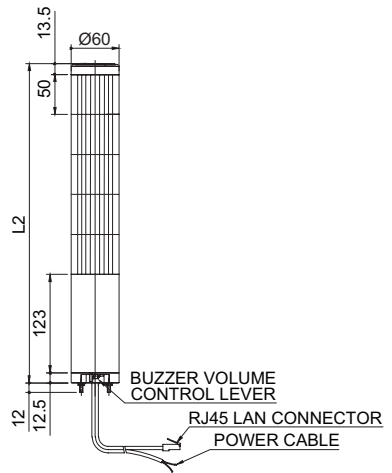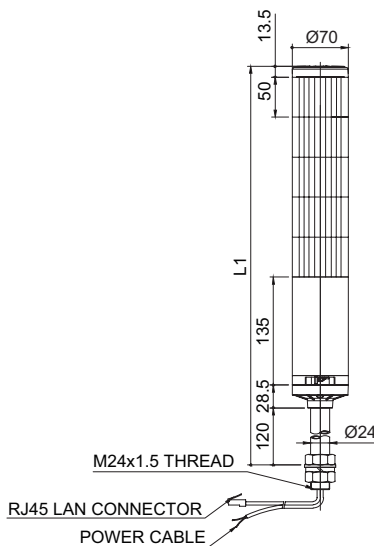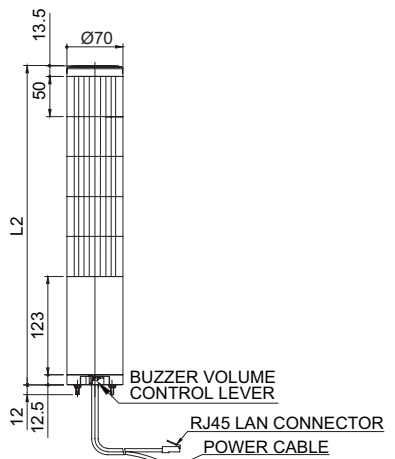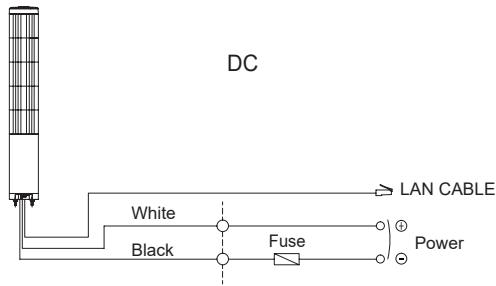
Power

- Connect RJ45 connector that is connected to UTP cable to Ethernet port of a PC or a router.
- External power line - UL1015 AWG18(0.75sq) x 2C 400mm
- For AC type, power cable is equipped with the product.
- UTP Cable: Category 5 cable

Product Installation

Installation wiring instructions

EtherNet Tower

HUB

PC

RJ45

EtherNet Network

VAC 110V~220V
VDC 12/24
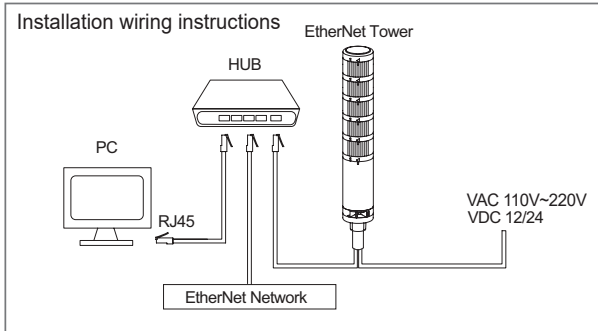
■ **Test Ethernet LED Tower Light**

1. Please connect LAN cable of the tower light to the router so that the tower light can access Ethernet network by referring left diagram.
2. Please be sure that the power supply shall meet the product specification accordingly.

Applying the Ethernet Device

1. Please activate default PC network only. Please run Windows CMD(Command line) of PC over the same network in order to confirm network information where the Ethernet product will be connected.
   Example) Windows 7 : Start(Run)->CMD->ipconfig /all
   　　　　　Windows 10 : Start menu-> Click right mouse button->CMD->ipconfig /all
   - Please refer to below network information when the Ethernet product's network environment is configured.

```
Ethernet adapter Local Area Connection:

        Connection-specific DNS Suffix  . :
        IP Address. . . . . . . . . . . : 192.168.10.101
        Subnet Mask . . . . . . . . . . : 255.255.255.0
        Default Gateway . . . . . . . . : 192.168.10.1
```

2. Because the ETN tower light is connected to a hub with the PC that is same as the picture on the front page, ETN tower light and the PC are now connected with the same network.
3. Please download the product manual, library file and test program from Qlight website(www.qlight.com) or blog.qlight.com

Download

PDF Catalogue　　　Operating Manual

Test Program　　　Manual & Library

📁 1.Dev. ETN Program Sample

Program Sample needed when developing (x32bit/x64bit compatibility)

📁 2.How to use

Instructions of how to use the product and library file

4. When you unzip the file, there will be a file with the same name below. The instructions are listed inside the file.

5. When you unzip "ETN TEST PROGRAM.zip" file, following folders are created.

📁 1.ETN Test Program

A program for setting IP before testing the ETN device

📁 2.IP Set Program

A program for setting testing the ETN device

6. Run the "Mac_Setting.exe" program that is inside the IP Set Program Folder .

① When the program is running such as the right figure, click the "Mac Find" button in the "Find Mac Address / Select" section

  - MAC Address of the connected device appears when you click the Device List combo box. (If the Mac Addr does not appear, make sure that the connection status or the power supply is functional and then retry.)

② Select the MAC Addr of the device you want to change, and then click on the "Read" button.

③ Check the information and settings from the "Mac config status"

④ Set the value of users network information identified in the previous chapter (subnet mask, gateway) in each text box, and set a different IP_Addr than your PC
Apply the settings by pressing the Write button

  - The port is set to "20000"by default and the port number can be changed if necessary

  - Reconnect After Disconnecting the power from the tower light.
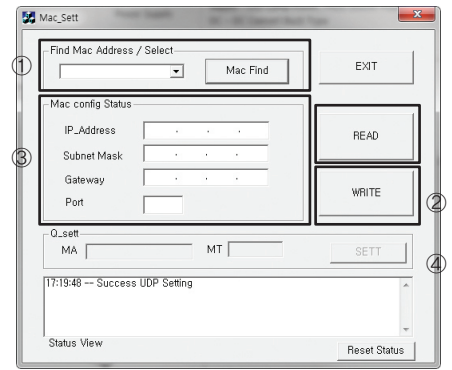
7. ETN Test Program Files folder includes the followings.

QLight_Lamptest_TCP.exe
Test Program

QTvc_dll.dll
Library required for the test program

8. Run the "QLight_Lamptest_TCP" program.

Article	Detailed specification
① Network information setting	- Input port on TCP/PORT and IP address on TCP/IP that set on Ethernet tower lights
② Lamp control	- ON : Click the button Lamp ON - ON/OFF : Click the button Lamp Flash - OFF : Click the button Lamp OFF
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 Sound selection	- Select 5 sounds based on model which is fixed on Ordering Specifications

• User can select appropriate sound pattern by referring Ordering Specifications. There're WS, WM, and WA sound patterns and user can choose the option when placing order.

① Network Information Setting

② Lamp Control

③ Sound Group Selection

④ Sound Selection
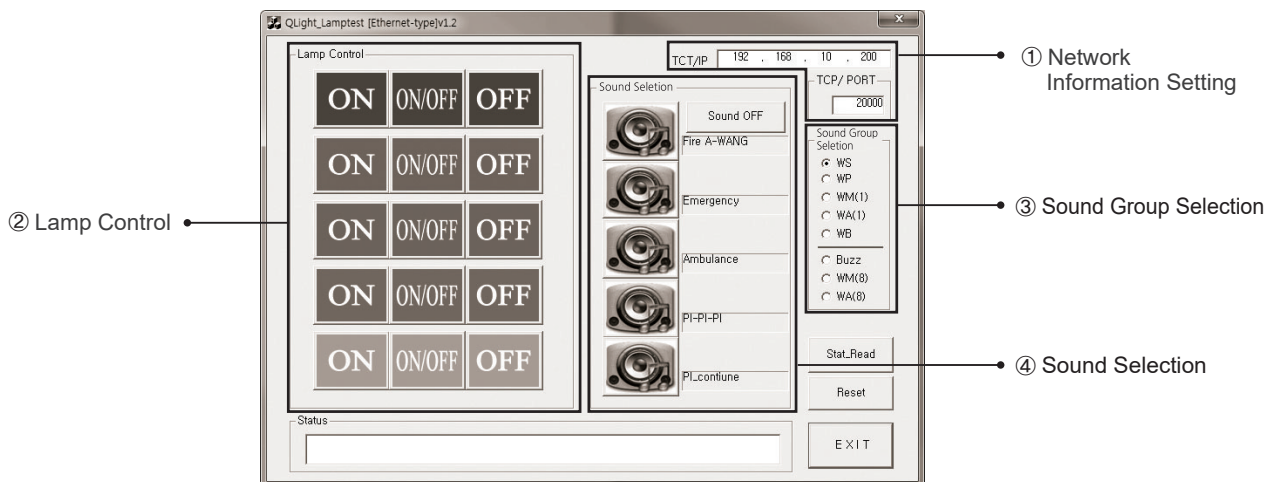
• Fill TCP/IP and TCP/PORT (①Network Information Setting) with IP address and port that has been setted in ethernet tower light.
• When click LAMP ON, correspond lamp turns on.
• When click LAMP OFF, correspond lamp turns off.
• Please choose appropriate sound pattern group by referring ③ Sound Group Selection area.
• You can choose sound pattern by referring ④ Sound Selection.
• Tower lamp plays sound when SOUND button is pressed.
• Tower lamp stops sound when SOUND OFF button is pressed.

Parts Definition

- Cover(ABS)
- Lens(PC)
- Housing(ABS)
- Sound volume lever
- ETN CONNECTOR
- ETN POWER CONNECTOR
- Pole(Al)
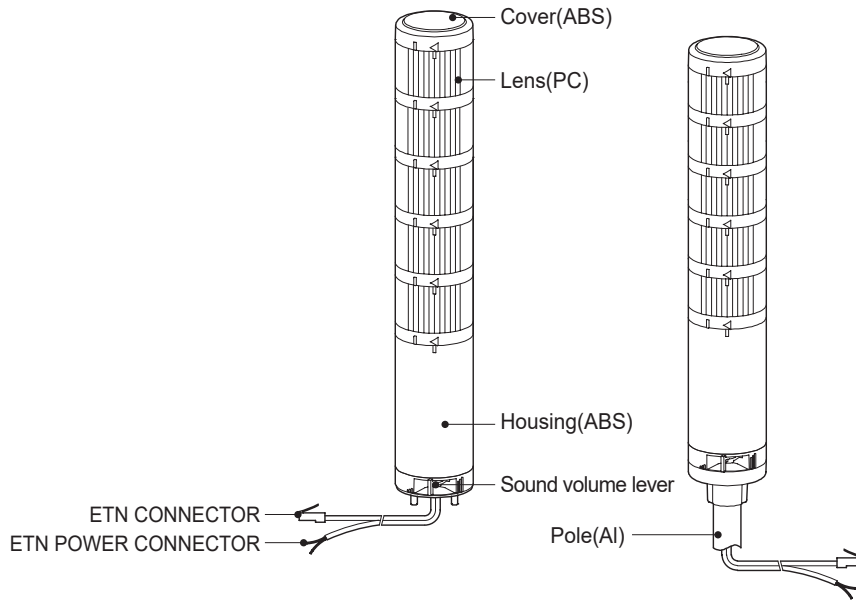
How to Change Lens Kit
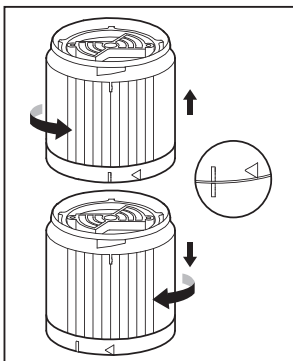
- Disassembling lens kits
① Twist the upper lens kit in a counter-wise direction so the "I" mark from both kits align.
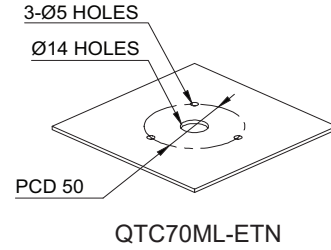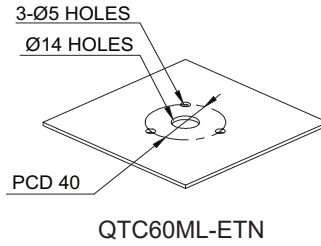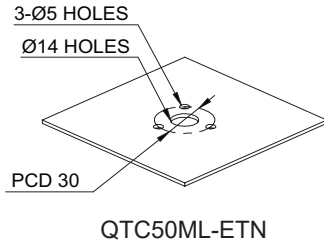② Disassemble by removing the upper lens kit from the lower one.

※Cautions
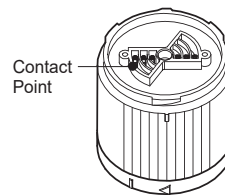
Contact Point

Lens modules are connected through cone-shaped contact point. In case the contact point is damaged, it may cause a contact failure.
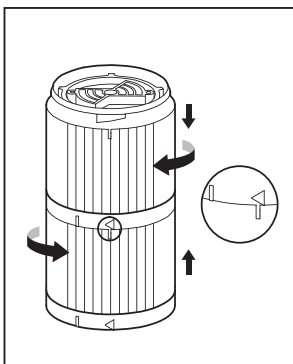
- Assembling lens kits
① Put the two lens kits together by aligning the upper lens' "I" mark and the lower lens' "I" mark together.
② Lock the two kits by twisting the upper lens kit in a counter-wise direction so the upper lens' "◁" mark aligns with the lower lens' "I" mark.

Mounting Hole Specifications

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

3-Ø5 HOLES, Ø14 HOLES, PCD 30	3-Ø5 HOLES, Ø14 HOLES, PCD 40	3-Ø5 HOLES, Ø14 HOLES, PCD 50
QTC50ML-ETN	QTC60ML-ETN	QTC70ML-ETN

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.
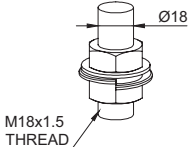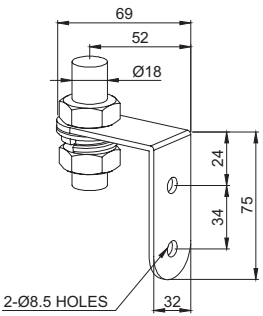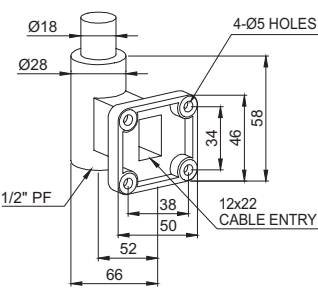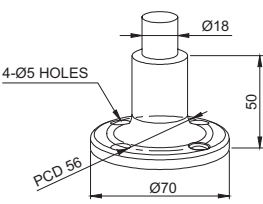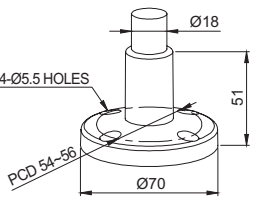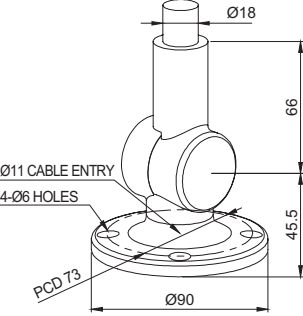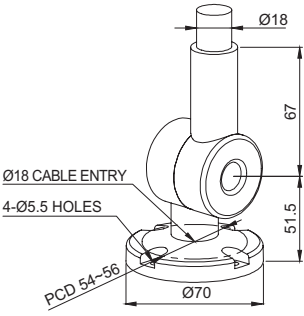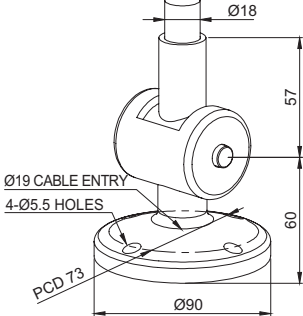
Mounting Accessories (Sold Separately)

• Please refer to the dimensions below for installati on of mounting brackets

■ **QTC50ML-ETN/QTC60ML-ETN/QTC70ML-ETN -Direct Mounting Type Model**
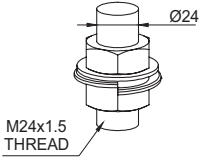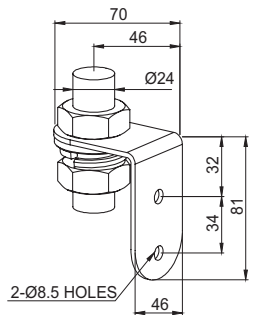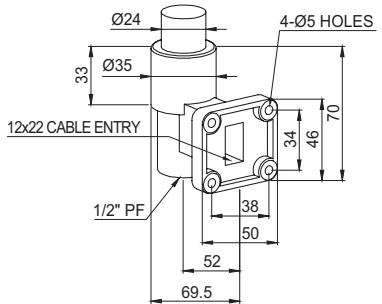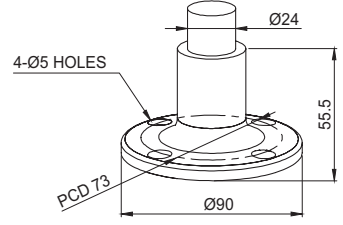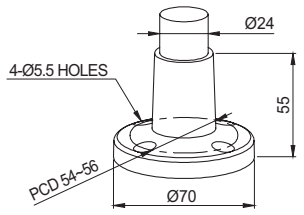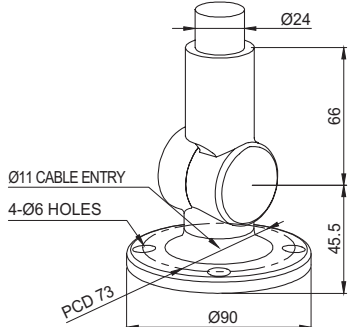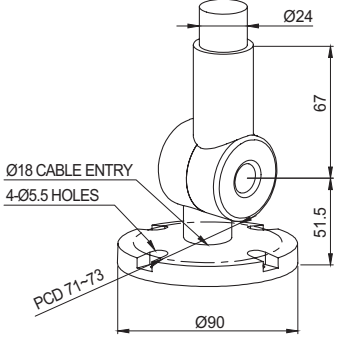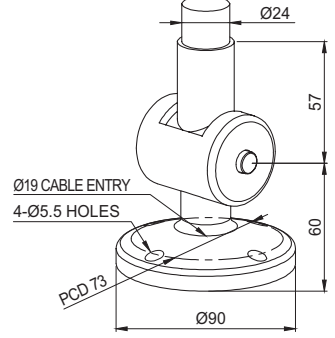
	Dimensions	
QTC50ML-ETN QTC60ML-ETN	TWS45	TWA45
QTC70ML-ETN	TWS80	TWA80

■ QTC50L-ETN/ QTC60L-ETN - Pole Mounting Type Model

	Dimensions
QTC50L-ETN QTC60L-ETN	 **18mm SCREW & NUT** **LB18** **LW18** **SZ18** **QZ18** **SL18** **QL18** **QLA18**

■ QTC70L-ETN - Pole Mounting Type Model

	Dimensions
QTC70L-ETN	

24mm SCREW & NUT
- Ø24
- M24x1.5 THREAD

LB24
- 70
- 46
- Ø24
- 32
- 34
- 81
- 2-Ø8.5 HOLES
- 46

LW24
- Ø24
- 4-Ø5 HOLES
- Ø35
- 33
- 12x22 CABLE ENTRY
- 34
- 46
- 70
- 1/2" PF
- 38
- 50
- 52
- 69.5

SZ24
- Ø24
- 4-Ø5 HOLES
- 55.5
- PCD 73
- Ø90

QZ24
- Ø24
- 4-Ø5.5 HOLES
- 55
- PCD 54~56
- Ø70

SL24
- Ø24
- 66
- Ø11 CABLE ENTRY
- 4-Ø6 HOLES
- 45.5
- PCD 73
- Ø90

QL24
- Ø24
- 67
- Ø18 CABLE ENTRY
- 4-Ø5.5 HOLES
- 51.5
- PCD 71~73
- Ø90

QLA24
- Ø24
- 57
- Ø19 CABLE ENTRY
- 4-Ø5.5 HOLES
- 60
- PCD 73
- Ø90

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Technical Certification

• 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.

IECEx International Explosion Proof Certification (IECEx)

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

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.

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)

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.

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.

CCS China Classification Society

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

RMRS Russian Maritime Register of Shipping

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

LR Lloyd's Register

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

KR Korean Register of Shipping

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

KC Korea Safety Certification

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

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)

ICAO International Civil Aviation Organization

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

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.

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.

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.

CCC China Compulsory Certificate

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

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.

MEMO

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