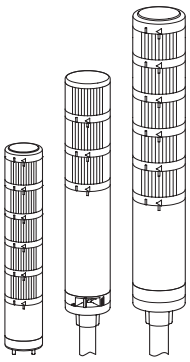
Modular LED Signal Tower Lights

QTC50/ QTC60/ QTC70



IP54 IP65 -30~+50℃ BUZZER 85dB NPN PNP 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/ 60/ 70L	-	3	-	110/220	-	RAG	-	LW18/24
[Model number]		[Layer count]		[Voltage]		[Color]		[Bracket]
• QTC50/ 60/ 70L • QTC50/ 60/ 70L-BZ • QTC50/ 60/ 70LF • QTC50/ 60/ 70LF-BZ • QTCA50/ 60/ 70L • QTCA50/ 60/ 70L-BZ • QTCA50/ 60/ 70LF • QTCA50/ 60/ 70LF-BZ		• 1-1 Layer • 2-2 Layers • 3- 3Layers • 4-4 Layers • 5-5 Layers		• 12-DC12V • 24-DC24V • 110/220 -AC110V-220V		R-Red A-Amber G-Green B-Blue W-White		• None-Standard • Bracket - LB18/24 - LW18/24 - QZ18/24 - SZ18/24 - QL18/24 - SL18/24 - SLB370

QTC50/ 60/ 70ML	-	3	-	110/220	-	RAG
[Model number]		[Layer count]		[Voltage]		[Color]
• QTC50/ 60/ 70ML • QTC50/ 60/ 70ML-BZ • QTC50/ 60/ 70MLF • QTC50/ 60/ 70MLF-BZ • QTCA50/ 60/ 70ML • QTCA50/ 60/ 70ML-BZ • QTCA50/ 60/ 70MLF • QTCA50/ 60/ 70MLF-BZ		• 1-1 Layer • 2-2 Layers • 3- 3Layers • 4-4 Layers • 5-5 Layers		• 12-DC12V • 24-DC24V • 110/220-AC110V-220V		R-Red A-Amber G-Green B-Blue W-White

Please scan the QR code for more detailed product information.

www.qlight.com

Product Specifications

• QTC50L

Model number	Layer count	Voltage	Certificate	Weight	Color
QTC50L Steady QTC50L-BZ Steady/w built-in buzzer QTC50LF Steady/Flashing QTC50LF-BZ Steady/Flashing /w built-in buzzer QTCA50L Steady QTCA50L-BZ Steady/w built-in buzzer QTCA50LF Steady/Flashing QTCA50LF-BZ Steady/Flashing /w built-in buzzer	1	DC12V DC24V AC110V-220V	CE UL	0.35kg 0.35kg 0.45kg	R-Red
	2	DC12V DC24V AC110V-220V		0.44kg 0.44kg 0.54kg	R-Red G-Green
	3	DC12V DC24V AC110V-220V		0.52kg 0.52kg 0.62kg	R-Red A-Amber G-Green
	4	DC12V DC24V AC110V-220V		0.61kg 0.61kg 0.71kg	R-Red A-Amber G-Green B-Blue
	5	DC12V DC24V AC110V-220V		0.69kg 0.69kg 0.79kg	R-Red A-Amber G-Green B-Blue W-White

Light source/buzzer current(based on 1 layer)			
Voltage condition	DC12V	DC24V	AC110-220V
Light source current (1 layer)	90mA	70mA	Max.55mA
Buzzer current	40mA	75mA	Max.55mA

• QTC60L

Model number	Layer count	Voltage	Certificate	Weight	Color
QTC60L Steady QTC60L-BZ Steady/w built-in buzzer QTC60LF Steady/Flashing QTC60LF-BZ Steady/Flashing /w built-in buzzer QTCA60L Steady QTCA60L-BZ Steady/w built-in buzzer QTCA60LF Steady/Flashing QTCA60LF-BZ Steady/Flashing /w built-in buzzer	1	DC12V DC24V AC110V-220V	CE UL	0.43kg 0.43kg 0.53kg	R-Red
	2	DC12V AC/DC24V AC110V-220V		0.52kg 0.52kg 0.62kg	R-Red G-Green
	3	DC12V DC24V AC110V-220V		0.60kg 0.60kg 0.70kg	R-Red A-Amber G-Green
	4	DC12V DC24V AC110V-220V		0.69kg 0.69kg 0.79kg	R-Red A-Amber G-Green B-Blue
	5	DC12V DC24V AC110V-220V		0.77kg 0.77kg 0.87kg	R-Red A-Amber G-Green B-Blue W-White

Light source/buzzer current(based on 1 layer)			
Voltage condition	DC12V	DC24V	AC110-220V
Light source current (1 layer)	105mA	70mA	Max.60mA
Buzzer current	40mA	75mA	Max.55mA

• QTC70L

Model number	Layer count	Voltage	Certificate	Weight	Color
QTC70L Steady QTC70L-BZ Steady/w built-in buzzer QTC70LF Steady/Flashing QTC70LF-BZ Steady/Flashing /w built-in buzzer QTCA70L Steady QTCA70L-BZ Steady/w built-in buzzer QTCA70LF Steady/Flashing QTCA70LF-BZ Steady/Flashing /w built-in buzzer	1	DC12V DC24V AC110V-220V	CE UL	0.56kg 0.56kg 0.66kg	R-Red
	2	DC12V DC24V AC110V-220V		0.68kg 0.68kg 0.78kg	R-Red G-Green
	3	DC12V DC24V AC110V-220V		0.83kg 0.83kg 0.92kg	R-Red A-Amber G-Green
	4	DC12V DC24V AC110V-220V		0.98kg 0.98kg 1.08kg	R-Red A-Amber G-Green B-Blue
	5	DC12V DC24V AC110V-220V		1.22kg 1.22kg 1.31kg	R-Red A-Amber G-Green B-Blue W-White

Light source/buzzer current(based on 1 layer)			
Voltage condition	DC12V	DC24V	AC110-220V
Light source current (1 layer)	105mA	70mA	Max.60mA
Buzzer current	40mA	75mA	Max.55mA

※ QTC series UL listed : DC24V

• QTC50ML

Model number	Layer count	Voltage	Certificate	Weight	Color
QTC50ML Steady QTC50ML-BZ Steady/w built-in buzzer QTC50MLF Steady/Flashing QTC50MLF-BZ Steady/Flashing /w built-in buzzer QTCA50ML Steady QTCA50ML-BZ Steady/w built-in buzzer QTCA50MLF Steady/Flashing QTCA50MLF-BZ Steady/Flashing /w built-in buzzer	1	DC12V DC24V AC110V-220V	CE DC 24V only UL DC 24V only	0.20kg 0.20kg 0.30kg	R-Red
	2	DC12V DC24V AC110V-220V		0.28kg 0.28kg 0.38kg	R-Red G-Green
	3	DC12V DC24V 110V-220V		0.37kg 0.37kg 0.47kg	R-Red A-Amber G-Green
	4	DC12V DC24V AC110V-220V		0.45kg 0.45kg 0.55kg	R-Red A-Amber G-Green B-Blue
	5	DC12V DC24V AC110V-220V		0.54kg 0.54kg 0.64kg	R-Red A-Amber G-Green B-Blue W-White

Light source/buzzer current(based on 1 layer)			
Voltage condition	DC12V	DC24V	AC110-220V
Light source current (1 layer)	0.090A	0.070A	Max.0.055A
Buzzer current	0.040A	0.075A	Max.0.055A

• QTC60ML

Model number	Layer count	Voltage	Certificate	Weight	Color
QTC60ML Steady QTC60ML-BZ Steady/w built-in buzzer QTC60MLF Steady/Flashing QTC60MLF-BZ Steady/Flashing /w built-in buzzer QTCA60ML Steady QTCA60ML-BZ Steady/w built-in buzzer QTCA60MLF Steady/Flashing QTCA60MLF-BZ Steady/Flashing /w built-in buzzer	1	DC12V DC24V AC110V-220V	CE UL	0.28kg 0.28kg 0.38kg	R-Red
	2	DC12V DC24V AC110V-220V		0.36kg 0.36kg 0.46kg	R-Red G-Green
	3	DC12V DC24V AC110V-220V		0.45kg 0.45kg 0.55kg	R-Red A-Amber G-Green
	4	DC12V DC24V AC110V-220V		0.53kg 0.53kg 0.63kg	R-Red A-Amber G-Green B-Blue
	5	DC12V DC24V AC110V-220V		0.61kg 0.61kg 0.71kg	R-Red A-Amber G-Green B-Blue W-White

Light source/buzzer current(based on 1 layer)			
Voltage condition	DC12V	DC24V	AC110-220V
Light source current (1 layer)	0.105A	0.070A	Max.0.060A
Buzzer current	0.040A	0.075A	Max.0.055A

• QTC70ML

Model number	Layer count	Voltage	Certificate	Weight	Color
QTC70ML Steady QTC70ML-BZ Steady/w built-in buzzer QTC70MLF Steady/Flashing QTC70MLF-BZ Steady/Flashing /w built-in buzzer QTCA70ML Steady QTCA70ML-BZ Steady/w built-in buzzer QTCA70MLF Steady/Flashing QTCA70MLF-BZ Steady/Flashing /w built-in buzzer	1	DC12V DC24V AC110V-220V	CE UL	0.44kg 0.44kg 0.54kg	R-Red
	2	DC12V DC24V AC110V-220V		0.58kg 0.58kg 0.68kg	R-Red G-Green
	3	DC12V DC24V AC110V-220V		0.79kg 0.79kg 0.89kg	R-Red A-Amber G-Green
	4	DC12V DC24V AC110V-220V		0.94kg 0.94kg 1.04kg	R-Red A-Amber G-Green B-Blue
	5	DC12V DC24V AC110V-220V		1.09kg 1.08kg 1.19kg	R-Red A-Amber G-Green B-Blue W-White

Light source/buzzer current(based on 1 layer)			
Voltage condition	DC12V	DC24V	AC110-220V
Light source current (1 layer)	0.105A	0.070A	Max.0.060A
Buzzer current	0.040A	0.075A	Max.0.055A

Dimensions

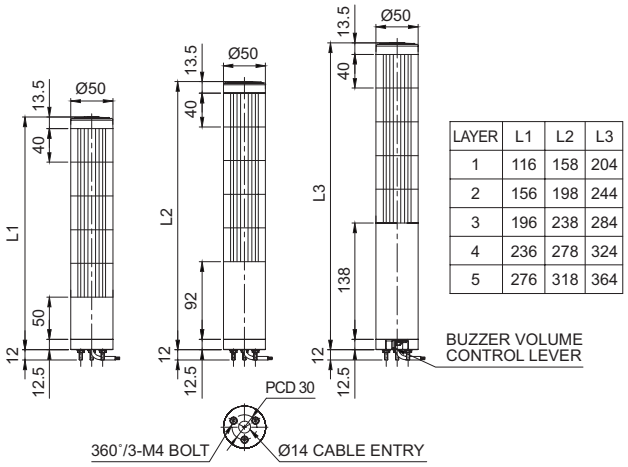
(Units : mm)

• QTC50(M)L

QTC50ML : DC
QTC50MLF : DC
QTC50ML-BZ : DC

QTC50ML : AC
QTC50MLF-BZ : DC

QTC50MLF : AC
QTC50ML-BZ : AC
QTC50MLF-BZ : AC

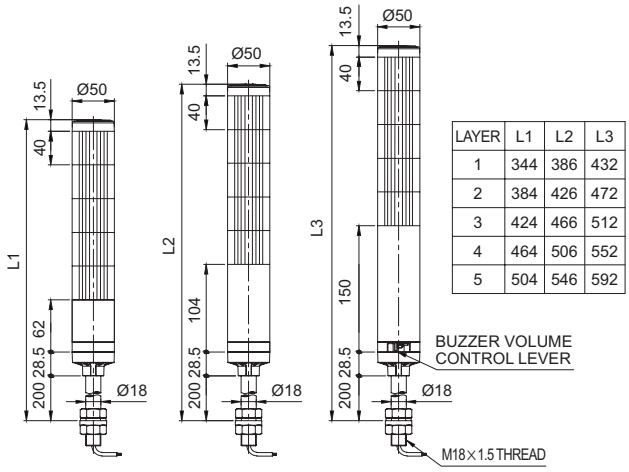


LAYER	L1	L2	L3
1	116	158	204
2	156	198	244
3	196	238	284
4	236	278	324
5	276	318	364

QTC50L : DC
QTC50LF : DC
QTC50L-BZ : DC

QTC50L : AC
QTC50LF-BZ : DC

QTC50LF : AC
QTC50L-BZ : AC
QTC50LF-BZ : AC



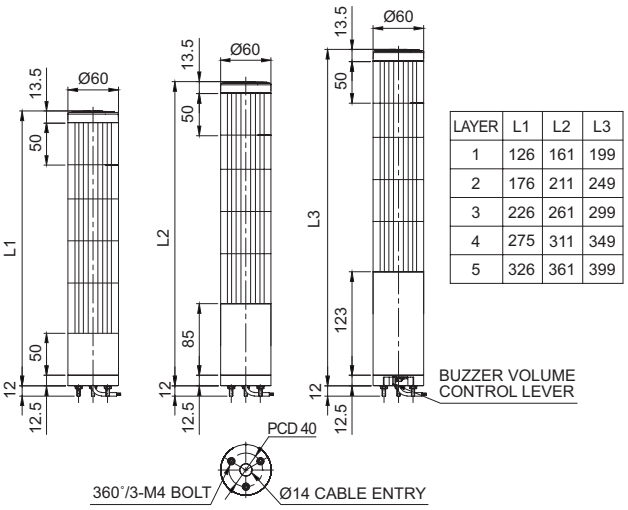
LAYER	L1	L2	L3
1	344	386	432
2	384	426	472
3	424	466	512
4	464	506	552
5	504	546	592

• QTC60(M)L

QTC60ML : DC
QTC60MLF : DC
QTC60ML-BZ : DC

QTC60ML : AC
QTC60MLF-BZ : DC

QTC60MLF : AC
QTC60ML-BZ : AC
QTC60MLF-BZ : AC

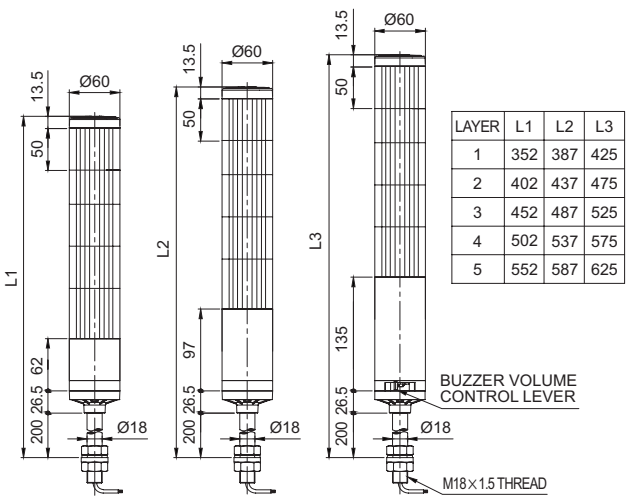


LAYER	L1	L2	L3
1	126	161	199
2	176	211	249
3	226	261	299
4	275	311	349
5	326	361	399

QTC60L : DC
QTC60LF : DC
QTC60L-BZ : DC

QTC60L : AC
QTC60LF-BZ : DC

QTC60LF : AC
QTC60L-BZ : AC
QTC60LF-BZ : AC



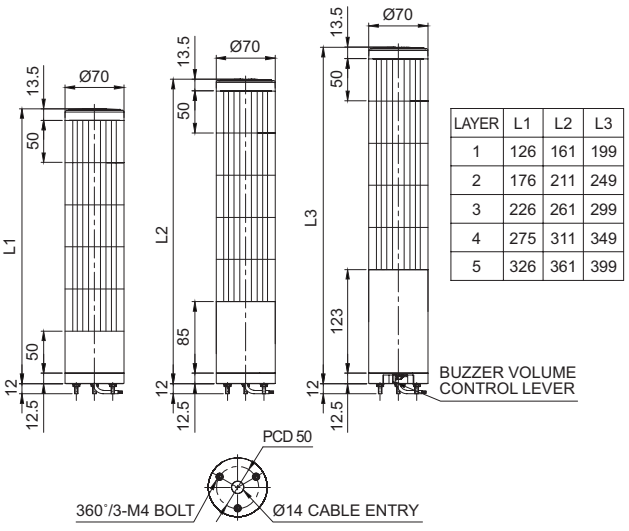
LAYER	L1	L2	L3
1	352	387	425
2	402	437	475
3	452	487	525
4	502	537	575
5	552	587	625

• QTC70(M)L

QTC70ML : DC
QTC70MLF : DC
QTC70ML-BZ : DC

QTC70ML : AC
QTC70MLF : AC
QTC70ML-BZ : AC
QTC70MLF-BZ : DC

QTC70MLF-BZ : AC

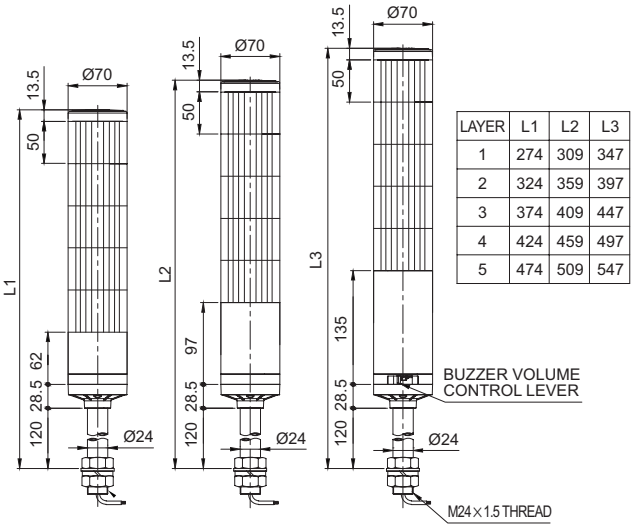


LAYER	L1	L2	L3
1	126	161	199
2	176	211	249
3	226	261	299
4	275	311	349
5	326	361	399

QTC70L : DC
QTC70LF : DC
QTC70L-BZ : DC

QTC70L : AC
QTC70LF : AC
QTC70L-BZ : AC
QTC70LF-BZ : DC

QTC70LF-BZ : AC

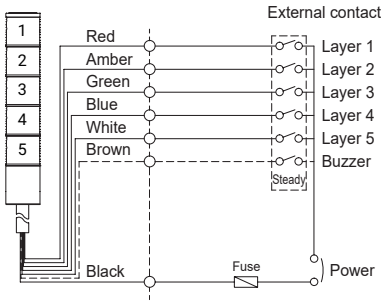
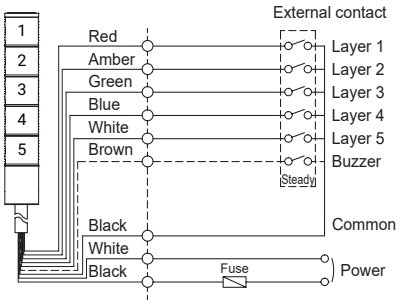
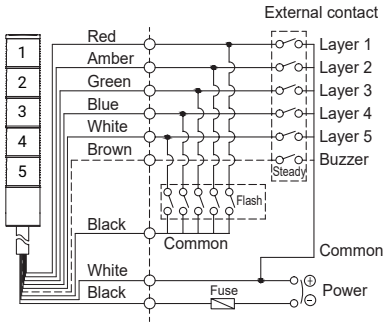
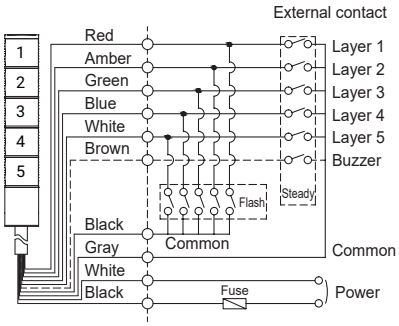


LAYER	L1	L2	L3
1	274	309	347
2	324	359	397
3	374	409	447
4	424	459	497
5	474	509	547

Wiring Instructions

■ Wiring using external contact

• In case of wiring with external contacts, refer to the wiring diagrams below according to your product's type and voltage setting.

<table>
<tr><th></th><th>Wiring diagrams</th><th></th><th>Wiring diagrams</th></tr>
<tr><td>DC steady</td><td rowspan="2">
</td><td>AC steady</td><td rowspan="2">
</td></tr>
<tr><td>QTC50ML
QTC50L
QTC60ML
QTC60L
QTC70ML
QTC70L</td><td>QTC50ML
QTC50L
QTC60ML
QTC60L
QTC70ML
QTC70L</td></tr>
<tr><td></td><td>• QTC(A) □□ (M)L - Refer to this diagram for buzzer type product
• QTC □□ L
└ Lens diameter 50(50mm) : QTC50(M)L
60(60mm) : QTC60(M)L
70(70mm) : QTC70(M)L</td><td></td><td>• QTC(A) □□ (M)L - Refer to this diagram for buzzer type product
• QTC □□ L
└ Lens diameter 50(50mm) : QTC50(M)L
60(60mm) : QTC60(M)L
70(70mm) : QTC70(M)L</td></tr>
<tr><td>DC steady/flashing</td><td rowspan="2">
</td><td>AC steady/Flashing</td><td rowspan="2">
</td></tr>
<tr><td>QTC50MLF
QTC50LF
QTC60MLF
QTC60LF
QTC70MLF
QTC70LF</td><td>QTC50MLF
QTC50LF
QTC60MLF
QTC60LF
QTC70MLF
QTC70LF</td></tr>
<tr><td></td><td>• QTC(A) □□ (M)LF - Refer to this diagram for buzzer type product
• QTC □□ LF
└ Lens diameter 50(50mm) : QTC50(M)LF
60(60mm) : QTC60(M)LF
70(70mm) : QTC70(M)LF</td><td></td><td>• QTC(A) □□ (M)LF - Refer to this diagram for buzzer type product
• QTC □□ LF
└ Lens diameter 50(50mm) : QTC50(M)LF
60(60mm) : QTC60(M)LF
70(70mm) : QTC70(M)LF</td></tr>
</table>

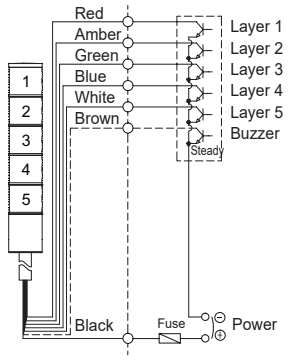
• DC steady type cable specification : External power/ signal line - UL1007 AWG22(0.3sq) 400mm

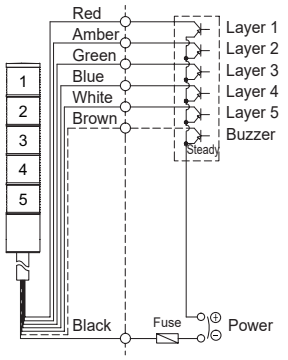
• AC steady, AC/DC steady/flashing type cable specification : External power line - UL1015 AWG18(0.75sq) × 2C 400mm,
External signal line - UL1007 AWG22(0.3sq) 400mm

■ Wiring using transistor

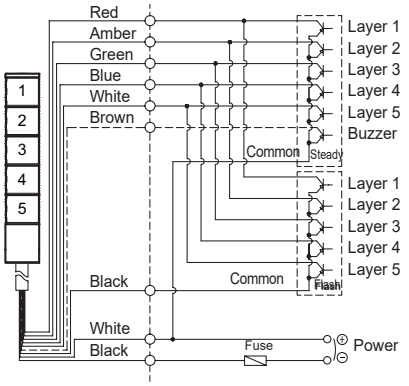
• When using a transistor, please choose between the NPN or PNP type transistor which best matches the voltage and product type, then connect them correctly according to the wiring diagrams below.

<table>
<tr><th></th><th>Wiring diagrams</th></tr>
<tr><td>DC steady

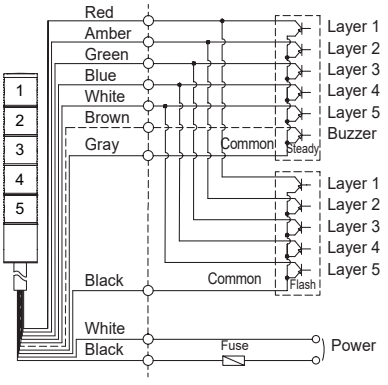
QTC50ML
QTC50L
QTC60ML
QTC60L
QTC70ML
QTC70L</td><td>
NPN-Transistor
External transistor-NPN


PNP-Transistor
External transistor-PNP


• QTC(A)□□(M)L - Refer to this diagram for buzzer type product
• QTC□□L
└ Lens diameter 50(50mm) : QTC50(M)L
60(60mm) : QTC60(M)L
70(70mm) : QTC70(M)L
</td></tr>
<tr><td>DC steady/flashing

QTC50MLF
QTC50LF
QTC60MLF
QTC60LF
QTC70MLF
QTC70LF</td><td>
External transistor-PNP


• QTC(A)□□(M)LF - Refer to this diagram for buzzer type product
• QTC□□LF
└ Lens diameter 50(50mm) : QTC50(M)LF
60(60mm) : QTC60(M)LF
70(70mm) : QTC70(M)LF
</td></tr>
<tr><td>AC steady/flashing

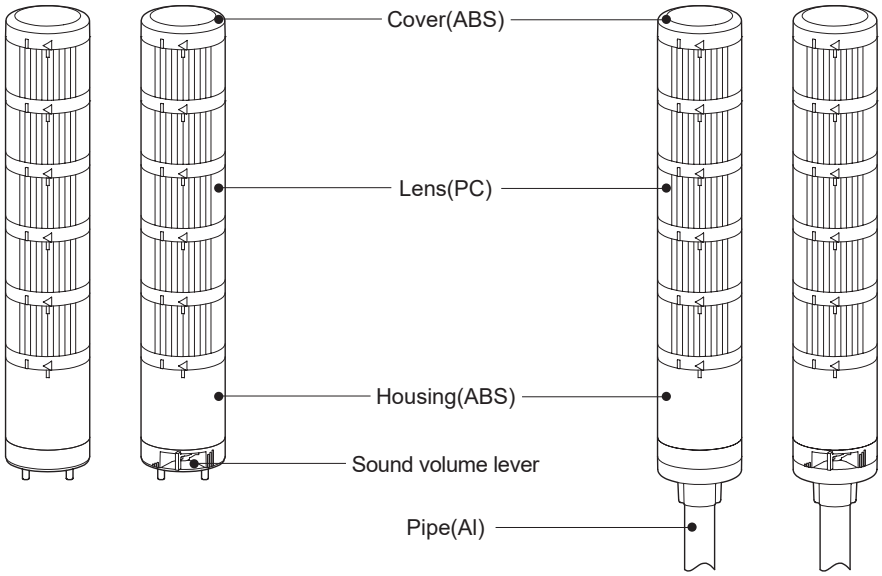
QTC50MLF
QTC50LF
QTC60MLF
QTC60LF
QTC70MLF
QTC70LF</td><td>
External transistor-PNP


• QTC(A)□□(M)LF - Refer to this diagram for buzzer type product
• QTC□□LF
└ Lens diameter 50(50mm) : QTC50(M)LF
60(60mm) : QTC60(M)LF
70(70mm) : QTC70(M)LF
</td></tr>
</table>

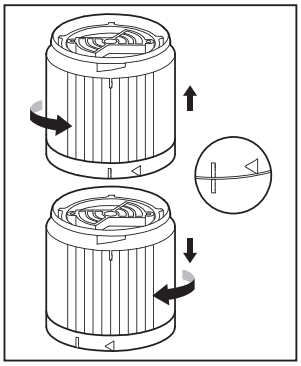
• DC steady type cable specification : External power/ signal line - UL1007 AWG22(0.3sq) 400mm

• AC steady, AC/DC steady/flashing type cable specification : External power line - UL1015 AWG18(0.75sq) × 2C 400mm,
External signal line - UL1007 AWG22(0.3sq) 400mm

Parts Definition



How to replace the module

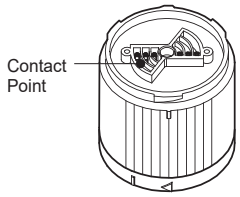


• Disassembling the module

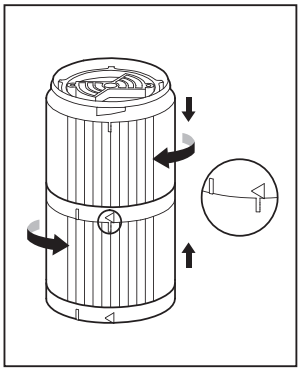
① Twist the upper module kit in a counterclockwise direction so the " " mark from both kits align.

② Disassemble by removing the upper module kit from the lower one.

※ Cautions



Lens modules are connected through cone-shaped contact point. In case the contact point is damaged, it may cause a contact failure.



• Assembling the module

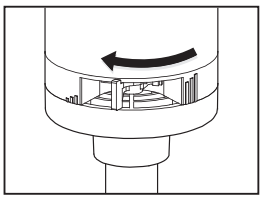
① Put the two module together by aligning the upper module' " " mark and the lower module' " " mark together.

② Lock the two kits by twisting the upper module kit in a clock wise direction so the upper module' "◁" mark aligns with the lower module' " " mark.

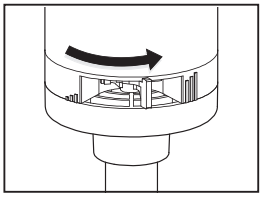
Installation Environment and Protection Rating

- This product is designed for indoor use with protection rating of IP65(standard type) or IP54(buzzer type).
- If the product is installed in locations that subject it to excessive dust or water other than the designated IP protection rating indicated(IP65), it may cause malfunction or damage to the product.
- For further information, please visit our website(www.qlight.com).

Buzzer Sound Volume Adjustment Instructions



Buzzer volume is reduced by sliding the volume control lever to the left as show in the diagram to the left.
(Min. 65±4dB/m)

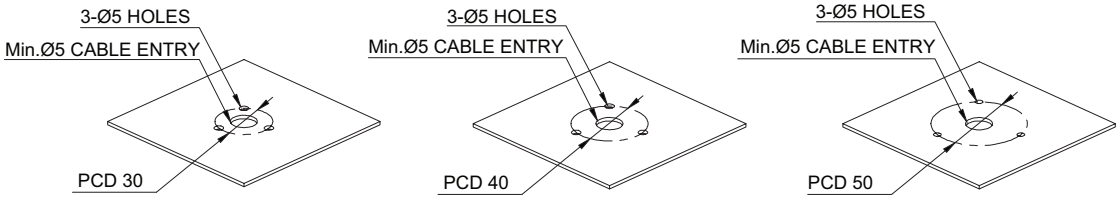


Raise/ Increase the buzzer volume by sliding the control lever to the right as shown in the diagram to the left.
(Max. 85±4dB/m)

Mounting Hole Specifications

■ **QTC50M/ QTC60M/ QTC70M - Direct Mounting Type Model**

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



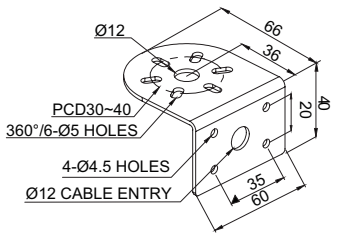
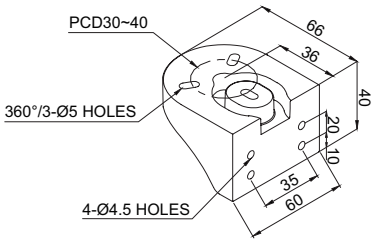
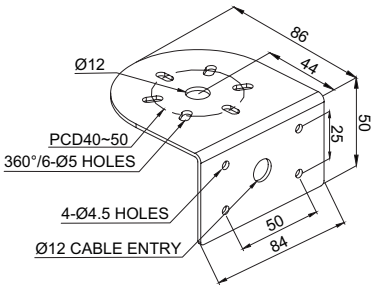
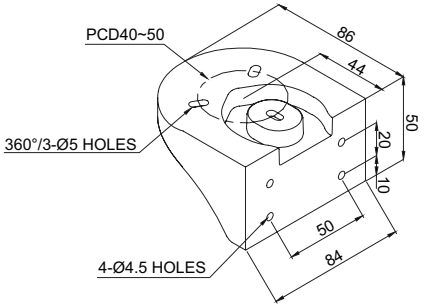
QTC50M QTC60M QTC70M

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.

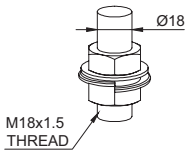
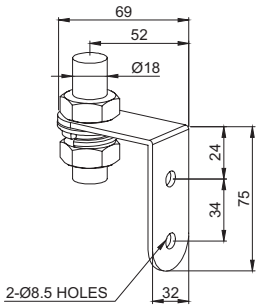
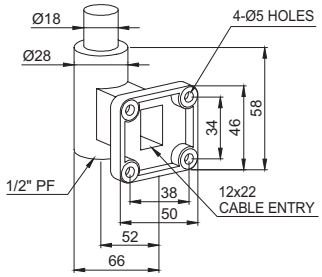
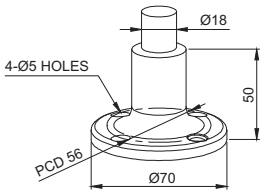
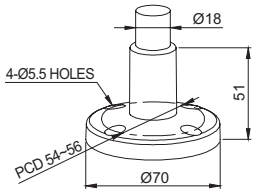
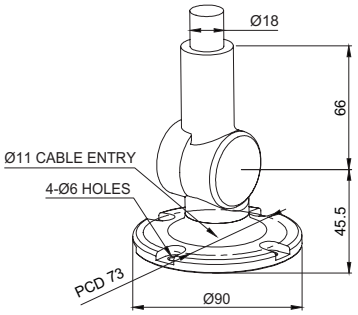
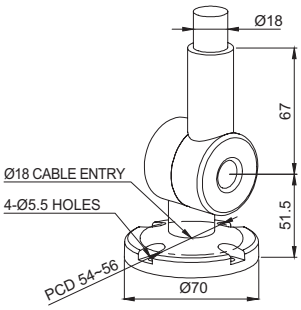
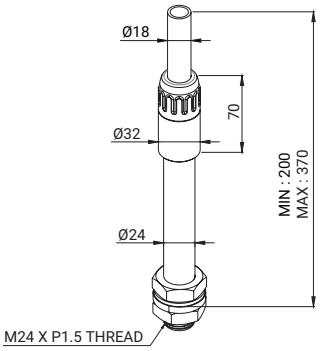
Mounting Accessories (Sold Separately)

• Please refer to the dimensions below for installation of mounting brackets.

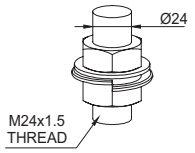
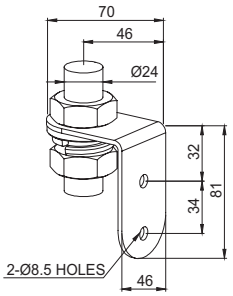
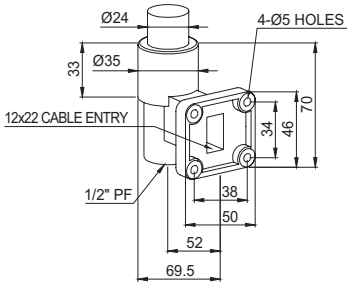
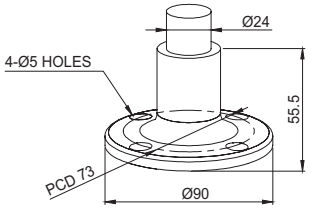
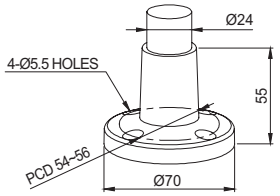
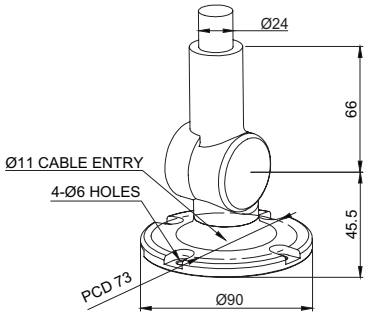
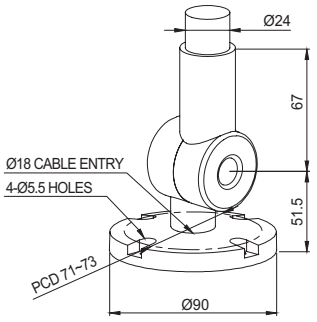
■ **QTC50ML/ QTC60ML/ QTC70ML - Direct Mounting Type Model**

	Dimensions	
QTC50 series QTC60 series	 TWS45	 TWA45
QTC70 series	 TWS80	 TWA80

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

	Dimensions	
QTC50 series QTC60 series	 18mm SCREW & NUT	 LB18
	 LW18	 SZ18
	 QZ18	 SL18
	 QL18	 SLB370

■ **QTC70L - Pole Mounting Type Model**

	Dimensions	
QTC70 series	 24mm SCREW & NUT	 LB24
	 LW24	 SZ24
	 QZ24	 SL24
	 QL24	

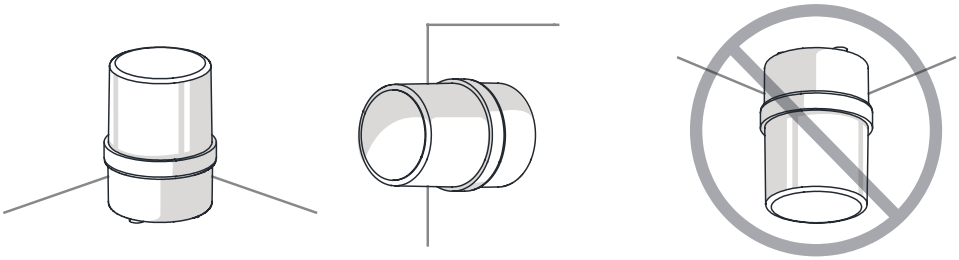
Product installation direction

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

· BEACON/SIGNALING LIGHT

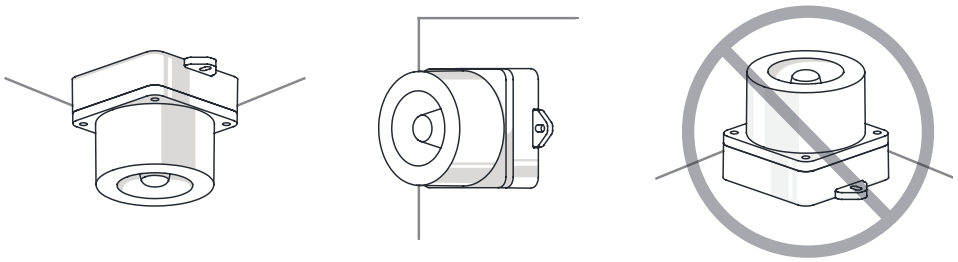
※ For products with a protection rating of less than IPX4, please install it vertically.

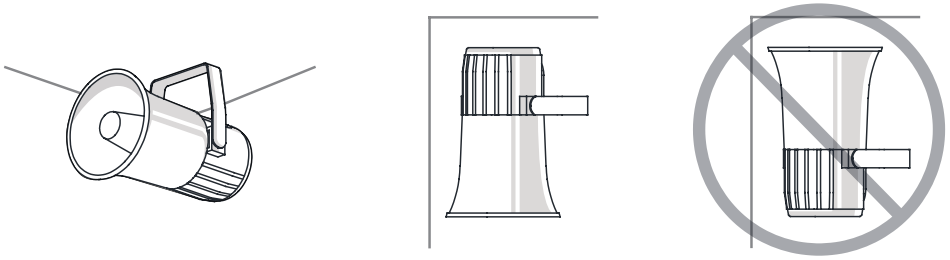
Power cord inlet part shall not be facing the sky.



· ELECTRONIC SOUNDER/SIGNAL HORN

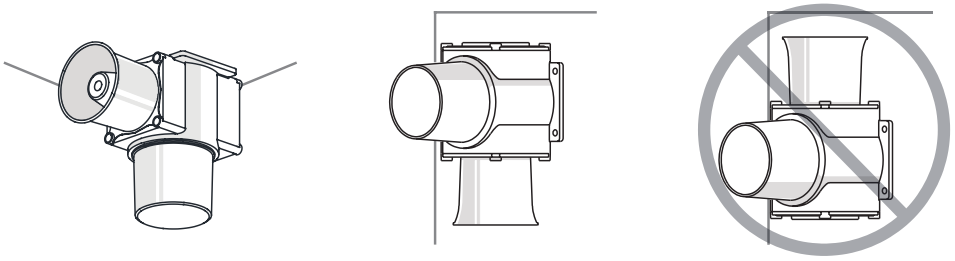
Sounder part shall not be facing the sky.





· HEAVY-DUTY & EXPLOSION PROOF SIGNALINGS

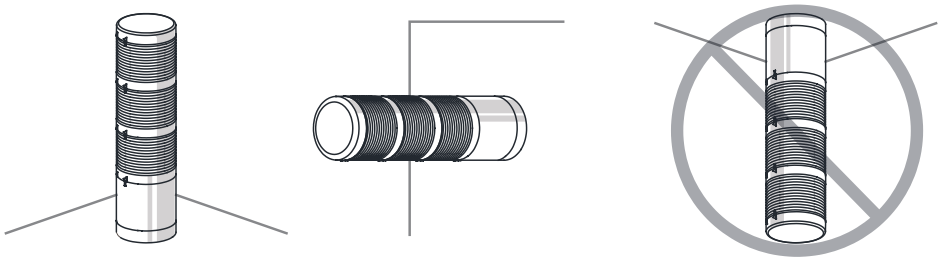
Sounder part shall not be facing the sky.



· 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.



⚠ For your safety

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.

Korea Corporation Qlight Co., Ltd. www.qlight.com | trade@qlight.com
Head Office | Suite #1510, STX-V Tower, 128 Gasan Digital 1-ro, Geumcheon-gu, Seoul, 08507, South Korea
Tel: +82-2-2679-6152 Fax: +82-2-2679-6154
Factory(Gimhae Production Headquarters) | 185-25, Mukbang-ro, Sangdong-myeon, Gimhae-si, Gyeongsangnam-do, 50805, South Korea
Tel: +82-55-328-1111
Overseas Sales Department | Qlight Building, 704 Nakdong-daero, Sasang-gu, Busan 47044, South Korea Tel: +82-51-620-4100
Busan Business Centerr | Qlight Building, 704 Nakdong-daero, Sasang-gu, Busan 47044, South Korea Tel: +82-51-245-0017

China Corporation SHANGHAI Qlight Electronic Co., Ltd. www.qlight.com www.qlightcn.com | qlightcn@qlight.com
Sales Corporation (Shanghai) | Room 333 Building B, No.11, Lane 450, Zhenda Road, Baoshan District, Shanghai, China
Tel: +86-21-6651-7100 Fax: +86-21-6315-3929
Manufacturing Corporation (Qidong) | No.33, Haiyan Road, Qidong High-tech Industrial Development Zone, Qidong, Jiangsu Province, China
Tel: +86-513-8384-9999 Fax: +86-513-8384-9910

Qlightec
Innovation in Alarm & Signal

Product Operation Inquiry / Customer Support +82-51-620-4100
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.
Head office : Suite #1510, STX-V Tower, 128 Gasan digital 1-ro, Geumcheon-gu, Seoul, Korea (Postal Code : 08507)
Factory : 185-25, Mukbang-Ro, Sangdong-Myeon, Gimhae-Si, Gyeongsangnam-Do, Korea (Postal Code : 50805)
www.qlight.com

EN - QTC50L - 2609A