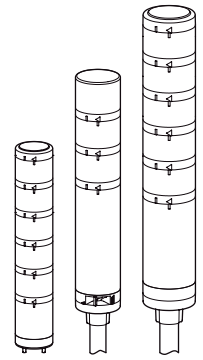


Modular LED Signal Tower Lights

QTR50/ QTR60/ QTR70

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

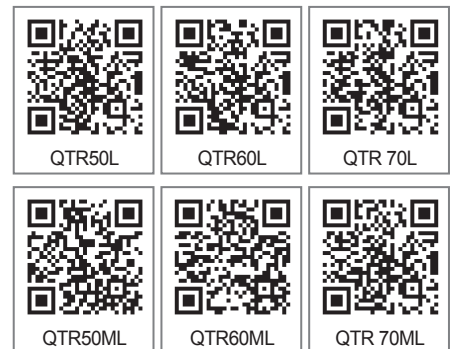
Failure to follow the proper instructions may cause damage to property, the product, and or malfunction of the product that would void the warranty.

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 Specifications

QTR50/ 60/ 70L	3	110/220	RAG	LW18
[Model number]	[Layer count]	[Voltage]	[Color]	[Mounting option]
• QTR50/ 60/ 70L • QTR50/ 60/ 70L-BZ • QTR50/ 60/ 70LF • QTR50/ 60/ 70LF-BZ • QTRA50/ 60/ 70L • QTRA50/ 60/ 70L-BZ • QTRA50/ 60/ 70LF • QTRA50/ 60/ 70LF-BZ	• 1 Layer • 2 Layers • 3 Layers • 4 Layers • 5 Layers	• 12-DC12V • 24-DC24V • 110/220 -AC110V~220V	- R-Red - A-Amber - G-Green - B-Blue - W-White	• (Blank) - Standard type • Mounting type - LB18/24 - LW18/24 - QZ18/24 - SZ18/24 - QL18/24 - SL18/24 - QLA18/24

QTR50/ 60/ 70ML	3	110/220	RAG
[Model number]	[Layer count]	[Voltage]	[Color]
• QTR50/ 60/ 70ML • QTR50/ 60/ 70ML-BZ • QTR50/ 60/ 70MLF • QTR50/ 60/ 70MLF-BZ • QTRA50/ 60/ 70ML • QTRA50/ 60/ 70ML-BZ • QTRA50/ 60/ 70MLF • QTRA50/ 60/ 70MLF-BZ	• 1 Layer • 2 Layers • 3 Layers • 4 Layers • 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

• QTR50L

Model number	Layer count	Voltage	Current	Certificate	Weight	Color
QTR50L Steady	1	AC/DC12V	0.080A	CE DC 24V Only UL DC 24V Only	0.34kg	R-Red
QTR50L-BZ		AC/DC24V	0.045A		0.34kg	
Steady/w built-in buzzer	AC110V~220V	Max. 0.045A	0.44kg			
QTR50LF	2	AC/DC12V	0.160A		0.43kg	R-Red G-Green
Steady/Flashing		AC/DC24V	0.090A		0.43kg	
QTR50LF-BZ	3	AC110V~220V	Max. 0.065A		0.53kg	
Steady/Flashing /w built-in buzzer		AC/DC12V	0.240A		0.51kg	R-Red
QTRA50L	4	AC/DC24V	0.135A		0.51kg	A-Amber
Steady		AC110V~220V	Max. 0.080A	0.61kg	G-Green	
QTRA50L-BZ	5	AC/DC12V	0.320A	0.60kg	R-Red	
Steady/w built-in buzzer		AC/DC24V	0.180A	0.60kg	A-Amber	
QTRA50LF	5	AC110V~220V	Max. 0.100A	0.70kg	G-Green B-Blue	
Steady/Flashing		AC/DC12V	0.400A	0.68kg	R-Red	
QTRA50LF-BZ		AC/DC24V	0.225A	0.68kg	A-Amber	
Steady/Flashing /w built-in buzzer		AC110V~220V	Max. 0.120A	0.78kg	G-Green B-Blue W-White	

• QTR60L

Model number	Layer count	Voltage	Current	Certificate	Weight	Color
QTR60L Steady	1	AC/DC12V	0.090A	CE DC 24V Only UL DC 24V Only	0.41kg	R-Red
QTR60L-BZ		AC/DC24V	0.050A		0.41kg	
Steady/w built-in buzzer	AC110V~220V	Max. 0.050A	0.51kg			
QTR60LF	2	AC/DC12V	0.180A		0.50kg	R-Red
Steady/Flashing		AC/DC24V	0.100A		0.50kg	G-Green
QTR60LF-BZ	3	AC110V~220V	Max. 0.072A		0.60kg	
Steady/Flashing /w built-in buzzer		AC/DC12V	0.270A		0.58kg	R-Red
QTRA60L	4	AC/DC24V	0.150A		0.58kg	A-Amber
Steady		AC110V~220V	Max. 0.094A	0.68kg	G-Green	
QTRA60L-BZ	5	AC/DC12V	0.360A	0.67kg	R-Red	
Steady/w built-in buzzer		AC/DC24V	0.200A	0.67kg	A-Amber	
QTRA60LF	5	AC110V~220V	Max. 0.116A	0.77kg	G-Green	
Steady/Flashing		AC/DC12V	0.450A		B-Blue	
QTRA60LF-BZ	5	AC/DC24V	0.250A	0.75kg	R-Red	
Steady/Flashing /w built-in buzzer		AC110V~220V	Max. 0.138A	0.75kg	A-Amber	
				0.85kg	G-Green	
					B-Blue	
					W-White	

• QTR70L

Model number	Layer count	Voltage	Current	Certificate	Weight	Color
QTR70L Steady	1	AC/DC12V	0.090A	 DC 24V Only  DC 24V Only	0.54kg	R-Red
QTR70L-BZ Steady/w built-in buzzer		AC/DC24V	0.050A		0.54kg	
	AC110V~220V	Max. 0.050A	0.64kg			
QTR70LF Steady/Flashing	2	AC/DC12V	0.180A		0.66kg	R-Red G-Green
QTR70LF-BZ Steady/Flashing		AC/DC24V	0.100A		0.66kg	
	AC110V~220V	Max. 0.072A	0.76kg			
QTR70LF-BZ Steady/Flashing /w built-in buzzer	3	AC/DC12V	0.270A		0.81kg	R-Red A-Amber G-Green
QTRA70L Steady		AC/DC24V	0.150A		0.81kg	
	AC110V~220V	Max. 0.094A	0.90kg			
QTRA70L-BZ Steady/w built-in buzzer	4	AC/DC12V	0.360A	0.96kg	R-Red A-Amber G-Green B-Blue	
QTRA70LF Steady/Flashing		AC/DC24V	0.200A	0.96kg		
	AC110V~220V	Max. 0.116A	1.06kg			
QTRA70LF-BZ Steady/Flashing /w built-in buzzer	5	AC/DC12V	0.450A	1.20kg	R-Red A-Amber G-Green B-Blue W-White	
		AC/DC24V	0.250A	1.20kg		
	AC110V~220V	Max. 0.138A	1.29kg			

• QTR50ML

Model number	Layer count	Voltage	Current	Certificate	Weight	Color
QTR50ML Steady	1	AC/DC12V	0.080A	 DC 24V Only  DC 24V Only	0.19kg	R-Red
QTR50ML-BZ Steady/w built-in buzzer		AC/DC24V	0.045A		0.19kg	
	AC110V~220V	Max. 0.045A	0.29kg			
QTR50MLF Steady/Flashing	2	AC/DC12V	0.160A		0.27kg	R-Red G-Green
QTR50MLF-BZ Steady/Flashing		AC/DC24V	0.090A		0.27kg	
QTR50MLF-BZ Steady/Flashing /w built-in buzzer		AC110V~220V	Max. 0.065A		0.37kg	
	3	AC/DC12V	0.240A		0.36kg	R-Red A-Amber G-Green
QTRA50ML Steady		AC/DC24V	0.135A		0.36kg	
		AC110V~220V	Max. 0.080A	0.46kg		
QTRA50ML-BZ Steady/w built-in buzzer	4	AC/DC12V	0.320A	0.44kg	R-Red A-Amber G-Green B-Blue	
		AC/DC24V	0.180A	0.44kg		
QTRA50MLF Steady/Flashing		AC110V~220V	Max. 0.100A	0.54kg		
	5	AC/DC12V	0.400A	0.53kg	R-Red A-Amber G-Green B-Blue W-White	
QTRA50MLF-BZ Steady/Flashing /w built-in buzzer		AC/DC24V	0.225A	0.53kg		
		AC110V~220V	Max. 0.120A	0.63kg		

• QTR60ML

Model number	Layer count	Voltage	Current	Certificate	Weight	Color		
QTR60ML Steady	1	AC/DC12V	0.090A	 DC 24V Only  DC 24V Only	0.26kg	R-Red		
QTR60ML-BZ Steady/w built-in buzzer		AC/DC24V	0.050A		0.26kg			
	AC110V~220V	Max. 0.045A	0.36kg					
QTR60MLF Steady/Flashing	2	AC/DC12V	0.180A		0.34kg	R-Red G-Green		
QTR60MLF-BZ Steady/Flashing		AC/DC24V	0.100A		0.34kg			
QTR60MLF-BZ Steady/Flashing /w built-in buzzer		AC110V~220V	Max. 0.065A		0.44kg			
	3	AC/DC12V	0.270A		0.43kg	R-Red		
		AC/DC24V	0.150A		0.43kg		A-Amber	
QTRA60ML Steady		AC110V~220V	Max. 0.094A	0.53kg	G-Green			
QTRA60ML-BZ Steady/w built-in buzzer	4	AC/DC12V	0.360A	 DC 24V Only	0.51kg	R-Red		
		AC/DC24V	0.200A		0.51kg		A-Amber	
QTRA60MLF Steady/Flashing		AC110V~220V	Max. 0.116A		0.61kg	G-Green		
	5	AC/DC12V	0.450A		0.59kg	R-Red		
QTRA60MLF-BZ Steady/Flashing		AC/DC24V	0.250A				A-Amber	
		AC110V~220V	Max. 0.138A				0.59kg	G-Green
QTRA60MLF-BZ Steady/Flashing /w built-in buzzer							0.69kg	B-Blue W-White

• QTR70ML

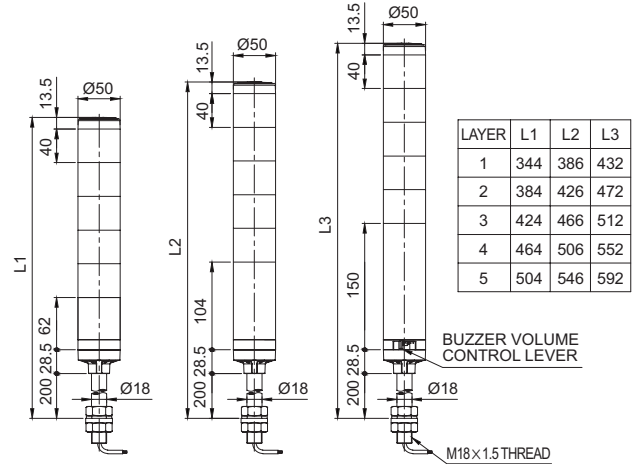
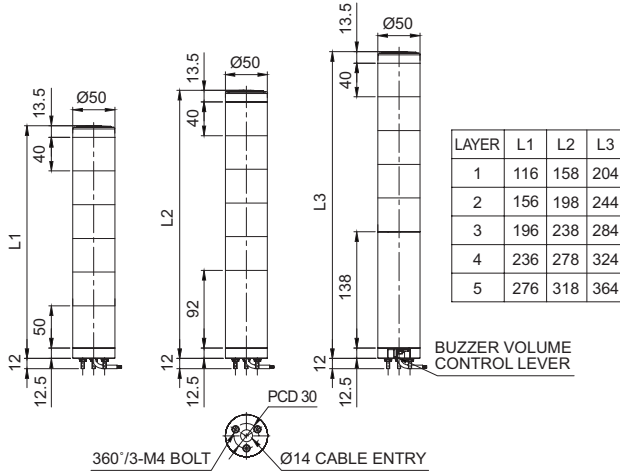
Model number	Layer count	Voltage	Current	Certificate	Weight	Color
QTR70ML Steady	1	AC/DC12V	0.090A	 DC 24V Only  DC 24V Only	0.42kg	R-Red
QTR70ML-BZ Steady/w built-in buzzer		AC/DC24V	0.050A		0.42kg	
	AC110V~220V	Max. 0.050A	0.52kg			
QTR70MLF Steady/Flashing	2	AC/DC12V	0.180A		0.56kg	R-Red G-Green
QTR70MLF-BZ Steady/Flashing		AC/DC24V	0.100A		0.56kg	
QTR70MLF-BZ Steady/Flashing /w built-in buzzer	3	AC110V~220V	Max. 0.072A		0.66kg	
		AC/DC12V	0.270A		0.77kg	R-Red
QTRA70ML Steady	4	AC/DC24V	0.150A		0.77kg	R-Red
		AC110V~220V	Max. 0.094A	0.87kg	A-Amber G-Green	
QTRA70ML-BZ Steady/w built-in buzzer	5	AC/DC12V	0.360A	0.92kg	R-Red	
QTRA70MLF Steady/Flashing		AC/DC24V	0.200A	0.92kg	A-Amber G-Green	
QTRA70MLF-BZ Steady/Flashing /w built-in buzzer	5	AC110V~220V	Max. 0.116A	1.02kg	B-Blue	
		AC/DC12V	0.450A	1.07kg	R-Red	
	5	AC/DC24V	0.250A	1.07kg	A-Amber G-Green	
		AC110V~220V	Max. 0.138A	1.17kg	B-Blue W-White	

• QTR50(M)L

QTR50ML : DC QTR50ML : AC QTR50MLF : AC
QTR50MLF : DC QTR50MLF-BZ : DC QTR50ML-BZ : AC
QTR50ML-BZ : DC QTR50MLF-BZ : AC

QTR50L : DC QTR50L : AC QTR50LF : AC
QTR50LF : DC QTR50LF-BZ : DC QTR50L-BZ : AC
QTR50L-BZ : DC

QTR50LF : AC QTR50L-BZ : AC QTR50LF-BZ : AC

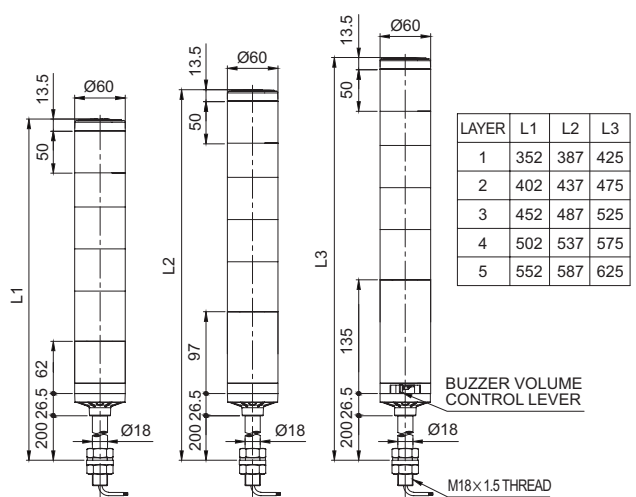
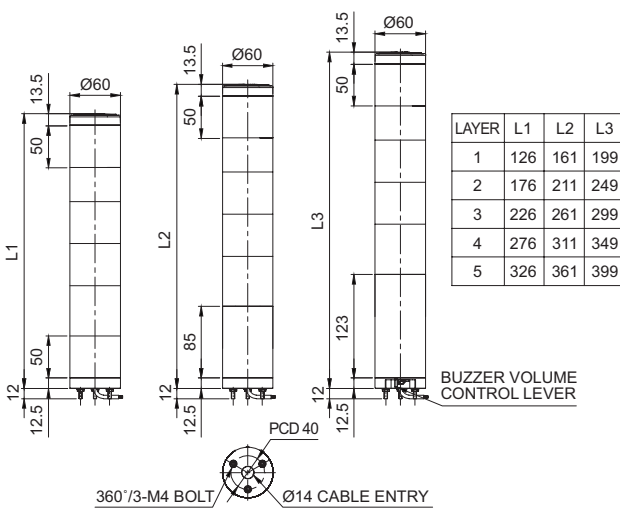


• QTR60(M)L

QTR60ML : DC QTR60ML : AC QTR60MLF : AC
QTR60MLF : DC QTR60MLF-BZ : DC QTR60ML-BZ : AC
QTR60ML-BZ : DC QTR60MLF-BZ : AC

QTR60L : DC QTR60L : AC QTR60LF : AC
QTR60LF : DC QTR60LF-BZ : DC QTR60L-BZ : AC
QTR60L-BZ : DC

QTR60LF : AC QTR60L-BZ : AC QTR60LF-BZ : AC

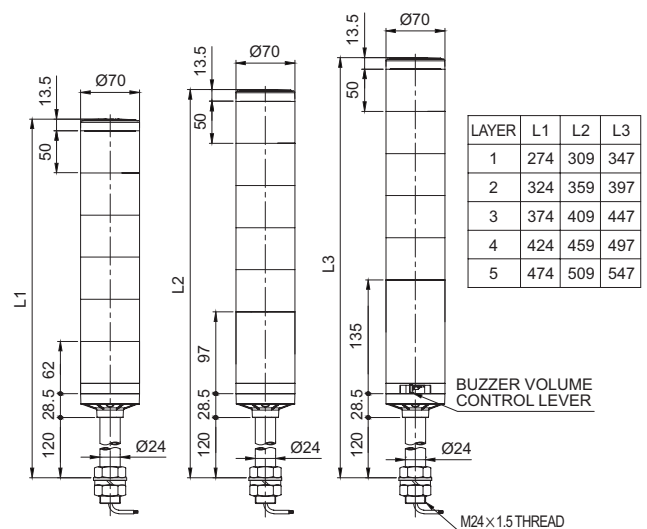
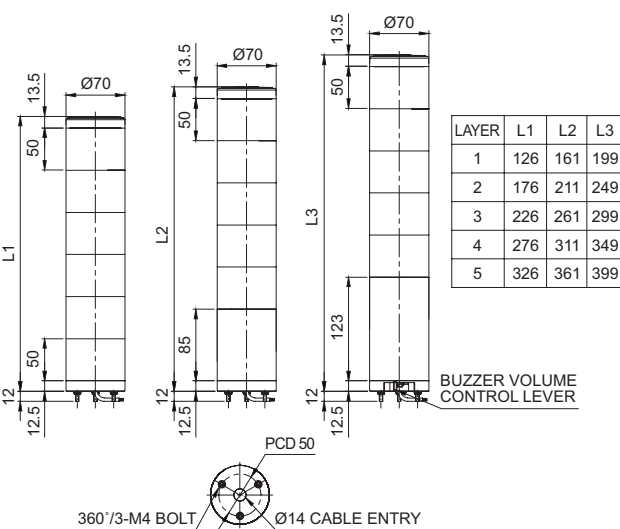


• QTR70(M)L

QTR70ML : DC QTR70ML : AC QTR70MLF-BZ : AC
QTR70MLF : DC QTR70MLF : AC QTR70ML-BZ : AC
QTR70ML-BZ : DC QTR70ML-BZ : AC QTR70MLF-BZ : DC

QTR70L : DC QTR70L : AC QTR70LF : AC
QTR70LF : DC QTR70LF : AC QTR70L-BZ : AC
QTR70L-BZ : DC QTR70L-BZ : AC QTR70LF-BZ : DC

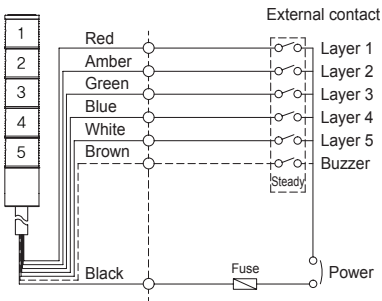
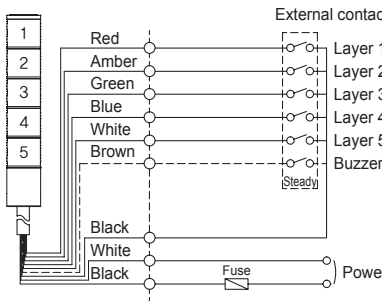
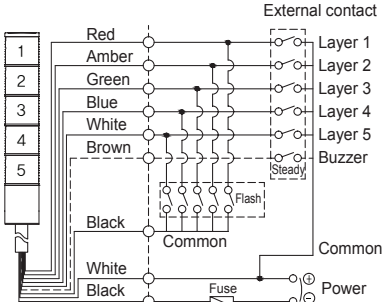
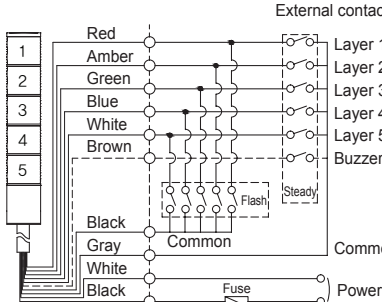
QTR70LF-BZ : AC



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.

	Wiring diagrams		Wiring diagrams
DC Steady	 QTR50ML QTR50L QTR60ML QTR60L QTR70ML QTR70L • QTR(A) □□ (M)L - Refer to this diagram for buzzer type product • QTR □□ L — Lens diameter 50(50mm) : QTR50(M)L 60(60mm) : QTR60(M)L 70(70mm) : QTR70(M)L	AC Steady	 QTR50ML QTR50L QTR60ML QTR60L QTR70ML QTR70L • QTR(A) □□ (M)L - Refer to this diagram for buzzer type product • QTR □□ L — Lens diameter 50(50mm) : QTR50(M)L 60(60mm) : QTR60(M)L 70(70mm) : QTR70(M)L
DC Steady/Flashing	 QTR50MLF QTR50LF QTR60MLF QTR60LF QTR70MLF QTR70LF • QTR(A) □□ (M)LF - Refer to this diagram for buzzer type product • QTR □□ LF — Lens diameter 50(50mm) : QTR50(M)LF 60(60mm) : QTR60(M)LF 70(70mm) : QTR70(M)LF	AC Steady/Flashing	 QTR50MLF QTR50LF QTR60MLF QTR60LF QTR70MLF QTR70LF • QTR(A) □□ (M)LF - Refer to this diagram for buzzer type product • QTR □□ LF — Lens diameter 50(50mm) : QTR50(M)LF 60(60mm) : QTR60(M)LF 70(70mm) : QTR70(M)LF

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

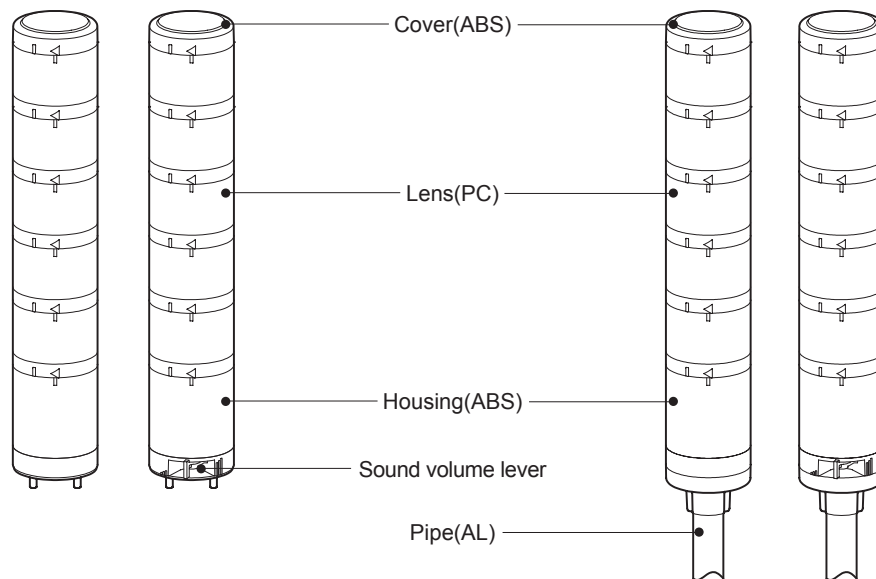
■ Wiring using transistor

- 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.

Wiring diagrams	
DC Steady	NPN-Transistor External Transistor-NPN QTR50ML QTR50L QTR60ML QTR60L QTR70ML QTR70L • QTR(A) □ □ (M)L - Refer to this diagram for buzzer type product • QTR □ □ L □ Lens diameter 50(50mm) : QTR50(M)L □ 60(60mm) : QTR60(M)L □ 70(70mm) : QTR70(M)L PNP-Transistor External Transistor-PNP
DC Steady/Flashing	PNP-Transistor External Transistor-PNP QTR50MLF QTR50LF QTR60MLF QTR60LF QTR70MLF QTR70LF • QTR(A) □ □ (M)LF - Refer to this diagram for buzzer type product • QTR □ □ LF □ Lens diameter 50(50mm) : QTR50(M)LF □ 60(60mm) : QTR60(M)LF □ 70(70mm) : QTR70(M)LF AC Steady/Flashing PNP-Transistor External Transistor-NPN QTR50MLF QTR50LF QTR60MLF QTR60LF QTR70MLF QTR70LF • QTR(A) □ □ (M)LF - Refer to this diagram for buzzer type product • QTR □ □ LF □ Lens diameter 50(50mm) : QTR50(M)LF □ 60(60mm) : QTR60(M)LF □ 70(70mm) : QTR70(M)LF

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

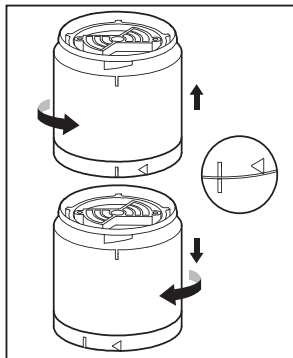
Parts Definition



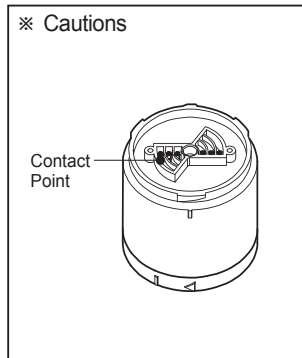
Installation Environment and Protection Rating

- This product is designed for indoor use with protection rating of IP65(standard type) and 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 at <http://www.qlight.com>.

How to Change Lens Kit

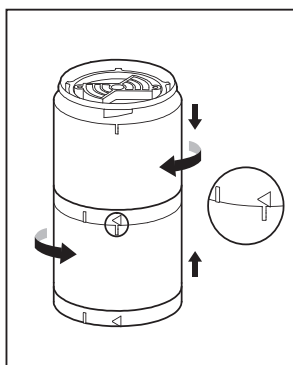


- Disassembling lens kit
 - ① Twist the upper lens kit in a counter-wise direction so the "I" mark from both kits align.
 - ② Disassemble by removing the upper lens kit from the lower one.



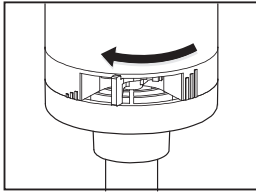
※ Cautions

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

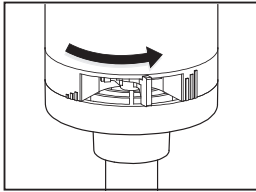


- Assembling lens kit
 - ① Put the two lens kits together by aligning the upper lens' "I" mark and the lower lens' "I" mark together.
 - ② Lock the two kits by twisting the upper lens kit in a counter-wise direction so the upper lens' "<" mark aligns with the lower lens' "I" mark.

Buzzer Sound Volume Adjustment Instructions



Buzzer volume is reduced by sliding the volume control lever to the left as shown in the diagram to the left.
(Min. $65 \pm 4 \text{ dB/m}$)

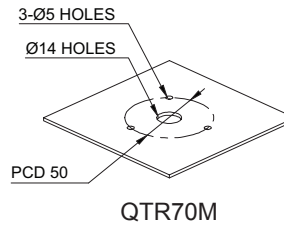
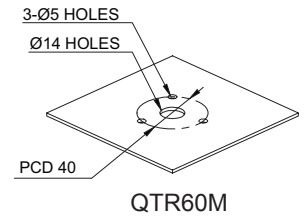
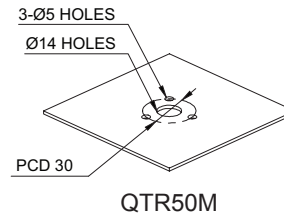


Raise/ Increase the buzzer volume by sliding the control lever to the right as shown in the diagram to the left.
(Max. $85 \pm 4 \text{ dB/m}$)

Mounting Hole Specifications

■ QTR50M/ QTR60M/ QTR70M -Direct Mounting Type Model

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



- Please disassemble flange nuts placed in mounting bolts and put the 3 bolts into mounting holes.
- Tighten the flange nuts from the opposite side of the mounting surface.

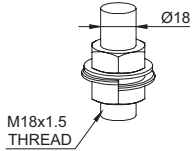
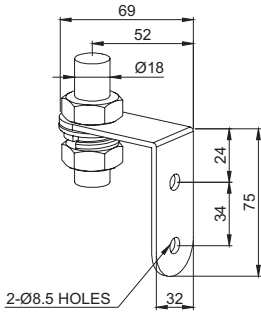
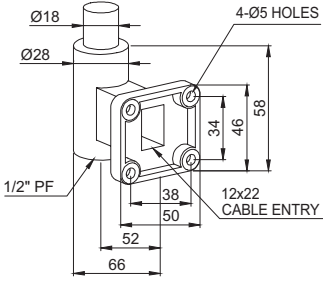
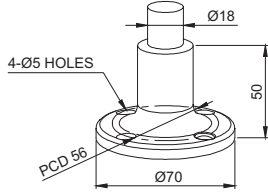
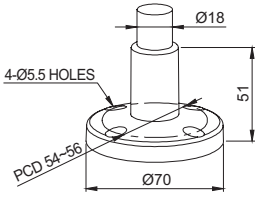
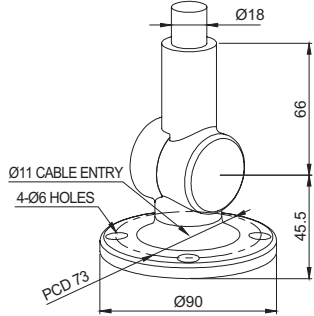
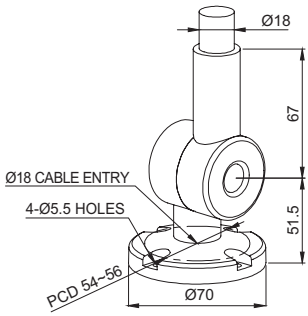
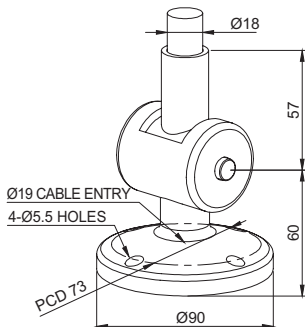
Mounting Accessories (Sold Separately)

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

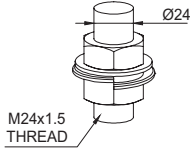
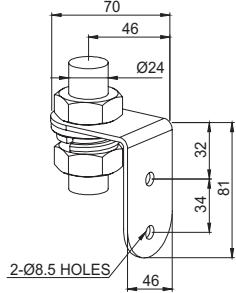
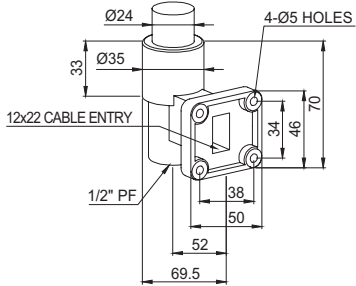
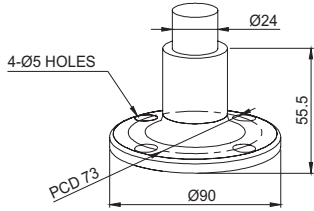
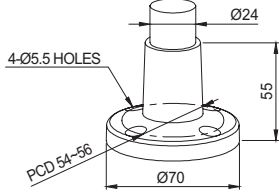
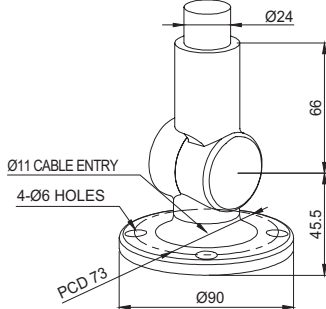
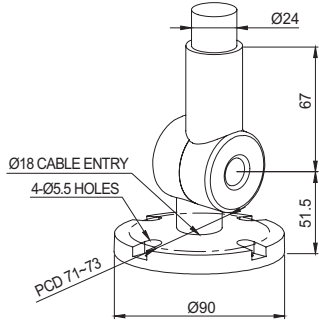
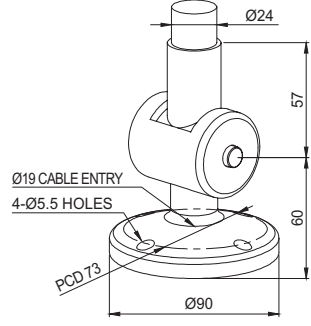
■ QTR50ML/ QTR60ML/ QTR70ML - Direct Mounting Type Model

	Dimensions	
QTR50 series QTR60 series	TWS45	TWA45
QTR70 series	TWS80	TWA80

■ QTR50L/ QTR60L - Pole Mounting Type Model

Dimensions	
QTR50 series QTR60 series	 M18x1.5 THREAD 18mm SCREW & NUT
	 LB18
	 LW18
	 SZ18
	 QZ18
	 SL18
	 QL18
	 QLA18

■ QTR70L - Pole Mounting Type Model

	Dimensions	
QTR70 series	 M24x1.5 THREAD 24mm SCREW & NUT	 LB24
	 LW24	 SZ24
	 QZ24	 SL24
	 QL24	 QLA24

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Product Operation Inquiry / Customer Support +82-55-328-4082

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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