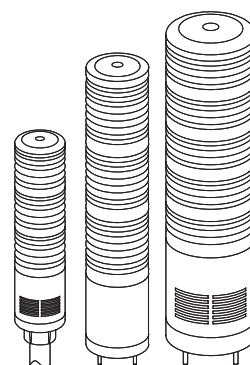


# LED Steady/Flashing Tower Lights

## ST45/ ST56/ ST80



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.



Please scan the QR code for more detailed product information.

[www.qlight.com](http://www.qlight.com)

## Ordering Specifications

<b>ST45/ 56ML</b>	<b>3</b>	<b>110/220</b>	<b>RAG</b>	<b>ST45/ 56L</b>	<b>3</b>	<b>110/220</b>	<b>RAG</b>	<b>LW18</b>
[Model number]	[Layer count]	[Voltage]	[Color]	[Model number]	[Layer count]	[Voltage]	[Color]	[Mounting option]
<ul style="list-style-type: none"> <li>• ST45/ 56ML</li> <li>• ST45/ 56ML-BZ</li> <li>• ST45/ 56ML-WS</li> <li>• ST45/ 56ML-WM</li> <li>• ST45/ 56ML-WA</li> <li>• ST45/ 56MLF</li> <li>• ST45/ 56MLF-BZ</li> <li>• ST45/ 56MLF-WS</li> <li>• ST45/ 56MLF-WM</li> <li>• ST45/ 56MLF-WA</li> </ul>	<ul style="list-style-type: none"> <li>• 1-1 Layer</li> <li>• 2-2Layers</li> <li>• 3-3 Layers</li> <li>• 4-4 Layers</li> <li>• 5-5 Layers</li> </ul>	<ul style="list-style-type: none"> <li>• 12-DC12V</li> <li>• 24-DC24V</li> <li>• 110-AC110V</li> <li>• 220-AC220V</li> </ul>	<ul style="list-style-type: none"> <li>R-Red</li> <li>A-Amber</li> <li>G-Green</li> <li>B-Blue</li> <li>W-White</li> </ul>	<ul style="list-style-type: none"> <li>• ST45/ 56L</li> <li>• ST45/ 56L-BZ</li> <li>• ST45/ 56L-WS</li> <li>• ST45/ 56L-WM</li> <li>• ST45/ 56L-WA</li> <li>• ST45/ 56LF</li> <li>• ST45/ 56LF-BZ</li> <li>• ST45/ 56LF-WS</li> <li>• ST45/ 56LF-WM</li> <li>• ST45/ 56LF-WA</li> </ul>	<ul style="list-style-type: none"> <li>• 1-1 Layer</li> <li>• 2-2Layers</li> <li>• 3-3 Layers</li> <li>• 4-4 Layers</li> <li>• 5-5 Layers</li> </ul>	<ul style="list-style-type: none"> <li>• 12-DC12V</li> <li>• 24-DC24V</li> <li>• 110-AC110V</li> <li>• 220-AC220V</li> </ul>	<ul style="list-style-type: none"> <li>R-Red</li> <li>A-Amber</li> <li>G-Green</li> <li>B-Blue</li> <li>W-White</li> </ul>	<ul style="list-style-type: none"> <li>• (Blank)</li> <li>- Standard type</li> <li>• Mounting type</li> <li>- LB18 - LW18</li> <li>- QZ18 - SZ18</li> <li>- QL18 - SL18</li> <li>- QLA18</li> </ul>

<b>ST80ML</b>	<b>3</b>	<b>110/220</b>	<b>RAG</b>	<b>ST80L</b>	<b>3</b>	<b>110/220</b>	<b>RAG</b>	<b>LW24</b>
[Model number]	[Layer count]	[Voltage]	[Color]	[Model number]	[Layer count]	[Voltage]	[Color]	[Mounting option]
<ul style="list-style-type: none"> <li>• ST80ML</li> <li>• ST80ML-BZ</li> <li>• ST80ML-WS</li> <li>• ST80ML-WM</li> <li>• ST80ML-WA</li> <li>• ST80MLF</li> <li>• ST80MLF-BZ</li> <li>• ST80MLF-WS</li> <li>• ST80MLF-WM</li> <li>• ST80MLF-WA</li> </ul>	<ul style="list-style-type: none"> <li>• 1-1 Layer</li> <li>• 2-2Layers</li> <li>• 3-3 Layers</li> <li>• 4-4 Layers</li> <li>• 5-5 Layers</li> </ul>	<ul style="list-style-type: none"> <li>• 12-DC12V</li> <li>• 24-DC24V</li> <li>• 110-AC110V</li> <li>• 220-AC220V</li> </ul>	<ul style="list-style-type: none"> <li>R-Red</li> <li>A-Amber</li> <li>G-Green</li> <li>B-Blue</li> <li>W-White</li> </ul>	<ul style="list-style-type: none"> <li>• ST80L</li> <li>• ST80L-BZ</li> <li>• ST80L-WS</li> <li>• ST80L-WM</li> <li>• ST80L-WA</li> <li>• ST80LF</li> <li>• ST80LF-BZ</li> <li>• ST80LF-WS</li> <li>• ST80LF-WM</li> <li>• ST80LF-WA</li> </ul>	<ul style="list-style-type: none"> <li>• 1-1 Layer</li> <li>• 2-2Layers</li> <li>• 3-3 Layers</li> <li>• 4-4 Layers</li> <li>• 5-5 Layers</li> </ul>	<ul style="list-style-type: none"> <li>• 12-DC12V</li> <li>• 24-DC24V</li> <li>• 110-AC110V</li> <li>• 220-AC220V</li> </ul>	<ul style="list-style-type: none"> <li>R-Red</li> <li>A-Amber</li> <li>G-Green</li> <li>B-Blue</li> <li>W-White</li> </ul>	<ul style="list-style-type: none"> <li>• (Blank)</li> <li>- Standard type</li> <li>• Mounting type</li> <li>- LB24 - LW24</li> <li>- QZ24 - SZ24</li> <li>- QL24 - SL24</li> <li>- QLA24</li> </ul>

<b>ST56MEL</b>	<b>3</b>	<b>110/220</b>	<b>RAG</b>	<b>ST56EL</b>	<b>3</b>	<b>110/220</b>	<b>RAG</b>	<b>LW18</b>
[Model number]	[Layer count]	[Voltage]	[Color]	[Model number]	[Layer count]	[Voltage]	[Color]	[Mounting option]
<ul style="list-style-type: none"> <li>• ST56MEL</li> <li>• ST56MEL-BZ</li> <li>• ST56MEL-WS</li> <li>• ST56MEL-WM</li> <li>• ST56MEL-WA</li> <li>• ST56MELF</li> <li>• ST56MELF-BZ</li> <li>• ST56MELF-WS</li> <li>• ST56MELF-WM</li> <li>• ST56MELF-WA</li> </ul>	<ul style="list-style-type: none"> <li>• 1-1 Layer</li> <li>• 2-2Layers</li> <li>• 3-3 Layers</li> <li>• 4-4 Layers</li> <li>• 5-5 Layers</li> </ul>	<ul style="list-style-type: none"> <li>• 12-DC12V</li> <li>• 24-DC24V</li> <li>• 110-AC110V</li> <li>• 220-AC220V</li> </ul>	<ul style="list-style-type: none"> <li>R-Red</li> <li>A-Amber</li> <li>G-Green</li> <li>B-Blue</li> <li>W-White</li> </ul>	<ul style="list-style-type: none"> <li>• ST56EL</li> <li>• ST56EL-BZ</li> <li>• ST56EL-WS</li> <li>• ST56EL-WM</li> <li>• ST56EL-WA</li> <li>• ST56ELF</li> <li>• ST56ELF-BZ</li> <li>• ST56ELF-WS</li> <li>• ST56ELF-WM</li> <li>• ST56ELF-WA</li> </ul>	<ul style="list-style-type: none"> <li>• 1-1 Layer</li> <li>• 2-2Layers</li> <li>• 3-3 Layers</li> <li>• 4-4 Layers</li> <li>• 5-5 Layers</li> </ul>	<ul style="list-style-type: none"> <li>• 12-DC12V</li> <li>• 24-DC24V</li> <li>• 110-AC110V</li> <li>• 220-AC220V</li> </ul>	<ul style="list-style-type: none"> <li>R-Red</li> <li>A-Amber</li> <li>G-Green</li> <li>B-Blue</li> <li>W-White</li> </ul>	<ul style="list-style-type: none"> <li>• (Blank)</li> <li>- Standard type</li> <li>• Mounting type</li> <li>- LB18 - LW18</li> <li>- QZ18 - SZ18</li> <li>- QL18 - SL18</li> <li>- QLA18</li> </ul>

<b>ST80MEL</b>	<b>3</b>	<b>110/220</b>	<b>RAG</b>	<b>ST80EL</b>	<b>3</b>	<b>110/220</b>	<b>RAG</b>	<b>LW24</b>
[Model number]	[Layer count]	[Voltage]	[Color]	[Model number]	[Layer count]	[Voltage]	[Color]	[Mounting option]
<ul style="list-style-type: none"> <li>• ST80MEL</li> <li>• ST80MEL-BZ</li> <li>• ST80MEL-WS</li> <li>• ST80MEL-WM</li> <li>• ST80MEL-WA</li> <li>• ST80MELF</li> <li>• ST80MELF-BZ</li> <li>• ST80MELF-WS</li> <li>• ST80MELF-WM</li> <li>• ST80MELF-WA</li> </ul>	<ul style="list-style-type: none"> <li>• 1-1 Layer</li> <li>• 2-2Layers</li> <li>• 3-3 Layers</li> <li>• 4-4 Layers</li> <li>• 5-5 Layers</li> </ul>	<ul style="list-style-type: none"> <li>• 12-DC12V</li> <li>• 24-DC24V</li> <li>• 110-AC110V</li> <li>• 220-AC220V</li> </ul>	<ul style="list-style-type: none"> <li>R-Red</li> <li>A-Amber</li> <li>G-Green</li> <li>B-Blue</li> <li>W-White</li> </ul>	<ul style="list-style-type: none"> <li>• ST80EL</li> <li>• ST80EL-BZ</li> <li>• ST80EL-WS</li> <li>• ST80EL-WM</li> <li>• ST80EL-WA</li> <li>• ST80ELF</li> <li>• ST80ELF-BZ</li> <li>• ST80ELF-WS</li> <li>• ST80ELF-WM</li> <li>• ST80ELF-WA</li> </ul>	<ul style="list-style-type: none"> <li>• 1-1 Layer</li> <li>• 2-2Layers</li> <li>• 3-3 Layers</li> <li>• 4-4 Layers</li> <li>• 5-5 Layers</li> </ul>	<ul style="list-style-type: none"> <li>• 12-DC12V</li> <li>• 24-DC24V</li> <li>• 110-AC110V</li> <li>• 220-AC220V</li> </ul>	<ul style="list-style-type: none"> <li>R-Red</li> <li>A-Amber</li> <li>G-Green</li> <li>B-Blue</li> <li>W-White</li> </ul>	<ul style="list-style-type: none"> <li>• (Blank)</li> <li>- Standard type</li> <li>• Mounting type</li> <li>- LB24 - LW24</li> <li>- QZ24 - SZ24</li> <li>- QL24 - SL24</li> <li>- QLA24</li> </ul>



## Product Specifications

### • ST80MEL

Model number	Layer count	Voltage	Current	Certificate	Weight	Color	
* ST80MEL * ST80MEL-BZ ST80MEL-WS ST80MEL-WM ST80MEL-WA ST80MELF ST80MELF-BZ ST80MELF-WS ST80MELF-WM ST80MELF-WA	1	AC/DC12V	0.080A	CE UL	0.36kg	R-Red	
		AC/DC24V	0.040A		0.36kg		
		AC110V	0.046A		0.59kg		
	AC220V	0.023A	0.59kg				
	2	AC/DC12V	0.160A		0.45kg	R-Red	
		AC/DC24V	0.080A		0.45kg		G-Green
		AC110V	0.051A		0.68kg		
	AC220V	0.025A	0.68kg				
	3	AC/DC12V	0.240A		0.55kg	R-Red	
		AC/DC24V	0.120A		0.55kg		A-Amber
		AC110V	0.057A		0.76kg		
	AC220V	0.028A	0.76kg				
	4	AC/DC12V	0.320A		0.64kg	R-Red	
		AC/DC24V	0.160A		0.64kg		A-Amber
		AC110V	0.064A		0.87kg		
AC220V	0.032A	0.87kg					
5	AC/DC12V	0.400A	0.73kg	R-Red			
	AC/DC24V	0.200A	0.73kg		A-Amber		
	AC110V	0.071A	0.96kg				
AC220V	0.035A	0.96kg					

### • ST80EL

Model number	Layer count	Voltage	Current	Certificate	Weight	Color	
* ST80EL * ST80EL-BZ ST80EL-WS ST80EL-WM ST80EL-WA ST80ELF ST80ELF-BZ ST80ELF-WS ST80ELF-WM ST80ELF-WA	1	AC/DC12V	0.080A	CE UL	0.58kg	R-Red	
		AC/DC24V	0.040A		0.58kg		
		AC110V	0.046A		0.81kg		
		AC220V	0.023A		0.81kg		
	2	AC/DC12V	0.160A		0.67kg	R-Red	
		AC/DC24V	0.080A		0.67kg		G-Green
		AC110V	0.051A		0.91kg		
		AC220V	0.025A		0.91kg		
	3	AC/DC12V	0.240A		0.77kg	R-Red	
		AC/DC24V	0.120A		0.77kg		A-Amber
		AC110V	0.057A		1.00kg		
		AC220V	0.028A		1.00kg		
	4	AC/DC12V	0.320A		0.86kg	R-Red	
		AC/DC24V	0.160A		0.86kg		A-Amber
		AC110V	0.064A		1.09kg		
AC220V		0.032A	1.09kg				
5	AC/DC12V	0.400A	0.95kg	R-Red			
	AC/DC24V	0.200A	0.95kg		A-Amber		
	AC110V	0.071A	1.19kg				
	AC220V	0.035A	1.19kg				

### • ST80ML

Model number	Layer count	Voltage	Current	Certificate	Weight	Color	
* ST80ML * ST80ML-BZ ST80ML-WS ST80ML-WM ST80ML-WA ST80MLF ST80MLF-BZ ST80MLF-WS ST80MLF-WM ST80MLF-WA	1	AC/DC12V	0.160A	CE UL	0.40kg	R-Red	
		AC/DC24V	0.080A		0.40kg		
		AC110V	0.055A		0.64kg		
		AC220V	0.027A		0.64kg		
	2	AC/DC12V	0.320A		0.54kg	R-Red	
		AC/DC24V	0.160A		0.54kg		G-Green
		AC110V	0.064A		0.78kg		
		AC220V	0.032A		0.78kg		
	3	AC/DC12V	0.480A		0.68kg	R-Red	
		AC/DC24V	0.240A		0.68kg		A-Amber
		AC110V	0.073A		0.92kg		
		AC220V	0.036A		0.92kg		
	4	AC/DC12V	0.640A		0.83kg	R-Red	
		AC/DC24V	0.320A		0.83kg		A-Amber
		AC110V	0.084A		1.06kg		
AC220V		0.042A	1.06kg				
5	AC/DC12V	0.800A	0.97kg	R-Red			
	AC/DC24V	0.400A	0.97kg		A-Amber		
	AC110V	0.093A	1.20kg				
	AC220V	0.046A	1.20kg				

### • ST80L

Model number	Layer count	Voltage	Current	Certificate	Weight	Color	
* ST80L * ST80L-BZ ST80L-WS ST80L-WM ST80L-WA ST80LF ST80LF-BZ ST80LF-WS ST80LF-WM ST80LF-WA	1	AC/DC12V	0.160A	CE UL	0.62kg	R-Red	
		AC/DC24V	0.080A		0.62kg		
		AC110V	0.055A		0.86kg		
		AC220V	0.027A		0.86kg		
	2	AC/DC12V	0.320A		0.77kg	R-Red	
		AC/DC24V	0.160A		0.77kg		G-Green
		AC110V	0.064A		1.00kg		
		AC220V	0.032A		1.00kg		
	3	AC/DC12V	0.480A		0.91kg	R-Red	
		AC/DC24V	0.240A		0.91kg		A-Amber
		AC110V	0.073A		1.14kg		
		AC220V	0.036A		1.14kg		
	4	AC/DC12V	0.640A		1.05kg	R-Red	
		AC/DC24V	0.320A		1.05kg		A-Amber
		AC110V	0.084A		1.29kg		
AC220V		0.042A	1.29kg				
5	AC/DC12V	0.800A	1.19kg	R-Red			
	AC/DC24V	0.400A	1.19kg		A-Amber		
	AC110V	0.093A	1.14kg				
	AC220V	0.046A	1.14kg				

\* Models with an asterisk mark (\*) have certification.

\* CE compliant : DC24V, DC12V/24V(ST80EL, ST80EL)

\* UL listed : DC24V

### • Signal/ Audible line current(Per each layer)

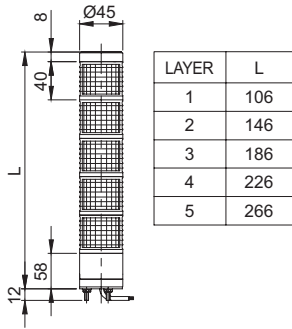
Model number	Current	AC/DC12V	AC/DC24V	AC110V	AC220V
ST45ML ST45L	Signal line current	0.040A	0.040A	0.024A	0.012A
	Audible line current	0.016A	0.031A	0.027A	0.030A
ST56MEL ST56EL	Signal line current	0.060A	0.040A	0.044A	0.022A
	Audible line current	0.016A	0.031A	0.027A	0.030A
ST56ML ST56L	Signal line current	0.120A	0.080A	0.048A	0.024A
	Audible line current	0.016A	0.031A	0.027A	0.030A
ST80MEL ST80EL	Signal line current	0.080A	0.040A	0.046A	0.023A
	Audible line current	0.016A	0.031A	0.027A	0.030A
ST80ML ST80L	Signal line current	0.160A	0.080A	0.055A	0.027A
	Audible line current	0.016A	0.031A	0.027A	0.030A

# Dimensions

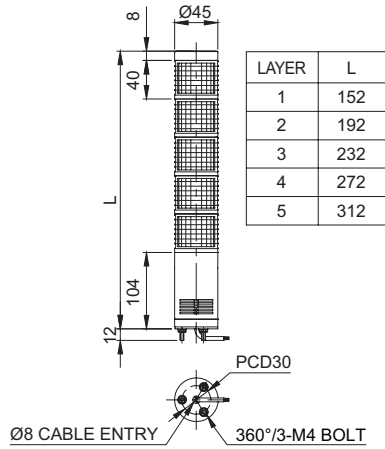
(Units : mm)

## • ST45ML/ ST45L

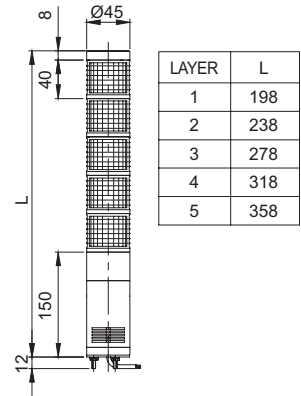
ST45ML : AC/DC  
ST45ML-BZ : DC  
ST45MLF : DC



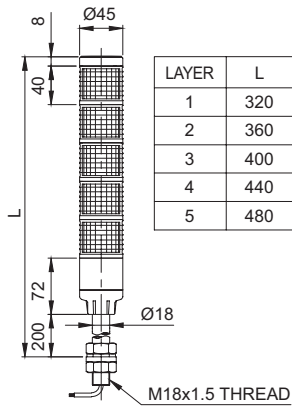
ST45ML-BZ : AC  
ST45MLF : AC  
ST45MLF-BZ : DC



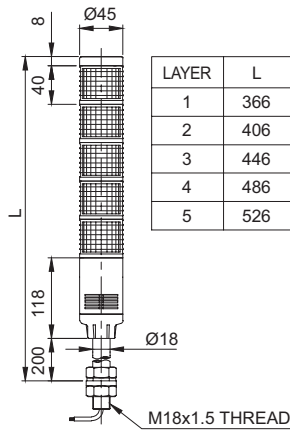
ST45MLF-BZ : AC



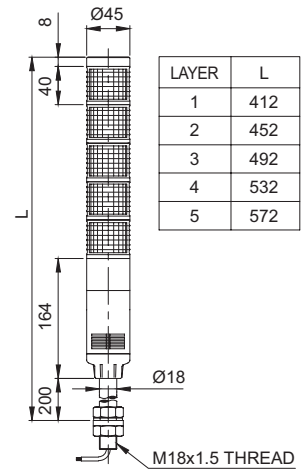
ST45L : AC/DC  
ST45L-BZ : DC  
ST45LF : DC



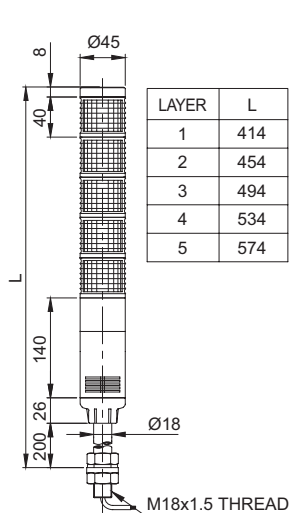
ST45L-BZ : AC  
ST45LF : AC  
ST45LF-BZ : DC



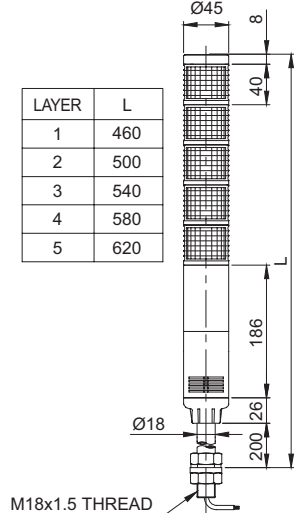
ST45LF-BZ : AC



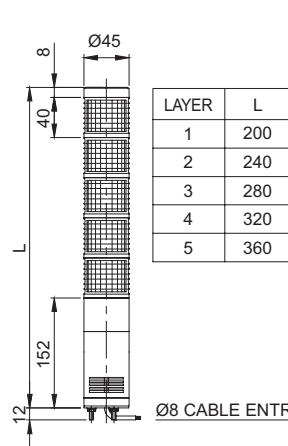
ST45L-W□ : DC  
ST45LF-W□ : DC



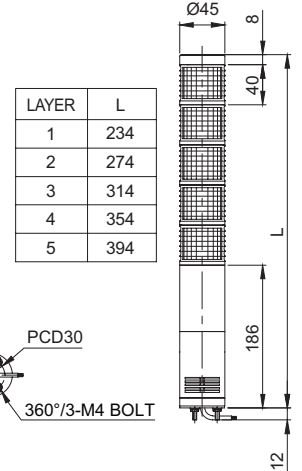
ST45L-W□ : AC  
ST45LF-W□ : AC



ST45ML-W□ : DC  
ST45MLF-W□ : DC



ST45ML-W□ : AC  
ST45MLF-W□ : AC

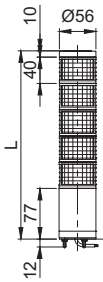


# Dimensions

(Units : mm)

## • ST56MEL/ ST56EL

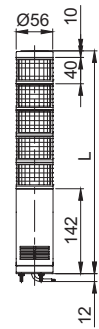
ST56MEL : AC/DC  
ST56MEL-BZ : DC  
ST56MELF : DC



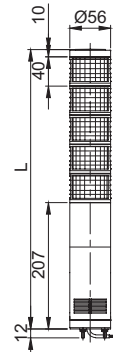
LAYER	L
1	127
2	167
3	207
4	247
5	287

LAYER	L
1	192
2	232
3	272
4	312
5	352

ST56MEL-BZ : AC  
ST56MELF-BZ : AC/DC  
ST56MELF : AC



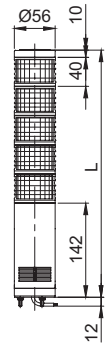
ST56MEL-W□ : AC  
ST56MELF-W□ : AC



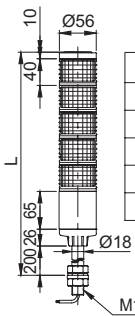
LAYER	L
1	257
2	297
3	337
4	377
5	417

LAYER	L
1	192
2	232
3	272
4	312
5	352

ST56MEL-W□ : DC  
ST56MELF-W□ : DC



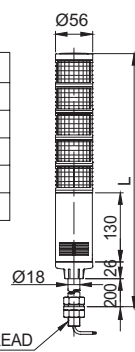
ST56EL : AC/DC  
ST56EL-BZ : DC  
ST56ELF : DC



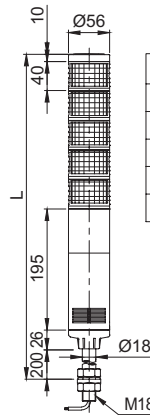
LAYER	L
1	341
2	381
3	421
4	461
5	501

LAYER	L
1	406
2	446
3	486
4	526
5	566

ST56EL-BZ : AC  
ST56ELF-BZ : AC/DC  
ST56ELF : AC



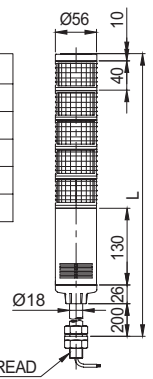
ST56EL-W□ : AC  
ST56ELF-W□ : AC



LAYER	L
1	471
2	511
3	551
4	591
5	631

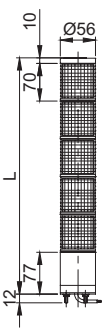
LAYER	L
1	406
2	446
3	486
4	526
5	566

ST56EL-W□ : DC  
ST56ELF-W□ : DC



## • ST56ML/ ST56L

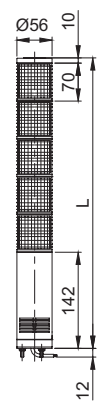
ST56ML : AC/DC  
ST56ML-BZ : DC



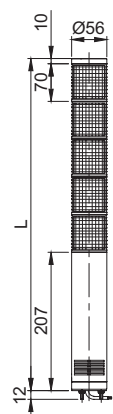
LAYER	L
1	157
2	227
3	297
4	367
5	437

LAYER	L
1	222
3	362
4	432
5	502

ST56ML-BZ : AC  
ST56MLF-BZ : AC/DC



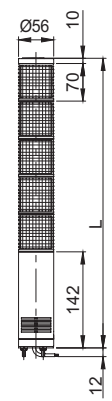
ST56ML-W□ : AC  
ST56MLF-W□ : AC



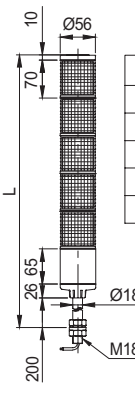
LAYER	L
1	287
2	357
3	427
4	497
5	567

LAYER	L
1	222
2	292
3	362
4	432
5	502

ST56ML-W□ : DC  
ST56MLF-W□ : DC



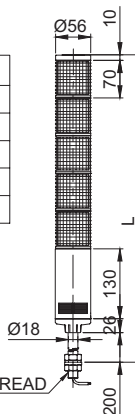
ST56L : AC/DC  
ST56L-BZ : DC  
ST56LF : DC



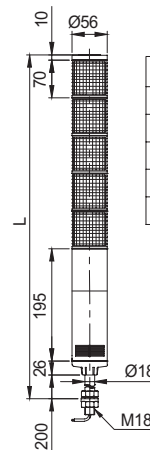
LAYER	L
1	371
2	441
3	511
4	581
5	651

LAYER	L
1	436
2	506
3	576
4	646
5	716

ST56L-BZ : AC  
ST56LF-BZ : AC/DC  
ST56LF : AC



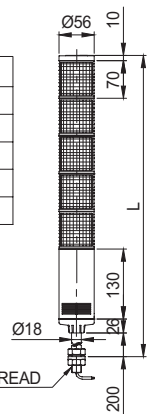
ST56L-W□ : AC  
ST56LF-W□ : AC



LAYER	L
1	501
2	571
3	641
4	711
5	781

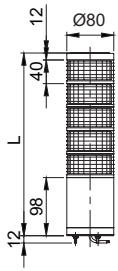
LAYER	L
1	436
2	506
3	576
4	646
5	716

ST56L-W□ : DC  
ST56LF-W□ : DC



## • ST80MEL/ ST80EL

ST80MEL : AC/DC  
ST80MELF : AC/DC

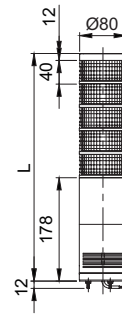


LAYER	L
1	150
2	190
3	230
4	270
5	310



ST80MEL-BZ : AC/DC  
ST80MELF-BZ : AC/DC

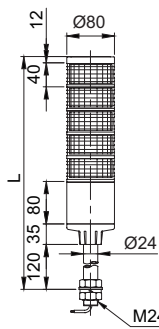
ST80MEL-W□  
ST80MELF-W□



LAYER	L
1	230
2	270
3	310
4	350
5	390



ST80EL : AC/DC  
ST80ELF : AC/DC



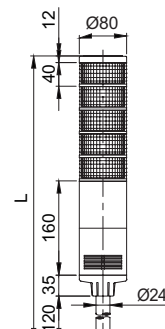
LAYER	L
1	287
2	327
3	367
4	407
5	447



M24x1.5 THREAD

ST80EL-BZ : AC/DC  
ST80ELF-BZ : AC/DC

ST80EL-W□  
ST80ELF-W□

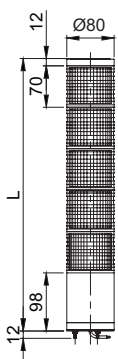


LAYER	L
1	367
2	407
3	447
4	487
5	527

M24x1.5 THREAD

## • ST80ML/ ST80L

ST80ML : AC/DC  
ST80MLF : AC/DC

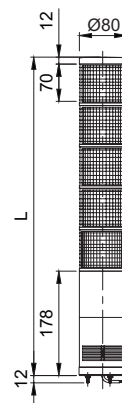


LAYER	L
1	180
2	250
3	320
4	390
5	460



ST80ML-BZ : AC/DC  
ST80MLF-BZ : AC/DC

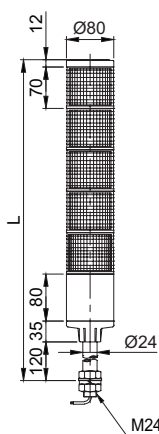
ST80ML-W□  
ST80MLF-W□



LAYER	L
1	260
2	330
3	400
4	470
5	540



ST80L : AC/DC  
ST80LF : AC/DC



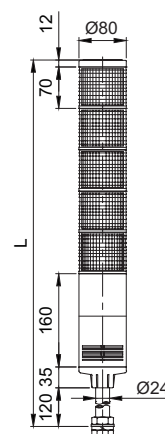
LAYER	L
1	317
2	387
3	457
4	527
5	597



M24x1.5 THREAD

ST80L-BZ : AC/DC  
ST80LF-BZ : AC/DC

ST80L-W□  
ST80LF-W□



LAYER	L
1	397
2	467
3	537
4	607
5	677

M24x1.5 THREAD

# 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		AC Steady	
ST45ML ST45L ST56MEL ST56ML ST56EL ST56L ST80MEL ST80ML ST80EL ST80L		ST45ML ST45L ST56MEL ST56ML ST56EL ST56L ST80MEL ST80ML ST80EL ST80L	
DC Steady/Flashing		AC Steady/Flashing	
ST45MLF ST45LF ST56MELF ST56MLF ST56ELF ST56LF ST80MELF ST80MLF ST80ELF ST80LF		ST45MLF ST45LF ST56MELF ST56MLF ST56ELF ST56LF ST80MELF ST80MLF ST80ELF ST80LF	
DC/AC Steady Built-in Signal Sound	<p>           • ST□□M(E)L - WS/ WM/ WA type same wiring instruction            • ST□□(E)L - WS/ WM/ WA type same wiring instruction            • ST□□L            Lens diameter 45(45mm) : ST45L                              56(56mm) : ST56L                              80(80mm) : ST80L         </p>	DC/AC Steady/Flashing Built-in Signal Sound	<p>           • ST□□M(E)LF - WS/ WM/ WA type same wiring instruction            • ST□□(E)LF - WS/ WM/ WA type same wiring instruction            • ST□□LF            Lens diameter 45(45mm) : ST45LF                              56(56mm) : ST56LF                              80(80mm) : ST80LF         </p>
ST45ML ST45L ST56MEL ST56ML ST56EL ST56L ST80MEL ST80ML ST80EL ST80L		ST45MLF ST45LF ST56MELF ST56MLF ST56ELF ST56LF ST80MELF ST80MLF ST80ELF ST80LF	

- 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

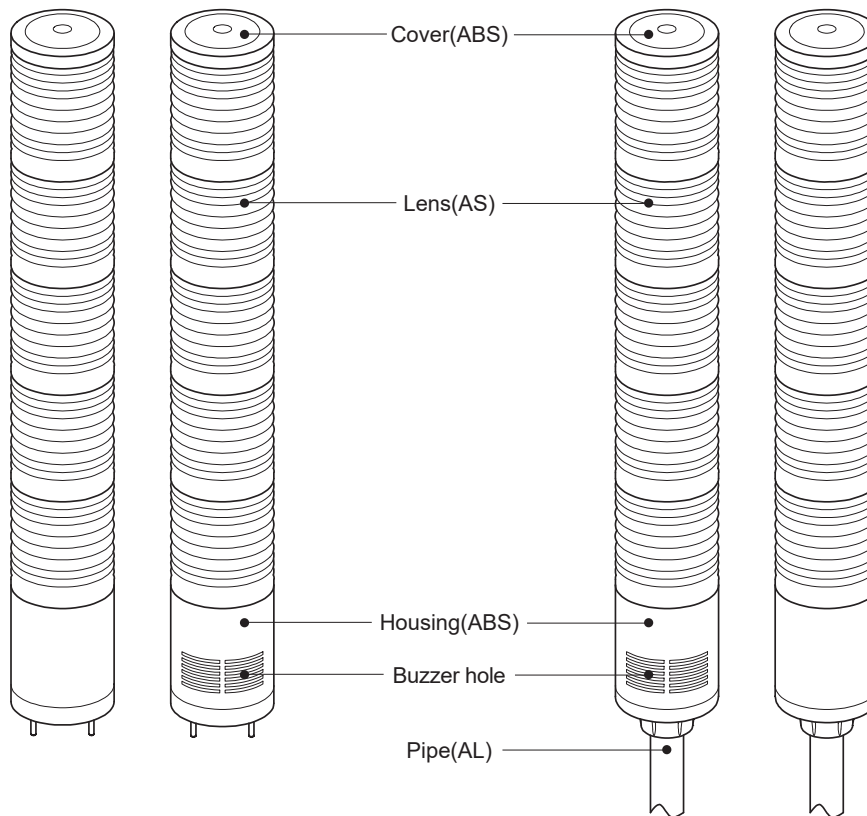
- When using a transistor, please choose between the NPN or PNP type transistor which best matches the voltage and product type, then connect them correctly according to the wiring diagrams below.

		Wiring diagrams			
DC Steady		NPN-Transistor	External Transistor-NPN	PNP-Transistor	External Transistor-PNP
ST45ML ST45L ST56MEL ST56ML ST56EL ST56L ST80MEL ST80ML ST80EL ST80L					
DC Steady/Flashing	PNP-Transistor	External Transistor-PNP	AC Steady/Flashing	PNP-Transistor	External Transistor-PNP
ST45MLF ST45LF ST56MELF ST56MLF ST56ELF ST56LF ST80MELF ST80MLF ST80ELF ST80LF					
DC/AC Steady Built-in Signal Sound	NPN-Transistor	External Transistor-NPN	DC/AC Steady/Flashing Built-in Signal Sound	NPN-Transistor	External Transistor-NPN
ST45ML ST45L ST56MEL ST56ML ST56EL ST56L ST80MEL ST80ML ST80EL ST80L	<ul style="list-style-type: none"> <li>• ST□□M(E)L - WS/ WM/ WA type same wiring instruction</li> <li>• ST□□(E)L - WS/ WM/ WA type same wiring instruction</li> <li>• ST□□L</li> </ul> <p>Lens diameter 45(45mm) : ST45L 56(56mm) : ST56L 80(80mm) : ST80L</p>		<ul style="list-style-type: none"> <li>• ST□□M(E)LF - WS/ WM/ WA type same wiring instruction</li> <li>• ST□□(E)LF - WS/ WM/ WA type same wiring instruction</li> <li>• ST□□LF</li> </ul> <p>Lens diameter 45(45mm) : ST45LF 56(56mm) : ST56LF 80(80mm) : ST80LF</p>		

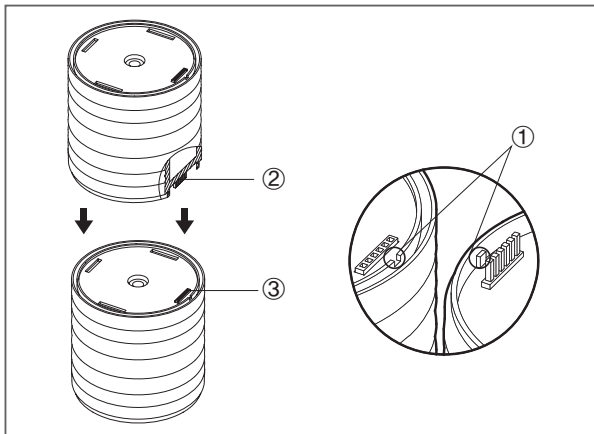
• DC steady type cable specification : External power/ signal line - UL1007 AWG22(0.3sq) 400mm.

• 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 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.

### ※ Caution when dealing with lens kit

- Lens kits are connected with connector pins each other. Bad connection may be experienced when the connector pins are touched with a foreign substance.
- If the lens kits are not turned on or not flashed after lens kits replacement, please make sure status of lens kit connection.

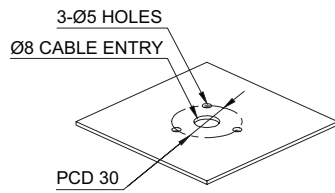
## Installation Environment and Protection Rating

- This product is designed for indoor use with protection rating of IP44(standard type) or IP23(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(IP44), it may cause malfunction or damage to the product.
- For further information, please visit our website([www.qlight.com](http://www.qlight.com)).

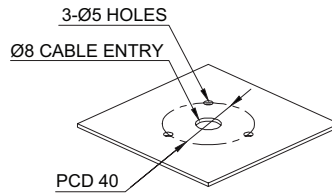
## Mounting Hole Specifications

### ■ ST45ML/ ST56MEL/ ST56ML/ ST80MEL/ ST80ML-Direct Mounting Type Model

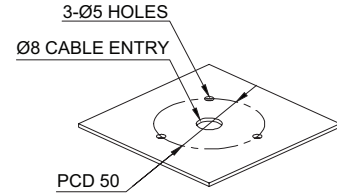
① Machine holes on the mounting surface referring to the diagram below.



ST45ML



ST56MEL/ ST56ML



ST80MEL/ ST80ML

② First, 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.

### ■ 2 Sound Buzzer Type

• Buzzer type model with 2 different sounds of long beeping sound and short beeping sound is available upon request.

### ■ Lens Kits supplied by AC Type power (same wiring as DC Steady type product)

### ■ Customized pole length(ST45L/ ST56EL/ ST56L/ ST80EL/ ST80L)

## Mounting Accessories (Sold Separately)

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

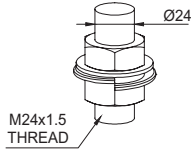
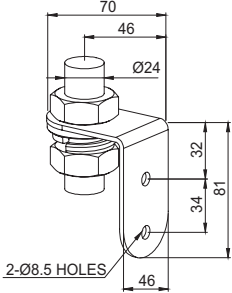
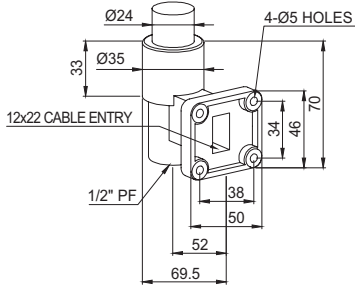
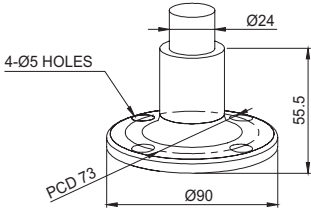
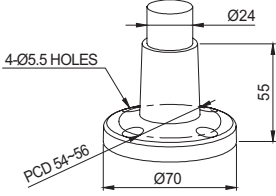
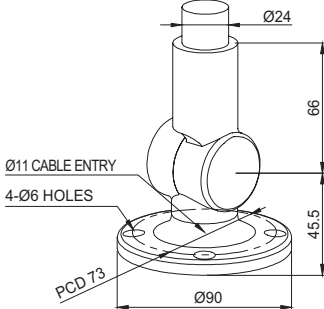
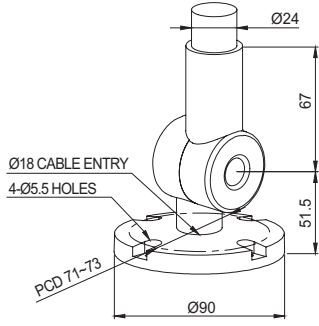
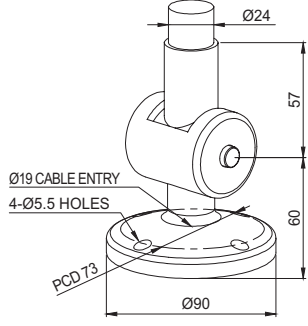
### ■ ST45ML/ ST56MEL/ ST56ML/ ST80MEL/ ST80ML - Direct Mounting Type Model

	Dimensions	
ST45 series ST56 series	<p>TWS45</p>	<p>TWA45</p>
ST80 series	<p>TWS80</p>	<p>TWA80</p>

■ ST45L/ ST56EL/ ST56L - Pole Mounting Type Model

Dimensions	
<p>ST45 series ST56 series</p>	<p style="text-align: center;"><b>LB18</b></p>
<p>18mm SCREW &amp; NUT</p>	<p style="text-align: center;"><b>LW18</b></p>
<p style="text-align: center;"><b>QZ18</b></p>	<p style="text-align: center;"><b>SL18</b></p>
<p style="text-align: center;"><b>QL18</b></p>	<p style="text-align: center;"><b>QLA18</b></p>

■ ST80EL/ ST80L - Pole Mounting Type Model

Dimensions	
ST80 series	 <p style="text-align: center;">24mm SCREW &amp; NUT</p>
	 <p style="text-align: center;">LB24</p>
	 <p style="text-align: center;">LW24</p>
	 <p style="text-align: center;">SZ24</p>
	 <p style="text-align: center;">QZ24</p>
	 <p style="text-align: center;">SL24</p>
	 <p style="text-align: center;">QL24</p>
	 <p style="text-align: center;">QLA24</p>

## 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 managed 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 Japanese 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 have 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 complies with the Restriction of Hazardous Substances Directive by limiting its use of hazardous materials.





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.

*Qlight Co., Ltd. www.qlight.com | trade@qlight.com*

Head Office | Suite #1510, STX-V Tower, 128 Gasan digital 1-ro, Geumcheon-gu, Seoul, Korea

Tel. +82-2-2679-6152(Toll free. +82-80-328-2222) Fax. +82-2-2679-6154

Factory | 185-25, Mukbang-ro, Sangdong-myeon, Gimhae-si, Gyeongsangnamdo, Korea Tel. +82-55-328-1111(Toll free. +82-80-328-1111)

Qlight OverSEAs Sales Dept | 704 Nakdong-daero, Sasang-gu, Busan, Korea(Eomgung-Dong) Tel : +82-51-620-4100

Qlight Public Relations & Marketing Team Office | 704 Nakdong-daero, Sasang-gu, Busan, Korea(Eomgung-Dong) Tel. +82-51-245-0017

---

*Qlight USA, Inc. www.qlight.com www.qlightusa.com | sales@qlightusa.com*

3003 North First Street, Suite #341, San Jose, CA 95134 USA Tel. +1-408-519-5740 Fax. +1-408-519-5739

---

*SHANGHAI Qlight Electronic Co., Ltd. www.qlight.com www.qlightcn.com | qlightcn@qlight.com*

China Factory/ Shanghai Sales Office | #19, Nanda Road, Baoshan Area, Shanghai, China Tel. +86-21-6651-7100 Fax. +86-21-6315-3929

China Factory Site 2 (Qidong) | #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 - ST45ML - 2106A