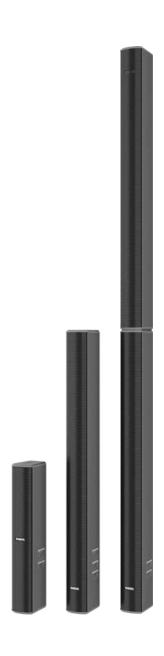


# HCL series Line Array Column Loudspeaker



**Installation and Operating Manual** 

# **HCL-1200A Line Array Column Loudspeaker**

#### Features:

- Compact design, natural and high- quality sound
- Built-in 8 2.5-inch full-frequency drivers
- Wide frequency range and enhanced performance:
   Characterized with wider bandwidth, has the lowest frequency at 80 Hz. Constant resistance (8 Ω) power mode for higher output level
- Switchable Speech/Music mode
- Built-in 70V/100V transformer, plus 8 Ω direct capability
- Coverage pattern: Horizontal: 150°, Vertical: 20°
- Professional line array sound column, with uniform sound field coverage, higher transmission gain and hardly howling. Solve the sound reinforcement requirement in the environment with sound defect
- Enclosure designed IP-54 rate, per IEC529 allows use in a wide of adverse conditions
- Fiberglass reinforced ABS cabinet with UV resistant
- Wall-mount (with swivel (pan)/tilt wall bracket) or stand-mount

#### Overview:

HCL-1200A Line Array Column Loudspeaker, composed of eight full-range drivers, features natural and high-quality sound in a compact and exquisite enclosure. It offers rich and nice middles, and crisp and sweet highs. Thanks to its wide and even sound field, HCS-1200A can be used for various applications such as in conference room, lecture hall, ballroom, auditorium and classroom. The internal speaker units arrayed vertically in close proximity form a linear sound source, which guarantees better coverage and less susceptibility to feedback at a longer throw distance. A multi-way full range loudspeaker characterized with wider bandwidth, has the lowest frequency at 80 Hz. Default constant resistance mode (8  $\Omega$ ) for higher output level.

HCL-1200A is versatile by accommodating different applications with enhanced mid-range output in Speech mode and more flat response in Music mode.

Enclosure designed IP-54 rate IEC 529 allows use in a wide range of adverse conditions such as wet, dirty or corrosive environments.

#### **Specifications:**

Components	Eight 2.5 inch full-range	
Frequency response	80 Hz ~ 18 kHz (-10 dB)	
Coverage pattern	Horizontal: 150°	
	Vertical: 20°	
Sensitivity	93 dB (speech mode)	
(2.83 V@1 m)	89 dB (music mode)	



#### **Specifications:**

Impedance	8 Ω
Power capacity (8 Ω)	200 W (800 W peak), 2 hrs
	120 W (480 W peak), 100 hrs
Max. SPL	120 dB (speech mode)
	117 dB (music mode)
70V/100V	60 W, 30 W, 15 W, 7.5 W at 70V only,
transformer taps	and 8 Ω thru, via switch
EQ	Speech v. Music: 2.5-4 dB (@2-5 kHz)
Enclosure	Fiberglass reinforced ABS cabinet,
	painted aluminum grille
Outdoor capability	IP-54 rated, per IEC529, moisture- and
	water-proof, dust-proof, water-proof
-	cable gland
Colors	Black or White
Insert	Eight M6 swivel (pan)/tilt insert points
·	on back panel
Mounting	Included swivel (pan) / tilt wall bracket
	provides continuously variable ±80
	degree left-right swivel aiming,
	continuously adjustable ±15 degree tilt,
	as well as 5 degree fixed increment
	points within the range.
Dimensions (h × w × d)	620×102×155 mm
Weight	5.3 kg
Accessories	Swivel (pan)/tilt wall bracket

HCL-1200A\_B \_\_\_\_Line Array Column Loudspeaker (8  $\Omega$ , 200 W, 70V/100V transformer & 8 ohm direct capability, black) HCL-1200A\_W \_\_\_\_Line Array Column Loudspeaker (8  $\Omega$ , 200 W, 70V/100V transformer & 8 ohm direct capability, white)

# **HCL-1200 Line Array Column Loudspeaker**

#### Features:

- Compact design, natural and high- quality sound
- Built-in 8 2.5-inch full-frequency drivers
- Wide frequency range and enhanced performance:
   Characterized with wider bandwidth, has the lowest frequency at 80 Hz. Constant resistance (8 Ω) power mode for higher output level
- Switchable Speech/Music mode
- Coverage pattern: Horizontal: 150°, Vertical: 20°
- Professional line array sound column, with uniform sound field coverage, higher transmission gain and hardly howling. Solve the sound reinforcement requirement in the environment with sound defect
- Enclosure designed IP-54 rate, per IEC529 allows use in a wide of adverse conditions
- Fiberglass reinforced ABS cabinet with UV resistant
- Wall-mount (with swivel (pan)/tilt wall bracket) or stand-mount

#### Overview:

HCL-1200 Line Array Column Loudspeaker, composed of eight full-range drivers, features natural and high-quality sound in a compact and exquisite enclosure. It offers rich and nice middles, and crisp and sweet highs. Thanks to its wide and even sound field, HCS-1200 can be used for various applications such as in conference room, lecture hall, ballroom, auditorium and classroom. The internal speaker units arrayed vertically in close proximity form a linear sound source, which guarantees better coverage and less susceptibility to feedback at a longer throw distance. A multi-way full range loudspeaker characterized with wider bandwidth, has the lowest frequency at 80 Hz. Default constant resistance mode (8  $\Omega$ ) for higher output level.

HCL-1200 is versatile by accommodating different applications with enhanced mid-range output in Speech mode and more flat response in Music mode.

Enclosure designed IP-54 rate IEC 529 allows use in a wide range of adverse conditions such as wet, dirty or corrosive environments.



#### **Specifications:**

Components	Eight 2.5 inch full-range		
Frequency response	80 Hz ~ 18 kHz (-10 dB)		
Coverage pattern	Horizontal: 150°		
	Vertical: 20°		
Sensitivity	93 dB (speech mode)		
(2.83 V@1 m)	89 dB (music mode)		
Impedance	8 Ω		
Power capacity (8 Ω)	200 W (800 W peak), 2 hrs		
	120 W (480 W peak), 100 hrs		
Max. SPL	120 dB (speech mode)		
	117 dB (music mode)		
EQ	Speech v. Music: 2.5-4 dB (@2-5 kHz)		
Enclosure	Fiberglass reinforced ABS cabinet,		
·	painted aluminum grille		
Outdoor capability	IP-54 rated, per IEC529, moisture- and		
	water-proof, dust-proof, water-proof		
	cable gland		
Colors	Black or White		
Insert	Eight M6 swivel (pan)/tilt insert points		
	on back panel		
Mounting	Included swivel (pan) / tilt wall bracket		
	provides continuously variable ±80		
	degree left-right swivel aiming,		
	continuously adjustable ±15 degree tilt,		
	as well as 5 degree fixed increment		
	points within the range.		
Dimensions (h × w × d)	620×102×155 mm		
Weight	5.3 kg		
Accessories	Swivel (pan)/tilt wall bracket		

# **HCL-1400A Line Array Column Loudspeaker**

#### Features:

- Compact design, natural and high- quality sound
- Built-in 16 2.5-inch full-frequency drivers
- Wide frequency range and enhanced performance:
   Characterized with wider bandwidth, has the lowest frequency at 80 Hz. Constant resistance (8 Ω) power mode for higher output level
- Switchable Speech/Music mode
- lacksquare Built-in 70V/100V transformer, plus 8  $\Omega$  direct capability
- Coverage pattern: Horizontal: 150°, Vertical: adjustable board/narrow
- Professional line array sound column, with uniform sound field coverage, higher transmission gain and hardly howling. Solve the sound reinforcement requirement in the environment with sound defect
- Enclosure designed IP-54 rate, per IEC529 allows use in a wide of adverse conditions
- Fiberglass reinforced ABS cabinet with UV resistant
- Wall-mount (with swivel (pan)/tilt wall bracket) or stand-mount

#### Overview:

HCL-1400A Line Array Column Loudspeaker, composed of sixteen full-range drivers, features natural and high-quality sound in a compact and exquisite enclosure. It offers rich and nice middles, and crisp and sweet highs. Thanks to its wide and even sound field, HCS-1400A can be used for various applications such as in conference room, lecture hall, ballroom, auditorium and classroom. The internal speaker units arrayed vertically in close proximity form a linear sound source, which guarantees better coverage and less susceptibility to feedback at a longer throw distance. A multi-way full range loudspeaker characterized with wider bandwidth, has the lowest frequency at 80 Hz. Default constant resistance mode (8  $\Omega$ ) for higher output level.

HCL-1400A is versatile by accommodating different applications with enhanced mid-range output in Speech mode and more flat response in Music mode.

Enclosure designed IP-54 rate IEC 529 allows use in a wide range of adverse conditions such as wet, dirty or corrosive environments.

#### **Specifications:**

Components	Sixteen 2.5 inch full-range	
Frequency response	80 Hz ~ 18 kHz (-10 dB)	
Coverage pattern	Horizontal: 150°	
	Vertical: narrow: 15°, board: 40°	
Sensitivity	Narrow: 96 dB (speech mode)	
(2.83 V@1 m)	93 dB (music mode)	
	Broad: 93 dB (speech mode)	
	90 dB (music mode)	
Impedance	8 Ω	
Power capacity (8 Ω)	400 W (1600 W peak), 2 hrs	
	240 W (960 W peak), 100 hrs	



#### **Specifications:**

Max. SPL	Narrow: 132 dB (speech mode)		
	129 dB (music mode)		
	Broad: 129 dB(speech mode)		
	126 dB (music mode)		
70V/100V	120 W, 60 W, 30 W, 15 W at 70V only,		
transformer taps	and 8 Ω thru, via switch		
EQ	Speech v. Music: 2.5-4 dB (@2-5 kHz)		
Enclosure	Fiberglass reinforced ABS cabinet,		
	painted aluminum grille		
Outdoor capability	IP-54 rated, per IEC529, moisture- and		
	water-proof, dust-proof, water-proof		
	cable gland		
Colors	Black or White		
Insert	Ten M6 swivel (pan)/tilt insert points on		
	back panel		
Mounting	Included swivel (pan) / tilt wall bracket		
	provides continuously variable ±80		
	degree left-right swivel aiming,		
	continuously adjustable ±15 degree tilt,		
	as well as 5 degree fixed increment		
	points within the range.		
Dimensions (h × w × d)	1180×102×155 mm		
Weight	9.0 kg		
Accessories	Swivel (pan)/tilt wall bracket		

HCL-1400A\_B Line Array Column Loudspeaker (8 Ω, 400 W, 70V/100V transformer & 8 ohm direct capability, black)
HCL-1400A\_W Line Array Column Loudspeaker (8 Ω, 400 W, 70V/100V transformer & 8 ohm direct capability, white)

# **HCL-1400 Line Array Column Loudspeaker**

#### Features:

- Compact design, natural and high- quality sound
- Built-in 16 2.5-inch full-frequency drivers
- Wide frequency range and enhanced performance:
   Characterized with wider bandwidth, has the lowest frequency at 80 Hz. Constant resistance (8 Ω) power mode for higher output level
- Switchable Speech/Music mode
- Coverage pattern: Horizontal: 150°, Vertical: adjustable board/narrow
- Professional line array sound column, with uniform sound field coverage, higher transmission gain and hardly howling. Solve the sound reinforcement requirement in the environment with sound defect
- Enclosure designed IP-54 rate, per IEC529 allows use in a wide of adverse conditions
- Fiberglass reinforced ABS cabinet with UV resistant
- Wall-mount (with swivel (pan)/tilt wall bracket) or stand-mount

#### Overview:

HCL-1400 Line Array Column Loudspeaker, composed of sixteen full-range drivers, features natural and high-quality sound in a compact and exquisite enclosure. It offers rich and nice middles, and crisp and sweet highs. Thanks to its wide and even sound field, HCS-1400 can be used for various applications such as in conference room, lecture hall, ballroom, auditorium and classroom. The internal speaker units arrayed vertically in close proximity form a linear sound source, which guarantees better coverage and less susceptibility to feedback at a longer throw distance. A multi-way full range loudspeaker characterized with wider bandwidth, has the lowest frequency at 80 Hz. Default constant resistance mode (8  $\Omega$ ) for higher output level.

HCL-1400A is versatile by accommodating different applications with enhanced mid-range output in Speech mode and more flat response in Music mode.

Enclosure designed IP-54 rate IEC 529 allows use in a wide range of adverse conditions such as wet, dirty or corrosive environments.

#### **Specifications:**

Components	Sixteen 2.5 inch full-range	
Frequency response	80 Hz ~ 18 kHz (-10 dB)	
Coverage pattern	Horizontal: 150°	
	Vertical: narrow: 15°, board: 40°	
Sensitivity	Narrow: 96 dB (speech mode)	
(2.83 V@1 m)	93 dB (music mode)	
	Broad: 93 dB (speech mode)	
	90 dB (music mode)	
Impedance	8 Ω	
Power capacity (8 Ω)	400 W (1600 W peak), 2 hrs	
	240 W (960 W peak), 100 hrs	



#### **Specifications:**

Narrow: 132 dB (speech mode)		
129 dB (music mode)		
Broad: 129 dB(speech mode)		
126 dB (music mode)		
Speech v. Music: 2.5-4 dB (@2-5 kHz)		
Fiberglass reinforced ABS cabinet,		
painted aluminum grille		
IP-54 rated, per IEC529, moisture- and		
water-proof, dust-proof, water-proof		
cable gland		
Black or White		
Ten M6 swivel (pan)/tilt insert points on		
back panel		
Included swivel (pan) / tilt wall bracket		
provides continuously variable ±80		
degree left-right swivel aiming,		
continuously adjustable ±15 degree tilt,		
as well as 5 degree fixed increment		
points within the range.		
1180×102×155 mm		
9.0 kg		
Swivel (pan)/tilt wall bracket		

HCL-1400\_BLine Array Column Loudspeaker (8  $\Omega$ , 400 W, black)HCL-1400\_WLine Array Column Loudspeaker (8  $\Omega$ , 400 W, white)

## HCL-1800U+HCL-1800D Line Array Column Loudspeaker

#### Features:

- Compact design, natural and high- quality sound
- Built-in 32 2.5-inch full-frequency drivers
- Wide frequency range and enhanced performance:
   Characterized with wider bandwidth, has the lowest frequency at 80 Hz. Constant resistance (4 Ω) power mode for higher output level
- Switchable Speech/Music mode
- Coverage pattern: Horizontal: 150°, Vertical: adjustable board/narrow
- Professional line array sound column, with uniform sound field coverage, higher transmission gain and hardly howling. Solve the sound reinforcement requirement in the environment with sound defect
- Enclosure designed IP-54 rate, per IEC529 allows use in a wide of adverse conditions
- Fiberglass reinforced ABS cabinet with UV resistant
- Wall-mount (with swivel (pan)/tilt wall bracket)

#### Overview:

HCL-1800 Line Array Column Loudspeaker, composed of thirty-two full-range drivers, features natural and high-quality sound in a compact and exquisite enclosure. It offers rich and nice middles, and crisp and sweet highs. Thanks to its wide and even sound field, HCS-1800 can be used for various applications such as in conference room, lecture hall, ballroom, auditorium and classroom. The internal speaker units arrayed vertically in close proximity form a linear sound source, which guarantees better coverage and less susceptibility to feedback at a longer throw distance. A multi-way full range loudspeaker characterized with wider bandwidth, has the lowest frequency at 80 Hz. Default constant resistance mode (4  $\Omega$ ) for higher output level.

HCL-1800 is versatile by accommodating different applications with enhanced mid-range output in Speech mode and more flat response in Music mode.

Enclosure designed IP-54 rate IEC 529 allows use in a wide range of adverse conditions such as wet, dirty or corrosive environments.

#### **Specifications:**

Components	Thirty-two 2.5 inch full-range	
Frequency response	80 Hz ~ 18 kHz (-10 dB)	
Coverage pattern	Horizontal: 150°	
	Vertical: narrow: 15°, board: 30°	
Sensitivity	Narrow: 95 dB (speech mode)	
(2 V@1 m)	92 dB (music mode)	
	Broad: 92 dB (speech mode)	
	89 dB (music mode)	
Impedance	4 Ω	
Power capacity (4 Ω)	800 W (3200 W peak), 2 hrs	
	480 W (1920 W peak), 100 hrs	

#### **Specifications:**

Max. SPL	Narrow: 135 dB (speech mode)	
	132 dB (music mode)	
	Broad: 132 dB(speech mode)	
	129 dB (music mode)	
EQ	Speech v. Music: 2.5-4 dB (@2-5 kHz)	
Enclosure	Fiberglass reinforced ABS cabinet,	
	painted aluminum grille	
Outdoor capability	IP-54 rated, per IEC529, moisture- and	
	water-proof, dust-proof, water-proof	
	cable gland	
Colors	Black or White	
Configuration	Two pieces (HCL-1800U (top half) and	
	HCL-1800D (bottom half, with TAIDEN	
	logo) half), each 1180 mm tall,	
	connected together via Coupler Plate.	
	Top/bottom orientation of each piece	
	must be observed.	
Insert	Eight M6 coupler plate insert points on	
	back panel,	
	Four M6 swivel (pan)/tilt insert points	
	on coupler plate	
Mounting	Included swivel (pan) / tilt wall bracket	
	(must be mounted to threaded points	
	on coupler plate) provides continuously	
	variable ±80 degree left-right swivel	
	aiming, continuously adjustable ±5	
	degree tilt, as well as 5 degree fixed	
	increment points within the range.	
Dimensions (h x w x d)	2360×102×155 mm	
Weight	9.0 kg	
Accessories	Swivel (pan)/tilt wall bracket,	
	coupler plate	

HCL-1800U\_B + HCL-1800D\_BLine Array Column Loudspeaker (4  $\Omega$ , 800 W, black)HCL-1800U\_W + HCL-1800D\_WLine Array Column Loudspeaker (4  $\Omega$ , 800 W, white)

## **CBL-SPK Speaker Cable**

#### Features:

 Audio cable for HCL-1200 series and HCL-1400 series Line Array Column Loudspeaker

Length of per roll: 305 meterWeight of per roll: 14 kg

■ Color: white



CBL-SPK Speaker cable (For HCL-1200 series and HCL-1400 series Line Array Column Loudspeaker, 305 m per roll, white, unit: meter )

# **CBL-SPK3 Speaker Cable**

#### Features:

■ Audio cable for HCL-1800U+HCL-1800D Line Array Column Loudspeaker

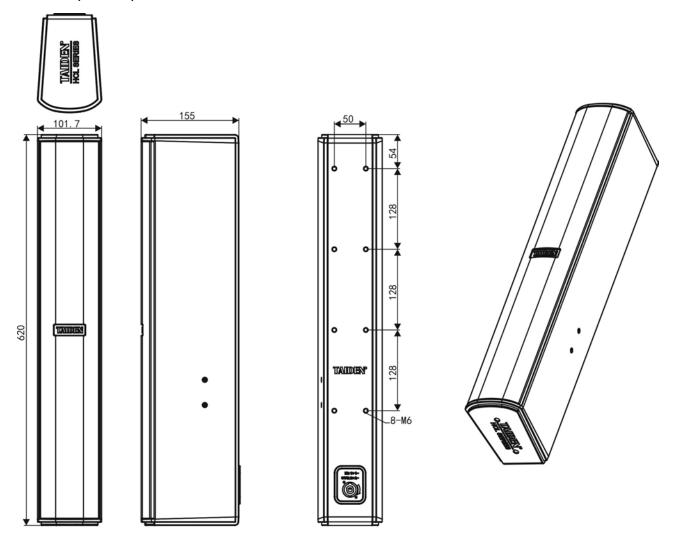
Length of per roll: 150 meterWeight of per roll: 18 kg

Color: white

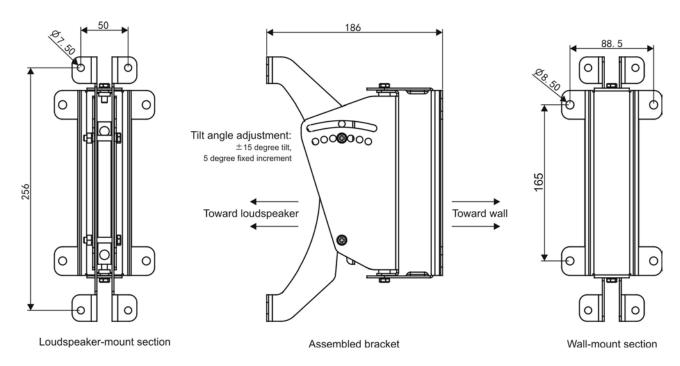


CBL-SPK3\_\_\_\_\_Speaker cable (For HCL-1800U+HCL-1800D Line Array Column Loudspeaker, 150 m per roll, white, unit: meter)

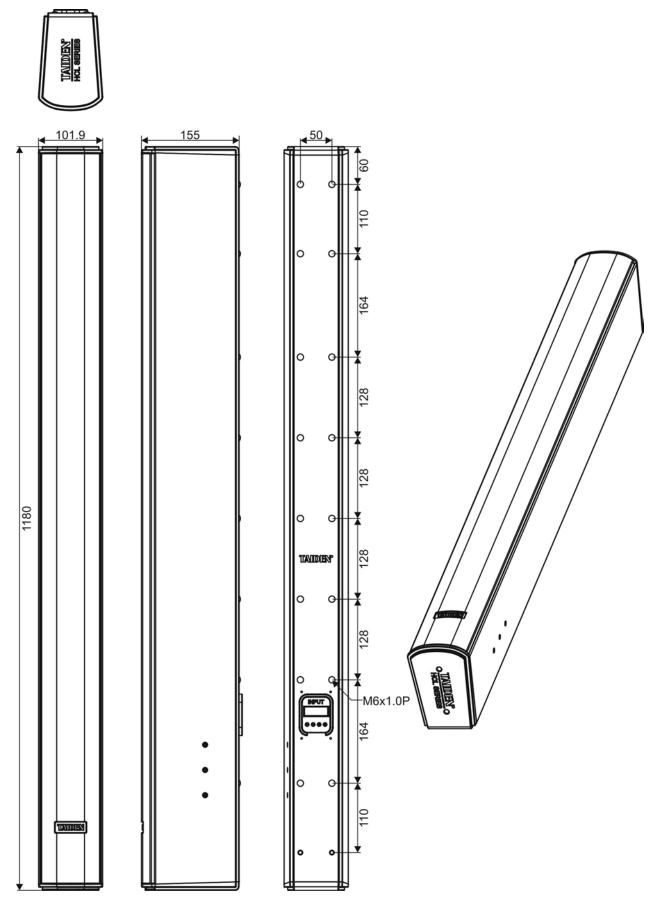
### Dimensions (unit: mm):



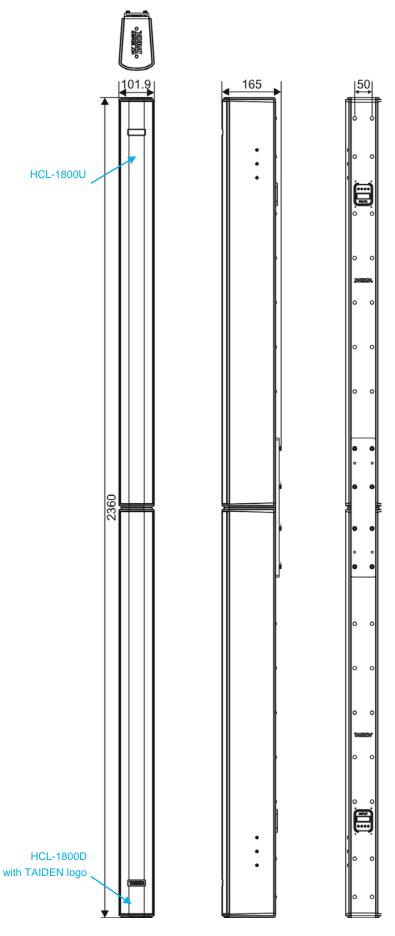
Dimensions of HCS-1200 series Line Array Column Loudspeaker (unit: mm)



Dimensions of swivel (pan) / tilt wall bracket (unit: mm)



Dimensions of HCS-1400 series Line Array Column Loudspeaker (unit: mm)



Dimensions of HCS-1800U+HCL-1800D Line Array Column Loudspeaker (unit: mm)

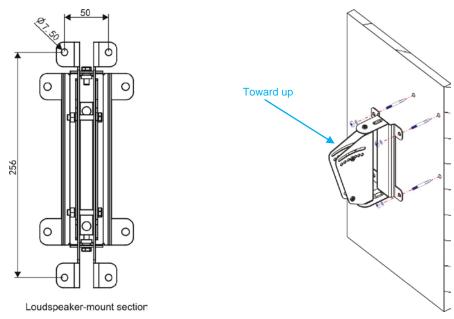
### Installation of HCL-1200 series, HCL-1400 series and HCL-1800

Explanation: wall bracket consists of a speaker bracket and a wall bracket.

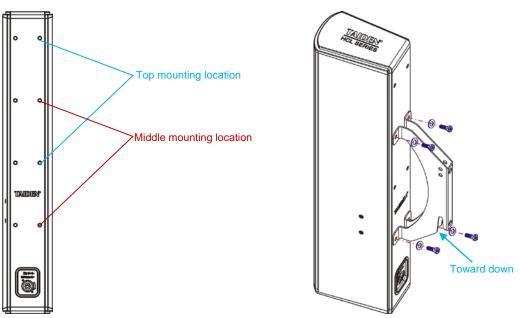
Speaker bracket 1	PM6×12 mm screws 4  M6×70 mm screws 4		Wall bracket 1
Орсакої Біаскої	Flat washers 4 Lock washers 4	MOX70 Hill Sciews 4	Wall bracket
Coupler Plate 1	PM6×25 mm screws 8, only for HCL-1800U+HCL-1800D		

- 1. Wiring: run the wiring between the amplifier and the location desired for mounting the loudspeakers;
- 2. Attach wall bracket to wall: secure the wall bracket to the wall according the following dimensions, please using a level to ensure the wall bracket is straight. Use the appropriate wall anchors for attaching the bracket, the provided screws (M6×70 mm) are for hard wall such as cement wall. Be sure that the slot feature is at the top.

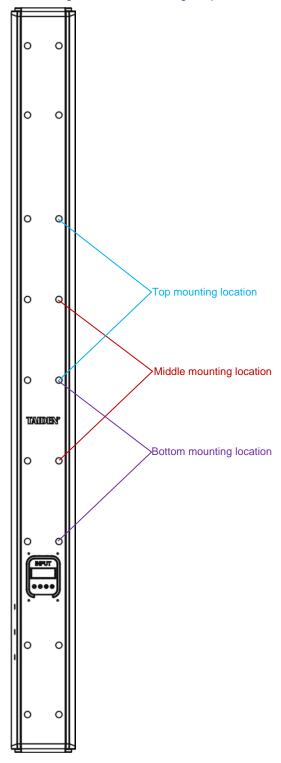
**Note:** installation must be done by qualified persons using safe rigging standards, and please use all four screw holes for maximum integrity and safety.



- 3. Attach speaker bracket to speaker: mount the speaker bracket to the speaker with four provided PM6×12 mm screws, lock washers and flat washers.
  - HCL-1200: there are two optional mounting locations for attach speaker bracket, top and middle locations, as shown in the
    following figure, and all the mounting locations support ±80 degree swivel (pan) and ±15 degree tilt angles. Middle mounting
    location is recommended.

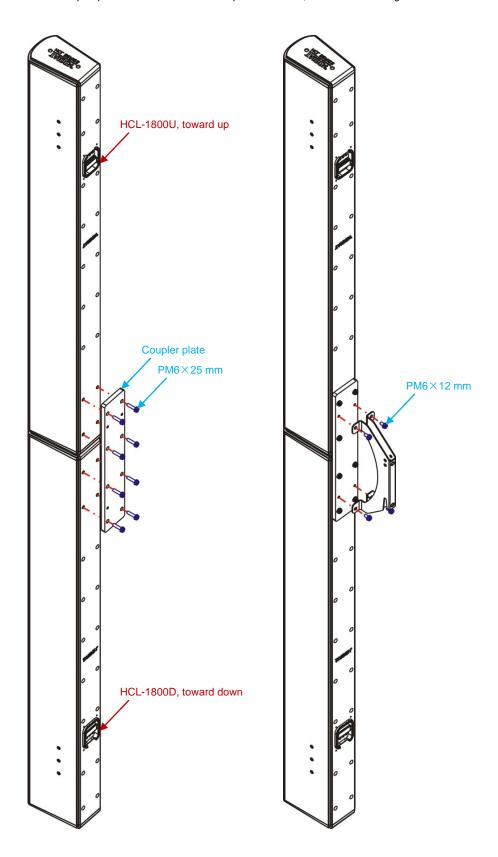


- HCL-1400: there are three optional mounting locations for attach speaker bracket, top, middle and bottom locations, as shown in
  the following figure, and all the mounting locations support ±80 degree swivel (pan) and different tilt angles. Middle mounting
  location is recommended.
  - > Top mounting location: 15 degree down-tilt and 15 degree up-tilt
  - Middle mounting location: 15 degree down-tilt and 15 degree up-tilt
  - Bottom mounting location: 15 degree down-tilt and 10 degree up-tilt

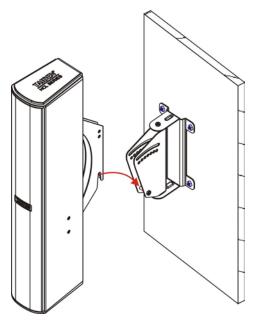


 HCL-1800U (top half) and HCL-1800D(bottom half) Line Array Column Loudspeaker needs to be firmly connected by coupler plate, and then fixed the speaker bracket onto the coupler plate (ONLY fixed on coupler plate, not on other mounting location), and it supports ±80 degree swivel (pan) and ±5 degree tilt angles

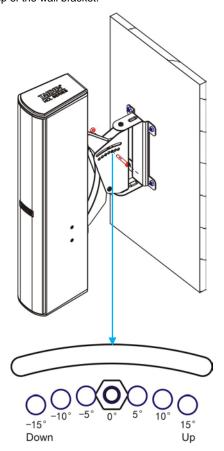
**Note:** because HCL-1800U (top half) and HCL-1800D(bottom half) Line Array Column Loudspeaker is too long, it should not be moved after fixed with the coupler plate without fixed onto the speaker bracket, so as not to damage the box.



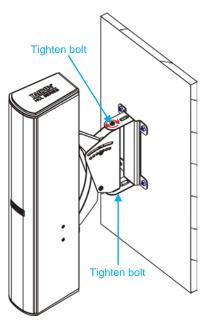
4. Slide speaker with speaker bracket onto wall bracket: when the above steps have finished, slide the speaker forward so that the speaker bracket engages into the wall bracket, dropping the hook slot of the speaker bracket onto the pivot bolt (PM6×35) (which will already be installed loosely in the wall bracket)



5. Set the tilt angle: if the speaker has nested securely on the pivot bolt, disassemble the PM6×35 mm bolt in the top of the bracket, and then slide it into one of the holes in the top of the wall bracket.



6. Set the swivel (pan) angle: loosen the top and bottom bolts on the pivot, adjust swivel aiming angle of the speaker, then tighten the bolts





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