

LED BATTEN  
DB181 Series





## Introduction

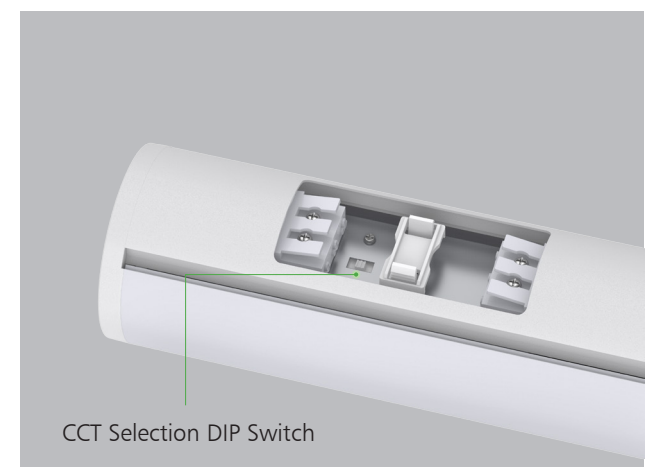
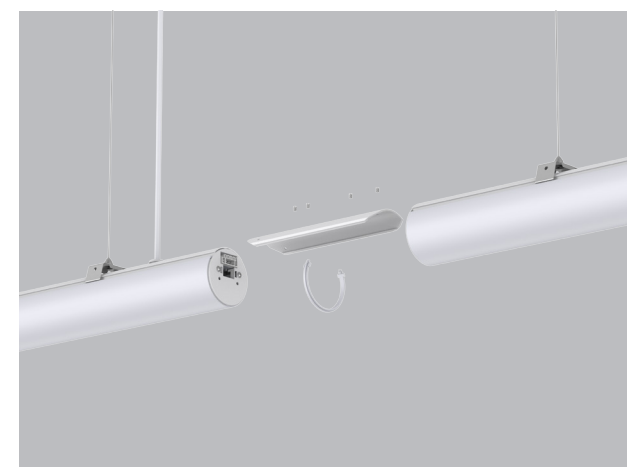
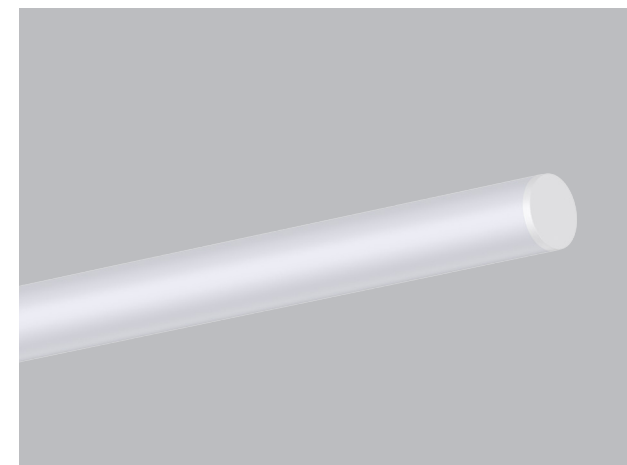
This is a cylinder shape batten light with 200 degree lighting surface. It mainly adopts PC lampshade for big lighting surface for uniform light output. 600mm/1200mm/1800mm standard size optional, it also supports to cut different sizes. What's more, to meet more application areas, it can do microwave sensor, emergency, triac, 0-10V, DALI dim, and available for splicing, surface mount, wall mount, pendant installation.

## Features

- Wide emitting angle with 200 degree
- Easy splicing way for multiple lamps
- Interchangeable CCT(3000K+4000K+5700K) with DIP switch
- High lumen efficiency, 120lm/W for energy saving
- Functions: Microwave sensor, Emergency
- Flexible mounting ways: surface mount/ wall mount/ pendant/ splicing
- Dimming ways: Triac, 0-10V, DALI
- Internal flicker free driver

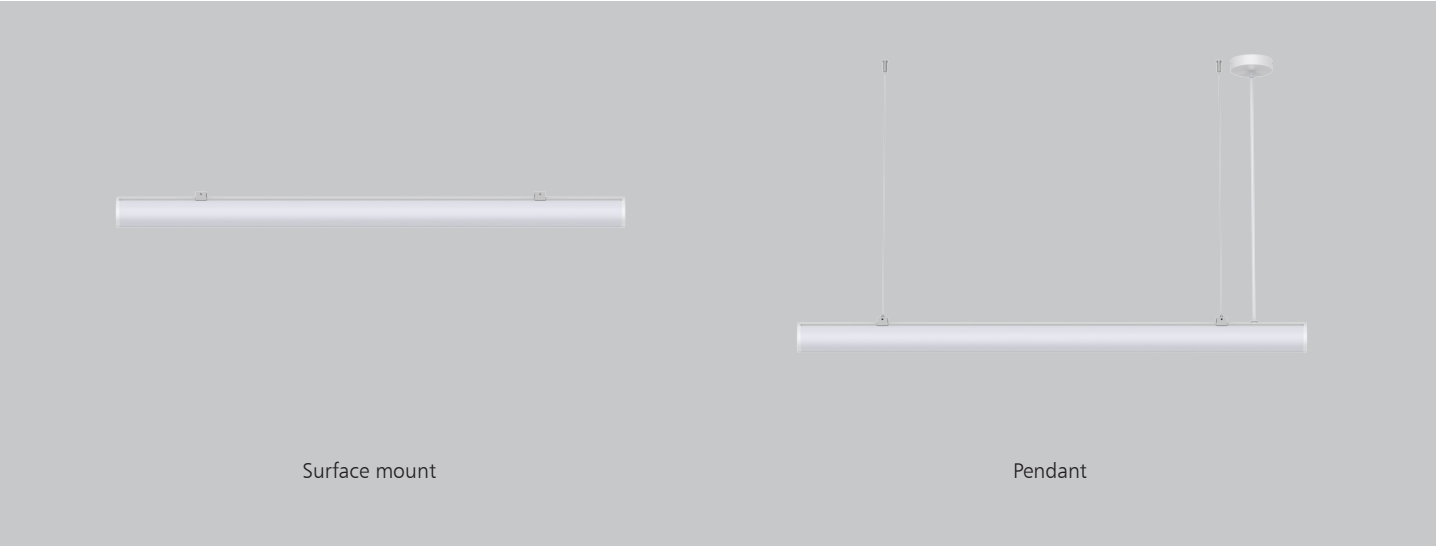
## Application Areas

It is widely used in office, meeting room, museum, workshop, supermarket, warehouse etc.



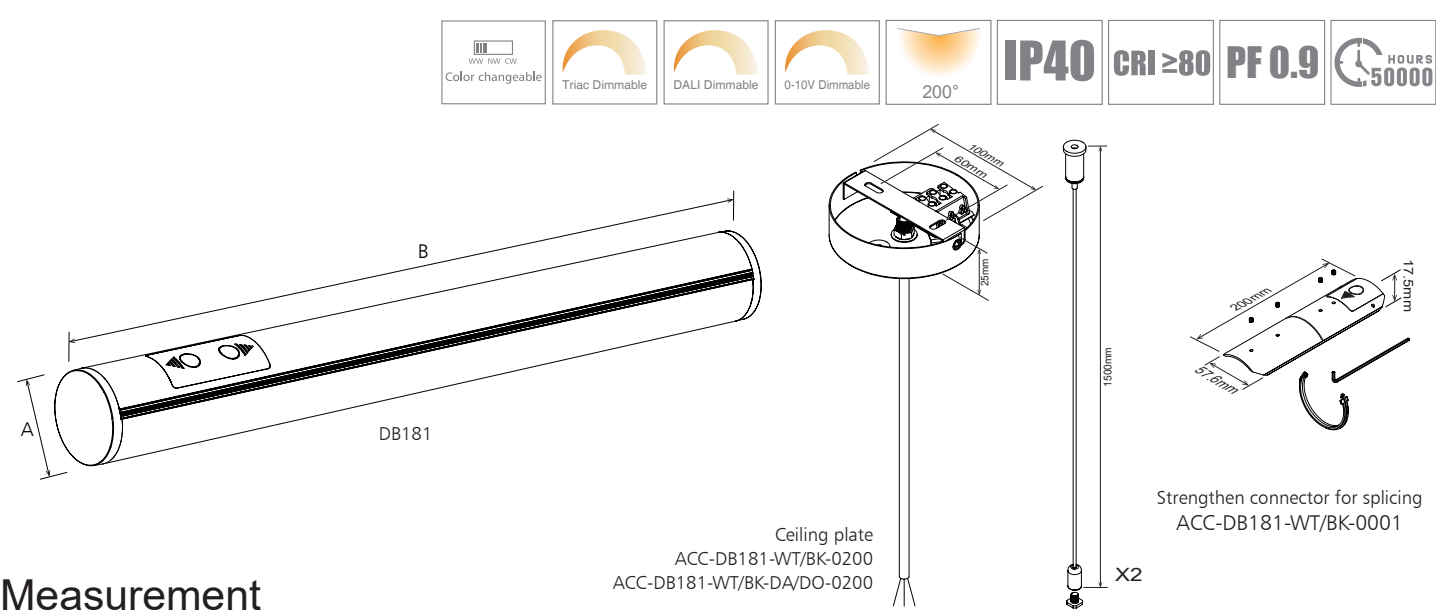
CCT Selection DIP Switch





Technical Data Sheet

Code			DB181-600-20W	DB181-600-23W-S7	DB181-1200-38W-S7	DB181-1200-40W	DB181-1800-56W-S7	DB181-1800-60W
Dimension(mm)			Ø72*L600	Ø72*L600	Ø72*L1200	Ø72*L1200	Ø72*L1800	Ø72*L1800
Cutout (mm)			-					
Watt(W)			20W	23W	38W	40W	56W	60W
Rated Input Voltage			AC220-240V					
Input Voltage			AC198-264V					
LED Module Input			-					
Light Source			SMD					
SDCM			<6					
CCT(K)			1-CCT: 3000K/4000K/5000K/5700K    3-CCT: 3000K + 4000K + 5700K					
CCT Selection DIP Switch			NO					
Luminous Flux (lm) ±5% CRI80 White finish	1-CCT	Non-DIM	2400-2600	2650-2800	4500-4750	4900-5100	7000-7300	7100-7400
		DIM	2400-2600	-	-	4650-4850	-	7100-7400
	3-CCT	Non-DIM	2400-2600	-	-	4900-5100	-	7100-7400
		DIM	2400-2600	-	-	4650-4850	-	7100-7400
Remark: If lamp body with black color, the lumen will decrease around 13%								
CRI			>80					
Beam Angle (°)			200°					
UGR			-					
LED Driver			Driver built-in					
Dimming Option			Triac / DALI / 0-10V					
Sensor			Microwave sensor					
Emergency Kits			YES					
Electrical Class			Class I					
Ingress Protection(IP Rating)			IP40					
Impact Resistance(IK Rating)			-					
Product Finishing			White RAL9016, Black RAL9005					
Optics Material			PC					
Housing Material			Aluminium					
Lifetime (hr)			50,000h					
Glow wire test (°C)			750°C					
Operating Temp.(°C)			-20°C~45°C					
Storage Temp.(°C)			-20°C~65°C					
Installation			Surface mount/Pendant/wall mount					



Measurement

Code	Dimension(mm)		Size(mm)	Product Weight (Kg)		Package weight (Kg)		Carton Size(cm)	Qty/ CTN	20GP (pcs)	40HQ (pcs)
	A	B		N.W/PC	G.W/PC	N.W/CTN	G.W/CTN				
DB181-600	72	600	Ø72*600	1.12	1.41	6.72	9.56	75*36*30.5	12	3780	8928
DB181-1200	72	1200	Ø72*1200	1.89	2.35	11.31	15.18	135*27.5*21	6	1980	4824
DB181-1800	72	1800	Ø72*1800	2.75	3.40	10.98	14.77	195*19*21	4	1320	3168
ACC-DB181-WT/BK-0200 ACC-DB181-WT/BK-DA/DO-0200	-	-	100*25*1500	0.27	0.28	6.48	7.2	40*26*27	24	-	-
ACC-DB181-WT/BK-0001	-	-	200*57.6*17.5	0.082	-	5.904	6.97	45*42*17.5	72	-	-

Driver Datasheet (Non-dimmable)

Total load wattage		20W	40W	60W
Output	Rated output current	500mA	1000mA	1500mA
	Output Voltage range	DC28-42V		
	Line Regulation	±5%		
	Setup Rise Time	<0.5s @230V		
	Flickering Index	0.25% (NO RISK)		
Input	Rated Input Voltage	AC220-240V		
	Input Voltage	AC198-264V		
	Frequency	50/60HZ		
	Rated Input Current	0.12 A	0.21A	0.31A
	Input Current	0.14A	0.23A	0.36A
	Power Factor	0.9		
	THD	<20% @230V		
	Efficiency	86%	87%	87%
Protection	No load wattage	<0.5W @230V		
	Short circuit protection	PASS		
	Over voltage protection	PASS		
	Over temperature protection	PASS		
Safety & EMC	Withstand voltage	I/P-FG:1.5KVac, <5mA 60S		
	Isolation Resistance	I/P-O/P: 500VDC, ≥4M Ω		
	Surge	IEC/EN61000-4-5 (L-N:1KV, L/N-PE: 2KV)		
	EMC Emission	EN55015, EN61000-3-2		
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547		



Driver Datasheet (Triac Dimmable)

Total load wattage		20W	40W
Output	Rated output current	500mA	950mA
	Output Voltage range	DC28-40V	
	Line Regulation	± 5%	
	Setup, Rise Time	≤500ms@230V	
	Flickering Index	5%(LOW RISK)	
Input	Rated Input Voltage	AC220-240V	
	Input Voltage	AC198-264V	
	Frequency	50Hz	
	Rated Input Current	≤0.11A	≤0.21A
	Input Current	≤0.12A	≤0.23A
	Power Factor	0.9	
	THD	-	<20% @230V
	Efficiency	≥81%	≥84%
	No load wattage	<1W @230V	
Protection	Short circuit protection	PASS	
	Over voltage protection	PASS	
	Over temperature protection	PASS	
Safety & EMC	Withstand voltage	I/P-FG:1.5KVac, <5mA 60S	
	Isolation Resistance	500VDC, ≥2M Ω	
	Surge	IEC/EN61000-4-5 (L-N:1KV, L/N-PE: 2KV)	
	EMC Emission	EN55015, EN61000-3-2	
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547	

Driver Datasheet (DALI Dimmable)

Total load wattage		20W	40W	60W
Output	Rated output current	500mA	950mA	1500mA
	Output Voltage range	DC28-40V		
	Line Regulation	±5%		
	Setup, Rise Time	< 1s @230V		
	Flickering Index	< 1%(NO RISK)		
Input	Rated Input Voltage	AC220-240V		
	Input Voltage	AC198-264V		
	Frequency	50/60HZ		
	Rated Input Current	≤0.10A	≤0.20A	≤0.30A
	Input Current	≤0.11A	≤0.22A	≤0.34A
	Power Factor	0.9		
	THD	<20% @230V		
	Efficiency	≥84%	≥86%	
	No load wattage	<0.5w @230V		
Protection	Short circuit protection	PASS		
	Over voltage protection	PASS		
	Over temperature protection	PASS		
Safety &EMC	Withstand voltage	I/P-FG:1.5KVac, <5mA 60S		
	Isolation Resistance	500VDC, ≥2M Ω		
	Surge	IEC/EN61000-4-5 (L-N:1KV, L/N-PE: 2KV)		
	EMC Emission	EN55015, EN61000-3-2		
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547		

Driver Datasheet (0-10V Dimmable)

Total load wattage		20W	40W	60W
Output	Rated output current	500mA	950mA	1500mA
	Output Voltage range	DC9-40V		
	Line Regulation	± 5%		
	Setup, Rise Time	<0.5s @230V		
	Flickering Index	< 1%(NO RISK)		
Input	Rated Input Voltage	AC220-240V		
	Input Voltage	AC198-264V		
	Frequency	50/60HZ		
	Rated Input Current	≤0.10A	≤0.20A	≤0.30A
	Input Current	≤0.11A	≤0.22A	≤0.34A
	Power Factor	0.9		
	THD	<20% @230V		
	Efficiency	≥86%	≥88%	
	No load wattage	<0.5W @230V		
Protection	Short circuit protection	PASS		
	Over voltage protection	PASS		
	Over temperature protection	PASS		
Safety & EMC	Withstand voltage	I/P-FG:1.5KVac, <5mA 60S		
	Isolation Resistance	500VDC, ≥2M Ω		
	Surge	IEC/EN61000-4-5 (L-N:1KV, L/N-PE: 2KV)		
	EMC Emission	EN55015, EN61000-3-2		
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547		

Driver Datasheet(Non-dimmable for sensor)

Total load wattage		23W	38W	56W
Output	Rated output current	150mA	250mA	390mA
	Output Voltage range	DC120-150V	DC120-150V	DC100-150V
	Line Regulation	±5%		
	Setup, Rise Time	<500ms @230V		
	Flickering Index	<3%(NO RISK)		
Input	Rated Input Voltage	AC220-240V		
	Input Voltage	AC198-240V		
	Frequency	50HZ/60Hz		
	Rated Input Current	≤0.13A	≤0.21A	≤0.31A
	Input Current	≤0.15A	≤0.23A	≤0.34A
	Power Factor	>0.9		
	THD	-	<20% @230V	
	Efficiency	≥90%		
	No load wattage	<0.5W @230V		
Protection	Short circuit protection	PASS		
	Over voltage protection	PASS		
	Over temperature protection	PASS		
Safety &EMC	Withstand voltage	-		
	Isolation Resistance	-		
	Surge	IEC/EN61000-4-5 (L-N:1KV, L/N-PE: 2KV)		
	EMC Emission	EN55015, EN61000-3-2		
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547		



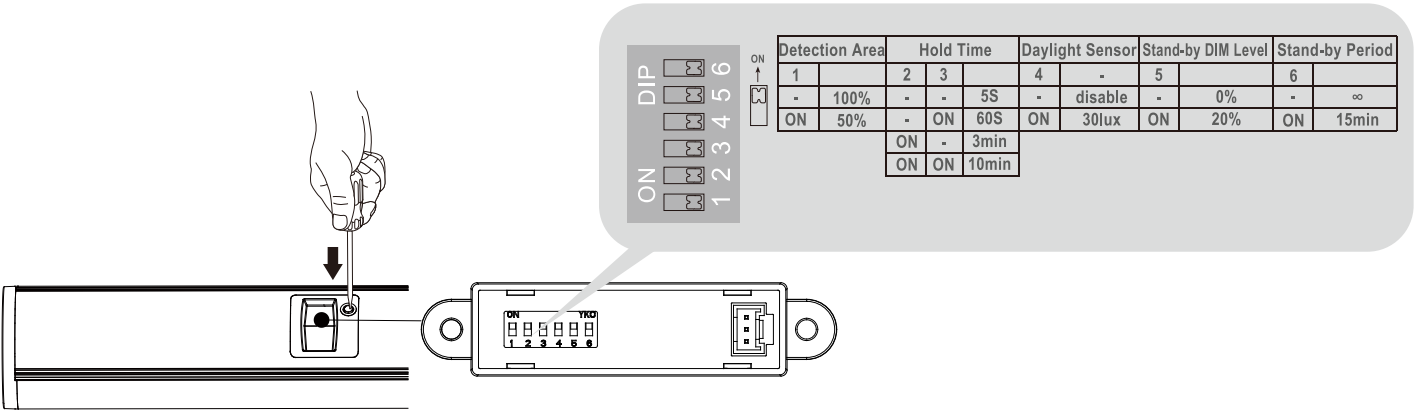
Driver Datasheet (Emergency)

Input power	3W
Discharge power	2W
Rated Input Voltage(V)	AC230V
Frequency	50/60Hz
Input Voltage	AC200-240V
Rated Input Current	≤0.03A
Battery	6.4V 1500mAh (LifepO4)
Lifetime	Over 2000 cycles
Battery duration	≥3hrs
Charge Period	≤24hrs
Emergency switching time	≤1S
Emergency Operating Temp. (°C )	0°C-25°C

Driver Datasheet (Sensor)

Operating Voltage	DC7-12V
Microwave frequency	5.8GHz±75MHz, ISM wave band
Detection angle	140°
Detection Area	DIP switch 4-6M (50%/100%) Remote 4-6m (25%/50%/75%/100%)adjustable
Hold time	DIP switch 5S/60S/3min/10min Remote 5S/1min/5min/10min/adjustable
Daylight threshold	DIP switch 30lux/disable Remote 15lux☾/50lux☀/disable/adjustable
Stand-by DIM Level	DIP switch 0% / 20% Remote 10%/30%/adjustable
Stand-by Period	DIP switch 15min/8 Remote OS/1min/10min/+/adjustable
Dimming Range	Pressing this button continuously, the brightness will increase or reduce 5% for each adjustment ON mode is still available. Dimming range: 30%-100%
Microwave ON/OFF function	Pressing this button, the sensor function will be turned off,the lamp will remain ON/OFF and keep same brightness as last setting. The sensor mode can be restored and workable by pressing the 'Detection Area' button.(Other paramerers stay the latest setting)
Installation Height	Recommended Installation Height: Wall mounted height 1.8m. Ceiling mounted height 3m.
Minimum mounting distance	recommended install height should be more than 3m
Operating temperature(°C)	-20°C~60°C

Sensor Setting



Factory setting

Factory settings				
Detection Area	Hold Time	Daylight Sensor	Stand-by DIM Level	Stand-by Period
100%	5S	Disable	0%	∞

Sensor Setting

Detection area:

**Sensor test condition:** The test is based on 3m height, the detect distance radius is based on ground, the detect distance can be adjusted through the slide switch.

**Sensor test environment and reference:**The detective range is measured by human body whose stature is around 1.6-1.7M with medium size and traveling speed is around 1.0-1.5M per second. If the stature, bodily form and traveling speed are changed,then the detective range will be changed accordingly.

**Sensor lamp's reaction under open/narrow environment:**Test result will be highly influenced by test environment, the more open environment, the closer detect distance; the narrower environment, the longer detect distance. The detector may do self-excitation in a narrow environment.

**Sensor Setting based on environmental disturbance:**Some environmental disturbances will cause abnormal induction, such as the lamp can not automatically turn off for a long time or the sensor function is invalid, then users can adjust sensor distance to reach the ideal effect. It is recommended to adjust the sensing distance to 50% for the environment where near the heavy equipment, metal sheets and metal pipes, concrete wall (<30cm thickness) etc. Recommend to keep 100% sensor distance in open environment. For environment where near the routers, telecommunications base stations, electrical machinery etc, it is recommended to keep the installation distance of more than 5 meters and adjust to 50% sensor distance.

Hold time:

Refers to the time period the lamp remains at 100% illumination after no motion detected.

Notice 1: The hold time can be selected by the slide switch.

The hold time counting should be started after the sensor is powered on and initialized.

Daylight sensor:

The sensor can be set to only allow the lamp to illuminate below a defined ambient brightness threshold. When set to Disable mode, the daylight sensor will switch on the lamp when motion is detected regardless of ambient light level.

**Notice 1:** The light threshold can be selected through the slide switch, it may cause a large deviation in different lamps.

Stand-by dimming level:

This is the dimmed low light output level you would like to have after the hold-time in the absence of people.

Detection Area	
1	
-	100%
ON	50%

Hold Time		
2	3	
-	-	5S
-	ON	60S
ON	-	3min
ON	ON	10min

Daylight Sensor	
4	-
-	disable
ON	30lux

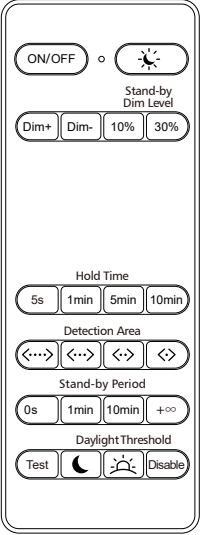
Stand-by DIM Level	
5	
-	0%
ON	20%



Stand-by Period	
6	
-	∞
ON	15min

**Stand-by period:**  
This is the time period you would like to keep at the low light output level before it is completely switched off in the long absence of people.

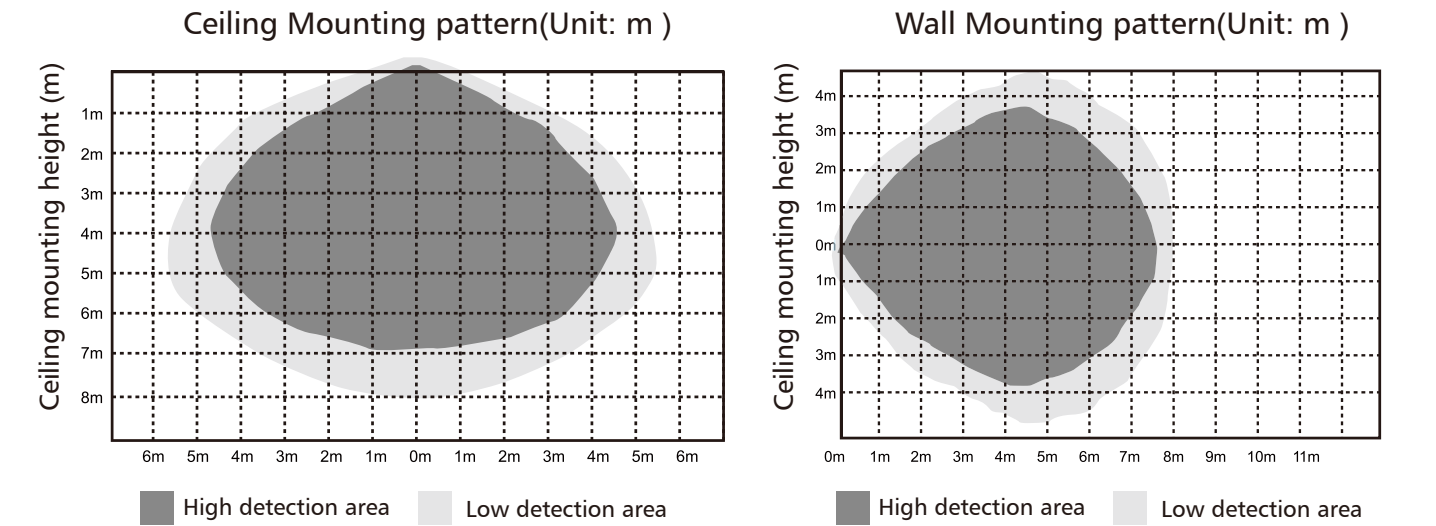
Sensor Setting



Button	Function	Description
ON/OFF	Normal ON/OFF	Pressing ON/OFF button, the sensor function will be turned off, the lamp will remain ON/OFF and keep same brightness as last setting. The sensor mode can be restored and workable by pressing the 'Detection Area' button.(Other paramerers stay the latest setting)
	Night light function	Short press  , the lamp will keep 10% brightness as a night lamp. Long press 3 seconds to reset sensor mode, the lamp will recover to 100% brightness, all parameters will keep same as DIP setting. In night lamp mode, press Dim+/Dim- can restore to last setting status and do relevant dim+/dim- adjustment.The sensor mode can be restored and workable by pressing the 'Detection Area' button.(Other paramerers stay the latest setting)
Dim +	Increasing Brightness	Pressing this button continuously, the brightness will increase 5% for each adjustment. ON mode is still available. Dimming range: 30%-100%
Dim-	Reducing Brightness	Pressing this button continuously, the brightness will reduce 5% for each adjustment. ON mode is still available. Dimming range: 30%-100%
Stand-by Dim Level	Low Brightness	10% , 30%
Hold Time	100% Brightness	5s, 1min, 5min, 10min
Detection Area	Detection Area	100% <...> , 75% <...> , 50% <.> , 25% <.>
Stand-by Period	Stand-by Time	0s, 1min, 10min, + ∞
Test	TEST Button	Pressing this button, the light will turn off after 2 seconds. Restore to last sensing setting after power off.
Daylight Threshold	Threshold	15Lux  , 50Lux  , Disable

- 1.The infrared remote control is a point-to-point controller, which can be operated one-to-one or one-to-many without code pairing. The lamp will light up and flash once when it receives a signal.
2. Separate control on each luminaire requires an installation distance of 3 meter between two adjacent lamps.
3. If lose control, please operate with a closer distance, recommend remote control distance is 3 to 5 meters.

Induction Range

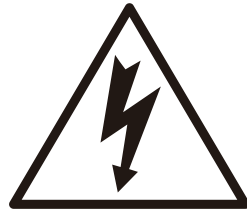
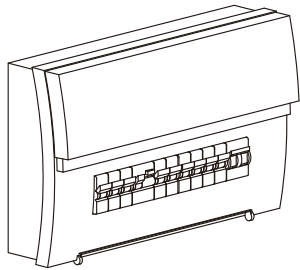




Installation Procedure

WARNING ⚡

- 1.Switch off before installation.
- 2.Switch on only after complete installation and examination of the circuit.
- 3.Professional electrician for installation and maintenance only.



Turn Off  
Power Supply

Surface mount installation

1

Ref:200      Ref:200

2

3

4

select preferred colour temperature for product in CCT change function only

5

6

7

Standard	Emergency	DALI	0-10V
L=Switched ⊕=Earth N=Neutral	L'=Switched L=Unswitched ⊕=Earth N=Neutral	L=Switched N=Neutral ⊕=Earth DA/L DA/N	L=Switched N=Neutral ⊕=Earth DIM+ DIM-

8







9

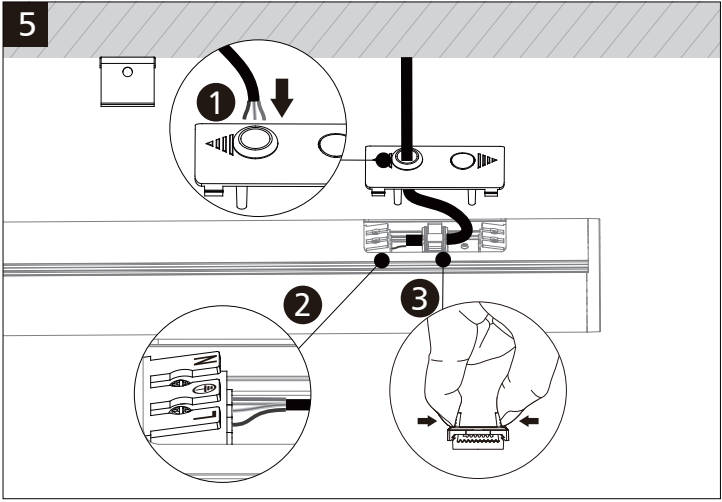
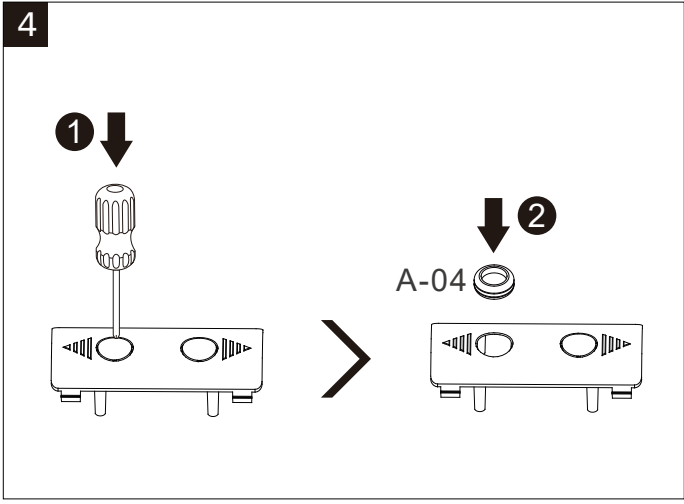
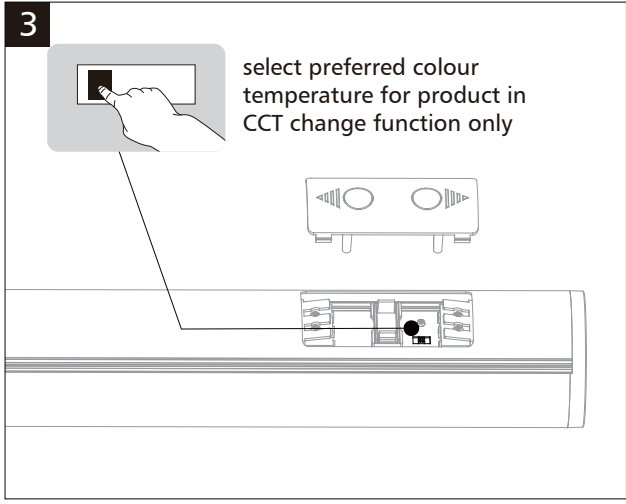
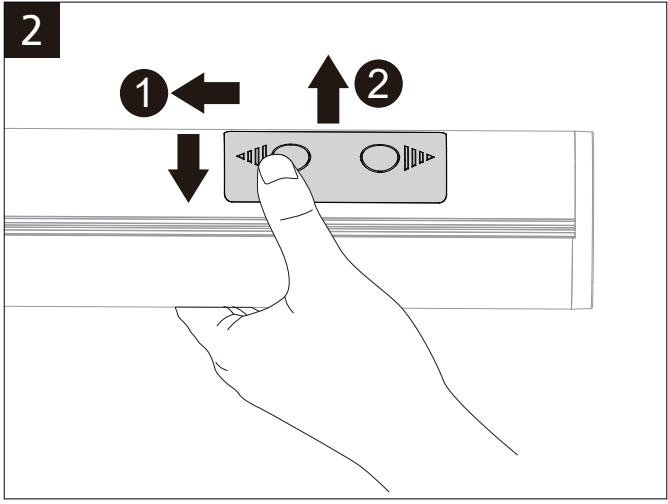
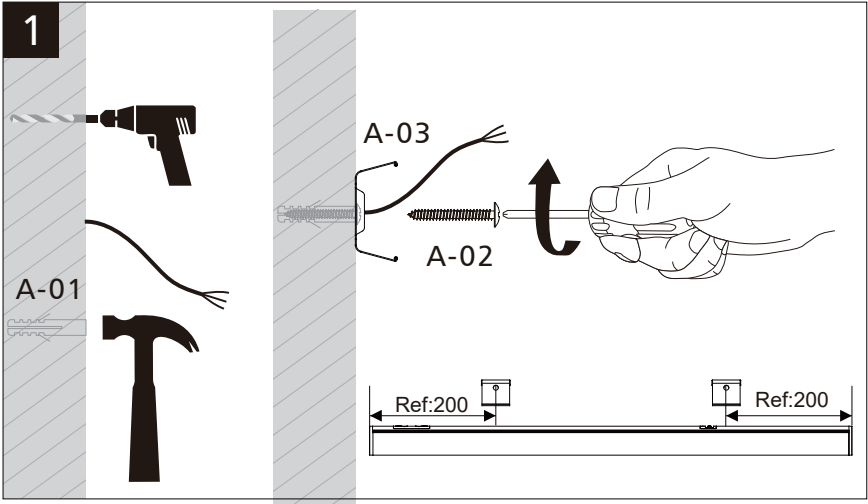
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COMPLETE


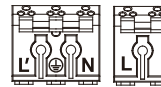
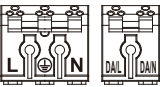
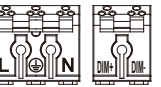


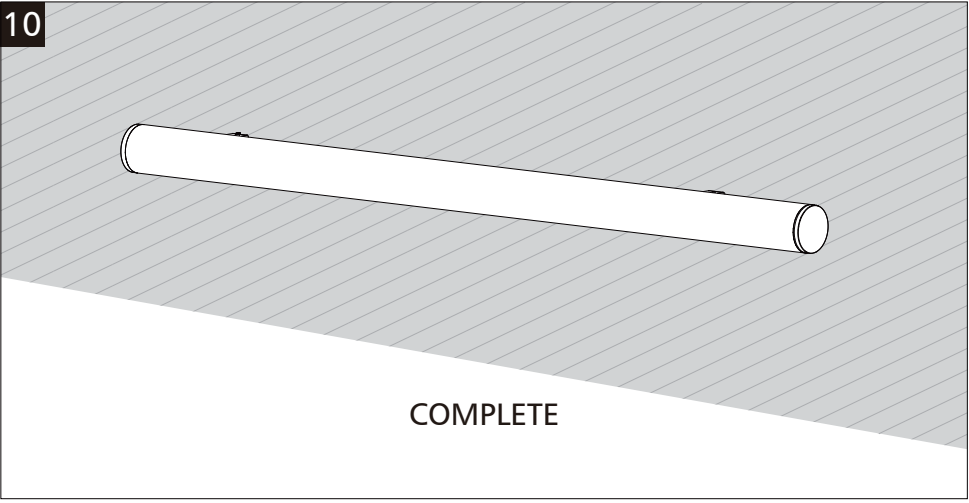
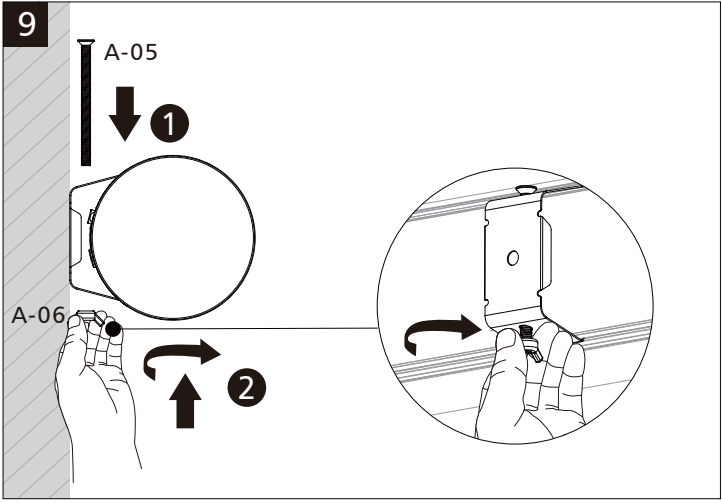
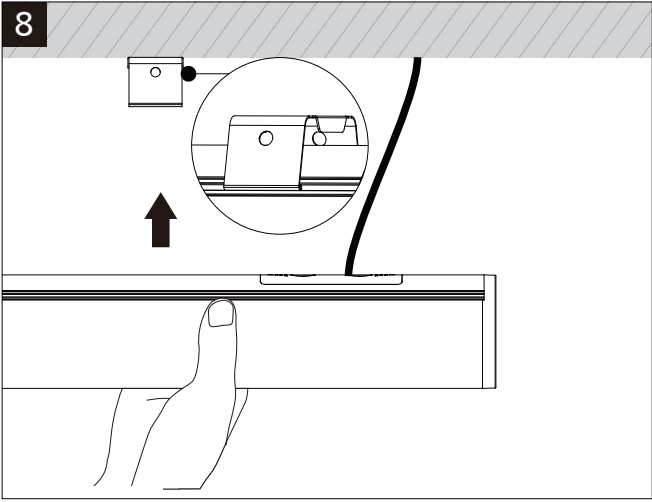
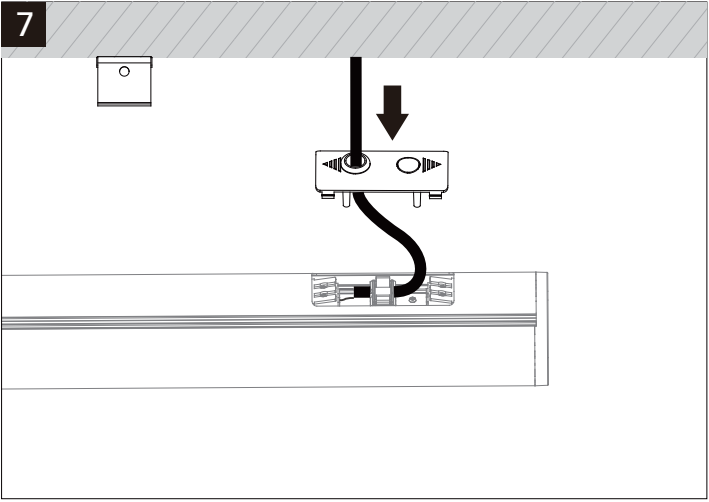
Wall mount installation

Code	A-01 	A-02 	A-03 	A-04 	A-05 	A-06 
ACC	x2	x2	x2	x2	x2	x2









6

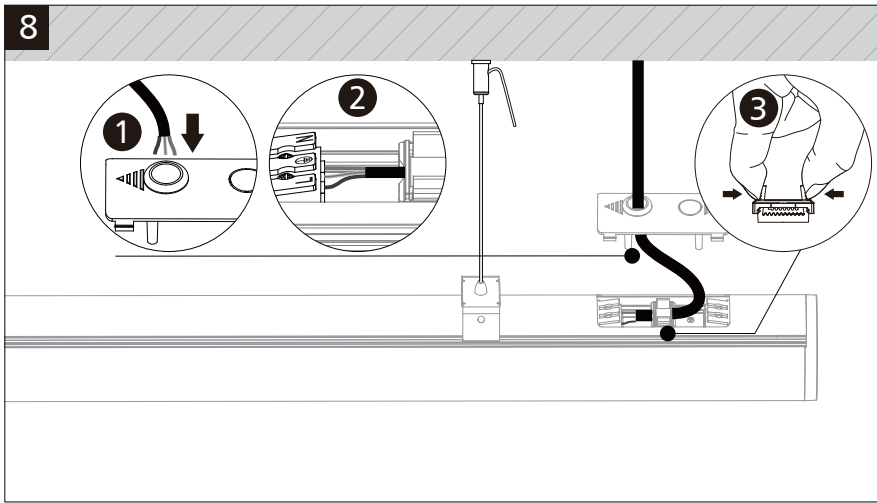
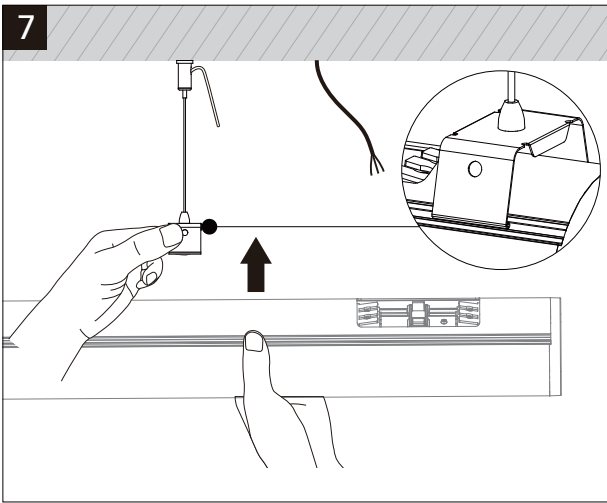
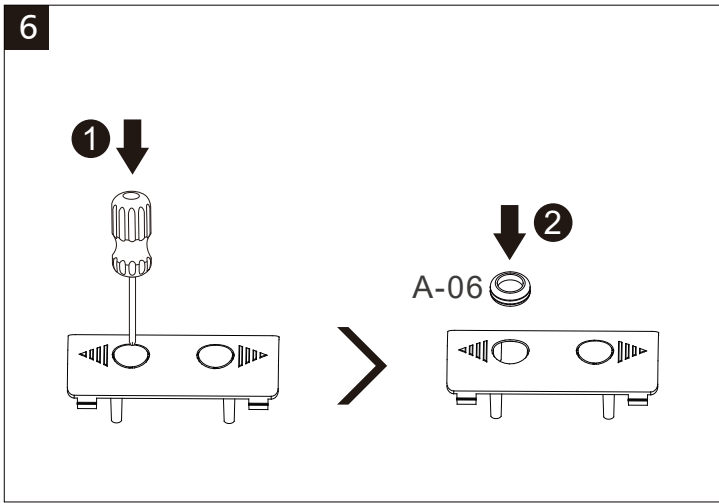
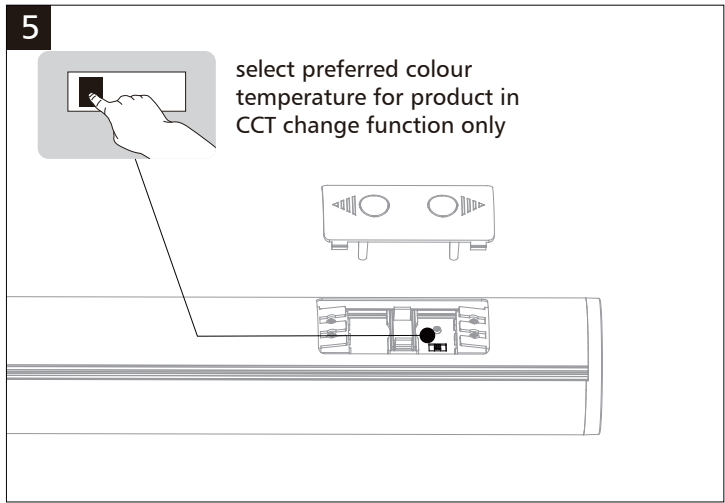
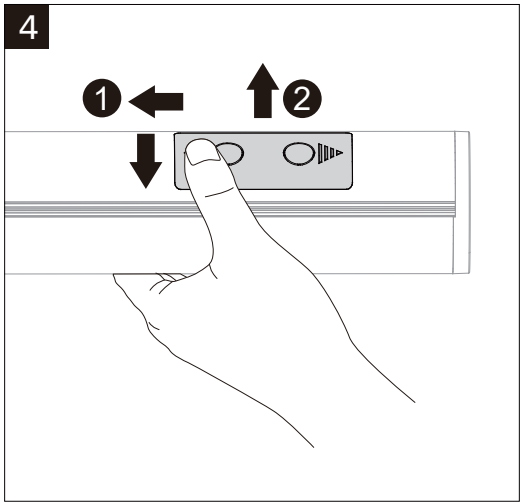
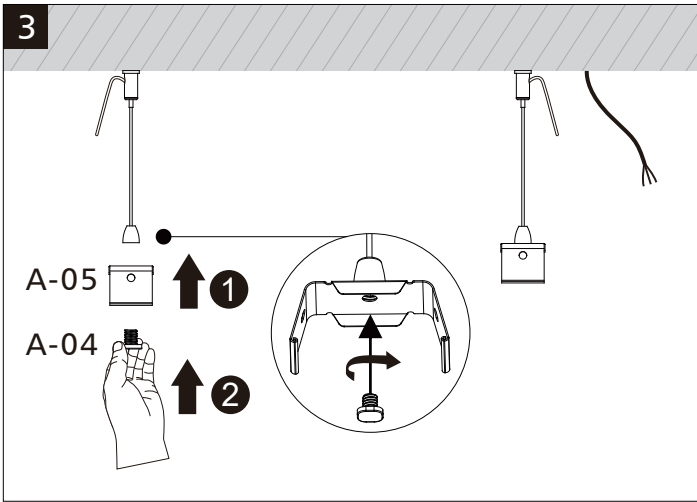
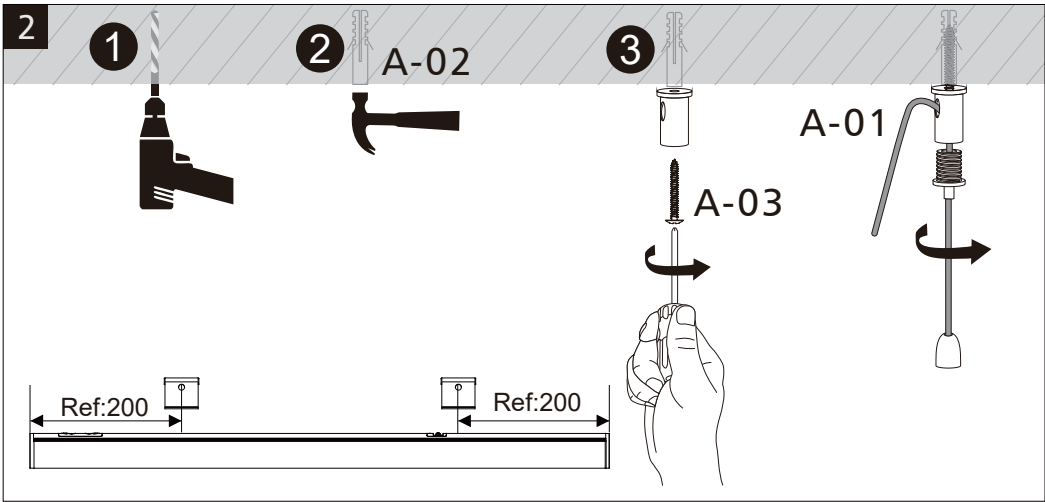
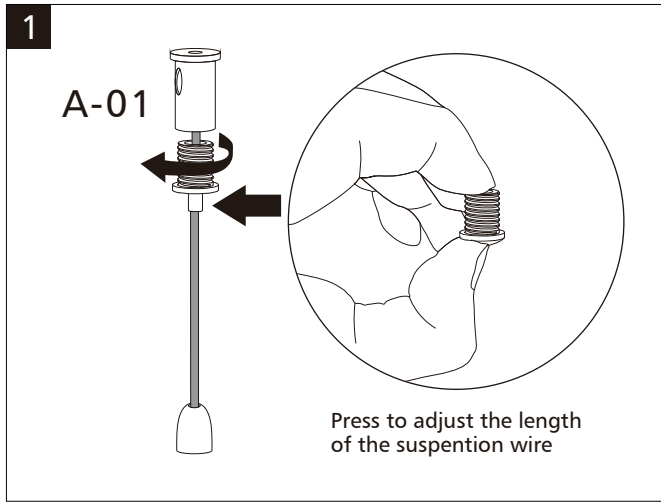
Standard	Emergency	DALI	0-10V
			
L=Switched ⊕=Earth N=Neutral	L'=Switched L=Unswitched ⊕=Earth N=Neutral	L=Switched N=Neutral ⊕=Earth DALI+ DALI-	L=Switched N=Neutral ⊕=Earth DIM+ DIM-









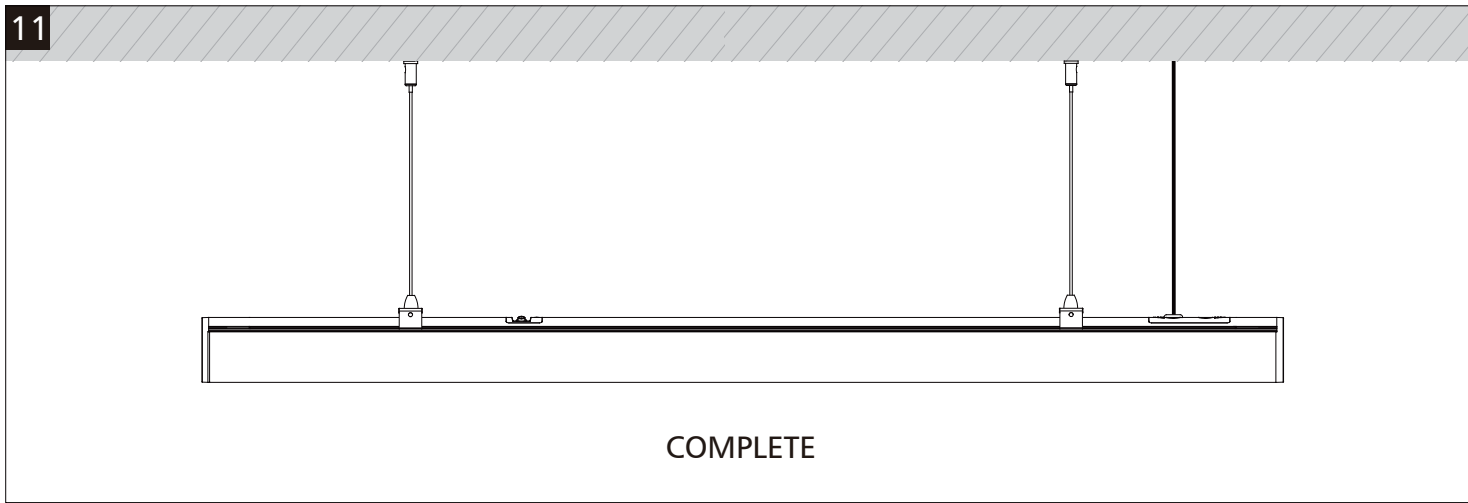
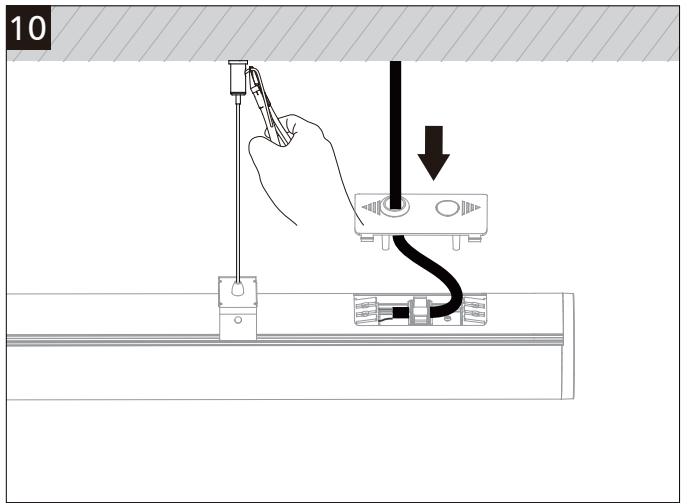
Pendant installation(Without round ceiling plate)

Code	 A-01	A-02 	A-03 	A-04 	A-05 	A-06 
ACC	x2	x2	x2	x2	x2	x2










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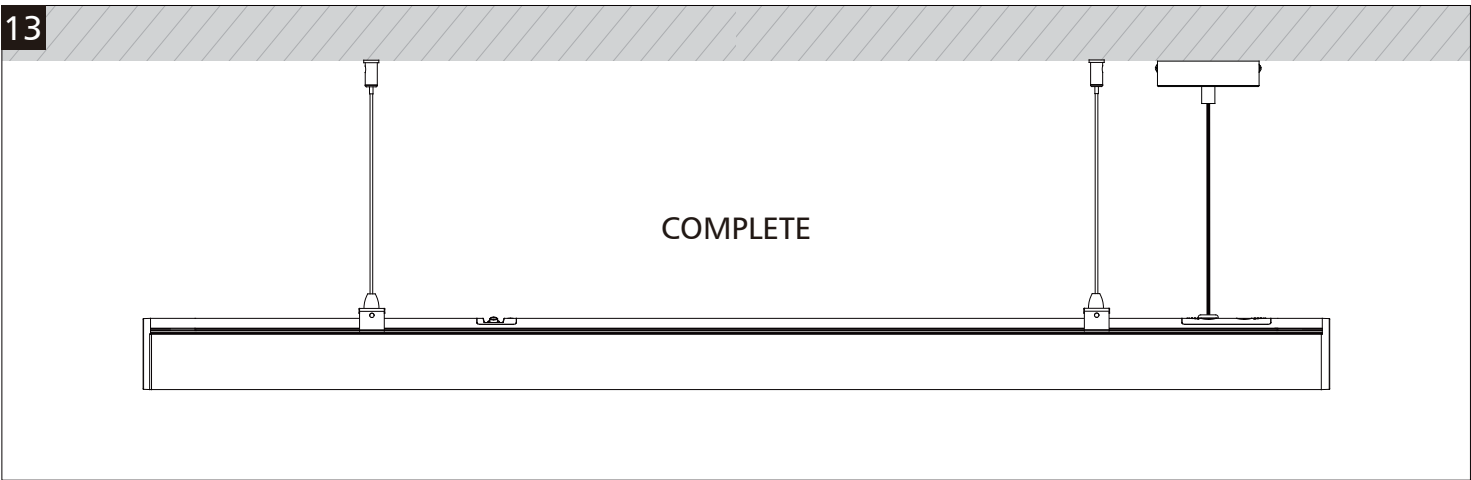
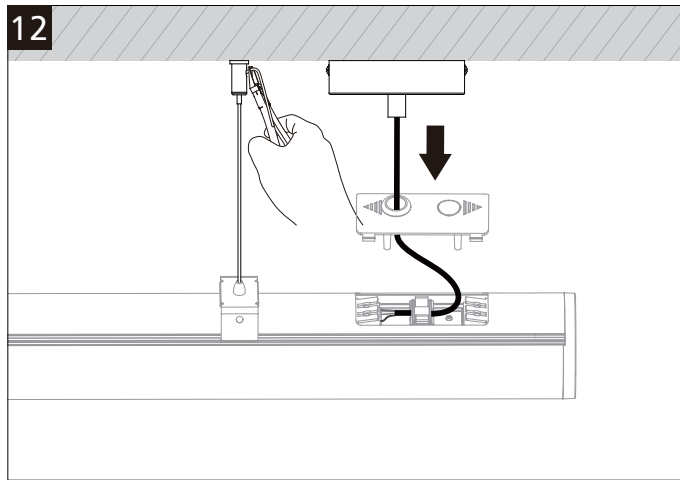
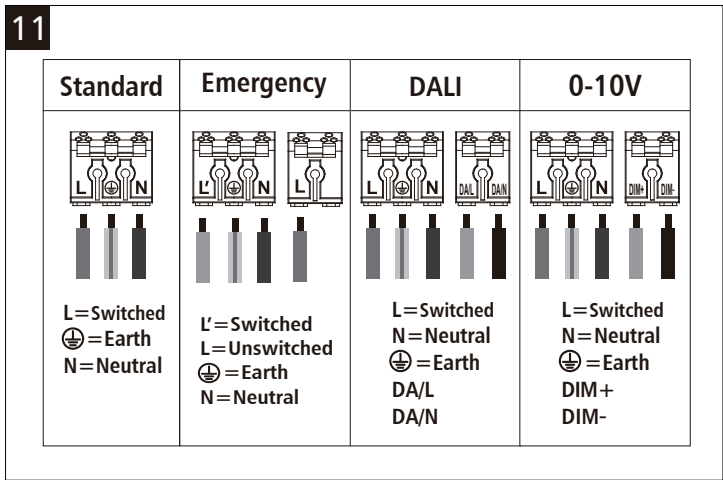
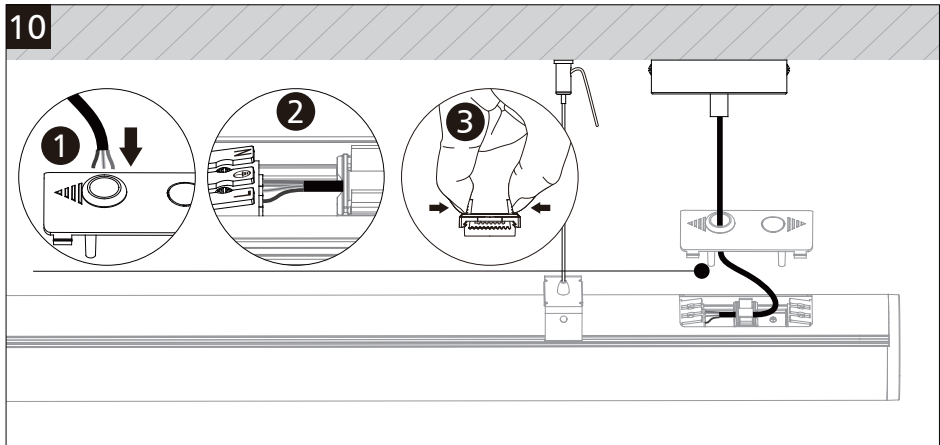
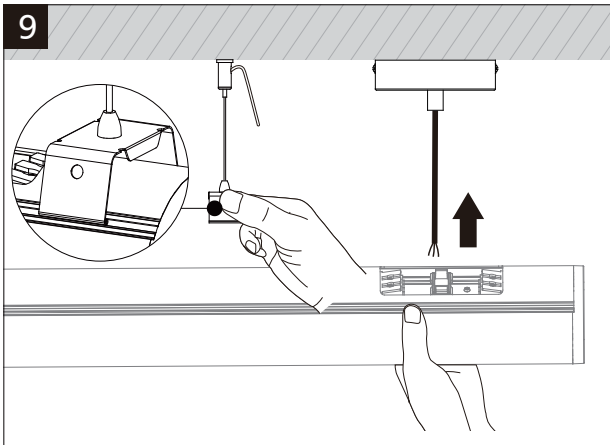
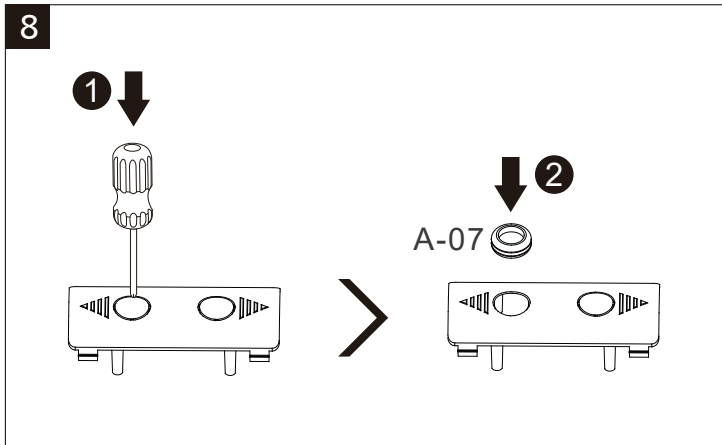
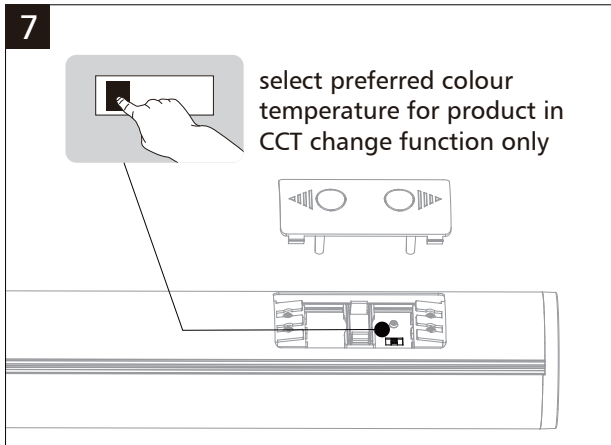
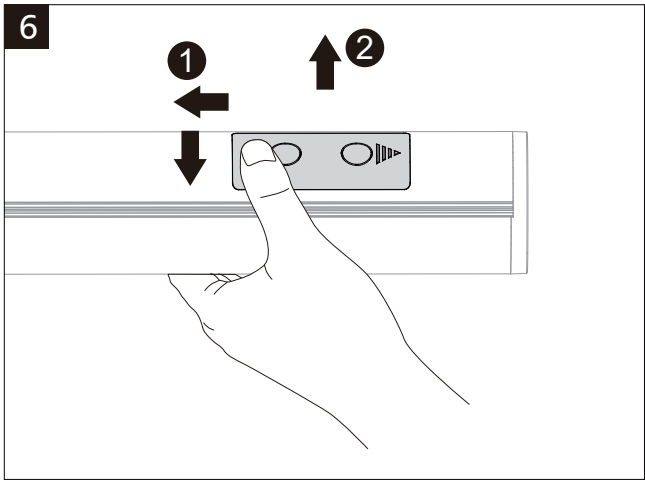
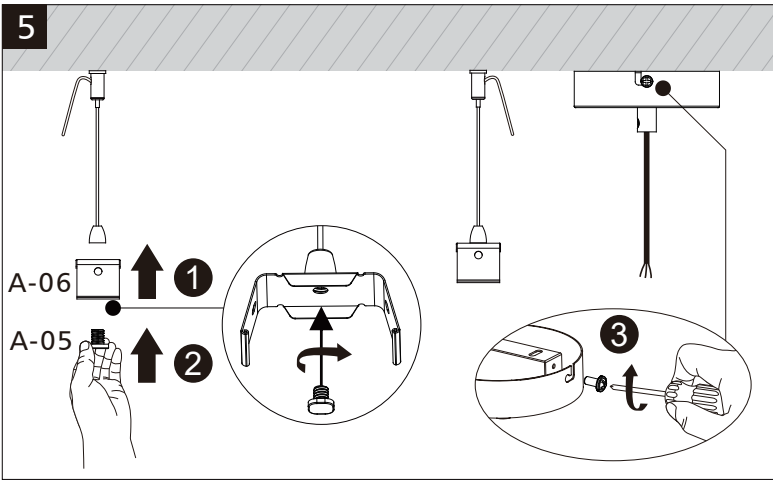
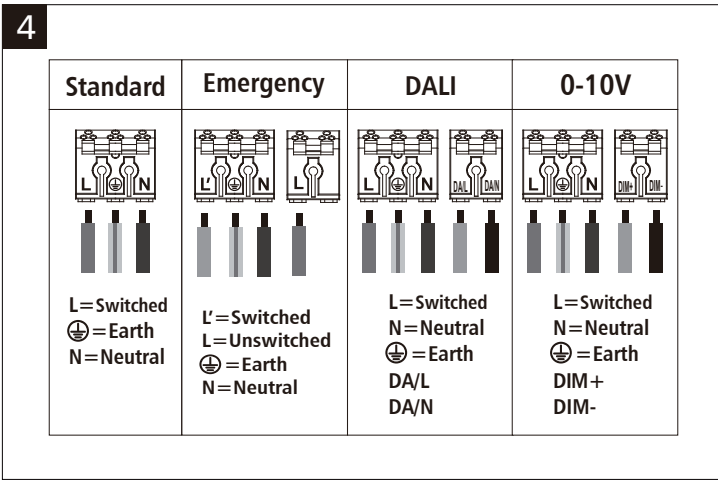
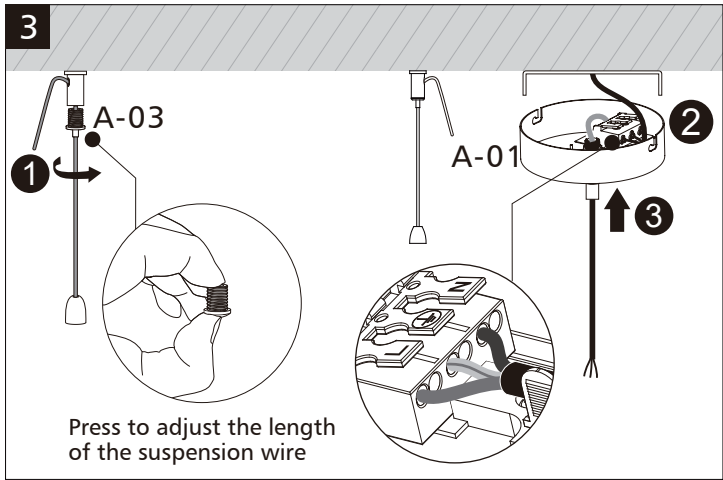
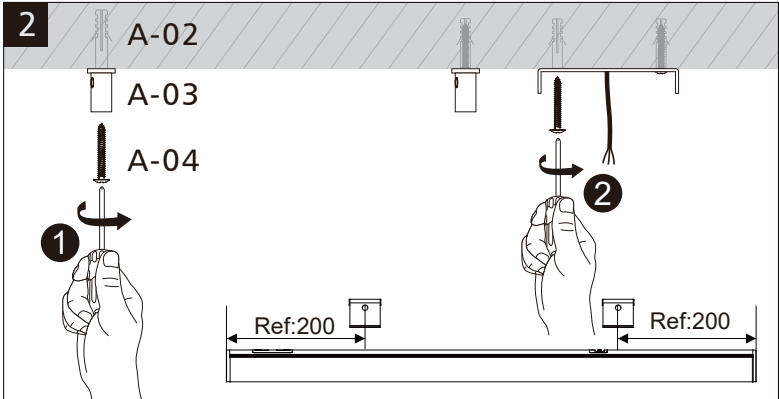
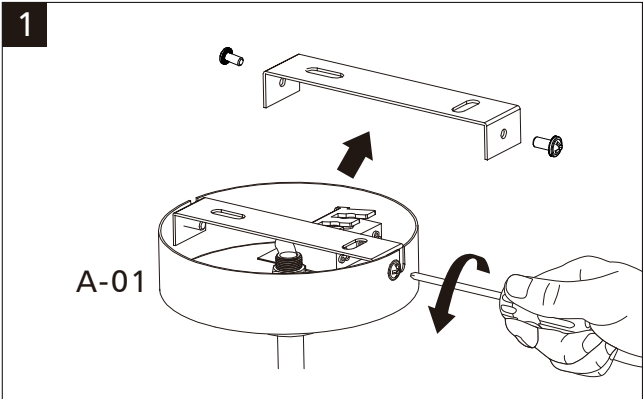
Standard	Emergency	DALI	0-10V
			
L=Switched ⊕=Earth N=Neutral	L'=Switched L=Unswitched ⊕=Earth N=Neutral	L=Switched N=Neutral ⊕=Earth DA/L DA/N	L=Switched N=Neutral ⊕=Earth DIM+ DIM-





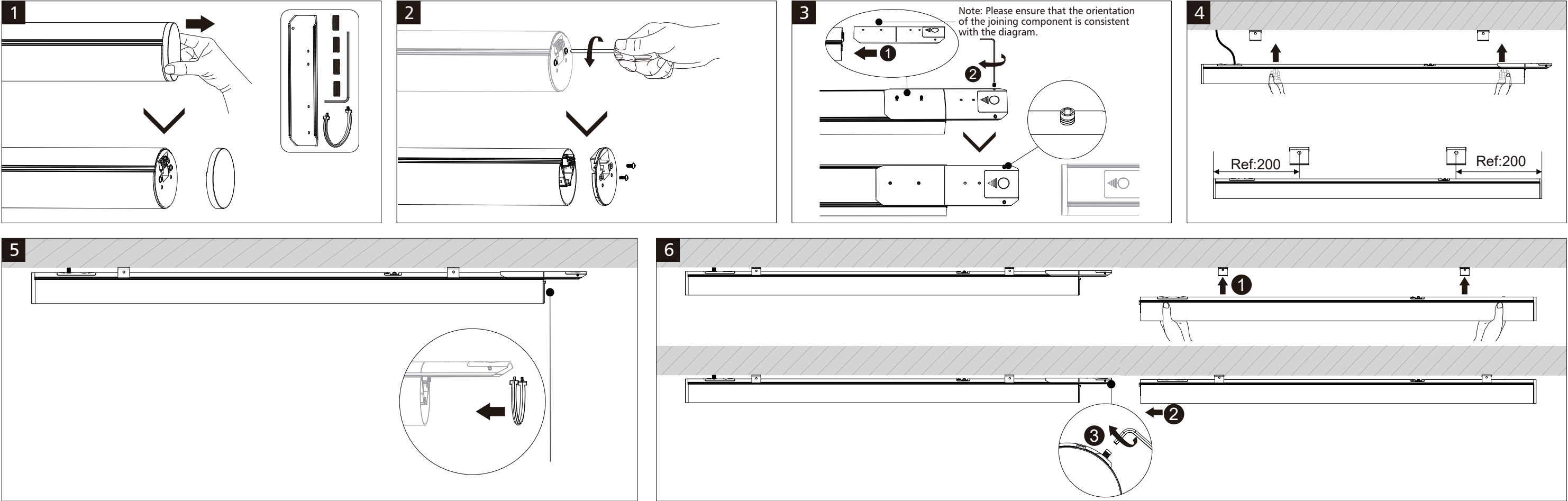
Pendant installation(With round ceiling plate)

Code	A-01 	A-02 	A-03 	A-04 	A-05 	A-06 	A-07 
ACC	x1	x4	x2	x4	x2	x2	x2

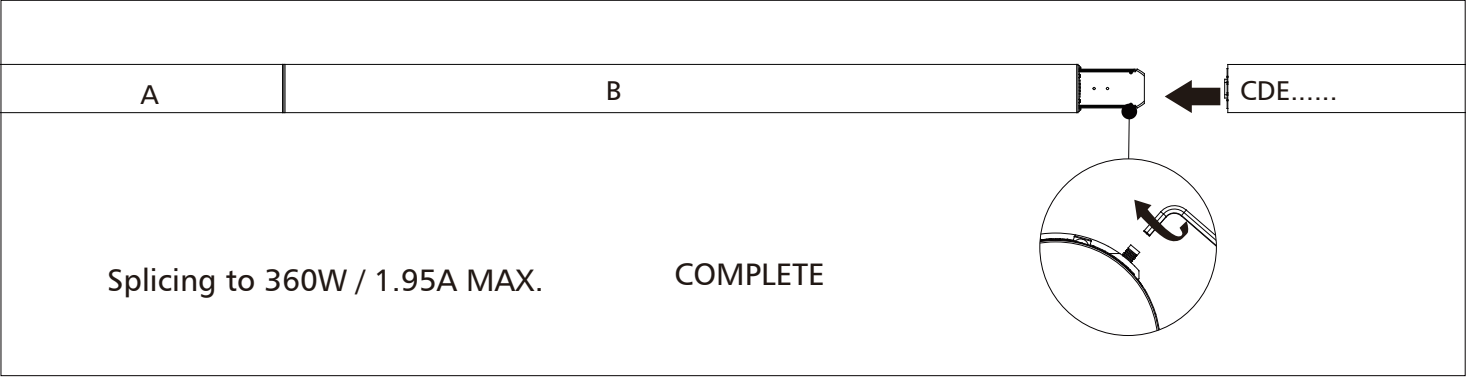




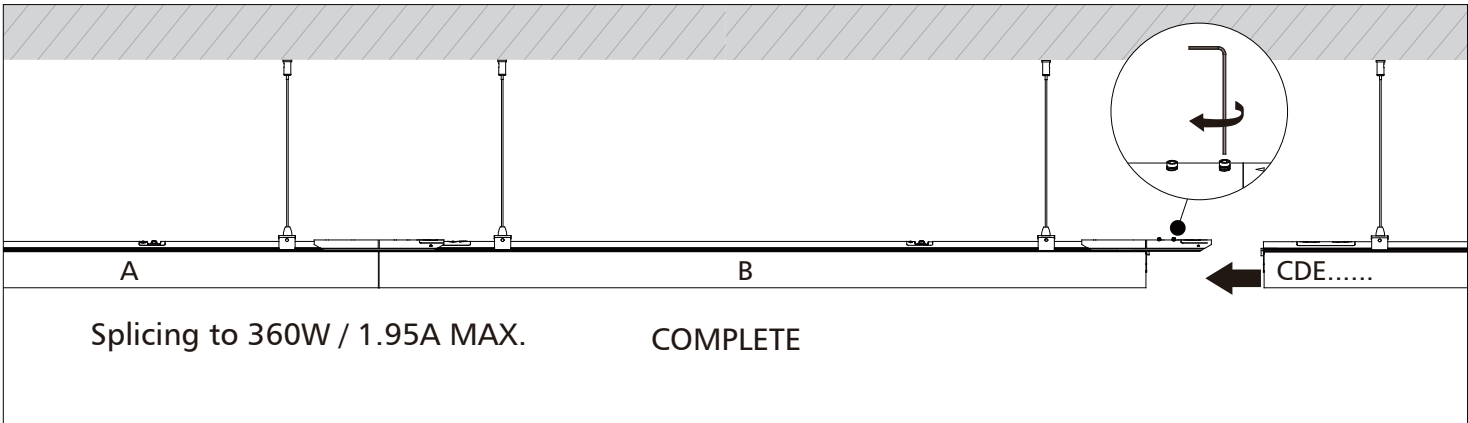
Surface mount splicing installation



Wall mount splicing installation



Pendant splicing installation(Without round ceiling plate)



Pendant splicing installation(With round ceiling plate)

