RHEA
LED LINEAR
Infinite Architectural Linear Lighting Solutions

Double Protection

LED Point Light Source

Product Description	This point light is small, delicate, ultra thin and transparent. It can be used indoor, outdoor and underwater 20m, also it can be used to draw the contour of buildings, fixed inside the lamps as light source in led advertising display and indoor decoration.	CE FC SASO
		▲▲20m ◈ ⟨III⟩ ▽F⟩ t_a55°C
		IP68 Class 4 (Anti-UV)
		V-0 (Fire Retardant Grade)

PRODUCT SPECIFICATION

· **Model:** OUGE-DGY-30

· **Color Range:** 16.7 million additive RGB colors

· **Color Resolution:** 3X16bit

· **Beam Angle:** 110º

· **Lumen:** 14 lm

· **Efficacy:** 19 lm/w

· **LED Pitch:** 120mm min（can be customized）

· **Housing Material:** modified PVC

· **Pixel Connection:** 40pcs/string

· **Size:** Φ30mmX11.7mm

· **Weight:** 18g /（pixel）；900g（LED controller）

· **Safety Approval:** CE；FCC；SASO

· **Operating Temperature:** -20 to +55 / -4ºF to +131ºF

· **Storage Temperature:** -40 to +80 / -40ºF to +176ºF

· **Environment:** outdoor (dry / damp / wet location / underwater / coastal environments)

ELECTRICAL SPECIFICATION

· **Operating Voltage:** DC 12V

· **Power Consumption:** 0.8W

RHEA
LED LINEAR
Infinite Architectural Linear Lighting Solutions

SYSTEM SPECIFICATION

· **Control:** DMX512 Control

· **Power Supply:** DC12V/ 350W

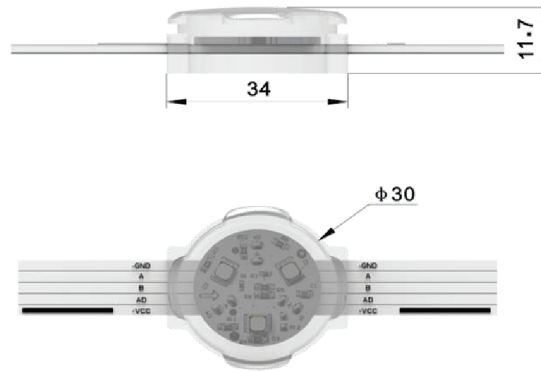· **Addressing Options:** addressing required

NOTES WHEN INSTALLATION

• This lights can only be installed by professional staff, and it is forbidden to install the lights with electric.

• The location around the lights should not be corrosive, explosive, flammable materials or dust. Strong shock and impact should be forbidden.

• The lights can only use the rated voltage indicated on lights, or it will make the lights eternal damage.

• Lights should be handled with care; the installation location must be strong and firm, while the installation must be firm, too.

• The cable must be connected firmly, and the connection quantity cannot exceed the cable load capacity.

• The lights can only be connected by the cable definition, or the light damage will occur.

• For the safety consideration, if the exterior cover of the wire or the cable is destroyed, it must be replaced by the same type of cable and must be changed by professional staff.

• Avoid destroying the power supply, if there used many power supplies, the power supply cannot be parallel connection.

• While you do the lamps installation, you need keep 2mm at least between the lamps; and while you do aluminum channel installation, you need keep 2mm at least between the channels; while you install the light source directly, you need keep 2mm at least between the light source.
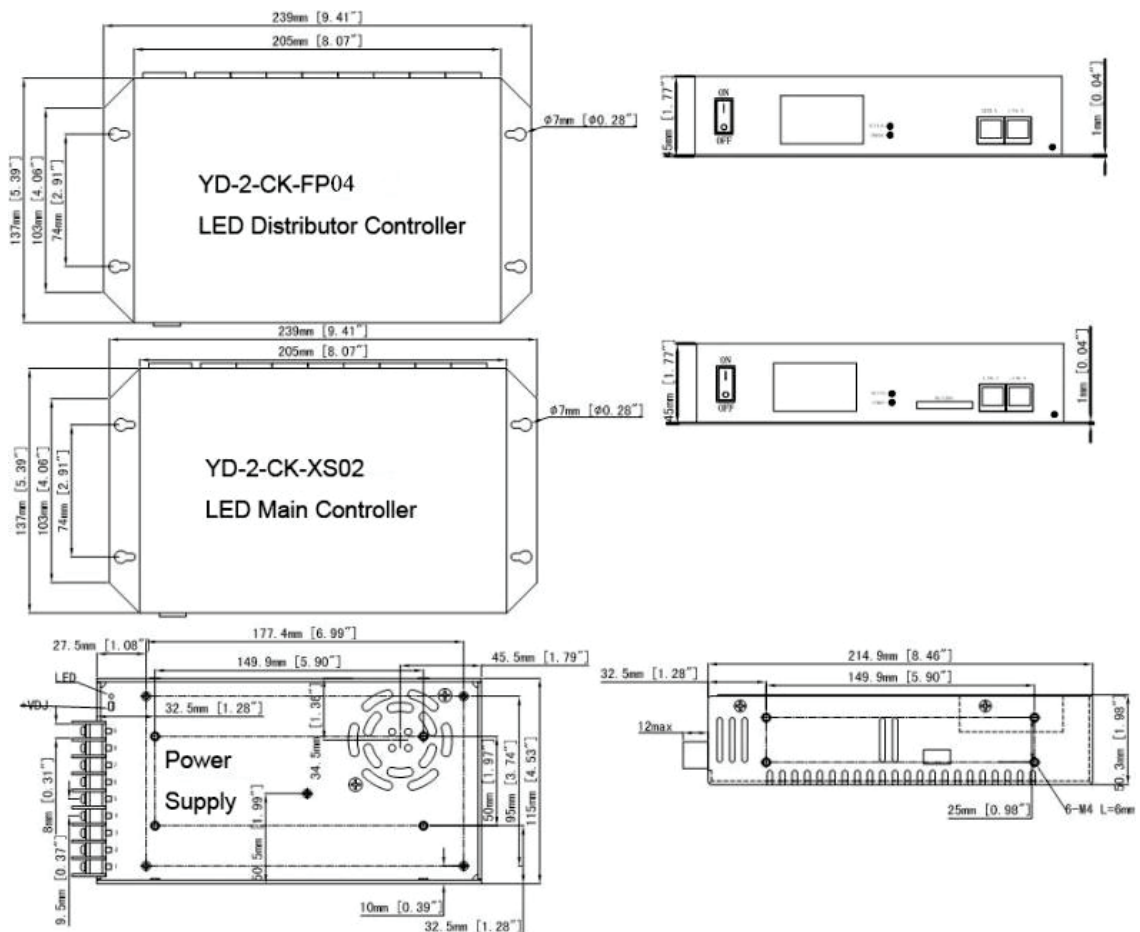
Double Protection LED Point Light Source

Size

Light Drawing

11.7

34

Φ30

-GND
A
B
AD
+VCC

-GND
A
B
AD
+VCC

Controller and Power Supply Drawing

239mm [9.41"]
205mm [8.07"]
Φ7mm [Φ0.28"]

137mm [5.39"]
103mm [4.06"]
74mm [2.91"]

YD-2-CK-FP04
LED Distributor Controller

ON
OFF

239mm [9.41"]
205mm [8.07"]
Φ7mm [Φ0.28"]

137mm [5.39"]
103mm [4.06"]
74mm [2.91"]

YD-2-CK-XS02
LED Main Controller

ON
OFF

27.5mm [1.08"]
177.4mm [6.99"]
149.9mm [5.90"]
45.5mm [1.79"]
32.5mm [1.28"]
214.9mm [8.46"]
149.9mm [5.90"]

LED

VDJ

32.5mm [1.28"]
34.5mm
50mm [1.97"]
95mm [3.74"]
115mm [4.53"]

8mm [0.31"]

Power
Supply

12max

9.5mm [0.37"]
10mm [0.39"]
32.5mm [1.28"]

25mm [0.98"]
6-M4 L=6mm
50.3mm [1.98"]

RHEA
LED LINEAR
Infinite Architectural Linear Lighting Solutions

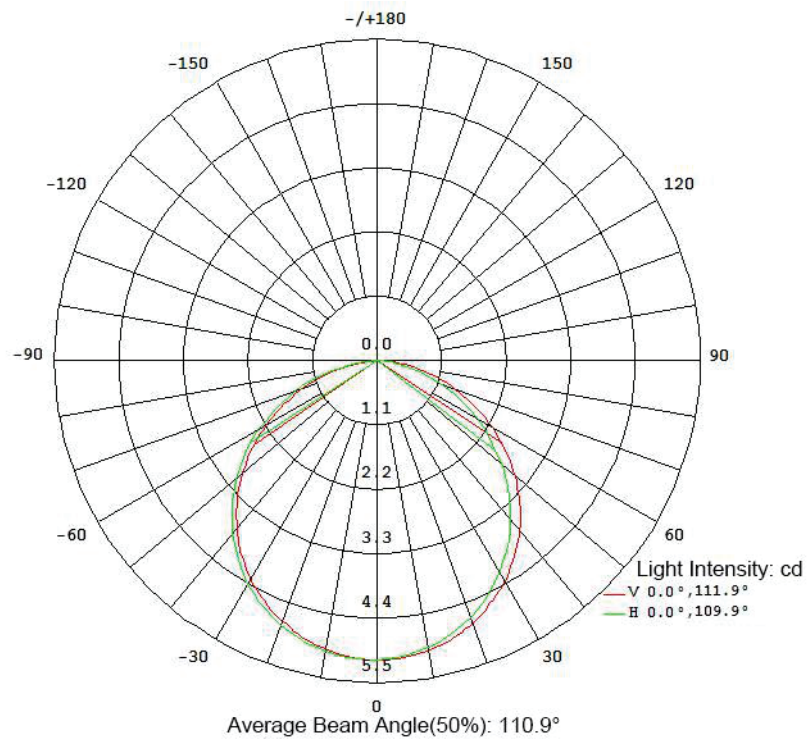| Double Protection LED Point Light Source | Efficacy |

Light Specification

·**LED Type:** 3 in 1 RGB
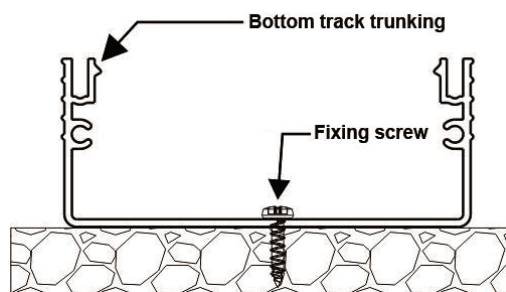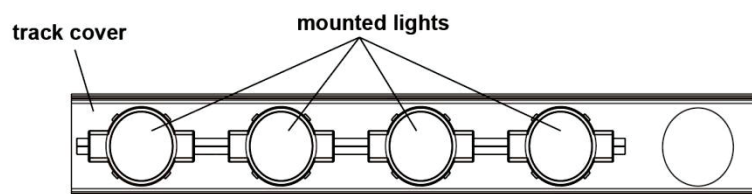
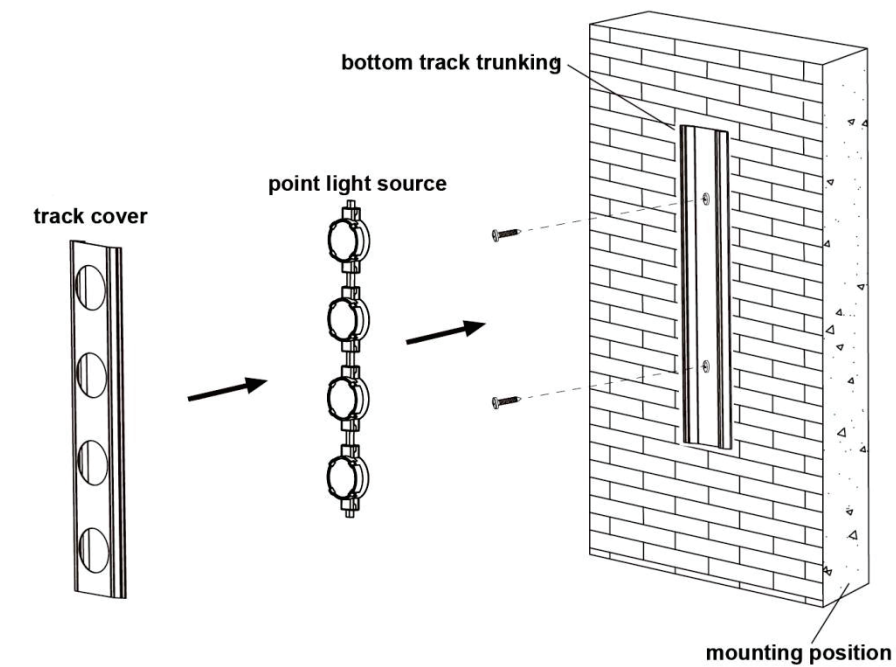·**Beam Angle:** 110º

·**Encapsulation Material:** modified PVC

Luminosity Distribution

Average Beam Angle(50%): 110.9°

Light Intensity: cd
— V 0.0°,111.9°
— H 0.0°,109.9°

Mounting

track cover

point light source

bottom track trunking

mounting position

track cover

mounted lights

Bottom track trunking

Fixing screw

Double Protection LED Point Light Source	System Diagram

Controller and Power supply Installation

Air switch

Ground connection

YD-2-CK-XS02 LED main controller

YD-2-CK-FP04 LED data distributor

12 V/350W Power Supply

12 V/350W Power Supply

12 V/350W Power Supply

12 V/350W Power Supply

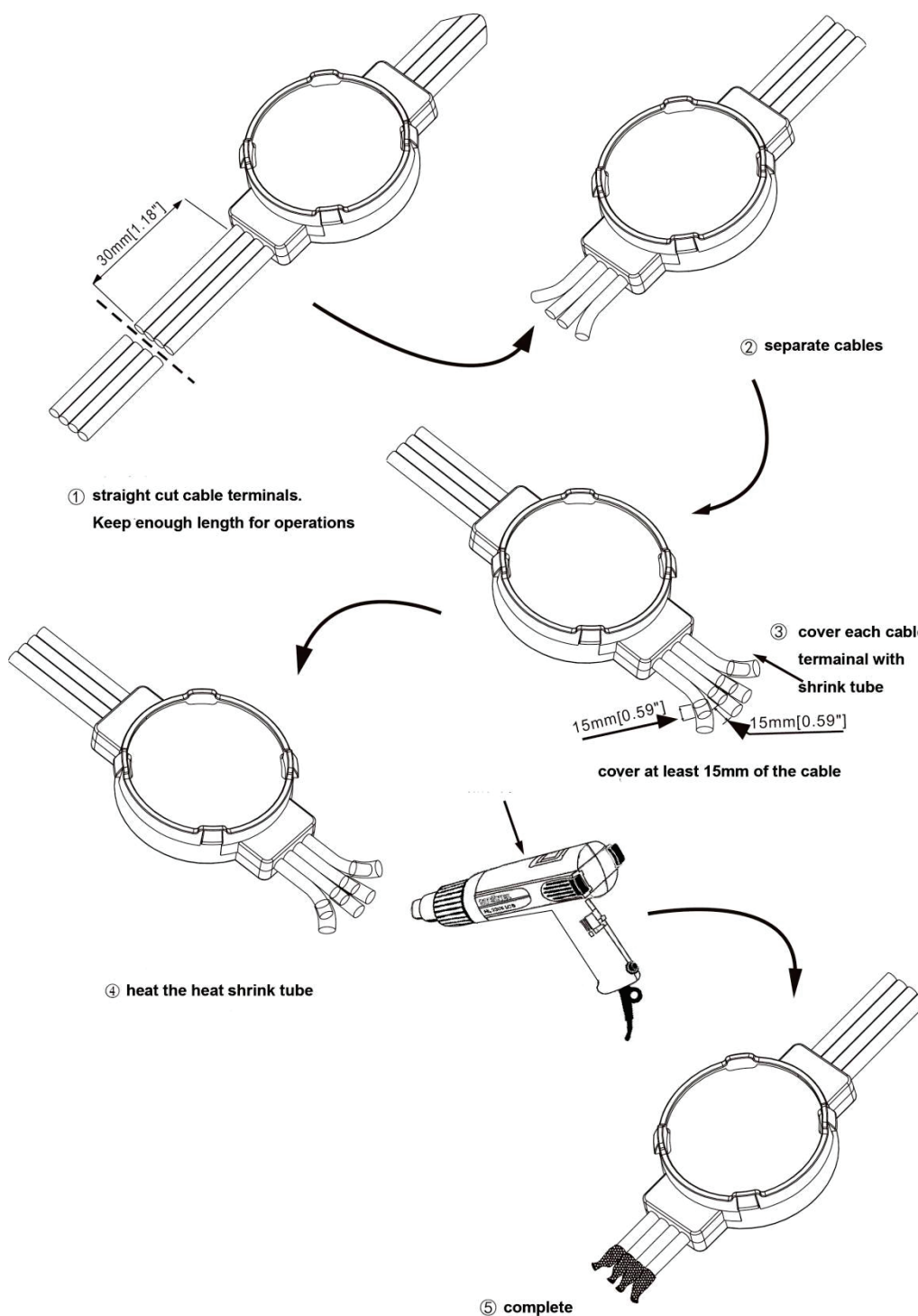220V Power

connect to next LED Data Distributor
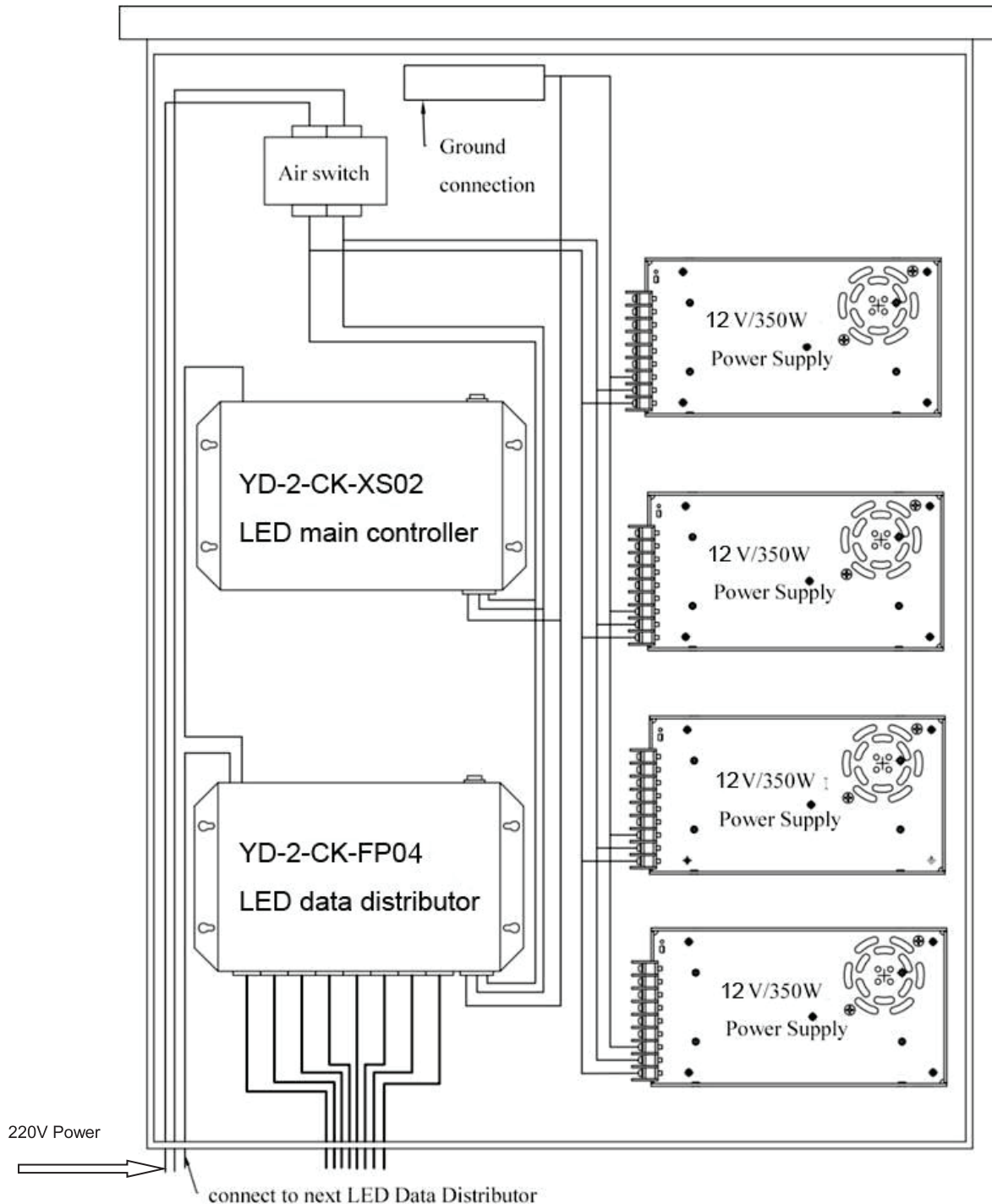
Connect 220V to air switch, through the air switch, provide the power to power supply and LED controller. The YD-2-CK-XS02 LED controller is main controller, YD-2-CK-FP04 LED controller is distributor, every distributor need to cascade connection by network cable, as shown in the picture.

Double Protection LED Point Light Source

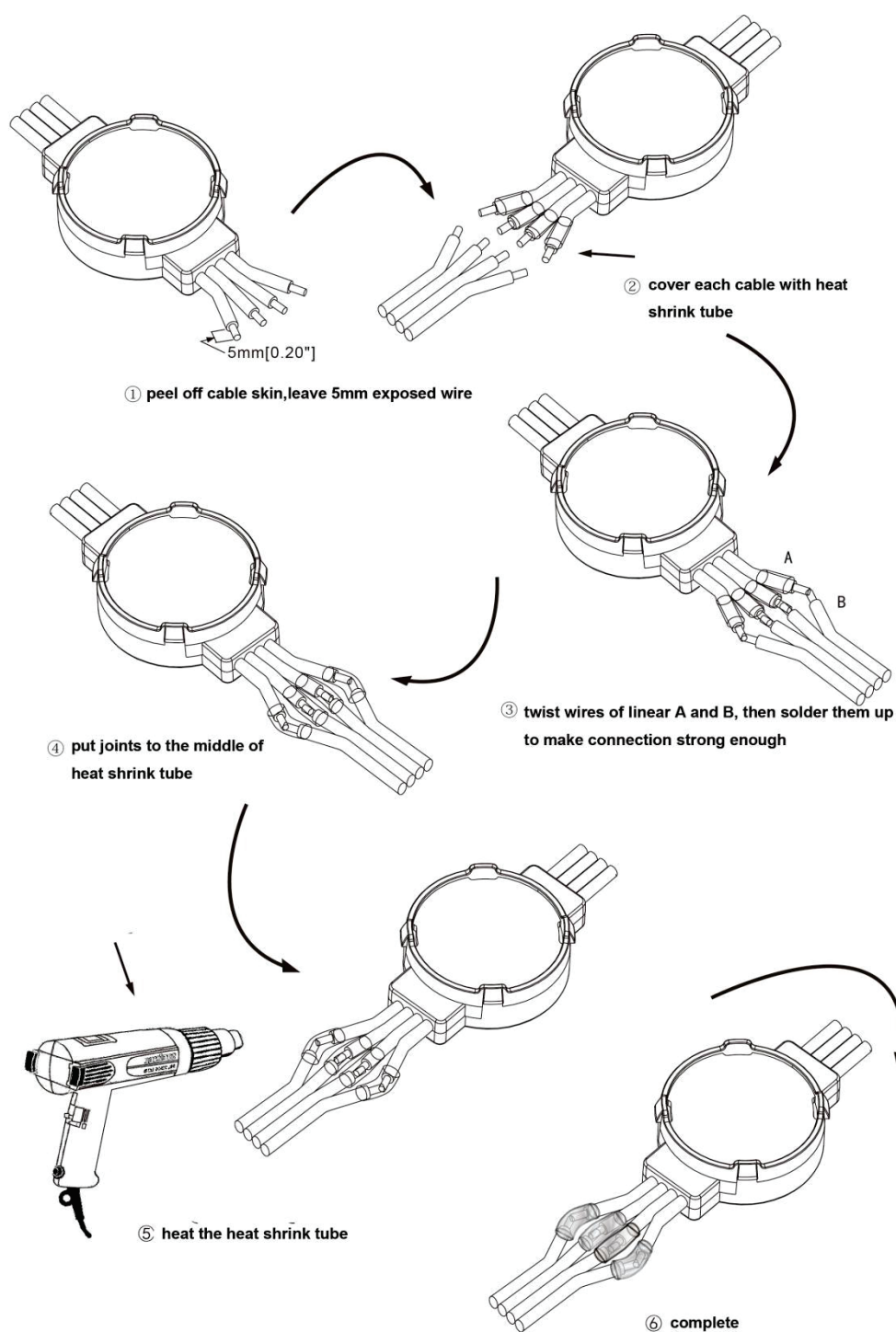## Waterproof treatment

Waterproof treatment to cable terminals

30mm[1.18"]

① straight cut cable terminals.
   Keep enough length for operations

② separate cables

③ cover each cable
   termainal with
   shrink tube

15mm[0.59"]   15mm[0.59"]

cover at least 15mm of the cable

④ heat the heat shrink tube

⑤ complete

Double Protection LED Point Light Source | Waterproof treatment

Connection between pixels

① peel off cable skin,leave 5mm exposed wire

5mm[0.20"]

② cover each cable with heat shrink tube

③ twist wires of linear A and B, then solder them up to make connection strong enough

④ put joints to the middle of heat shrink tube
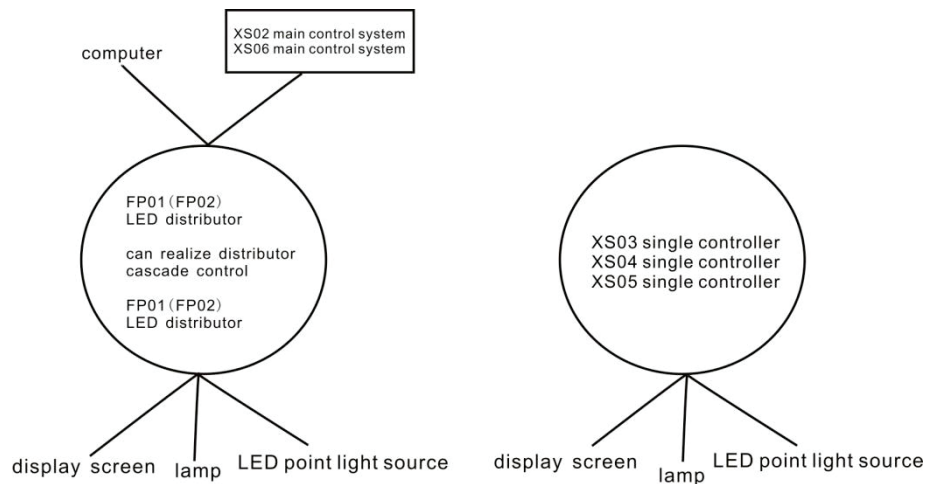
⑤ heat the heat shrink tube

⑥ complete

Double Protection LED Point Light Source | Control system

Ⅱ Type LED Control System

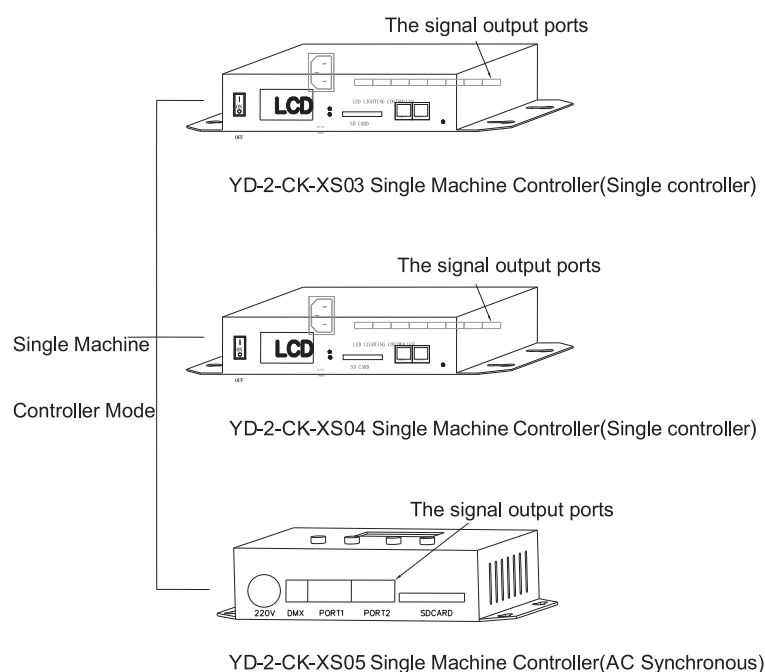**Ⅱ Type LED Control System, it has 3 kinds of Control Modes: Single Machine Controller Mode; Offline Mode**

A. Single Machine Controller Mode Instruction：

YD-2-CK-XS03、YD-2-CK-XS04 are single machine controllers, can be used with single one.

YD-2-CK-XS05 Single Machine Controller can be used many single ones together ,can realize the AC Synchronous function when electrify them at the same time

YD-2-CK-XS03 Single Machine Controller(Single controller)

YD-2-CK-XS04 Single Machine Controller(Single controller)

YD-2-CK-XS05 Single Machine Controller(AC Synchronous)

B. Offline Control mode: Offline control mode can load at most 150,000 pixels, each distributor controller has 8 ports, each port can load at most 170pixels.

YD-2-CK-XS02   YD-2-CK-FP04

YD-2-CK-FP04

C. Online Control mode: Offline control mode can load at most 150,000 pixels, each distributor controller has 8 ports, each port can load at most 170pixels.

Computer

YD-2-CK-FP04

YD-2-CK-FP04
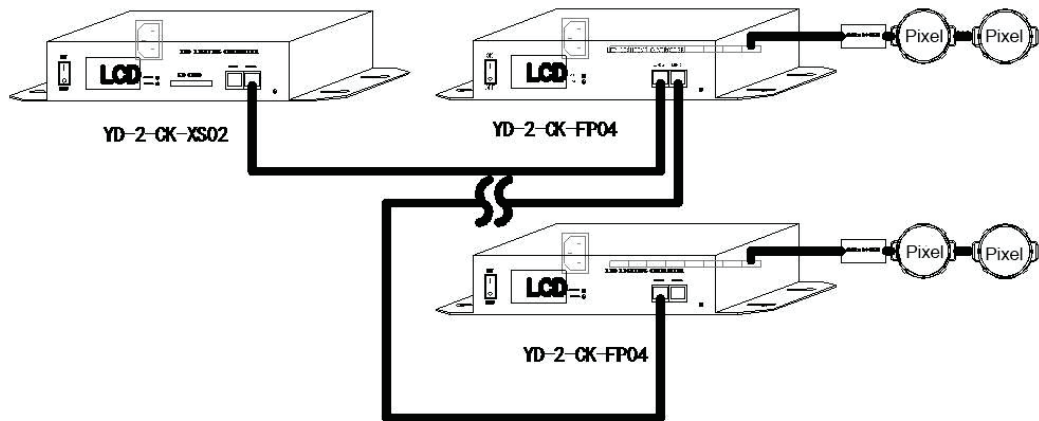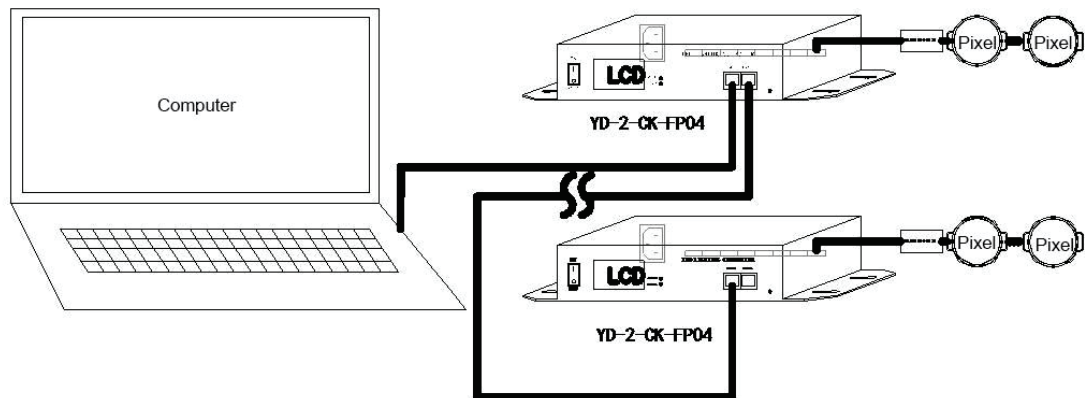
D. Online + Offline Control mode: Connect Offline main controller with computer(under this condition, computer and offline main controller do not work at the same time. Whether computer work or offline main controller work)
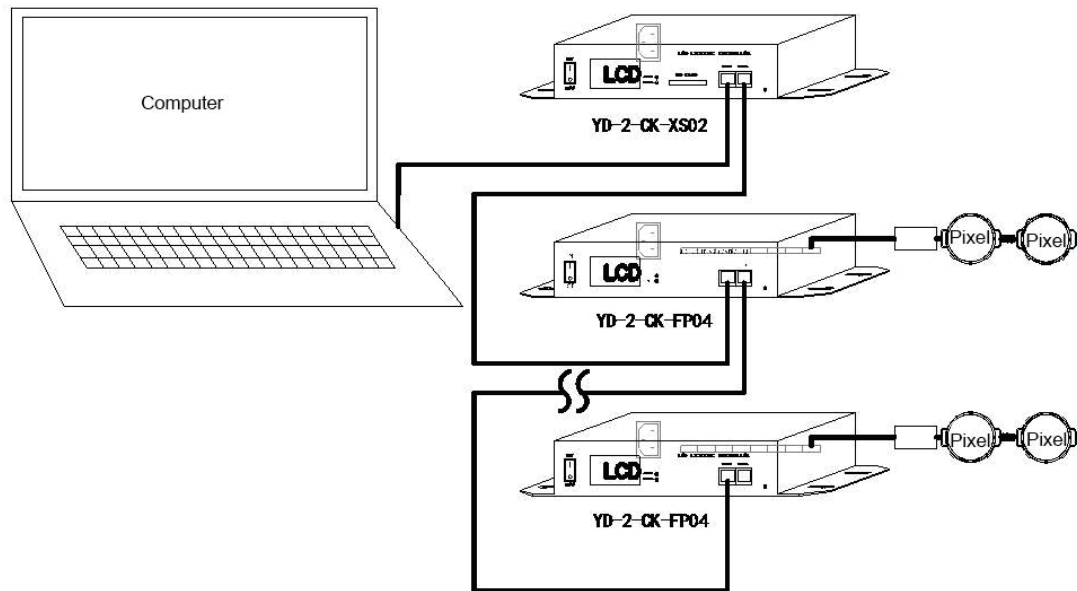
E. Large-scale project switch control: switch cascade connection can load millions of pixels, the proposed switch model is TP-LINK TL-SL2428.