

Data Sheet

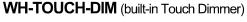
WH-C10L Linear LED Light



Model: WH-C10



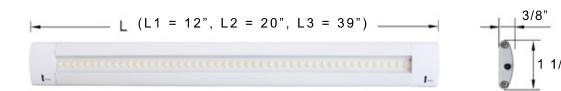
WH-MAST-SW (on/off switch)







Size



FUTURA LIGHTING'S WH-C10L Linear LED is perfect for installation in showcases, display case or furniture. This Linear LED Light is especially applied to hidden/ covert installation. After processed by special optical system, this kind of flat linear light indeed becomes a continuous well-proportioned linear light source. With unique design, which has patented, the lamp can be easily to change the illuminated direction. The direction of LED light can be adjusted to 0°, 45° and 90°. With various accessories, the led light can have different extended functions like connection, motion and light sensor, dimmer and switch, etc.

Advantages

- Energy saving up to 50% compared with traditional fluorescent under the same flux
- Life Span-over 50,000 hours
- Available in cool white, neutral white, and warm white color temperatures;
- Standard length: L1 = 12", L2 = 20", L3 = 39", and customized length is also available.
 Standard finish color: white or silver, and customized color is also available.
- Easy linking up to 48 watts per run and up to 10 feet when connected in series.
- Easy installation with only 2 screws.
- The direction of LED light can be adjusted for 0°,45° and 90°.
- Low voltage, more safety.
- Warranty: 3 years.

Applications

LED show case lighting; LED shelf lighting; LED retail product Lighting; LED Furniture Lighting; LED bookcase lighting; LED wardrobe lighting; LED wine cabinet lighting; LED under cabinet lighting; LED document lighting; LED accent lighting; LED task lighting; LED product line lighting

Technical Operating Data

Model No.	length	Number of leds	Voltage	Power	Radiance	Color Temp.	CRI	Luminous Flux
	[mm]	[pcs]	[Vdc]	[W]	Angle [°]	[K]		[lm]*
WH-C10L1	L = 12"	49	24	5	120	3000k	>80	400
WH-C01L2	L = 20"	77	24	8	120	3000k	>80	640
WH-C01L3	L = 39"	154	24	16	120	3000k	>80	1280

Dimensions: 1 1/4" (width) x 3/8" (height) x "L"

Materials: Aluminum extrusion with plastic end caps, Acrylic Lens

Light Source: High brightness SMD3014 LED

Operating Temperature: -20°C to 40°C - Indoors

Installation: 2 M3x10 screws make it easy to install

Usage Instruction

1. Standard package

Standard package includes:

1 piece of LED light, 1 piece of connecting cable, 1 piece of straight connector, 2pcs of screws

WH-C10 LINEAR LED LAMP (1 piece)

WH-CONN-MINI (STRAIGHT CONNECTOR) (1 piece)

M3x10 screws



WH-CABLE-RE (CONNECTING CABLE)





Screws (2PCS): M3.0X10

Straight connector (1 piece): can be used for direct connection of LED fixtures.

Connecting cable (1 piece): 1 meter long, can be used for long distance connection of LED fixtures.

2. Basic Usage: The LED light needs to connect with power supply directly.

The LED light needs to plug into power supply and then it can work, please refer to the picture as below.



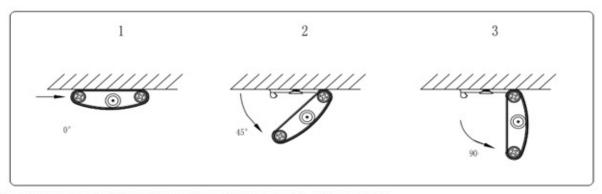
3. Using straight connector and connecting cable to connect the LED lights.

Based on the above usage, using straight connector and connecting cable can make LED lights interconnection, please refer to the picture as below.



Note: The maximum length for connection is not over than 10 feet.

4. Adjust the direction of LED light

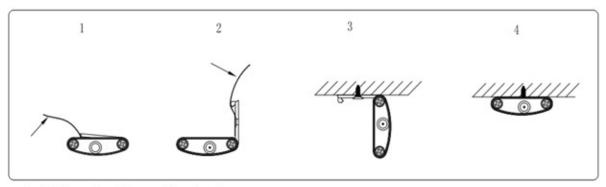


The direction of LED light can be adjusted to 0°, 45° and 90°.

Rotate LED light according to the symbol PULL printed on the end cap to 0°,45° and 90°.

Attention that the LED light can only be rotated to 90° maximum.

Installation of LED lights



- 1. Pull up the blue adhesive tape.
- The adhesive tape will take mounting plate rotate to 90°.
- 3. Rip the tape and fix the mounting plate with M3*10 screws onto the place where the LED light needs to be installed.

Power supply usage instruction

The following table shows how many lamps the power supply can drive respectively. You can select suitable power supply according to the power per run.

Power Supply	WH-C10L1 (5W)	WH-C10L2 (8W)	WH-C10L3 (16W)
WH-24W-24V-PSU	4	2	1

Remarks:

- The standard package of LED light doesn't include power supply, but we can offer the power supply in separated package.
- 2. The power of power supply must be over the total power of connected LED lights in series.
- 3. The voltage of constant-voltage power supply must be same as the voltage of LED lights. The output voltage of power supply can't be allowed to be higher than the input voltage of LED light. If you choose to use other power supply, the power supply must have short circuit protection, overload protection, overheat protection besides the above requirements.

Power Supplies

Compatible Dimmable Drivers	Specifications		
LED-26W-24V-DIM	Max Load: 26W / Input: 120V / Output: 24VDC / Dimensions: Length: 7", Width: 1.9", Depth: 1"		
LED-48W-24V-DIM	Max Load: 48W / Input: 120V / Output: 24VDC / Dimensions: Length: 4.8", Width: 3.1", Depth: 1.4"		
FLM-60W-24V-LED-DIM	Max Load: 60W / Input: 120V / Output: 24VDC / Dimensions: Length: 6", Width: 2.6", Depth: 2.2"		
FLM-90W-24V-LED-DIM	Max Load: 90W / Input: 120V / Output: 24VDC / Dimensions: Length:9", Width:4", Depth:3 1/4"		
FLM-200W-24V-LED-DIM	Max Load: 200W / Input: 120V / Output: 24VDC / Dimensions: Length:9", Width:4", Depth:3 1/4"		

Extended accessories

Except the standard accessories, we also can offer optional extended accessories for your choice to get more various functions. For example: connection, sensor, dimmer and switch, etc.

WH-MAST-SW IN-LINE SWITCH



WH-TOUCH-DIM
IN-LINE TOUCH DIMMER



WH-JUNCT-BOX DC JUNCTION BOX



WH-DIMM WIRED DIMMER



WH-PIR-SENS PIR SENSOR



WH-MOV-SEN IN-LINE MOVING SENSOR



Extended accessories Continued

WH-IR-SENS
IR SENSOR



WH-24W-24V-PSU 24W/24V PLUGIN POWER SUPPLY



WH-CONN-MINI STRAIGHT CONNECTOR



WH-CONN-WIRE
3 FT CONNECTING WIRE



WH-CABLE-RE
5 FT WIRE WITH LEADS TO CONNECT
TO REMOTE POWER SUPPLY



Installation instructions of extended accessories

1. WH-JUNCT-BOX (In-line switch)





Installation Instruction: Use In-line switch to connect with LED lights, then connect the power supply to the input side of the In-line switch.

Operation: Press the switch on the body to turn ON/OFF the system at any time and can control all the connected LED lights in a series.

2. WH-TOUCH-DIM (In-line Touch dimmer with dimmer switch function





Installation Instructions:

- Use In-line Touch Dimmer to plug into the DC jack socket and secure the Dimmer to the mounting surface.
- Connect the power supply to the input side of the Dimmer.

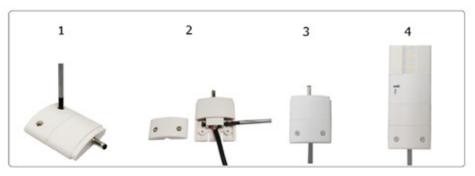
Operation:

- Touch the power icon [] on the body to turn ON/OFF the system at any time.
- 2. The initial brightness is fixed at 100% when the system is first powered up.
- When the light is on, the brightness can be adjusted by touching and holding the power icon for more than 0.5 seconds.
- 4. If the power to the dimmer is uninterrupted, the light level will be memorized when the system is turned off and then on again.
- 5. The dimmer switch can control all the connected LED lights in a series.

Note: This touch switch can't control LED lights with built-in dimmer. If control the whole series in one line, please connect the LED lights without dimmer function.

3. WH-JUNCT-BOX (DC Junction Box)





If use the power supply without DC plug or need to cut off the DC plug of power supply to connect LED light, you can choose to use DC junction box to connect the LED light with hardwired power supply.

Installation instructions:

- Open the cover of DC junction box with screw driver.
- 2. Insert the positive and negative output side of power supply into the positive and negative terminal block and lock the screws of terminal block.
- 3. Close the cover by fastening the screws.
- Plug the DC junction box into the DC jack socket and secure the DC junction box to the mounting surface.
- 5. Connect the power supply to the input side of the DC junction box.

Note: The LED light will not work if the positive & negative output side between power supply and terminal block is not consistent. It will not destroy LED light and you can make the correct positive & negative connection between them.

4. WH-DIMM (Wired Dimmer with dimmable and switch function)





Installation Instructions:

- Use the screws provided to secure the Dimmer to the mounting surface.
- Connect the output to the LED light
- Connect the power supply to the input side of the Dimmer.
- 4. This dimmer can be used in the place where the distance is less than 3 feet from the LED light Operation:
- Touch the power icon [] on the body to turn ON/OFF the system at any time.
- 2. The initial brightness is fixed at 100% when the system is first powered up.
- When the light is on, the brightness can be adjusted by touching and holding the power icon for more than 0.5 seconds.
- If the power to the dimmer is uninterrupted, the light level will be remembered when the system is turned off and then on again.
- The dimmer switch can control all the connected LED lights in a series.

Note: This touch switch can't control LED lights with built-in dimmer. If control the whole series in one line, please connect the LED lights without dimmer function.

WH-MOV-SEN (Moving sensor with automatic sensor function)





Installation Instructions:

- Use the sensor to plug into the DC jack socket and secure the Sensor to the mounting surface.
- Connect the power supply to the input side of the Sensor.

Basic Data:

Detection Distance: 10 ft. Detection Range: 120°

Installation Angle: 0°, 45°, 90°

Delay time: Standard is 30 seconds and can be adjusted to 2 minutes (can design in 1s ~20 minutes

as customers' request)

Functional information:

- Automatic detection: when people enter the detection area, infrared ray detector will output 12V or 24V and the light turns on.
- Delay function: when people leave the detection area or people stay still, the light will turn off after 30 seconds. Delay time can be adjustable from 30 seconds to 3 minutes, or others.
- Continuous detection: when people have activities during the period of delay time, the detector works and the light is always on.
- Installation Angle: The sensor can be easily rotated and made 0 degrees or 45 degrees or 90 degrees with the mounting surface of light..





6. WH-PIR-SENS (with automatic sensor function)





Installation Instructions:

- Use the screws provided to secure the Sensor to the mounting surface.
- 2. Connect the output to the LED light
- 3. Connect the power supply to the input side of the Sensor.
- 4. This dimmer can be used in the place where the distance is less than 1 meter from the LED light.

Technical Features:

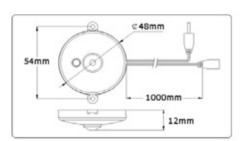
Related load wattage: Max 36W in 24V

Detection Distance: 6 1/2 ft. Detection Range: 120°

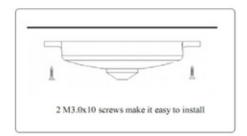
Delay time: Standard is 30 seconds (can design in 1s ~20 minutes as customers' request)

Ambient light: <10 lux daylight.

Drawing:



Installation information:



Functional information:

- Automatic detection: when people enter the active zone, infrared ray detector will output 12V or 24V and the light turns on.
- Delay function: when people leave the active zone or people stay still, the light will turn off after 30 seconds.
- Continuous detection: when people have activities during the period of delay time, the detector works and the light is always on.
- 4. Light sensitive control: The PIR Motion Sensor has two sensitive parts, one is infrared ray sensitive part, and the other is light sensitive parts. So it works when people enter in the active zone in the daylight luminance is less than 10 lux.

Notes:	