

TM1914A IC

## Features

- TTM1914 IC
- 6 LEDs per cutting units
- FPC material, flexible and bendable
- Quick XH-2Y & PH-2 connector
- Easy installation by tape and screws
- Customizable in size, color, power, and logo, etc.
- To achieve rich light changes like dreaming color chasing effects with an external controller
- Separate power supply and signal input ports



## Application

Suitable for large-area lighting, curved decorative lighting, special-shaped decorative lighting, staircase corridor lighting, advertising light boxes, etc.

## Installation

Fix by 3M self adhesive tape or screws



## Optical & Electrical Parameters

Model No.	Light Color	CCT/Wavelength (K/nm)	Beam Angle	Luminous Flu (lm/pcs)	Efficacy (lm/W)	CRI	Voltage (V DC)	Power (W/pcs)
H150-D3-DN4040-288-24-W2	R	620-630	120°	548	15	/	24	31
	G	515-530		1525	41			31
	B	460-470		330	9			31
	RGB	/		2343	28			72

\*When the input voltage is 24V, the static power consumption of this product is 12W/pcs.

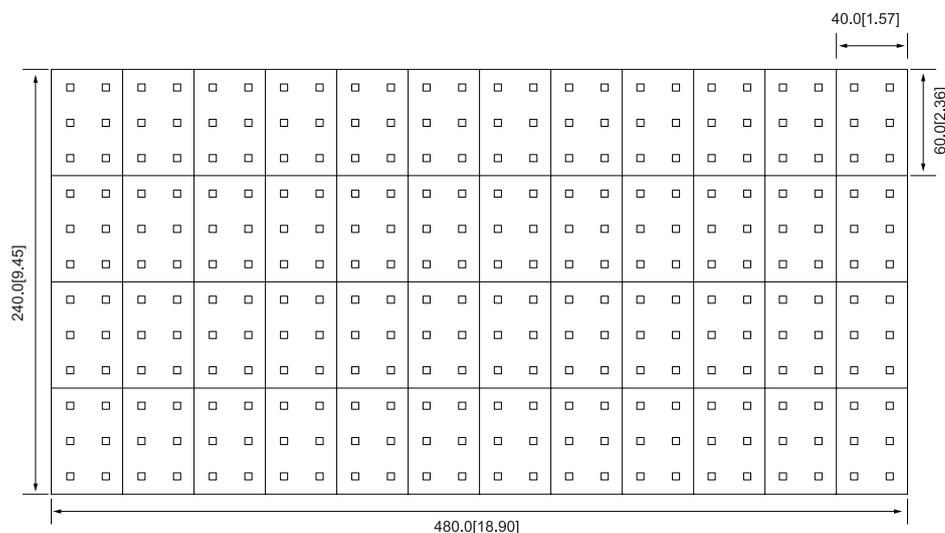
## Other Parameters

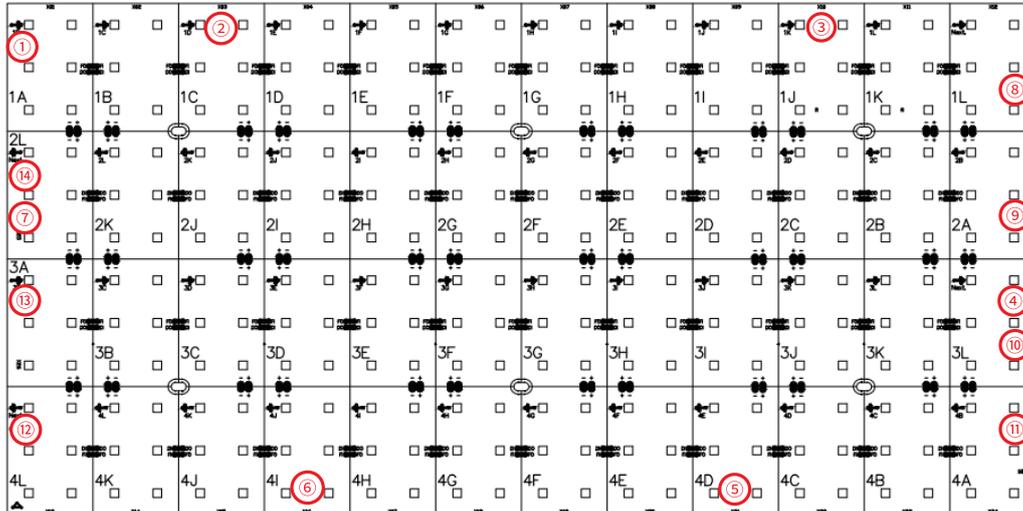
Model No.	LED Quantity (pcs)	Product Size (mm)	Max Run(pcs)	Min Cuttable length (mm)	Working Temperature	Storage Temperature
H150-D3-DN4040-288-24-W2	288	480*240	2	60*40	-25~+60°C	-25~+70°C

### NOTE:

1. Test environment temperature : 25±2°C.
2. Figures above are typical figures. Actual figures could be different with typical figures, and the data is subject to change without notice.
3. The luminous flux is tested with corresponding color light on.
4. Different color temperature or wavelength will make luminous flux different.
5. The Luminous efficiency is measured value.
6. Max run is in single feed.
7. The luminous flux and power tolerance within ±10%.
8. Cutting marks see profile drawing below.

## Profile Drawings





## Port Description

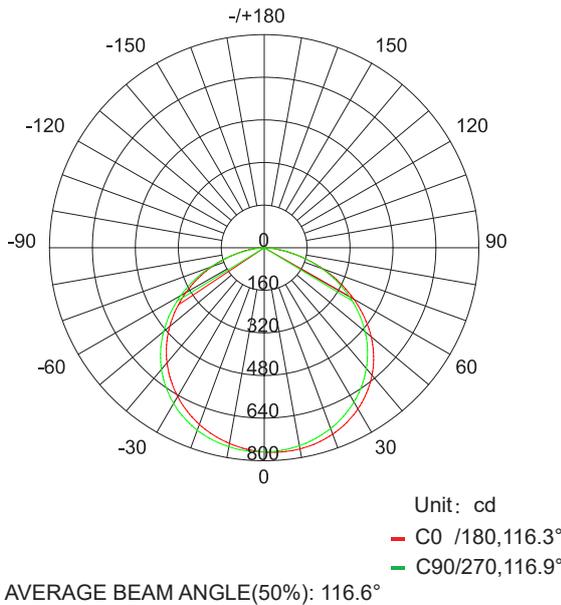
Port location	Port name	Port type	Effect	Note
① ⑨ ⑪ ⑬	Signal input	1pin	External SPI signal input	Use IPEX terminal line
② ③ ④ ⑤ ⑥ ⑦	Power input / output	2pin	Voltage input / output	Using xh-2y connector wire
⑧ ⑩ ⑫ ⑭	Signal output	1pin	Internal SPI signal output	Use IPEX terminal line

## Operating Length VS. Electrical Parameters

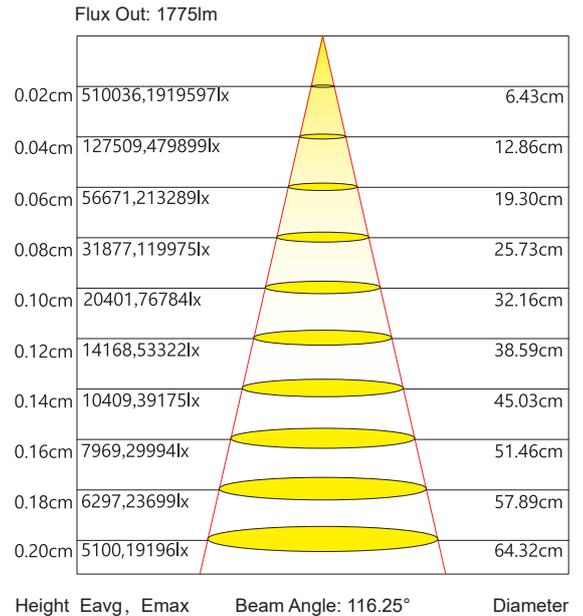
H150-D3-DN4040-288-24-W2	Operating Length(m)				
	1	2	3	4	5
Parameters					
Operating Voltage (DC V)	24.0				
Total Current(A)	3.11	6.14	9.17	12.20	15.23
Total Power(W)	74.64	147.36	220.08	292.80	365.52
Head voltage(V)	23.88	23.78	23.76	23.68	23.66
Tail voltage(V)	23.87	23.61	23.35	23.09	22.83
Head Current(mA)	54.36	53.64	53.42	53.22	53.18
Tail Current(mA)	53.76	51.67	49.58	47.49	45.40
Head-to-tail Voltage Drop Rate(%)	0.04	0.71	1.73	2.49	3.51
Head-to-tail Current Drop Rate(%)	1.10	3.67	7.19	10.77	14.63
Run a cable back to the driver	No	No	No	No	Yes



Luminous Intensity Distribution Diagram

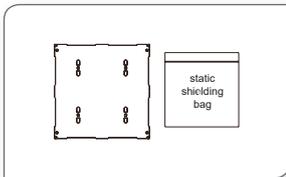


Average Illumination

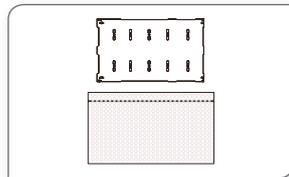


Note: The above data are tested with all lights on.

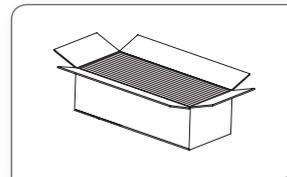
packing



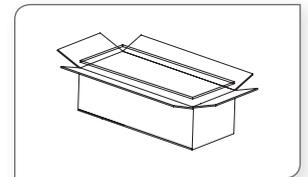
Put the product neatly on the table.



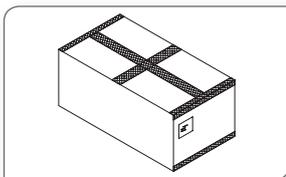
Put the PCB into bubble bag.



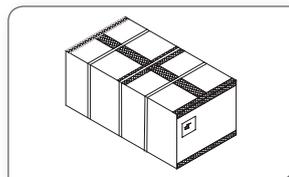
Put the product and desiccant together into carton box.



To fill the void with a foam or bubble bag.



Seal and label the box.



Use packing belt to pack. Add edge protectors if necessary.



## Packaging information

Model No.	Product Size L*W(mm)	Carton Size(mm)	PCS/Bag	Bag/Carton	Net Weight(kg)	Gross Weight(kg)
H150-D3-DN4040-288-24-W2	480*240	555*295*275	2	25	8.64(1±10%)	10.35(1±10%)

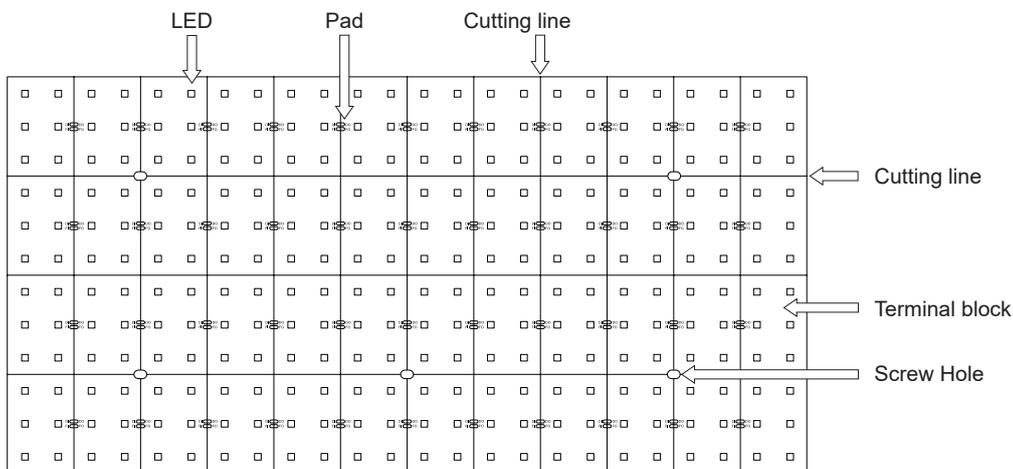
### Note:

Every 2pcs back with back packed in an anti-static bubble bag and put into carton box.

The above quantity and weight are only for the illustrated packaging method. There will be differences in the quantity and weight with other packaging methods.

## Installation

### 1.The Product



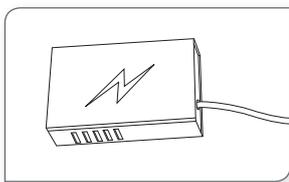
	Application	Quantity	Position	Note
Screw Hole	Fix the product	6	/	Runway hole
Cutting line	Cutting position	/	With scissors mark	/
Terminal block	Connect the controller	6	/	2Pin/3Pin Terminal
Pad	Use of welding wire	/	/	/
3M self adhesive tape	primary fixation	3	/	/
Basic information	/	/	/	See the figure below



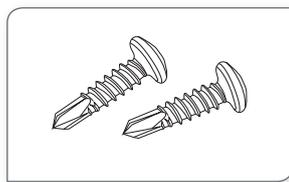
Basic information

2044	44#	-	3939	54mA
Single LED working current	Production batch number	CRI	Color temperature/Light color	Production date(Year/Week)

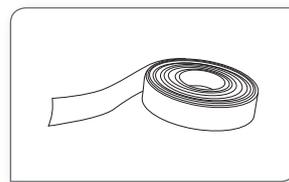
Products and Tools



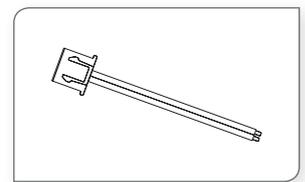
LED power supply



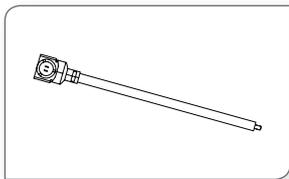
Self-tapping screw



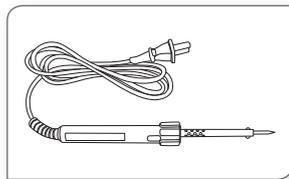
Insulation Tape



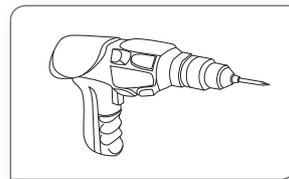
XH-2Y Connector wire



IPEX terminal line



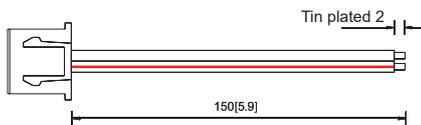
Electric iron



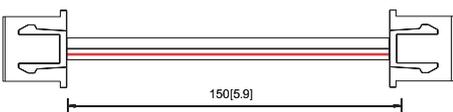
Electric drill

XH-2Y Connector wire

Order number: 01.05.P8A0D00003

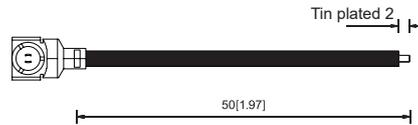


Order number: 01.05.P8A0DP8010

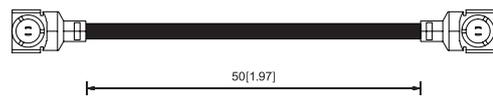


IPEX terminal line

Order number: 01.05.9R01100003

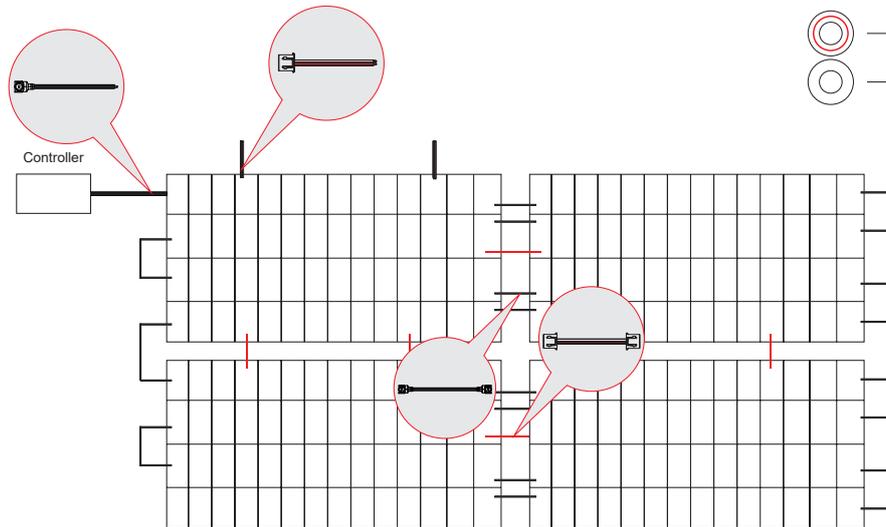


Order number: 01.05.9R0119R002

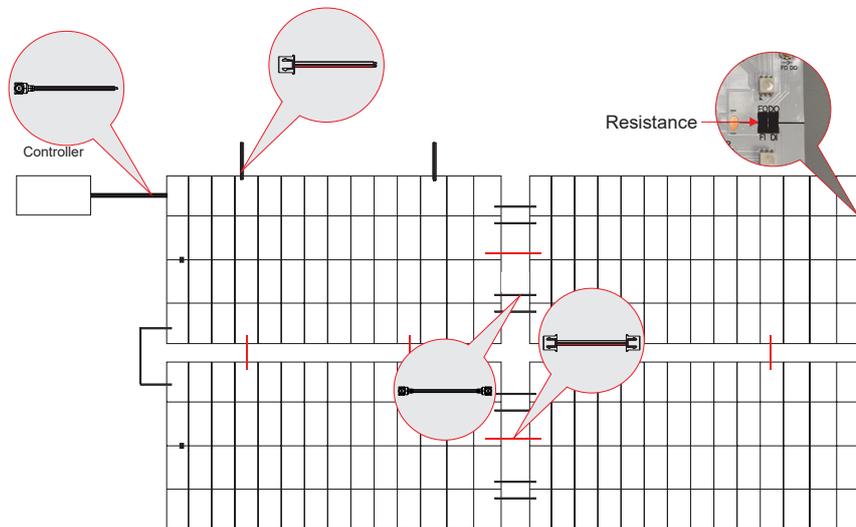


Product Connection Diagram

Connection mode 1



Connection mode 2



Note:

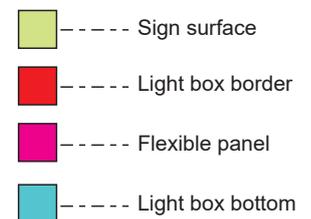
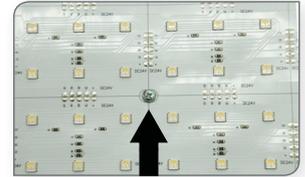
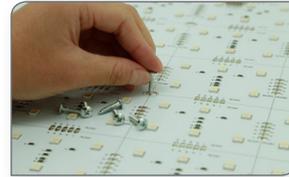
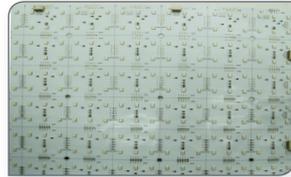
That when connecting the control board, the insertion direction cannot be reversed, and pay attention to the arrow mark on the light board.

When connecting the electric terminal line, if the connecting terminal line is connected between two pieces of output to input, pay attention to that the lamp board is placed in the same direction. If the direction is reversed, the positive and negative poles will be reversed and the lamp board will not be lit.

In connection mode 2, the resistance is connected in series in the board, and the connector wire is used between the boards to realize the signal transmission effect; before using this mode, the resistance should be welded at FI / FO / DI / DO.



### Installation Steps



#### Note:

"+" for white and red wire.  
The above diagram is only for installation, not the physical drawing.

### Attentions before installation

- Before installation, check that the product parameters are consistent with the requirements (Seeing product specifications or product labels)
- Load voltage, current, power and power supply should be matched with the product.
- Follow the instructions of wiring diagram (first connect the load and then the power supply) to avoid short circuit.
- Make sure the correct connection of positive and negative poles between products and power supply. Otherwise, the light will not be on.
- Make sure the power cord firmly screwed into the terminal and it should not be pulled out by hands.
- The terminal should have insulation, waterproof and anti-corrosive treatment.

### Warning

- Do not disassemble or retrofit the light. Do not touch the surface of the light with a sharp object.
- Do not do live-line working during installation, especially for high voltage product.
- Do not use any organic chemical solvents.
- Use neutral glass adhesive to fix this product and it needs to be dried 4 hours in the open environment after operation.
- Treat the ends and the circuit connection points that are not connected to the main line with insulation, waterproof, and anti-corrosion in the installation.
- Use 18AWG (0.75mm<sup>2</sup> cross-sectional area) or thicker core wire to avoid adverse consequences caused by overheating, if the power cable need to lengthen.
- Make sure the input voltage meets the requirements and lines are connected correctly before lighting on.
- This product is for signage, and do not use as general lighting.
- Series connection within the max run.
- The length of the power cable between the power supply and the led strip should not exceed 2 meters. Otherwise, large circuit loss will lead to inconsistent brightness.
- Installation, maintenance and repair should be operated by a qualified technician.



### Common Faults and Troubleshoot

Quick Guide		
Problems	Reasons	Solutions
All LEDs can not light on.	No electric supply.	Power on
	Automatic power protection from the open or short circuit in output of the power supply.	Fix the short circuit problem.
	Wrong connection of power supply.	
LEDs can not light on partly.	Some switching mode power supplies are not powered.	Check the power supply system to fix it.
	Power supply line error.	
	Mistaken wire connection of some of products	Correctly connection
Brightness of LED is inconsistent tor insufficient.	Power overloaded.	Replace with more powerful power
	Power supply circuit excessive consumption.	Make sure the working voltage of the product within $\pm 5\%$ of standard voltage, or keep balance by circuit power consumption.
	Excessive quantities in series connection of the product	Reduce the quantities of the product in series connection to meet requirement.
LED flicker.	Connection point fault.	Remove bad connection point.
	Switching power supply failure.	Replace a new power supply.
	Wrong Installation or use of products	Please follow the instructions

### Statements and Recycling

#### Statements:

Repair should be operated by a qualified technician, if the external circuit or main line of this product is damaged.  
 The parameters given in this manual are typical values and for reference only.  
 All illustrations and drawings in this manual are for reference.  
 This product is subject to change without notice.

#### Recycling:

LED lighting products belongs to electronic products, please do recycling treatment according to the relevant WEEE directives.