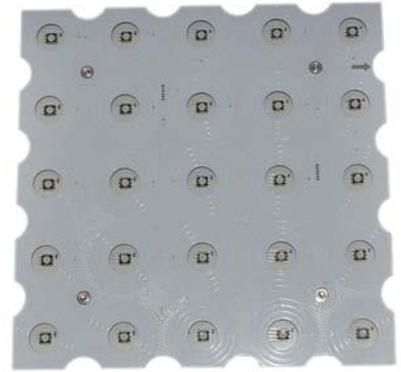




# PIXEL TOUCH PCB USER MANUAL



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## PRODUCTION DESCRIPTION

CAT WALK PANEL is a wonderful LED display screen integral with 25 three-in-one RGB LEDs, featuring auto DMX addressing and inductive touch control.

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## FEATURES

- Automatic DMX addressing
- Innovative control by inductive touching
- Easy & one-for-all setting
- Dazzling LED display suitable for various occasions
- Remarkable interactive lighting-up to walking or dancing

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## SPECIFICATIONS

<input type="checkbox"/> OPERATING VOLTAGE	24VDC
<input type="checkbox"/> CURRENT CONSUMPTION	450mA
<input type="checkbox"/> MAX CURRENT INPUT	6A
<input type="checkbox"/> LIGHT SOURCE	Full color 5050 SMD LEDs (25pcs)
<input type="checkbox"/> PIXEL DISTANCE	40mm
<input type="checkbox"/> INDUCTIVE DISTANCE	20mm Max
<input type="checkbox"/> INDUCTIVE TIME	60ms Min
<input type="checkbox"/> DIMENSIONS	200(L)x200(W)x10(H)mm
<input type="checkbox"/> WEIGHT	225g

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## INSTALLATION & OPERATION GUIDE

### 1 Field Connection

Connect the first unit to the 24VDC power supply (and a DMX controller, if necessary). Then link other units to it in a line by using the power/data cables. Up to 24 units can be linked together by DMX1000K and 6 units by DMX512.

NOTE:

- The nominal wattage of the power supply in use must be above the loading of the whole line of units, otherwise extra power supplies will have to be used, so as to avoid risk of over-loading.
- The maximum permissible current of the power/data cable is 6A. Always keep input current below 6A.

### 2 Inductive Control

When the units are duly connected and powered, and an object eg finger, foot, etc comes within the inductive range of the LEDs of a unit, the LEDs will automatically change from background color (manually preset or DMX controlled) to touch-color, and turn back to background color when the object goes out of the inductive range,.

### 3 Auto DMX Addressing

When CAT WALK PANEL units are linked together and controlled by a DMX protocol, DMX channels will be automatically addressed in numeric order (D1 ~ D25), starting from red, green and then blue section of the first LED (position designator - D1) of the first unit. This means a single unit shall takes 75 DMX channels of which each three channels are assigned to one LED (1st channel for red, 2nd for green and 3rd for blue).

## 4 How to Get the Unit Ready for Use

### Start Setting

Turn on the LEDs one by one with a finger or similar object along the track indicated in Fig 1. Follow the track a second time and then make the finger stay at LED D13 (the central one) till all the LEDs start twinkling, which means the unit now has moved into setting mode and has been ready for further setting.

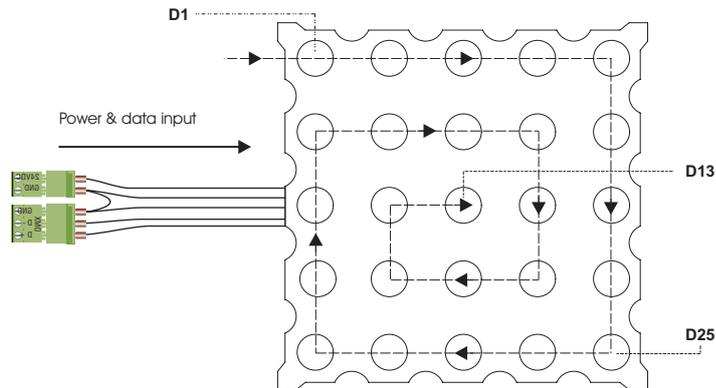


Fig 1

### NOTE

- i) Only the first unit in the line linked by DMX cables must be preset. Other units will follow the same way of the first unit.
- ii) During the setting, make sure that intervals of touching between every two LEDs are less than 2 seconds.

The following table gives relevant information concerning the LEDs which may be used as functional buttons during setting.

LED Line	LED Color	Signification
Line 1 (D1~D5)	light blue (default setting)	touch-color (variable as per the mixing of the red, green, and blue sections)
Line 2 (D6~D10)	red ( 0% intensity)	same as the red section of touch-color
Line 3 (D11~D15)	green	(synchronizing with Line 5 when it is red in color )
Line 4 (D16~D17)	blue	same as the green section of touch-color
Line 5 (D21~D25)	red (default setting)	(synchronizing with Line 5 when it is blue in color)
		the color section(red, green or blue) under setting

### Touch Color

After the unit enters setting mode, the following table tells the color status of the LEDs and how to use the signs to finish touch-color setting.

LED Line	LED Color	Signification
Line 1 (D1~D5)	light blue (default setting)	touch-color (variable as per the mixing of the red, green, and blue sections)
Line 2 (D6~D10)	red ( 0% intensity)	red section of touch-color
Line 3 (D11~D15)	green	green section of touch-color
Line 4 (D16~D17)	blue	blue section of touch-color
Line 5 (D21~D25)	red (default setting)	the color section(red, green or blue) under setting

Touch D21, Line 5 will change from red to green. Touch D21 again, the line will change to green. In this way users may individually set the red, green and blue sections of touch-color.

### Touch-delay Time

Touch D21 again to finish touch-color setting and start to set touch-delay time. Now Line 5 is white in color. A single touch on D22/D23 will increase/decrease touch-delay time by 0.1 second and holding it for 2 seconds will greatly speed the adjusting. Please view the following information revealing how the LEDs demonstrate the time values.

LED (Time Indicator)	LED Color	Indicated Delay Time per LED (sec)
Any of Line 1 (D1~D5)	red/white	0.1 / 0.2
Any of Line 2 (D6~D10)	red/white	1 / 2
Any of Line 3 (D11~D15)	red/white	10 / 20
Any of Line 4 (D16~D20)	red/white	100 / 200

The maximum touch-delay time available is 530 sec. Please view the formula below to bring out the exact touch-delay time:

$$\text{LED amount of the same line \& color} \times \text{its unit time value} + \text{time values of other LEDs} = \text{Touch-delay Time}$$

### **Background Color**

Touch D21 to enter background color setting. Please view the following table about the LED significations.

<b>LED Line</b>	<b>LED Color</b>	<b>Signification</b>
Line 1 (D1~D5)	green (default setting)	background color (variable as per the mixing of the red, green, and blue sections)
Line 2 (D6~D10)	red ( 0% intensity)	red section of background color (synchronizing with Line 5 when it is red in color )
Line 3 (D11~D15)	green	green section of background color(synchronizing with Line 5 when it is green in color)
Line 4 (D16~D17)	blue	blue section of background color (synchronizing with Line 5 when it is blue in color)
Line 5 (D21~D25)	red (twinkling)	the color section(red, green or blue) under setting

Touch D21 once and then twice, Line 5 will change from red to green and blue. Now the unit has been at the end of the whole setting circle. Touch D21 again, the setting will move back to the first item of touch-color setting.

### **System Connection**

It is required to make a proper system connection prior using this fixture, the following contents present you the single module connection methods on next page.

# Catwlak Panel Single Module Connection Schematic Diagram

