

1pcs Color code sensor LX-101N DC10-30V mark detection  
Intelligent digital display color Recognition photoelectric  
switch

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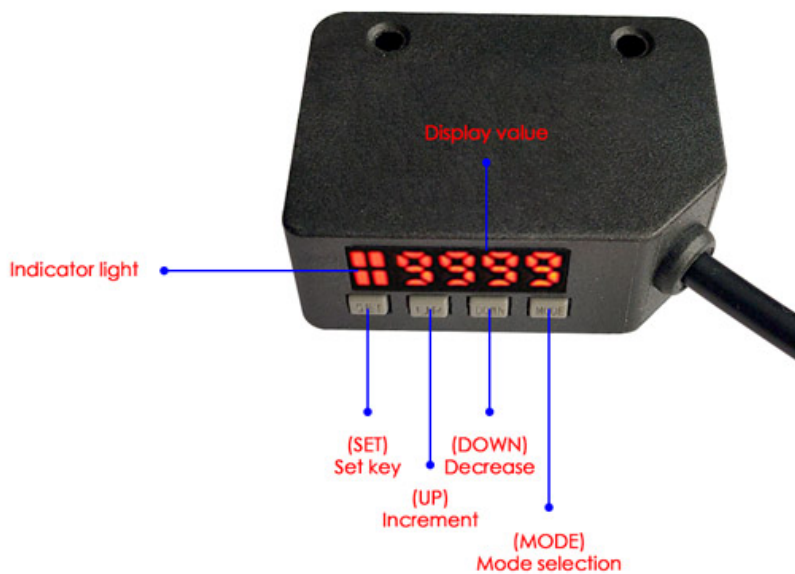
The parameters

параметр

# Color code photoelectric switch instruction manual

## (Precautions)

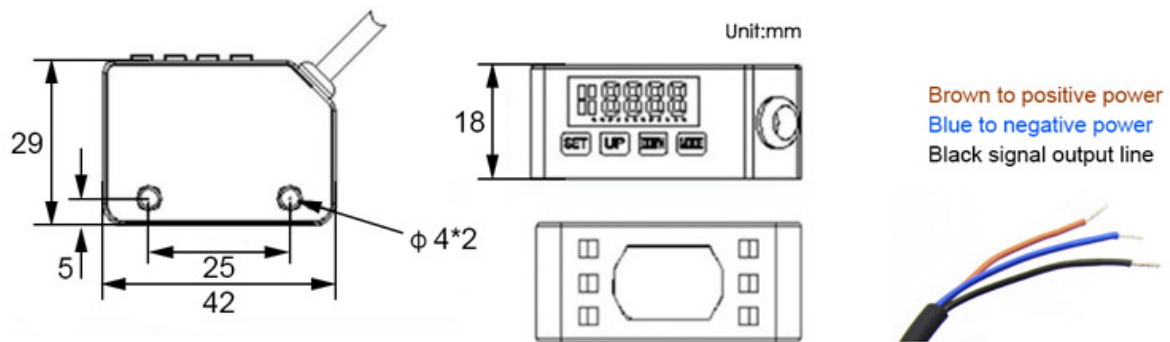
- ① This product is only for target detection, please do not use this product for the purpose of human body or human body parts.
- ② This product should not be used as an explosion-proof product, and should not be used in a dangerous place and/or an environment with potentially explosive gas.
- ③ This product is a DC power supply type sensor, please do not use AC power supply, otherwise it will cause the product to explode or catch fire.
- ④ Do not wire the sensor along the power line or high-voltage line, otherwise the sensor may malfunction or be damaged due to noise.
- ⑤ When using a commercial switching regulator, be sure to ground the chassis ground terminal and the ground terminal.
- ⑥ Do not use it outdoors or where outside light can directly enter the light-receiving surface.
- ⑦ The following undetectable colors: screen color, liquid color, light color.
- ⑧ The voltage within DC10-30V can be used normally for a long time.
- ⑨ Please use it within the best detection distance range, the best detection distance: 8-16mm.






## Product parameters

<b>Model</b>	LX-101
	NPN output
<b>Type</b>	One output port, lead-out type
<b>Control output</b>	an output port
<b>Light source</b>	LED tri-color light
<b>Sensing distance</b>	8mm- 15mm
<b>Reaction time</b>	0.5ms
<b>Output selection</b>	LIGHT-ON/DARK-ON (switch selection)
<b>Show indicator</b>	Operation Indicator: Red LED, Dual Digital Monitor: Dual 7-digit display, the threshold value (4-digit green LED body indicator) and current value (4-digit red LED body indicator) are lit together. Current value range: 0-9999
<b>Detection method</b>	C1: Color mode C: Color mark mode MARK: Contrast mode
<b>Delay function</b>	Off-delay timer/on-delay timer/unit timer/on-single timer, selectable. Gauge display in duration selectable: 1 ms to 9999 ms
<b>Control output</b>	NPN/PNP open collector 24V, 100mA max (main unit only) Maximum 20mA (when the expansion part is connected, the residual voltage: 1V. The sensor with the word MZ is the analog output, the analog voltage is 0-5V, and the detection accuracy is one thousandth
<b>Power supply</b>	Between 12-24VDC±10, floating rate (P-P): 10% maximum level 2
<b>Working environment brightness</b>	Incandescent Lamp: Maximum: 20,000lux, Daylight: Maximum: 30,000lux
<b>Power Consume</b>	Standard Mode: Max 300mW Maximum voltage: 24V
<b>Vibration resistance</b>	10-55Hz, double amplitude: 1. 5mm, X, Y, Z axis is 2 hours respectively
<b>Working temperature</b>	-10+55°C, no freezing

## Product size and wiring method










## Operation settings

	<p>Aim at the target color and press the SET button, move it away and press the SET button again to detect the target color.</p>
	<p>Short press MODE to enter threshold fine tuning UP- The threshold increases DOWN- The threshold decreases</p>
	<p>Short press MODE again to enter the normally open/normally closed switch don: normally closed mode, lon: normally open mode UP key/DOWN key to switch normally open/normally closed</p>

The two-point calibration is based on the presence and absence of the workpiece. The set point is an intermediate value between the above two cases. It will occur if the workpiece is too reflective. "nnnn", if the reflection is too strong, "uuuu" will appear. For the setting method, please refer to the following operations.

## Parameter settings

	<p>(1) Light source saturation setting Long press M for more than 3 seconds to enter the light saturation setting, press UP/DOWN to switch A-H is the standard light source mode A-L is the low light mode</p>
	
	<p>(2) Mode setting Press the MODE key and press UP or DOWN Mode switching (C is color code mode C1 is the color mode MARK is two-point calibration mode)</p>
	

	
	<p>(3) Teach function switching  After the mode is set  Press the MODE key to teach function switching  Press the left and right keys to switch, E-1P is one-click instruction (just press SET once to complete the setting, change mode is only suitable for (C mode)</p>
	<p>(4) Delay mode  After setting the mode, press the M key to enter the delay mode setting  Press the left and right keys to switch for 0.01-9.99 seconds  EOFF (delay off)  OFFD (Delay output)  OND (delayed input)  ONOD (delay input output)  Press the left and right keys to add or subtract the red value  The value 10 is 0.01 seconds  The value 9999 is 9.9 seconds</p>

1. If there is a non-human-caused failure during the warranty period, we will repair the product free of charge.

However, the following cases are not covered by the warranty

\* Failure to follow the conditions specified in the instruction manual, technical manual requirements, incorrect operations, or malfunctions caused by incorrect use.

\*Failures are not due to product defects, but to the design of the buyer's equipment or the buyer's software.

\*Failures caused by modifications or repairs by the purchaser's personnel.

\*Due to the failure caused by fire, earthquake and flood disaster, or abnormal voltage and other external factors, our company is not responsible for the warranty.

2. The scope of the warranty is limited to the cases specified in "1.", and the company does not bear any economic responsibility for the indirect loss (equipment damage, loss of opportunity, loss of profit) or other losses of the buyer caused by its equipment.

3. In order to improve product performance and upgrade products, the contents of this manual may be modified without prior notice.

## Operation icon



1. If you need to detect green, align the light spot with green and press the "SET" key

2. After the light spot leaves the green, press the "SET" button to complete the setting

★10-30V wide voltage

The voltage within DC10-30V can be used normally for a long time.



**Note: Screen color, light color, liquid color cannot be detected**

Best detection distance: 8-16mm



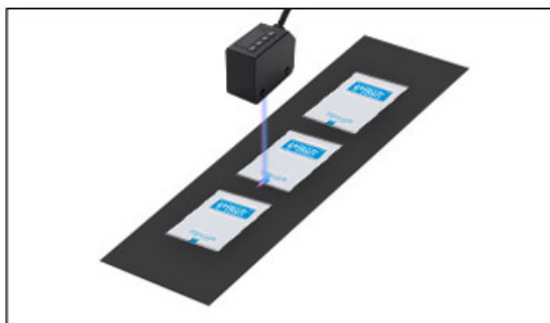
The Description

описание



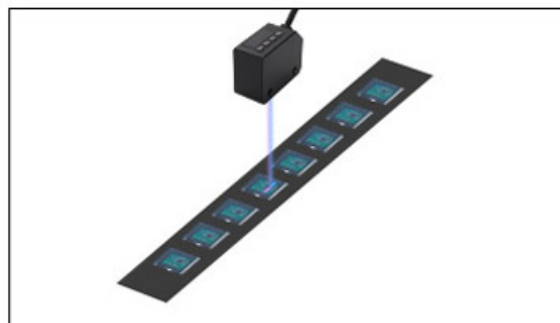


## Examples of application scenarios



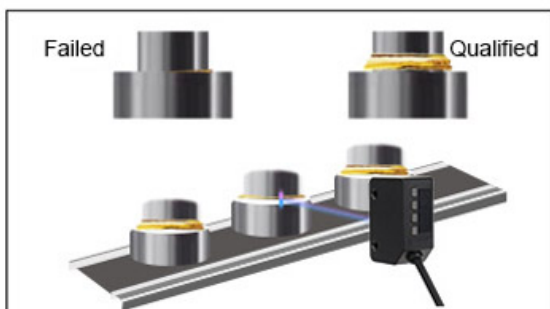
**Color printing marks on detection bags**

Even if the background of the mark is vibrating or shiny, the anti-gloss sensor provides stable detection. The small light spot ensures reliable detection of even small marks.



**Distinguishing chip front and back in embossed tape**

The anti-gloss type eliminates the shadow of specular reflection, so that the front and back of the chip can be distinguished stably even after passing through a transparent film.



**Check for lubricating oil**

Even if the object is irregular in shape and in different positions, the lubricating oil can be accurately detected by eliminating the influence of surface gloss and target position.



**Detecting gaps in spray cans**

Even if there is a pattern sensor on the spray can, it will only detect gaps



**Buyer tips**

покупатель советы

# **NOTE**

**1、 Brazil customers need to provide CNPJ/CPF.**

**Recommend using Singapore post/e-packet/China Post,these may needn't customs tax.**

**If shipping use international express:DHL/FedEx/e-EMS (BUT NO UPS),these usually need customs duty**

**2、 The costumers of South American and European need provide tax number if necessary.**

**3、 The customs tax need be paid by buyer,if need make low value invoice,please leave a message.**

**4、 Customs tax threshold:**

**USA:800USD ; EU:22Euro ;**

**Russia:1000Rouble ; Australia and New Zealand:1000Australian dollar ; Japan & Korea:130USD ; South America & Southeast Asia:under 50USD**

