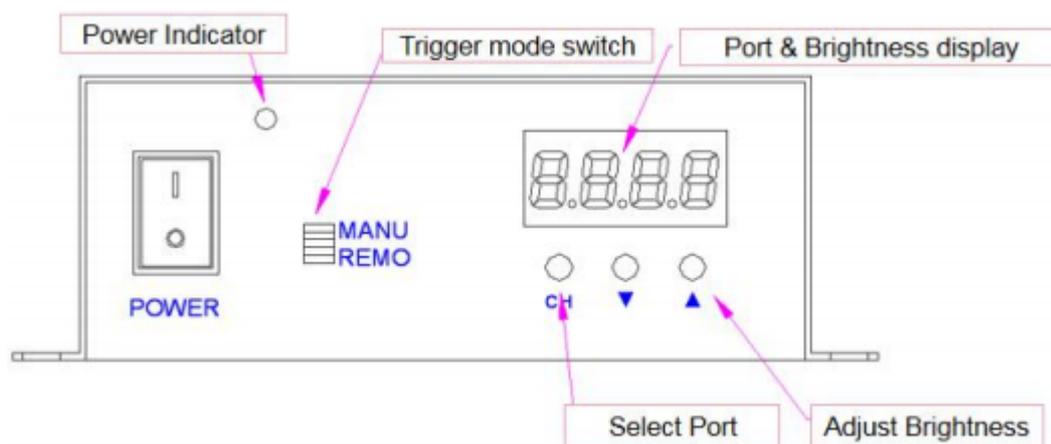# MPD-5/24S-4C Light Controller

Technical Instructions

This product is our programmable digital controller designed to drive machine vision LED light source. It has the functions of 256 levels of brightness setting, light source switching, hardware external trigger light source switching, manual brightness adjustment, digital display, etc. for LED light source remotely through RS232 interface. It is especially suitable for complex and high-end machine vision equipment.

The controller has a mature design, reasonable technology, and stable quality of selected materials, which ensure a high degree of reliability and strong adaptability to the environment. At the same time, the controller has the advantages of small size and simple structure.
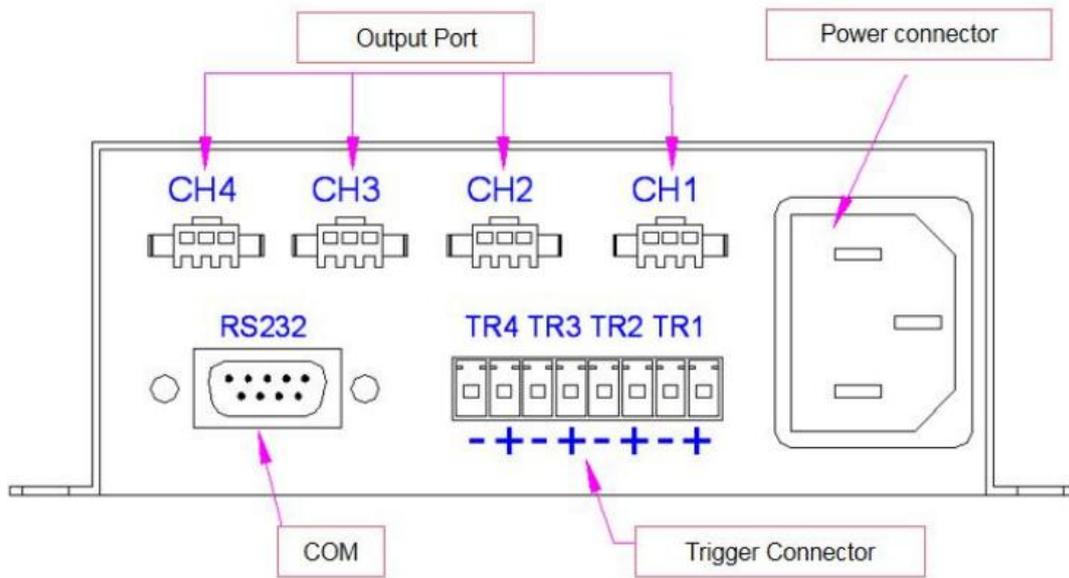
1. Electrical Parameters

INPUT	Voltage Range	88-264VAC
	Frequency Range	47-63HZ
OUTPUT	Type	constant current
	Port 5V	2
	Port 24V	2
	Adjustment Range	0-100%
	Max Current Per port	≤0.4A
	Brightness Adjustment	Button/host computer
	Brightness adjustment level	256 levels
TRIGGER	Mode	+/-
	Trigger Level	5-24V
PROTECTION	Surge protection; Over current protection; Overheat protection.	
ENVIRONMENTAOL ADAPTABILITY	Operating Temperature	0 ～ 40℃
	Storage Temperature	-10 ～ 50℃
Others	Size	152x174x52mm
	Surface	Spray

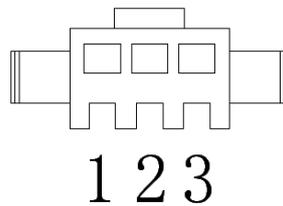# 2. Interface description

P1 Operation panel diagram (front)

P2 Operation panel diagram (back)

Note:
CH1 and CH2 is 24V port, CH3 and CH4 5V port.

3. Wiring

 Power Output Wire Connection：

P4 Output Connector

 24V Plug in model：SMP-03V

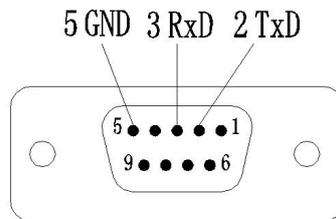1: (to light)

2: NC

3: - (to light)

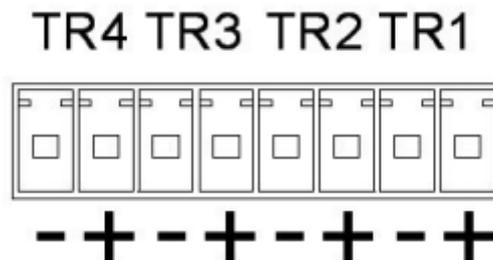5V Plug in model：SMP-03V

1: + (to light)

2:　(to light)

3: NC

 RS232 COM：PC port and RS232 plug should be connected with cable extender.

P5 RS232 Plug

 External Trigger Power Input Wire Connection：

P6 External Trigger

4. Operation Instruction

1. Manual Mode

The brightness can be adjusted by the button on the front panel.

 Choose the target'CH' Output Button.

 Press "▲"and"▼" to adjust brightness level.

Level Range: 000~255

Long Pressing "▲"and "▼" button can adjust the level more

quickly.

The brightness level value has a memory function, and will not be lost when the power is turned off.
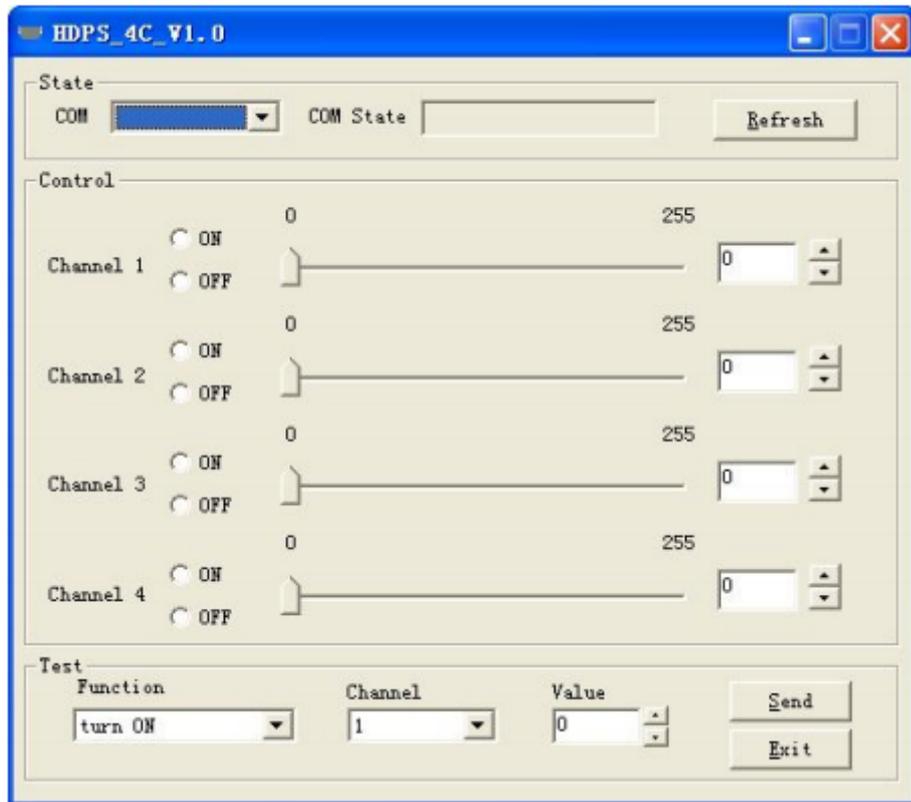
2．Hardware Trigger Working Mode

MANU is manual mode, when the trigger current is 0V, the lighting source output works, when the trigger current is 5-24V,the lighting source output shuts down.

REMO is remote trigger mode. When the trigger current is 0V, the lighting source output shuts down, when the trigger current is 5-24V,the lighting source output opens.

Note：Select the "MANU" mode, trigger level is not connected (that is, 0V), the light source is constantly on.

3．Remote Control Mode
Run the **HDPS_4C_V1.0** software on your computer and the following screen appears:

P7 Demo Interface

5. Structure