

High Power Constant Current Controller New

DPA Series

- ◆ Easy to operate, each channel can be controlled independently with high precision.
- ◆ Digital display, button control, easy to understand.
- ◆ Can communicate with PC by RS232.
- ◆ With trigger, faster respond speed, high reliability.
- ◆ Power off saving function.



→ Control panel specification <LTS-DPA24200-1S>

No.	Parameter	Specification
1	Power indicator	Power indicator, the indicator light on when controller power on
2	TS	Output initial state option switch. Move TS up, output open; Move TS down, output off
3	3 digital tube display	Luminance grade display
4	Button	Press "+" button, to increase the luminance, press "-" button, to decrease the luminance
5	Light interface	AS16 aviation joint
6	Trigger interface	Connect external trigger signal to do the frequency trigger working, high level trigger
7	RS232 /LAN	Connect the controller and PC by RS232 serial port or LAN
8	Cooling fan	Heat dissipating of the controller, can extend the controller working life-span
9	Power switch	On/ off controller power
10	AC input interface	AC96-264V/47-63Hz

Connection step:

- Step 1: connected the light and controller (Reference to the picture on the right).
- Step 2: if need the external trigger control, please connect the external trigger signal with the controller trigger interface.
- Step 3: connect power (AC96-264V 47-63 Hz), press the red switch "-", indicator light up, "o" uplifted, power on.
- Step 4: If need to control the luminance by PC, please connect the PC with controller by RS232 data line in the power off status, then control by our demo program or the program you write yourself. Can set-up the each channel parameter manual when operated by serial port mode. That's to say, the upper computer and controller all can set-up the parameter, no need mode swapping.

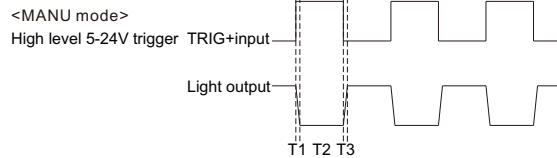
→ Sequence chart

Normal on mode (MANU mode) :

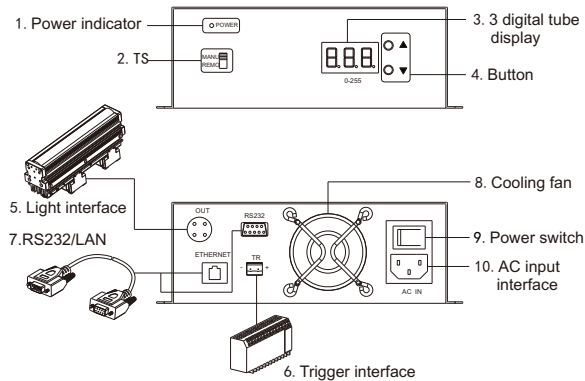
When connect external trigger signal, trigger "+" input high level 5-24V "-" ground connection, light off.

Normal closed mode (REMO mode) :

When connect external trigger signal, trigger "+" input high level 5-24V "-" ground connection, light on.



Specification: T1 is trigger delay time, $T1 \leq 80\mu s$ $T3 \leq 80\mu s$.

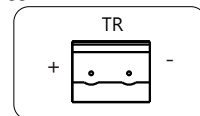


→ Mode setup

Working mode	Output interface
Normal on mode	TS up, output state is open mode
Normal closed mode	TS down, output state is off mode

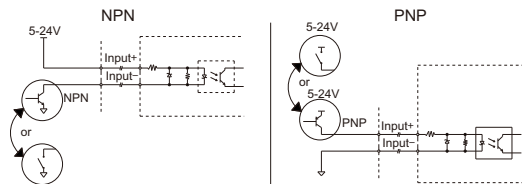
→ Trigger port setup <LTS-DPA24200-1S>

This series controller is low level trigger controller. Total 1 group trigger ports, each has +/- mark. To input low level 5-24V to +/- port can achieve the trigger function.



Trigger introduction: when output initial state is open mode, input 5-24V to trigger port, light off; when output initial state is off mode, input 5-24V to trigger port, light on.

→ Wire connection method of the external trigger signal



Line scan illumination	3LINH 3LINL 3LIN 2LINS 2LIN 2COXL 2LINM SDL
Structured light	STL
Ring illumination	RN RNH SRN
Shadowless illumination	HPR FPR DML LFR 3DM 2DM LFX FPQ RIH DL
Bar illumination	3BRH 2BR 2BRS 2BRM
Coaxial illumination	3COH 3CON COXR 3COX COPA HSL 2SL SL
Multi-angle illumination	RNMU AOI
Back illumination	2FTB/ 2FTR FTC 2FT/ 3FT
Waterproof illumination	2PFT/ 3PFT LIP IP
Infrared light	IR
Ultraviolet light	UV
Customized	Customized
Controller	PS PD 2DRC 3STU APC DPC 2APC DPA 2ACC 2DPC
Lenses	Area scan Line scan



High Power Constant Current Controller

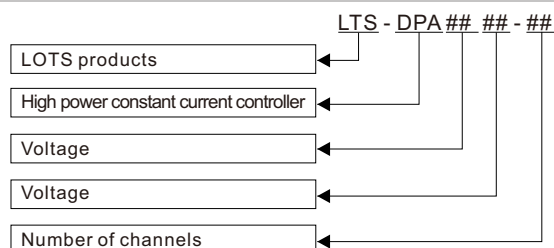
DPA Series

3LINH	Line scan illumination
3LINL	
3LIN	
2LINS	
2LIN	
2COXL	
2LINM	Structured light
SDL	
STL	
RN	
RNH	
SRN	
HPR	Ring illumination
FPR	
DML	
LFR	
3DM	
2DM	
LFX	Shadowless illumination
FPQ	
RIH	
DL	
3BRH	Bar illumination
2BR	
2BRS	
2BRM	
3COH	
3CON	
COXR	Coaxial illumination
3COX	
COPA	
HSL	
2SL	
SL	
RNMU	Multi-angle illumination
AOI	
2FTB/2FTF	
FTC	
2FT/3FT	
2PFT/3PFT	
LIP	Back illumination
IP	
IR	
UV	
Customized	
Customized	
PS	Controller
PD	
2DRC	
3STU	
APC	
DPC	
2APC	Lenses
DPA	
2ACC	
2DPC	
Area scan	
Line scan	

→ Parameters

Model	LTS-DAP24200-1S	LTS-DPA24400-1S/2S	LTS-DPA48600-1S	LTS-DPA481000-1S	LTS-DAP481200-1S
Number of channels	1 way	1, 2 way	1 way	1 way	1 way
Input voltage	AC100-240V				AC 180-264V
Communication mode	RS232, LAN				
Input frequency range	43-67Hz				
Luminance control method	Manual adjust by button, PC remote adjustio				
Luminance control mode	Constant-current				
Luminance control level	256 level				
Storage function	set-up parameter of luminance will be kept while power off				
External trigger voltage	high level 5-24V				
Power supply output voltage of fan	24V 2A				
Baud rate	9600bps				

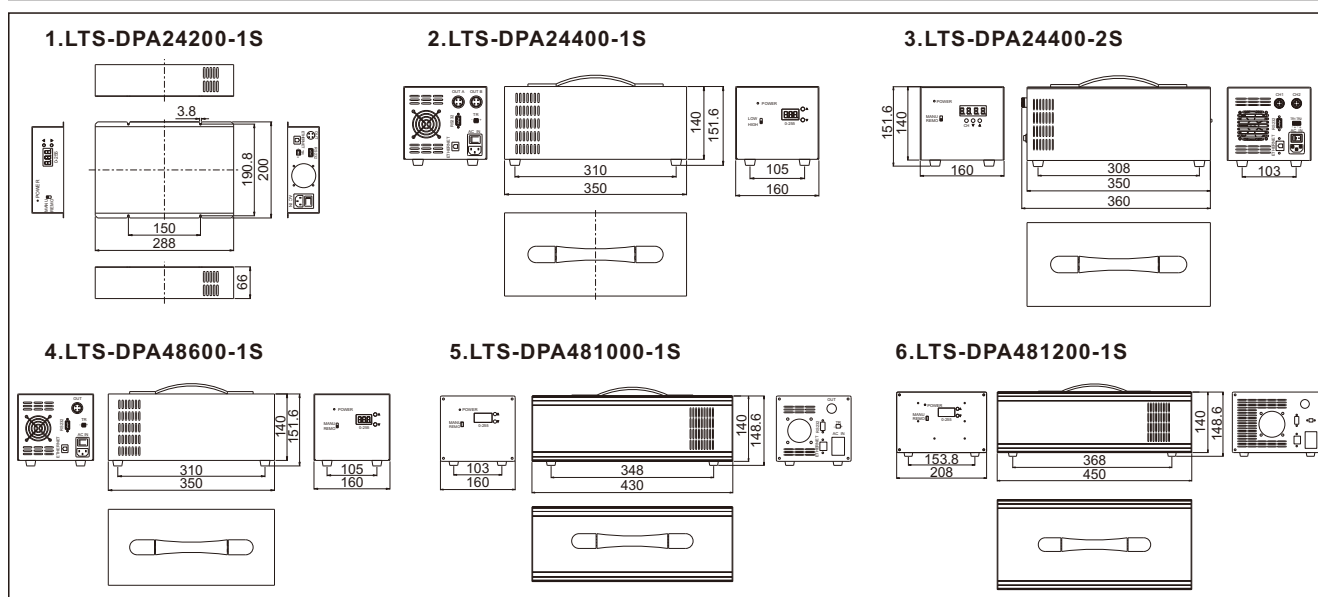
→ Coding rule



→ Controller model

Product	Model	One way output adjustable current	Total output power	One way Max. output power	Number of channels	Dimen-sion	External trigger voltage	Remark
High power constant current controller	LTS-DPA24200-1S	0-8A	200W	200W	1	1	5-24V	Have communication, trigger, luminance level display function
	LTS-DPA24400-1S	0-16A	400W	400W	1	2		
	LTS-DPA24400-2S	0-8A	400W	200W	2	3		
	LTS-DPA48600-1S	0-10.4A	500W	500W	1	4		
	LTS-DPA481000-1S	0-16.6A	800W	800W	1	5		
	LTS-DPA481200-1S	0-25A	1200W	1200W	1	6		

→ Boundary dimension(mm)



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