

# Constant Current Controller

## 2ACC 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.
- ◆ Have a 5V 500mA output to supply to other device.



### → Control panel specification <LTS-2ACC700-4>

| No. | Parameter              | Specification   |
|-----|------------------------|---|
| 1   | Button                 | S is channel selection button, +/- is for the each channel luminance controlling, and on/off output button    |
| 2   | Trigger interface      | Connect external trigger signal to do the frequency strobe working, high level trigger                        |
| 3   | Light interface        | 4 way output, each can be controlled independently  |
| 4   | AC input interface     | Input AC100-240V 50/60 Hz   |
| 5   | 4 digital tube         | First from left display the channel, other 3 digital tube display the luminance grade                         |
| 6   | DC 5V output interface | Output 5V 500mA voltage, can power supply to other device. This interface strictly prohibit reverse connected |
| 7   | RS232 serial port      | Connect the controller and PC by RS232 serial port  |
| 8   | Power switch           | On/ off controller power  |

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 (AC100-240V 50/60 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 (H1 mode):

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

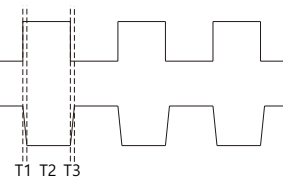
Normal closed mode (H0 mode):

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

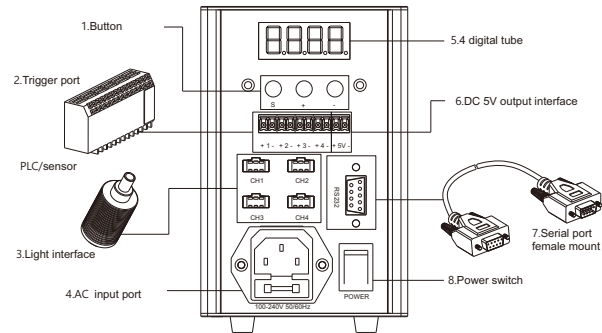
<H 1 mode>

High level 5-24V trigge TRIG+input

Light output



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

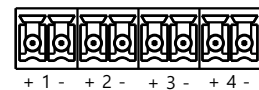


### → Mode setup

| Mode                    | Output interface   |
|-------------------------|--|
| Normal on lighting mode | Control by S button, when first of digital tube display 1/2/3/4, luminance of output interface connected light can be adjusted |
| H1 mode                 | Control by S button, when first of digital tube display H, third of digital tube display 1, output interface open              |
| H0 mode                 | Control by S button, when first of digital tube display H, third of digital tube display 0, output interface close             |

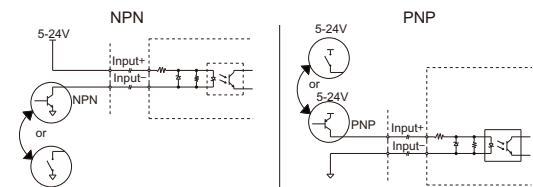
### → Trigger port setup <LTS-2ACC700-4>

This series controller is high level trigger. Total 4 group trigger ports, each has +, - mark. To input high level to +, - port can achieve the trigger function.



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

### → Wire connection method of the external trigger signal



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

# Constant Current Controller

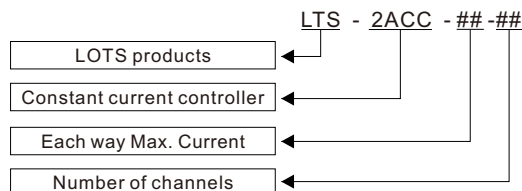
## 2ACC Series

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

### → Parameters

| Model                    | LTS-2ACC350/700/1000-4                                     | LTS-2ACC350/700/1500-2 | LTS-2ACC2500-2   | Remark   |
|--------------------------|--|------------------------|------------------|--|
| Number of channels       | 4 way  | 2 way                  | 2 way            |  |
| Trigger voltage          | high level 5-24V   | low level 0-1.5V       | low level 0-1.5V |  |
| Input voltage            | AC 100-240V  |                        |                  |  |
| Input frequency range    | 50/60Hz  |                        |                  |  |
| 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 |                        |                  |  |
| Addition output voltage  | 5V   |                        |                  | this voltage strictly prohibit reverse connected |
| Baud rate                | 9600bps  |                        |                  |  |
| Communication mode       | RS232 serial port communication                            |                        |                  |  |

### → Coding rule

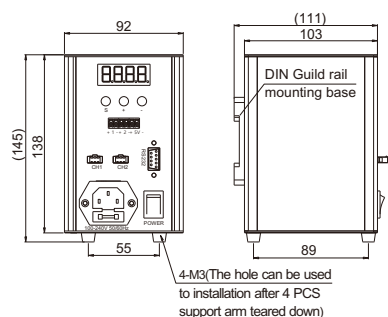


### → Controller model

| Product                     | Model          | One way output adjustable current | Total output power | One way Max. output power | Number of channels | Dimen-sion | Extenal trigger voltage | Remark  |
|-----------------------------|----------------|-----------------------------------|--------------------|---------------------------|--------------------|------------|-------------------------|---|
| Constant current controller | LTS-2ACC350-2  | 0-350mA                           | 2W                 | 1W                        | 2                  | 1          | 0-1.5V                  | Have communication, trigger, luminance level display function |
|                             | LTS-2ACC700-2  | 0-700mA                           | 4W                 | 2W                        | 2                  | 1          |                         |   |
|                             | LTS-2ACC350-4  | 0-350mA                           | 4W                 | 1W                        | 4                  | 1          | 5-24V                   |   |
|                             | LTS-2ACC700-4  | 0-700mA                           | 8W                 | 2W                        | 4                  | 1          |                         |   |
|                             | LTS-2ACC1000-4 | 0-1000mA                          | 12W                | 3W                        | 4                  | 1          |                         |   |
|                             | LTS-2ACC1500-2 | 0-1500mA                          | 10W                | 5W                        | 2                  | 1          | 0-1.5V                  |   |
|                             | LTS-2ACC2500-2 | 0-2500mA                          | 16W                | 8W                        | 2                  | 1          | 0-1.5V                  |   |

### → Boundary dimension(mm)

#### 1.LTS-2ACC350/700/1000/1500/2500-2/4



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