

### **LED Tester with Direct Current Readout**

ILA-1CH-LED-TESTER-PREC-01.



### **Product Overview**

The ILA-1CH-LED-TESTER-PREC-01. LED Tester combines a switch mode regulator with a microcontroller to create a user controllable LED current source, controlled by a single control knob. It is designed to be connected between a constant voltage power supply and one or more LEDs. It is very quick to use and allows immediate changes to the LED currents. It allows fast testing of single LEDs, LED chains or luminaires.

### **Technical Features**

- Variable drive current control between 10mA and 700mA
- Microcontroller based design
- Small 10mA increments
- 7 segment display showing LED drive current at all times
- Runs from a variety of DC power supplies
- Drives a wide variety of power LEDs
- Drives parallel, series or combination LED chains

### **Applications**

- Testing LEDs
- Comparing different LEDs
- Checking different LED drive currents
- Laboratory testing
- Lighting product development
- Easy dimming control for lighting experiments



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### **Important Information and Precautions**

- The LEDs, when powered up, are very bright. Thus it is advised that you do not look directly at them. All LED product must be turned away from you and do not shine into the eyes of others.
- LEDs will overheat in operation if not attached to a suitable Heat Sink using a suitable thermal interface material. Overheating can cause failure or damage.
- Do not operate LED products with a Power Supply with unlimited current. Connection to constant voltage supplies that are not current limited may cause the LED product to consume current above the specified maximum and cause failure or irreparable damage.
- LED products, when operated, can reach high temperatures thus there is risk of injury if they are touched.
- The LEDs, when powered up not visible to the naked eye. Thus it is advised that you do not look directly at it. Turn the LED away from you and do not shine into the eyes of others.
- DO NOT HOT PLUG ON LED SIDE OF POWER SUPPLY
- This driver displays the LED drive current on the 3 digit display. The actual current may vary to that shown
  depending on the type and voltage of LEDs connected. If accurate currents are required, it is recommended to
  place a current meter in series with the LEDs

#### **Specifications**

Parameter	Value
Minimum LED current	10mA
Maximum LED current	700mA
Minimum input voltage	12V
Maximum input voltage	24V

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### How to connect the driver

- IT IS IMPORTANT TO CONNECT THE LEDS TO THE DRIVER BEFORE CONNECTING POWER
- DO NOT CONNECT THE LEDS WHEN THE POWER IS CONNECTED TO THE DRIVER
- FAILURE TO RESPECT THIS MAY CAUSE IRREVERSABLE DAMAGE TO THE LEDS DUE TO EXCESSIVE VOLTAGE

### 1 Connect the LED(s)

- Connect the LED(s) to the connector marked (CON1 LED)
- Connect the Anode to the terminal marked (+)
- Connect the Cathode to the terminal marked (-)





### 2 Connect the power supply

- Connect the power supply to the connector marked (J3)
- The positive wire should be connected to the centre pin of the connector
- The negative wire should be connected to the barrel of the connector



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### How to adjust the LED drive current

The ILA-1CH-LED-TESTER-PREC-01. tester has a variable current control allowing direct adjustment of the LED current. The drive current is displayed on the 7-segment LED displays at all times.

- The current is displayed in milliamps (mA)
- To increase the current, twist the control clockwise
- To decrease the current, twist the control anti-clockwise



### For further information please contact ILS

The values contained in this datasheet can change due to technical innovations. Any such changes will be made without separate notification.



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