LTT1 LED Tape Tester Manual

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Overview

The LTT1 LED Tester is a manual controller for testing and controlling LED tape and LED modules that operate within 12 to 24 Volts DC and are controlled by dimming.

Specifications

- 4 control channels
- Volt meter for measuring input Voltage
- Current meter for measuring output current
- Removable Phoenix-style connectors

IMPORTANT REGULATORY SAFETY INSTRUCTIONS

1 Read these instructions.

2 Keep these instructions.

3 Heed all warnings.

4 Follow all instructions.

5 Do not use this apparatus near water.

6 Clean only with dry cloth.

7 Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8 Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9 Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10 Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11 Only use attachments/accessories specified by the manufacturer.

12 Use only with the cart, stand,

tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.

13 Unplug this apparatus during lightning storms or when unused for long periods of time.

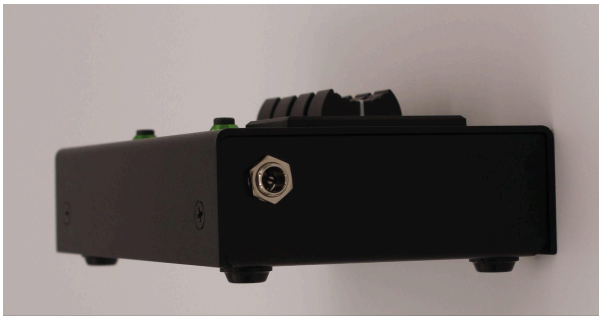
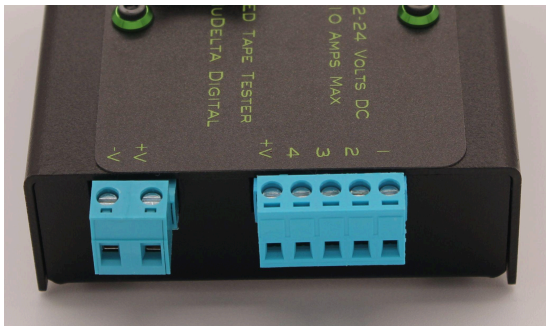
14 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

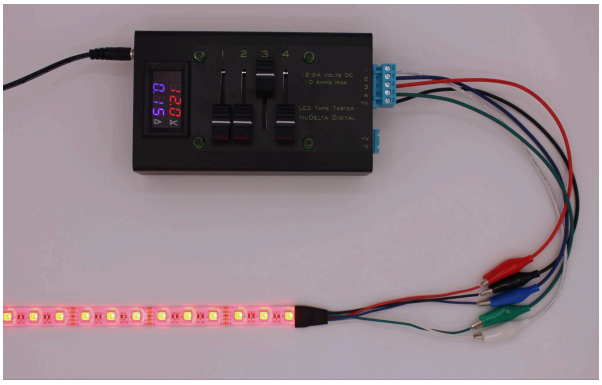
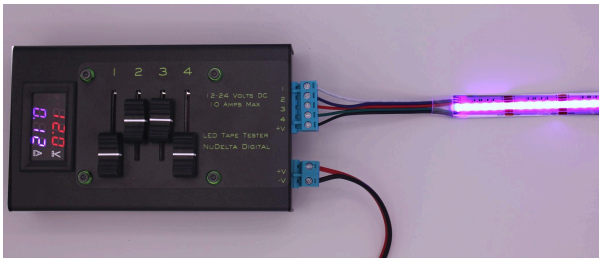
15 This product is not intended for residential use. This product contains small parts that may be harmful to children

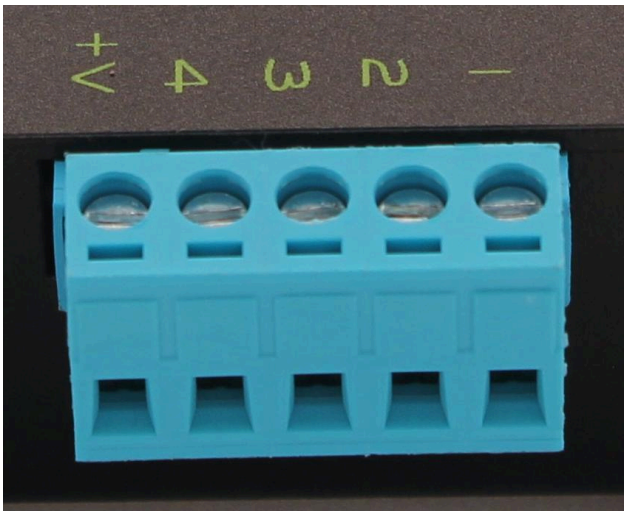
Safe use of the LTT1 LED Tester

For safety and best performance of the LTT1 LED Tester, please follow the following safety guidelines and refer to the pictures below:

- Do not exceed 10 amps through the Phoenix-style input connector on the right side of the tester.
- Do not exceed 5 amps through the 5.5 millimeter input connector on the left side of the tester.
- You can use either the 5.5 millimeter DC input connector on the left or the two wire Phoenix-style connector on the right, but not both.
- Do not exceed 24 Volts DC with the tester.
- Do not use near water
- Do not allow the output terminals to short or connect to one another
- Do not use this tester with LED pixel tape or pixel modules.
- Always make sure that the voltage of your power supply matches the voltage of your LEDs.

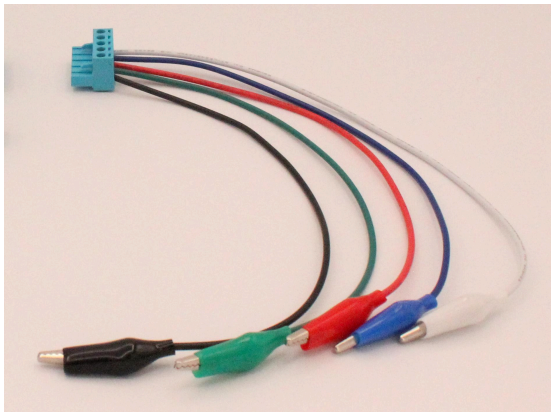
	
5.5 millimeter input connector on left side	Removable Phoenix-style connectors on the right side. The connector on the left, marked with V+ and V-, is for power input. The connector on the right is for the LEDs.

	
LED tape connected using the 5.5 millimeter DC input connector.	LED tape connected using Phoenix style power connector on right side.



Output Connector

The five position Phoenix-style output connector is removable. Simply pull it away from the tester to remove. The LTT1 comes with two of these connectors. One connector is pre-wired with alligator style clips and the other is empty. You can connect the wires from LED tape directly to the empty connector or use the connector with the clips to temporarily connect to the wires on the LED tape for testing. The contact terminals on most LED tapes are too small to directly connect the alligator clips to the tape for testing. Wires usually need to be soldered onto the LED tape to be connected to a DMX driver or dimmer module.



Color Coding of Wires

The five position Phoenix-style connector comes pre-wired with alligator clips. The color of the wires can be rearranged to suit the color order of your LED tape or module. Keep in mind that the +V terminal on the tester must always be connected to the common positive or +V terminal on your LED tape or module. Even though red is the standard color for positive Voltage or +V in many industries, we chose black because most LED tapes and modules have red LEDs and not black LEDs.

Meter

The meter on the LTT1 LED Tester shows two readings. The top reading, marked with a “V” is the input voltage. This measures the voltage of the electricity going into the tester. This reading may fluctuate as some power supplies will decrease in voltage as the current increases. The bottom number marked with an “A” is the current. This number should increase as the brightness of LEDs increases. Do not exceed 10 amps of current through the tester.

Helpful hints:

- Use the LTT1 LED Tape Tester to test your power supply before plugging in your LED tape. This way, if the power supply voltage is too high for your LED tape, you will not risk damaging your LED tape.

- When soldering wires to LED tape, strip off the insulation to the same length as the length of the terminal or copper strip on the tape. It may not seem like enough insulation is removed, but when the wire is heated, the insulation recedes.

- After the wires have been soldered onto the tape, and you have tested the tape to make sure it works, apply a thin layer of hot glue or silicone caulking to the soldered wire connection. This will prevent the wires from touching each other which would cause a short circuit. The glue or caulking will also act as a strain relief to prevent the wires from being pulled off.

- Apply a piece of heat shrink tubing to the soldered connection to further prevent short circuits and make the connection look nicer.

- For maximum brightness, solder wires to both ends of your LED tape. On long runs of LED tape, the voltage drops down as it goes through the tape. Adding wires to both ends and connecting both ends to the LED Tape Tester or the driver or dimmer that you are using, will prevent the voltage from dropping as much. Wires may need to be added to the middle of an extremely long run of LED tape.

- For portable testing, batteries can be used. There are adapters for popular tool batteries such as Dewalt and Milwaukee. Some models of the adapter will connect to 12 volt or 24 volt batteries directly. There are also adapters available that convert from a higher voltage, such as 20 volts, down to 12 volts. These adapters are a convenient way to use your common tool battery to power your LED Tape Tester.

- When shopping for LED tape, consider the color that you will be trying to achieve. Tape that contains other colors such as warm white or cool white in addition to red, blue, and green, will be able to achieve a wider variety of colors, especially in the pastel palette.

- When shopping for LED tape, consider how it will be mounted. Most LED tape comes with an adhesive backing but it usually does not adhere well to most surfaces. Consider the use of aluminum extruded channels to mount the LED tape, especially for permanent installations. The channels offer protection from damage and can include diffusion covers to help spread the light out. These channels are available wherever LED tape is sold.

For more information about this product, visit our website at NuDeltaDigital.com
If you have questions about the LED Tape Tester, contact us at Info@NuDeltaDigital.com

Regulatory Information:

Disposal of electrical and electronic equipment:

(a)
All electrical and electronic equipment should be disposed of separately from the municipal waste stream via collection facilities designated by the government or local authorities.
(b)
By disposing of electrical and electronic equipment correctly, you will help save valuable resources and prevent any potential negative effects on human health and the environment.
(c)
Improper disposal of waste electrical and electronic equipment can have serious effects on the environment and human health because of the presence of hazardous substances in the equipment.
(d)
The Waste Electrical and Electronic Equipment (WEEE) symbol, which shows a wheeled bin that has been crossed out, indicates that electrical and electronic equipment must be collected and disposed of separately from household waste.
(e)
Return and collection systems are available to end users. For more detailed information about the disposal of old electrical and electronic equipment, please contact your city office, waste disposal service or the shop where you purchased the equipment.

Disposal of batteries and/or accumulators

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Waste batteries and/or accumulators should be disposed of separately from the municipal waste stream via collection facilities designated by the government or local authorities.
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By disposing of waste batteries and/or accumulators correctly, you will help save valuable resources and prevent any potential negative effects on human health and the environment.
(c)
Improper disposal of waste batteries and/or accumulators can have serious effects on the environment and human health because of the presence of hazardous substances in them.

(d)
The WEEE symbol, which shows a wheeled bin that has been crossed out, indicates that batteries and/or accumulators must be collected and disposed of separately from household waste.
If a battery or accumulator contains more than the specified values of lead (Pb), mercury (Hg), and/or cadmium (Cd) as defined in the Battery Directive (2006/66/EC), then the chemical symbols for those elements will be indicated beneath the WEEE symbol.
(e)
Return and collection systems are available to end users.
For more detailed information about the disposal of waste batteries and/or accumulators, please contact your city office, waste disposal service or the shop where you purchased them.