DMX Tool Splitter 1 to 5 User Manual

DMX Tool Splitter 1 to 5
User Manual

The DT125 is a versatile desktop or truss mounted DMX splitter supporting the bidirectional extension to the DMX protocol to accommodate Remote Device Management (RDM).
The DT125 is used in DMX networks where more than a simple daisy-chain connection between DMX devices (to a maximum of 32 devices) is needed. DT125 splitter (or hub) boosts the signal to create a 'star' network of 5 additional DMX lines from a single DMX input. DT125 is available with either 3-pin or 5-pin XLR connections and as a fully isolated version.

The ELC DMX Tool Splitter 1 to 5 comes in four variations:
DT125
DT125_FI   fully isolated
DT125DIN
DT125DIN_FI   fully isolated

Features

- 1 DMX input to 5 DMX output, plus DMX/RDM thru
- Remote Device Management (RDM) compatible
  Truss mounted using M10 beneath, or desktop mounted
- All DMX/RDM outputs are boosted signals (connect up to 32 devices per output)
- Optocoupler isolation for input, full isolation available as option (FI option)
- Bi-colour LED confirms valid DMX signal
- USB connection for firmware updates
- 19" rack mounting with optional accessory brackets (ELC-RMKIT)

Functional overview

The DT-125 DMX / RDM splitter is a flexible DMX splitter with support for the bidirectional extension to the DMX protocol called Remote Device Management (RDM).

Normal DMX cabling has to be done in daisy chain connection, meaning the DMX connection goes from the DMX source (console) to the first device, then to the next device, and so on. The last device will have to be equipped with a terminator plug. A maximum of 32 DMX devices is allowed on a single line.
This is not an ideal cabling scheme. To use a more star-like approach, DMX splitters are needed. A splitter has one input and multiple outputs. Each output regenerates the signal, so each output is also a new DMX source. This is also called boosting.

With the new RDM specifications, DMX is extended with the ability for devices to "talkback" to the source (console). This requires a special kind of splitter (or hub), such as the ELC DT125 or DT2210. These splitters will reverse the communication when required.

This product may only be used for
controlling dimmers and moving lights.
Using the product outside of these specifications
will remove all responsibility from the supplier.

Operation

The DT-125 has 1 DMX input at the back. The input has a "thru"-connection (female XLR). This thru-connection is parallel wired to the input and can be used to connect to another DMX device or a terminator plug. The input is galvanic isolated from the rest of the electronics. The outputs on the DT-125 are located on the front of the unit. The outputs on the front of the DT-125_FI also have galvanic isolation.

Firmware update

A USB connector and a small red switch are located on the back of the DT-125. These come into play when firmware updates become available which are periodically published on the ELC Lighting website (www.elclighting.com). The USB Update software, which is needed to perform the firmware upgrade, is also available for download on the website.

To force the device into upgrade mode, go through the next steps;
- Power off the device
- Press and hold the red switch on the back
- Power on the device
- Plug in the USB cable
- Click "update" in the USB Update software and select the latest firmware version
- After successfully updating the device, unplug the USB cable and do a power-cycle.

Technical specifications

DT125 / DT125_FI

Power:	85-264 VAC 47-440 Hz 10VA max
Dimensions:	200 x 160 x 45 mm
Weight:	1.4 kg

DT125DIN

Dimensions:	105 x 90 x 60 mm
Weight:	0.2 kg

General safety instructions

Read all instructions - especially the safety requirements - in the user manual before use. Save these instructions - the safety and operating instructions should be retained for future reference. Carefully follow all instructions.

Cleaning

Disconnect all connected supply and signal cables before cleaning the unit. Clean with a dry cloth. Do not use any liquids or aerosols on the unit.

Usage

Do not use the unit near water or moisture. - Do not block any ventilation openings, they are necessary for the essential airflow within the unit and protect it against overheating. - Install in accordance with the manufacturer's instructions. - Do not insert any objects through the ventilation slots of the unit, as these could come in contact with live parts or could cause short circuits. This could cause electric shock and/or fire. - Do not install near any heat sources such as radiators, stoves or other apparatus (including amplifiers) that produce heat. - Unplug this apparatus during lightning storms or when unused for long periods of time. Do not place the unit on unstable surfaces. – Do not place any objects on the power cord. Protect it from being walked on or pinched particularly at the plugs and the point where they exit from the device. If the power cord or the mains plug is damaged, let a qualified technician replace it immediately. - Do not defeat the safety purpose of the grounding plug. A grounding plug has two blades and a third grounding connection. The third grounding connection is provided for your safety. If the provided plug does not fit in your outlet, consult an electrician for replacement of the obsolete outlet.

Servicing

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way such as; damage to the power supply cord or plug, spillage of liquids, objects falling into the apparatus, exposure to rain or moisture, abnormal operation or falling damage. In all of the previous conditions, disconnect the main plug immediately and call your distributor or technical support!

Cautionary instructions

Maintenance and service of the device may only be carried out by qualified service personnel, as when opening and /or removing coverings of the device live parts may be exposed causing the risk of an electric shock.

CAUTION
Risk of electric shock
Do not open !

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE

Declaration of Conformity

We,

Manufacturers name: ELC lighting b.v.

Manufacturers address: Weerijs 8
5422 WV Gemert
the Netherlands

Herewith take the full responsibility to confirm that the product

Product Category: Lighting control equipment

Name of product: ELC-DT125 / ELC-DT125_FI

Which refer to this declaration are manufactured in the Netherlands and complies with the following product specifications and harmonized standards:

Safety: LVD (Low Voltage Directive) 2014/35/EU, EN62368-1

EMC: 2014/30/EG, EN55032

ROHS (II):   2011/65/EU

With the presumption that the equipment is used and connected according to the manual, supplied with the equipment. All signal input- and output connections must be shielded and the shielding must be connected to the ground of the corresponding plug.

Gemert, February 16, 2018

ing. Joost van Eenbergen