

Specifications

Unit type: Switch mode constant current LED driver
Outputs: 3 dimmed outputs 0-350mA per output, 48 volt
Input: AC 80V-260V 50-60Hz 0.6A
Control: DMX512 or internal control
Protection: LED outputs protected against short circuit and miswiring. Driver protected by progressive thermal shutdown.



AVR Ledion System

LUD36 driver unit

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About this unit

The LUD36 is an LED driver for the AVR Ledion system. It can drive up to 36 one-watt LED emitters in 3 channels, 12 per channel. So for example it could drive the following:

12 LU3 fixtures

6 LU6 fixtures

1 LUS1200/36 batten

The LEDs may be controlled from DMX512, or a selection of static colours or a fade program may be selected using the dip switches.

Multiple units may be linked up by DMX512. The LUD36 does not have master-slave functions.

The LUD36 is configured using an on board 10 way dip switch.

The LUD36 is fully protected against short circuits on its LED output.

Operation in DMX mode

The unit is controlled by three DMX channels:

1	Red
2	Green
3	Blue

You set the base DMX address using the dip switches in binary code. Each switch adds a fixed number to the address:

1	2	3	4	5	6	7	8	9	10
1	2	4	8	16	32	64	128	256	OFF

For example:

DMX channel 1 = switch 1 on, all the rest off

DMX channel 65 = switches 7 and 1 on, all the rest off

The Green LED will illuminate when valid DMX is being received.

If switch 10 is on, the unit will drop into a selftest mode when DMX is lost.

DMX control values

Red, Green, Blue

DMX	Output
0	Off
1-254	Variable output 1-99%
255	Full On

Operating the LUD36

Test operating mode

The LUD36 may be set to a TEST mode offering a range of fixed colours, or a continuous fade program, using the dip switches.

- TEST mode does not operate when DMX is present. To use TEST mode ensure all DMX is disconnected.

Dip Switches	Output
10 on, 9 off 1-8 set speed (1=fastest)	R-G-B continuous fade
10+9+1	Red static
10+9+2	Green static
10+9+3	Blue static
10+9+4	Orange static
10+9+5	Cyan static
10+9+6	Magenta static
10+9+7	Cool White static
10+9+8	Warm White static
10+9	All LEDs on full power (pink)

You do not need to repower the driver when the dip switches are changed. The new selection will take effect immediately.

If DMX is received while the unit is in Test mode, then it will switch to DMX mode. If DMX is lost, it will revert to Test mode.

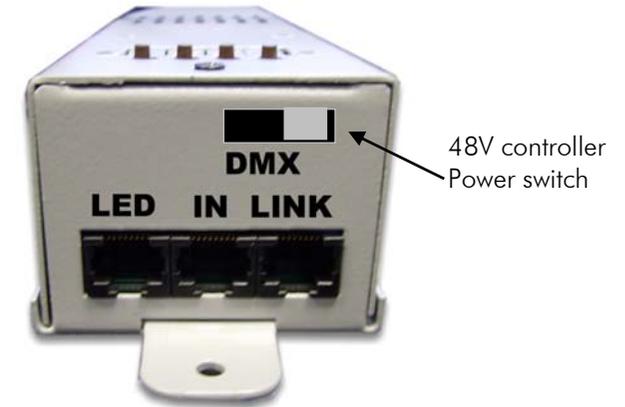
There is no master-slave operation on the LUD36 driver.

Connecting it up

The power cable of the unit should be connected to AC mains, 80-260V, 50-60Hz.

If the unit is installed, ensure there is clear airflow around the unit for cooling, or it may overheat and shut down.

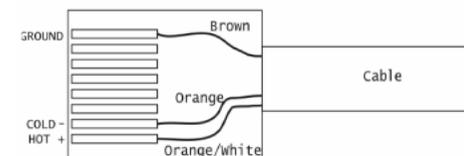
There are three control sockets.



The DMX sockets (in and link through) allow control from a DMX desk or master-slave linking of units. Pin 1 is the leftmost pin in the above picture. The 48V switch puts out power on unused pins of the DMX sockets to power an external controller.

- Warning: Although this unit uses similar connectors to a computer network, it is not compatible. Network equipment may be damaged if you connect this unit to a computer network.

DMX pins: Pin 1=Data Hot, Pin 2=Data Cold, Pin 8=Ground
RJ45 viewed from contact side

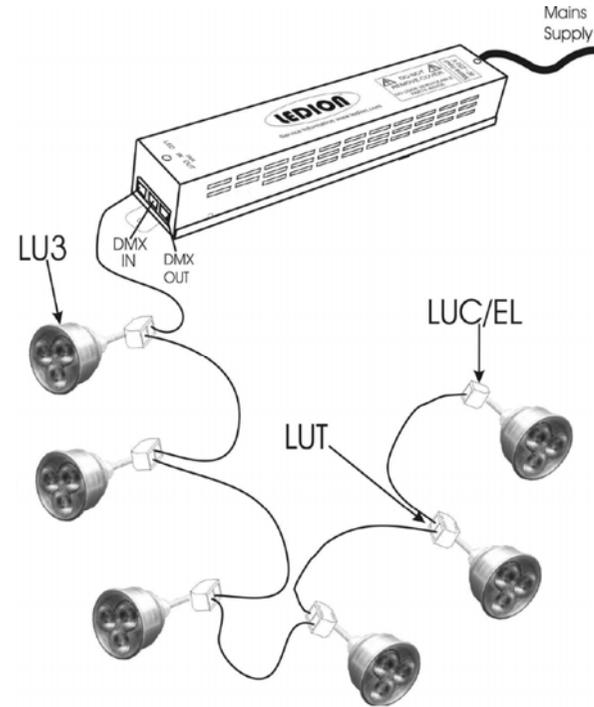
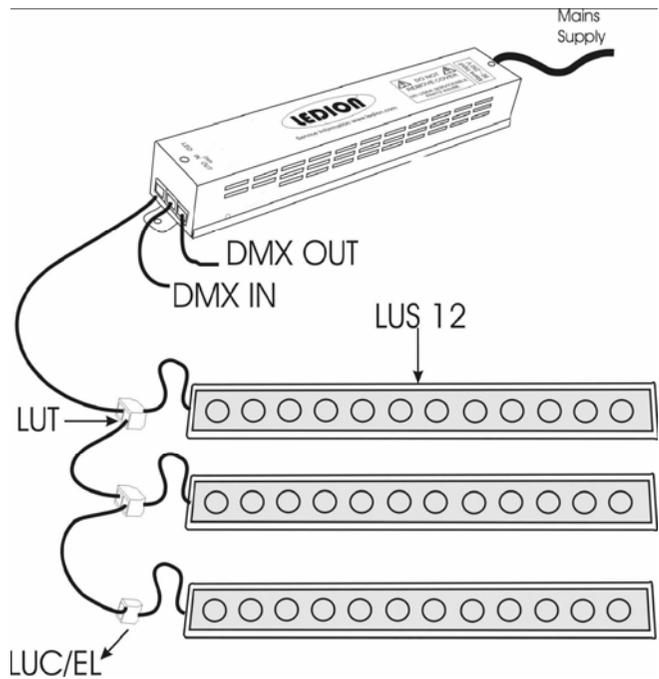


The LED fixtures link to the LED socket. Multiple fixtures can be connected using the LUT tee-piece.

All fixtures should be connected to the LUD36 power supply with RJ45 data cables into the LUT (tee piece). The fixture is plugged into the port marked LED, the cable coming from the LUD36 is plugged into the port marked IN and the cable to the next fixture is plugged into the port marked OUT.

When you come to the last fixture an LUC/EL should be used in place of the tee as you do not need to carry on to any other fixtures. The LUC/EL can be used for the end of the line or as an in line connector to extend data cables.

➤ Note: All tee-piece sockets must have either a fixture or another tee-piece connected – if there are any open sockets in tee-pieces, none of the fixtures will light.



LED cable wiring: Pin 1=Red Pos, pin 2=Green pos, pin 3=Blue Pos, pin 4=no connection, pin 5=Red neg, pin 6=Green neg, pin 7=Blue neg, pin 8=no connection.

