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LED technology

A9915501 DMX512 INTERFACE LXU01
Operating Instructions

Design and specifications subject to change without notice.

IP68 UNDERWATER RATED

Underwater Pool Light

CE

CONTENTS

PREFACE

The LXU01 is DMX512 to METEOR protocol converter with 1 output to control a groups of RGB multi-color lights of METEOR series with built-in METEOR protocol. The DMX512 control of single-color lights METEOR series is enabled by using the PWM dimmer LDU13 with built-in METEOR protocol.

FEATURES

1 Control Output
DIP-switch Programmable
Multi - Speed Mode
Wide Range Power Supply
Low Power Consumption
Polarity Protection
Transient Protection
Short Circuit Output Protection
Simple Installation

PRECAUTIONS

The DMX512 Interface LXU01 has to be installed and used in accordance with the instructions of this manual only.

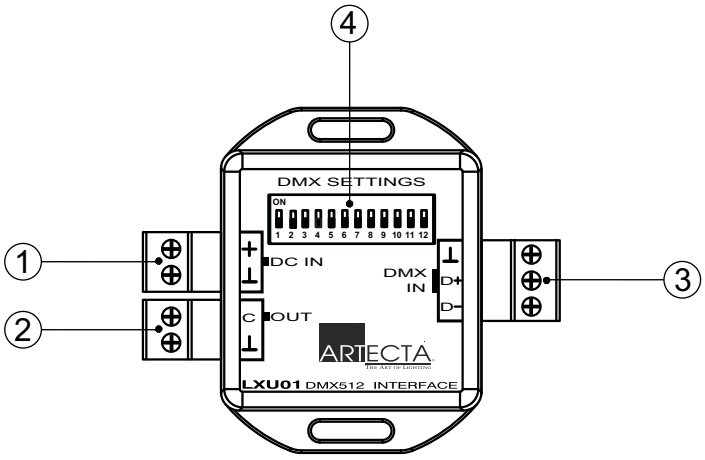
The power supply has to be disconnected before installation.

Avoid installing the DMX512 Interface LXU01 in extremely hot places and near appliances generating strong magnetic fields.

Do turn power off immediately and refer servicing to qualified service personnel if the DMX512 Interface LXU01 does not operate normally following the operating instructions.

CONTROLS AND CONNECTORS

DMX512 Interface LXU01



(1) DC IN
Terminal-block connector to connect 12-24Vdc power supply.

(2) OUT
Control output to connect the +Control (P) and GND Control (-) wires of multi-color RGB lights Meteor series or PWM dimmer LDU13.

(3) CONTROL
The 3-pole terminal block connector to connect DMX512 line.

(4) DMX SETTINGS
DIP-switch to set the DMX512 and METEOR protocol commmunication parameters.

INSTALLATION

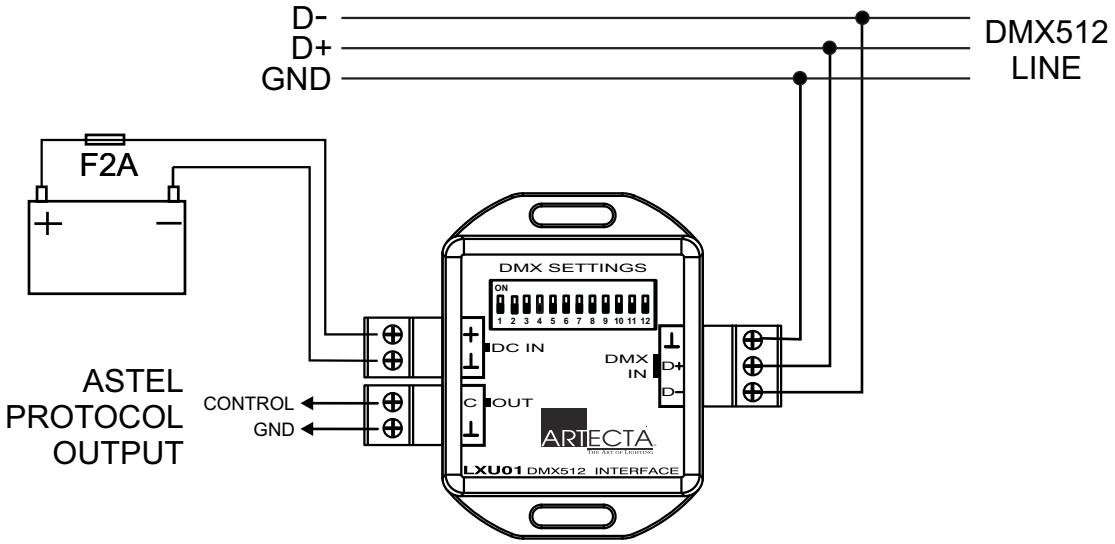
The DMX512 Interface LXU01 kit consists of the following components:

DMX512 Interface LXU01
3 x terminal-block connectors
Operating Instructions with Declaration of Conformity and Warranty conditions

The LXU01 has to be installed on a suitable location.
Avoid the installation in extremely hot places and near appliances generating strong magnetic fields.
The installation has to be realized by a qualified personnel.

Note:

The main DC power supply has to be switched off before installation.



Power supply connection

The power supply has to be connected through the switch (not included) and protected by a fuse (not included) to the DC IN terminal-block connector with correct polarity. The power supply voltage has to be from 10 - 30Vdc.

ASTEL protocol output connection

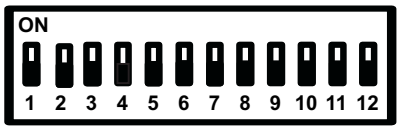
The 2 control wires of multi-color RGB lights Meteor series or PWM dimmer LDU13 for single-color lights control have to be connected to the OUT terminal-block connectors.

DMX512 line connection

The DMX512 control wires have to be connected to the DMX IN terminal-block connector.

SET-UP

The DMX512 Interface LXU01 set-up is enabled by adjusting the DIP-switch.



DIP-switch 1-2-3-4	**VALUE**
OFF-OFF-OFF-OFF	0
ON -OFF-OFF-OFF	1
-	-
OFF-ON -ON -ON	14
ON -ON -ON -ON	15

DIP-switch 1-2-3-4-5-6-7-8-9	**VALUE**
OFF-OFF-OFF-OFF-OFF-OFF-OFF-OFF-OFF	0
ON -OFF-OFF-OFF-OFF-OFF-OFF-OFF-OFF	1
-	-
ON -ON -OFF-OFF-ON -OFF-ON -ON -OFF	211
-	-
OFF-ON -ON -ON -ON -ON -ON -ON -ON	510
ON -ON -ON -ON -ON -ON -ON -ON -ON	511

In normal operation the switches 1 - 9 define the DMX address!

Note:

The switch 12 must be in OFF position for normal operation!

The DIP-switch is used to set-up the mode of operation and programming

DIP-switch switches	**FUNCTION**
1 - 4	Parameter
5 - 8	Mode of operation
9 -10	Not used
11	Programming trigger
12	Programming mode

The set-up procedure:

1. Set the switch 12 to ON position
2. Set the programming mode with the switches 5 – 8 as described below
3. Set the parameter value as described below
4. Set the switch 11 to ON position
5. Wait for 5 seconds
6. Set the switch 11 to OFF position
7. Set the switch 12 to OFF position

DIP-switch 5-6-7-8	**DIP-switch** 1-2-3-4	**SET-UP**
OFF-OFF-OFF-OFF	0-2	Speed mode
ON -OFF-OFF-OFF	0-15	Number of addressable lights
OFF-ON -OFF-OFF	0-3	Data type
OFF-ON -ON -ON	not used	Set default
ON- ON -ON -ON	1-15	Programming the light address

Speed mode
Defines the ASTEL protocol communication baud rate.

Value	FUNCTION
0	LOW speed – 1200 bps
1	MID speed – 2400 bps
2	HIGH speed – 4800 bps

Number of addressable lights
This defines how the OUT is acting. There are two basic modes:

-non addressable – all the lights on the control OUT light in the same way

-addressable – there can be up to 15 address and each light connected to the OUT can have the address from 1 to 15 – each light with different address can light different. There can be more than one light with the same address – the number of the lights with the same address is not limited!

To set-up non addressable mode set the switches 1 - 4 to OFF.
To set-up addressable mode set the switches 1 - 4 to the number of the lights with different addresses on the control OUT.
Please pay attention the higher number results in lower refresh rate!

Data type
This defines the number of data bytes used for light / the number of DMX channels for each light on the control OUT.

Value	FUNCTION
0	1 byte - not used
1	2 bytes - not used
2	3 bytes - RGB lights
3	4 bytes - not used

Non addressable mode:
The number of used DMX channels is same as the defined.

Addressable mode:
The number of used DMX channels used for control OUT is as follows:

DATA TYPE number x number of ADDRESSABLE LIGHTS

Example:
DATA TYPE = 2 – 3 bytes
Number of ADDRESSABLE LIGHTS = 5
DMX channels used = 3 x 5 = 15

Set default
Sets the parameters to their default values:

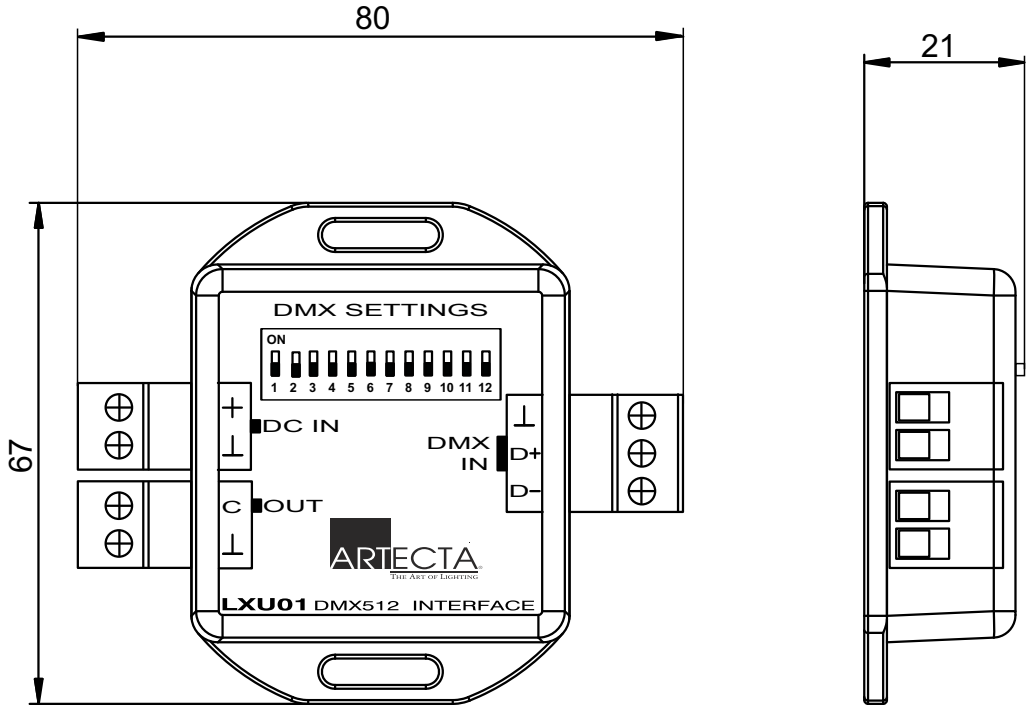
Parameter	Value
Speed mode	0
Number	0
Data type	2

Programming the light address

The set up procedure:

1. Connect the light to the DMX512 interface LXU01
2. Connect the light to the power supply
3. Switch-on the light – the light must light!
4. Switch-off the light – the light must NOT light!
5. Disconnect the light from power supply
6. Connect the DMX interface LXU03 to the power supply
7. Set the switch 12 to ON position
8. Set the programming mode – with the switches 5 – 8 to ON position
9. Set the light new address to 1-15 - with the switches 1 – 4
10. Connect the light to the power supply and IMMEDIATELY continue with step 11!
11. Set the switch 11 to ON position
12. Wait for 5 seconds
13. Set the switch 11 to OFF position
14. Set the switch 12 to OFF position

APPEARANCE



TECHNICAL SPECIFICATIONS

Input voltage	12-24 Vdc
Consumption	max. 50 mAdc
Operating temperature	-10 C - +50 C
Casing	ABS
Protection	IP 65
Dimensions	max. 67x80x21mm
Weight	0.1 kg

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