# TOKISTAR LIGHTING INSTRUCTION MANUAL

## **LC-3CH-DMX Dimmer Pack**

#### General

The LC-3CH-DMX Dimmer Pack can be used with any of Tokistar's LED Lighting Systems operating from our 6, 8, or 24 VDC LED Drivers. The maximum rating at 6 and 8 VDC is 5 amps. The maximum rating at 24 VDC is 4 amps.

This unit may be operated on different dimming protocols, which include:

**DMX Mode** - In this mode, each unit is independently addressable. Convenient In-Out terminals are provided for connecting units in series.

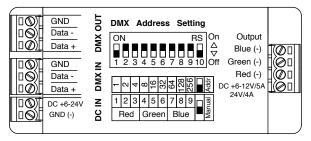
**MANUAL Mode** - You may select a light intensity the fixtures will operate at. In this case, no external dimming device is required.

#### **Delivery Packet**

Check for transport damage. You should be in possession of the following items:

- 1 LC-3CH-DMX
- 1 Manual, 1 Screwdriver, 1 Connecting part

#### LC-3CH-DMX



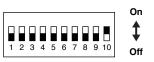
Technical Specifications			
Power Requirement	6~12VDC / 5A Max., 24VDC / 4A Max.		
• Input	2-pin orange terminal connector for Power In 3-pin green terminal connector for DMX In		
• Output	3-pin green terminal connector for DMX out 4-pin green terminal connector for LOAD (5A Max.)		
Housing	Black Plastic		
Environmental Rating	IP20 / Dry Location Only		
Control Protocol	DMX-512 (1990)		
Connection	Terminal		
Listing	CE certified / ETL Listed		
Operation temperature	0 degC to + 50 degC		
Dimensions	3.6" (90mm) L x 1.6" (40mm) W x 0.8" (20mm) H		
• Weight	50g / 0.11 lbs		

## **A** PRECAUTIONS

- 1. Read all instructions completely before beginning installation.
- 2. Turn off electricity before beginning installation.
- 3. All wiring is to be performed by a qualified electrician.
- 4. Installation must comply with the National Electrical Code, and all applicable codes.
- 5. Turn main supply to LED Driver on only after all connections are made and tested.
- 6. Use only LED Drivers provided by Tokistar with the system.
- 7. Components must be installed in enclosures suitable for the environment.

### **DMX Control Mode**

For operation from devices using DMX protocol, flip dip-switch 10 to the "ON" position.



DMX is an acronym for Digital Multiplex. This is a universal binary language used as a form of communication between intelligent devices. After setting dip-switch 10 to the "ON" position, you need to set the address on the dimmer pack. If all dimmer packs have the same address setting, all will work in unison. You can set dimmer packs to different addresses, so each one is operating independently.

Each dip-switch on the dimmer pack represents a binary value. A DMX address is set by combining the dip switches so they add up to the value you wish to achieve.

Dip-Switch 1 address equals 1

Dip-Switch 2 address equals 2

Dip-Switch 3 address equals 4

Dip-Switch 4 address equals 8

Dip-Switch 5 address equals 16

Dip-Switch 6 address equals 32

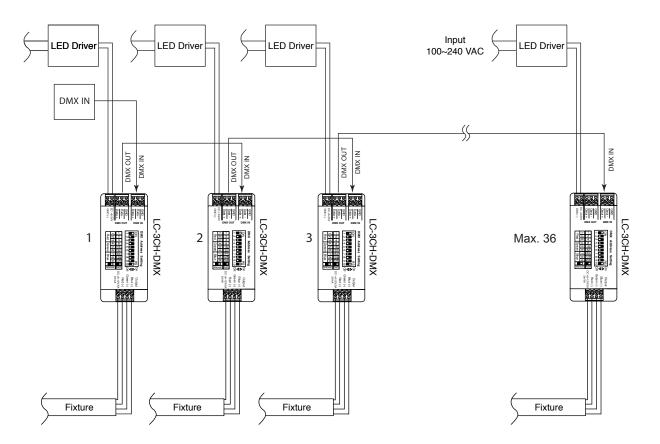
Dip-Switch 7 address equals 64

Dip-Switch 8 address equals 128 Dip-Switch 9 address equals 256

				E	Evenne 0	
Start CH#	Switches On	Start CH#	Switches On	Example 1	Example 2	
1	1	11	1,2,4	Dip Switch Value	Dip Switch <sup>Value</sup>	
3	1,2	12 13	3,4 1,3,4	· · · · · · · · · · · · · · · · · · ·		
4	3	14 15	2,3,4	1 = 1 3 = 4	1 = 1 4 = 8	
6	1,3 2,3	:	1,2,3,4	5 = 4 5 = 16	7 = 64	
7	1,2,3	:	:	= 21	8 = 128	
8	4	:	:		= 201	
10	2,4	511	1,2,3,4,5,6,7,8,9			

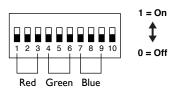
### WIRING DETAILS

A maximum of 36 dimmer packs may be connected in series in the DMX Mode. For applications exceeding 36 dimmer packs, an additional feed from the DMX device is required.



### **Manual Control Mode**

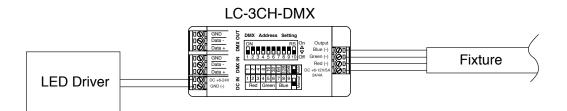
In this mode, dip-switch 10 is flipped to the "OFF" position. Flip dip-switches 1-3 to set the intensity of the RED LEDs, dip-switches 4-6 to set the intensity of GREEN LEDs and dip-switches 7-9 to set the intensity of BLUE LEDs.



Refer to the following table for further information.

### **Dip-Switch Settings**

INTENSITY	Red (SW1~3)	Green (SW4~6)	Blue (SW7~9)
0	000	000	000
14%	100	100	100 010 110 001 101
28%	010	010	
43%	110	110	
57%	001	001	
71%	101	101	
86%	86% 011		011
100% 111		111	111



### TOKISTAR<sup>®</sup> LIGHTING

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