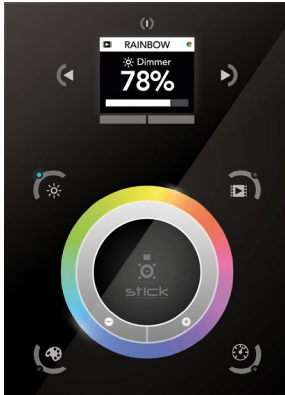




Client		Date		Qty	
Project		Type		PO#	

LS-CON-DMX-DE3



Overview

The feature rich lighting controller has been designed to provide a control solution for the most demanding of projects, whilst maintaining an easy to use panel of touch sensitive buttons. The controller integrates a graphical color screen allowing scene photos to be displayed. Easily view the selected zone, scene name and design without the need to navigate through complex menus. Change the speed, color and dimmer using the circular palette. The lighting levels, color and effects can be programmed from a PC, Mac, Android, iPad or iPhone using the included software.

Key Features

- Sleek glass design which sits 11mm from the wall
- Graphical color display to show selected environment
- Color/dimmer/speed palette
- Color temperature mixing
- Touch sensitive buttons. No mechanical parts
- Touch sensitive wheel allows for accurate color selection
- Multi-zone microSD memory
- Multi-room control with 500 scenes, 10 zones
- 1024 DMX channels. Control 340 RGB fixtures
- USB & Ethernet connectivity for programming and control
- RS232, Dry Contact Ports and an Infra Red input port
- Clock and calendar with Sunrise/Sunset triggering
- Network communication. Control lighting remotely
- Catalog of designs including black and white glass
- OEM customization of the color palette and logo
- Windows/Mac software to set dynamic colors/effects
- iPhone/iPad/Android remote and programming apps

Technical Data

Input Power	6-7V DC 0.6A
Output Protocol	DMX512 (x2)
Programmability	PC, Mac, Tablet, Smartphone
Available Colors	Black / White
Connections	USB, Ethernet, RS232, Clock, 8 dry contact ports, open drain output (for relay)
Memory	microSD (32Gb Max)
Temperature	-10 °C to 45 °C
Battery	LIR2032
Mounting	Single or double gang wall socket
Dimensions	146x106x11mm
Weight	247g
Standards	EC, EMC, ROHS, ETL

Optional Accessories

- | | |
|-----------------|---|
| RJ2BLOCK | RJ45 to connector block converter for power+DMX |
| POWER4M | 6-7v ACDC power supply |



Client

Date

Qty

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LS-CON-DMX-DE3

EASY INSTALLATION

1. Mount an electrical box inside the wall

The controller can be installed in any standard electrical backbox. If you use a double size box, you can insert the power supply inside.



2. Connect the wires

POWER: Connect a 6V to 7V DC 0.6A ACDC supply. Be sure to not invert the + and the ground.

DMX: Connect the DMX cable to the lighting receivers (Leds, Dimmers, Fixtures..) (for XLR: 1=ground 2=dmx- 3=dmx+)



3. Mount the interface on the wall

First, mount the back side of the interface on the wall with 2 or more screws

Secondly, plug the connectors :

- DMX and power (connector block or RJ45)
- Ethernet cable

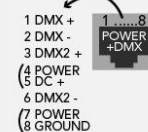
The front panel is mounted by pressing it against the back plate and then sliding down. 2 screws should then be attached underneath to hold the controller in place.



POWER+DMX WITH THE CONNECTOR BLOCK



POWER+DMX WITH THE RJ45 CABLE



****CHECK PIN CONFIGURATIONS. APPLYING POWER TO THE DMX INPUT WILL DAMAGE THE CONTROLLER****
****MAKE SURE THE CONTROLLER IS MOUNTED WITHOUT TOO MUCH FORCE BEHIND AS THIS CAN PUSH APART THE GLASS****

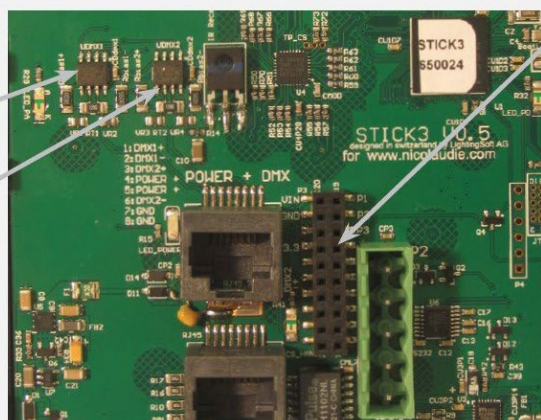
2x10 pins EXTENSION socket

DMX CHIP replacement

DMX universe #1

DMX universe #2

Ref: SP485ECN-L
MAX485 CSA



EXTENSION socket

VIN *	20	19	PORT1
GND	18	17	PORT2
IR_RX	16	15	PORT3
3.3V	14	13	PORT4
Relay	12	11	PORT5
DMX2+	10	9	PORT6
DMX2-	8	7	PORT7
DMX1+	6	5	PORT8
DMX1-	4	3	RS232 RX
GND_DMx	2	1	RS232 TX

* VIN pin 20 is not protected and should not be used

Compatible header connectors:

WURTH ELEKTRONIK ref: 61301021121
 MOLEX ref: 10-89-7202
 TE Connectivity ref: 1-87227-0
 FCI ref: 77313-101-20LF
 HARWIN ref: M20-9981046
 SAMTEC ref: TSW-110-xx-T-D
 FARNELL ref: 1841232
 RS ref: 763-6754 673-7534 251-8165
 MOUSER ref: 538-10-89-7202
 DIGIKEY ref: WM26820-ND



Client

Date

Qty

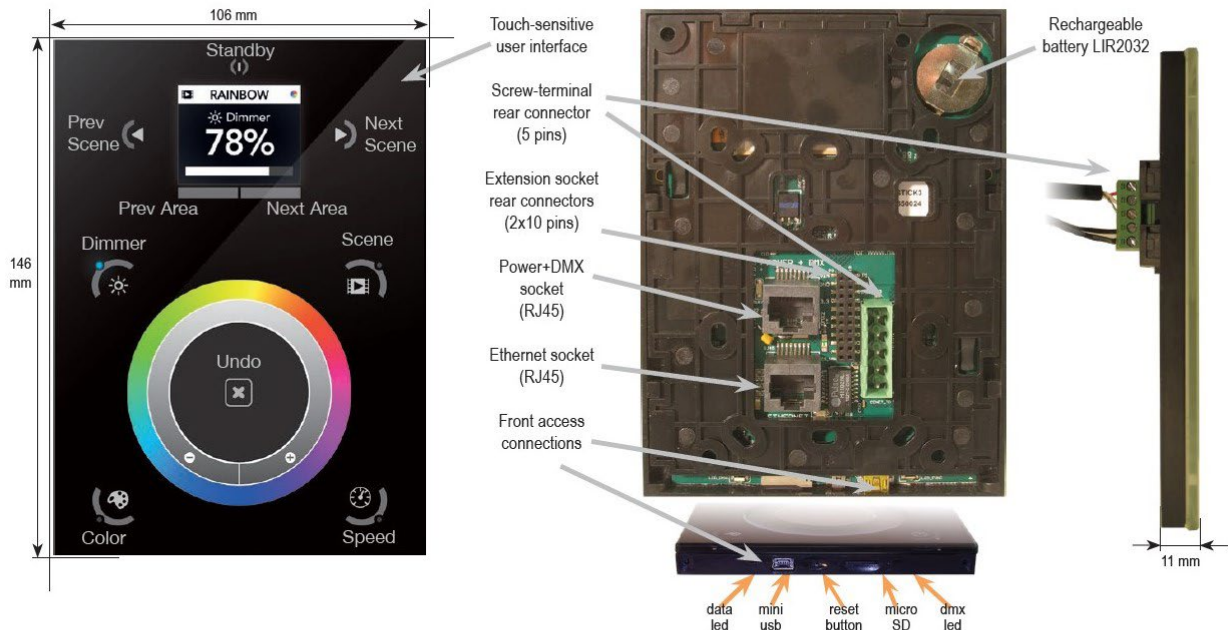
Project

Type

PO#

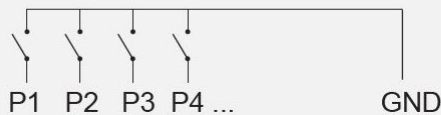
LS-CON-DMX-DE3

Connections & Triggering



Dry Contact Port Triggering

It is possible to start scenes using the input ports (contact closure). To activate a port, a brief contact of at least 1/25 second must be established between the ports (1...8) and the ground (GND). Note: the scene will not be switched off when the switch is released.



RS232 Triggering

Make a cable using the 3 pins : TX, RX and G (GND)
Set the RS232 parameters to : 9600bds 8 bits, no Parity, 2 Stop bits
Messages should be hexadecimal not decimal (ie. 1 = 01, 255 = ff etc.)

- To play a scene, send 4 bytes : 1 x y 255
- To stop a scene, send 4 bytes : 2 x y 255
- To pause a scene, send 4 bytes : 3 x y 255
- To release a pause, send 4 bytes : 4 x y 255
- To reset a scene, send 4 bytes : 5 x y 255

When (y)=0, (x) can be set between 0 and 255

-to stop scene 145, send the command: 2 145 0 255

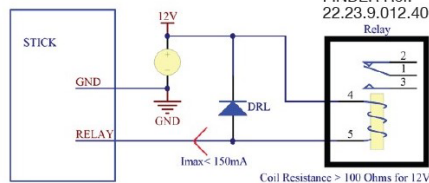
When (y)=1, (x) can be set between 0 and 243 to trigger scenes 256-499

-to play scene 300, send the command: 1 44 1 255

BLACKOUT Relay (energy saving)

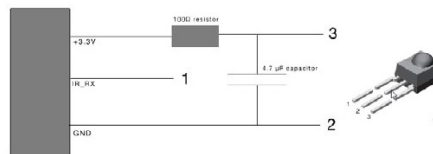
A relay can be connected between the RELAY and GND sockets of the 20 pin extension socket. This is an open drain output that allows current to flow only when the controller is on. It can be used to turn off other equipment such as lighting drivers.

Example Relay :
FINDER Ref.
22.23.9.012.4000



Infra Red

The controller works with the official IR remote control, however there is no receiver. A 36khz infra red receiver can be connected, such as the TSOP34836 by Vishay Semiconductors. Farnell ref: 4913127. This can be attached to the 20 pin connector. It's a good idea to add a resistor and capacitor to suppress power supply disturbance.



Network Control

The controller can be connected to a local network, allowing it to be controlled from a smartphone or tablet over WIFI.

- Connect the controller to a router or switch with an RJ45 cable
- The controller is set by default to get an IP address from the router via DHCP. If the network is not working with DHCP, a manual IP address and subnet mask can be set using the Hardware Manager
- If the network has a firewall enabled, allow ports 2430 and 2431

TCP Triggering

The controller can be connected to an existing automation system over a network and triggered via TCP packets on port 2431 or UDP packets on 2430. Refer to the remote protocol document for more information.