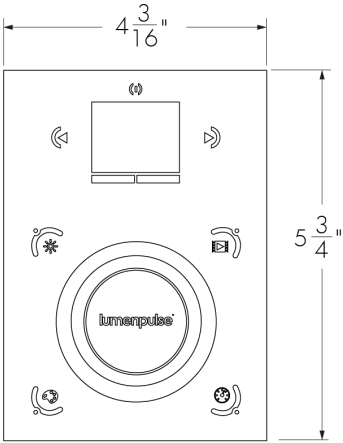


Project Name _____

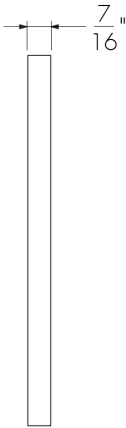
Qty _____

Type _____

Catalog / Part Number _____

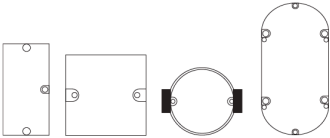


Front view



Side view

Mounting Plate



- Universal back mounting plate
- Hole pattern to fit most standard junction boxes
- Extended back boxes are recommended for all installations

Content

- Lumentouch 2.0 hardware (stand alone wall mounted DMX controller)
- Mini-USB cable
- Micro SD card and adapter
- UL listed 5-15V DC power supply (100-240V AC input voltage) with connector block for DMX connection

Downloads (Available on Website)

- User Manual
- Troubleshooting Tips
- Quick Start Guide
- Remote Protocol Guide
- ESA PRO 2 Software (Available for PC and MAC Systems)

Description

Lumentouch 2.0 is an intuitive, touch sensitive DMX512 controller. An elegant update of the Lumentouch, the Lumentouch 2.0 provides increased scene and zone capabilities, an on-screen LCD display and a sleek glass finish. Users can program, modify and trigger lighting effects and shows, dimmers, speed and color, with just a simple touch. Designed for all manner of applications, the controller is adaptable to various sizes of recessed electrical boxes and easy to install.

Features

Interface	Touch sensitive control panel with sensitive wheel allows for accurate color selection
Clock and calendar	Integrated clock/calendar with Sunrise/Sunset triggering
Compatible Fixture Types	White DMX dimming, Dynamic White and Color Changing
Connections	USB Type-C connection for software programming, PC, MAC, tablet, Smartphone, can be used without a computer in stand alone mode, iPhone/iPad/Android remote and programming apps
Memory	Multi-zone microSD memory Micro SD (32GB max)
System Requirements	Compatible with Microsoft Windows 10 & 11 (64-bit), Mac OS Catalina and newer, 4GB ram 1GB free hard disk space 1680x1500 minimum display resolution OpenGL 3.2 minimum for Easy View 2 3D Visualizer
Warranty	5-year limited warranty
Output Protocols Supported	2x DMX 512 universes (1024 channels)

Physical

Finish Black

Certifications

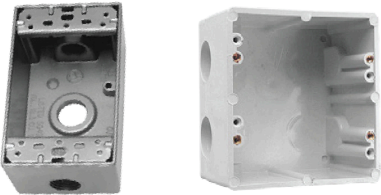


Weight	0.54 lbs
Mounting	Single or double gang wall socket, Universal mounting plate compatible with most electrical backboxes
Electrical and Control	
Power Input	5-15V DC
Battery	LIR2032 (rechargeable)
Connections	USB Type-C, Ethernet, RS232, Clock, 8 relay, dry contact ports and an Infrared input port
Standards	EC, EMC, ROHS, ETL
Environmental	
Operating Temperature	14 °F to 113 °F

Installation

Step 1. Install Electrical Box And Mounting Plate

Electrical Box



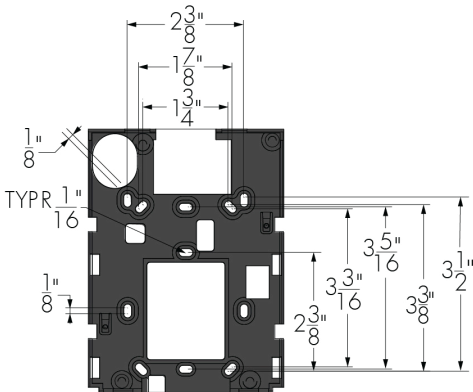
- Lumentouch 2.0 controller can be installed on any and standard electrical box (double electrical box recommended)

Electrical Box With Power Supply



- The power supply can be inserted in a double size electrical box

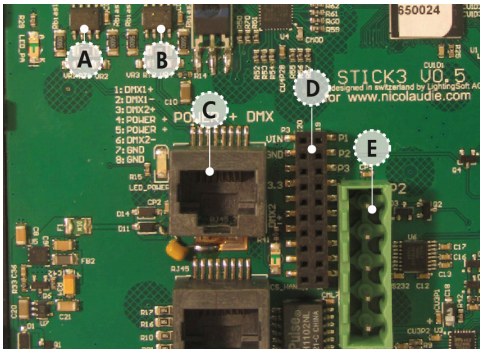
Mounting Hole Pattern



- Install mounting plate on electrical box with 2 or more screws

Step 2. Connect Cables

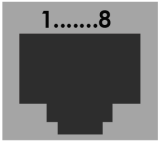
(Power+DMX with Connector Block or RJ45 Cable)



- A- DMX chip replacement DMX universe #1
- B- DMX chip replacement DMX universe #2

Ref: SP485ECN-L MAX485 CSA

C- Power+DMX Socket
(RJ45 cable)



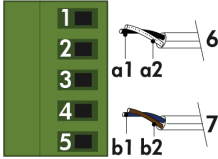
- 1- DMX +
- 2- DMX -
- 3- DMX2 +
- 4/5- Power/DC +
- 6- DMX2 -
- 7/8- Power/Ground

D- Extension Socket Rear Connectors
(2x10 pins)

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

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: 54 673-7534 251-8165
MOUSER Ref: 538-10-89-7202
DIGIKEY Ref: WM26820-ND

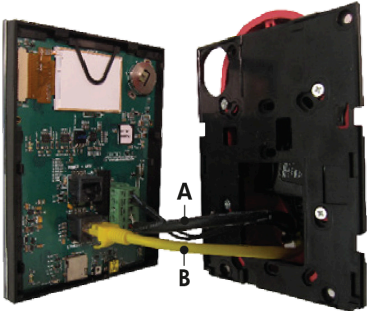
E- Connector Block
(5 pins)



- 1- Power&DC +⁽¹⁾
 - 2- Power&Ground ⁽¹⁾
 - 3- DMX&Ground ⁽²⁾
 - 4- DMX - ⁽²⁾
 - 5- DMX +⁽²⁾
 - 6- From power supply to connector block
 - a1: Power DC + (white trace cable)
 - a2: Power Ground (black cable)
 - 7- From power supply to wall plug
 - b1: VDC + (blue cable)
 - b2: VDC - (brown cable)
- ⁽¹⁾ **Power:** Connect a 6V to 7V DC 0.6A ACDC supply. Be sure to not invert the + and the ground.
⁽²⁾ **DMX:** Connect the DMX cable to the lighting receivers (LEDs, dimmers, fixtures)

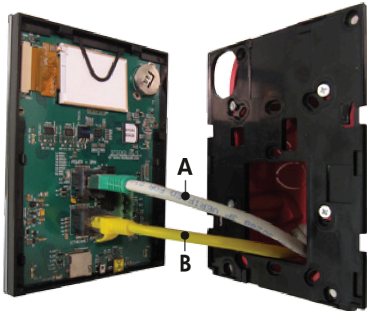
Step 3. Install Lumentouch 2.0 Interface On Mounting Plate

Plug Connector Block and Ethernet cable



- A- Block connector (5 pins)
- B- Ethernet socket (RJ45 cable)

Plug Power+DMX and Ethernet cable



- A- Power+DMX socket (RJ45 cable)
- B- Ethernet socket (RJ45 cable)

- Press front panel controller against mounting plate and slide down to install (2x screws needed underneath to hold the controller in place).
- 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.
- Lumenpulse recommends using a gang box extension if possible to increase the volume of the wiring compartment for ease of installation.

Connections and Triggering

Touch-Sensitive User Interface*

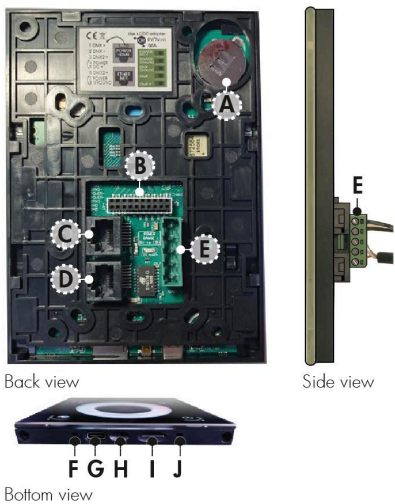


Front view

- A - Previous scene
- B - Power On/Off and settings menu
- C - Next scene
- D - Previous area/page
- E - Next area/page
- F - Dimmer
- G - Scene playback
- H - Color wheel
- I - Enter/confirm selection
- J - Speed
- K - Color selection wheel

**Please remove protective film before use to ensure proper operation of the controller.*

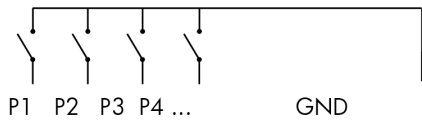
Connections



- A- Rechargeable battery LIR2032
- B- Extension socket rear connectors (2x10 pins)
- C- Power+DMX socket (RJ45 cable)
- D- Ethernet socket (RJ45 cable)
- E- Screw terminal rear connector (5 pins)
- F- Data activity LED
- G- USB-C port
- H- Reset button
- I- Micro SD card slot
- J- DMX activity LED

Connections and Triggering (continued)

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.

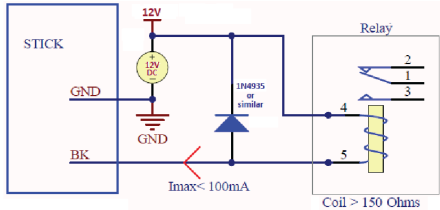
Messages should be hexadecimal not decimal (ie. 1 = 01, 255 = ff etc.)

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

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 can be used to turn off other equipment such as lighting drivers. The signal is connected when the controller is in standby.

Example of relay :

FINDER Ref.
22.23.9.012.4000

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.

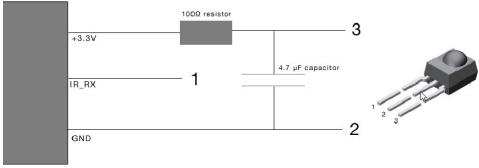
If the network has a firewall enabled, allow ports 2430 and 2431.

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.

Consult the remote protocol document for more information.

Infra Red



The controller works with the official IR remote control (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 extension connections. A resistor and capacitor can be added to surpress power supply disturbance.

Setting Up the Controller

iPhone/iPad/Android Control

The controller can be used with one of 2 different apps, each available at Google Play and the App Store (not supported through Lumenpulse).

Arcolis Remote

A simple interface provides the easiest way to control your device (iOS/Android).

Arcolis Remote Pro

Create a customized remote controller with buttons, faders and color control (iOS / Android).

How to Order

Housing
LTO2 Lumentouch 2.0™