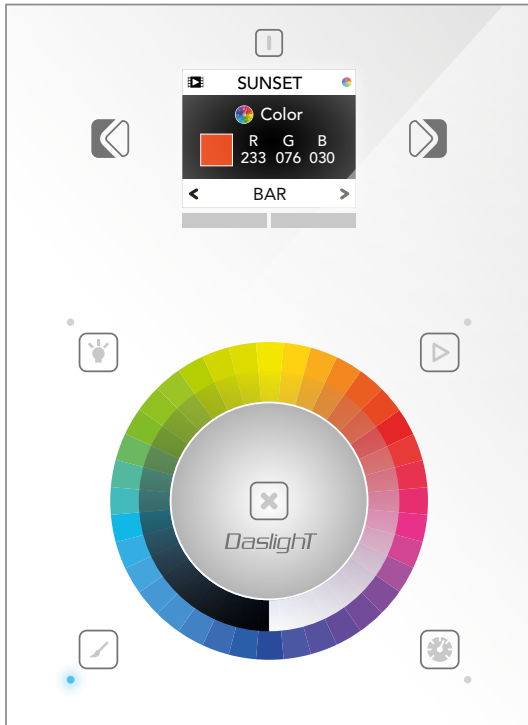


# DPAD Gold

*Touch Sensitive Intelligent Control Keypad*



## 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.

<http://www.daslight.com/dpadgold.htm>

## 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

<b>Input Power</b>	6V DC 0.6A
<b>Output Protocol</b>	DMX512 (x2)
<b>Programmability</b>	PC, Mac, Tablet, Smartphone
<b>Available Colors</b>	Black / White
<b>Connections</b>	USB, Ethernet, RS232, Clock, 8 dry contact ports, 5v Output Relay
<b>Memory</b>	microSD card
<b>Temperature</b>	-10 °C - 45 °C
<b>Mounting</b>	Single or double gang wall socket
<b>Dimensions</b>	146x106x11mm
<b>Weight</b>	247g
<b>Standards</b>	EC, EMC, ROHS, ETL

## Optional Accessories

- RJ2BLOCK** RJ45 to connector block converter for power+DMX
- POWER4M** DMX512 (x2)

# EASY INSTALLATION

## 1. Mount an electrical box inside the wall

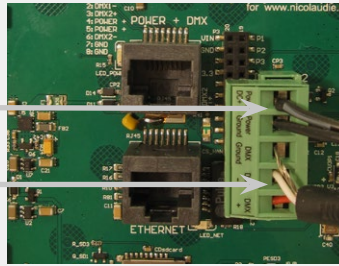
The controller can be installed in any standard electrical backbox. If you use a double size box, you can insert the power supply inside.



## 2. Connect the wires

**POWER:** Connect a 5.5V or 6V 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

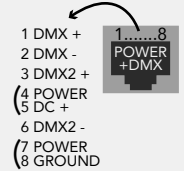
The front panel is mounted by pressing it against the back plate and then sliding down. 2 screws should then be attached underneath to hold the controller in place.



## 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\*\***

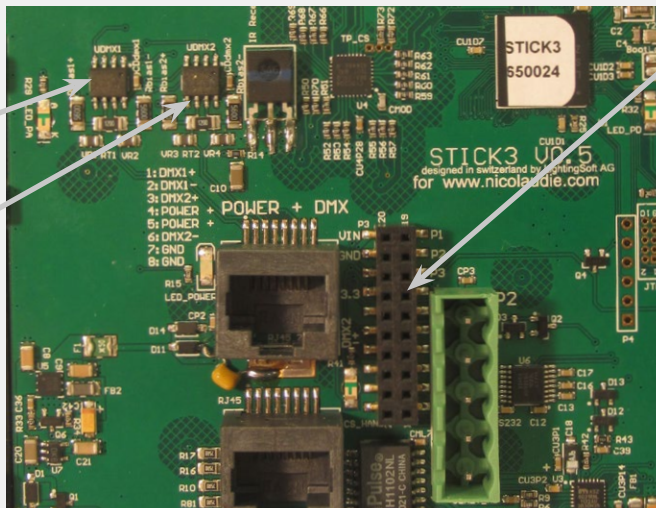
## 2x10 pins EXTENSION socket

DMX CHIP replacement

DMX universe #1

DMX universe #2

Ref: SP485ECN-L  
MAX485 CSA



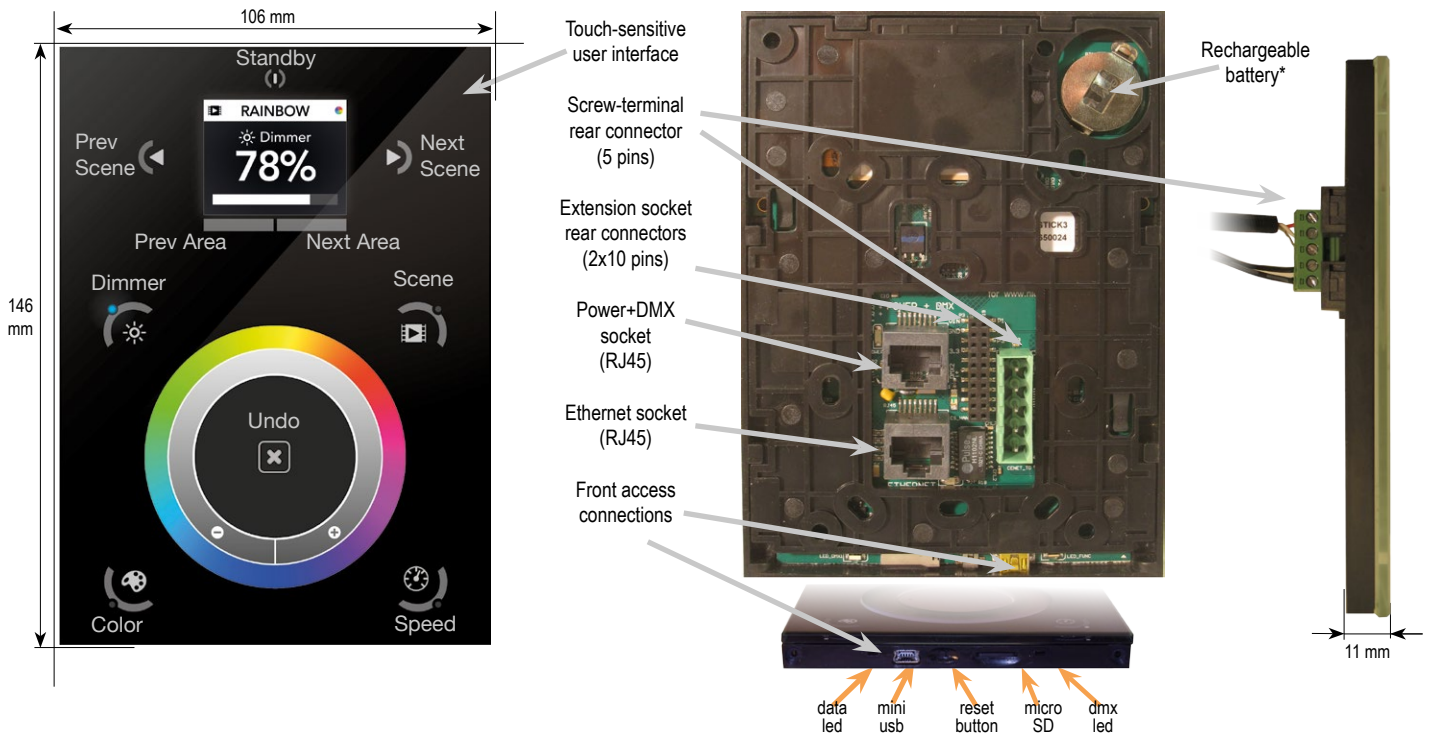
## EXTENSION socket

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

### Compatible header connectors:

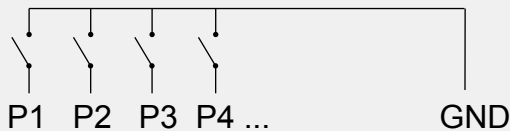
- WURTH ELEKTRONIK ref: 61301021121
- MOLEX ref: 10-89-7202
- TE Connectivity ref: 1-87227-0
- FCI ref: 77313-101-20LF
- HARWIN ref: M20-9981046
- SAMTEC ref: TSW-110-xx-T-D
- FARNELL ref: 1841232
- RS ref: 763-6754 673-7534 251-8165
- MOUSER ref: 538-10-89-7202
- DIGIKEY ref: WM26820-ND

## 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 atleast 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)

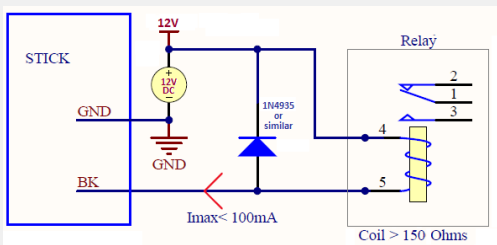
Set the RS232 parameters to : 9600bds 8 bits, no Parity, 2 Stop bits (x = scene number)

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

Note: the scene number (x) can be from 0 to 499. There are 49 scenes + an OFF scene per page. For instance, 51 will switch on Page B Scene #1, 50 will switch off Page B.

### BLACKOUT Relay (energy saving)

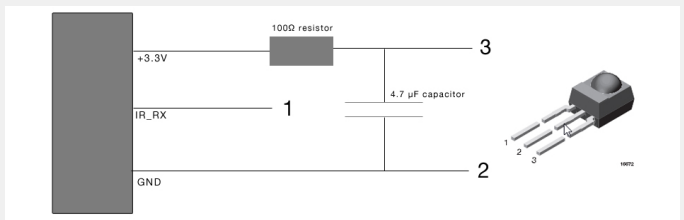
A relay can be connected between the RELAY and GND sockets of the 20 pin extension socket. This can be used to turn off other equipment such as lighting drivers. The signal is connected when when the controller is in standby.



Example of 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 package on port 2431 or UDP packets on 2430. Refer to the remote protocol document for more information.

# Setting up the Controller

## iPhone/iPad/Android Control

The controller can be used with one of 3 different apps. Each available at Google Play and the App store.

### DMX Lightpad 3

Designed to work seamlessly with the controller, DMX Lightpad 3 provides an easy way to control your lights over a local WiFi network. Use the wheel to change the dimmer, color or speed, and the arrows to select scenes and effects just like the wall panel. Swipe down to reveal quick access scene selection buttons.

### Easy Remote

Create an entirely customized remote controller for your tablet or smartphone. Easy Remote is a powerful and intuitive app allowing you to easily add buttons, faders, color wheels and more. Connect to a WiFi network and the app will find all compatible devices.

### Arcolis

The Arcolis application is a comprehensive tool allowing you to directly control and re-program the controller from your smartphone or tablet. This is a simple application which can be used by just about everyone in any situation. Mobile, easy to use and powerful, Arcolis is the ideal controller for dimming or switching traditional, LED and RGB color mixing DMX lighting fixtures. Program static and dynamic lighting scenes and effects.

## Programming the Controller

The controller be programmed from a PC, Mac, Tablet or Smartphone using the software available on our website. Refer to the corresponding software manual for more information. The firmware can be updated using the Hardware Manager which is included with the programming software.

### DVC3 Software (Windows)

[http://www.daslight.com/downloads/files/DVC3\\_setup.exe](http://www.daslight.com/downloads/files/DVC3_setup.exe)

### Hardware Manager (Windows) - Firmware, clock..

<http://www.dmxsoft.com/global/ftp/hardwaremanager.zip>

## Color Temperature Mixing

In addition to mixing RGB using the color pallet, it's also possible to mix up to 3 custom colors. This is useful for mixing color temperature. To set this up, choose the correct profile for your lighting fixture when programming the controller. Profiles for common channel configurations can be found in the 'Generic' folder:

RGBW for Red, Green, Blue, White  
 RGBA for Red, Green, Blue, Amber  
 RGBY for Red, Green, Blue, Yellow  
 WWCW for Warm White, Cold White

Once your show has been written to the controller, tap the color mode button and use the circular palette to change the color. If your lighting fixture has more than 3 color channels, tap the color mode button a second time to mix the additional colors.

## Settings Menu

To access the settings menu, hold the standby button for 3 seconds.

- Use the arrow buttons or palette to scroll through the menus
- Use the area buttons to navigate forwards and backwards
- The 'undo' button can also be used to navigate forwards

**Mode (M):** Manages the on/off button and the 4 modes (dimmer, speed, color, scene)

**Arrows (A):** Allows you to adjust which modes can be controlled by the arrows

**Pallet (P):** Allows you to adjust which modes can be controlled by the palette wheel

**Scene (S):** Scene management

**First Start (F):** Default settings when the unit is first powered up

**Trigger (T):** Manages the controllers external triggering properties

**Ethernet (E):** Enables the Ethernet socket on the controller

**Date/Time (D):** Manages the date and time stored inside the controller

**Graphics (G):** Screen management

**DMX Output (X):** Manage the timings of the DMX output messages and the page priorities (advanced function!)

**Sensitive (S):** Manage the touch sensitivity settings

**Language (L):** change the language of the text which appears on the screen

**About:** check the firmware release date and version number and assign a name for the controller



## Service

Servicable parts include:

- Memory card - used to store the scenes
- Battery - used to store the clock/calendar
- DMX Chips - used to drive the DMX (see p2.)

\*To replace the Li-Ion rechargeable battery on the DE3 :

1. You need a rechargeable 3.6v LIR 2032 replacement battery
2. Remove the back panel by pulling down and sliding it out.
3. Using a paper clip push the battery from the bottom so it slides out of its cage.
4. Slide the replacement battery in from the top, making sure the positive side is facing up.
5. Replace the back panel by pushing it up into place.