

# STICK-CU4

*Smart Touch Sensitive Intelligent Control Keypad*



## Overview

This DMX controller is aimed at architectural lighting installations requiring an advanced level of programming (color changing effects, specific colors etc). The controller has been engineered to meet the needs of lighting designers, whilst providing a clean and user-friendly panel. Featuring an on/off button, 6 scene buttons and a color wheel, the controller is ideal for hotels, homes and public environments. The controller is USB programmable from a PC or Mac using the ESA2 software. Up to 36 scenes can be stored within the controller and directly recalled via 6 touch sensitive scene buttons.

<http://www.nicolaudie.com/stick-cu4.htm>

## Key Features

- DMX stand alone controller
- Compatible with any DMX fixture or DMX LED driver
- Ready-to-use (pre-loaded with 8 scenes and 170 RGB fixtures)
- Sleek black glass design which sits 10mm from the wall
- Color palette (can also be used for scene selection)
- 12 touch-sensitive buttons. No mechanical parts
- Touch-sensitive wheel allows for accurate color selection
- Built-in flash memory for storing programs
- Up to 36 dynamic or static scenes
- 512 DMX channels. Control 170 RGB fixtures
- USB connectivity for programming and control
- 8 dry contact trigger ports
- OEM customization of the color palette and logo
- Windows/Mac software to set dynamic colors/effects

## Technical Data

<b>Input Power</b>	5-10V DC 0.6A
<b>Output Protocol</b>	DMX512
<b>Programmability</b>	PC, Mac
<b>Available Colors</b>	Black
<b>Connections</b>	USB, 8 dry contact ports
<b>Memory</b>	In-built flash
<b>Temperature</b>	-10 °C - 45 °C
<b>Mounting</b>	Single or double-gang wall socket
<b>Dimensions</b>	146x106x10mm
<b>Weight</b>	200g
<b>Standards</b>	EC, EMC, ROHS

## Optional Accessories

- RJ2BLOCK** RJ45 to connector block converter for power+DMX
- POWER4M** 5-10v ACDC power supply

## EASY INSTALLATION

### 1. Mount an electrical box inside the wall

The controller can be installed in a standard electrical backbox. This box is usually 60mm high and wide, except in Japan and America where it is 83.5mm/3.29 inches high. You can insert the AC/DC adapter inside or outside the backbox.



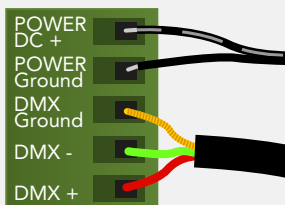
### 2. Connect the wires

**POWER:** Connect a 5-10V 0.6A ACDC supply. Be sure to not invert the + and the ground.

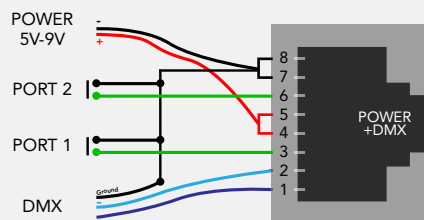
**DMX:** Connect the DMX cable to the lighting receivers (LEDs, Dimmers, Fixtures..) (for XLR: 1=ground 2=dmx- 3=dmx+)

There are 2 ways to connect the power and DMX:

#### Connector Block



#### RJ45



**CHECK PIN CONFIGURATIONS.**  
**APPLYING POWER TO THE DMX INPUT WILL DAMAGE THE CONTROLLER**

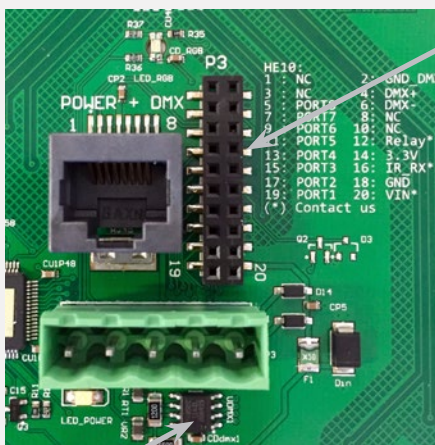
**MAKE SURE THE CONTROLLER IS MOUNTED FLAT WITHOUT OBSTRUCTIONS FROM BEHIND AS THIS CAN PUSH APART THE GLASS**

### 3. Mount the interface on the wall

First, mount the backside of the interface on the wall with 2 or more screws. Secondly, connect the DMX and power (connector block or RJ45).

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

## Other Connections



#### HE10 EXTENSION socket

NC	1	2	GND_DMX
NC	3	4	DMX+
NC	5	6	DMX-
PORT8	7	8	NC
PORT7	9	10	NC
PORT6	11	12	NC
PORT5	13	14	NC
PORT4	15	16	NC
PORT3	17	18	GND
PORT2	19	20	VIN

#### Compatible header connectors:

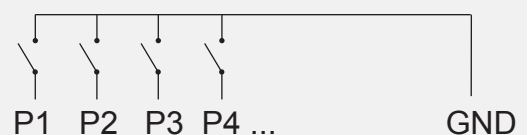
WURTH ELEKTRONIK ref: 61301021121  
MOLEX ref: 10-89-7202  
TE Connectivity ref: 1-87227-0  
FCI ref: 77313-101-20LF  
HARWIN ref: M20-9981046  
SAMTEC ref: TSW-110-xx-T-D  
FARNELL ref: 1841232  
RS ref: 763-6754 673-7534 251-8165  
MOUSER ref: 538-10-89-7202  
DIGIKEY ref: WM26820-ND

#### DMX CHIP

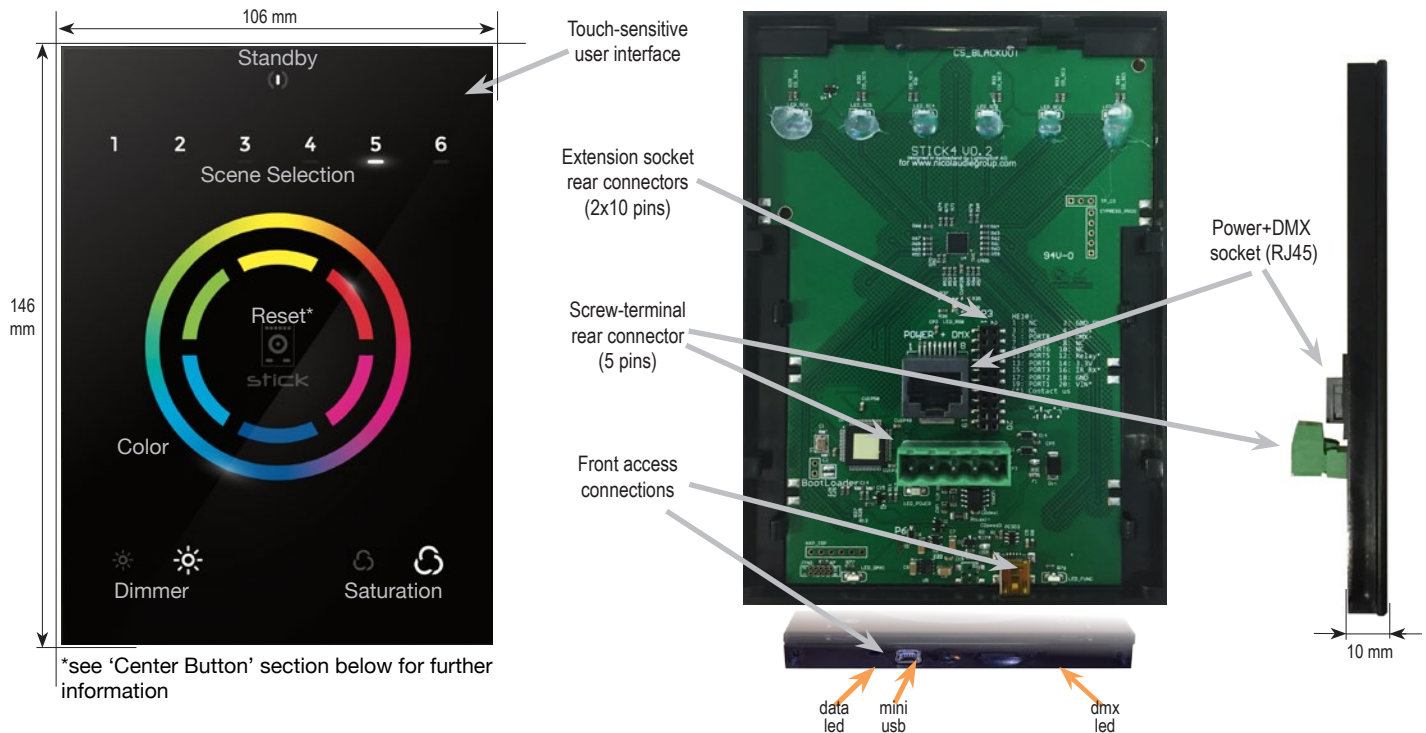
Solder the DMX chip to the 8 pin connector on the right of the RJ45 socket. Be sure that the chip is facing downwards

## Dry Contact Port Triggering

It is possible to start scenes using the dry contract input ports available on the HE10 extension socket. 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.



## Connections & Hardware Operation



### Center Button

There are several operation modes for the button in the center of the palette. These can be set within the Hardware Manager.

**Reset color** : the color set on the wheel will be cleared and the default scene will be restored.

**Play next scene** : the currently selected scene will stop and the next scene will play.

**Select next bank** : If more than 6 scenes are stored, you can select a scene on another scene bank. 1) press the centre button one or more times to select a scene bank number. The selected bank will flash. 2) Quickly, press a scene number to select a scene from the selected bank. If no scene is selected, it will continue playing the original scene.

**Toggle wheel color/scene mode** : the wheel can be used to select a color or a scene, depending on the mode. Tapping the button will toggle between scene selection and color selection mode. The center LED will blink when the wheel is set to scene mode.

**Disable button** : the button will have no function.

### Other Settings

There are several other settings which are available within the Hardware Manager.

#### Miscellaneous:

**Name** : a custom name for the controller, usefull if you have several controllers connected.

#### Parameters:

**Color/Dimmer** : determines whether the color/dimmer will be reset when a new scene is recalled and whether color/dimmer changes are stored globally, or per scene.

**Re-select scene** : determines what happens when a playing scene is re-selected.

**Reset color** : clear any color changes and reset to the scene's color vlaues.

**Reset dimmer** : clear any dimmer changes and reset to the scene's dimmer vlaues.

**Reset saturation** : clear any saturation changes and reset to the scene's saturation vlaues.

**Starting mode (L)** : change the language of the text which appears on the screen.

**Re-select scene** : settings related to the LEDs on the controller.

**Scene LED light level** : sets the brightness of the LEDs.

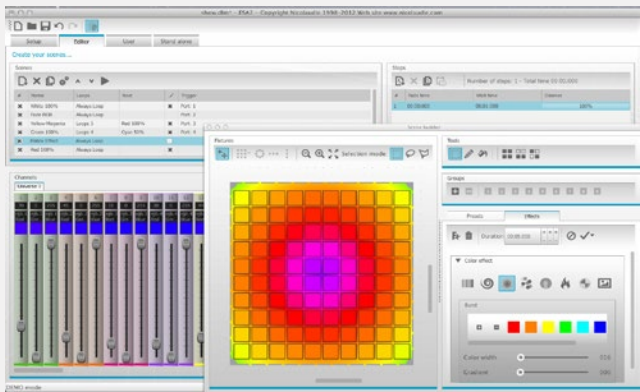
**RGB LED enable** : enabled and disables the RGB LED in the center of the wheel.

# Setting up the Controller

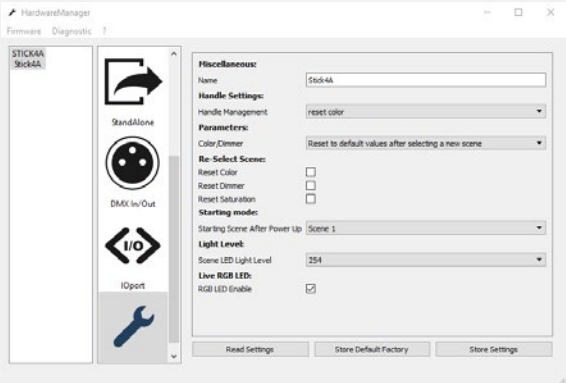
## Programming the Controller

The DMX controller can be programmed from a PC or Mac 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.

**ESA2 Software (Windows/Mac)**  
<http://www.nicolaudie.com/esa2.htm>



**Hardware Manager (Windows/Mac) - Firmware, clock..**  
<http://www.dmxsoft.com/global/ftp/hardwaremanager.zip>  
<http://www.dmxsoft.com/global/ftp/HardwareManager.dmg>



# Troubleshooting

## All 7 LED's on the controller are blinking

The controller is in bootloader mode. This is a special 'startup mode' which is run before the main firmware loads.

- Check that there is nothing metallic touching the back of the controller
- Try re-writing the firmware with the latest hardware manager

## The 6 scene LED's are blinking

No showfile has been detected on the controller.

- Download the latest software
- Update to the latest firmware using the included Hardware Manager
- Try re-writing the show file

## Contact us if you see the following errors

Center LED Red, cycling pattern on 6 LEDs - Error1  
 Center LED Green, cycling pattern on 6 LEDs - Error2  
 Center LED Blue, cycling pattern on 6 LEDs - Error3

## The lights are not responding

- Check the DMX +, - and GND are connected correctly
- Check that the driver or lighting fixture is in DMX mode
- Be sure that the DMX address has been set correctly
- Check there are no more than 32 devices in the chain
- Check that the DMX LED is flickering to the right of the SD card
- Connect with the computer and open Hardware Manager (found in the software directory). Open the DMX Input/Output tab and move the faders. If your fixtures respond here, it is possibly a problem with the show file

## The controller is not detected by the computer

- Be sure that the latest software version is installed (use the beta if available)
- Connect by USB and open the Hardware Manager (found in the software directory). If it's detected here, try to update the firmware
- Try another USB cable, port and computer