

STICK-KE1

Smart Touch Sensitive Intelligent Control Keypad



Overview

This complete stand alone wall-mounted DMX controller is the perfect answer to interior lighting control expectations. Along with a state of the art design, the product comes with amazing features such as 1024 DMX channels, touch sensitive panel, clock/calendar, remote control, Ethernet facilities, and much much more

The lighting levels, color and effects can be programmed from a PC, Mac, Android, iPad or iPhone using the included software.

<http://www.nicolaudie.com/stick-ke1.htm>

Key Features

- 8 touch sensitive scene buttons
- Color/dimmer/speed fader
- Touch sensitive buttons. No mechanical parts
- Touch sensitive fader allows for accurate color selection
- Multi-zone microSD memory
- Multi-room control with 200 scenes, 5 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 frame
- OEM customization
- Windows/Mac software to set dynamic colors/effects
- iPhone/iPad/Android remote and programming apps

Technical Data

Input Power	6-9V 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, Output Relay
Memory	microSD card 4GB max, FAT16 or 32
Temperature	-10 °C to 50 °C
Mounting	Single or double gang wall socket
Dimensions	168x128x11.5mm Complete Package 250x150x55mm
Weight	200g
Standards	EC, EMC, ROHS, ETL

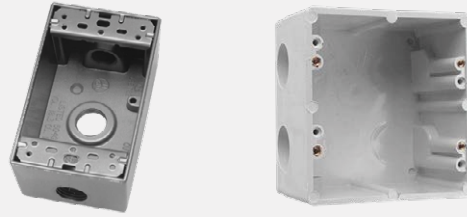
Optional Accessories

POWER4M 6V ACDC power supply

EASY INSTALLATION

1. Mount an electrical box inside the wall

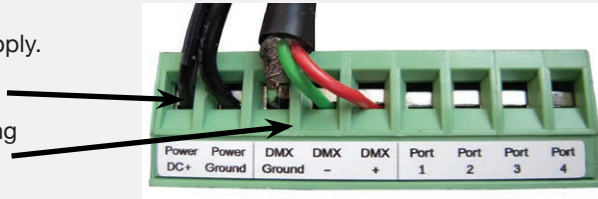
The controller can be installed in any standard electrical backbox. If you use a double size box, you can insert the power supply inside.



2. Connect the wires

POWER: Connect a 6V 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+)



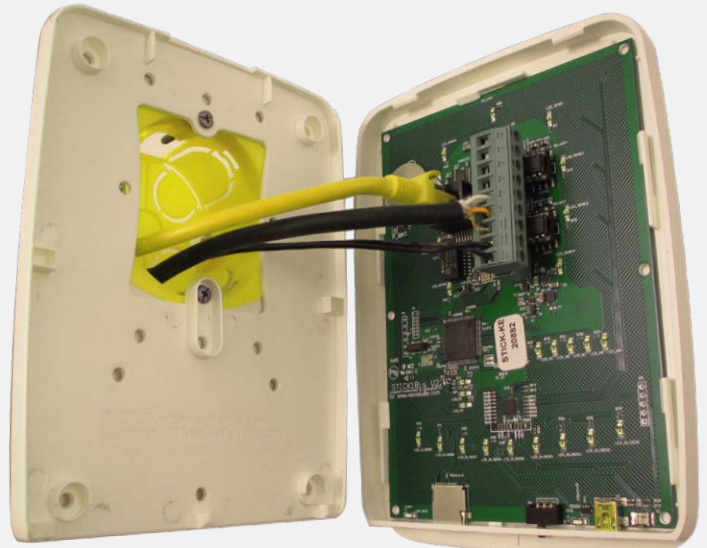
3. Mount the interface on the wall

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)
- Ethernet cable

The front panel is mounted by clipping the 2 tabs along the top edge to the back plate and then arching down. 1 screw should then be attached underneath to hold the controller in place. A bottom cover plate can also be attached with 2 screws to cover the sockets and switches.



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

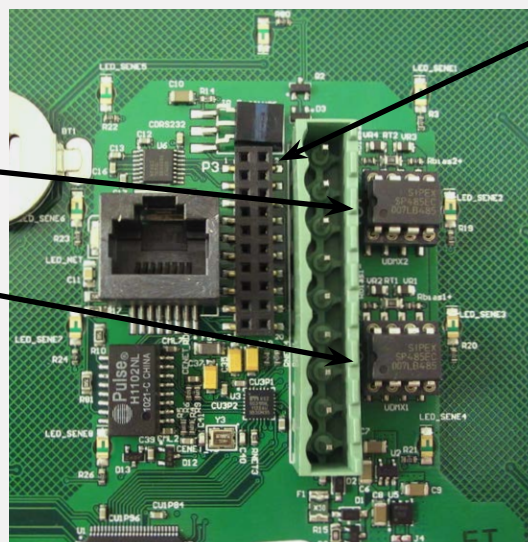
2x10 pins EXTENSION socket

DMX CHIP replacement

DMX universe #1

DMX universe #2

Ref: SP485ECN-L
MAX485 CSA



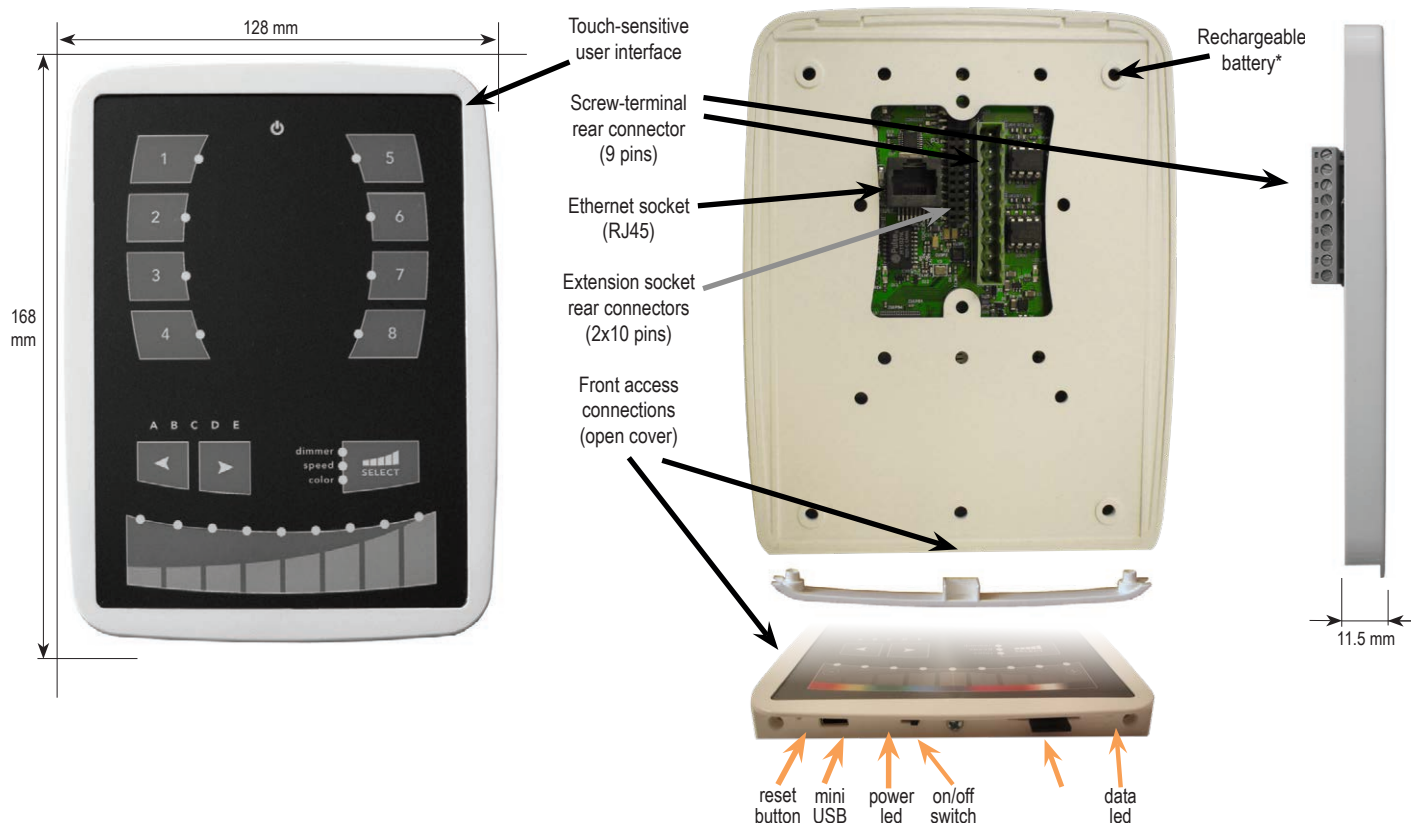
EXTENSION socket

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

Connections



SPECIFICATIONS / CONNECTIONS

		Built-in features	screw-terminal rear connector (9 pins)	extension socket rear connectors (2x10 pins)	front access connections (open cover)
Power Supply	6V DC 0.65A, supplied		•		USB
DMX Output #1	First universe, 512 channels DMX512 output		•	•	
DMX Output #2	Second universe, 512 channels DMX512 output (*)			•	
USB	USB 2.0 communication for PC/software				•
Ethernet	Advanced networking features	•			
Ports 1,2,3,4	4 Contact closure inputs, connect to ground for operating		•	•	
Ports 5,6,7,8	4 Contact closure inputs, connect to ground for operating			•	
User interface	14 buttons, 1 fader, 28 leds (Touch-sensitive keypad)	•			power/data leds
SDCARD	Micro sd card for stand alone memory use (supplied)				•
RESET	Push button for reset operation				•
RS232	RS232 Serial communication for external synchronisation			•	
Output relay	Automatic Stand by 5V signal			•	
Clock	Real time clock and calendar	•			
Infrared receiver	Easy learning triggering from any 36Khz remote control	•			

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.)

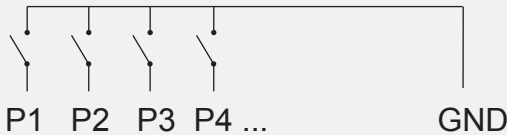
***To replace the Li-Ion rechargeable battery :**

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.

Setting up the Controller

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

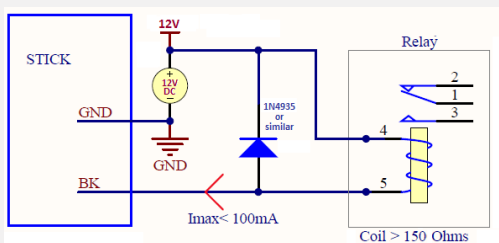
Make a cable using the 3 pins : TX, RX and G (GND)

Set the RS232 parameters to : 9600bds 8 bits, no Parity, 2 Stop bits

- 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**

The scene number (x) can be from 1 to 40. For instance, 11 means Page B Scene #3

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 on.



Example of relay :
FINDER Ref.
22.23.9.012.4000

Infrared Control

The controller works with the official IR remote control. By default, this function is disabled on the controller.

To enable IR control:

1. Load HardwareManager (included with software) and connect to controller
2. Click **Settings**
3. Under Triggering, Set IR to **Enabled (default configuration)**
4. Click **Store Settings**



iPhone/iPad/Android Control

The controller can be used with one of 3 different apps.

Lightpad

Designed to work seamlessly with the controller, Lightpad provides an easy way to control your lights over a local WiFi network. Use the slider to change the dimmer, color or speed, and the 8 scene buttons to select scenes and effects just like the wall panel.

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 (Android only)

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.

<http://www.nicolaudie.com/smartphone-tablet-apps.htm>

UDP Triggering

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

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 port 2430

Programming the Controller

The controller can 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.

ESA Pro Software (Windows) - Timeline + Multi-Zone

<http://www.nicolaudie.com/en/esapro.htm>

ESA2 Software (Windows/Mac) - Single Zone

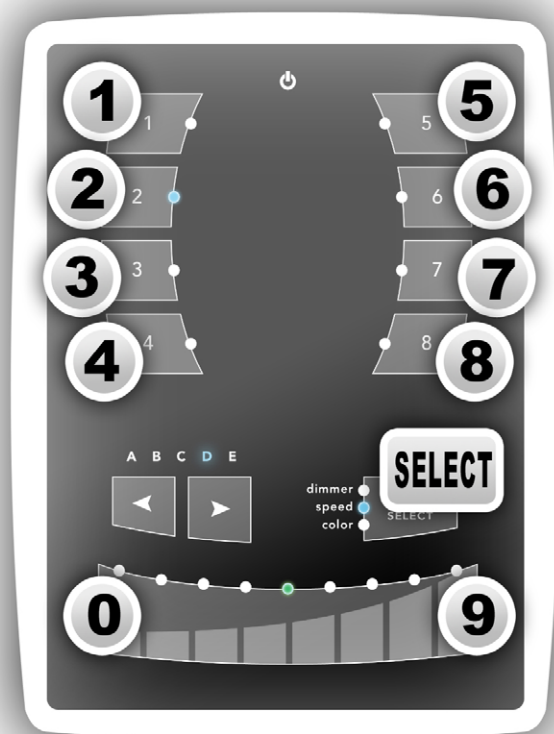
<http://www.nicolaudie.com/esa2.htm>

Hardware Manager (Windows/Mac) - Firmware, clock..


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

<http://www.dmxsoft.com/global/ftp/HardwareManager.dmg>

Some functions are available directly from the controller keypad using the SELECT button.



⚠ WARNING

 = 3:30pm


































3:30pm = 15:30

15:30 = **1530**



= 5 DEC 2008

5 DEC 2008 = **051208**

 + 	View time	Example : view 2:45pm = 14:45 = 1445 1445 = 2:45pm (USA) or 14:45 (Europe)
 + 	View date	Example : view 6 SEP. 2009 date = 060909 060909 = September 6th 2009
 + 	Set time	Example : set 3:30pm = 15:30 = 1530     = 1530
 + 	Set date	Example : set 5 DEC 2008 date = 051230       = 051208
 + 	Set Fade time	Example : set 01'32" fade time = 1 minute and 32 seconds = 0132     = 0132
 + 	Lock function	 This function locks the keypad (disabled by default) Use the TOOLS program to enable it and set the 4-digit code
 + 	Set IR	Example : assign an IR key to Scene #2  + 
 + 	Firmware version	Example : view 1.02 firmware version = 0102 0102 = firmware version 1.02

Troubleshooting

Fixtures / lights 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 HardwareManager (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
- We strongly recommend the use of a DMX Tester with our interfaces with any problem solving
- No DMX output? There could be a faulty DMX chip. The Stick1 has 2 x DMX chips labelled UDMX1 and UDMX2 which are user-replaceable (see pg2). Try swapping the chips over to test if one is faulty. Use a flat head screw driver to pry them gently from the socket

8 scene and standby LEDs flashing

There is no SD card detected

- Check the SD card is properly inserted
- Try formatting the SD card to FAT16/32 in the computer
- Try re-writing the show file
- Try replacing the SD memory card (Max 4Gb)

8 scene LEDs are flashing

There is no show file detected on the SD memory card

- Try formatting the SD card in the computer
- Try re-writing the show file
- Try writing the standalone demo show using HardwareManager
- Try replacing the SD memory card

8 scene LEDs cycling constantly

The interface is constantly restarting. There could be several causes :

- Corrupt show files. Remove SD card and backup contents. Use the HardwareManager Standalone screen to write the demo show. If this solves problem, rewrite your show using the dmx programming software and .arc or .dlm from your backup.
- Corrupt Firmware. Load HardwareManager and update the firmware. If not detected, try Bootloader Mode.
- Faulty power supply. Use a multimeter to check the power supply. The Stick-KE1 requires 6v and the older Stick-KU1 requires 9v. Power supplies do lose the ability to supply voltage over time. If below spec, replace power supply.

All LEDs on the controller are flickering

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 HardwareManager
- Try slow formatting SD to FAT16/32 or replacing the card

The controller is not detected by the computer

- Be sure that the latest software version is installed
- Make sure you are using Windows 7, 8 & 10 or OS X 10.8+
- Connect by USB and open the HardwareManager (found in the software directory). If it's detected here, try to update the firmware
- If not detected by HardwareManager, the firmware could be corrupted. This can be solved by forcing a firmware update in Bootloader Mode
 - Load HardwareManager
 - Connect the BootLoader solder points on the back and ...
 - Plug-in the USB cable at the same time. If successful the interface will appear in HardwareManager with the suffix '_BL'
 - Update the firmware

