STICK-KE1

Sunlite 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
Temperature	-10 °C to 50 °C
Mounting	Single or double gang wall socket
Dimentions Complete Package	168x128x11.5mm 250x150x55mm
Weight	200g
Standards	EC, EMC, ROHS, ETL (some are in progress)

Optional Accessories

POWER4M 6V ACDC power supply

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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+)
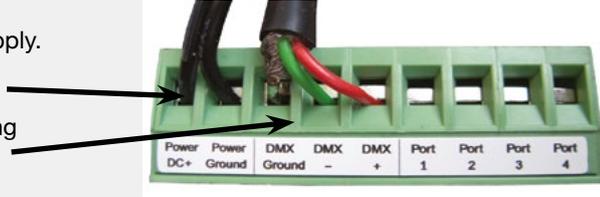
3. Mount the interface on the wall

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 underneith 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
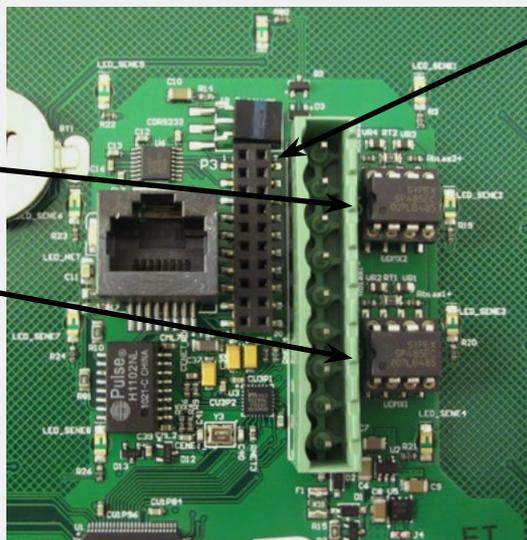
2x10 pins EXTENSION socket

EXTENSION socket

DMX CHIP replacement

DMX universe #1

DMX universe #2

Ref: SP485ECN-L
        MAX485 CSA

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

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Connections

Touch-sensitive user interface
Screw-terminal rear connector (9 pins)
Ethernet socket (RJ45)
Extension socket rear connectors (2x10 pins)
Front access connections (open cover)
Rechargeable battery*

128 mm
168 mm
11.5 mm

reset button | mini USB | power led | on/off switch | micro SD | data led

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.

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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 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.

P1   P2   P3   P4 ...   GND
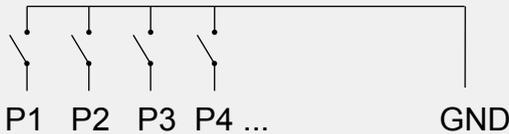
RS232 Triggering

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

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.
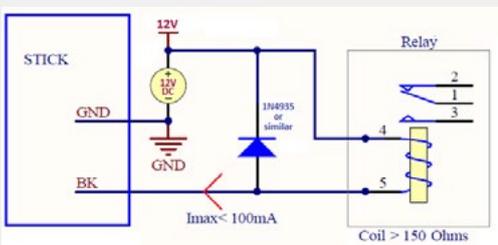
Example of relay : FINDER Ref. 22.23.9.012.4000

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 surpress power supply disturbance.
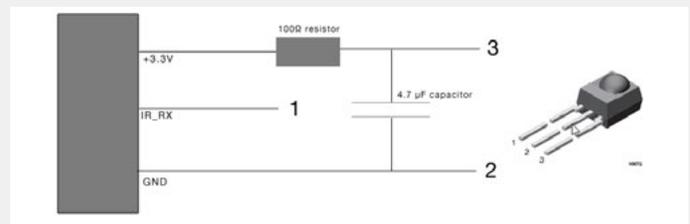
iPhone/iPad/Android Control

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

STICK Remote
Designed to work seamlessly with the controller, STICK Remote 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
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 filewall enabled, allow port 2430

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.

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

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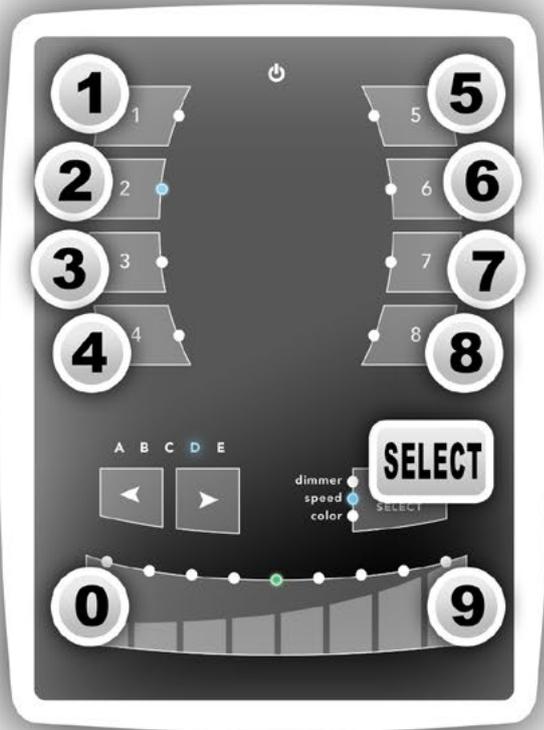
WARNING

⏰ = 3:30pm

3:30pm = 15:30

15:30 = 1530

DECEMBER 2008 = 5 DEC 2008

5 DEC 2008 = 051208

SELECT ✚ 1	View time	Example : view 2:45pm = 14:45 = 1445 1445 = 2:45pm (USA) or 14:45 (Europe)
SELECT ✚ 2	View date	Example : view 6 SEP. 2009 date = 060909 060909 = September 6th 2009
SELECT ✚ 3	Set time	Example : set 3:30pm = 15:30 = 1530 1 5 3 0 = 1530
SELECT ✚ 4	Set date	Example : set 5 DEC 2008 date = 051230 0 5 1 2 0 8 = 051208
SELECT ✚ 5	Set Fade time	Example : set 01'32" fade time = 1 minute and 32 seconds = 0132 0 1 3 2 = 0132
SELECT ✚ 6	Lock function	🔒 This function locks the keypad (disabled by default) Use the TOOLS program to enable it and set the 4-digit code
SELECT ✚ 9	Set IR	Example : assign an IR key to Scene #2 2 ✚ [remote]
SELECT ✚ 0	Firmware version	Example : view 1.02 firmware version = 0102 0102 = firmware version 1.02
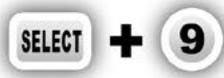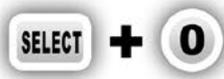
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Troubleshooting

The 8 Scene 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 hardware manager
-Try formatting or replacing the SD card

All LEDs on the controller are flashing

There is no SD card detected.
-Check the SD card is properly connected
-Try formatting the SD card in the computer
-Try re-writing the show file
-Try replacing the SD memory card

The controller is not detected by the computer

-Be sure that the latest software version is installed
-Connect by USB and open the Hardware Manager (found in the software directory). If it's detected here, try to update the firmware

All LEDs on the controller are flickering except the standby LED

There is no showfile detected on the SD memory card.
-Try formatting the SD card in the computer
-Try re-writing the show file
-Try replacing the SD memory card

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