

5 ZONE DMX WALL CONTROLLER

The Acolyte 5 Zone DMX Wall Controller creates lighting scenes and moods from a sleek touch-sensitive display. Program and save unique transitions, rolls and fades with ease. Choose between full spectrum color or variable color temperature control. Universal protocol DMX controllers can control any lighting fixture that supports DMX protocol.

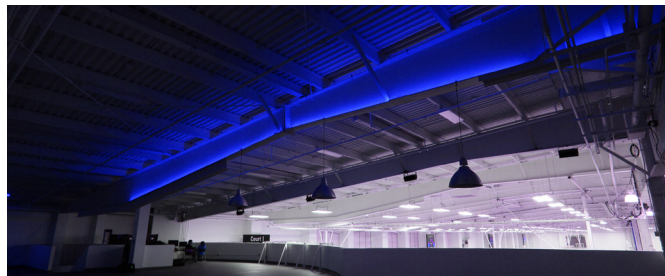
- Manage 2 universes of 512 DMX channels
- Change color, brightness, speed and scene
- 5 - 6V DC input
- Touch capacitive
- Programmable with ESA2 PC/Mac software
- Up to 200 preset scenes on 5 zones
- Available in black
- Memory stored on SD card

Applications:

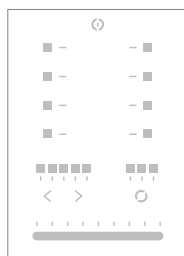
Commercial
Entertainment
Healthcare

Hospitality
Museums
Public Spaces

Residential
Retail



DIMENSIONS



Width: 4.17 in (106 mm)
Length: 5.75 in (146 mm)
Depth: 0.43 in (11 mm)

ORDERING GUIDE

STANDARD

Category

DMXCTRL

DMXCTRL - 5 ZONE DMX CONTROLLER

INSTALLATION

EASY INSTALLATION

1. Mount an electrical box inside the wall.

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



3. Mount the back side of the interface on the wall with 2 or more screws.

Then plug in the connectors:

- DMX and power (connector block or RJ45)
- Ethernet cable (allows LAN connection)

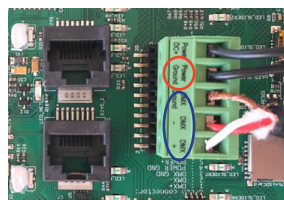
The front panel is mounted by pressing it against the back plate and then sliding down. Two screws can then be attached underneath to prevent removal.



2. Connect the wires.

POWER: Connect a 5 - 6V DC 0.6A ACDC supply. Be sure to not invert the + and the ground.

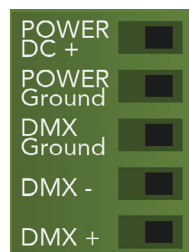
DMX: Connect the DMX cable to the lighting receivers (LEDs, dimmers, fixtures) (for XLR: 1=ground 2=dmx- 3=dmx+)



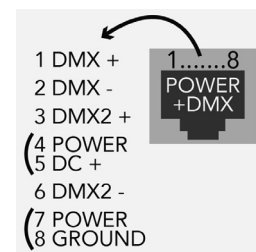
NOTE:

- **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**

POWER+DMX WITH THE CONNECTOR BLOCK



POWER+DMX WITH THE RJ45 CABLE



I/O CONNECTIONS

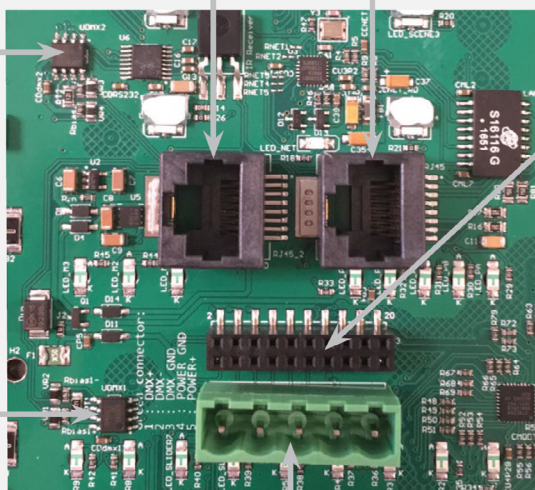
POWER+DMX
with RJ45

ETHERNET
Network Port

DMX universe #1

DMX CHIP
replacement
Ref: SP485ECN-L
MAX485 CSA

DMX universe #2



Phoenix Type Connector Block

EXTENSION socket

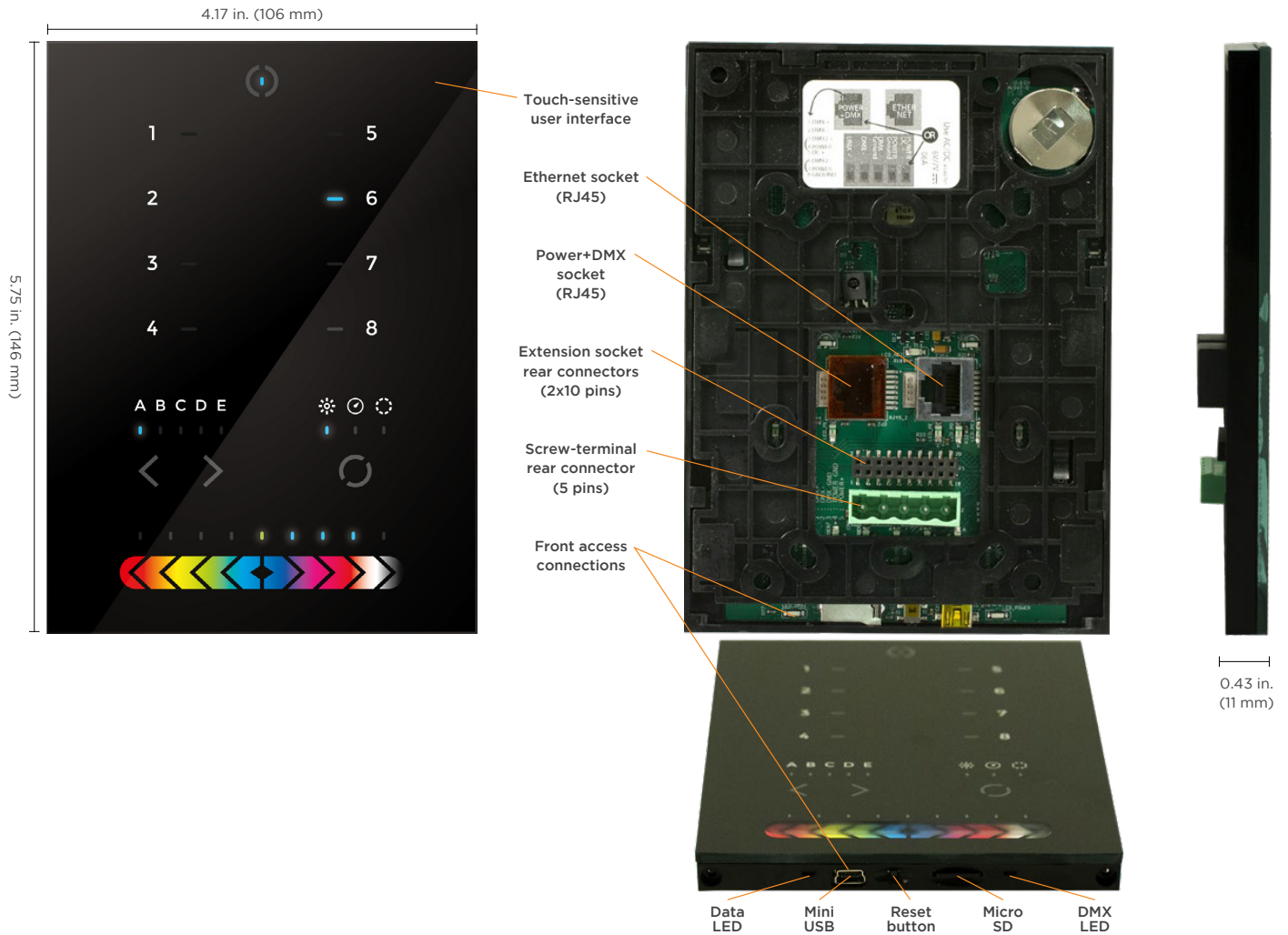
GND_DMXX	DMX1-	DMX1+	DMX2-	DMX2+	Relay	3.3V	IR_RX	GND	VIN *
2	4	6	8	10	12	14	16	18	20
1	3	5	7	9	11	13	15	17	19
RS232 TX	PORT8	PORT7	PORT6	PORT5	PORT4	PORT3	PORT2	PORT1	

* VIN pin 20 is not protected and should not be used

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 (5 PINS)	EXTENSION SOCKET REAR CONNECTORS (2X10 PINS)	CONNECTORS (2X10 PINS) FRONT ACCESS CONNECTIONS (OPEN COVER)
Power Supply	7V DC 0.65A, supplied		•		
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 1-8	Contact closure inputs, connect to GND to trigger				
User Interface	14 buttons, 1 fader, 28 leds (Touch-sensitive keypad)	•			Power/data LEDs
SD Card	MicroSD 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	•			

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 :

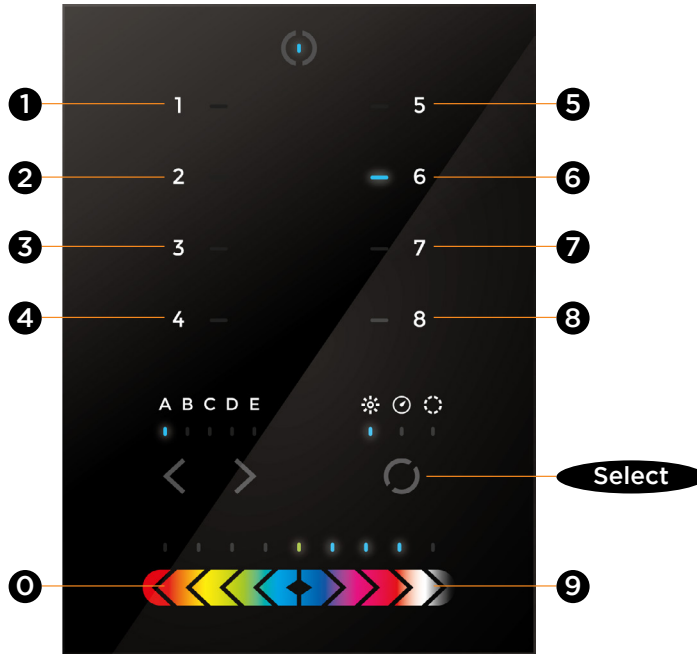
1. You need a rechargeable 3.6v LIR 2032 replacement battery
2. Remove the back panel by pulling down and sliding it out.
3. Using a paper clip push the battery from the bottom so it slides out of its cage.

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.

FUNCTIONS / COMPONENTS / FEATURES / TECHNICAL DATA

COMPONENTS

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



	FUNCTION	EXAMPLES
Select + 1	View time	View time 2:45pm (14:45) = 1445
Select + 2	View date	View date Sep. 6, 2022 = 060922
Select + 3	Set time	Set time to 3:30pm (15:30) = 1530 1 5 3 0
Select + 4	Set date	Set date to Dec. 18, 2022 = 181222 1 8 1 2 2 2
Select + 5	Set fade time	Set 1m 32s fade time = 0132 0 1 3 2
Select + 6	Lock function	This function locks the keypad (disabled by default) Use Hardware Manager to enable it and set the 4-digit code
Select + 0	Firmware version	0121 = firmware version 1.21

TIME FORMAT
3:30pm (15:30) = **1530**

TIME FORMAT
5 DEC 2018 = **051218**

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 and Dry Contact Ports

Clock and calendar with Sunrise/Sunset triggering

Network communication. Control lighting remotely

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
Connections	USB, Ethernet, RS232, Clock, 8 dry contact ports, Output Relay
Memory	microSD card 4GB max, FAT16/32
Temperature	14° - 122° F (-10° - 50° C)
Mounting	Single or double-gang wall socket
Dimensions	5.75 x 4.17 x 0.43 in. (146 x 106 x 11 mm)
Weight	0.54 lb (247 g)
Standards	EC, EMC, RoHS, ETL
Optional Accessory	6V ACDC power supply

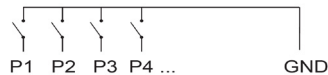
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GUIDE

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.



Relay

A relay can be connected between the RELAY and GND sockets of the 20 pin extension socket. This is an OPEN COLLECTOR OUTPUT that can drive up to 150mA, 20V. Current flows when the controller is on and is stopped when in standby. It can be used to turn off other equipment such as lighting drivers to save power (see diagram right).

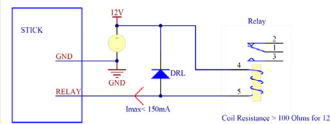
RS232 Triggering

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



Example relay :
FINDER Ref. 22.23.9.012.4000

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 from a tablet or smartphone. 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. (www.nicolaudie.com/lightpad.htm)

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. (www.nicolaudie.com/easy-remote.htm)

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.

UDP Triggering

The DMX controller can be connected to an existing automation system over a network and triggered via UDP packet on port 2430. Use Hardware Manager to find IP address of DMX controller. Refer to the remote protocol document for more information. www.nicolaudie.com/download.htm

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

<https://www.nicolaudie.com/esapro.htm>

ESA2 Software (Windows/Mac) - Single Zone

www.nicolaudie.com/esa2.htm

Hardware Manager (Windows/Mac) - Firmware, clock

www.nicolaudie.com/download.htm

GUIDE

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 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
- 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 controller has 2 DMX chips labelled UDMX1 and UDMX2 which are user-replaceable (see page 2). Try swapping the chips over to test if one is faulty. Use a flathead 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 rewriting 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 rewriting the show file
 - Try writing the standalone demo show using Hardware Manager
 - 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 back up contents. Use the Hardware Manager "Standalone" screen to write the demo show. If this solves the problem, rewrite your show using the DMX programming software and .arc or .dlm from your backup.
 - Corrupt Firmware. Load Hardware Manager and update the firmware. If not detected, try Bootloader Mode.
 - Faulty power supply. Use a multimeter to check the power supply. The Stick-KE1 and KE2 require 6-7V. The older Stick-KU1, which used a miniSD card rather than a microSD, requires 9V. Power supplies do lose the ability to supply voltage over time. If below specification, replace power supply.

All LEDs on the controller are flickering

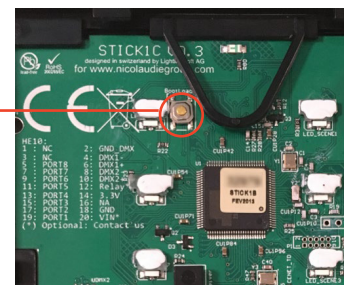
The controller is in Bootloader Mode. This is a special 'startup mode' which is run before the main firmware loads.

- Check that there is nothing metallic touching the back of the controller
- Try rewriting the firmware with the latest Hardware Manager
- 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 Hardware Manager (found in the software directory). If it's detected here, try to update the firmware
- If not detected by Hardware Manager, the firmware could be corrupted. This can be solved by forcing a firmware update in Bootloader Mode
- Load Hardware Manager
- Press Bootloader button on the back (see image):
- Plug in the USB cable at the same time.
- If successful the interface will appear in Hardware Manager with the suffix '_BL'
- Update the firmware

Bootloader Button



CONNECTIONS

WIRING DIAGRAM

