

LR512

USB & WiFi - DMX controller



Overview

The Stand Alone DMX controller can be used to control a wide variety of different DMX systems- from RGB/RGBW to more advanced moving and color mixing luminaires, DMX audio players and fountains. The controller comes with a variety of features including 1024 DMX channels , clock/calendar, iPhone/iPad/Android remote control, WiFi facilities, dry contact port triggering and flash memory.

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

<http://www.lightriderapp.com>

Key Features

- DMX Stand Alone controller
- USB & WiFi connectivity for programming/control
- Up to 2 DMX512 universes in live and stand alone
- Stand Alone mode with 99 scenes
- 128k flash memory for storing stand alone programs
- 8 dry contact trigger ports via HE10 connector
- Clock and calendar with sunrise/sunset triggering
- Network communication. Control lighting remotely
- OEM customization
- Windows/Mac software to set dynamic colors/effects
- iPhone/iPad/Android remote and programming apps
- SUT Technology allows the device to be used with other Nicolaudio Group software via an online upgrade

Note: feature compatibility depends on which application is being used with the controller and which SUT add-ons have been purchased

Technical Data

Input Power	5-5.5V DC 0.6A
Output Protocol	DMX512 (x2)
Programmability	PC, Mac, Tablet, Smart-phone
Available Colors	Blue, Orange, Gray
Connections	USB-C, 2x XLR3, 2x HE10, battery
Memory	128k flash
Environment	IP20. 0°C - 50°C
Buttons	2 buttons to change scene 1 button to change dimmer
Dimensions	79x92x43mm 120g Complete Package 140x135x50mm 340g
OS Requirements	Mac OS X 10.8-10.13 Windows 7/8/10
Standards	ROHS

Optional Accessories

POWER1_EU/UK/US 5V ACDC power supply with EU/UK/US plug

CONNECTIVITY

Live use with a computer



Stand Alone or live use with a smartphone/tablet



External HE10

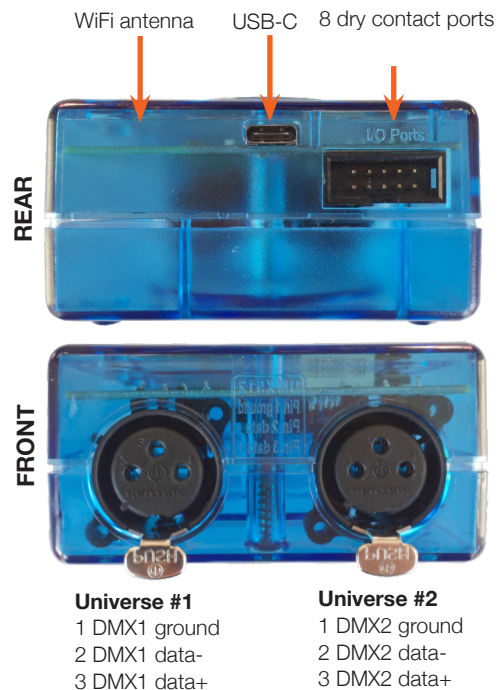
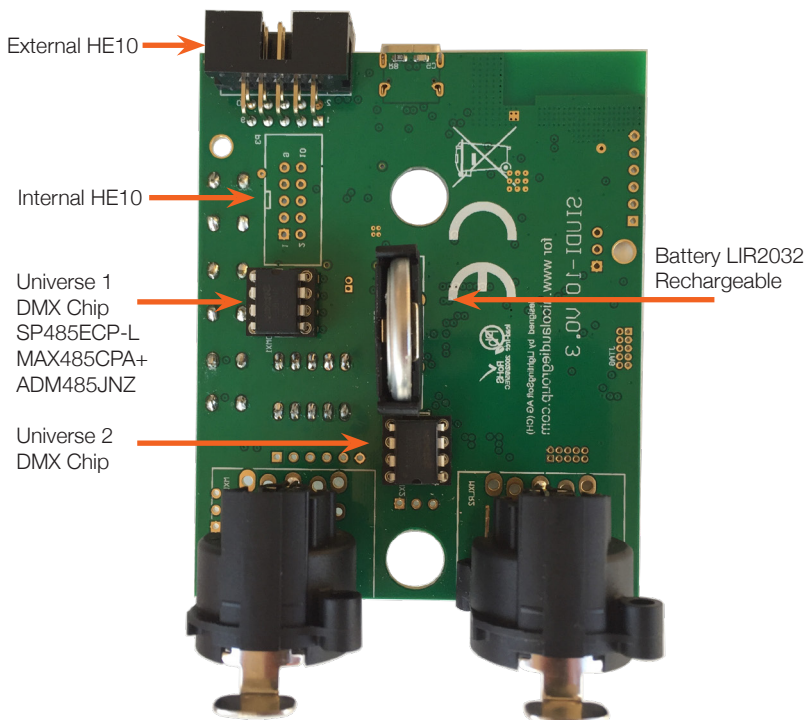


- P1 PORT 1
- P2 PORT 2
- P3 PORT 3
- P4 PORT 4
- P5 PORT 5
- P6 PORT 6
- P7 PORT 7
- P8 PORT 8
- GND Ground

Internal HE10



- 1 Ground
- 2 Dimmer
- 3 DMX1+
- 4 PREVIOUS
- 5 DMX1-
- 6 NEXT
- 7 Zone
- 8 LED DMX
- 9 VUSB
- 10 LED USB



Setting up the Controller

Network Control

The controller can be connected directly from a computer/ smartphone/tablet (Access Point Mode), or it can be connected to an existing local network (Client Mode). The controller will work in Access Point (AP) Mode by default. See *Programming the Controller* for further information

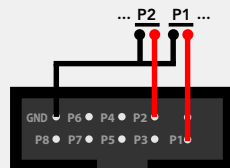
- In AP Mode, the default network name is **Smart DMX Interface XXXXXX** where X is the serial number and the default password is **00000000**
- In Client Mode, the controller is set by default to get an IP address from the router via DHCP. If the network is not working with DHCP, a manual IP address and subnet mask can be set. If the network has a firewall enabled, allow port 2430

Upgrades

The controller can be upgraded at store.dmxsoft.com. Hardware features may be unlocked and software upgrades may be purchased without the need to return 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) using the external HE10 connector. Note: the scene will not be switched off when the switch is released.



iPhone/iPad/Android Control

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. Available for iOS and Android.

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. Currently available for Android only.

Light Rider

Designed for live use, moving and color effects can be created automatically to create an automated light show.

UDP Triggering

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

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 and also available on the App Store.

ESA2 Software (Windows/Mac) - Single Zone

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

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

<https://storage.googleapis.com/nicolaudie-eu-tools/Release/HardwareManager.exe>

<https://storage.googleapis.com/nicolaudie-eu-tools/Release/HardwareManager.dmg>

The iPhone/iPad version can be found on the app store

Service

Servicable parts include:

- 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 underside of the plastic casing with the 2 screws
3. Pull the battery out of its holder, being careful not to pull the holder itself
4. Slide the replacement battery in from the top, making sure the positive side is as marked
5. Re-attach the casing

Troubleshooting

'88' is showing on the display

The controller is in bootloader mode. This is a special 'startup mode' which is run before the main firmware loads. Try re-writing the firmware with the latest hardware manager

'EA' is displayed

There is no show on the device.

The controller is not detected by the computer

- Be sure that the latest software version is installed from our website
- Connect by USB and open the Hardware Manager (found in the software directory). If it is detected here, try to update the firmware. If it is not detected, try the method below.
- Bootloader Mode
Sometimes the firmware update may fail and the device may not be recognised by the computer. Starting the controller in 'Bootloader' mode forces the controller to start at a lower level and in some cases allows the controller to be detected and the firmware to be written. To force a firmware update in Bootloader Mode :
 1. Power off your interface
 2. Start HardwareManager on your computer
 3. Press and hold the dimmer button (marked 'PB_ZONE" on PCB) and connect the USB cable at the same time. If successful, your interface will appear in HardwareManager with the suffix _BL.
 4. Update your firmware

'LI' is showing on the display

This stands for 'LIVE' mode and means that the controller is connected and running live with a computer, tablet or smartphone.

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 red DMX LED is flickering. There's one by each XLR
- 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

What do the LED's on the controller signify?

- Blue :
 - ON : Connected but no data transmission
 - Flickering : WiFi activity
 - OFF : no WiFi connection
- Yellow : The device is receiving power
- Red : Flickering indicates DMX activity
- Green : USB activity