LR512

Light Rider USB & WiFi - DMX controller

Overview

The LR512 DMX controller can control a wide variety of different DMX systems- from RGB/RGBW tto more advanced moving heads, specialist fixtures and stage effects.

Directly connect to the Light Rider app via an Apple iPad or Android tablet to control 512 DMX channels (expandable up to 1024 channels).

SUT (Smart Upgrade Technology) enables upgrades such as compatibility with additional software / apps and extra DMX channels to be purchased at store.dmxsoft.com.

www.lightrider.com

Key Features

- Light Rider app connectivity for Android tablet and Apple iPad
- Tablet app designed for live use to create an automated light show.
- 512 channels for Live use (expandable to 1024)
- 128 channels for Stand Alone use (expandable to 1024)
- USB & WiFi connectivity for programming/control
- DMX Stand Alone controller for computer software
- Stand Alone mode with 99 scenes
- 100KB flash memory for storing stand alone programs
- Network communication. Control lighting remotely
- SUT Technology allows the device to be used with other Nicolaudie Group software via license upgrade

Technical Data

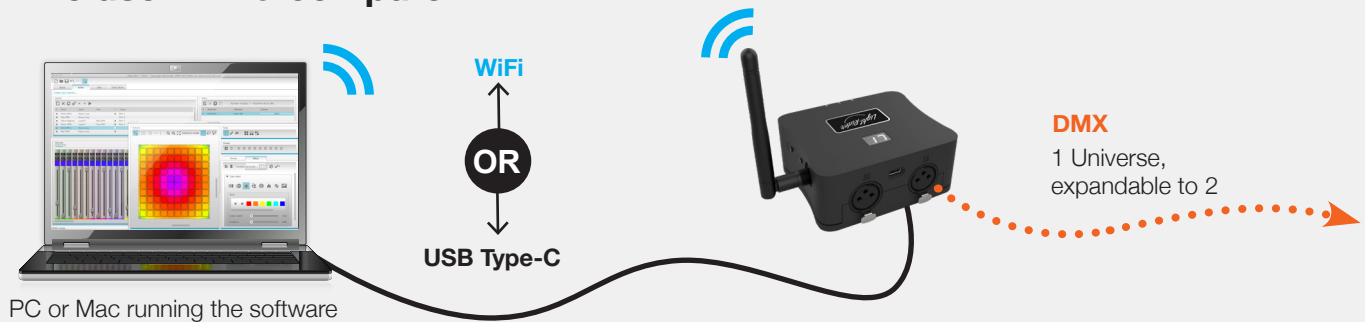|	
Input Power	5-5.5V DC 0.6A
Output Protocol	DMX512
Programmability	Android Tablet and Apple iPad (Light Rider app). PC and Mac (for Hardware Manager & computer software). See website for specific requirements.
Connections	USB-C, 2x XLR3
Memory	100KB flash
Environment	IP20. 0°C - 50°C
Buttons	2 buttons to change scenes (next and previous)
Dimensions Packaging	95x85x40mm 130g 138x138x65mm 350g
OS Requirements	Refer to specific software documentation
Standards	Low voltage, EMC, RED and RoHS

Optional Accessories

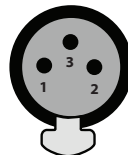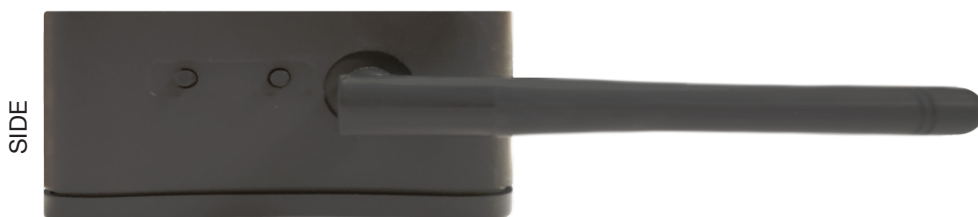**POWER1_EU/UK/US**   5V ACDC power supply with EU/UK/US plug

CONNECTIVITY
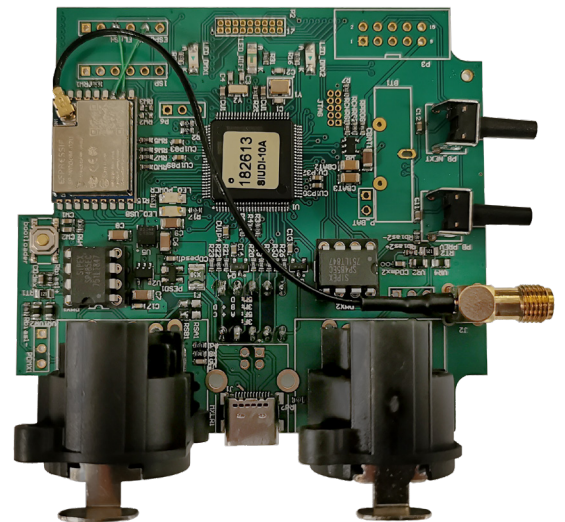
Light Rider app Live use with a tablet

POWER

USB Type-C

WiFi

AC/DC ADAPTOR

5V-5.5V

POWER1 PSU

DMX
1 Universe,
expandable to 2

iPad, Android

Live use with a computer

WiFi

OR

USB Type-C

PC or Mac running the software

DMX
1 Universe,
expandable to 2

I/O Connections

USB-C

REAR

FRONT

SIDE

Universe #1,2
1 DMX1 ground
2 DMX1 data-
3 DMX1 data+

Using the Controller

Mobile/Tablet Control

Light Rider (Android/iOS) - Live lighting shows
Designed for live use. Light Rider lets you control your DMX lights easily without the need to complex programming. Connect to the app using the device password found on the underside of your controller.

Stand Alone Control

Write scenes and effects to your controller using a compatible software (e.g. Daslight, or Sunlite - license upgrade required) for Stand Alone use. Nicolaudie Group provide free apps to allow remote control over a local area network when running in standalone mode. Connect the controller to a Wifi network. The apps will find all compatible devices on the network.

Arcolis Remote (Android/iOS) - Simple remote control app
A simple interface providing an easy way to control your device in Stand Alone.

Arcolis Remote Pro (Android/iOS) - Remote control app
Create a customized remote control interface to control Stand Alone scenes written to the devices memory.

Software Control

DMXSoft (Windows/Mac) - License store
Extra software licenses can be purchased at **store.dmxsoft.com**. Refer to specific software documentation for specific information.

Network Control

The controller can be connected to directly from a computer/smartphone/tablet (Access Point Mode), or it can be connected to an existing local network (Station Mode). The controller will work in Access Point (AP) mode by default. Adjust your network settings using the Hardware Manager tool for PC or Mac.

- In Acess Point Mode, the default network name is **Smart DMX Interface XXXXXX** where X is the **serial number**. The WiFi key/password is written on a sticker on the underside of the controller.
- In Station 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 filewall enabled, be sure to allow ports 2430 and 2431.

SUT License Upgrades

Extra hardware features (e.g. extra DMX512 universes) and software compatibility can be unlocked at: store.dmxsoft.com/my_interfaces. Any licence changes will be automatically synchronised the next time you connect your interface to almost any Nicolaudie Group software while connected to the internet.

UDP Triggering

The controller can be connected to an existing automation system using a local area network (LAN) and triggered via UDP packets on port 2430. Refer to the remote protocol document for more information. Note: This interface cannot be controlled over the internet.

Device Management

The device settings can be adjusted through the Hardware Manager tool (available for PC or Mac). Using Hardware Manager you can update your device firmware, choose your device WiFi mode (Access Point, Station, or Dual mode), customise your WiFi settings, and change/remove the app connection password.

Hardware Manager (Windows/Mac) - Firmware, WiFi, password, settings.
https://eu-tools.n-g.co/Release/HardwareManager.exe
https://eu-tools.n-g.co/Release/HardwareManager.dmg

Troubleshooting

What do the LED's on the controller signify?

- **Top LCD display** : Shows the device status
  01 : Playback of scene 01 from Stand Alone memory
  EA : No scenes stored in Stand Aloine memory for playback
  LI : Live, means the device is connected to an app or software
  88 : The device is in bootloader mode

- **Front #1; Light Blue** : DMX port 1
  Flickering : Indicates DMX activity in port 1

- **Front #2; Dark Blue** : WiFi
  ON : Connected but no data transmission
  Flickering : WiFi activity
  OFF : No WiFi connection

- **Front #3; Light Blue** : DMX port 2
  Flickering : Indicates DMX activity in port 2

- **Beneath (inside); Yellow** : The device is receiving power

- **Beneath (inside); Green** : USB activity

'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 available from the downloads section of our website.

'LI' is showing on the display

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

'EA' is showing on the display

The controller is in Stand Alone mode (not connected to any software or app), but there is no show written to 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 to 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. Remove the PCB from the housing (remove the screws from underneath)
  3. Start Hardware Manager on your computer
  4. 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.
  5. Update your firmware

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