

# SUNLITE-RC

sunlite

## Sunlite Suite Rack-Mounted DMX Controller



### Overview

The SUNLITE-RC is the flagship DMX interface for Sunlite Suite 3 software. Designed to run the most advanced lighting and shows with software time triggers, multimedia (audio and video) and MIDI Time Code sync. Featuring 3072 DMX channels (expandable to 4096) on 6 XLR connectors and 20 Art-Net universes (10,240 channels) from your PC.

The Sunlite-RC metal chassis fits neatly into any 19" rack mount with 1U of space. As well as live performance through Sunlite Suite 2 & Sunlite Suite 3 software, this interface can operate as a Stand Alone DMX controller with 5 zones and 99 scenes.

SUT (Smart Upgrade Technology) allows license upgrades to enable extra features to be enabled and compatibility with selected current and future Nicolaudie Group software.

### Key Features

- 6x DMX512 universes in Live mode (computer/tablet)
- 1x DMX512 universes in Stand Alone mode
- Expandable from 6 to 8 DMX Live universes
- Expandable from 1 to 4 DMX Stand Alone universes
- DMX in or out
- 20x Art-Net universes in Live mode (expandable)
- Sunlite Suite 3 Full license
- Stand Alone mode with 99 scenes across 5 zones
- USB-B & Ethernet for programming/control
- Multi-zone microSD memory
- 16 dry contact trigger ports
- Clock & calendar Stand Alone triggering
- Network communication. Control lighting remotely
- Smart Upgrade Technology (SUT) upgrades
- RDM compatible with RDM Manager tool
- Windows software to create and operate live shows
- Windows software to write Stand Alone scenes
- Phone/iPad/Android remote and programming apps

### Technical Data

|                        |                                                             |
|------------------------|-------------------------------------------------------------|
| <b>Input Power</b>     | 5-5.5V DC 0.6A                                              |
| <b>Output Protocol</b> | DMX512                                                      |
| <b>Programmability</b> | Windows, Mac OS, iOS, Android                               |
| <b>Connections</b>     | Type B USB, XLR3, XLR5 Ethernet, 15EDGRH-2.5 20PIN, battery |
| <b>TCP Connections</b> | 2                                                           |
| <b>Memory</b>          | microSD SD & SDHC (32Gb Max)                                |
| <b>Environment</b>     | IP20. 0°C - 50°C                                            |
| <b>Buttons</b>         | 2 buttons to change scene + 1 button to change zone         |
| <b>Dimensions</b>      | 240x100x45mm 550g                                           |
| <b>OS Requirements</b> | Refer to specific software documentation                    |
| <b>Standards</b>       | EC, EMC, ROHS                                               |

### Optional Accessories

**POWER1EU/UK/US** 5V AC/DC PSU with EU/UK/US plug

# CONNECTIVITY

## Live use with a computer

When connected to software the controller will output DMX directly from the software and will display LI on the screen.

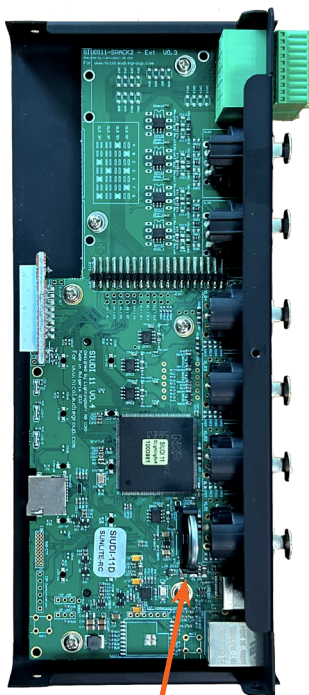


## Stand Alone or live use with a smartphone/tablet

The controller will start in Stand Alone Mode when powered on. It will look for a project stored on the microSD card and then begin playing scenes. A01 indicates Scene 1 from zone A is playing. Trigger scenes using a mobile device/tablet via Arcolis Remote Pro app.

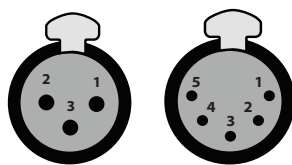


## I/O Connections



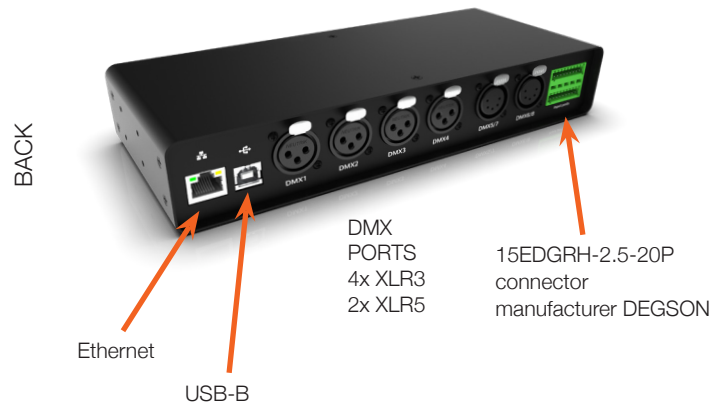
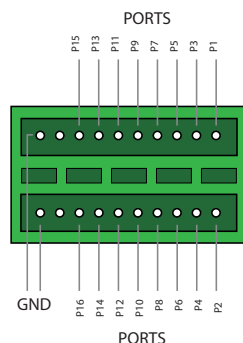
Rechargeable battery holder (LIR 2032 3.6v)

DMX / XLR : Pin Out (Front view)



- Pin numbers
- 1 DMX ground
  - 2 DMX1 data-
  - 3 DMX1 data+
  - 4 DMX2 data-
  - 5 DMX2 data+

15EDGRH-2.5 20PIN SOCKET  
Manufactured by DEGSON



# Using the Controller

## Available Software

The controller can be programmed from a PC, iOS (Apple) or Android device using the software listed below. Refer to the corresponding software manual for more information. Firmware and settings can be updated using Hardware Manager (installed with programming software).

### Programming Software



#### Sunlite Suite 3 - Live entertainment software (Windows)

[https://eu-software.n-g.co/Release/sun\\_suite3.exe](https://eu-software.n-g.co/Release/sun_suite3.exe)  
[https://eu-software.n-g.co/Release/sun\\_suite3Beta.exe](https://eu-software.n-g.co/Release/sun_suite3Beta.exe)



#### Sunlite Suite 2 - Legacy software (Windows)

[https://eu-software.n-g.co/Release/sun\\_suite2.exe](https://eu-software.n-g.co/Release/sun_suite2.exe)



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

<https://eu-tools.n-g.co/Release/HardwareManager.dmg>  
<https://eu-tools.n-g.co/Release/HardwareManager.exe>

### Apple iOS and Android Apps



#### Sunlite Remote (iOS, Android)

Remote control app for Sunlite Suite 3



#### Arcolis Remote Pro

Remote control app for live control

## Basic Operation

Using your controller with software can be done via the following steps:

- Download Sunlite software from [sunlitepro.com/download](http://sunlitepro.com/download)
- Connect the controller via USB to a computer
- Connect your lights to the XLR ports
- Use Sunlite software to program live shows (refer to manual / tutorials)
- Use the scenes created in the software to control your lights live

Your controller can also be used in Stand Alone mode. The controller comes pre-programmed with a demo RGB show with 8 scenes. This demo show can be rewritten at any time using Hardware Manager. In most cases you will want to create your own Stand Alone show for your specific fixtures using our software.

## SUT Licence Upgrades

Extra hardware features (e.g. extra DMX512 universes) and software compatibility can be unlocked at:  
[https://store.dmxsoft.com/my\\_interfaces](https://store.dmxsoft.com/my_interfaces)

- Click + *Register a new Interface* and download the SUT driver software. Follow the on-screen prompts.

- Once registered, select your interface on the left. You can buy new upgrades and software licenses, change the device name or transfer the device to a new owner. 30 day software trials are available.

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.

Note: The Art-Net upgrade allows live output from software only (Daslight, Sunlite etc). The controller cannot output Art-Net when operating in Stand Alone mode.

## Remote Control Over Local Network

Free apps are provided to allow remote control over a local area network when running in stand alone mode. Connect the controller to a WiFi network. The apps will find all compatible devices on the network using multicast / broadcast messages. Use Hardware Manager to configure the network settings for your controller.

**Sunlite Remote** - A simple interface that mirrors the Console screen of Sunlite Suite 3, allowing you to remotely control your live show remotely. (iOS / Android)

**Arcolis Remote Pro** - Create a customized remote controller with buttons, faders and color control. Control your device remotely in Stand Alone. (iOS / Android)

### UDP Network 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.

## Display Messages

000 022 at startup -> means serial number 1 000 022  
A01 to E99 -> Stand Alone OK (Zone A-E + Scene No. displayed)  
USB/Eth PC -> connected to a Windows software (live mode)  
USB/Eth nAC -> connected to a MacOS software (live mode)  
USB/Eth LI -> connected to a Linux software (live mode)  
USB/Eth APP -> connected to another OS app (live mode)

See **Troubleshooting** section for other messages.

## Mount Controller

19 inch rack mount adapters included with interface.

# Troubleshooting

## 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. Start Hardware Manager on your computer.
  3. Activate Bootloader by holding down the 3 buttons under the screen (A-B-C, < , > ) while connecting power. If successful, your interface will appear in HardwareManager with the suffix `_BL`.
  4. Update your firmware.

## '8.8.8.' is flashing 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.

## 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?

- **Yellow** : The device is receiving power
- **Red** : Flickering indicates DMX activity
- **Green** : USB activity

## Displayed error messages

You may see one of the following messages on the LCD display

|                |                                                                                                                                                                            |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>no LIC</b>  | No licences found on device. See information below this table.                                                                                                             |
| <b>no SD</b>   | No SD card detected. Insert an SD card.                                                                                                                                    |
| <b>no Sho</b>  | No show files detected on the SD card. Write a show using our software.                                                                                                    |
| <b>bAd Sho</b> | Invalid show found on SD card. Write a new show using our software                                                                                                         |
| <b>err drl</b> | Drive fail.<br>- Make sure the microSD is formatted to FAT16 or FAT32 and 32Gb or less in capacity.<br>- Try replacing microSD, if faulty.                                 |
| <b>err CHA</b> | Too many channels in the show files. Reduce number of channels in your show or purchase channel upgrade if an extra DMX port is available. Max 4 universes, 2048 channels. |
| <b>err PIN</b> | Try rewriting your show.<br>Contact support with error number.                                                                                                             |
| <b>err XXX</b> | Error code number XXX. Send support code.                                                                                                                                  |
| <b>HDF XXX</b> | Hardware fault number XXX. Send support code                                                                                                                               |

## no LIC

This message means no licences found on device. The device is likely not yet registered. If you see this message try:

- Connecting your device to a computer with an internet connection.
- Go to [store.dmxsoft.com/my\\_interfaces](http://store.dmxsoft.com/my_interfaces).
- Click + *Register a new Interface* and download the SUT driver software. Follow the on-screen prompts.

If this does not solve it, try completely disabling your firewall or create a rule which allows our software to communicate through your firewall, then repeat the steps above. If this does not solve it, contact support with your device serial number. The serial number is displayed when it first powers on; see display messages on page 3.

## Intended use

The device is intended for use as a lighting controller to control a wide variety of DMX fixtures. The device is build to be used in live mode (connected to a compatible Nicolaudie Group software), or in stand alone mode (running pre-programmed scenes). If the device is used in any other way than its intended use, there will be no liability assumed.

## Disposal instructions



Dispose of all packaging materials according to local recycling regulations. Do not dispose of materials with your normal household waste. Separate all materials and make sure they are collected for recycling. Follow local regulations and observe markings on the packaging.



Device is not suitable for disposal in your regular household waste. This device contains electrical and electronic components which must be collected separately to enable proper recycling and prevent potential harm to the environment and human health. Ensure your device is disposed of at an official collection point for Waste Electrical and Electronic Equipment (WEE). Contact your local council or municipal authority for nearest drop-off point.

## Company information

Sunlite is a part of the Nicolaudie Group - <https://www.nicolaudiegrou.com>

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