

DINA-SR1

Rack-mounted advanced lighting controller



Overview

The DINA-SR1 is designed to be installed in a 19" rack mount with 1U of space. Designed for the most ambitious of projects, outputting 6 DMX universes (3072 channels) in 20 zones. Trigger lighting scenes using calendar triggers and conditional rules with our New Stand Alone engine. Use contact ports, RS232, sound-to-light (Line In or microphone) or messages over Ethernet. The lighting levels, color and effects can be programmed from a PC, Mac, Android, iPad or iPhone using software freely available from our website and app stores.

Key Features

- DMX Stand Alone controller
- Up to 6 x DMX512 universes (3072 channels)
- RDM compatible
- Sound-to-Light via microphone or Line In
- USB & Ethernet connectivity for programming/control
- Stand Alone mode with 2000 scenes
- Play scenes in 20 zones
- 16MB flash memory
- SD slot
- 8 dry contact trigger ports
- 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 Nicolaudie Group software via an online upgrade

Future features

- Remote management via internet (beta testing)
- Artnet/sACN (beta testing)
- Control relay via TCA triggers (ESA Pro 2)
- Direct support for LED Pixel Tape
- DALI

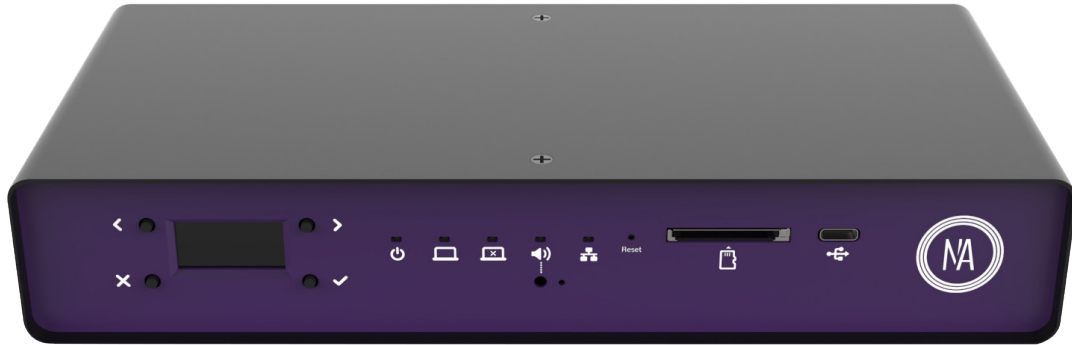
Optional Accessories

POWER1 5V USB Power Adapter

Technical Data

Input Power	5.0v USB-C / USB-B
Output Protocol	DMX512 (x6), eDMX, LED Pixel (SPIx2)
Programmability	PC, Mac, Android, iOS
Connections	USB-C & USB-B RJ45 Ethernet 6 x XLR-3 DMX / RDM Extension Socket - 2x DALI loops (coming) - 2x LED Pixel (coming) - RS232 scene trigger - Relay - 8 dry contact ports Line-in (sound to light) Battery holder (LIR2032) SD card slot
Memory	16MB flash, SD 32Gb max
Environment	IP20
Buttons	2 scene, 2 page, 1 reset
Dim / Weight	24 x 4.4 cm (1U) x 11.2cm, 966 g (excluding brackets)
OS Requirements	Mac OS X 10.8+ Windows 10, 11
Standards	Low voltage, EMC, and RoHS

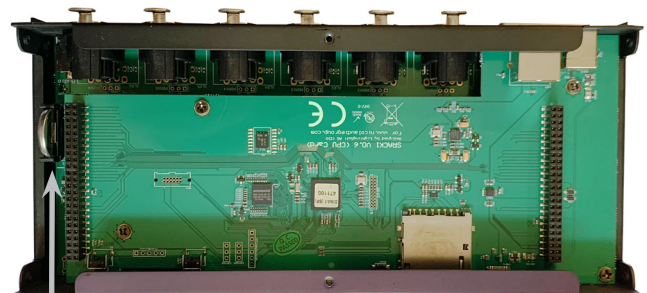
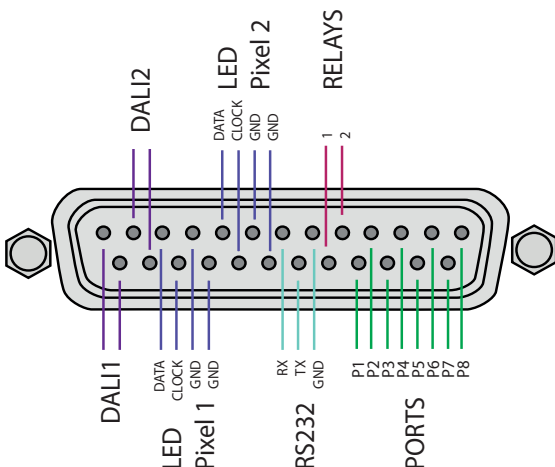
Connections



- ↑ LCD Display & 4 buttons
- ↑ Power LED
- ↑ Live Mode LED
- ↑ Standalone LED
- ↑ Audio LED, mic + potentiometer
- ↑ Ethernet LED
- ↑ Reset port
- ↑ SD card (max 32Gb)
- ↑ USB type-C



- ↑ USB Type-B
- ↑ Ethernet
- ↑ IO Extension (25 Pin Female D-Sub Connector)
- ↑ 3-pin DMX Female Sockets (DMX1, DMX2, DMX3, DMX4, DMX5, DMX6)
- ↑ Audio Input



LIR2032 3.6v rechargeable battery is used to keep time when power is disconnected
Warning: Do not use non-rechargeable battery such as CR2032. Risk of damage to PCB

DIN rail mounted - Advanced lighting controller		DINA-SR1	Page
Technical datasheet	Revision date 31 Oct 2022	www.nicolaudie.com	V 1.01

EASY INSTALLATION

1. Install the 2 x L shaped brackets at either end of the DINA-SR1 using the included 12 screws



2. Install DINA-SR1 in rack mount using 4 rack mount screws at ends of brackets

3. Connect the wires

POWER: Connect 5V USB via USB-B at the back

DMX: Connect the DMX cables from one of the 6 universes to the lighting receivers.

For other connections, refer to page 2.

SETTING UP THE CONTROLLER

Programming

The controller can be programmed from a PC, Mac, iOS (Apple) or Android device using the software listed below. All software and manuals can be found at nicolaudie.com/download.htm.

Software/apps can connect to the controller via USB or via a local network connection. To connect iPhones, iPads, and Android devices, your network must have Wifi available *.

Programming Software / Apps

ESA Pro 2 (Windows/Mac) - Timeline based, multizone programming with advanced trigger rules
nicolaudie.com/esapro2.htm

ESA2 (Windows/Mac) - Single-zone step based programming with basic trigger rules
nicolaudie.com/esa2.htm

Arcolis Designer (iOS/Android)
 Easy multizone programming from a phone or tablet with basic trigger rules
nicolaudie.com/arcolis-designer

* Android version of Arcolis Designer can connect by USB

Remote Control Apps

Search for apps in the iOS & Android app stores using the names below.

Arcolis Remote - Simple remote control over a LAN

Arcolis Remote Pro - Remote control over a LAN with a custom interface and controls.

Configuration / Diagnostic Tools

Hardware Manager (Windows/Mac) Firmware updates, set time/date, location, LAN, diagnostics ...

Hardware Tools (iOS/Android) - Similar features to HardwareManager on a tablet or smartphone

DIN rail mounted - Advanced lighting controller		DINA-SR1	Page
Technical datasheet	Revision date 31 Oct 2022	www.nicolaudie.com	V 1.01

CONNECTIONS AND TRIGGERING

DMX512

Connect up to 6 DMX universes using the DMX connections.

LED INDICATORS

- POWER: orange LED is ON when the interface is powered on
- LIVE MODE: green LED flashes when software is connected
- STANDALONE MODE: red LED is ON when the controllers is running in standalone mode
- AUDIO: white LED flashes when the controller detects a beat or pulse from the microphone or Line In
- ETHERNET: blue LED flashes when the controller is connect to a local network

AUDIO / SOUND-TO-LIGHT

The controller has sound-to-light capability running in standalone mode. Audio beats are detected using either the built-in microphone (with sensitively adjustment) or via the Line In port. The signal should be line level. The audio LED will flash white when a beat is detected.

Programming/configuration of sound-to-light must be made using ESA Pro 2. Refer 'Audio Triggering' in ESA Pro 2 manual.

BATTERY

The 3.6v LIR2032 battery provides power to store the date and time and last played scene when power is interrupted.

Warning: Battery should not be relied upon for daily outages or in sub-zero temperatures. Do not replace with a non-rechargeable CR2032 battery as this could result in damage.

PORTS

Use up to 8 external trigger ports (dry contacts)

Connect G and P1 to trigger port #1

Connect G and P2 to trigger port #2...

Use the ports to trigger actions in our software such as starting, stopping or pausing a scene.

RS232

Make a cable using the 3 pins : TX, RX and G (GND)

Set the RS232 communication parameters to :

9600bds, 8 bits, no Parity, 2 Stop bits

Messages should be hexadecimal not decimal (ie. 1 = 01, 255 = ff etc.)

- To play a scene, send 4 bytes : 1 x y 255
- To stop a scene, send 4 bytes : 2 x y 255
- To pause a scene, send 4 bytes : 3 x y 255
- To release a pause, send 4 bytes : 4 x y 255
- To reset a scene, send 4 bytes : 5 x y 255

When (y)=0, (x) can be set between 0 and 255 to trigger scenes 0-255

When (y)=1, (x) can be set between 0 and 255 to trigger scenes 256-511

... and so on, up to (y)=7) and (x) =208 for scene 2000.

A page can contain 1-2000 scenes as long as the total number on all pages does not exceed 2000.

The index of a scene can be found by looking in the file /show/show_map.xml on the microSD or when using 'Write on Computer' (ESA Pro 2).

General examples:

0x01 0x02 0x00 0xFF to start scene 2

0x01 0x05 0x00 0xFF to start scene 5

0x01 0x10 0x05 0xFF to start scene 1296

HARDWARE SETTINGS DISPLAY

It is possible to display most of the controller settings from the device screen. Press and hold the 2 zone buttons (tick and cross) for 2 seconds to display the settings. You can then navigate with the scene buttons. Repeat the operation to leave the display mode.

The most important settings can be seen from the device display: date/time, firmware version, serial number, network settings, etc. It is also possible to see the controller hardware performance (CPU, stack memory...).

LOG MANAGEMENT

The controller offers the possibility to store activity logs to the SD CARD or send them to a SysLog server. This option can be activated from Hardware Manager on the Settings tab and could be helpful in servicing an installation. We recommend using the 'Store on SD Card' option for debugging only ; leaving it on permanently as this will greatly reduce the longevity of the SD card.