

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. Created for the most ambitious of projects, outputting 6 DMX universes (3072 channels) in 20 zones, eDMX and DALI simultaneously. Trigger lighting scenes using calendar triggers and conditional rules. Connect to the Nicolaudie Cloud for remote control and management. Lighting levels, color and effects can be programmed from a PC or Mac. Remote control from iPhone/iPad, Android, Win & Mac using remote control app.

<https://www.cqiled.com/en/product/dina-sr1.html>

Key Features

- DMX512 / eDMX / LED Pixel Stand Alone controller
- 6x Universes (3072 channels) Universes via DMX512
- Artnet/sACN allows up to 6 universes or up to 12 universes with SUT upgrade
- 2x DALI buses (single-master)
- SUT Technology allows the controller to be upgraded
- USB & Ethernet connectivity
- Stand Alone mode with 2000 scenes & 20 zones
- 16MB internal flash memory & SD slot
- 8 dry contact trigger ports
- RDM compatible
- Windows/Mac software for programming
- iPhone/iPad/Android/Mac & Windows apps for remote control
- Compatible with NATouch wall controllers
- Control 2 external relays
- Nicolaudie Cloud : Remote control and management via internet connection (subscription required)
- Audio triggering / sound-to-light
- RS232 protocol scene control
- Direct support for LED Pixel Tape

Technical Data

Input Power	5.0v USB-C / USB-B
Output Protocol	DMX512 (x6), DALI-2, 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 - 2x LED Pixel (coming) - RS232 scene trigger - 2x Relays - 8 dry contact ports Line-in (sound to light) Battery holder (LIR2032) SD card slot
TCP Connections	10 + 1 cloud
Memory	16MB flash, SD Card (FAT32 or exFAT)
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 10.13 Windows 10, 11

Optional Accessory 12V AC/DC power supply

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



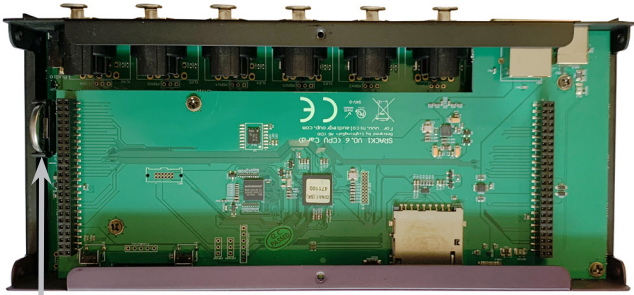
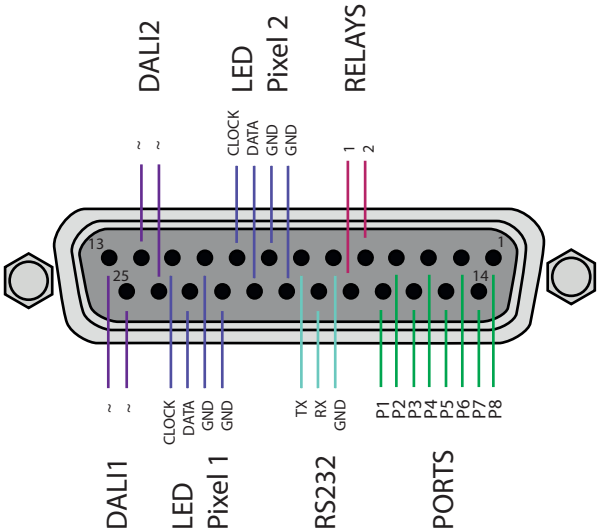
↑ USB-B

↑ Ethernet

↑ IO Extension (25 Pin Female D-Sub Connector)

↑ 3-pin DMX Female Sockets

↑ Audio Input



LIR2032 3.6v rechargeable battery is used to keep time when power is disconnected

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

DMX512: Connect the DMX cables to one or more of the 6 universes to the lighting receivers.

NETWORK : Connect an Ethernet cable to a network. For Nicolaudio Cloud, an internet connection is required on the network.

For other connections, refer to page 2.

SETTING UP THE CONTROLLER

Programming the Controller

The controller can be programmed from a PC or Mac. All computer software and manuals available at nicolaudio.com/downloads Refer to the corresponding software manual for more information.

Windows / Mac Programming Software



ESA Pro 2 Software (Windows/Mac) Designed for lighting professionals. Includes multi-zone programming, a time-line editor, automations, advanced triggers (TCA), DMX512, DALI, sound-to-light, relays and a standalone mode simulator.

<https://www.cqiled.com/en/product/esapro2.html>



ESA2 Software (Windows/Mac) – Single zone, DMX512, step-based programming with time / port triggers. It only requires a few minutes to setup the software and gain full control of any kind of lighting.

<https://www.cqiled.com/en/product/esa2.html>



Hardware Manager (Windows/Mac)

Update firmware, set clock & manage device.
Use for DALI commissioning.



RDM Manager (Windows/Mac)

Set DMX address and personality. View information about the fixture and sensors.

Remote Control



Arcolis Remote makes life easy, allowing you to control your Nicolaudio interface over a local network or cloud from your iPhone/iPad, Android device, Windows or Mac.



Arcolis Touch Create a customized remote controller interface using ESA Pro 2.5 software. Available for iPhone/iPad and Android devices.

CONNECTIONS AND TRIGGERING

DMX512

Connect up to 6 DMX universes to the controller using the DMX connections DMX. Up to 32 DMX devices per DMX512 bus.

DALI

Connect up to 2 distinct DALI buses to the DALI1 and DALI2 connections. These support DALI-2 control-gears (e.g. DALI output drivers) in a single-master configuration with up to 64 addresses per bus. The DINA acts as the master. Neither input devices nor other masters are currently supported. Read the DALI section of the ESA Pro 2.2 manual for setup.

PORTS

Use up to 8 external trigger ports (dry contacts)
Connect G and P1 to trigger port #1 etc. Program port triggers in the software to start actions. e.g. start scene x

AUDIO / SOUND-TO-LIGHT

The controller has sound-to-light capability running in standalone mode.

- Audio beats are detected using the Line In port.
- The signal should be line or headphone level. For microphone level, the signal will need a pre-amp.
- 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 to the ESA Pro 2.2 manual.

BATTERY

3.6v rechargeable LIR2032 battery provides power to store date and time and last played scene in case of a power cut.
Warning: Do not replace with a non-rechargeable CR2032 battery as these can leak and cause damage. Battery should not be relied upon for daily power outages due to life of ~500 cycles or relied upon in temps below 0°C.

NICOLAUDIE CLOUD

The Cloud allows remote triggering and management of the controller via the internet. Cloud licence required after free 14 days.

Connect the Ethernet port to a network with internet access. Read the *Nicolaudie Cloud Control* and *Cloud Quickstart* at nicolaudie.com/download in the *User Manuals* section.

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

RS232

Make a cable using the 3 pins : TX, RX and G (GND)
Set the RS232 communication parameters to :
9600bds, 8 bits, no parity, 1 stop bit

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

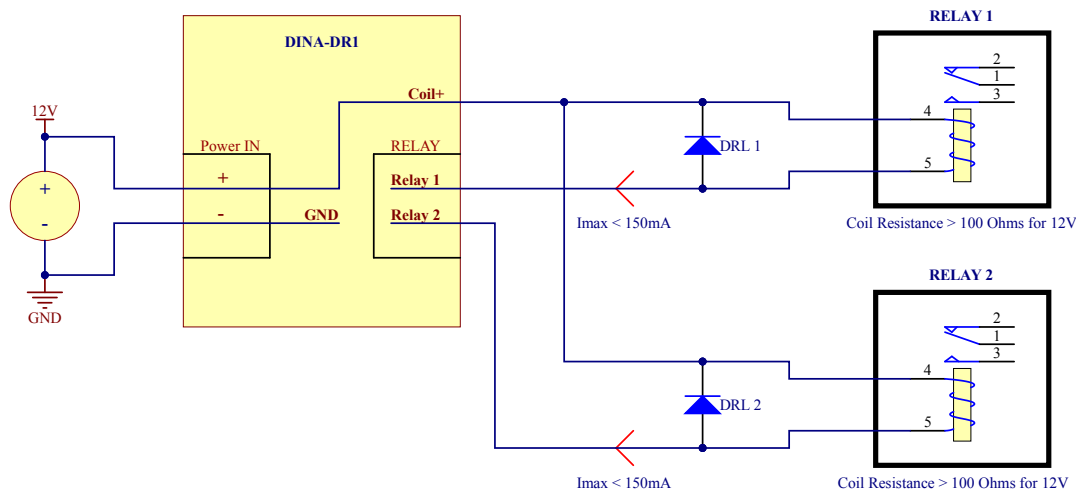
When (y)=0, (x) can be set 0 - 255 to trigger scenes 0-255
When (y)=1, (x) can be set 0 -255 to trigger scenes 256-511
... and so on, up to (y)=7) and (x) =208 for scene 2000.
The index of a scene can be found in ESA Pro 2.2 using the *Scene List* button on the Standalone screen.

CONNECTIONS AND TRIGGERING

RELAY CONTROL

Two relays can be connected to the DINA between the connections Coil+ and Relay 1 or 2.

Relay 1 and 2 are open drain outputs that allow the current to flow according to the parameters of your scenes. See ESA Pro 2 manual for software programming using Relay time line blocks. These can be used to turn on and off other equipment.



HARDWARE SETTINGS DISPLAY

Most controller settings can be displayed on the screen. e.g. date/time, firmware version, serial number, network settings, etc. Press and hold the 2 zone buttons (tick and cross) for 2 seconds to display the settings. Repeat to leave the display mode.

LOG MANAGEMENT

The controller offers the possibility to store activity logs on the SD CARD or on a syslog server. This option can be activated from Hardware Manager on the Settings tab. We recommend using the 'Store on SD Card' option for debugging only.

SUT Licence Upgrades

Extra hardware features and software compatibility can be unlocked by purchasing upgrades or adding 30 day free software trials at https://store.nicolaudie.com/my_interfaces

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

2. Once registered, select your interface on the left. You can buy new features and software compatibility, change the device name or transfer the device to a new owner.

Any licence changes will be *automatically* synchronised the next time you connect your interface to most Nicolaudie Group software while connected to the internet. Currently installed licences can be checked using HardwareManager on the SUT screen.

DIN rail mounted – Advanced lighting controller		DINA-SR1	
Technical datasheet	8 May 2026	www.cqiled.com	V1.08

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 recognized 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. Activate Bootloader by holding down buttons 2 & 3 (under the screen) while connecting power. Instead of connecting power you can also press the reset button. If successful, the green, red and white LED will flash and your interface will appear in HardwareManager with the suffix _BL.
 4. 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 on or flickering.
- 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

Green, red and white LED flashing

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 HardwareManager available from the downloads section of our website.