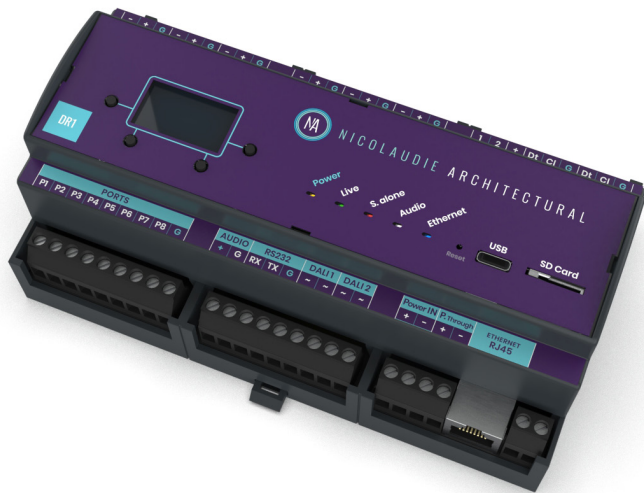


# DINA-DR1 / LITE

*DIN rail mounted – Advanced lighting controller*



## Overview

The DINA-DR1 is a lighting controller 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, using contact ports, RS232 or over Ethernet. In 2021 new features will be unlocked such as direct support for LED Pixel tape, DALI and remote management.

The lighting levels, color and effects can be programmed from a PC, Mac, Android, iPad or iPhone using software from our website.

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

## Key Features

- DMX / eDMX / LED Pixel Stand Alone controller
- Up to 6 x DMX512 universes (3072 channels)
- RDM compatible
- USB & Ethernet connectivity for programming/control
- Stand Alone mode with 2000 scenes
- Play scenes in 20 areas / zones
- 16MB flash memory & microSD 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

### Features coming soon

- Remote management via internet (beta test)
- Artnet/sACN (beta test)
- Connect relay via triggers
- Direct support for LED Pixel Tape
- DALI

## Optional Accessories

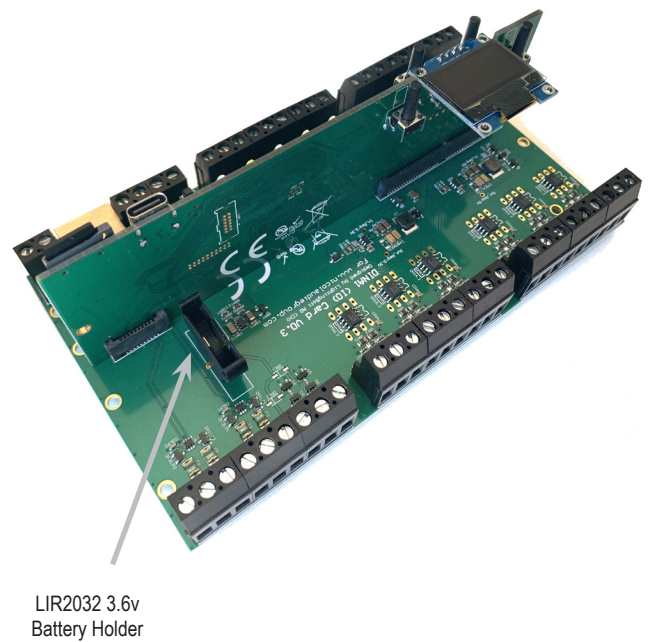
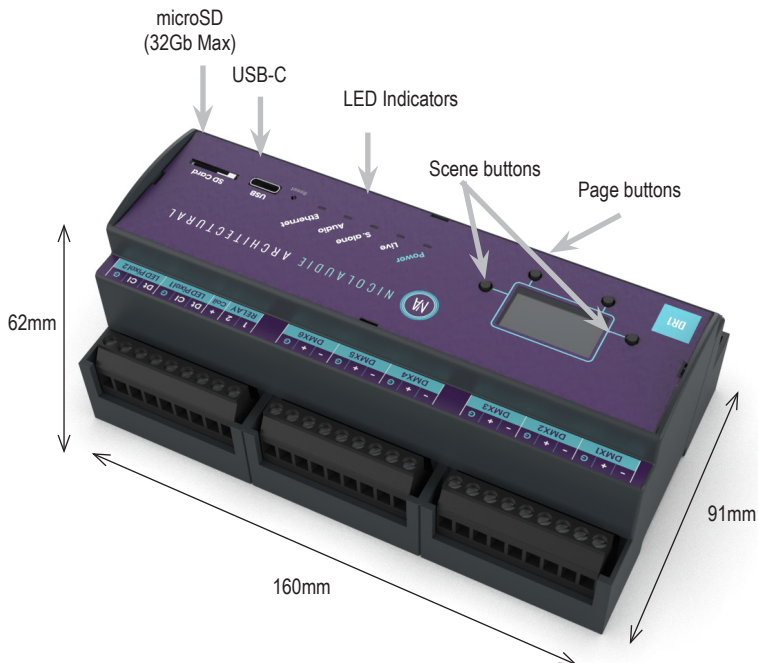
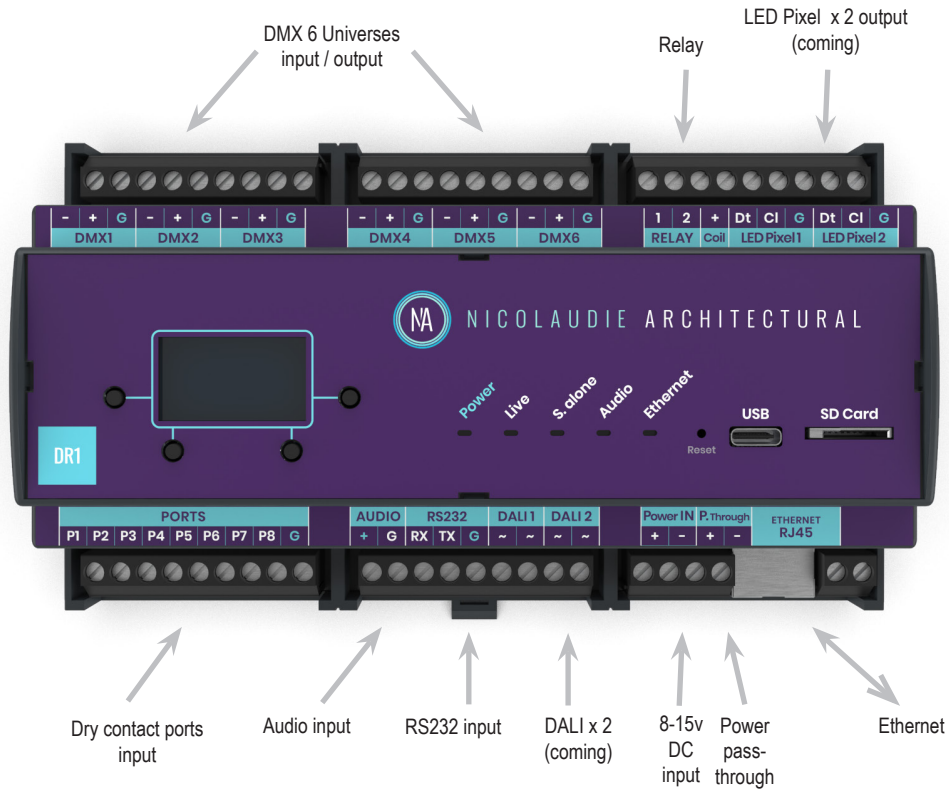
**POWER** 12V AC/DC power supply

## Technical Data

<b>Input Power</b>	12v DC (8-15V range)
<b>Output Protocol</b>	DMX512 (x6), eDMX, LED Pixel (SPIx2)
<b>Programmability</b>	PC, Mac, Android, iOS
<b>Connections</b>	USB-C Ethernet Screw terminals for - 6 DMX / RDM Universes - LED Pixel (coming) - 2 DALI loops (coming) - 8 Contact ports - Relay (coming) - 12v power-in & p.through - RS232 scene trigger - Audio in (sound to light) Battery holder (CR2032) microSD slot
<b>Memory</b>	16MB flash, SD Card
<b>Environment</b>	IP20
<b>Buttons</b>	2 scene, 2 page, 1 reset
<b>Dim / Weight</b>	160 x 91 x 62 mm 317g
<b>OS Requirements</b>	Mac OS X 10.8-10.14 Windows 7/8/10

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Technical datasheet	Revision date 26 JUL 2022	<a href="http://www.nicolaudie.com">www.nicolaudie.com</a>	V 1.00

# Connections



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# EASY INSTALLATION

1. Mount a DIN Rail or DIN Rail Encloser against a wall

2. Connect the wires

**POWER:** Connect 12V DC ACDC supply. The DINA-DR1 can accept 8v-15v. Be sure to not invert the + and the ground.

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

3. Clip the DINA-DR1 onto the DIN RAIL

On the back of the interface housing is a channel designed to accept a DIN Rail with a black plastic clip which secures the interface.

To mount: Slide the mounting teeth behind the top of the rail and then rotate downwards to engage the clip.

To dismount: At the lower edge of the interface you will see a plastic clip. Pull this down to release interface from the rail.



# SETTING UP THE CONTROLLER

## Programming the DINA-DR1

The controller can be programmed from a PC, Mac, 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 PC/Mac programming software) or with Hardware Tools (Android / iOS, compatibility coming soon).

### Windows / Mac Programming Software

**ESA Pro 2 (Windows/Mac)** - Multizone  
[www.nicolaudie.com/esapro2.htm](http://www.nicolaudie.com/esapro2.htm)

**ESA2 (Windows/Mac)** - Single Zone  
[www.nicolaudie.com/esa2.htm](http://www.nicolaudie.com/esa2.htm)

**Hardware Manager (Windows/Mac)** For Firmware, time/date.  
 Find this under Tools @ [nicolaudie.com/download.htm](http://nicolaudie.com/download.htm)

### Apple iOS and Android Apps

**Arcolis** - Search for 'Arcolis' on the Google Play Store and iOS App Store

**Hardware Tools (compatibility coming soon)**  
 Search for 'Hardware Tools' on the iOS App Store. Android coming soon.

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# CONNECTIONS AND TRIGGERING

## DMX512

Connect up to 6 DMX universes to the DINA SRI using the 6 3pin DMX sockets at the back of the unit

## 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 DINA-SRI has sound-to-light capability in standalone mode.

Audio beats can be detected using either the built-in microphone (with sensitively adjustment screw) or via the Line In port. The Line In input signal must be Line Level. When Line In is connected the microphone will be disabled.

When an audio beat or pulse is detected the white audio LED will flash white to show that an audio beat / pulse has been detected.

Programming/configuration of sound-to-light must be made with ESA Pro 2 as only this software has access to TCA triggers. Download the ESA Pro 2 manual and refer to the 'Audio Trigger' section.

## 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...

The ports can be programmed in your show file (TCA)

## 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 /show1/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 DINA-DR1 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 and could be very helpful in servicing an installation. We recommend using the 'Store on SD Card' option for debugging only. We recommend against leaving it on permanently as this will reduce the longevity of the SD card.