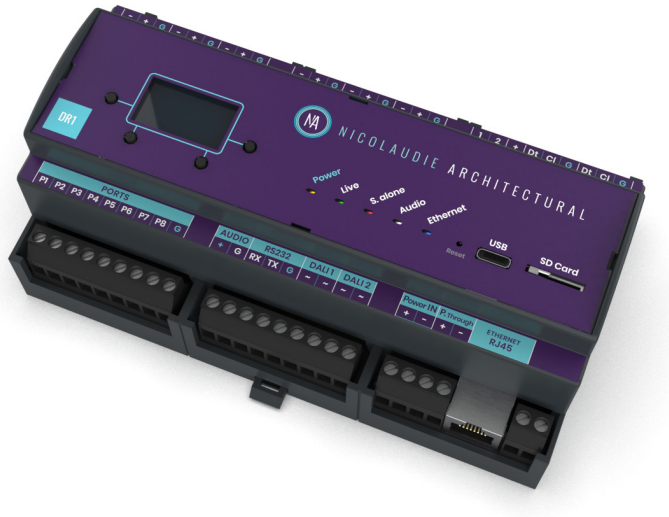
DINA-DR1 / LITE

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. New features will be unlocked in future such as remote management, direct support for LED Pixel tape and DALI.

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 compatable
- 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

Future features

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

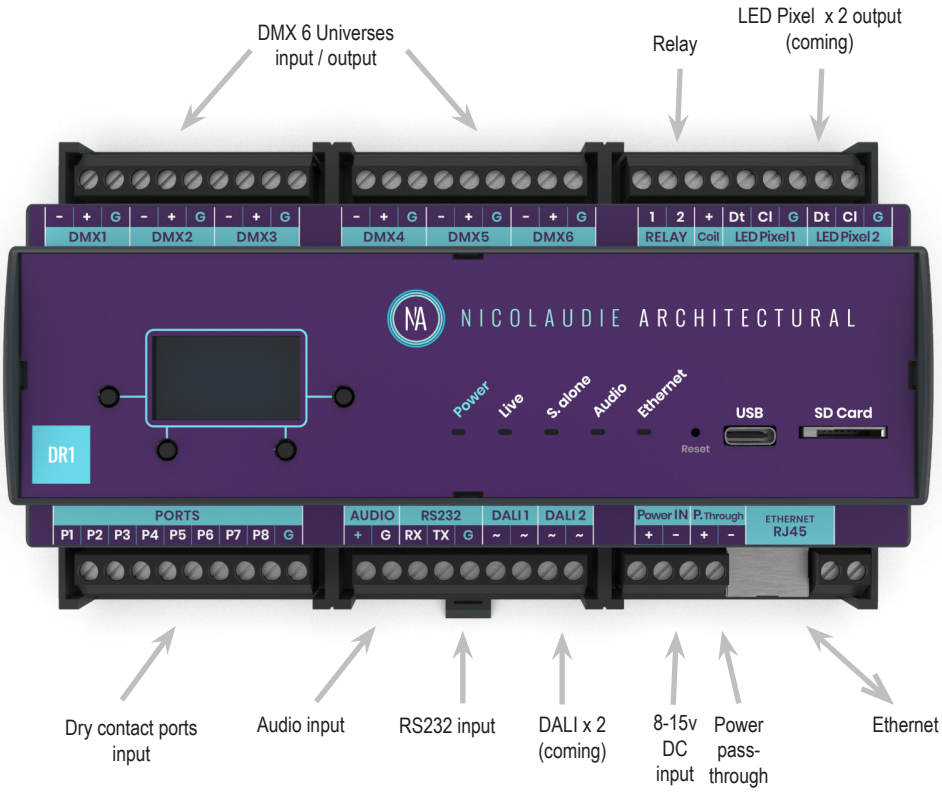
Technical Data

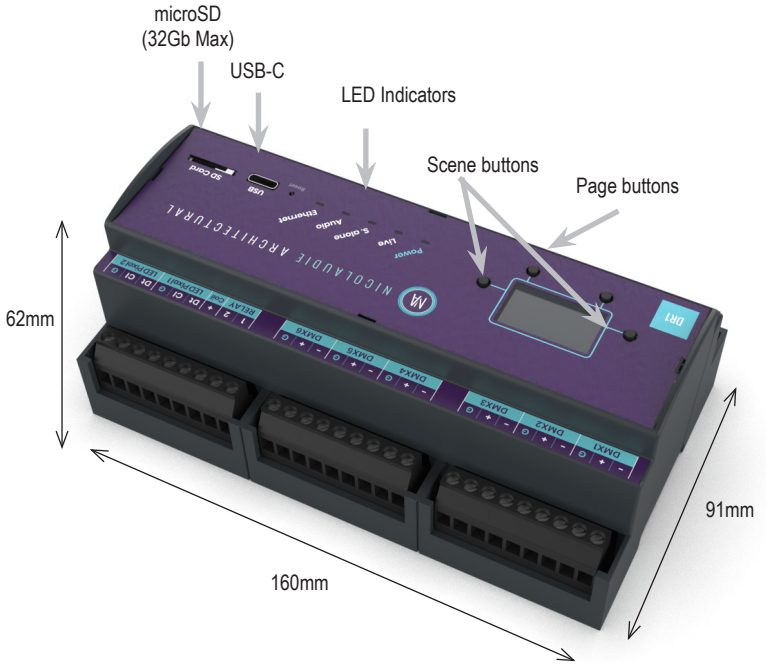
Input Power	12v DC (8-15V range)
Output Protocol	DMX512 (x6), eDMX, LED Pixel (SPIx2)
Programmability	PC, Mac, Android, iOS
Connections	USB-C Ethernet Scew terminals for - 6 DMX / RDM Universes - LED Pixel (coming) - 2 DALI loops (coming) - 8 Contact ports - Relay (coming) - 12v power-in & p.through - RS232 scene trigger - Audio in (sound to light) Battery holder (LIR2032 3.6v), microSD slot
Memory	16MB flash, SD Card
Environment	IP20
Buttons	2 scene, 2 page, 1 reset
Dim / Weight	160 x 91 x 62 mm 317g
OS Requirements	Mac OS X 10.8-10.14 Windows 7/8/10
Standards	Low voltage, EMC, and RoHS

Optional Accessories

POWER	12V AC/DC power supply

Connections





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 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

CONNECTIONS AND TRIGGERING

DMX512

Connect up to 6 DMX universes to the controller using the DMX connections. LITE models ship with licences for 2 universes but can be upgraded.

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 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 /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 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 and could be very helpful in servicing an installation. We recommend using the 'Store on SD Card' option for debugging only ; Do not leave it on permanently as this will greatly reduce the longevity of the SD card.