

DINA-DR1

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.

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 Nicolaudio Group software via an online upgrade

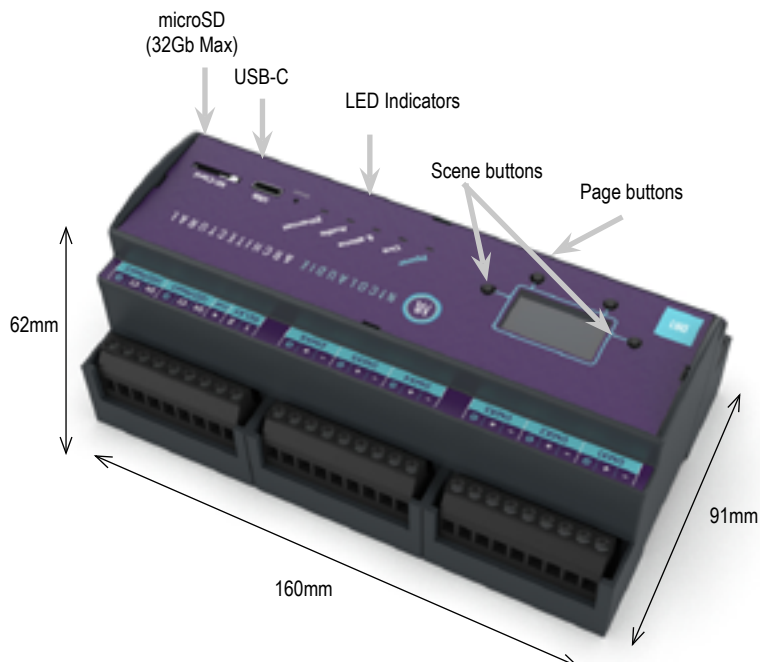
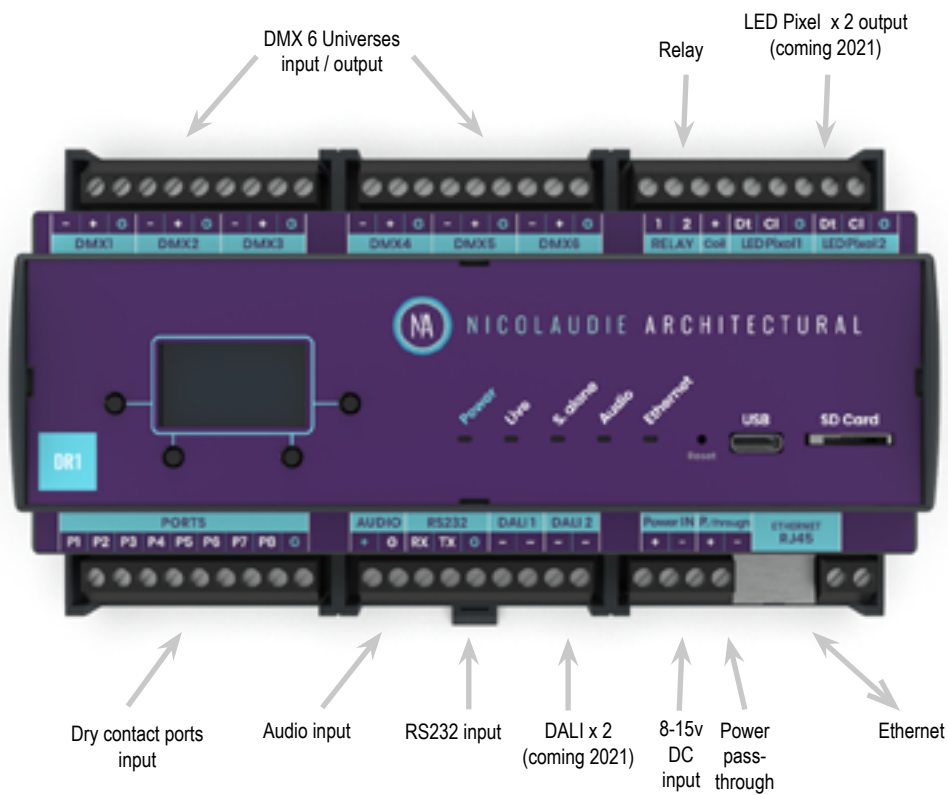
Optional Accessories

POWER 12V AC/DC power supply

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 ScREW terminals for - 6 DMX / RDM Universes - 2 DALI loops (2021) - LED Pixel (2021) - 8 Contact ports - Relay - 12v power-in & p.through - RS232 scene trigger - Audio in (sound to light) Battery holder (CR2032) 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

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 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

ESA2 (Windows/Mac) - Single Zone
www.nicolaudie.com/esa2.htm

Hardware Manager (Windows/Mac) For Firmware, time/date..
 Find this under Tools @ 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.

CONNECTIONS AND TRIGGERING

DMX512

Connect up to 6 DMX universes and 2 for the DINA-DR1 LITE . It is possible to buy extra DMX universes for the LITE version to reach the maximum amount of channels (6 universes in total).

LED INDICATORS

- POWER: orange LED is ON when the interface is powered
- LIVE: green LED is ON when a soft/app communicates with the controller
- S.ALONE: red LED is ON when the controllers runs in standalone mode
- AUDIO: white LED is flashing when the controller receives an audio signal
- ETHERNET: blue LED is flashing when the controllers is connect to a local network

AUDIO

It is possible to directly connect an analog audio source to the DINA-DR1 in order to trigger your lighting scenes with the music beat. Simply connect a line level signal to the controller.

The programming/configuration must be done with ESA Pro 2 software like any other TCA trigger. You can decide to make a scene to jump from step to step according to the music beat.

When an audio signal is received by the controller, the AUDIO LED (white) is flashing.

PORTS

Use up to 8 external trigger ports (dry contacts)
Connect G and P1 to start the port #1
Connect G and P2 to start the 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 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 stop scene 145, send the command: 2 145 0 255

When (y)=1, (x) can be set between 0 and 243 to trigger scenes 256-499

-to play scene 300, send the command: 1 44 1 255

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 after writing a scene.

General examples:

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

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

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

HARDWARE SETTINGS DISPLAY

It is possible to display most of the controller settings from the device screen. Simply press and hold for 2 seconds the 2 zone buttons 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 visualized from the device display: date/time, firmware version, serial number, network settings, etc...It is also possible to visualize the controller performances (CPU, 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 the Hardware Manager program (Settings tab) and could be very helpful to service an installation. We recommend to activate the SD CARD option on demand only (debugging operation) to lower the SD CARD access.