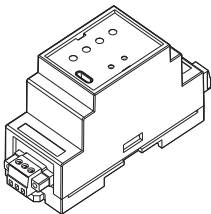


OBSEIDIAN

CONTROL SYSTEMS



NETRON

EP1

User Guide

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ELATION PROFESSIONAL B.V.

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Energy Saving Matters (EuP 2009/125/EC)

Saving electric energy is a key to help protecting the environment. Please turn off all electrical products when they are not in use. To avoid power consumption in idle mode, disconnect all electrical equipment from power when not in use. Thank you!

Document Version: An updated version of this document may be available online.

Please check www.obsidiancontrol.com for the latest revision/update of this document before beginning installation and use.

Date	Document Version	Note
11/18/2024	1.0	Initial Release

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FCC STATEMENT



Please note that changes or modifications to this product that have not been expressly approved by the party responsible for compliance could

void the user's authority to operate the equipment. NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

GENERAL INFORMATION

INTRODUCTION

Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this device. These instructions contain important safety and use information.

UNPACKING

Every device has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton is damaged, carefully inspect the device for damage, and be sure all accessories necessary to install and operate the device have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this device to your dealer without first contacting customer support. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

GENERAL INFORMATION

CUSTOMER SUPPORT

Contact your local Obsidian Controls Systems dealer or distributor for any product related service and support needs. Also visit [forum.obsidiancontrol.com](#) with questions, comments, or suggestions.

OBSIDIAN CONTROL SERVICE EUROPE

Monday - Friday 08:30 to 17:00 CET

+31 45 546 85 63 | support@obsidiancontrol.com

OBSIDIAN CONTROL SERVICE USA

Monday - Friday 08:30 to 17:00 PST

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LIMITED WARRANTY (USA ONLY)

1. Obsidian Control Systems hereby warrants, to the original purchaser, Obsidian Control Systems products to be free of manufacturing defects in material and workmanship for a period of two years (730 days).
2. For warranty service, send the product only to the Obsidian Control Systems service center. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Obsidian Control Systems will pay return shipping charges only to a designated point within the United States. If any product is sent, it must be shipped in its original package and packaging material. No accessories should be shipped with the product. If any accessories are shipped with the product, Obsidian Control Systems shall have no liability whatsoever for loss and/or damage to any such accessories, nor for the safe return thereof.
3. This warranty is void if the product serial number and/or labels are altered or removed; if the product is modified in any manner which Obsidian Control Systems concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Obsidian Control Systems factory unless prior written authorization was issued to purchaser by Obsidian Control Systems; if the product is damaged because not properly maintained as set forth in the product instructions, guidelines and/or user manual.
4. This is not a service contract, and this warranty does not include any maintenance, cleaning or periodic check-up. During the periods as specified above, Obsidian Control Systems will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Obsidian Control Systems under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Obsidian Control Systems. All products covered by this warranty were manufactured after January 1, 1990, and bare identifying marks to that effect.

LIMITED WARRANTY (USA ONLY)

5. Obsidian Control Systems reserves the right to make changes in design and/or performance improvements upon its products without any obligation to include these changes in any products theretofore manufactured.
6. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with the products described above. Except to the extent prohibited by applicable law, all implied warranties made by Obsidian Control Systems in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty periods set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said periods have expired. The consumer's and/or dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall Obsidian Control Systems be liable for any loss and/or damage, direct and/or consequential, arising out of the use of, and/or the inability to use, this product.
7. This warranty is the only written warranty applicable to Obsidian Control Systems products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.
8. Use of Software and Firmware: To the maximum extent permitted by applicable law, in no event shall Elation or Obsidian Control Systems or its suppliers be liable for any damages whatsoever (including, but not limited to, damages for loss of profits or data, for business interruption, for personal injury or other loss whatsoever) arising out of or in any way related to the use of or inability to use firmware or software, the provision of or failure to provide support or other services, information, firmware, software, and related content through the software or otherwise arising out of the use of any software or firmware, even in the event of the fault, tort (including negligence), misrepresentation, strict liability, breach of warranty of Elation or Obsidian Control Systems or any supplier, and even if Elation or Obsidian Control Systems or any supplier has been advised of the possibility of such damages.

LIMITED WARRANTY (USA ONLY)

WARRANTY RETURNS: All returned service items, whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without a R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a R.A. number by contacting customer support.

SAFETY GUIDELINES

This device is a sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow all instructions and guidelines in this manual. **OBSIDIAN CONTROL SYSTEMS** is not responsible for injury and/or damages resulting from the misuse of this device due to the disregard of the information printed in this manual. Only the original included parts and/or accessories for this device should be used. Any modifications to the device, included and/or accessories will void the original manufactures warranty and increase the risk of damage and/or personal injury.



DEVICE PROTECTION CLASS 3: USE ONLY SAFETY EXTRA-LOW VOLTAGE (SELV) POWER SOURCES! DO NOT GROUND OR MODIFY POWER CONNECTIONS!



DO NOT ATTEMPT TO USE THIS DEVICE WITHOUT BEING FULLY TRAINED ON HOW TO USE IT. ANY DAMAGES OR REPAIRS TO THIS DEVICE OR ANY LIGHTING FIXTURES CONTROLLED BY THIS DEVICE RESULTING FROM IMPROPER USE, AND/OR THE DISREGARD OF THE SAFETY AND OPERATION GUIDELINES IN THIS DOCUMENT VOIDS THE OBSIDIAN CONTROL SYSTEMS WARRANTY, AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS, AND MAY ALSO VOID THE WARRANTY FOR ANY NON-OBSIDIAN CONTROL SYSTEMS DEVICES.



KEEP FLAMMABLE MATERIALS AWAY FROM DEVICE.

DRY LOCATIONS USE ONLY! DO NOT EXPOSE DEVICE TO RAIN, MOISTURE, AND/OR SEVERE ENVIRONMENTS! DO NOT SPILL WATER AND/OR

SAFETY GUIDELINES

DISCONNECT the device from power before removing any part, and when not in use.

Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault protection.

Do not expose the device to rain or moisture.

Refer all service to a qualified technician.

Do not modify the device or install other than genuine NETRON parts.

CAUTION: Risk of Fire and Electrical Shock. Use only in dry locations.

AVOID brute force handling when transporting or operating.

DO NOT expose any part of the device to open flame or smoke. Keep device away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

DO NOT use device in extreme and/or severe environments.

SAFETY GUIDELINES

DO NOT operate device if power cord is frayed, crimped, damaged and/or if any of the power cord connectors are damaged, and does not insert into the device securely with ease. NEVER force a power cord connector into device. If the power cord or any of its connectors are damaged, replace it immediately with a new one of similar power rating.

DO NOT use the product if the ambient temperature exceeds 40°C (104° F)

Transport the product only in suitable packaging or a custom fitted road case. Transportation damage is not covered under warranty.

OVERVIEW

INTRODUCTION

The **NETRON EP1D** is a DIN-Rail Ethernet to DMX gateway with a single RDM compatible port. It is configurable via the internal web remote or the NETRON CLU tool. EP1D is powered over Ethernet or via the convenient USB-C connection.

EP1D is a powerful and convenient single port node that is ideally suited to distribute sACN and Art-Net traffic across any type of facility or building network.

INCLUDED ITEMS:

- 1.5m Obsidian USB-C Cable

KEY FEATURES:

- RDM, ArtNet and sACN support
- Factory and user presets for plug and play setup
- POE or USB-C or Phoenix powered
- Remote configuration via internal webpage
- ABS Plastic housing
- DIN Rail mounted horizontally or vertically

OVERVIEW

SOFTWARE AND OPERATION

To ensure optimal setup and functionality of software features, we recommend using the NETRON CLU application, which can be downloaded from:

<https://obsidiancontrol.com/netron-clu>

The NETRON CLU application not only contains the most current firmware, but also provides a user-friendly interface for discovering, configuring, and updating NETRON devices.

For detailed instructions, please download and review the complete user manuals, available at:

<https://obsidiancontrol.com/netron>

NETRON Ether-DMX devices are designed with an extensive array of features that are both user-friendly and subject to ongoing enhancements. We advise users to regularly visit the Obsidian product pages to check for any updates.

INSTALLATION INSTRUCTIONS



DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!



ELECTRICAL CONNECTIONS

A qualified electrician should be used for all electrical connections and/or installations.



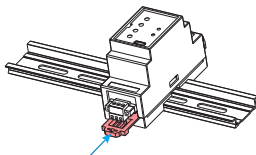
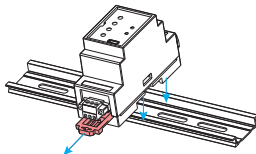
USE CAUTION WHEN POWER LINKING OTHER MODEL DEVICES AS THE POWER CONSUMPTION OF OTHER MODEL DEVICES MAY EXCEED THE MAXIMUM POWER OUTPUT OF THIS DEVICE. CHECK SILK SCREEN FOR MAXIMUM AMPS.

Device **MUST** be installed following all local, national, and country commercial electrical and construction codes and regulations.

INSTALLATION INSTRUCTIONS

DIN RAIL MOUNT

This unit is designed to be DIN rail mounted in either horizontal or vertical orientation. To install the device, locate the mounting tab beneath the 3-pin Phoenix port, and pull the tab outwards. Insert the mounting channel on the back of the device over the DIN rail, then push the mounting tab back in to secure the device in place.



CONNECTIONS

POWER CONNECTIONS

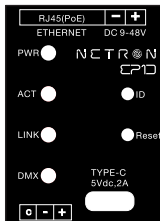


The Obsidian Control Systems Netron EP1D is rated 9-48 VDC. Do not connect the device to power outside this range. Damage resulting from incorrect or improper connection is not covered under warranty.

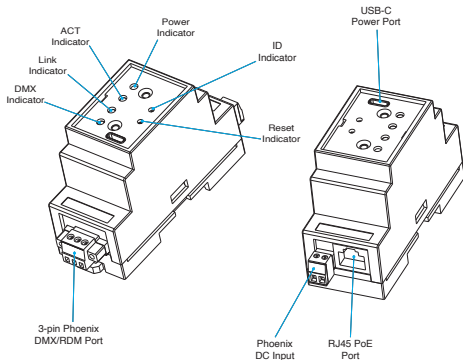
The Netron EP1D is designed for operational flexibility, supporting Power over Ethernet (PoE) for integrated setups, a DC input range of 9-48V for fixed installations, and the ability to be temporarily powered via any USB-C adapter or battery pack during setup or configuration.

DATA CONNECTION

The device also features a bi-directional, 3-pin Phoenix DMX/RDM optically isolated data port and Gigabit RJ45 network port. An array of indicator lights for Power, ACT, Link, DMX, Identification, and Device Reset can be found on the front of the device.



CONNECTIONS



DMX INDICATORS

The DMX Indicator LED flashes different colors to indicate various statuses. Refer to the chart on the next page to determine the status for each color.

CONNECTIONS

DMX PORTS STATUS INDICATOR LEDS

LED Color	Solid	Blink	Routing
DMX Ports Red	-	-	-
DMX Ports Green	DMX In	DMX Lost	-
DMX Ports Blue	DMX Out Stable	DMX Lost	-
DMX Ports White	-	-	Flash on RDM packets

MAINTENANCE

The Obsidian Control Systems Netron EP1D is designed as rugged, roadworthy device. The only required service is occasional cleaning. For other service-related concerns, please contact your Obsidian Control Systems dealer, or visit www.obsidiancontrol.com.

Any service that is not described in this guide must be carried out by a trained and qualified Obsidian Control Systems technician.

As any computer, the EP1D requires periodic cleaning. The schedule relies on the environment in which the controller is operated. An Obsidian Control Systems technician can provide recommendations if necessary.

Never spray cleaner directly onto the device surface; always spray into a lint-free cloth and wipe it clean. Consider using cleaning products designed for cellphone and tablet devices.



Important! Excessive dust, dirt, smoke, fluid build-up, and other materials can degrade the performance of the EP1D device, causing overheating and damage to the unit that is not covered by the warranty.

SPECIFICATIONS

Mounting

- DIN Rail mounted horizontally or vertically

Front

- Reset button and ID button
- USB-C power option (5V, 2A)
- (4x)LED indicator

Top

- RJ45 Gigabit Ethernet (POE)
- Phoenix 9-48V DC Input

Bottom

- 3pinPhoenix DMX/RDM optically isolated port
- Bidirectional for DMX In and Output

Physical

- Length: 3.4 in. (87mm)
- Width: 1.4 in. (36mm)
- Height: 2.4 in. (60mm)
- Weight: 0.44 lbs. (0.2 kg)

Electrical

- USB-C 5V
- POE 802.3af
- Power Consumption: 1.6W

DIMENSIONS

