# CONTROL SYSTEMS



# NX DNX Installation Guide

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### **OBSIDIAN CONTROL SYSTEMS B.V.**

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### FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### FCC RADIO FREQUENCY INTERFERENCE WARNINGS & INSTRUCTIONS

This product has been tested and found to comply with the limits as per Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device uses and can radiate radio frequency energy and, if not installed and used in accordance with the included instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be deter- mined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following methods:

- Reorient or relocate the device.
- Increase the separation between the device and the receiver.
- Connect the device to an electrical outlet on a circuit different from which the radio receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### 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	Notes
03/28/19	1	Initial release.
08/26/19	2	Updated Specs

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# 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.

### CUSTOMER SUPPORT

Contact Obsidian Controls Systems service for any product related service and support needs. Also visit forums.obsidiancontrol.com with questions, comments or suggestions.

OBSIDIAN CONTROL SERVICE EUROPE - Monday - Friday 08:30 to 17:00 CET +31 45 546 85 63 | Fax +31 45 546 85 96 | support@Obsidian Control Systemslighting.eu

REPLACEMENT PARTS please visit parts.obsidiancontrol.com

# 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 what so ever for loss and/or 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.
- 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. 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.



# PROTECTION CLASS 1 - DEVICE MUST BE PROPERLY GROUNDED

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 LIQUIDS ON OR INTO THE DEVICE!

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.

**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.

Strictly use a source of AC power that complies with local building and electrical codes and has both overload and ground-fault protection. Use only the provided AC power supply and power cords and the correct connector for the country of operation. Use of the factory provided power cable is mandatory for operation in the US and Canada.

Allow free unobstructed airflow to the bottom and back of the product. Do not block the ventilation slots.

DO NOT use the product if the ambient temperature exceeds 50°C (122° F)

# OVERVIEW

# NX DMX

NX DMX is a USB powered 2 port DMX Node. As a member of the innovative ONXY platform from Obsidian Control Systems, the NX DMX provides instant access to DMX Inputs and Outputs, as well as RDM communication. The device is plug and play, and requires no drivers or additional configuration to integrate with ONYX. It is designed to work with any PC, but also works with any ONYX console as a fast way, and affordable option, to add two additional DMX ports.

NX DMX supports ONYX on PC systems for up to four Universes without any dedicated license. When connected to an ONYX licensed PC or a console the NX DMX is assignable to any one of 255 Universes. NX DMX allows for the full ONYX system to be used in many situations, from small events, tradeshows to clubs and churches. Many technicians utilize ONYX through the NX DMX as an affordable but powerful tests station due to ONYX outstanding library support.

# **KEY FEATURES**

- Plug and Play 2 Port DMX Node for ONYX
- USB powered
- DMX In/Out and RDM support
- Expand any ONYX console or PC system
- Rugged design
- K-Lock security slot

# SOFTWARE

Operating the NX DMX requires the use of a Windows PC running ONYX, which can be downloaded from the support website http://support.obsidiancontrol.com .

You must update your controller to the latest version of ONYX before using it for the first time, and periodically check the website for updates.

# PC SYSTEM REQUIREMENTS FOR NX DMX

The NX DMX was designed to operate with an external PC. Although it can be used with any PC system, the ONYX controller software was designed around a touch screen interface, and without one, will be more difficult to use.

MINIMUM RECOMMENDED PC SYSTEM:

- Windows 10
- Intel Core i3 processor 6<sup>th</sup> Generation+
- 2GB available disk space (SSD recommended)
- Widescreen monitor, minimum 1280 wide, 768 high (capacitive multi-touchscreen recommended)
- USB 2.0 port for Onyx Key and optional USB to DMX devices
- 10/100 Ethernet port for Art-Net, Remote operation and sACN
- 100/1000 Ethernet port for X-Net, Remote operation and sACN
- NX DMX is also compatible with Elation LightJockey 2 Software

# SETUP

# USB

The NX DMX draws its power from the connected computer via USB. If you use a USB hub, it must be powered. The host PC will fail to recognize a NX DMX device that is connected via an unpowered USB hub.

When the NX DMX is connected for the first time to a computer running ONYX software, a driver will be installed on the computer. As soon as the driver is loaded on the computer and initialized, the NX DMX is ready for use.

# DMX

Connect fixtures to one or both of the DMX ports of the NX DMX device using DMX cable and standard DMX 512A pinout. Do not use microphone cable.

Use a DMX termination plug on the last fixture on the DMX link.

Damage to the NX DMX device or to the connected computer due to faulty DMX wiring is not covered by the product warranty.



You can configure the NX DMX from the host PC once the system is installed.

# CONNECTIONS

- USB In: a USB 2.0 B is located on the front panel for connection to a host computer.
- 2x DMX / RDM Universe In/Out 5-pin locking XLR connectors are located on the back. Note that the NX DMX can draw a maximum of 300mA. If using a USB hub between the NX DMX and the host computer, make sure that the USB is powered.



# MAINTENANCE

The Obsidian Control Systems NX DMX is designed as a 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 qualified Obsidian Control Systems technician.

As any electronic device, the NX DMX 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; 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 NX DMX, causing overheating and damage to the unit that is not covered by the warranty.

# NX DMX SPECIFICATIONS

### **Control/User Interface**

- Capacity: Up to two DMX universes
- Configuration and management: ONYX or LightJockey 2 software
- Device status: (3x) multicolor status LEDs

### Construction

- Housing: aluminum
- IP Rating: IP20

### Connections

- (2x) DMX / RDM Universe In/Out: 5-pin locking XLR
- USB In: USB 2.0 B
- K-Lock security slot

## Physical

- Length: 3.7" (92mm)
- Width: 3.3" (82mm)
- Height: 1.7" (41mm)
- Weight: 0.6lb. (245g)

### Electrical

- 5VDC over USB
- 100-240V nominal, 50/60Hz
- Maximum current: 300mA

## Thermal

- Operating temperature: 0° - 50°C (32° - 122°F)

# **Included Items**

- (1x) Obsidian USB Cable

# DIMENSIONS

