

# OBSEIDIAN

CONTROL SYSTEMS



## NX SYNC

# Installation Guide

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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 determined 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](http://www.obsidiancontrol.com) for the latest revision/update of this document before beginning installation and use.

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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](https://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@ObsidianControlSystemsLighting.eu](mailto:support@ObsidianControlSystemsLighting.eu)

## **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, AND 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 USB cable is frayed, crimped, damaged and/or if any of the USB cable connectors are damaged, and does not insert into the device securely with ease. NEVER force a USB cable connector into device. If the USB cable or any of its connectors are damaged, replace it immediately with a new one of similar specifications.

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

## OVERVIEW

### **NX SYNC**

NX SYNC is a USB powered SMPTE time code device. As a member of the innovative ONYX platform from Obsidian Control Systems, the NX SYNC provides SMPTE time code generation and reception. 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 SMPTE time code.

**NX SYNC** also operates as a generic MIDI device on Windows and MAC systems. It will convert any incoming SMPTE signal to a MIDI Timecode.

### **KEY FEATURES**

- Plug and Play LTC SMPTE time code generator and receiver
- USB powered
- Rugged design
- K-Lock security slot
- Windows and MAC compatible

### **ONYX SOFTWARE**

Operating the NX SYNC with ONYX 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.


## SETUP


### USB

The NX SYNC draws its power from the connected computer via USB. If you use a USB hub, it is recommended that it is a powered hub. The host PC can fail in some cases to recognize a NX SYNC device that is connected via an unpowered USB hub.

The NX SYNC uses standard Microsoft™ MIDI drivers.

#### ▼ Sound, video and game controllers

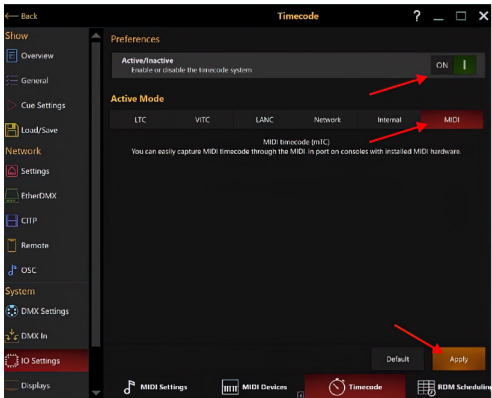
 Intel(R) Display Audio

 MIDI Interface

## **SMPTE TIME CODE**

### **SOFTWARE SETTINGS**

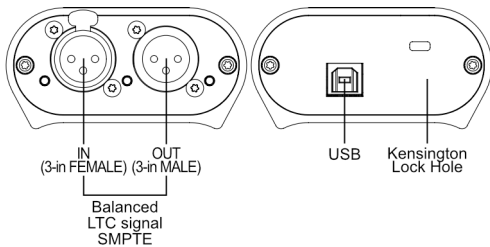
Since the SMPTE time code of the NX-SYNC runs through a standard MIDI driver, activate the SMPTE time code of the NX-SYNC device in the software menu as a “MIDI time code (mTC)” device and activate the time code system:



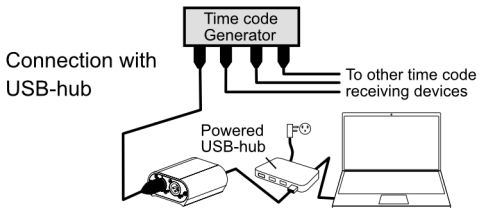
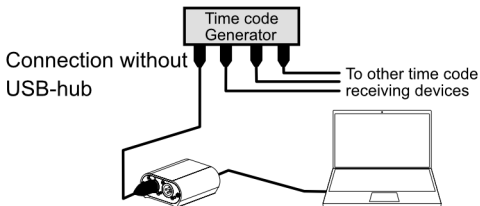
## CONNECTIONS

- USB In: a USB 2.0 B is located on the front panel for connection to a host computer.
- The NX-SYNC generates and receives balanced LTC SMPTE time code on 3-pin XLR connections. Use audio XLR 3-pin male to female shielded cables. Note that the NX SYNC can draw a maximum of 100mA. If using a USB hub between the NX SYNC and the host computer, make sure that the USB is powered.
- Pin connections:
  - PIN 1 : GND
  - PIN 2: HOT
  - PIN 3: COLD
- LTC SMPTE time code is a digitized audio signal, which means that all precautionary tasks for audio signals apply also to the time code signal. Audio ground loops, hum and external noise are the most common errors when receiving error-free time code. If the time code fails or does not play correctly, then check for these possible error sources.
- Damage to the NX SYNC device or to the connected computer due to faulty wiring is not covered by the product warranty.





## SYNCHRONIZING WITH EXTERNAL TIME CODE GENERATOR



## MAINTENANCE

The Obsidian Control Systems NX SYNC 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](http://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 SYNC 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 SYNC, causing overheating and damage to the unit that is not covered by the warranty.

## **NX SYNC SPECIFICATIONS**

### **Control/User Interface**

- Capacity: 1 LTC SMPTE transmitter and receiver
- Configuration and management: ONYX software
- Device status: (3x) multicolor status LEDs

### **Construction**

- Housing: aluminum
- IP Rating: IP20

### **Connections**

- (1x) LTC SMPTE In/Out: 3-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
- Maximum current: 100mA

### **Thermal**

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

### **Included Items**

- (1x) Obsidian USB Cable

## DIMENSIONS

