// ONYX PRODUCT GUIDE 2024

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CONTROL SYSTEMS

REFINED BY PASSION

Obsidian Control Systems combines over 25 years of experience developing professional entertainment lighting control solutions for automated and theatrical lighting fixtures.

CONTROL SYSTEMS

The lighting control software engine that powers the entire system. The ONYX platform scales from simple setup to complex touring shows with ease. Multiple hardware choices from USB wings to powerful consoles allow users to select the best surface for the budget and application. One simple platform, no simplistic feature-limited editions. ONYX is designed to grow with the user and shows, offering smart options and affordable solutions along the way.

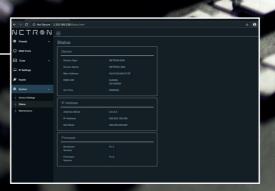
YLOS

The advanced pixel composer and media engine powering ONYX. Create the most powerful FX with remarkable ease. Access hundreds of variations of any media file or effect. DYLOS gives the operator a full media engine without limitations. Fully integrated in the workflow of ONYX, DYLOS truly breaks new ground in combining a traditional lighting console with an advanced media engine in a totally integrated system.



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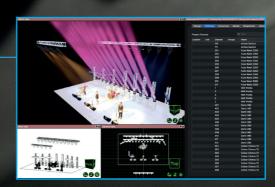
NETRON is a comprehensive lighting data distribution range of rugged, reliable and easy-to-configure devices, offering affordable smart solutions for the professional lighting and AV markets. NETRON devices support applications from live production and venue installations to architectural environments. Our products are developed with the user in mind, combining tough hardware with smart software, for fast setup and solid performance.





CAPTURE is a powerful and fast rendering 3D visualizing software not limited to simply 3D renders but full 3D design with lighting plot and paperwork. Deliver a full design project in both 2D and 3D presentation formats as well as a previz software for your next event or tour. Capture and ONYX are ideal partners through a deep bidirectional communication, speeding up the design process.

Capture is distributed by Obsidian Control Systems in certain countries. Inquire for details.



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ONYX

ONYX is envisioned for creative professionals and new beginners alike. Designed with the user in mind, its tools are easy to access with an optimized graphical work environment that can adapt to any task and complexity.

The **ONYX** platform scales from simple setups to complex touring shows with ease. Multiple hardware choices from USB wings to powerful consoles allow users to select the best surface for the budget and application. One single platform, no simplistic feature-limited editions. ONYX is designed to grow with the user and shows, offering smart options and affordable solutions along the way.

ONYX supports up to 128 Universes of DMX calculations straight from the console processor, eliminating the need for expensive external processing nodes and complex networks. ONYX provides automated network settings of EtherDMX and X-Net for plug and play configuration, getting you started on programming the show right away.

ONYX is the perfect system for creative types. Access unlimited playbacks from the console hardware and the touch screens. Adapt to your show with the various cuelist styles to control all parameters with precise timings or immediately on the fly. Synchronize cues to timecode or run them manually following the music. Fade in, out or through cues using the unique Override feature with the powerful cue-blender option.

ONYX provides incredibly detailed fixture libraries. Everything is mapped right at your fingertips with the expandable graphical parameter view. Using encoders, touch, mouse or keypad control, the user has instant access to colors, gobos and every specific feature that the fixture supports. With fast turnaround times on our library service and an internal library editor for last minute fixture additions, ONYX is always ready to take control.



DYLOS

A radical new concept to programming and playback, **DYLOS** is the most powerful parameter engine ever created.

Based on a full 3D environment and powerful DirectX graphics processing, the **DYLOS** engine has been designed from the ground up for power and performance to manage tens of thousands of fixtures and parameters with ease.

Design and compose Colors, Intensities, Movements, or any other parameter using graphical tools, videos or images. Compose hugely complex FX in seconds with the massive visual library and real time graphics generators.

Creative control with **DYLOS** is truly limitless, offering the designer an incredibly diverse tool set to support the performance with organic color compositions and animations.

DYLOS enhances the design process and encourages playful experimentation rather than an overly technical and uninspiring approach of numbers and values.

Provided with a comprehensive Content Package optimized for pixel effects of over 1000 files, **DYLOS** is fun to use and easy to navigate, allowing complete focus on the creative process.

The **DYLOS** workflow is natural and follows the same well known access to any regular stage light programmed with ONYX. Available any time dynamic control of colors, movements, intensity or any fixture parameter is required, DYLOS is natively integrated into the operation of the console, offering seamless programming and playback through its optimized user interface of live previews, thumbnails, library and FX browsers and dynamic parameter control.

The NX4 is a comprehensive feature-packed control surface. With a well-arranged combination of motorized and manual faders, as well as an array of playback buttons, the NX4 offers 44 total playbacks in a compact yet extremely powerful package. As a member of the innovative ONYX platform from Obsidian Control Systems, the NX4 is feature rich and never restricted in its capabilities. NX4 includes a high-brightness, full HD multi-touch screen; 8 assignable parameter encoders; dedicated Intensity encoder; an assistive

mini touch-screen; full keypad and command section and a dedicated grand master.

Key Features

- Adjustable 15.6" Full HD multi touch screen,2x external 4K Touch Displays
- 44 playbacks (10 Motorized, 12 Sub,22 Playback Executors)
- ¬ 9 Encoders, Keypad, Trackball, 14 Function keys, assistive 3.5" touchscreen
- ¬ 64 Universe integrated processing
- ¬ Network, DMX, Timecode and Midi Connectivity







Two independent playback sections offer instant access. The main playback with 10 motorized faders plus 10 play-pairs allows for quick page changes while the sub playback with 12 faders and 12 button playbacks allows important cues to always be at the user's fingertips.

Utilizing the latest in industrial components, the NX4 contains a powerful new Intel Hexa-Core processor, high speed NVMe SSD drive and 16GB of DDR4 RAM. Fast boot times, instant operation and the ability to process 64 Universes right inside the console without the need for costly external processing networks result in unprecedented power in this form factor. The NX4 is ergonomic with its motorized playback faders, short depth, easy screen access, full ONYX command and keypad section and bright adjustable HD touch screen. It is always ready to run the largest shows and events at a moment's notice.

Surface

- 10x 60 mm motorized playback faders, each with 4x function-assignable buttons, digital backlit labels
- 12x 45mm Sub Playback Fader with Flash keys
- 22x Playback Executors
- 14x customizable multi-function keys
- Playback Select button
- 2x Master Go section with Go, Pause, Snap and Release
- 4x digital rotary encoders with push function and status LED for fixture parameter control
- 4x screen mounted digital rotary encoders with push
- 1x digital intensity Encoder with push
- 3.5" RGB touchscreen for parameter groups, effect parameters, fanning and global timings
- 1x 60mm Grandmaster with Flash/DBO
- Blind/HighLight/Last/Next buttons
- Full numerical keypad and command keys
- Industrial Trackball
- Industrial 15.6" TFT 16:9 touchscreen (1920x1080px)

Physical

- Length: 431 mm (16.9 in.)
- Width: 928 mm (36.5 in.)
- Height: 149 mm (5.8 in.)
- Weight: 16.4 kg (36.1 lbs.)

Hardware

- 250 GB NVMe M.2 storage drive
- Industrial motherboard with Intel i5 Hexa-Core CPU
- Quiet thermal design using advanced copper heat pipe coolers
- 16 GB DDR4 RAM
- Integrated graphics processor
- Windows 10 IoT Embedded Operating System
- OS installation by USB 3.0 storage device
- Supports Windows USB touchscreens
- 4x DMX / RDM Universe In/Out: 5pin locking XLR
- External Display: 2x DisplayPort (up to 4k)
- External Display Power: 12V, 2x Molex 8pin
- Network: 2x Gigabit RJ45 Ethernet for Art-Net, sACN and ONYX X-Net
- Storage and Peripherals: 3x USB 3.0, 3x USB 2.0
- Audio Out, Mic In: 2x 6.3mm Jack
- MIDI in/out/thru (MIDI Show Control, MIDI notes, MIDI timecode): 5pin DIN
- SMPTE Timecode In/Out: 3pin XLR
- Locking Power In

Electrical

100-240 V nominal, 50/60 Hz, 140W

The NX2 is the ultimate compact yet powerful fully integrated lighting controller. As a member of the innovative ONYX platform from Obsidian Control Systems, the NX2 is feature rich and never restricted in its capabilities. NX2 includes a high-brightness, full HD multi-touch screen; 8 assignable parameter encoders; an assistive mini touch-screen; full keypad and command section; a dedicated grandmaster and 10 full playbacks with four freely assignable buttons.

Key Features

¬ Portable and compact fully featured lighting console

¬ Adjustable 15.6" Full HD multi touch screen,2x external 4K Touch Displays

¬ 64 Universe integrated processing

¬ 10 Playbacks, 8 Encoders, Keypad and internal 3.5" touchscreen

¬ Network, DMX, Timecode and Midi Connectivity





The compact playback section with its dedicated Main Playback controls offers instant access to the operator while 8 Encoders and the assistive touchscreen improve programming speed for today's feature-packed DMX devices. Utilizing the latest in industrial components, the NX2 contains a powerful new Intel Hexa-Core processor, high-speed NVMe SSD drive and 16GB of DDR4 RAM. Fast boot times, instant operation and the ability to process 64 Universes right inside the console without the need for costly external processing networks result in unprecedented power in this form factor. The NX2 is ergonomic with its compact footprint, full ONYX command and keypad section and the bright adjustable HD touch screen. It is always ready to run the largest shows and events at a moment's notice.

Surface

- 10x 60 mm playback faders, each with 4x function-assignable buttons
- 8x customizable multi-function keys
- Playback Select button
- Master Go section with Go, Pause, Snap and Release
- 4x digital rotary encoders with push function and status LED for fixture parameter control
- 4x screen mounted digital rotary encoders with push function
- 3.5" RGB touchscreen for parameter groups, effect parameters, fanning and global timings
- Grand master rotary fader and button
- Blind/HighLight/Last/Next buttons
- Full numerical keypad and command keys

Hardware

- Industrial 15.6" TFT 16:9 touchscreen (1920x1080px)
- 250 GB NVMe M.2 storage drive
- Industrial motherboard with Intel i5 Hexa-Core CPU
- · Quiet thermal design using advanced copper heat pipe coolers
- 16 GB DDR4 RAM
- Integrated graphics processor
- Windows 10 IoT Embedded Operating System
- OS installation by USB 3.0 storage device
- Supports Windows USB touchscreens
- 4x DMX / RDM Universe In/Out: 5pin locking XLR
- External Display: 2x DisplayPort (up to 4k)
- Network: 2x Gigabit RJ45 Ethernet for Art-Net, sACN and ONYX X-Net
- Storage and Peripherals: 4x USB 3.0, 1x USB 2.0
- Audio Out, Mic In: 2x 3.5mm Jack
- MIDI in/out/thru (MIDI Show Control, MIDI notes, MIDI Time code): 5pin DIN
- SMPTE Timecode In/Out: 3pin XLR
- 12 VDC power supply input: 4pin XLR
- Desk Lamp: XLR 12V
- USB In: USB 2.0 B

- Length: 300 mm (11.9 in.)Width: 540 mm (21.3 in.)
- Height: 121 mm (4.8 in.)Weight: 9 kg (19.8 lbs.)

Physical

Electrical

- AC mains power to 12VDC external PSU (included):
- 100-240V nominal, 50/60 Hz
- Maximum current: 3A
- 12VDC output: 11A, 132W max.

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The NX1 is the essential lighting controller in the innovative and powerful ONYX platform. Fully featured and unrestricted if offers the complete ONYX experience without compromises in an ultra-compact package.

Utilizing the full ONYX Operating System the NX1 includes a high-brightness 10.1" HD multi-touch screen; 4 assignable parameter encoders; 10 full motorized playbacks with four freely assignable buttons plus and extra playback and function key hybrid array. A dedicated Master Go section rounds out the efficient front panel design.

Including the latest in industrial components the NX1 contains a powerful new Intel processor, high speed NVMe SSD drive and 8GB of DDR4 RAM, allowing fast boot times, instant operation and the ability to process 8 Universes right inside the console. With four DMX ports, a Gigabit network port for up to 8 Universes of Art-Net, sACN plus the ONYX X-Net protocol the NX 1 has ample connectivity and power for a wide variety of shows and applications. One additional touch monitor is supported for even more direct access at anytime.

Key Features

- ¬ Portable and compact fully featured lighting console
- ¬ 10.1" Full HD multi touch screen, 1x external Touch display suppport
- ¬ ONYX Essential License (8 Universes)
- ¬ Fully integrated industrial processing
- ¬ 10 Motorized Playbacks, 10 Playback / Function Hybrids, 4 Encoders, Master Go section



Surface

- 10x 60 mm motorized playback faders, each with 4x function-assignable buttons
- 10x customizable playback or multi-function keys
- Playback Select button
- Master Go section with Go, Pause, Snap and Release
- 4x digital rotary encoders with push function and status LED for fixture parameter control
- Virtual Keypad control

Hardware

- Industrial 10.1" TFT 16:9 touchscreen (1920x1080px)
- 250 GB NVMe M.2 storage drive
- Industrial motherboard with Intel CPU
- Quiet thermal design using advanced copper heat pipe coolers
- 8 GB DDR4 RAM
- Integrated graphics processor
- Windows 10 IoT Embedded Operating
- OS installation by USB 3.0 storage
- Supports Windows USB touchscreens

Physical

- Length: 298.5 mm (11.75 in.)Width: 636 mm (25 in.)
- Height: 71 mm (2.8 in.)

Electrical

• 100-240V, 50/60 Hz, max. 104W@100V



NXP

The NX P is a motorized fader wing for ONYX. The ideal expansion for the NX1 console and ONYX PC systems, it replicates the full playback section of the NX1 console. Four integrated DMX ports provide instant connectivity to the lighting system.

Multiple NX P wings can be connected to any ONYX console or PC system, expanding direct access with 20 playbacks at a time. The flexible button array can be mapped to playback control or powerful function keys. The NXP replicates the layout and all functionality of the NX1 and NX4 console surfaces so all operation is seamless and intuitive.

A simple magnetic alignment system allows attachment on any side of the NX1 console or NX K command pad. The keypad and playback wing are part of the ONYX platform and can be utilized with all other NX devices or ONYX on any PC system.

Key Features

- ¬ Portable and compact motorized playback wing
- 10 Motorized Playbacks, 10 Playback / Function Hybrids, Master Go section
- ¬ 4x DMX Ports integrated
- ONYX Nova+ License
 (4 Universes + MIDI/OSC/
 Timecode support)

NXZ



- 10x 60 mm motorized playback faders, each with
- 4x function-assignable buttons
- 10x customizable playback or multi-function keys
- Playback Select button
- Master Go section with Go, Pause, Snap and Release

Physical

- Length: 298.5 mm (11.75 in.)
- Width: 373 mm (14.7 in.)
- Height: 71 mm (2.8 in.)
- Weight: 4.5 kg (9.9 lbs.)

Electrical

• 100-240 V nominal, 50/60 Hz, 30W



The NX K is a small USB powered control surface for ONYX. The ideal companion for the NX1 console and ONYX PC systems, it replicates the full keypad and command section of larger consoles. Four encoders complete the programming experience for fast and direct parameter access.

A simple magnetic alignment system allows attachment on either side of the NX1 console or NXP motorized fader wing. The keypad and playback wing are part of the ONYX platform and can be utilized with all other NX devices or ONYX on any PC system.

Key Features

- ¬ Portable and compact USB keypad
- ¬ Full ONYX keypad and command section
- ¬ 4 Encoders with push and led feedback
- ¬ ONYX Nova License (4 Universe)
- ¬ USB powered



Surface

- ONYX numerical keypad
- Command section
- 4x digital rotary encoders with push function and status LED for fixture parameter control

Physical

- Length: 298.5 mm (11.75 in.)
- Width: 160 mm (6.3in.)
- Height: 71 mm (2.8 in.)
- Weight: 1.4 kg (3 lbs.)

Electrical

• USB 5V

NX,

NX WING

NX Wing is the complementary USB control surface to Obsidian Control Systems' ONYX platform. Based on the NX 2 console, the NX Wing utilizes the same rugged design and components with an identical footprint and layout. Through its USB connection, the NX Wing provides a responsive, professional hardware surface to operate ONYX on any PC system without compromises. Any user of ONYX will feel instantly familiar with the NX Wing and no setup or additional installation is required. Simply plug it into a user-provided PC with ONYX and get started instantly.

NX Wing provides extensive connectivity with 4 DMX Ports, MIDI and Timecode ports while unlocking 64 Universes of control when connected to ONYX on a PC.

Key Features

- ¬ Fully featured control surface, portable and lightweight
- ¬ 10 Playbacks, Encoders, Keypad and internal 3.5" touchscreen
- ¬ DMX, Timecode and Midi Connectivity
- ¬ ONYX Premier 64 Universe License included
- ¬ Plug and Play USB device for any PC with ONYX





PC Requirements

- Windows 10 64bit
- SSD, 8GB RAM
- Gigabit Network Adapter
- USB 2.0 Port

Connections

- 4x DMX / RDM Universe In/Out: 5pin locking XLR
- MIDI in/out/thru (MIDI Show Control, MIDI notes, MIDI Timecode): 5pin DIN
- SMPTE Timecode In/Out: 3pin XLR
- 12VDC power supply input: 4pin XLR
- Desk lamp: XLR 12V
- USB In: USB 2.0 B

Physical

- Length: 300 mm (11.9 in.)
- Width: 540 mm (21.3 in.)
- Height: 99 mm (3.9 in.)
- Weight: 4.6 kg (10.2 lbs.)

Electrical

- AC mains power to 12VDC external PSU (included): 100-240V nominal, 50/60 Hz
- Maximum current: 3A
- 12VDC output: 11A, 132W max.



· Monitor not included

NX TOUCH

The NX Touch is a powerful yet simple control surface for the ONYX platform. Fully compatible with all ONYX consoles and PC software, NX Touch is a plug and-play solution with an innovative control surface like no other lighting console.

14 touch faders allow control of playbacks and fixture parameters while 20 velocity-controlled pads allow for new types of effects. Additional programming buttons such as Record, Edit, Update, Load and Clear are accessible directly from the NX Touch control panel. NX Touch includes one DMX port for direct control of any compatible DMX device.

Key Features

- ¬ USB control surface for both smaller applications and professional use
- ¬ Combined playback and programming surface with innovative touch fader technology
- ¬ Pressure sensitive flash buttons
- ¬ 10 Playbacks, 10 multi-purpose function keys, 4 digital encoders
- ¬ Portable, rugged and lightweight design
- ¬ USB connection for ONYX on PC systems or as expansion wing for all ONYX consoles
- ¬ Integrated DMX output, expandable up to 128 Universes
- ¬ Plug and Play USB device without external power supply







Requirements

- Windows 10 64bit
- SSD, 8GB RAM
- Gigabit Network Adapter
- USB 2.0 Port

Connections

- DMX Out: 1x 5pin locking XLR
- USB Input: USB B 2.0

Physical

- Length: 394 mm (15.5 in.)
- Width: 218.5 mm (8.6 in.)
- Height: 46.5 mm (1.8 in.)
- Weight: 1.5 kg (3.3 lbs.)
- Housing: Aluminum, steel, plastic Mounting: VESA 75x75, 100x100
- Security: K-Lock locking slot
- IP Rating: IP20

Electrical

- Power source: 5 VDC over USB
- Maximum current: 500 mA



· Tablet not included



NX TOUCH RACKMOUNT KIT Optional rack mount accessory

ONYX KEY

and Licences for PC System

ONYX for PC is available in several different license levels. Starting from the Free Edition, which enables a Universe of Artnet or sACN to test and evaluate, up to ONYX Elite with 128 Universe of control straight from a single PC, ONYX has various license options for any show and budget.

ONYX License	USB Universes	sACN and Art-Net Universes	DYLOS Zones	OSC Playback	MIDI	Timecode
ONYX "Free"		1	2	5 min Timeout		
ONYX Nova*	4	4	2	5 min Timeout (unlocked with Touch/Play)		
ONYX Essential	8	8	2	Yes	Yes	Yes
ONYX Premier	64	64	5	Yes	Yes	Yes
ONYX Elite	128	128	5	Yes	Yes	Yes

^{*}requires genuine ONYX USB device or NETRON EtherDMX Node

ONYX Essential and Premier Keys are encrypted USB dongles to unlock up to 64 Universes of DMX control on any PC system. This compact key carries the full ONYX license that is instantly recognized by the ONYX software. No online connectivity or activation is required. The ONYX key can be used on any PC and is not registered to a specific hardware. Drivers are pre-installed with ONYX, making this key plug and play. The ONYX Key is a great solution for users on the go, as a backup system or to build powerful PC systems for architainment applications.

Key Features

- ¬ 8 or 64 Universe ONYX licenses
- ¬ Expandable up to 128 Universes
- \neg USB 2.0 compact housing with security loop
- ¬ Pre-activated license
- ¬ Plug and Play, no additional drivers required

PC Requirements

- Windows 10 64bit
- · 40GB SSD, 8GB RAM
- Gigabit Network Adapter
- USB 2.0 Port

Connections

• USB 2.0

Included Items

- ONYX USB Key (Essential 8 Universes or Premier 64 Universes)
- USB Drive with ONYX Software
- 2x ONYX USB Lanyard



NX DMX

The NX DMX is a USB-powered 2-port DMX Node. As a member of the innovative ONYX platform from Obsidian Control Systems, the NX DMX provides instant access to DMX In 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 and affordable way to add two additional DMX ports.







Tablet not included

NX SYNC

The NX SYNC captures timecode in various SMPTE formats from its 3-pin XLR connection and converts it to a MIDI Timecode (MTC) stream, where it can be read into ONYX or any other MIDI Timecode compatible software. Additionally, it also has the power to take MTC and send it back out as SMPTE.

The NX SYNC contains a powerful hardware architecture for instant processing and minimal frame delays. It allows the ONYX software to read Linear Timecode (LTC) signals for perfect cue synchronization with external devices like sound or video playback systems.







· Tablet not included









NX2



NX1



NINGS

NX WING



NXK



NX TOUCH



NXP



NETRO IN

NETRON is a comprehensive data distribution range of rugged, reliable and easy-tofigure devices, offering affordable smart solutions for the professional lighting and AV markets.



