



# AX2

## User Manual

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#### **DOCUMENT VERSION**

Due to additional product features and/or enhancements, an updated version of this document may be available online.



Please check [www.adj.com](http://www.adj.com) for the latest revision/update of this manual before beginning installation and/or programming.

Date	Document Version	Notes
12/02/25	1	Initial Release

# CONTENTS

<b>INFORMATION</b>	<b>4</b>
<b>SAFETY GUIDELINES</b>	<b>5</b>
<b>OVERVIEW</b>	<b>6</b>
<b>SOFTWARE I POWER CONNECTIONS</b>	<b>7</b>
<b>CONNECTIONS</b>	<b>8</b>
<b>MAINTENANCE</b>	<b>9</b>
<b>SPECIFICATIONS</b>	<b>10</b>
<b>DIMENSIONS</b>	<b>11</b>
<b>OPTIONAL ACCESSORIES</b>	<b>12</b>

# 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.

**This product is intended for use by professionally trained personnel only, and is not suitable for private use.**

## 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.

**Parts:** To purchase parts online visit:

<http://parts.adj.com> (US)

<http://www.adjparts.eu> (EU)

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## LIMITED WARRANTY

For up-to-date warranty information regarding your device, please visit ADJ's warranty information page online or scan the QR codes below.



USA: <https://www.adj.com/pages/warranty-information>



EU: [https://www.adj.eu/terms\\_and\\_conditions](https://www.adj.eu/terms_and_conditions)

It is strongly recommended to power the fixture down completely when not in use. Doing so will reduce wear on the fixture due to sustained or extended operational periods, thereby maximizing its operational lifespan.

# 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. ADJ 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 manufacturer's 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 ADJ WARRANTY, AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS, AND MAY ALSO VOID THE WARRANTY FOR ANY NON-ADJ 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.

Operate the console only on a stable and solid surface.

**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.

Protect the internal touch screen from sharp objects and operate the screen using only a finger.

**CAUTION:** Risk of explosion if CMOS battery is replaced by an incorrect type. Dispose of used batteries according to local environmental regulations.

**CAUTION:** Do not expose CMOS battery to excessive heat such as sun or fire.

# OVERVIEW

## AX2

The AX2 is the ultimate compact, yet powerful, fully integrated lighting controller. It is the first console in the ADJ portfolio derived from the innovative ONYX platform. The AX2 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 grand master, and 10 full playbacks with four freely assignable buttons.

Utilizing the latest industrial components, the AX2 features a powerful Intel Hexa-Core processor, high-speed NVMe SSD drive, and 16 GB of DDR4 RAM. These deliver fast boot times, instant operation, and the ability to process 32 Universes directly inside the console without the need for costly external processing networks—resulting in unprecedented power in this form factor.

The AX2 is ergonomically designed with a compact footprint, complete 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.

With four DMX ports, Timecode, MIDI, and dual Gigabit ports supporting up to 32 Universes of Art-Net, sACN, plus the ONYX X-Net protocol, the AX2 provides all the connectivity and power demanded by today's ever-increasing show sizes. Two additional 4K touch monitors are supported for even more direct access at any time.

## Key Features

- Powered by ONYX
- DYLOS Media Engine with 5 Zones of Pixel Control
- Adjustable 15.6" Full HD multi touch screen
- 2x external 4K Touch Displays
- 32 Universe integrated processing
- 10 Playbacks
- 8 Encoders
- SMPTE/MIDI
- Keypad and internal 3.5" touchscreen
- Network, DMX, Timecode and Midi Connectivity

# SOFTWARE

The software for AX2 is available 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.

## POWER CONNECTIONS

The ADJ AX2 accepts AC mains power at 100–240 V, 50/60 Hz. Do not connect it to power outside this range. Damage resulting from incorrect connection is not covered under warranty.

North America: A cable with a NEMA 5-15P plug is provided for use with the AX2 in the USA and Canada. This approved cable must be used in North America.

Rest of the world: The provided IEC cable is not fitted with a country-specific plug. Install only a plug that meets local and/or national electrical codes and is suitable for the country's specific requirements.

A 3-prong grounded-type (earthed-type) plug must be installed following the plug manufacturer's instructions. The table below shows some possible pin identification schemes; if the pins are not clearly identified, or if you have any doubts about proper installation, consult a qualified electrician.

Wire color (standard EU code)	Pin	Symbol
brown	live	L
blue	neutral	N
yellow/green	ground	

To apply power to the AX2:

1. Set the power switch to the center OFF position.



2. Insert the 4-pin XLR connector from the external power supply unit into the power input on the back of the console.
3. Insert the provided power cable into the IEC connector of the power supply unit and connect the cable to a properly protected and grounded outlet.
4. Turn the AX2 on by toggling the power switch to the CPU position.

## CONNECTIONS: RIGHT SIDE PANEL

- USB device socket, suitable for USB flash drives or a keyboard. This connection is not suitable for boot operations. Use the USB connectors on the back of the console for this purpose. Do not exceed a 500mA current on any USB device port.
- The MIDI card provides MIDI In, Out, and Thru 5-pin DIN connectors. The software supports incoming MIDI Notes, MIDI Show Control, and MIDI Timecode signals.
- The SMPTE device offers 3-pin XLR connectors for SMPTE In and Out signals.



## CONNECTIONS: REAR PANEL

- 4xDMX/RDM Universe In/Out: 5-pin locking XLR
- External Display: 2x DisplayPort (up to 4k)
- Network: 2x Gigabit 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 Showcontrol, MIDI notes, MIDI Timecode): 5pin DIN
- SMPTE Timecode In/Out: 3-pin XLR
- 12VDC power supply input: 4-pin XLR
- Desk lamp: XLR 12V
- USB In: USB 2.0 B



## MAINTENANCE

The ADJ AX2 is designed as a rugged, roadworthy device built to withstand the demands of professional use. The only routine maintenance required is occasional cleaning. For any other service needs, please contact your ADJ dealer or visit [www.adj.com](http://www.adj.com).

Any service not described in this manual must be performed by a trained and qualified technician authorized by ADJ.

Like any computer, the AX2 requires periodic cleaning, with the schedule depending on the operating environment. An authorized ADJ technician can provide specific recommendations if needed.

Never spray cleaner directly onto the console surface; always apply it to a lint-free cloth and wipe the surface clean. Cleaning products designed for cellphones and tablets are ideal for maintaining a lighting console.



Important: Excessive dust, dirt, smoke residue, fluid build-up, or other contaminants can degrade performance, lead to overheating, and cause damage not covered by the warranty.

# AX2 SPECIFICATIONS

## Control Surface

10 x 60 mm playback faders, each with 4 x function- assignable buttons  
8 x customizable multi-function keys  
Playback Select button  
Master Go section with Go, Pause, Snap and Release  
4 x digital rotary encoders with push function and status LED for fixture parameter control  
4x screen mounted digital rotary encoders with push  
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  
'Powered by Onyx' text on front panel

## Hardware

Industrial 15.6" TFT 16:9 touchscreen (1920x1080px)  
500 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 11 IoT Embedded Operating System  
OS installation by USB 3.0 storage device  
Supports Windows USB touchscreens

## Connections

4 x DMX / RDM Universe In/Out: 5-pin locking XLR  
External Display: 2x DisplayPort (up to 4k)  
Network: 2x Gigabit 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 timecode): 5pin DIN  
SMPTE Timecode In/Out: 3-pin XLR  
12 VDC power supply input: 4-pin XLR  
Desk lamp: XLR 12V

## Physical

Length: 300mm (11.9 in.)  
Width: 540 mm (21.3 in.)  
Height: 121mm (4.8 in.)  
Weight: 4.6 kg (10.2 lbs.)

## Electrical (Power Supply)

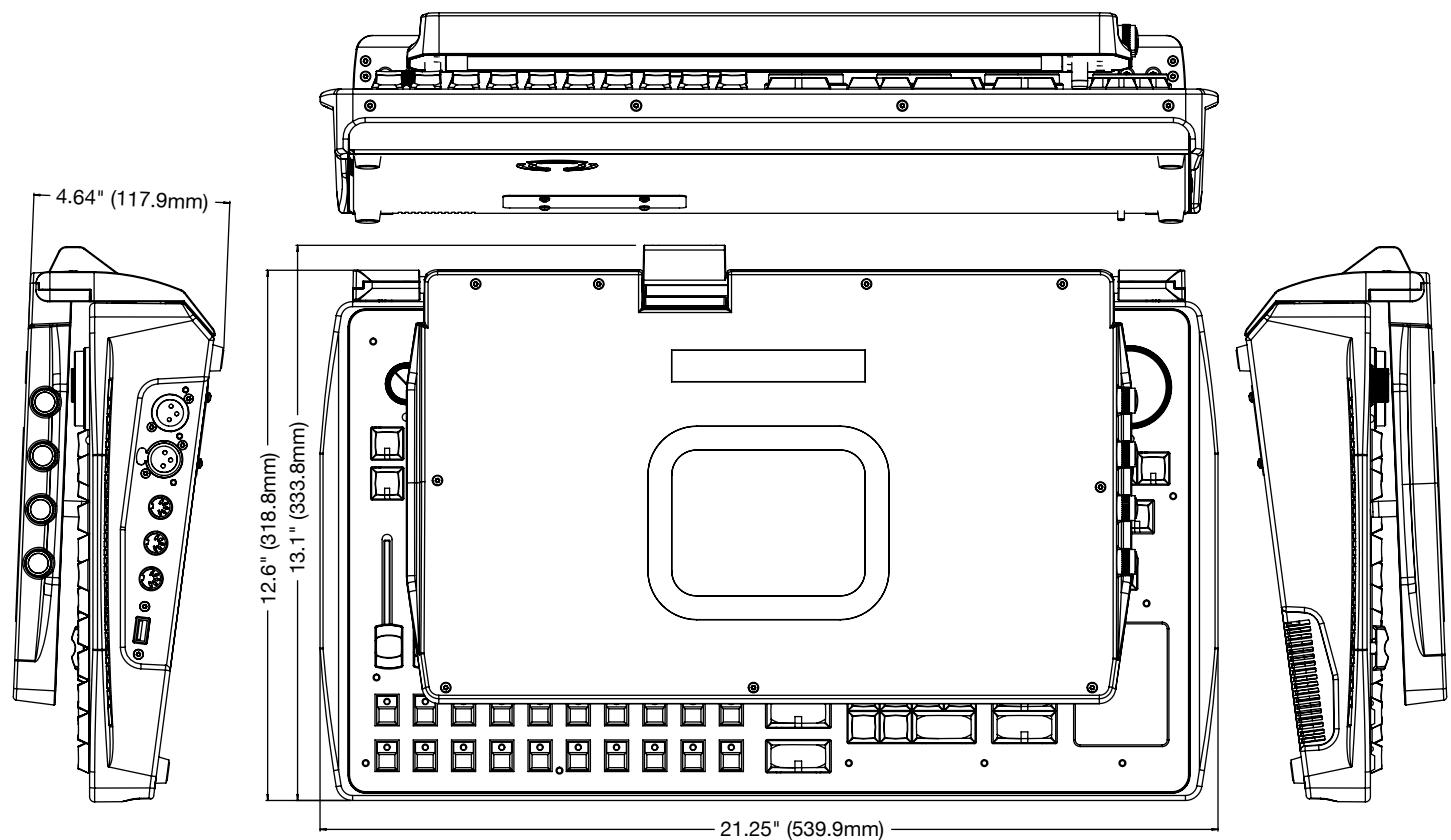
AC mains power to 12 VDC external PSU (included): 100-240 V nominal, 50/60 Hz  
Maximum input current: 3 A  
12 VDC output: 11 A, 132 W max

## Included Items

RGB LED desk lamp, angular XLR connector, 13"  
Dust Cover  
USB Cable  
External PSU (12V 11A)  
1.5 m power cable, 3-pin IEC (EU or US version)  
USB Recovery Flash drive Installation Manual

# DIMENSION DRAWINGS

Drawings not to scale



## OPTIONAL ACCESSORIES

ORDER CODE		ITEM
US	EU	
AX2992	1322000066	AX2



### FCC STATEMENT

**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 their own expense.

**WARNING:** Changes or modifications to this product not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### 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!

