

# ARIA X2 BRIDGE

## 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 scan the QR Code with your mobile device or visit [www.elationlighting.com](http://www.elationlighting.com) for the latest revision/update of this manual, before installation and/or programming.

Date	Document Version	Software Version >	Modes	Notes
07/16/24	1	1.00	N/A	Initial Release
07/31/25	1.1	N/A	N/A	Updated system menu, FCC Statement
11/18/25	1.2	N/A	N/A	Updated: Overview, Rear Connections

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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.

**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.

## BOX CONTENTS

1.83M locking power cable  
3 antennas

## CUSTOMER SUPPORT

Contact ELATION Service for any product related service and support needs.  
Also visit [forums.elationlighting.com](http://forums.elationlighting.com) with questions, comments or suggestions.

**ELATION SERVICE USA** - Monday - Friday 8:00am to 4:30pm PST  
323-582-3322 | [support@elationlighting.com](mailto:support@elationlighting.com)

**ELATION SERVICE EUROPE** - Monday - Friday 08:30 to 17:00 CET  
+31 45 546 85 63 | [support@elationlighting.eu](mailto:support@elationlighting.eu)

**REPLACEMENT PARTS** - please visit [parts.elationlighting.com](http://parts.elationlighting.com)



## IMPORTANT NOTICE!

**THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT.  
DO NOT ATTEMPT ANY REPAIRS YOURSELF; DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURER'S WARRANTY AND ARE NOT SUBJECT TO WARRANTY CLAIMS AND/OR REPAIRS.**

## **LIMITED WARRANTY (USA ONLY)**

- A. Elation Professional hereby warrants, to the original purchaser, Elation Professional products to be free of manufacturing defects in material and workmanship for a period of two years (730 days), and Elation Professional product rechargeable batteries to be free of manufacturing defects in material and workmanship for a period of six months (180 days), from the original date of purchase. This warranty excludes discharge lamps and all product accessories. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.
- B. For warranty service, send the product only to the Elation Professional factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Elation Professional 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, Elation Professional shall have no liability what so ever for loss and/or damage to any such accessories, nor for the safe return thereof.
- C. 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 Elation Professional concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Elation Professional factory unless prior written authorization was issued to purchaser by Elation Professional; if the product is damaged because not properly maintained as set forth in the product instructions, guidelines and/or user manual.
- D. 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, Elation Professional 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 Elation Professional under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Elation Professional. All products covered by this warranty were manufactured after January 1, 1990, and bare identifying marks to that effect.
- E. Elation Professional 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.
- F. 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 Elation Professional 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 Elation Professional 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.
- G. This warranty is the only written warranty applicable to Elation Professional products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

### **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. Elation Professional 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 - FIXTURE MUST BE PROPERLY GROUNDED**



**THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT.**

**DO NOT ATTEMPT ANY REPAIRS YOURSELF; DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURE'S WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.**



**DO NOT PLUG FIXTURE INTO A DIMMER PACK!**

**NEVER OPEN THIS FIXTURE WHILE IN USE!**

**UNPLUG POWER BEFORE SERVICING FIXTURE!**

**NEVER TOUCH FIXTURE DURING OPERATION, AS IT MAY BE HOT!**

**KEEP FLAMMABLE MATERIALS AWAY FROM FIXTURE!**



**INDOOR / DRY LOCATIONS USE ONLY!**

**DO NOT EXPOSE FIXTURE TO RAIN AND MOISTURE!**

**DO NOT** shake the device; avoid brute force when installing and/or operating the device.

**DO NOT** operate the device if the power cord is frayed, crimped, damaged, and/or if any of the power cord connectors are damaged and do not insert into the fixture securely with ease.

**NEVER** force a power cord connector into the device. If the power cord or any of its connectors are damaged, replace it immediately with a new one of a similar power rating.

When installing the fixture in a suspended environment, always use mounting hardware that is no less than M10 x 25 mm, and always install the fixture with an appropriately rated safety cable.

Always disconnect the fixture from the main power source before performing any type of service and/or cleaning procedure.

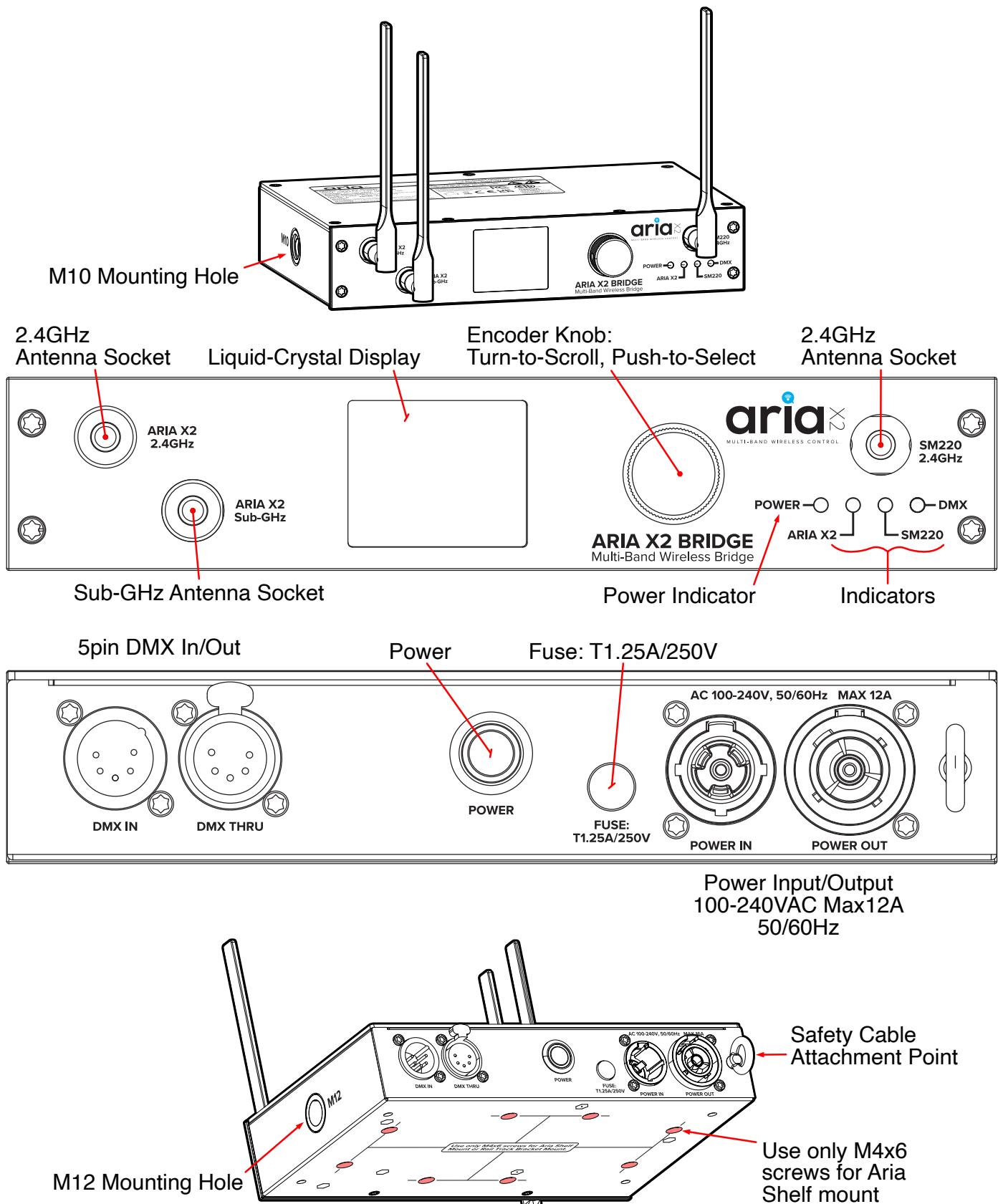
Only handle the power cord by the plug end; never pull out the plug by tugging the wire portion of the cord.

During the initial operation of this fixture, light smoke or a smell may emit from the interior of the fixture. This is a normal process and is caused by excess paint in the interior of the casing burning off from the heat associated with the lamp and will decrease gradually over time.

Consistent operational breaks will ensure the fixture functions properly for many years.

**ONLY** Use the original packaging and materials to transport the fixture for service.

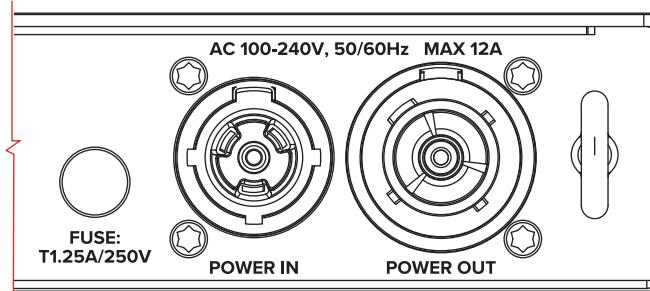
# OVERVIEW



# REAR CONNECTIONS

## AC CONNECTIONS

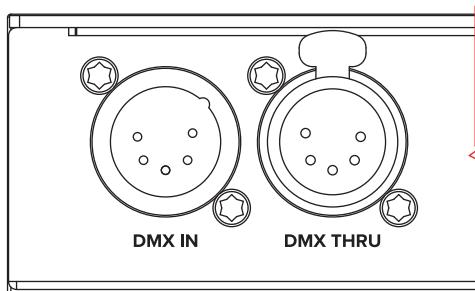
The Aria X2 Bridge is rated for 100-240V 50/60Hz, and accepts AC mains power within that range. Do not connect it to power outside this range. Note that the device uses a T1.25A/250V fuse. Damage resulting from incorrect connection is not covered under warranty. A cable with a NEMA 15-5P plug is provided for use with the Aria X2 Bridge in the USA and Canada. This approved cable must be used in North America.



## DMX CONNECTIONS:

The DMX Input/Output connections are 5pin male/female XLR. The pin-out on the socket is pin 1 to shield, pin 2 to cold (-), and pin 3 to hot (+). Pins 4 and 5 are not used. Carefully connect DMX cables to the respective ports. To prevent damaging the DMX ports, provide strain relief and support. Avoid connecting FOH Snakes to the ports directly.

Pin	Connection
1	Com
2	Data -
3	Data +
4	Not connected
5	Not connected



# DMX SETUP

## DMX-512:

Digital Multiplex, or DMX, serves as a universal protocol utilized by most lighting and controller manufacturers for communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is transmitted as serial data, traveling from fixture to fixture through the DATA 'IN' and DATA 'OUT' XLR terminals found on all DMX fixtures. Most controllers only have a DATA 'OUT' terminal.

## DMX LINKING:

As a language, DMX enables all makes and models from different manufacturers to be connected and operated from a single controller, provided that all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission when using multiple DMX fixtures, use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not affect the DMX addressing. For example, a fixture assigned a DMX address of 1 can be placed anywhere in a DMX line—at the beginning, at the end, or anywhere in the middle. Therefore, the first fixture controlled by the controller could be the last fixture in the chain. When a fixture is assigned a DMX address of 1, the DMX controller knows to send data assigned to address 1 to that unit, regardless of its position in the DMX chain.

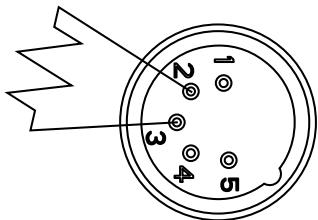
## DATA CABLE (DMX CABLE) REQUIREMENTS:

The Aria X2 Bridge can be controlled via the DMX-512 protocol. The DMX address is electronically set using the controls on the front panel of the unit. Both the unit and the DMX controller require an approved DMX-512 110 Ohm Data cable for data input and output. Accu-Cable DMX cables are recommended. If you are making your own cables, ensure that you use standard 110-120 Ohm shielded cable (which can be purchased at most professional sound and lighting stores). Cables should be made with a male and female XLR connector on either end of the cable. Additionally, keep in mind that DMX cable must be daisy-chained and cannot be split.



## LINE TERMINATION:

When using longer runs of cable, one may need to use a terminator on the last unit to avoid erratic behavior. A terminator is a 110-120 ohm 1/4-watt resistor, which connects between pins 2 and 3 of a male XLR connector (DATA + and DATA -). Insert this unit into the female XLR connector of the last unit in your daisy chain to terminate the line. Using a cable terminator (ADJ part number Z-DMX/T) will decrease the possibilities of erratic behavior.



A DMX512 terminator reduces signal errors, avoiding most signal reflection interference. Connect PIN 2 (DMX-) and PIN 3 (DMX+) of the last fixture in series with a 120 Ohm, 1/4 W Resistor to terminate the DMX512.

# DMX SETUP

## CONNECTING DMX CONTROLLER TO ARIA X2 BRIDGE

This device has the flexibility to receive signal from the controller, and transmit the signal to other devices or additional bridges, via multiple protocols. Input and output signals may be received or transmitted via either of the Aria antennas, the SM220 antenna, or the physical DMX connection.

Any one of these 3 options (Aria, SM220, or physical DMX cable) can be used as the input to the device, and one or both of the remaining options can be used as the output. **However, please note that the option that has been selected for the input cannot be simultaneously selected for the output as well.** For example, if the device has the physical DMX as its input, it is able to output via either Aria or SM220, or both.

When using a physical cable to link the units, please note that the DMX ports are cable glands intended for hard-wiring. The single DMX port should include wiring for both DMX input and output.

Selection of which method will be the unit input, and which method or methods will be the unit output, is done in the Bridge sub-menu of the System Menu. Please refer to the **System Menu** section of this manual for additional details.

## ARIA X2 BRIDGE OPERATION INSTRUCTION

**Transmitter Mode:** When transmitting, the signal indicator turns orange. You can set either 2.4G or Sub-GHz to choose a different channel.

**Receiver Mode:** When you set the device to receiver mode with the same frequency (2.4G or Sub-GHz) and channel as the transmitter device, the LED indicator turns green. You can then control the lighting.

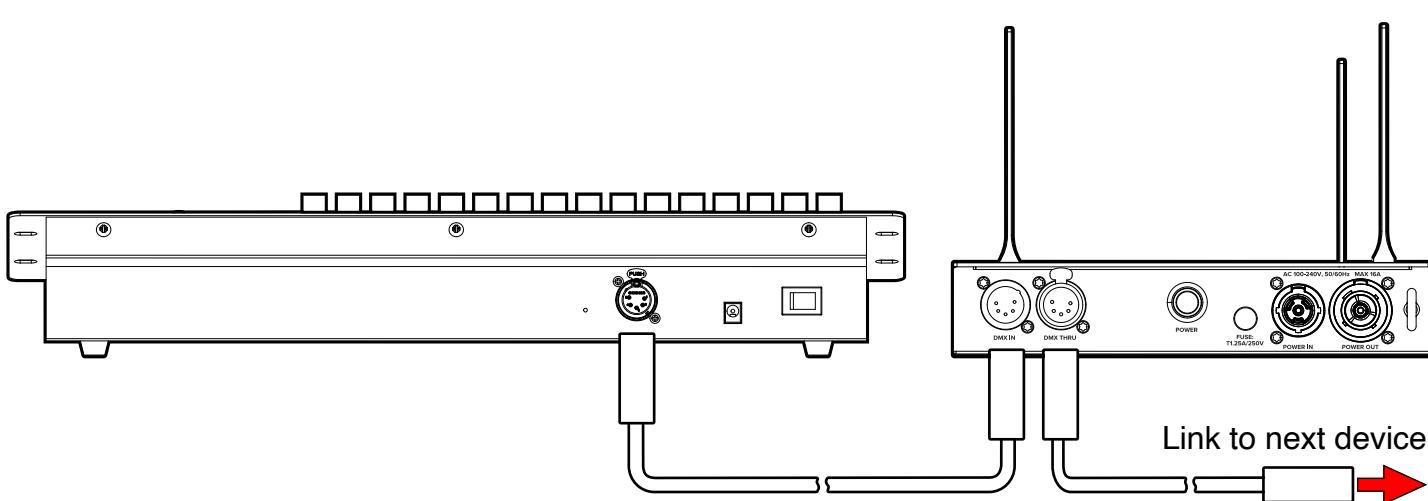
## ARIA X2 BRIDGE OPERATION INSTRUCTION FOR SM220 TRANSMITTING AND RECEIVING

**Instruction:** Set the menu to DMX in and SM220 out. When the LED indicator of SM220 turns green, it indicates that it is receiving. When the SM220 indicator turns orange, it indicates that it is transmitting.

Set the channel of the SM220 receiver to be the same as the SM220 transmitter, and it will receive the signal from the transmitting device.

## ARIA X2 BRIDGE AS RECEIVER, AND THEN TRANSMITTING TO SM220 DEVICES AS BRIDGE

**Aria X2 Bridge as Receiver Mode:** (Set menu to be Aria In, SM220 Out) Set the frequency to be the same as the transmitter. When it is receiving, the signal indicator turns green. The SM220 turns orange (which indicates it is transmitting). All devices with an SM220 module will receive the signal from the Aria X2 Bridge.



# 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.**



**THE ARIA X2 TRANSCEIVER IS DESIGNED TO BE TRUSS-MOUNTED; HOWEVER, IT CAN BE USED STAND-ALONE, WHERE THE DEVICE MUST SIT ON A FIRM FLAT SURFACE.**

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

## POWER LINKING

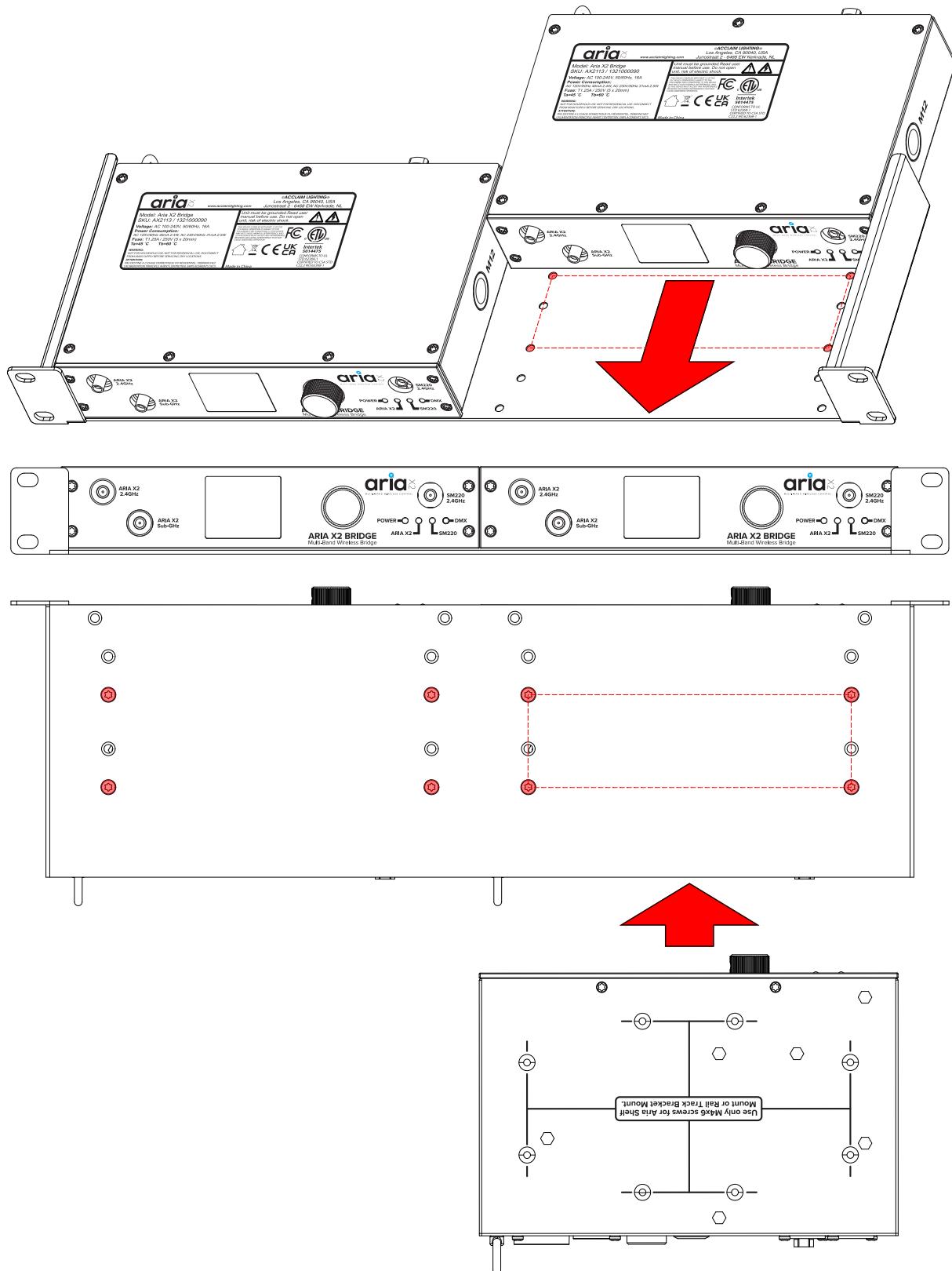


**USE CAUTION WHEN POWER LINKING AS THE POWER CONSUMPTION MAY EXCEED THE MAXIMUM POWER OUTPUT ON THIS DEVICE. CHECK SILK SCREEN FOR MAXIMUM AMPS.**

# INSTALLATION GUIDELINES

## RACK MOUNT INSTALLATION

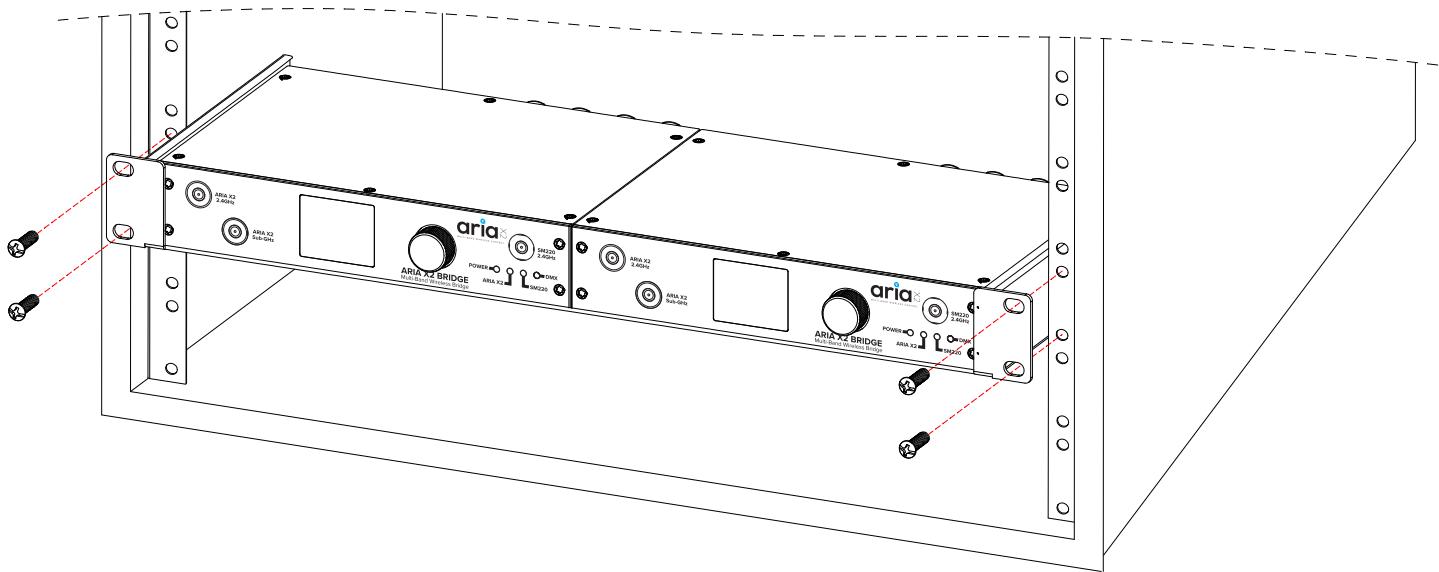
1. Slide the Aria X2 Bridge units into the rear of the Rack Shelf.
2. Align the mounting holes on the bottom of each Aria X2 Bridge with the corresponding holes on the Rack Shelf, and secure each unit to the Rack Shelf with (4x) M4x6 screws.



# INSTALLATION GUIDELINES

## ARIA RACK SHELF (SOLD SEPARATELY):

3. Align the mounting holes of the Aria Rack Shelf Ears with the corresponding vertical holes on the rack, making sure to position the device at the desired height.
4. Insert (4x) screws through the mounting holes of the 19" Rack Shelf Ears, and securely tighten them.
5. Ensure that the devices are firmly mounted to the 19" Rack Shelf, and that it is securely attached to the rack before connecting any cables.



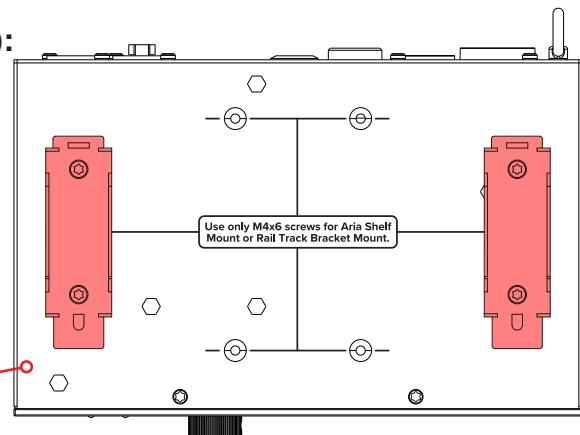
# INSTALLATION GUIDELINES

## 35MM DIN RAIL ADAPTERS (SOLD SEPARATELY):

1. Secure 2x 35mm DIN Rail Adapters to the bottom of the Aria X2 Bridge using (2x) M4x6 screws.

35mm DIN Rail Adapter

Bottom

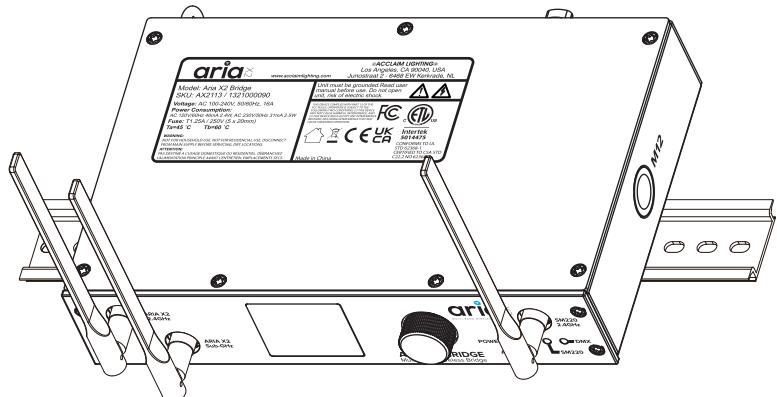
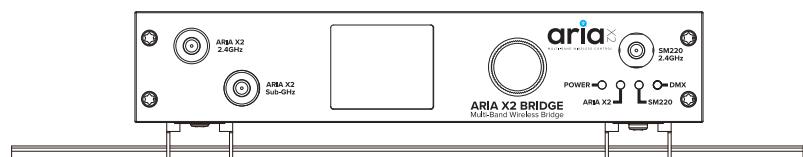
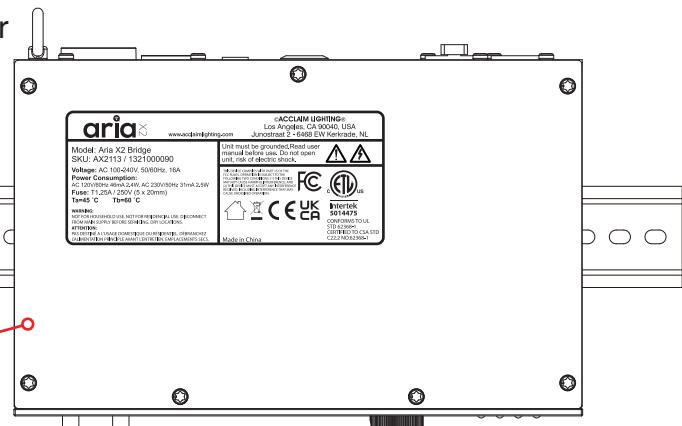


Rear

35mm DIN Rail

Top

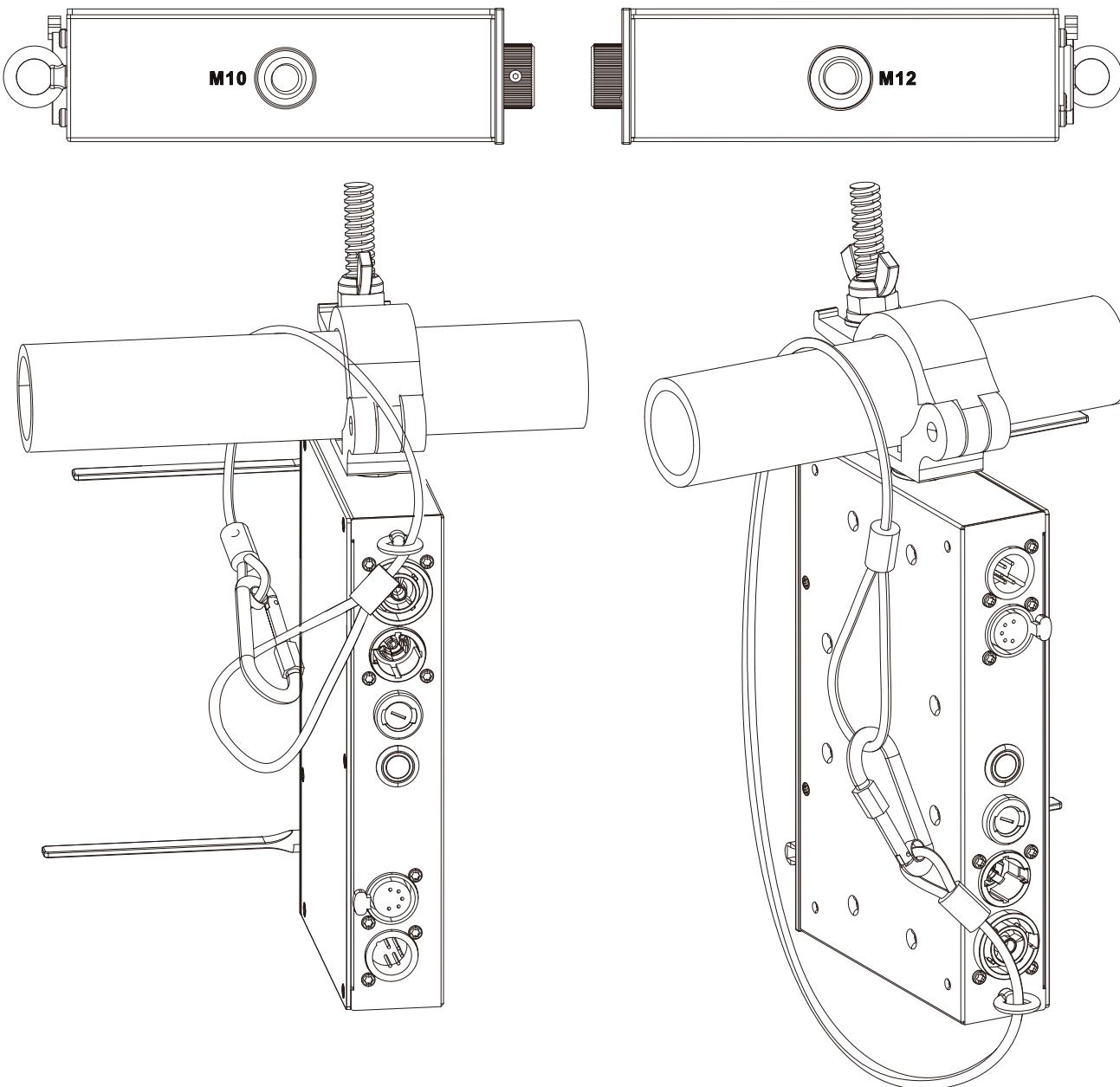
Front



# INSTALLATION GUIDELINES

## TRUSS MOUNT INSTALLATION

Insert 18.8 steel M10x20mm or M12x25mm bolt (not included) through the respective mounting hole of the clamp (not included), and then thread it into the matching 10M hole (shown below left), or 12M hole (shown below right). The bolt must be threaded at least 18mm (0.7ins) into the fixture base.



**FALLING FIXTURES CAN CAUSE SEVERE INJURY OR SERIOUS EQUIPMENT DAMAGE! FOR THIS REASON, FIXTURES SHOULD BE INSTALLED AND INSPECTED ONLY BY QUALIFIED PERSONNEL. DO NOT INSTALL THE UNIT IF YOU LACK THE QUALIFICATIONS TO DO SO, OR IF YOU HAVE DOUBTS ABOUT THE SAFETY AND SECURITY OF THE INSTALLATION SETUP OR LOCATION!**



**ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THE FIXTURE WILL NOT FALL IF THE CLAMP FAILS.**

# SETUP GUIDELINES

## GENERAL INFORMATION

The Aria Bluetooth app has the ability to connect wirelessly to any device that has Aria wireless DMX installed and has Bluetooth enabled.

**Before installing the fixture in a remote location, double check that the fixture's main power is switched on, and that the Bluetooth function has been enabled in the fixture's system menu.** Certain fixtures may have Bluetooth disabled by default. If this function is disabled, then the fixture cannot be configured remotely using the Aria app, and will have to be configured directly from the fixture's control screen.

Additionally, the user should consider setting the fixture's No DMX setting to "Hold Last". This will allow the fixture to continue running using the current settings, even if the Aria app device moves out of range, the app is closed, or the signal is otherwise interrupted, minimizing disruption in the operation of the fixtures.

## LEGACY DEVICES

Please note that legacy connected devices, such as those using Wifly, E-Fly, or Magfly, are not compatible with this app. For such legacy devices, the use of a bridge is recommended, as the bridge can communicate with these devices via its SM220 protocol.

The Aria X2 BLE app is currently available from the Apple app store.

## Fixture Identification

Aria compatible devices can be identified and connected via the **Fixtures** tab in the app. This tab displays a field of twenty-four buttons that can be assigned to Aria compatible devices that are within range, and the buttons will automatically be assigned to devices in the order in which they are discovered. If more than twenty-four units are within range, it may be necessary to use the filter feature to search for the desired fixture. Button location can be edited by selecting the configuration key, then the user can drag and drop the buttons to the desired location and hit save to keep changes. Once a device is known to the app, it can also be assigned to a particular button. From that point forward, the assigned device will always be assigned to that button location.

**IMPORTANT NOTE:** For version 0.65 or higher, a shared system password is required to connect to any device.

Unlike wireless DMX, Bluetooth is a connect first protocol. To connect to a device or fixture, tap the assigned button in the **Fixtures** tab. If the connection is successful, a green frame will appear around the button, indicating that the app was able to retrieve the current channel values from the fixture. The app must be connected to a fixture in order to use its channel controls or view and change settings. Please note that not all Aria devices have channel controls.

Additionally, each fixture can only be connected to one device with the app at any given time. Once a fixture is connected to the app installed on one device, any other devices will be blocked from connecting. As a result, when setting up a new fixture for the first time, best practice is to have only a single user with the app open within range, in order to ensure that the fixture pairs to the intended user's device.

# SETUP GUIDELINES

## DETECTED DEVICES

The second table section shows all Aria devices detected in range. A checkmark indicates the device is currently assigned to a button. If more than 24 devices are within range, the user may remove or add devices to the buttons list by tapping a row to check or uncheck a device. If all buttons are full, it will be necessary to uncheck a device before adding another.

**Filter:** The user can filter which Aria devices get button assignments by tapping “filter” at the top of the view. A popup will appear where the user can enter text to filter devices by username, model name, or manufacturer. **Please note that these searches are case sensitive.**

**Note:** If a device shows an asterisk (\*) it means that there is no fixture profile currently available, and therefore there will be limited support available for that device. The user will still be able to connect and adjust channels if the device supports that feature, but the user will not be able to view how many channels the device has or the channel names.

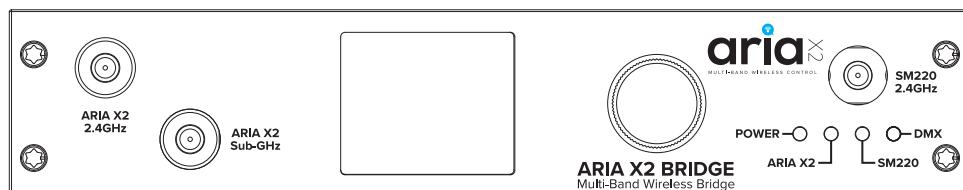
## SECURITY

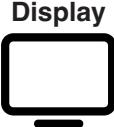
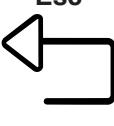
Each fixture must have a password saved to be secure. When a new fixture is installed for the first time, its password will automatically be set to the app’s system password on first connection. Once the password has been entered, the user will need to exit out to the main page containing the fixture buttons, then de-select and re-select the fixture to lock in the password. From that point forward only, controlling devices that use the correct password can connect to this fixture. **This security is now required by law in most jurisdictions.**

The app will detect any Aria capable fixture within range, even if the app does not have the password to that fixture and therefore cannot access that fixture. If that fixture is selected in the app, the green frame will momentarily appear around that fixture’s button, but then disappear. This indicates that the fixture is visible but inaccessible.

# SYSTEM MENU

The Aria X2 Bridge features an LCD display screen with an Encoder Knob, which can be used to easily adjust any device settings, turn to scroll, push-to-select.



MAIN MENU	OPTIONS / VALUES (Default Settings in <b>BOLD</b> )		
 <b>Aria Settings</b>	Frequency	<b>2.4GHz.</b>	<b>2.4 GHz.</b>
		Sub GHz US	
		Sub GHz EU	
	2.4 GHz. CH	<b>00~15</b>	<b>1</b>
	Sub GHz CH	<b>00~09</b>	<b>1</b>
	Mesh	<b>ON/OFF</b>	<b>OFF</b>
 <b>SM220 Settings</b>	Bluetooth	<b>ON/OFF</b>	<b>ON</b>
	Enable	YES/NO	<b>YES</b>
 <b>Bridge</b>	Channel	<b>00-14</b>	<b>0</b>
	Aria In	SM220 Out	
		DMX Out	
		<b>Both Out</b>	<b>Both Out</b>
		Disable	
	SM220 In	Aria Out	
		DMX Out	
		<b>Both Out</b>	<b>Both Out</b>
		Disable	
 <b>Display</b>	DMX In	Aria Out	
		SM220 Out	
		<b>Both Out</b>	<b>Both Out</b>
	Timeout	<b>OFF - 10 minutes</b>	<b>OFF</b>
 <b>Label</b>	Passcode	Enable/Disable	<b>Disable</b>
	Edit Passcode	Passcode	xxx   xxx
 <b>Service</b>	Screen Rotation	<b>YES / NO / Auto</b>	<b>Auto</b>
	Rename		
 <b>Information</b>	Modify	AaBbCcDd... ( )+0123456789	<b>Aria X2 B</b>
	Passcode	Factory Restore	<b>YES / NO</b>
 <b>Esc</b>	Software Version	x.xx	
	RDM UID	xxxxxx	
	Label	xxxxxx	

# FREQUENCY & WIRELESS LOCATION GUIDELINES

## 2GHz Versus Sub-GHz Frequencies:

Sub-GHz frequencies offer greater reliability and range compared to higher frequencies, making them ideal for consistent communication over long distances or in challenging conditions. Devices operating in the sub-GHz band, which refers to frequencies below 1 GHz, can transmit signals over long distances and penetrate physical barriers such as walls and buildings more effectively. Additionally, these frequencies experience less interference than the crowded 2.4 GHz band commonly used by wireless devices.

In the United States, the 900 MHz band is a versatile frequency range used by various services, with the FCC overseeing its allocation and regulation.

In the European Union, the sub-GHz frequency band is designated by ETSI.

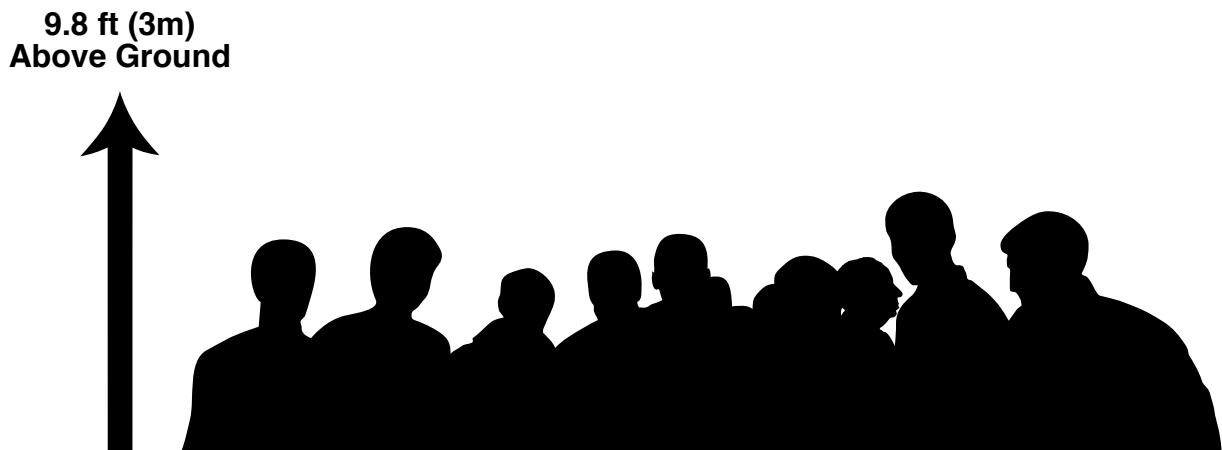
In summary, if an application requires high data rates and greater bandwidth in urban or densely populated areas where interference management is feasible, the 2.4 GHz frequency is an appropriate choice. Conversely, for applications requiring long-range communication and better obstacle penetration, especially in rural or industrial environments with fewer regulatory constraints, a sub-GHz frequency (< 1 GHz) is a better option.

## Installation Recommendations:

With the many factors that affect and/or interrupt a wireless signal such as walls, glass, metal, objects, and people, it is highly recommended to:

- Install devices a minimum of 9.8 ft. (3m) above audiences and/or ground level where practical.
- Adjust the wireless antenna in a vertical upright position
- Position devices in direct line of sight of the controlling E-FLY device

Careful planning and testing of the selected installation location is critical to ensure optimum and reliable wireless operation.



## FIRMWARE UPDATE

1. First, turn on the fixture and ensure that Bluetooth is enabled.
2. Next, open the Aria X2 app on your phone and press the ‘Refresh’ button. The app will search for devices and display the current software version of the fixture and Aria module.
3. To update the fixture, press ‘Update’, select ‘Aria X2’, click ‘Update Radios’, then click ‘Update Fixture’.
4. Click the upload icon, select the fixture update file from your phone, and then click ‘Update 1 Radio’. The fixture will begin updating, and after it finishes, the software file version and update date will be displayed.
5. To update the Aria module, follow the same steps, but select ‘Update Aria’ instead.

# MAINTENANCE GUIDELINES

**DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!**

## FUSE REPLACEMENT

Locate and remove the unit's power cord. Once the cord has been removed, locate the fuse holder next to the power socket. Insert a flat-head screw driver into the slot, and gently turn the cover of the fuse holder. Remove the bad fuse, and replace with a new one. Double check silkscreen for fuse value (T1.25A/250V).

## CLEANING

Frequent cleaning is recommended to ensure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky, or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics. Clean the external lens surface periodically with a soft cloth to avoid dirt/debris accumulation.

**NEVER** use alcohol, solvents, or ammonia-based cleaners.

## MAINTENANCE

Regular inspections are recommended to ensure proper function and extended life.

There are no user serviceable parts inside this fixture, please refer all other service issues to an authorized ADJ service technician. Should you need any spare parts, please order genuine parts from your local ADJ dealer.

Please refer to the following points during routine inspections:

- A detailed electrical check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition in order to prevent overheating.
- Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation, resulting in damage or injury as larger parts could fall.
- Check for any deformations on the housing, rigging hardware, and rigging points (ceiling, suspension, trussing).
- Electric power supply cables must not show any damage, material fatigue, or sediments.
- **NEVER** remove the ground prong from the power cable.

# SPECIFICATIONS

## Features:

Single DMX Universe  
Sub-GHz, 2.4 GHz, and Bluetooth  
Configuration via App (Coming Soon) or Front panel  
Wireless to DMX or DMX to Wireless  
Aria X2 to SM220 (eFly, MagFly and Acclaim Aria)  
SM220 (eFly, MagFly and Acclaim Aria) to Aria X2

## Supported Protocols:

DMX  
RDM (Planned for future software release)

Proprietary 802.15.4  
Aria X2 Mesh Protocol  
Bluetooth 4.2 (BLE)  
Aria X2 Serial Protocol

This is our proprietary serial protocol for communicating with a variety of fixtures.

## RF Characteristics:

Frequency range

Bluetooth: 2402-2480MHz  
Zigbee: 2405-2480MHz  
SM220: 2405-2475MHz  
Sub-GHz US: 906MHz-924MHz

Radio module: Aria X2

Interference mitigation

CSMA

Adaptive frequency hopping (on the roadmap)

OTA updates

## Connectors:

Antenna: 5G JT SMA  
DMX: 5-pin XLR Input and Output  
DC: 2.5mm/5.5mm Barrel connector  
Outdoor Locking Power Input and Output

## Power:

AC100-240V 50/60Hz  
Power Consumption: 2W  
Power Fuse: T1.25A/250V. (5 x 20mm)

## Physical:

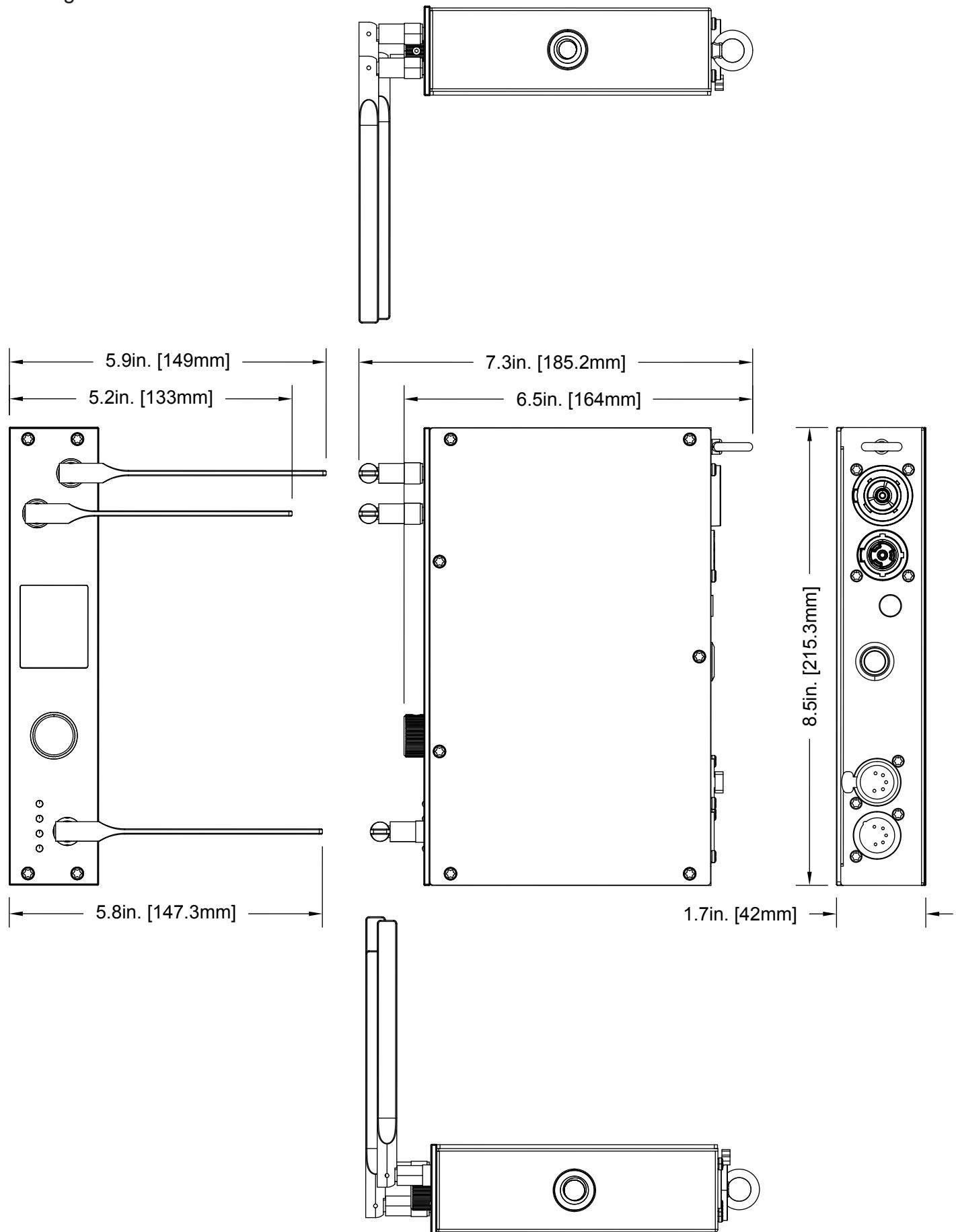
IP20 Aluminum / Metal enclosure  
Front panel digital screen and rotary knob  
M10 and M12 Threads  
Safety Eyelet  
Max ambient operating temp: 113°F (45°C)  
Max operating humidity: <75%  
Storage temperature: 77°F (25°C)  
Rack and wall mount accessories

## Dimensions and Weight:

Length: 6.46" (164mm)  
Width: 8.48" (215.30mm)  
Height: 1.66" (42mm)  
2.7lbs (1.23kgs.)

# DIMENSION DRAWINGS

Drawings not to scale



## OPTIONAL ACCESSORIES

ORDER CODE		ITEM
US	EU	
AX2100	1321000089	ARIA X2 TRANSCEIVER
TOU027	N/A	Tour Link 5P10
		Additional Cable Lengths Available

## ANTENNA INFORMATION

This radio transmitter [31378-AX2113] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

- Model: 5G JT antenna
- Serial Numbers: SD0174JT0005
- Antenna Input Impedance: 50Ω
- Maximum Gain:
  - 906-924MHz Max Gain: 2.44dBi
  - 2402-2480MHz Max Gain: -0.7dBi
- Antenna Type: SMA



## FCC AND IC STATEMENT

This equipment complies with FCC's and IC's RF radiation exposure limits set forth for an uncontrolled environment. The antenna(s) used for this transmitter must be installed and operated to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter. Installers must ensure that 20cm separation distance will be maintained between the device and users.

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Changes or modifications to this unit not 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 B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

