

# 4 STREAM DMX BRIDGE™

user manual

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#### **ADJ PRODUCTS LLC USA**

6122 S. Eastern Ave. Los Angeles, CA 90040 323-582-2650 | Fax 323-532-2941 | www.adj.com | info@adj.com

#### **ADJ SUPPLY Europe B.V**

Junostraat 2 6468 EW Kerkrade, The Netherlands +31 (0)45 546 85 00 | Fax +31 45 546 85 99 | www.adj.eu | info@americandj.eu

#### **ADJ PRODUCTS GROUP Mexico**

AV Santa Ana 30 Parque Industrial Lerma, Lerma, Mexico 52000 +52 (728) 282-7070 | ventas@adj.com

#### **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.adj.com for the latest revision/update of this document before beginning installation and use.

Date	Document Version	Notes	
02/6/19	1.0	Initial Release	
02/13/19	1.2	Added iOS information	
02/13/19	1.3	Added Interference and Channel Selection Chart	
11/26/19	1.4	Updated specifications	

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#### GENERAL INFORMATION

#### INTRODUCTION

Please read and understand all instructions in this manual carefully and thoroughly before attempting to operate this product. These instructions contain important safety and use information.

#### **UNPACKING**

The products in this kit have been thoroughly tested and have been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect each unit included for damage and be sure all accessories necessary to operate the units 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 kit to your dealer without first contacting customer support at the number listed below. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

#### **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.

#### **CUSTOMER SUPPORT**

Contact ADJ Service for any product related service and support needs. Please visit forums.adj.com with questions, comments or suggestions.

ADJ SERVICE USA - Monday - Friday 8:00am to 4:30pm PST 800-322-6337 | Fax 323-832-2941 | support@adj.com ADJ SERVICE EUROPE - Monday - Friday 08:30 to 17:00 CET +31 45 546 85 60 | Fax +31 45 546 85 96 | support@adj.eu

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# LIMITED WARRANTY (USA ONLY)

- ADJ Products, LLC hereby warrants, to the original purchaser, ADJ Products, LLC products to be free of
  manufacturing defects in material and workmanship for a prescribed period from the date of purchase (see
  specific warranty period on reverse). 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.
- 2. For warranty service, please contact ADJ Products, LLC Service Department at 800-322-6337. You must obtain a Return Authorization number (RA#) before sending back the product. Send the product only to the ADJ Products, LLC factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, ADJ Products, LLC will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, ADJ Products, LLC shall have no liability whatsoever for loss of or damage to any such accessories, or for the safe return thereof.
- 3. This warranty is void of the serial number has been altered or removed; if the product is modified in any manner which ADJ Products, LLC concludes, after inspection, affects the reliability of the product, if the product has been repaired or service by anyone other than ADJ Products, LLC factory unless prior written authorization was issued to purchaser by ADJ Products, LLC; if the product is damaged because not properly maintained as set forth in the instruction manual.
- 4. This is not a service contact, and this warranty does not include maintenance, cleaning or periodic check up. During the period specified above, ADJ Products, LLC will replace defective parts at its expense with new or refurbished parts, and will absorb all expenses for warrant service and repair labor by reason of defects in material or workmanship. The sole responsibility of ADJ Products, LLC under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of ADJ Products, LLC. All products covered by this warranty were manufactured after August 15, 2012, and bear identifying marks to that effect.
- 5. ADJ Products, LLC reserves the right to make changes in design and/or 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 products described above. Except to the extent prohibited by applicable law, all implied warranties made by ADJ Products, LLC in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has 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 ADJ Products, LLC be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.
- 7. This warranty is the only written warranty applicable to ADJ Products, LLC Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

#### **LIMITED WARRANTY PERIODS**

- Non L.E.D. Lighting Products = 1-year (365 days) Limited Warranty (Such as: Special Effect Lighting, Intelligent Lighting, UV lighting, Strobes, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting Stands etc. excluding LED and lamps).
- 2. Laser Products = 1 Year (365 Days) Limited Warranty (excludes laser diodes which have 6 month limited warranty).
- 3. **L.E.D. Products = 2-year (730 days) Limited Warranty** (excluding batteries which have a 180 day limited warranty) Note: 2 Year Warranty only applies to purchases within the United States.
- 4. StarTec Series = 1 Year Limited Warranty (excluding batteries which have a 180 day limited warranty)
  ADJ DMX Controllers = 2 Year (730 Days) Limited Warranty

# **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. The manufacturer of this device 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 qualified and/or certified personnel should perform installation of this device. Any modifications to the device will void the original manufactures warranty and increase the risk of damage and/or personal injury.

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

**DO NOT** operate fixture if the DMX and/or power supply cables have become frayed, crimped, damaged and/or if any of the connectors are damaged and do not insert into the device securely with ease. **NEVER** force a cable connector into the device. If the DMX and/or power supply cable or any of the connectors are damaged, replace it immediately with a new one of similar rating.

Use the original packaging and materials to transport the device in for service.



INDOORS USE ONLY!
DO NOT EXPOSE DEVICE RAIN AND MOISTURE!



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

**KEEP FLAMMABLE MATERIALS AWAY FROM DEVICE!** 

DO NOT EXPOSE DEVICE TO HEAT OR FIRE!



AMBIENT TEMPERATURES: MAX 45°C/113°F | MIN 2°C/35°F

DO NOT EXPOSE DEVICE TO FLAMMABLE MATERIALS!

DO NOT EXPOSE DEVICE TO HIGH HUMIDITY!

DO NOT EXPOSE DEVICE TO EXTREME VIBRATIONS!

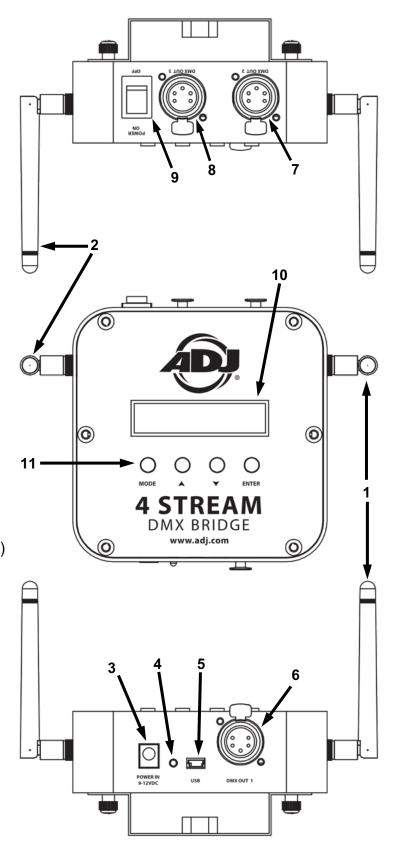
### OVERVIEW

- 1. WiFly Antenna (Universe 4)
- 2. Wi-Fi Antenna
- 3. 9-12VDC Power Supply
- 4. Network Activity LED Indicator
- 5. MINI USB Connector
- 6. 5pin DMX OUT (Universe 1)
- 7. 5pin DMX OUT (Universe 2)
- 8. 5pin DMX OUT (Universe 3)
- 9. Power Switch (On/Off)
- 10. LCD Control Display
- 11. MENU, UP, DOWN, ENTER Buttons

#### **BOX CONTENTS**

9-12VDC Power Supply

Mini Omega Bracket (for truss/clamp mounting)



#### INSTALLATION



### FLAMMABLE MATERIAL WARNING

Keep device at least 5.0 feet (1.5m) away from any flammable materials, decorations, pyrotechnics, etc.



# ELECTRICAL CONNECTIONS

A qualified electrician should be used for all electrical connections and/or installations.

#### DO NOT INSTALL THE DEVICE IF YOU ARE NOT QUALIFIED TO DO SO!

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

Ambient operating temperature range for this device is 35° to 113°F. (2° to 45°C)

**DO NOT** use the device under or above this temperature range.

**DO NOT** install the device in areas were unauthorized personnel might reach the device.

#### MINI OMEGA BRACKET / CLAMP INSTALLATION

Device can be placed on the flat surface, attached to a metal flat surface with included magnet on the back panel, and attached to truss using included mini omega bracket and a properly rated clamp. (Clamp not included) (See images below)

#### INSTALLATION LOCATION ON TRUSS MUST BE CLEAR OF ANY MOVING HEAD FIXTURES!





### SYSTEM MENU

The LCD control display located on the front of the device provides access to the main system menu where all necessary system adjustments are made to the device. During normal operation, pressing the **MENU** button at any time will allow you to select from a list of system menu items or settings to view or change. Use the **UP** or **DOWN** buttons to scroll through the list of menu items. Press the **ENTER** button to go to the menu item shown on the bottom line of the LCD display. Once inside a menu selection, use the **UP** or **DOWN** buttons to change the selected setting. All settings are updated in memory as they are changed, but most settings will require a system reset **(Power OFF/ON)** for the change to take effect. If a setting has more than one field, for example when entering a name, use the **ENTER** button to move to the next field. If you need to move forward or backward in a field, hold the **ENTER** button while pressing the **UP** or **DOWN** buttons to move the cursor. The **UP** and **DOWN** buttons will auto repeat if you hold them down.



### **Initial Power On**

When the 4 Stream DMX Bridge is powered ON for the first time, it will be configured in the default mode. It will create a local Wi-Fi access point, which should be available to any Wi-Fi equipped device, and appear in a list of local networks as **ADJ 4 Stream DMX**.

The default password is **4 Stream**. Join this network from the Wi-Fi equipped device in the normal fashion. The default DMX512 network protocol is Art-Net. If a Wi-Fi device is connected and running an Art-Net supported application, the 4 Stream DMX Bridge should be discoverable as an Art-Net node with four DMX outs. Art-Net discovery and support will be different for each application, so consult the application's instructions on how to connect and configure using the Art-Net settings for that app. The 4 Stream DMX Bridge can be configured using the LCD and menu buttons to access its various settings, which is explained in detail in the following sections.

Created Network
ADJ 4 Stream DMX

# **No Activity**

After a period of no activity, the LCD backlight turns off and displays the default message below. Press any of the control buttons under the LCD display to turn the LCD backlight back ON.

ADJ 4 Stream DMX Bridge V-3

### CONFIGURATION SETTINGS

# **WIFLY Settings**

Press the MENU button and the LCD displays the following message.

Select menu item Wifly settings

WiFly settings include two adjustable fields, on/off, and the wireless radio Channel (0-14). Use the UP or DOWN buttons to change the settings, or press the ENTER button to move the underline cursor to the desired field to change. Read the Interference and Channel Selection section, which provides more information on wireless channel selection.

Wifly settings on Channel 0

### **USB Mode:**

This setting will set the USB port mode. Leave this set to COM mode in order to use the PC and Mac setup programs that connect to the port. Only set this to MIDI when you want to connect the bridge to an IPad using Apple's Lightning to USB Camera Adapter. With the adapter you can have a wired connection between the ADJ Airstream DMX Pro. app and the bridge. This can be useful in situations where interference is causing problems with the Wi-Fi connection. ADJ Airstream DMX Pro. app is a stage and lighting control app designed for use with 4 Stream DMX Bridge as an interface between your lights and your IOS device, available for free download from the App Store: https://itunes.apple.com/us/app/adj-airstream-dmx-pro/id1339818459.

►When making this setting change, a system reset is required.

USB mode MIDI Port USB mode COM Port

# **Protocol**

Select the desired network protocol to control the bridge from a compatible lighting control application. Select between sACN and Art-Net. All four DMX universes will use this protocol. The default selection under Protocol is **Streaming ACN**; use the up or down arrow to switch between that or **Art-Net** as seen below.

►When making this setting change, a system reset is required.

Protocol Protocol Art-Net

# **sACN Universe**

When sACN protocol is selected, a universe number from 1 to 63996 must be selected, which will be the universe number for DMX Output 1. DMX Outputs 2-4 will use the next consecutive universe numbers based on the number selected for DMX Output 1.

▶When making this setting change, a system reset is required.

sACN universe 1

#### **Art-Net Universe**

When selecting the Art-Net protocol, the Net and Sub-Net addresses for the bridge can be selected. This is an address Art-Net uses to identify Art-Net devices on a network. The 4 Stream DMX Bridge will appear as an Art-Net node when using Art-Net discovery from a compatible lighting application. Each node must have a Net number from 0 to 127 and a Sub-Net number from 0 to 15 assigned to it. In addition, any Art-Net node can support up to four DMX-512 outputs. The 4 Stream DMX Bridge always assigns Art-Net universe numbers 0-3 to its four DMX outputs. The default setting for Net and Sub-Net is 0, which will work fine if the 4 Stream DMX Bridge is being used as the one and only Art-Net node. If more than one 4 Stream DMX Bridge or any other Art-Net nodes are being used in the network, different values must be set for each node.

For example, set the first node to Sub-Net 0 and the second node to Sub-Net 1, etc.

► (Net can be left at 0 for the first 16 nodes)

Art-Net universe Net <u>0</u> SubNt 0

#### **Art-Net Name**

Edit the name for the 4 Stream DMX Bridge that will appear on an Art-Net node list in the compatible controller application. This is referred to as the Art-Net short name.

►When using more than one 4 Stream DMX Bridge, changing the Art-Net short name is required in order to easily differentiate one unit from another.

Art-Net name <u>A</u>DJ 4 Stream

#### Wi-Fi Mode

Wi-Fi mode settings includes two adjustable fields, AP Mode (Create) where the 4 Stream DMX Bridge creates its own Wi-Fi access point, and Station (Join) where the 4 Stream DMX Bridge tries to join an existing network and/or router.

► When making this setting change, a system reset is required.

Wi-Fi mode

<u>A</u>P Mode (Create)

Wi-Fi mode Station (Join)

# **AP Network Name**

Edit the network name that the 4 Stream DMX Bridge creates. The name can be up to 32 characters long. Press the UP and DOWN buttons to scroll through characters, and press the ENTER button to advance the cursor. Press and hold the ENTER button and press the DOWN button to back the cursor.

►When making this setting change, a system reset is required.

AP network name

<u>A</u>DJ 4 Stream DMX

# **AP Password**

Edit the password for the AP network the 4 Stream DMX Bridge creates. Password must be between 8 and 16 characters. Editing the password is the same as entering the AP Network Name.

►When making this setting change, a system reset is required.

AP password <u>4</u> Stream

### **AP Beacon**

Turn the AP Network Beacon on or make it hidden.

When on, any compatible Wi-Fi device can see this AP Network on the list of available networks in the device's Wi-Fi settings menu.

When hidden, other devices cannot see this AP Network. However a known device, which knows the network name and password, will still be able to connect.

►When making this setting change, a system reset is required.

AP beacon AP beacon <u>h</u>idden

#### AP Wi-Fi Channel

Select a Wi-Fi channel for the AP Wi-Fi network to use. Channels 1-11 are available. It's important to choose a channel that is not shared with other 2.4GHz wireless networks in the vicinity. This includes other types of networks like WIFLY, Bluetooth, wireless audio, etc. If you are using WIFLY, keep a gap of at least 2-3 channels between the AP Wi-Fi channel and the WIFLY channel. Read the Interference and Channel Selection section, which provides more information on wireless channel selection.

►When making this setting change, a system reset is required.

AP Wi-Fi channel <u>1</u>1

#### Station Mode Network Name

Enter a known external Wi-Fi network name to join. The 4 Stream DMX Bridge Wi-Fi mode must be set to "station" to join an external network and also enter the network's password as described in the next section. The network name can be up to 32 characters long. Press the UP and DOWN buttons to scroll through characters, and press the ENTER button to advance the cursor. Press and hold the ENTER button and press the DOWN button to back the cursor.

When the 4 Stream DMX Bridge is configured for station mode, it will try to join the external network on power-up. If the network can't be found or the password is invalid, the LCD will display an error message. The 4 Stream DMX Bridge will continue to try to connect to the network every 10 seconds, in case the external network is temporarily turned off or the 4 Stream DMX Bridge has become disconnected.

▶When making this setting change, a system reset is required.

STA network name unknown

### Station Mode Password

Edit or enter the password for the external Wi-Fi network to join when running in station mode. The password can be up to 32 characters.

▶When making this setting change, a system reset is required.

STA password password

### **Station Mode DHCP Enable**

Turn DHCP on or off when running in station mode.

When DHCP is enabled, the network router will assign an IP address to the 4 Stream DMX Bridge. This is convenient on a large network where available IP addresses may not be known.

When DHCP is off, a specific static IP address must be entered, which is described in the next section. When running the 4 Stream DMX Bridge in sACN mode, IP addresses can be set by the network router using DHCP as this protocol doesn't need IP addresses to send messages.

►When making this setting change, a system reset is required.

STA DHCP enable enabled

STA DHCP enable off

# **DHCP assigned IP Address:**

This will let you view the IP address that is assigned by a router when DHCP is enabled in station mode. This is for information only; no changes are possible from the bridge.

DHCP assigned IP 192.168.0.11

# **Station Mode Static IP Address**

Enter a static IP address if 4 Stream DMX Bridge is running in station mode and DHCP is disabled. The 4 Stream DMX Bridge uses IPV4 style addresses. The 4 Stream DMX Bridge will try to join a network using this IP address. Care must be taken to match the IP address to the network's address settings. The default address 192.168.000.150 will most likely work (NOT guaranteed) if the network router is located at address 192.168.000.1 as is most common. If using more than one 4 Stream DMX Bridge device on a network, set each bridge to a different address by incrementing the last number, for example 150, 151, etc. for each consecutive 4 Stream DMX Bridge on the network. DHCP can be used if IP Addressing is unfamiliar.

► When making this setting change, a system reset is required.

STA IP address 19<u>2</u>.168.000.150

#### **Station Mode Router Address**

When using a static IP address running in station mode, the network router's address must be entered. The router's address can be found in the Wi-Fi settings of a wireless device already connected to the network, which can be the default address 192.168.0.1 as commonly used.

► When making this setting change, a system reset is required.

STA router addr 19<u>2</u>.168.000.001

### **Station Mode Net Mask**

If using a static IP address when running in station mode, the network router's net mask must be entered. The router's address can be found in the Wi-Fi settings of a wireless device already connected to the network, which can be the default address 255.255.255.0 as commonly used.

►When making this setting change, a system reset is required.

STA net mask 25<u>5</u>.255.255.000

# **Save Snapshot**

Up to 4 static scenes referred to as "snapshots", can be saved by the 4 Stream DMX Bridge.

A snapshot is a record of the current complete DMX512 frames for all 4 outputs. Set all DMX512 channels to the desired settings, use the UP or DOWN button to select a snapshot number from 1-4, then press ENTER to record the snapshot.

Save snapshot <u>1</u> press enter

# **Recall Snapshot**

Recalling a snapshot is like saving, select the number from 1-4 then press ENTER.

If DMX-512 frames are being received over the network, they will overwrite any snapshot. The green LED flashes when DMX-512 frames are being received.

Recall snapshot 1 press enter

# **Default Snapshot**

Select one of the four saved snapshots (1-4) to be the default settings when the 4 Stream DMX Bridge is powered on. If there are no incoming Art-Net or sACN data packets, the 4 Stream DMX Bridge will show the default scene. Any incoming data packets will overwrite this, so it is only useful when no controller is used, and some kind of output is desired on power-up.

Default snapshot none

Default snapshot

# **Erase All Memory**

Erase all the memory of the 4 Stream DMX Bridge returning everything to the default settings. Hold down the UP button for 5 seconds until "Reset to erase" message is displayed. Finally reset the 4 Stream DMX Bridge for this change to take effect.

►When making this setting change, a system reset is required.

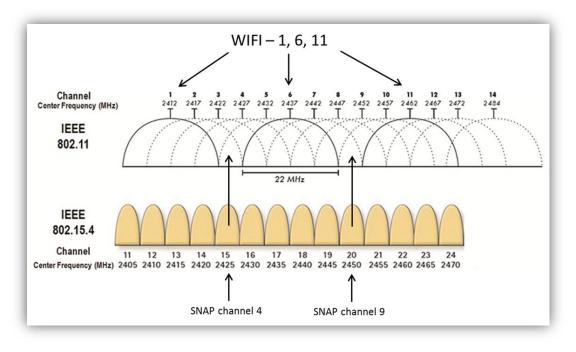
Erase all memory hold ^ 5 sec.

#### INTERFERENCE AND CHANNEL SELECTION

Both the Wi-Fi and Wifly radios operate in the 2.4GHz band. Many other devices including Wi-Fi routers, Bluetooth devices, and wireless audio also use this band, so the bridge will most likely always be competing for air space no matter where you are. The 2.4GHz Wi-Fi band is divided into 14 channels. Wi-Fi in the U.S. and Canada uses channels 1-11, and in Europe channels 12 and 13 are also available. For the best connection between your Wi-Fi tablet, phone, or laptop, and the bridge when it's in AP mode, it's important to select the best available Wi-Fi channel. (Note that when using an external network when the bridge is configured in station mode, it will join on the channel that's already established by that network.) There are apps available that can use the radio on your wireless device to scan for the least used channel in your location. It is highly recommended that you do this at each location and then set the bridge to that channel. Remember that most bridge settings don't take effect until after you reset.

Try to keep the bridge within 50 feet of your tablet or laptop and in direct line of sight when in AP mode. When using an external network, distance and signal strength will depend on the location of the network's router. The human body will block the signal so the higher you can locate the bridge the better. If you are within a few feet of the bridge, turn Bluetooth off on any nearby device such as your phone or smart watch. The range of the Wifly radio is much greater so Wifly equipped lights can be much farther away. If not using Wifly turn it off from the bridge settings. If in use, set the channel at least several steps away from the bridge Wi-Fi channel. The best channels to use for Wifly are channels 4 and 9. These two channels fall into a gap between Wi-Fi channels 1, 6 and 11. Wifly counts channels from 0-14 as can be seen in the picture.

The illustration below shows the center frequencies for Wi-Fi (top) and Wifly (bottom, also referred to as Snap). If you use Wi-Fi channels 1, 6 or 11, Wifly channels 4 and 9 should not interfere.



# WIFLY WIRELESS INSTALLATION LOCATION GUIDELINES

Wireless DMX signal can penetrate walls, glass, metal, and most objects; however, there are many factors that can affect and/or interrupt the wireless DMX signal, one of which are people. For this reason, it is highly recommended to position the wireless antenna a minimum of 9.8 ft. (3m) above people and/or above ground level.

The best placement for the 4 Stream DMX Bridge is high above people and in a direct clear line of sight to both the Wi-Fi controller, and WiFly equipped lighting fixtures. You can also experiment with antenna angles to get the best results.

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



### **USB Mini B Port**

The USB Mini B port located next to the power connector is used to install firmware updates from a PC and it is also be used to configure the 4Cast DMX Bridge using the **4Cast Bridge Setup** Windows app, both available from Elation Lighting. The port can also be configured as a USB MIDI port for connection to Apple's Lightning to USB Camera Adapter. See Airstream DMX Pro. app. instructions for more details on how to use this.

# **Firmware Update**

- 1. Connect your 4Cast DMX Bridge to your Windows PC with a USB cable.
- 2. Put the 4Cast DMX Bridge into bootloader mode by holding down the "ENTER" button on power-up. The display will show "Bootloader Mode".
- 3. After extracting the zipped folder on your PC, run the bootloader application "Elation\_4Cast\_Bridge\_USB\_Bootloader" directly from the unzipped folder.
- 4. From the bootloader application, select and load the firmware file (4Cast Bridge xxx.cyacd) that's included in the folder.
- 5. Wait until the bootloader application shows "connected".
- 6. Click the "PROGRAM" button on the bootloader application and wait until finished programming.
- 7. The 4Cast DMX Bridge will restart after the program has loaded.

### **MIDI**

This app supports both MIDI input and output over USB. To use MIDI, you will need to purchase the Apple Lightning to USB Camera Adapter. This will connect to you IPAD, will then let you connect the 4Cast DMX Bridge using a standard USB (mini) cable.



The camera adapter will also allow you to connect to a USB MIDI controller like the Elation MIDIcon 2. If you would like to connect to both the 4Cast DMX Bridge and a MIDI controller at the same time, you will need a simple USB hub, preferably one that is powered, as some controllers like the MIDIcon 2 get power from the USB bus.



From the "Settings" view in the fixtures pop-up menu, you can enable MIDI in the MIDI out separately. There is also a function to detect MIDI devices that are connected and check the MIDI messages coming from a controller.

As of this version, there is some support for controller input from the MIDIcon 2 or any MIDI controller that can send MIDI notes. MIDI notes 1-24 on any channel will trigger the buttons on the currently displayed tab or page. The page control on the MIDIcon 2 will also sync and control pages on the app. Pages will respond to continuous controller 11 with a value of 1 - 99 for the page number. The tabs will respond to notes 59-63, and the master fader will respond to continuous controller 9. MIDI channel is ignored for all.

### ART-NET AND SACN PROTOCOLS

The 4 Stream DMX Bridge supports the two primary lighting protocols for sending DMX-512 data over a network, Art-Net and sACN (Streaming ACN). sACN can only be used to send DMX-512 frames where Art-Net can do that and much more. Both protocols have their advantages. sACN is simple to configure, and doesn't require setting IP addresses, only the selection of a universe number for each DMX-512 port is needed. Art-Net may require more setup, but offers support for discovery of other nodes and RDM (Remote Device Management) support. The 4 Stream Bridge can be set to use either protocol, but not both at the same time. The 4 Stream Bridge supports node discovery as well as RDM (Remote Device Management) over Art-Net. Protocol choice will depend on the one your lighting control application supports.

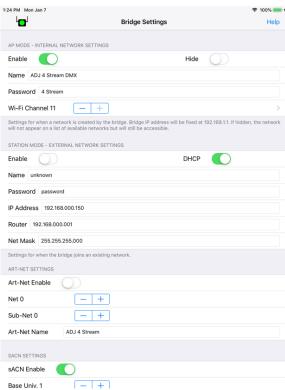
# CONFIGURATION TOOLS

In addition to configuring the 4 Stream DMX Bridge using the LCD and menu buttons, it can be configured from a PC connected to the USB Mini B port and using the **4 Stream Bridge Setup** Windows app available for download from ADJ. www.adj.com.



The 4 Stream DMX Bridge can also be configured from a compatible iOS device (iPad only) over a Wi-Fi connection using the **ADJ Airstream DMX Pro.** app currently available for download from the App Store. https://itunes.apple.com/us/app/adj-airstream-dmx-pro/id1339818459.





### TECHNICAL SPECIFICATIONS

#### **CONTROL / CONNECTIONS:**

(3) 5pin DMX Data Outputs (Universes 1,2,3)

ADJ WiFly Wireless DMX Transceiver (Universe 4)\*

\* Range Up To 2,500 feet (762m) Open Line of Sight (Indoor range maybe less)

Wi-Fi Wireless 2.4 GHZ Frequency\*

\*Range Up To 50 feet (15.2m) Open Line of Sight

4-Button Control Panel

LED System Menu Display

Network Activity LED Status Indicator

#### **SIZE / WEIGHT:**

Length: 6.9" (175.5mm) Width: 5.23" (133mm)

Vertical Height: 4.9" (125mm) Weight: 1.05 lbs. (0.477kg)

#### **ELECTRICAL / THERMAL:**

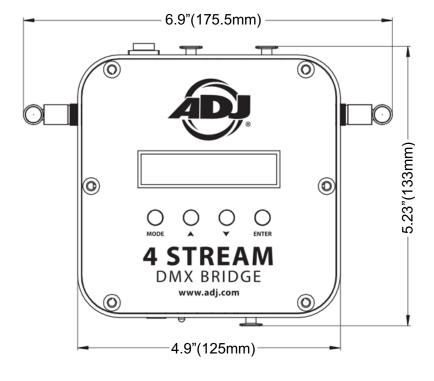
DC 9-12V

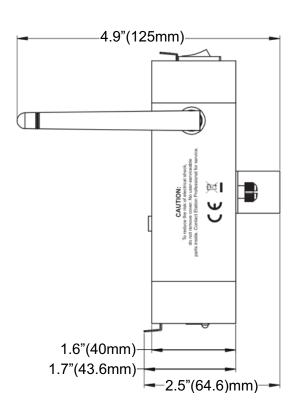
35°F to 113°F (2°C to 45°C)

APPROVALS / RATINGS: CE |



#### **DIMENSIONAL DRAWINGS**





Specifications subject to change without any prior written notice.

# **OPTIONAL COMPONENTS & ACCESSORIES**

Model (SKU)	Description
NARROW CLAMP	Heavy Duty 2 inch Clamp
CAT6PRO5	5 ft. (1.5m) CAT6 ETHER-CON Cable
AC5PDMX5PRO	5 ft. (1.5m) 5pin PRO DMX Cable
	Additional Cable Lengths Available