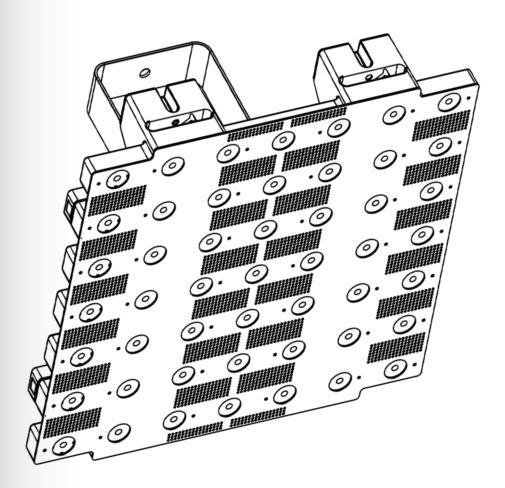


## **User Manual**







#### **Edition Notes**

This User Manual covers the description, safety precautions, installation, programming, operation, and maintenance of the Nexus<sup>™</sup> Aw 7x7.

Chauvet released this edition of the Nexus<sup>™</sup> Aw 7x7 User Manual in April 2015.

For information about determining which software is on the Nexus<sup>™</sup> Aw 7x7 product, see Product Information.

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#### **Document Printing**

For better results, print this document in color, on letter size paper (8.5 x 11 in), double-sided. If using A4 paper (210 x 297 mm), configure your printer to scale the content accordingly.

#### **Intended Audience**

Any person in charge of installing, operating, and/or maintaining this product should completely read through the guide that shipped with the product, as well as this manual, before installing, operating, or maintaining this product.

#### Disclaimer

Chauvet believes that the information contained in this manual is accurate in all respects. However, Chauvet assumes no responsibility for any errors or omissions in this document. Chauvet reserves the right to revise and make changes to the content of this document without obligation that Chauvet notify any person or company of such revision or changes. In any way, this does not constitute a commitment by Chauvet to make such changes. Chauvet may issue a revision of this manual or a new edition to incorporate such changes.

| Author  | Date     | Editor    | Date     |  |
|---------|----------|-----------|----------|--|
| A. Leon | 11/21/14 | D. Couppe | 04/13/15 |  |



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#### 1. Before You Begin

## What Is Included

- Nexus™ Aw 7x7
- · Neutrik® powerCON® power cord
- #8 Allen key
- · Warranty Card
- · Quick Reference Guide

#### Claims

Carefully unpack the product immediately, and check the box to make sure all the parts are in the package and are in good condition.

If the box or the product and included accessories appear damaged from shipping or show signs of mishandling, notify the carrier immediately, not Chauvet. Failure to report damage to the carrier immediately may invalidate your claim. In addition, keep the box and contents for inspection.

For other issues, such as missing components or parts, damage not related to shipping, or concealed damage, file a claim with Chauvet within 7 days of delivery.

## Manual Conventions

| Convention    | Meaning  |  |
|---------------|--|--|
| 1–512         | A range of values in the text                          |  |
| 50/60         | A set of mutually exclusive values in the text         |  |
| <set></set>   | A button on the product's control panel                |  |
| Settings      | A product function or a menu option                    |  |
| MENU>Settings | A sequence of menu options                             |  |
| 1–10          | A range of menu values from which to choose in a menu  |  |
| Yes/No        | A set of two mutually exclusive menu options in a menu |  |
| ON            | A unique value to be entered or selected in a menu     |  |

#### **Symbols**

| Symbols     | Meaning   |
|-------------|---|
| $\triangle$ | Critical installation, configuration, or operation information. Failure to comply with this information may cause the product not to work, damage third-party equipment, or cause harm to the operator. |
|             | Important installation or configuration information. Failure to comply with this information may keep the product from working.   |
|             | Useful information.   |



#### **Safety Notes**

Read all the following Safety Notes before working with this product. These notes include important information about the installation, usage, and maintenance of this product.



This product contains no user-serviceable parts. Any reference to servicing in this User Manual will only apply to properly trained Chauvet certified technicians. Do not open the housing or attempt any repairs.



All applicable local codes and regulations apply to proper installation of this product.

- Personal Safety · Avoid direct eye exposure to the light source while the product is on.
  - Always disconnect this product from its power source before servicing.
  - Always connect this product to a grounded circuit to avoid the risk of electrocution.
  - Do not touch this product's housing during operation because it may be very hot.

#### Mounting and . Rigging

- This product is for indoor use only! To prevent risk of fire or shock, do not expose this product to rain or moisture.
- Make sure there are no flammable materials close to this product while it is operating.
- When hanging this product, always secure to a fastening device using a safety cable (included).

#### Power and Wiring .

- Always make sure you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- Never connect this product to a dimmer pack or rheostat.
- Never disconnect this product by pulling or tugging on the power cable.

#### Operation -

- Do not operate this product if you see damage on the housing, lenses, or cables. Have the damaged parts replaced by an authorized technician at once.
- Do not cover the ventilation slots when operating to avoid internal overheating.
- The maximum ambient temperature is 104 °F (40 °C). Do not operate this product at a higher temperature.
- In case of a serious operating problem, stop using this product immediately!
- · CAUTION: When transferring product from extreme temperature environments, (e.g. cold truck to warm humid ballroom) condensation may form on the internal electronics of the product. To avoid causing a failure, allow product to fully acclimate to the surrounding.
- To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely disconnect the product from power via breaker or by unplugging it.



In the unlikely event that your Chauvet product requires service, contact Chauvet Technical Support.

#### **Expected LED** Lifespan

LEDs gradually decline in brightness over time, mostly because of heat. LEDs packaged in clusters exhibit higher operating temperatures than single LEDs. Using clustered LEDs at their fullest intensity significantly reduces the LEDs' lifespan, which under normal circumstances 40,000 to 50,000 hours. If extending this lifespan is vital, lower the operating temperature by improving the ventilation around the product and reducing the ambient temperature to an optimal operating range. In addition, limiting the overall projection intensity may also help to extend the LEDs' lifespan.



#### 2. Introduction

#### **Description**

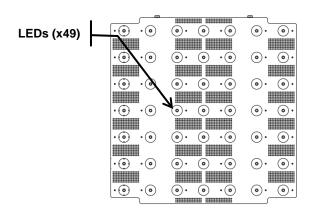
Nexus<sup>™</sup> Aw 7x7 is a tour-ready blinder panel with a pixel mappable display of forty-nine 3-watt warm white LEDs. Each LED projects a narrow beam of light that creates sharp text and visual designs or rich, powerful, warm white wash. The Nexus<sup>™</sup> Aw 7x7 operates in Standalone and Master/Slave modes and with the Art-Net<sup>™</sup>, Kling-Net, or DMX protocols. The Nexus<sup>™</sup> Aw 7x7 panels have coffin locks so they can be hung vertically, and locking bolt connectors so they can be connected horizontally.

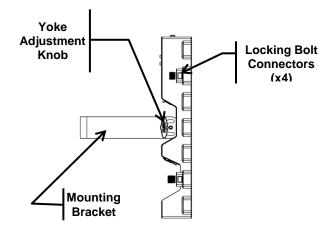
#### **Features**

- 49 3-watt WW LEDs
- Pixel mapping capability
- Operates in Standalone mode
- Operates with Art-Net<sup>™</sup>, Kling-Net, or DMX protocols using 5-, 8-, 49-, 54-, and 57-channel DMX personalities
- · Integrated locks for hanging and aligning panels in large arrays
- Works with Nexus<sup>™</sup> Aq 5x5
- Universal power and control cabling with Neutrik® powerCON®, Neutrik® etherCON®, and both 3- and 5-pin DMX ports



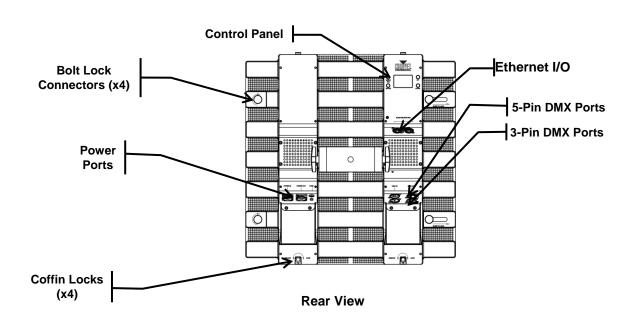
#### **Overview**





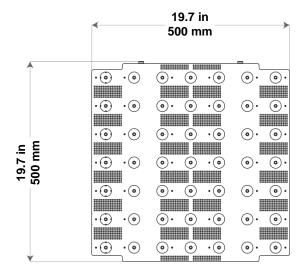
**Front View** 

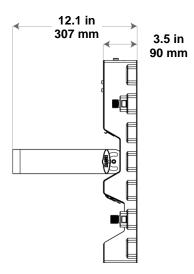
**Side View** 



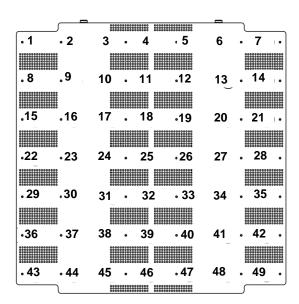


#### **Dimensions**





#### **Pixel Layout**





#### 3. Setup

#### **AC Power**

The Nexus<sup>™</sup> Aw 7x7 has an auto-ranging power supply that works with an input voltage range of 100 to 240 VAC, 50/60 Hz. To determine the power requirements for the Nexus<sup>™</sup> Aw 7x7, refer to the label on the product or <u>Technical Specifications</u> in this manual.

The listed current rating indicates the maximum current draw during normal operation. For more information, download Sizing Circuit Breakers from the Chauvet website <a href="https://www.chauvetprofessional.com">www.chauvetprofessional.com</a>.



- Always connect this product to a protected circuit with an appropriate electrical ground.
- · Never connect this product to a rheostat (variable resistor) or dimmer circuit.
- To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely disconnect the product from power via breaker or by unplugging it.

#### **AC Plug**

The Nexus<sup>™</sup> Aw 7x7 comes with a power input cord terminated with a Neutrik® powerCON® connector on one end, and an Edison plug on the other end (U.S. market). If the power input cord that came with your product has no plug, or if you need to change the plug, use the table below to wire the new plug.

| Connection | Wire (U.S.)  | Wire (Europe) | Screw Color     |  |
|------------|--------------|---------------|-----------------|--|
| AC Live    | Black        | Brown         | Yellow or Brass |  |
| AC Neutral | White        | Blue          | Silver          |  |
| AC Ground  | Green/Yellow | Green/Yellow  | Green           |  |

#### Fuse Replacement

The fuse is a T 3.15 A, 250 V and it is located in a fuse holder next to the etherCON® power ports. To replace the fuse, do the following:

- 1. Disconnect the product from power.
- 2. Using a flat-head screwdriver, unscrew the fuse holder cap.
- 3. Remove the blown fuse and replace it with a good fuse of the same type and rating.
- 4. Screw the fuse holder cap back in place.
- 5. Reconi
- 5. Reconnect the power to the product.
  - Disconnect the power before replacing a blown fuse.
  - · Always replace a blown fuse with a fuse of the same type and rating.

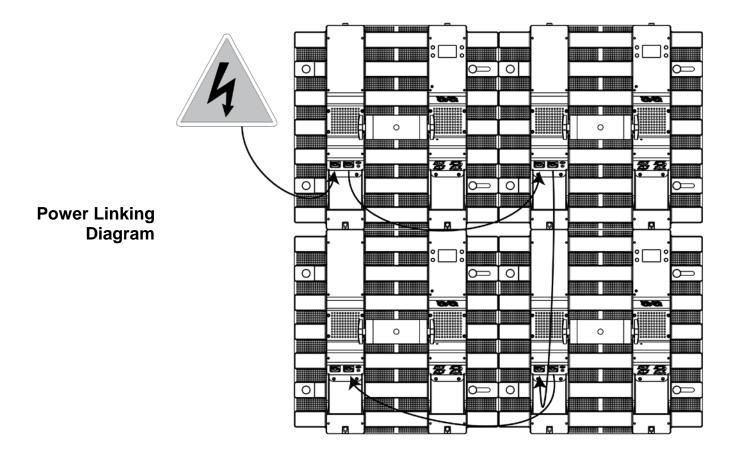


## Power Linking

The Nexus™ Aw 7x7 supports power linking of up to

- · 7 products at 120 V,
- · 12 products at 208 V, or
- · 13 products at 230 V.

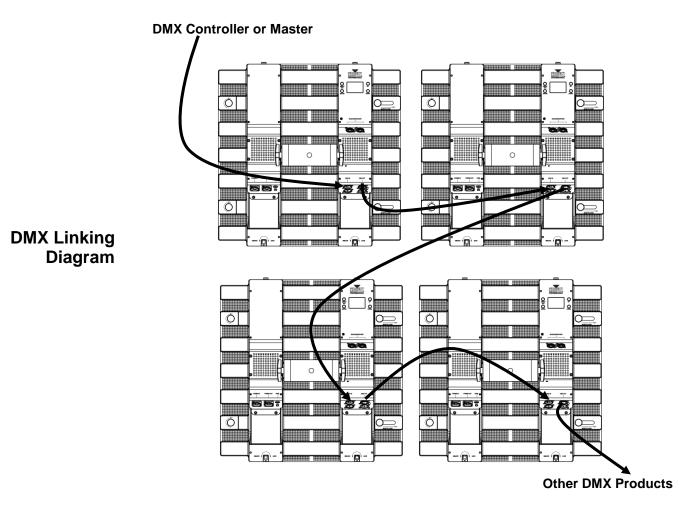
A power cord is included but power-linking cables are not included. For power-linking cables, see the Chauvet web site at <a href="https://www.chauvetlighting.com">www.chauvetlighting.com</a>.





#### **DMX Linking**

DMX Linking connects Nexus<sup>™</sup> Aw 7x7 panels through their DMX input and output ports. The Nexus<sup>™</sup> Aw 7x7 has both 3- and 5-pin DMX ports, so either 3- or 5-pin cables, or a combination of both, can be used. DMX Linking is for DMX controllers and for Master/Slave mode.





#### **DMX Mode**

In DMX mode, Nexus<sup>™</sup> Aw 7x7 panels are controlled by a DMX controller, and the DMX address and DMX personality must be set through the control panel.

The Nexus<sup>™</sup> Aw 7x7 automatically senses its control source. When there is a DMX cable plugged in, the Nexus<sup>™</sup> Aw 7x7 expects a DMX controller, or Master/Slave. When there is an etherCON® cable plug in, the Nexus<sup>™</sup> Aw 7x7 expects an IP protocol, such as Art-Net<sup>™</sup> or Kling-Net.

The Nexus<sup>™</sup> Aw 7x7 has 5 DMX personalities, each with different capabilities. The table below lists the capabilities of each personality. For more information, see <u>DMX Address</u> and <u>DMX Personality</u> in the <u>Menu Operations</u> section of this manual.

| Personality | Capabilities                        |  |
|-------------|-------------------------------------|--|
| 5-channel   | Strobe control                      |  |
| 8-channel   | Virtual gobo maps                   |  |
| 49-channel  | Pixel mapping                       |  |
| 54-channel  | Strobe and pixel mapping            |  |
| 57-channel  | Pixel mapping and virtual gobo maps |  |

#### Master/Slave Mode

In Master/Slave mode one Nexus<sup>™</sup> Aw 7x7 panel (the master) controls one or more Nexus<sup>™</sup> Aw 7x7 panels (the slaves) without a DMX controller. The master panel is set to an auto program, or static color and sends DMX to the slaves so they do the same thing. For more information, see <u>Master/Slave Mode</u> in the <u>Menu Operations</u> section of this manual.



- Do not connect a DMX controller to the DMX chain when operating Nexus™ Aw 7x7
  products in Master/Slave mode, because signals from the master and the DMX
  controller will conflict and cause erratic behavior in all the products.
- Master/Slave operates via DMX ports only. The etherCON® ports cannot be used for Master/Slave mode.



For more information about DMX, see the DMX Primer by Chauvet, available at www.chauvetlighting.com

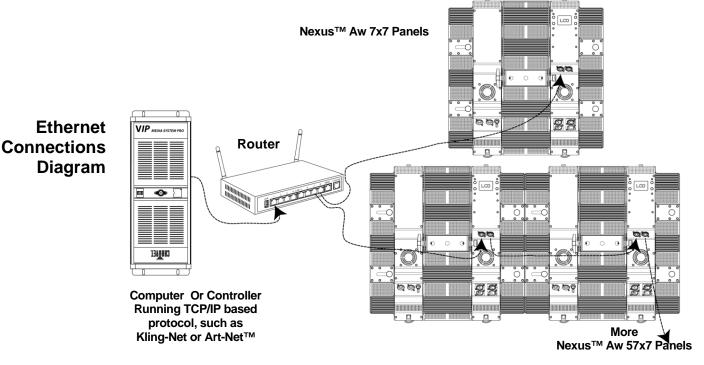


## **Ethernet Connections**

Ethernet connections link Nexus<sup>™</sup> Aw 7x7 panels to routers and each other through their etherCON® ports. Ethernet connections are for running TCP/IP-protocol-based control system, such as Kling-Net and Art-Net®. All etherCON® ports can be either input or output, and panels can be linked to each other, but the start of each chain of panels must be a router port, and there should be no more than 12 Nexus<sup>™</sup> Aw 7x7 panels linked off of one router port.



Do not connect Nexus™ Aw 7x7 panels to the WAN port of the router.



#### Kling-Net Mode

Kling-Net is a network protocol that uses TCP/IP to send DMX over a network and into the Neutrik® etherCON® connection ports of the Nexus<sup>™</sup> Aw 7x7 panels. Kling-Net works seamlessly with Kling-Net-supported ArKaos software for configuring and mapping display devices. For more information, see Kling-Net Configuration.



Kling-Net requires a gigabit (1000 Mbps) Ethernet card and network router.

#### Art-Net™ Mode

Art-Net<sup>™</sup> is an Ethernet protocol that uses TCP/IP to send DMX signals over a network and into the etherCON® connection ports of the Nexus<sup>™</sup> Aw 7x7 panels. Art-Net<sup>™</sup> requires configuration through the control panel. For more information, see <u>Setting Ethernet Protocols</u> and Art-Net<sup>™</sup>.

For more information about  $Art-Net^{TM}$ , see the  $Art-Net^{TM}$  protocol document available on the Chauvet web site at <u>www.chauvetprofessional.com</u>.



Nexus<sup>™</sup> Aw 7x7 panels do not work with Art-Net<sup>™</sup> controllers sending in Broadcast mode. For information about the controller's mode, see the controller's user manual.



#### Setting Modes And Protocols

The Nexus<sup>™</sup> Aw 7x7 automatically senses whether control is coming from a DMX source, or a Network source. When there is an etherCON® cable plug into it, the Nexus<sup>™</sup> Aw 7x7 expects a TCP/IP protocol, such as Art-Net<sup>™</sup> or Kling-Net, depending on the setting in the control panel. If there is a DMX cable plugged into it, the Nexus<sup>™</sup> Aw 7x7 expects a DMX controller or Master/Slave control, depending on the settings in the control panel.

The Nexus<sup>™</sup> Aw 7x7 can receive control from only one set of ports, either the DMX ports or the etherCON® ports. The Nexus<sup>™</sup> Aw 7x7 senses which ports are used on power-up, so the panel cannot be changed from DMX to TCP/IP, or from TCP/IP to DMX while it is turned on.

To switch from one set of ports to another (one control type to another), unplug the Nexus<sup>TM</sup> Aw 7x7 panel, switch the cables, and then plug the panel in again.

A DMX personality must be set for all modes, DMX, Art-Net<sup>™</sup>, or Kling-Net. For more information, see DMX Personality

Kling-Net has no settings to configure, but it must be selected through the control panel. For more information, see Setting Ethernet Protocols and Kling-Net

Art-Net<sup>TM</sup> has a number of settings that must be configured through the control panel. For more information, see <u>Setting Ethernet Protocols</u> and <u>Art-Net<sup>TM</sup></u>.

When a DMX controller is sending signal to the DMX ports and there is nothing in the etherCON® ports, any Ethernet settings in the control panel will be ignored.

When aTCP/IP controller is sending signal to the etherCON® ports and there is nothing in the DMX ports, the DMX personality will be recognized by the TCP/IP controller.



Do not connect both DMX and etherCON® cables, use one or the other.



#### **Mounting**

Before mounting the Nexus<sup>™</sup> Aw 7x7, review the <u>Safety Notes</u> section, and read and follow the guidelines below.

- · Mount so there is access to the control panel.
- Mount in a way that allows ventilation around the product.
- Do not mount near flammable materials as indicated in the <u>Safety Notes</u> section.
- Do not mount in rain, high humidity, or extreme temperature changes.
- Make sure that the mounting structure can support the weight of the Nexus<sup>™</sup> Aw 7x7 products. See <u>Technical Specifications</u> for information on weight.
- · Always use safety cables.

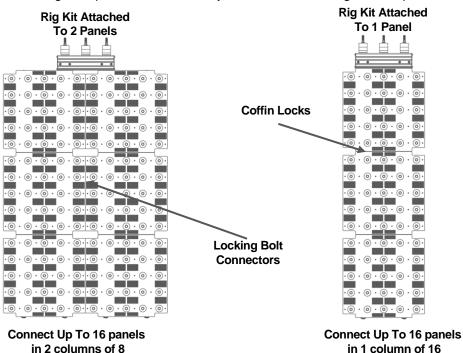
#### Orientation

Nexus<sup>™</sup> Aw 7x7 panels are hung in vertical rows and connected horizontally.

#### Rigging

Nexus<sup>™</sup> Aw 7x7 panels are rigged using the CHAUVET® Affinity<sup>™</sup> Rig Kit, or a clamp that is capable of supporting the weight of the panels, both of which are sold separately. The Rig Kit can bear the weight of 16 panels, in 1 column of 16, or 2 columns of 8. The rig kit has 5 holes for 2 compatible bolts and works with most standard truss clamps. The mounting clamp can bear the weight of 4 panels hung in a single column. The mounting clamp has one hole for 1 compatible bolts and fits most standard truss.

The coffin locks on the top and bottom of the Nexus<sup>™</sup> Aw 7x7 panels connect the tops and bottoms, and bear the weight, of the panels. The bolt-locking connectors on the sides connect the panels and align the pixels into rows. They cannot bear the weight of the panels.

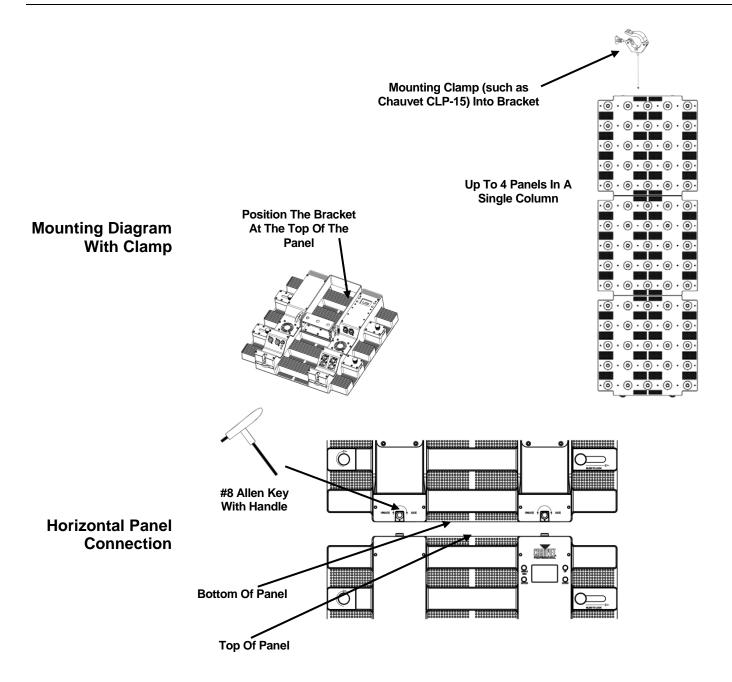


Mounting Diagram With Affinity™ Rig Kit



The locking bolt connectors on the sides of the Nexus<sup>™</sup> Aw 7x7 panels is not load bearing. Do not hang the panels sideways.







## 4. Operation

#### **Control Panel**

| Button  | Function  |  |  |
|---|---|--|--|
| <menu esc=""> Scrolls through the main menu options or exits the current menu option</menu>         |   |  |  |
| <b><enter></enter></b> Enters into the highlighted menu option or sets the currently selected value |   |  |  |
| <up> Navigates up through a list of menu options or values</up>                                     |   |  |  |
| <down></down>   | <down> Navigates down through a list of menu options or values</down> |  |  |

To select a main menu option press **<MENU/ESC>** repeatedly, or press **<MENU/ESC>** once and then press **<UP>** or **<DOWN>**.

To enter a menu option press **<ENTER>**.

To find a sub-menu or a programming value, press **<UP>** or **<DOWN>** until the menu or value is highlighted. Press **<ENTER>** to enter the sub-menu or select the value.

To exit back to the home screen, press and hold **<MENU/ESC>** until the home screen appears.

The home screen on the control panel display is what shows when the menu is left idle. The home screen includes the current operating mode, the current DMX personality—referred to as mode on the display, and the current temperature of the Nexus<sup>TM</sup> Aw 7x7.

The Menu Map below shows the menu options and the programming levels accessible from the control panel.



Setting changes are not activated until the control panel display returns to the home screen. To return the control panel display to the home screen press and hold <MENU/ESC> for 10 seconds.



## Menu Map

| Main Level        | Programming Levels |         |                      |                                    | Description   |
|-------------------|--------------------|---------|----------------------|------------------------------------|---|
| Auto Show         | Auto               | 0–8     | Show Spee            | ed 000–100                         | Selects Auto programs 0–8 and speed control                             |
| Otatia            | Dimr               | ner     | + 000 <b>–</b> 255 + |                                    | Sets dimmer to level (0–100%)   |
| Static            | Stro               | be      |                      |                                    | Sets strobe rate (0–20 Hz)  |
| Dimmor Mode       | Off                |         |                      |                                    |   |
| Dimmer Mode       |                    | Dimme   | r 1–3                |                                    | Sets dimming curve  |
|                   | On                 |         |                      |                                    |   |
| Dools Lite        |                    | 10\$    |                      |                                    |   |
| Back Lite         |                    | 209     | 3                    |                                    | Sets control panel backlight on time                                    |
|                   |                    | 308     | 3                    |                                    |   |
|                   |                    | Auto 1  | test                 |                                    | Starts a self-test  |
|                   |                    | Fixture | Hours                |                                    | Shows total operating hours   |
| Info              |                    | Versi   | on                   |                                    | Shows software version  |
|                   |                    | IP Add  | ress                 |                                    | Shows IP address  |
|                   |                    | Device  | e ID                 |                                    | Shows ID number   |
| DMX Address       |                    | 001–    | 512                  |                                    | Sets DMX start channel for DMX mode                                     |
|                   |                    | 5Ch     |                      |                                    | Sets DMX personality for DMX mode, Kling-Net<br>mode, or Art-Net™ mode. |
|                   |                    | 8Ch     |                      |                                    |   |
| DMX Channel       |                    | 49Ch    |                      |                                    |   |
|                   |                    | 54Ch    |                      |                                    |   |
|                   |                    | 57Ch    |                      |                                    |   |
| Master/Slave      |                    | Mast    | ter                  |                                    | Sets Master mode  |
| Waster/Slave      |                    | Slav    | re                   |                                    | Sets Slave mode   |
|                   | Temper             | ature   |                      |                                    | Shows product's internal temperature                                    |
|                   |                    |         | Kling-Net            |                                    | Sets Kling-Net protocols  |
|                   |                    |         |                      | Static                             | Sets product to use its internal IP address                             |
|                   |                    |         | IP Mode              | DHCP                               | Sets product to use Dynamic IP addressing                               |
|                   |                    |         |                      | Manual                             | Sets product to use a manually set IP address                           |
| Ethernet Settings | Protocol           | Art-Net | Net                  | 000–127                            | Sets the net number of the product                                      |
|                   |                    | ,       | Subnet               | ubnet 00-15                        | Sets the subnet of the product  |
|                   |                    |         | Universe             | 00-13                              | Sets the universe of the product  |
|                   |                    |         | Start<br>Channel     | 1–512                              | Sets the starting channel of the product                                |
| Minimum Dimmer    | 0–100              |         |                      | Selects the minimum dimmer setting |   |



## Menu Operations

The menu operation configurations the Nexus<sup>™</sup> Aw 7x7 for use, including setting it to use built-in programs to operate with a DMX control, and to operate with Art-Net<sup>™</sup> or Kling-Net. The menu operations are accessed via the control panel. See Control Panel.



Setting changes are not activated until the control panel display returns to the home screen. To return the control panel display to the home screen press and hold <MENU> until the home screen appears. For more information, see <a href="Home Screen">Home Screen</a>.

#### **Auto Show**

Auto Show mode selects built-in programs, and sets their speed, so the Nexus<sup>™</sup> Aw 7x7 can operate without a controller. To activate Auto Show mode do the following:

- 1. Go to the main menu option Auto Show.
- 2. Press <ENTER>.
- 3. Use **<UP>** or **<DOWN>** to scroll through the list of auto programs. The auto programs activate as they are highlighted.
- 4. Press **<ENTER>** when the desired auto program is highlighted. A number from **0–100** shows in a pop-up box.
- 5. Use **<UP>** or **<DOWN>** to select a speed. The auto program speeds up or slows down as the numbers in the box change.
- 6. Press **<ENTER>** when the program is operating at the desired speed.
- 7. Press **<MENU/ESC>** and hold it until the home screen appears.

## Exiting Auto Show Mode

Auto Show mode does not stop when a different operating mode, such as DMX, Art-Net<sup>™</sup>, or Kling-Net is selected. To exit from Show mode put the Nexus<sup>™</sup> Aw 7x7 into Slave mode. For more information, see <u>Master/Slave Mode</u>. Slave mode does stop when a different operating mode is selected through the control panel.

#### **Static**

Static mode configures the intensity of the light and the rate of strobe. The Nexus<sup>™</sup> Aw 7x7 can be configured in any range from a constant bright white, to a fast dim light. To set static mode do the following:

- 1. Go to the main menu option Static.
- 2. Press <ENTER>.
- 3. Use **<UP>** or **<DOWN>** to highlight **Dimmer** or **Strobe**.
- 4. Press **<ENTER>** to select Dimmer or Strobe. A number from 0–255 shows in a pop-up box.
- 5. Use **<UP>** or **<DOWN>** to scroll through intensity or strobe speeds. The Nexus<sup>™</sup> Aw 7x7 will respond as the numbers in the box change.
- 6. Press **<ENTER>** when the Nexus<sup>™</sup> Aw 7x7 is operating at the desired intensity and speed.
- 7. Press **<MENU>** to return to the home screen.

#### **Dimmer Mode**

Dimmer mode configures the rate of the intensity change of the Nexus<sup>™</sup> Aw 7x7 panel. There are 3 different dimmer modes with 1 being the slowest and 3 being the fastest. When Dimmer Mode is set to **OFF**, the panel fades in direct proportion to the DMX values. To configure Dimmer mode, do the following:

- 1. Go to the main menu option **Dimmer Mode**.
- 2. Press **<ENTER>**. A list of dimmer modes shows in a pop-up box.
- 3. Use **<UP>** or **<DOWN>** to scroll through through the dimmer modes.
- 4. Press **<ENTER>** when the desired dimmer mode is highlighted
- 5. Press and hold **<MENU/ESC>** until the home screen appears.



#### **Back Lite**

Back Lite determines how long the backlight on the display stays on. To set the display backlight on time, do the following:

- 1. Go to the main menu option Back Lite.
- 2. Press **<ENTER>**. A pop-up box shows with a list of display backlight options.
- 3. Use **<UP>** or **<DOWN>** to scroll through display backlight options.
- 4. Press **<ENTER>** when the desired backlight option is highlighted.
- 5. Press <MENU/ESC> to return to the home screen.

#### Minimum Dimmer

Minimum Dimmer sets the minimum for the dimming range. To select **Minimum Dimmer**, do the following:

- 1. Go to the main menu option **Minimum Dimmer**.
- 1. Press <ENTER>.
- 2. Use **<UP>** or **<DOWN>** to select the desired minium dimmer setting, **0–100**.
- 3. Press **<ENTER>**.

#### Information

Product Information shows information about the Nexus<sup>™</sup> Aw 7x7 panel, and it has an auto test function. To display product information, do the following:

- 1. Go to the main menu option **Information**.
- 2. Press **<ENTER>**. An **Auto Test** option, and a list of information options show.
- 3. Use **<UP>** or **<DOWN>** to scroll through the options.
- 4. Press **<ENTER>** when the desired option is highlighted.
- 5. The information shows on the screen.
- 6. Press and hold **<MENU/ESC>** until the home screen appears.

#### Auto Test

Auto test runs a program that checks all the LEDs. To activate the **Auto Test** function, do the following:

- 4. Go to the main menu option **Information**.
- 5. Press <ENTER>.
- 6. Use **<UP>** or **<DOWN>** to scroll through and highlight **Auto Test**. The words **Auto Test** show in a pop-up box and the Nexus<sup>™</sup> Aw 7x7 begins an auto test.

To stop the Auto Test function, press <MENU/ESC>.



#### **DMX Address**

DMX Address sets the Nexus<sup>™</sup> Aw 7x7 DMX address for DMX mode only. To select a DMX address, do the following:

- Go to the main menu option DMX Address.
- Press **<ENTER>**. A pop-up box shows with a number between 1–512.
- 3. Use **<UP>** or **<DOWN>** to scroll through numbers.
- 4. Press **<ENTER>** when the desired DMX address shows.
- 5. Press **<MENU/ESC>** to return to the home screen.

The highest recommended DMX addresses for each DMX personality are in the table below.

| DMX<br>Personality | DMX Address | DMX<br>Personality | DMX Address | DMX<br>Personality | DMX Address |
|--------------------|-------------|--------------------|-------------|--------------------|-------------|
| 5Ch                | 508         | 49                 | 464         | 57Ch               | 456         |
| 8Ch                | 505         | 54Ch               | 459         |                    |             |

#### **DMX Channel**

DMX channel sets the DMX personality for use in all modes and protocols: DMX, Art-Net™, and Kling-Net. Each DMX personality has different capabilities. For more information, see DMX Mode. To select a DMX personality, do the following:

- 1. Go to the main menu option DMX Personality.
- 2. Press **<ENTER>**. A pop-up box shows with a list of personalities.
- 3. Use **<UP>** or **<DOWN>** to scroll through the list.
- 4. Press **<ENTER>** when the desired DMX personality is highlighted.
- 5. Press and hold **<MENU/ESC>** until the home screen appears.

#### Master/Slave Mode

Master/Slave mode configures the Nexus<sup>™</sup> Aw 7x7 panels so that a group of them (the slaves) duplicates the actions of a single panel (the master). Master/Save mode does not need a DMX controller. To configure the Nexus<sup>™</sup> Aw 7x7s for Master/Slave mode, do the following:

First, set each of the slave panels:

- 1. Go to the main menu option Master/Slave.
- 2. Press **<ENTER>**. The words **Master**, and **Slave** show in a pop-up box.
- 3. Use **<UP>** or **<DOWN>** to scroll between the words.
- 4. Press **<ENTER>** when **Slave** is highlighted.
- 5. Press and hold **<MENU/ESC>** until the home screen appears.

Second, set the master panel:

- 1. Go to the main menu option Master/Slave.
- 2. Press **<ENTER>**. The words **Master**, and **Slave** show in a pop-up box.
- 3. Use **<UP>** or **<DOWN>** to scroll between the words.
- 4. Press <ENTER> when Master is highlighted.
- 5. Press and hold **<MENU/ESC>** until the home screen appears.
- 6. Set the master to a manual mode. For more information, see Auto Show or Static.
- Set the slaves before setting the master.



- Do not connect a DMX controller to Nexus<sup>TM</sup> Aw 7x7 products that are configured for Master/Slave operation.
- · The master panel must be set to a manual mode for Master/Slave to work.



#### **Temperature**

Temperature shows the internal temperature of the Nexus<sup>™</sup> Aw 7x7. The temperature is shown on the display home screen, but can also be accessed through the control panel. To show the internal temperature through the control panel, do the following:

- 1. Go to the **Temperature** main option.
- 2. Press **<ENTER>.** A pop-up box shows the current temperature of the Nexus<sup>™</sup> Aw 7x7.

Resetting to factory defaults clears all settings in the Nexus<sup>™</sup> Aw 7x7. To reset the Nexus<sup>™</sup> Aw 7x7 to factory defaults, do the following:

- 1. Disconnect the Nexus<sup>™</sup> Aw 7x7 from power.
- 2. Press and hold <MENU> and <ENTER> simultaneously.
- 3. Reconnect the Nexus™ Aw 7x7 to power.
- 4. Release <MENU> and <ENTER>. The words Factory reset? ENTER = Confirm show on the display.
- 5. Press <ENTER>.

## Reset to Factory Default

Resetting to factory defaults clears all settings in the Nexus<sup>™</sup> Aw 7x7. Resetting to Factory Defaults is not a menu option. To reset the Nexus<sup>™</sup> Aw 7x7 to factory defaults, do the following:

- 1. Disconnect the Nexus™ Aw 7x7 from power.
- 2. Press and hold <MENU> and <ENTER> simultaneously.
- 3. Reconnect the Nexus™ Aw 7x7 to power.
- 4. Release <MENU> and <ENTER>. The words Factory reset? ENTER = Confirm show on the display.
- 5. Press **<ENTER>**.



## Setting Ethernet Protocols

The Nexus™ Aw 7x7 products run on Kling-Net or Art-Net.

The Kling-Net protocol requires no configuration, except to set the Nexus<sup>™</sup> Aw 7x7 to Kling-Net. All Ethernet configurations in the Kling-Net protocol are done automatically by ArKaos software.

The Art-Net protocol requires configuration of a number of Ethernet settings. For more information, see  $\underline{\mathsf{Art-Net^{TM}}}$ .

#### Kling-Net

To set the Nexus<sup>™</sup> Aw 7x7 to Kling-Net, do the following:

- 1. Go to the main menu option Ethernet Setting.
- 2. Press **<ENTER>**. A list of setting options shows in the display. **Protocol** will be at the top.
- 3. Press <ENTER>. A pop-up box shows with the words Kling-Net, and Art-Net
- 4. Use **<UP>** or **<DOWN>** to highlight **Kling-Net**.
- 5. Press **<ENTER>**.
- 6. Press **<MENU>** until the display return to the home screen.

#### Art-Net™

Setting the Nexus<sup>™</sup> Aw 7x7 to Art-Net<sup>™</sup> involves setting the IP, the Net, the Subnet, the universe and the starting address. The starting address is the just like the DMX address for the DMX configuration, expect that this starting address applies only to the Art-Net<sup>™</sup> configuration. To set the Nexus<sup>™</sup> Aw 7x7 to Art-Net, do the following:

- 1. Go to the main menu option **Ethernet Setting**.
- 2. Press **<ENTER>**. A list of setting options shows in the display. **Protocol** will be at the top.
- 3. Press <ENTER>. A pop-up box shows with the words Kling-Net, and Art-Net.
- 4. Use **<UP>** or **<DOWN>** to highlight **Art-Net**<sup>™</sup>.
- 5. Press <ENTER>.
- 6. Press **<DOWN>**. **IP Mode** is highlighted.
- 7. Press <ENTER>. A pop-up box shows with 3 IP modes, **Static**, **DHCP**, and **Manual**.
- 8. Use **<UP>** or **<DOWN>** to highlight the desired mode.
- 9. Press **<ENTER>** to select the mode.

If Manual was selected, a pop-up box shows in the display with an IP address. Use <ENTER> to move between segments of the IP address and **<UP>** or **<DOWN>** to change the numbers in the segments.

- 10. Press **<MENU>** to return to the list of settings options.
- 11. Press **<DOWN>** to highlight **Net**.
- 12. Press **<ENTER>**. A pop-up box shows with a number between **0–127**.
- 13. Press **<UP>** or **<DOWN>** until the desired **Net** number shows.
- 14. Press **<ENTER>**. The display returns to the list of setting options.
- 15. Press **<DOWN>** to highlight **Subnet**.
- 16. Press **<ENTER>**. A pop-up box shows with a number between **0–15**.
- 17. Press **<UP>** or **<DOWN>** until the desired **Subnet** number shows.
- 18. Press **<ENTER>**. The display returns to the list of setting options.
- 19. Press **<DOWN>** to highlight **Universe**.
- 20. Press **<ENTER>**. A pop-up box shows with a number between **0–15**.
- 21. Press **<UP>** or **<DOWN>** until the desired **Universe** number shows.
- 22. Press **<ENTER>**. The display returns to the list of setting options.
- 23. Press **<DOWN>** to highlight **Start Channel**.
- 24. Press **<ENTER>**. A pop-up box shows with a number between **0–512**.
- 25. Press **<UP>** or **<DOWN>** until the desired **Start Channel** number shows.
- 26. Press **<ENTER>**. The display returns to the list of setting options.
- 27. Press and hold <MENU> until the home screen shows on the display.



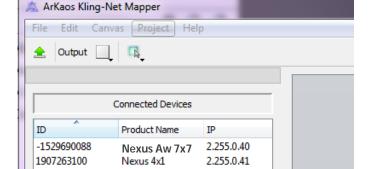
## Kling-Net Mapper

Kling-Net Mapper is part of the ArKaos software package and is used to inform the ArKaos software about the layout of the Nexus<sup>TM</sup> Aw 7x7 panels. This process is called called mapping. Kling-Net Mapper and ArKaos software can run simultaneously allowing the operator to see immediately the effects of the mapping on the live presentation. However, Kling-Net Mapper does not need to be active for ArKaos software to work. For more information, see ArKaos manuals at <a href="http://arkaospro.com">http://arkaospro.com</a>.

#### Part 1: Confirm Network Connectivity

The following section provides step-by-step instructions for mapping the Nexus<sup>™</sup> Aw 7x7 panels and informing ArKaos software of the mapping.

- 1. Connect the ArKaos computer and Nexus<sup>™</sup> Aw 7x7s to the same network. For more information, see <u>Ethernet Connections Diagram</u>.
- 2. Set the all the Nexus<sup>™</sup> Aw 7x7s to Kling-Net operating mode. For more information, see Setting Modes and Protocols.
- 3. Open the ArKaos Kling-Net Mapper. All the Kling-Net™ devices populate a list on the left side of the screen in the Connected Devices window.



#### The Connected Devices Window

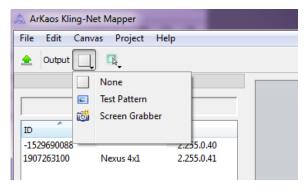
It can take up to 20 seconds for all the products to populate the list and the devices display in different colors for different reasons, which are as follows:

| Colors and Activity                                       | Explanation  |  |
|---|--|--|
| Black with an ID number and IP address                    | There is connectivity and everything is working properly, but the device is not yet mapped.  |  |
| Green with an ID number and IP address                    | There is connectivity and everything is working properly, and the device is mapped.  |  |
| Black to red with no IP address during initial population | The King-Net™ Mapper could not find an IP address for the device, most likely because the system is using an Ethernet switch instead of an Ethernet hub. |  |
| Black to red after initial population                     | The connectivity has been lost.  |  |

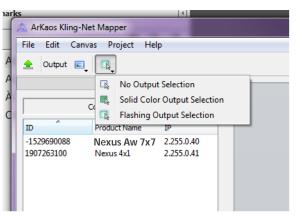


#### Part 2: Test Network Connectivity

Select the Output dropdown icon from the tool bar at the top of the Kling-Net Mapper screen. One of the options will be Test Pattern.



- 1. Select Test Pattern. The image to the right of the icon is a small screen, indicating that Test Pattern is the current mode.
- 2. Select the icon to the right of the Output dropdown icon. One of the options will be Flashing Output Selection.

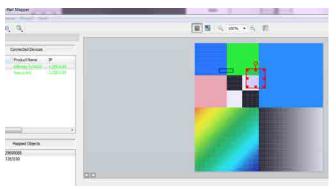


- 3. Select Flashing Output Selection. The icon is a faded green square with an arrow, indicating that a flashing green light is the current test pattern.
- 4. Left click once on an LED display product. The product flashes green.
- 5. Repeat step 8 for every product in the list.

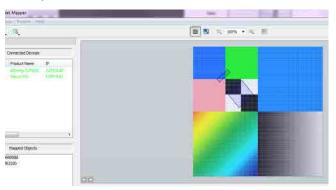


#### Part 3: Map The Products For ArKaos

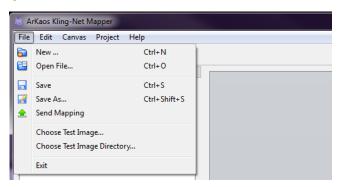
- Make sure the Nexus<sup>™</sup> Aw 7x7 products are all listed in the Connected Devices window and have flashed when tested. For more information, see <u>Part1 Confirming Connectivity</u>.
- Click on the first product in the list and drag it onto the mapping image in the center of the screen. A shape representing the display product shows on the mapping image. The product displays the pattern on the mapping image.



3. Drag, rotate, and resize the shape on the mapping image until it is in the position needed for the presentation layout.



- 4. Repeat steps 2 thru 3 for every Nexus™ Aw 7x7 product.
- 5. Complete Parts One and Two.
- 6. Click on File in the ArKaos Media Mapper.
- 7. Click on Save AS.



8. Save the file.



Remember the location of the file because the file must be loaded into the ArKaos software.

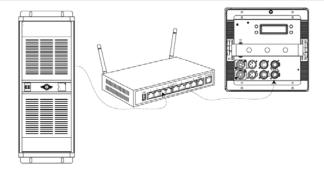


#### **Nexus Software Upgrade Instructions**

The following steps refer to the Windows® 7 operating system environment.

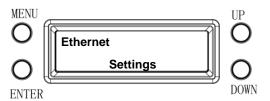
#### Step 1:

- Connect the Nexus<sup>™</sup> Aw 7x7 to the router.
- 2. Verify the computer is using the same network as the Nexus™ Aw 7x7 product.



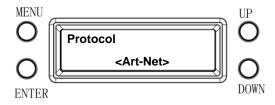
#### Step 2:

From the Nexus<sup>™</sup> Aw 7x7 main level, navigate to Ethernet
 Settings.



#### Step 3:

- Select Protocol.
- Select < Art-Net>.
- 3. Select <Static> IP Mode.



#### Step 4:

- 1. From the Windows® start menu, click the **<Start>** button.
- From the Search box, type Network and Sharing Center. Windows will generate the search results in the Start window.
- 3. Select Network and Sharing Center and the Network and Sharing Center dialog appears.



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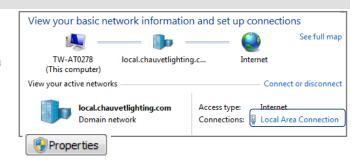


#### Step 5:

1. Select the desired network the product is connected to.

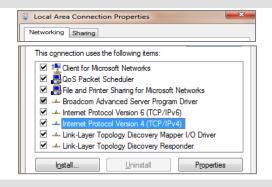
If you are running a hard-wired line from the PC to your router, then select Local Area Connection. The Local Area Connection Status dialog appears.

2. Click Properties. The *Local Area Connection Properties* dialog appears.



#### Step 6:

- From the Networking tab, select Internet Protocol Version 4 (TCP/IPv4).
- Click Properties. The Internet Protocol Version 4 (TCP/IPv4) Properties dialog appears.



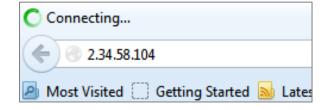
#### Step 7:

- 1. From the General tab, select Use the following IP address:.
- 2. Enter the following information:
- 3. Enter 2.255.0.0 in the IP address box.
- 4. Enter 255.0.0.0 in the Subnet mask box.
- 5. Click OK.
- 6. Close existing dialogs that are currently open.
- Minimize the Control Panel, as it will be necessary to access this window after the software upgrade is uploaded to the product.

# Internet Protocol Version 4 (TCP/IPv4) Properties General Obtain an IP address automatically Object the following IP address: IP address: 2 . 255 . 0 . 0 Subnet mask: Default gateway: . . . .

#### Step 8:

- From the Nexus<sup>™</sup> Aw 7x7 control panel, navigate to the Info main level.
- 2. Select IP Address.
- 3. From the PC, open the Internet browser.
- 4. Enter the IP address for the Nexus<sup>™</sup> Aw 7x7 you are working with in the address bar. For example, if the IP address shown in the product's control panel is 2.34.58.104, then type that into your internet browser address bar).
- 5. Press ENTER. The *Authentication Required* dialog appears.

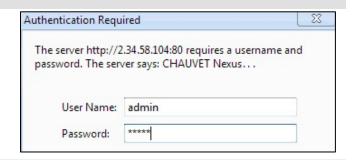




#### Step 9:

- 1. Enter the following information:
- 2. Enter admin in the User Name box.
- 3. Enter admin in the Password box.
- Click Log In. The Nexus<sup>™</sup> Aw 7x7 firmware window appears.

If the user name/password you entered is invalid, follow the Factory Reset procedure.



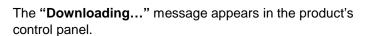
#### Step 10:

- 1. From the Navigation bar, select the Upgrade tab.
- 2. From the Firmware Upgrade section, click Choose File. The *Open* dialog appears.



#### Step 11:

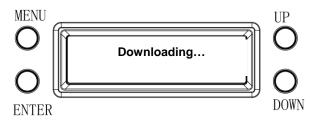
- From the Open dialog, select the file to upload the firmware onto the Nexus™ Aw 7x7 product.
- 2. Click Open.



Once the firmware finishes downloading the software, the product will automatically reset the unit and the control panel flickers.

Do not turn off the product during the downloading process. It will take approximately 1 min before to reset.

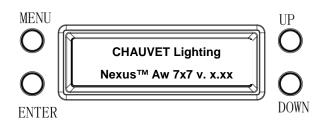
## Open News Updates Organize New folder Fevorites Desktop Downloads Recent Places Google Drive Topopox



#### Step 12:

- 1. Navigate to the Info main level.
- 2. Select Version.
- Verify the product's control panel displays the uploaded version.

The software upgrade is now complete.



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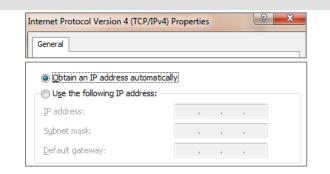


#### Step 13:

Once the software upgrade is complete, the IP setting on your PC needs to be changed back to the original settings.

- Refer to step #4 for navigation instructions on how to access the *Internet Protocol Version 4 Properties* (TCP/IPv4) dialog.
- 2. From the General tab, select Obtain an IP address automatically, and click OK.
- 3. Continue to close the dialogs displayed until you exit out of the Control Panel.

The installation process is complete.





The examples shown are for illustrative purposes, and your product's screens may appear slightly different.



### **DMX Channel Assignments And Values**

The following tables show the DMX channel function assignments and the values that trigger the functions.

#### **57 Channels**

57

| 7Ch | Channel | Function | Value            | Percent/Setting |
|-----|---------|----------|------------------|-----------------|
| _   | 1       | White 1  | 000 <b>á</b> 255 | 0–100%          |
|     | 2       | White 2  | 000 <b>á</b> 255 | 0–100%          |
|     | 3       | White 3  | 000 <b>á</b> 255 | 0–100%          |
| _   | 4       | White 4  | 000 <b>ර</b> 255 | 0–100%          |
|     | 5       | White 5  | 000 <b>ó</b> 255 | 0–100%          |
|     | 6       | White 6  | 000 <b>ó</b> 255 | 0–100%          |
|     | 7       | White 7  | 000 <b>ර</b> 255 | 0–100%          |
|     | 8       | White 8  | 000 <b>ර</b> 255 | 0–100%          |
|     | 9       | White 9  | 000 <b>ර</b> 255 | 0–100%          |
|     | 10      | White 10 | 000 <b>ර</b> 255 | 0–100%          |
|     | 11      | White 11 | 000 <b>ර</b> 255 | 0–100%          |
|     | 12      | White 12 | 000 <b>ó</b> 255 | 0–100%          |
| _   | 13      | White 13 | 000 <b>ර</b> 255 | 0–100%          |
| _   | 14      | White 14 | 000 <b>ර</b> 255 | 0–100%          |
|     | 15      | White 15 | 000 <b>ර</b> 255 | 0–100%          |
|     | 16      | White 16 | 000 <b>ó</b> 255 | 0–100%          |
|     | 17      | White 17 | 000 <b>ó</b> 255 | 0–100%          |
| _   | 18      | White 18 | 000 <b>ර</b> 255 | 0–100%          |
|     | 19      | White 19 | 000 <b>ර</b> 255 | 0–100%          |
| _   | 20      | White 20 | 000 <b>ර</b> 255 | 0–100%          |
| _   | 21      | White 21 | 000 <b>ර</b> 255 | 0–100%          |
| _   | 22      | White 22 | 000 <b>ó</b> 255 | 0–100%          |
|     | 23      | White 23 | 000 <b>ර</b> 255 | 0–100%          |
|     | 24      | White 24 | 000 <b>ó</b> 255 | 0–100%          |
|     | 25      | White 25 | 000 <b>ර</b> 255 | 0–100%          |
|     | 26      | White 26 | 000 <b>ර</b> 255 | 0–100%          |
| _   | 27      | White 27 | 000 <b>ó</b> 255 | 0–100%          |
| _   | 28      | White 28 | 000 <b>ó</b> 255 | 0–100%          |
| _   | 29      | White 29 | 000 <b>ó</b> 255 | 0–100%          |
| _   | 30      | White 30 | 000 <b>ó</b> 255 | 0–100%          |
| _   | 31      | White 31 | 000 <b>ó</b> 255 | 0–100%          |
| _   | 32      | White 32 | 000 <b>ó</b> 255 | 0–100%          |
| _   | 33      | White 33 | 000 <b>ර</b> 255 | 0–100%          |
| _   | 34      | White 34 | 000 <b>ර</b> 255 | 0–100%          |
| _   | 35      | White 35 | 000 <b>ó</b> 255 | 0–100%          |
|     | 36      | White 36 | 000 <b>ó</b> 255 | 0–100%          |

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| 5701 |         |                   |   |   |
|------|---------|-------------------|---|---|
| 57Ch | Channel | Function          | Value   | Percent/Setting   |
| _    | 37      | White 37          | 000 <b>ó</b> 255  | 0–100%  |
| _    | 38      | White 38          | 000 <b>ó</b> 255  | 0–100%  |
| _    | 39      | White 39          | 000 <b>ර</b> 255  | 0–100%  |
|      | 40      | White 40          | 000 <b>á</b> 255  | 0–100%  |
|      | 41      | White 41          | 000 <b>ó</b> 255  | 0–100%  |
| _    | 42      | White 42          | 000 <b>ó</b> 255  | 0–100%  |
| _    | 43      | White 43          | 000 <b>ó</b> 255  | 0–100%  |
| _    | 44      | White 44          | 000 <b>ó</b> 255  | 0–100%  |
|      | 45      | White 45          | 000 <b>ර</b> 255  | 0–100%  |
|      | 46      | White 46          | 000 <b>ó</b> 255  | 0–100%  |
| _    | 47      | White 47          | 000 <b>á</b> 255  | 0–100%  |
| _    | 48      | White 48          | 000 <b>ó</b> 255  | 0–100%  |
| _    | 49      | White 49          | 000 <b>ó</b> 255  | 0–100%  |
|      | 50      | Foreground Dimmer | 000 <b>ó</b> 255  | 0–100%  |
| _    | 51      | Background Dimmer | 000 <b>á</b> 255  | 0–100%  |
| _    | 52      | _                 | 000   | No function   |
|      |         | Alphanumeric      | 001 <b>ó</b> 127  | Numeric characters 1–0  |
| _    |         |                   | 128 <b>ó</b> 255  | Alpha characters A–Z  |
|      | 53      | Virtual Gobo Maps | 000 <b>6</b> 010 011 <b>6</b> 020 021 <b>6</b> 029 030 <b>6</b> 038 039 <b>6</b> 047 048 <b>6</b> 056 057 <b>6</b> 065 066 <b>6</b> 074 075 <b>6</b> 083 084 <b>6</b> 092 093 <b>6</b> 101 102 <b>6</b> 110 111 <b>6</b> 119 120 <b>6</b> 128 129 <b>6</b> 137 138 <b>6</b> 146 147 <b>6</b> 155 156 <b>6</b> 164 165 <b>6</b> 173 174 <b>6</b> 182 183 <b>6</b> 191 192 <b>6</b> 200 201 <b>6</b> 209 210 <b>6</b> 218 219 <b>6</b> 227 228 <b>6</b> 236 237 <b>6</b> 246 247 <b>6</b> 255 | No function Simple cross Simple box Square imploder Square exploder Diamond imploder Diamond exploder Two-Line spinner Triangle spinner Tri-Downer Tri-Upper Bowtie spinner One-Liner Line hop up Line hop down Line hop up/down T-Spin Upside down T-Spin Diamond spoke spin Line hop left Line hop left Line hop left/right Double verticals Double horizontals Diagonal right Diagonal left Moving squares Clock |



| 57Ch | Channel | Function              | Value  | Percent/Setting   |
|------|---------|-----------------------|--|---|
|      | 54      | Virtual Gobo Speed    | 000 <b>o</b> 010<br>011 <b>o</b> 100<br>101 <b>o</b> 149<br>150 <b>o</b> 202<br>203 <b>o</b> 255 | No function Gobo index No function Gobo speed clockwise, fast to slow Gobo speed counter-clockwise, slow to fast  |
|      |         | Alphanumeric Rotation | 000 <b>6</b> 063<br>064 <b>6</b> 127<br>128 <b>6</b> 191<br>192 <b>6</b> 255                     | 0°<br>90°<br>180°<br>270°   |
|      | 55      | Dimmer                | 000 <b>á</b> 255   | 0–100%  |
|      | 56      | Strobe                | 000 <b>ó</b> 010<br>011 <b>ó</b> 255   | No function<br>0–20 Hz  |
|      | 57      | Dimmer Mode           | 000 <b>ó</b> 051<br>052 <b>ó</b> 101<br>102 <b>ó</b> 152<br>153 <b>ó</b> 203<br>204 <b>ó</b> 255 | Preset dimmer speed from display menu<br>Linear dimmer<br>Nonlinear dimming curve 1 (fastest)<br>Nonlinear dimming curve 2<br>Nonlinear dimming curve 3 (slowest) |

#### 54 Channels

| 54Ch | Channel | Function | Value            | Percent/Setting |
|------|---------|----------|------------------|-----------------|
|      | 1       | White 1  | 000 <b>ó</b> 255 | 0–100%          |
|      | 2       | White 2  | 000 <b>ó</b> 255 | 0–100%          |
| _    | 3       | White 3  | 000 <b>ó</b> 255 | 0–100%          |
| _    | 4       | White 4  | 000 <b>ó</b> 255 | 0–100%          |
| _    | 5       | White 5  | 000 <b>ó</b> 255 | 0–100%          |
| _    | 6       | White 6  | 000 <b>ó</b> 255 | 0–100%          |
|      | 7       | White 7  | 000 <b>ó</b> 255 | 0–100%          |
|      | 8       | White 8  | 000 <b>ó</b> 255 | 0–100%          |
|      | 9       | White 9  | 000 <b>ó</b> 255 | 0–100%          |
|      | 10      | White 10 | 000 <b>ó</b> 255 | 0–100%          |
|      | 11      | White 11 | 000 <b>ó</b> 255 | 0–100%          |
|      | 12      | White 12 | 000 <b>ó</b> 255 | 0–100%          |
|      | 13      | White 13 | 000 <b>ó</b> 255 | 0–100%          |
|      | 14      | White 14 | 000 <b>ó</b> 255 | 0–100%          |
|      | 15      | White 15 | 000 <b>ó</b> 255 | 0–100%          |
|      | 16      | White 16 | 000 <b>ó</b> 255 | 0–100%          |
|      | 17      | White 17 | 000 <b>ó</b> 255 | 0–100%          |
|      | 18      | White 18 | 000 <b>ó</b> 255 | 0–100%          |
|      | 19      | White 19 | 000 <b>ó</b> 255 | 0–100%          |
| _    | 20      | White 20 | 000 <b>ó</b> 255 | 0–100%          |
|      | 21      | White 21 | 000 <b>ó</b> 255 | 0–100%          |
|      | 22      | White 22 | 000 <b>ó</b> 255 | 0–100%          |
|      | 23      | White 23 | 000 <b>ó</b> 255 | 0–100%          |
|      | 24      | White 24 | 000 <b>ó</b> 255 | 0–100%          |

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54Ch Percent/Setting Channel **Function** Value

| 25 White 25 000 ★ 255 0-100%  26 White 26 000 ★ 255 0-100%  27 White 27 000 ★ 255 0-100%  28 White 28 000 ★ 255 0-100%  29 White 29 000 ★ 255 0-100%  30 White 30 000 ★ 255 0-100% |    |
|--|----|
| 27     White 27     000 • 255     0-100%       28     White 28     000 • 255     0-100%       29     White 29     000 • 255     0-100%   |    |
| 28     White 28     000 • 255     0-100%       29     White 29     000 • 255     0-100%  |    |
| 29 White 29 000 <b>6</b> 255 0–100%  |    |
|  |    |
| <b>30</b> White <b>30</b> 000 <b>≤</b> 255 0−100%  |    |
|  |    |
| <b>31</b> White <b>31</b> 000 <b>๑</b> 255 0−100%  |    |
| <b>32</b> White <b>32</b> 000 <b>๑</b> 255 0−100%  |    |
| <b>33</b> White <b>33</b> 000 <b>๑</b> 255 0−100%  |    |
| <b>34</b> White <b>34</b> 000 <b>๑</b> 255 0−100%  |    |
| <b>35 White 35</b> 000 <b>⋄</b> 255 0−100%   |    |
| <b>36</b> White <b>36</b> 000 <b>★</b> 255 0–100%  |    |
| 37 White 37 000 <b>6</b> 255 0–100%  |    |
| 38 White 38 000 <b>6</b> 255 0–100%  |    |
| 39 White 39 000 <b>6</b> 255 0–100%  |    |
| <b>40</b> White <b>40</b> 000 <b>6</b> 255 0–100%  |    |
| 41 White 41 000 <b>6</b> 255 0–100%  |    |
| <b>42</b> White <b>42</b> 000 <b>6</b> 255 0–100%  |    |
| <b>43 White 43</b> 000 <b>≤</b> 255 0−100%   |    |
| <b>44</b> White <b>44</b> 000 <b>6</b> 255 0–100%  |    |
| <b>45</b> White <b>45</b> 000 <b>๑</b> 255 0−100%  |    |
| <b>46</b> White <b>46</b> 000 <b>๑</b> 255 0−100%  |    |
| <b>47 White 47</b> 000 <b>๑</b> 255 0−100%   |    |
| <b>48 White 48</b> 000 <b>≤</b> 255 0−100%   |    |
| <b>49 White 49</b> 000 <b>≤</b> 255 0−100%   |    |
| 000 <b>๑</b> 010 No function   |    |
| 011 <b>o</b> 038 Auto 1  |    |
| 039 <b>ó</b> 066 Auto 2  |    |
| 067 <b>6</b> 094 Auto 3  |    |
| 50 Auto Programs 095 <b>6</b> 122 Auto 4   |    |
| 123 <b>6</b> 150   Auto 5  |    |
| 151 <b>6</b> 178 Auto 6  |    |
| 179 <b>6</b> 206 Auto 7  |    |
| 207 <b>6</b> 234 Auto 8  |    |
| 235 <b>4</b> 255 Auto 0  |    |
| 51 Auto Speed 000 5 255 Only when Channel 50 has Auto 0–8 activated  |    |
| <b>52 Dimmer</b> 000 <b>๑</b> 255 0−100%   |    |
| 53 Shutter 000 <b>6</b> 010 No function  |    |
| 011 <b>©</b> 255   |    |
| 000 <b>6</b> 051 Preset dimmer speed from display me   | าน |
| 052 <b>ó</b> 101 Linear dimmer   |    |
| 54 Dimmer Mode 102 <b>5</b> 152 Nonlinear dimming curve 1 (fastest)  |    |
| 153 <b>4</b> 203 Nonlinear dimming curve 2   |    |
| 204 <b>5</b> 255 Nonlinear dimming curve 3 (slowest)   |    |
| 1 1 2 2 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2  |    |



#### 49 Channels

| 49Ch | Channel | Function | Value            | Percent/Setting |
|------|---------|----------|------------------|-----------------|
| -    | 1       | White 1  | 000 <b>ó</b> 255 | 0–100%          |
| -    | 2       | White 2  | 000 <b>ó</b> 255 | 0–100%          |
| -    | 3       | White 3  | 000 <b>ó</b> 255 | 0–100%          |
| -    | 4       | White 4  | 000 <b>ó</b> 255 | 0–100%          |
| -    | 5       | White 5  | 000 <b>ó</b> 255 | 0–100%          |
|      | 6       | White 6  | 000 <b>6</b> 255 | 0–100%          |
| _    | 7       | White 7  | 000 <b>ó</b> 255 | 0–100%          |
|      | 8       | White 8  | 000 <b>6</b> 255 | 0–100%          |
|      | 9       | White 9  | 000 <b>6</b> 255 | 0–100%          |
|      | 10      | White 10 | 000 <b>ó</b> 255 | 0–100%          |
|      | 11      | White 11 | 000 <b>6</b> 255 | 0–100%          |
|      | 12      | White 12 | 000 <b>6</b> 255 | 0–100%          |
|      | 13      | White 13 | 000 <b>6</b> 255 | 0–100%          |
|      | 14      | White 14 | 000 <b>ó</b> 255 | 0–100%          |
|      | 15      | White 15 | 000 <b>6</b> 255 | 0–100%          |
|      | 16      | White 16 | 000 <b>6</b> 255 | 0–100%          |
|      | 17      | White 17 | 000 <b>6</b> 255 | 0–100%          |
|      | 18      | White 18 | 000 <b>6</b> 255 | 0–100%          |
|      | 19      | White 19 | 000 <b>6</b> 255 | 0–100%          |
|      | 20      | White 20 | 000 <b>6</b> 255 | 0–100%          |
|      | 21      | White 21 | 000 <b>6</b> 255 | 0–100%          |
| _    | 22      | White 22 | 000 <b>ර</b> 255 | 0–100%          |
| _    | 23      | White 23 | 000 <b>ර</b> 255 | 0–100%          |
| _    | 24      | White 24 | 000 <b>ර</b> 255 | 0–100%          |
| _    | 25      | White 25 | 000 <b>ර</b> 255 | 0–100%          |
| _    | 26      | White 26 | 000 <b>ර</b> 255 | 0–100%          |
| _    | 27      | White 27 | 000 <b>ර</b> 255 | 0–100%          |
| _    | 28      | White 28 | 000 <b>ර</b> 255 | 0–100%          |
| _    | 29      | White 29 | 000 <b>ර</b> 255 | 0–100%          |
| _    | 30      | White 30 | 000 <b>ó</b> 255 | 0–100%          |
| _    | 31      | White 31 | 000 <b>ර</b> 255 | 0–100%          |
| _    | 32      | White 32 | 000 <b>ර</b> 255 | 0–100%          |
| _    | 33      | White 33 | 000 <b>ර</b> 255 | 0–100%          |
| _    | 34      | White 34 | 000 <b>ó</b> 255 | 0–100%          |
| _    | 35      | White 35 | 000 <b>ó</b> 255 | 0–100%          |
| _    | 36      | White 36 | 000 <b>6</b> 255 | 0–100%          |
| _    | 37      | White 37 | 000 <b>ó</b> 255 | 0–100%          |
| _    | 38      | White 38 | 000 <b>ó</b> 255 | 0–100%          |
|      | 39      | White 39 | 000 <b>ó</b> 255 | 0–100%          |

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| 49Ch | Channel | Function | Value            | Percent/Setting |
|------|---------|----------|------------------|-----------------|
| _    | 40      | White 40 | 000 <b>ó</b> 255 | 0–100%          |
| _    | 41      | White 41 | 000 <b>ó</b> 255 | 0–100%          |
| _    | 42      | White 42 | 000 <b>ó</b> 255 | 0–100%          |
| _    | 43      | White 43 | 000 <b>ó</b> 255 | 0–100%          |
| _    | 44      | White 44 | 000 <b>ó</b> 255 | 0–100%          |
|      | 45      | White 45 | 000 <b>ó</b> 255 | 0–100%          |
|      | 46      | White 46 | 000 <b>ó</b> 255 | 0–100%          |
|      | 47      | White 47 | 000 <b>ó</b> 255 | 0–100%          |
|      | 48      | White 48 | 000 <b>ó</b> 255 | 0–100%          |
| _    | 49      | White 49 | 000 <b>ó</b> 255 | 0–100%          |

#### 8 Channel

| -Ch Channel | Function                                   | Value   | Percent/Setting  |
|-------------|--|---|--|
| 1           | Dimmer                                     | 000 <b>ó</b> 255  | 0–100%   |
| 2           | Strobe                                     | 000 <b>ó</b> 010<br>011 <b>ó</b> 255  | No function<br>0–20 Hz   |
| 3           | Foreground Dimmer                          | 000 <b>ර</b> 255  | 0–100%   |
| 4           | Background Dimmer                          | 000 <b>ර</b> 255  | 0–100%   |
| 5           | 5 Alphanumeric 001 <b>6</b> 127 Numeric ch |   | No function<br>Numeric characters 1–0<br>Alpha characters A–Z  |
| 6           | Virtual Gobo Maps                          | 000 <b>6</b> 010 011 <b>6</b> 020 021 <b>6</b> 029 030 <b>6</b> 038 039 <b>6</b> 047 048 <b>6</b> 056 057 <b>6</b> 065 066 <b>6</b> 074 075 <b>6</b> 083 084 <b>6</b> 092 093 <b>6</b> 101 102 <b>6</b> 110 111 <b>6</b> 119 120 <b>6</b> 128 129 <b>6</b> 137 138 <b>6</b> 146 147 <b>6</b> 155 156 <b>6</b> 164 165 <b>6</b> 173 174 <b>6</b> 182 183 <b>6</b> 191 192 <b>6</b> 200 201 <b>6</b> 209 210 <b>6</b> 218 219 <b>6</b> 227 228 <b>6</b> 236 237 <b>6</b> 246 247 <b>6</b> 255 | No function Simple cross Simple box Square imploder Square exploder Diamond imploder Diamond exploder Two-Line spinner Triangle spinner Tri-Downer Tri-Upper Bowtie spinner One-Liner Line hop up Line hop down Line hop up/down T-Spin Upside down T-Spin Diamond spoke spin Line hop left Line hop right Line hop left/right Double verticals Double horizontals Diagonal right Diagonal left Moving squares Clock |



| 8-Ch | Channel | Function              | Value  | Percent/Setting   |
|------|---------|-----------------------|--|---|
| _    | 7       | Virtual Gobo Speed    | 000 <b>o</b> 010<br>011 <b>o</b> 100<br>101 <b>o</b> 149<br>150 <b>o</b> 202<br>203 <b>o</b> 255 | No function Gobo index No function Gobo speed clockwise, fast to slow Gobo speed counter-clockwise, slow to fast  |
|      |         | Alphanumeric Rotation | 000 <b>6</b> 063<br>064 <b>6</b> 127<br>128 <b>6</b> 191<br>192 <b>6</b> 255                     | 0°<br>90°<br>180°<br>270°   |
| _    | 8       | Dimmer Mode           | 000 <b>๑</b> 051<br>052 <b>๑</b> 101<br>102 <b>๑</b> 152<br>153 <b>๑</b> 203<br>204 <b>๑</b> 255 | Preset dimmer speed from display menu<br>Linear dimmer<br>Nonlinear dimming curve 1 (fastest)<br>Nonlinear dimming curve 2<br>Nonlinear dimming curve 3 (slowest) |

#### 5 Channel

| 5-Ch | Channel | Function      | Value  | Percent/Setting   |
|------|---------|---------------|--|---|
|      | 1       | Dimmer        | 000 <b>á</b> 255   | 0–100%  |
| -    | 2       | Strobe        | 000 <b>ó</b> 010<br>011 <b>ó</b> 255   | No function<br>0–20 Hz  |
| -    | 3       | Auto Programs | 000 <b>o</b> 010<br>011 <b>o</b> 038<br>039 <b>o</b> 066<br>067 <b>o</b> 094<br>095 <b>o</b> 122<br>123 <b>o</b> 150<br>151 <b>o</b> 178<br>179 <b>o</b> 206<br>207 <b>o</b> 234<br>235 <b>o</b> 255 | No function Auto 1 Auto 2 Auto 3 Auto 4 Auto 5 Auto 6 Auto 7 Auto 8 Auto 0  |
|      | 4       | Auto Speed    | 000 <b>ර</b> 255   | Slow to fast  |
|      | 5       | Dimmer Mode   | 000 <b>6</b> 051 052 <b>6</b> 101 102 <b>6</b> 152 153 <b>6</b> 203 204 <b>6</b> 255   | Preset dimmer speed from display menu<br>Linear dimmer<br>Nonlinear dimming curve 1 (fastest)<br>Nonlinear dimming curve 2<br>Nonlinear dimming curve 3 (slowest) |

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#### 5. Technical Information

## Product Maintenance

To maintain optimum performance and minimize wear, clean this product at least twice a month and more often in a dirty or dusty environment. Dust build-up reduces light output and can cause overheating which leads to reduced light source life and increased mechanical wear.

To clean the product:

- 1. Unplug the product from power.
- 2. Wait until the product has reached room temperature.
- Use a vacuum (or dry compressed air) and a soft brush to remove dust collected on the external vents.
- 4. Clean all external surfaces with a mild solution of non-ammonia glass cleaner or isopropyl alcohol.
- 5. Apply the solution directly to a soft, lint-free cotton cloth or a lens cleaning tissue.
- 6. Wipe any dirt or grime to the outside edges of the lens surface.
- 7. Gently polish the lens surfaces until they are free of haze and lint.



Do not spin the cooling fans using compressed air because you could damage them.



Always dry the external surfaces thoroughly and carefully after cleaning them.

#### Returns

- The product must be sent prepaid, in the original box, and with the original packing and accessories. Chauvet will not issue call tags.
- Call Chauvet and request a Return Merchandise Authorization (RMA) number before shipping the product. Be prepared to provide the model number, serial number, and a brief description of the cause(s) for the return.
- Clearly label the package with the Chauvet provided RMA number. Chauvet will refuse any product returned without a valid RMA number.



Do not write the RMA number directly on the box. Instead, write it on a properly affixed label.

Once you have received the RMA number, include the following information on a piece of paper inside the box:

- Your name
- · Your address
- · Your phone number
- · The RMA number
- A brief description of the problem(s)

Be sure to pack the product properly. Any shipping damage resulting from inadequate packaging will be the customer's responsibility. FedEx packing or double boxing is recommended.



Chauvet reserves the right to use its own discretion to repair or replace returned product(s).

#### **Technical Specifications**

| Dimensions and | Length                   | Width            | Height             | Weight               |  |
|----------------|--------------------------|------------------|--------------------|----------------------|--|
| Weight         | 19.7 in (500 mm)         | 19.7 in (500 mm) | 3.5 in (90 mm)     | 17.2 lb (7.8 kg)     |  |
| Electrical     | Power Supply Type        | Ran              | ge                 | Voltage Selection    |  |
|                | Switching (internal)     | 100–240 VAC      | C, 50/60 Hz        | Auto-ranging         |  |
|                | Parameter                | 120 V            | 208 V              | 230 V                |  |
|                | Consumption              | 173 W            | 171 W              | 176 W                |  |
|                | Operating current        | 1.44 A           | 0.82 A             | 0.75 A               |  |
|                | Power linking (products) | 7                | 12                 | 13                   |  |
|                | Fuse                     | T 3.15 A, 250 V  | T 3.15 A, 250 V    | T 3.15 A, 250 V      |  |
|                | Power I/O                | U.S./Wor         | ldwide             | Europe               |  |
|                | Power input connector    | Neutrik® pow     | verCON® A          | Neutrik® powerCON® A |  |
|                | Power output connector   | Neutrik® pow     | verCON® B          | Neutrik® powerCON® B |  |
|                | Power cord plug          | Edison           | (U.S.)             | Local plug           |  |
| Light Source   | Туре                     | Pow              | ver er             | Lifespan             |  |
|                | LED                      | 3 V              | V                  | 50,000 hours         |  |
|                | Color                    | Quan             | tity               | Current              |  |
|                | WW                       | 49               |                    | 700 mA               |  |
| Photo Optic    | Parameter                | eter Standard Op |                    |                      |  |
|                | Illuminance @ 5 m        | 9,400 lux        |                    |                      |  |
|                | PWM frequency            | 600 Hz           |                    |                      |  |
|                | Beam angle               | 7°               |                    |                      |  |
|                | Field angle              | 12°              |                    |                      |  |
|                | Pixels                   | 7 x 7            |                    |                      |  |
|                | Pixel Pitch              | 71 mm            |                    |                      |  |
|                | Pixel Density            |                  | 196/m <sup>2</sup> |                      |  |
| Thermal        | Max. External Temperatur | re               | Cooling Sys        |                      |  |
|                | 104 °F (40 °C)           |                  | Fan-assisted cor   |                      |  |
| DMX            | I/O Connectors           | Connecto         |                    | Channel Range        |  |
|                | 3- and 5-pin XLR         | Sock             |                    | 5, 8, 49, 54, and 57 |  |
| Art-Net™ And   | I/O Connectors           | Connecto         |                    | Channel Range        |  |
| Kling-Net      | Neutrik® etherCON®       | Sock             |                    | 5, 8, 49, 54, and 57 |  |
| Ordering       | Product Name             | Item C           |                    | UPC Number           |  |
|                | NEXUSAW7X7               | 03090            | )772               | 781462211202         |  |



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Outside the U.S., United Kingdom, Ireland, Mexico, or Benelux, contact your dealer. Follow their instructions to request support or to return a product. Visit our website for contact details.