LΩGIC Drive 2X

User Manual

Model ID: LOGICDRIVE2X

ILUMINARC®

Edition Notes

The LΩGIC Drive 2X User Manual includes a description, safety precautions, installation, programming, operation, and maintenance instructions for the LΩGIC Drive 2X as of the release date of this edition.

Trademarks

CHAUVET, the Chauvet logo, LΩGIC, and LΩGIC Drive 2X are registered trademarks or trademarks of Chauvet & Sons, LLC (d/b/a Chauvet and Chauvet Lighting) in the United States and other countries. Other company and product names and logos referred to herein may be trademarks of their respective companies.

Copyright Notice

The works of authorship contained in this manual, including, but not limited to, all design, text, and images are owned by Chauvet.

© Copyright 2025 Chauvet & Sons, LLC. All rights reserved.

Electronically published by Chauvet in the United States of America.

Manual Use

Chauvet authorizes its customers to download and print this manual for professional information purposes only. Chauvet expressly prohibits the usage, copy, storage, distribution, modification, or printing of this manual or its content for any other purpose without written consent from Chauvet.

Document Printing

For best 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 the printer to scale the content accordingly.

Intended Audience

Any person 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 and specifically disclaims any and all liability to any party for any loss, damage, or disruption caused by any errors or omissions in this document, whether such errors or omissions result from negligence, accident, or any other cause. Chauvet reserves the right to revise the content of this document without any obligation to notify any person or company of such revision, however, Chauvet has no obligation to make, and does not commit to make, any such revisions.

Document Revision

Go to www.iluminarc.com for the latest version.

Revision	Date	Description
3	07/2025	Updated menu map, MR16 DNS connection instructions, Wall Con instructions, Web Server and Firmware Update instructions. Added Match Net, DHCP, Error Codes.

TABLE OF CONTENTS

1. Before You Begin

What Is Included

- LΩGIC Drive 2X
- Seetronic Powerkon IP65 power cable
- LΩGIC Wall Controller
- 2 short rack ear brackets
- Quick Reference Guide

Claims

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

If the box or the contents (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.

Text Conventions

Convention	Meaning
1–512	A range of values
50/60	A set of values of which only one can be chosen
Settings	A menu option not to be modified
<ENTER>	A key to be pressed on the product's control panel

Symbols

Symbol	Meaning
⚡	Electrical warning. Not following these instructions may cause electrical damage to the product, accessories, or the user.
⚠	Critical installation, configuration, or operation information. Not following these instructions may make the product not work, cause damage to the product, or cause harm to the operator.
ⓘ	Important installation or configuration information. The product may not function correctly if this information is not used.
📝	Useful information.

📝 **The term "DMX" used throughout this manual refers to the USITT DMX512-A digital data transmission protocol.**
Connection of the control signal: DMX line
- **The product has XLR sockets for DMX input and output.**
- **Notice: This control circuit is isolated and belongs to the Class 2 data port.**
The control circuit has a cumulative leakage current of less than 3.5 mA.

Safety Notes

Read all the following safety notes before working with this product. These notes contain 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, certified technicians. Do not open the housing or attempt any repairs.**

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

- The connected luminaires are intended for professional use only.
- If an external flexible cable or cord of these luminaires is damaged, it shall be replaced by a special cord or cord exclusively available from the manufacturer or its service agent.
- The light sources contained in these luminaires shall only be replaced by the manufacturer or its service agent or a similar qualified person.
- **CAUTION:**
    - This product's housing may be hot when operating. Mount this product in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces.
    - When transferring the 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 the product to fully acclimate to the surrounding environment before connecting it to power.
    - Flashing light is known to trigger epileptic seizures. User must comply with local laws regarding notification of strobe use.
- **ALWAYS:**
    - Disconnect from power before cleaning the product or replacing the fuse.
    - Replace the fuse with the same type and rating.
    - Use a safety cable when mounting this product overhead.
    - Connect this product to a grounded and protected circuit.
- **DO NOT:**
    - Open this product. It contains no user-serviceable parts.
    - Look at light sources when connected products are on.
    - Leave any flammable material within 50 cm of this product while operating or connected to power.
    - Connect this product to a dimmer or rheostat.
    - Operate this product if the housing or cables appear damaged.
    - Operate this product outdoors or in any location where dust, excessive heat, water, or humidity may affect it (adhere to standards for the published IP rating).
- The maximum ambient temperature is 113 °F (45 °C). Do not operate this product at higher temperatures.
- The minimum startup temperature is -4°F (-20°C). Do not start the product at lower temperatures.
- The minimum ambient temperature is -22°F (-30°C). Do not operate the product at lower temperatures.
- 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 event of a serious operating problem, stop using immediately.

📝 **If your Chauvet product requires service, contact Chauvet Technical Support.**

FCC Statement of Compliance

This device complies with Part 15 Part B 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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Expected LED Lifespan

Over time, use and heat will gradually reduce LED brightness. Clustered LEDs produce more heat than single LEDs, contributing to shorter lifespans if always used at full intensity. The average LED lifespan is 40,000 to 50,000 hours. To extend LED lifespan, maintain proper ventilation around the product, and limit the overall intensity.

2. Introduction

Features

- 2 POE (Power Over Ethernet) outputs, each supplying up to 110W
- Control options include standard wall controllers, or DMX input via 5-pin XLR, Art-Net, or sACN
- Occupancy sensor-enabled
- Supports fixture hot-swapping and automatic fixture detection
- Current and voltage monitoring
- RDM compliant

Product Overview

Front Panel Overview
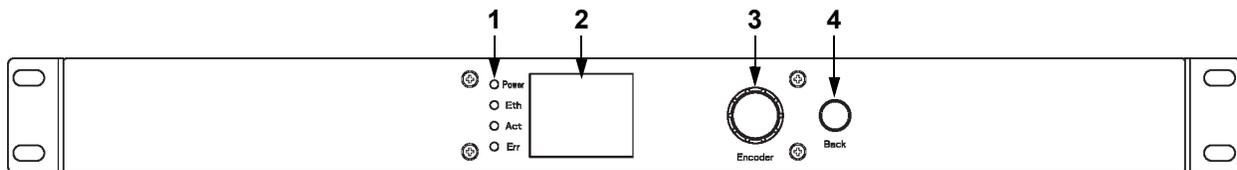
Front Panel Description

#	Name	Function
1	LED indicators	**POWER:** green, indicates power connection **NET:** yellow, indicates ethernet connection **ACT:** white, indicates controller signal **ERROR:** red, indicates an error (see **Warning Messages** in the menu)
2	LCD display	Displays the menu of the product
3	**<MENU> encoder**	Rotate to navigate upwards or downwards through the menu list, and increase or decrease a selected numeric value. Push to enable the currently displayed menu option or set the currently selected value into the selected function.
4	**<ESC/BACK> button**	Exits the current menu or function

Rear Panel Overview
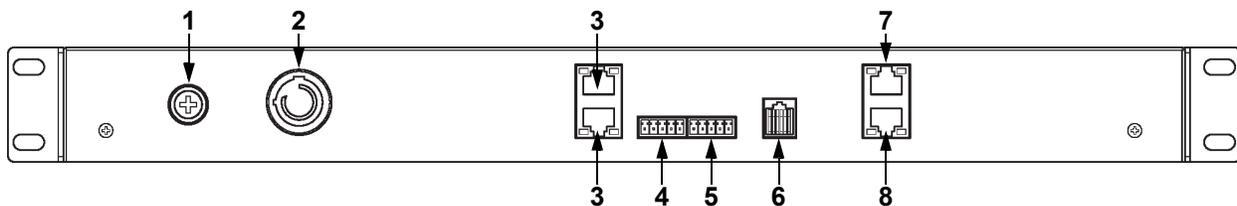
Rear Panel Description

#	Name	Function
1	**Fuse holder**	The receptacle for the power input fuse (T 3.15 A, 250V)
2	**Power input**	Seetronic TRUE1 power input connector
3	**IN/THRU**	RJ45 connectors for ethernet input and through
4	**DMX IN**	5-pin phoenix connector for DMX input
5	**DMX OUT**	5-pin phoenix connector for DMX output
6	**WALL CON**	RJ12 connector for LΩGIC Wall Controller
7	**OUTPUT 1**	RJ45 connector for output to first group of LΩGIC products
8	**OUTPUT 2**	RJ45 connector for output to second group of LΩGIC products

Product Dimensions

1.73 in
44 mm

9.19 in
233.5 mm

10.31 in
245 mm

17.17 in
436 mm

5.98 in
152 mm

18.86 in
479 mm
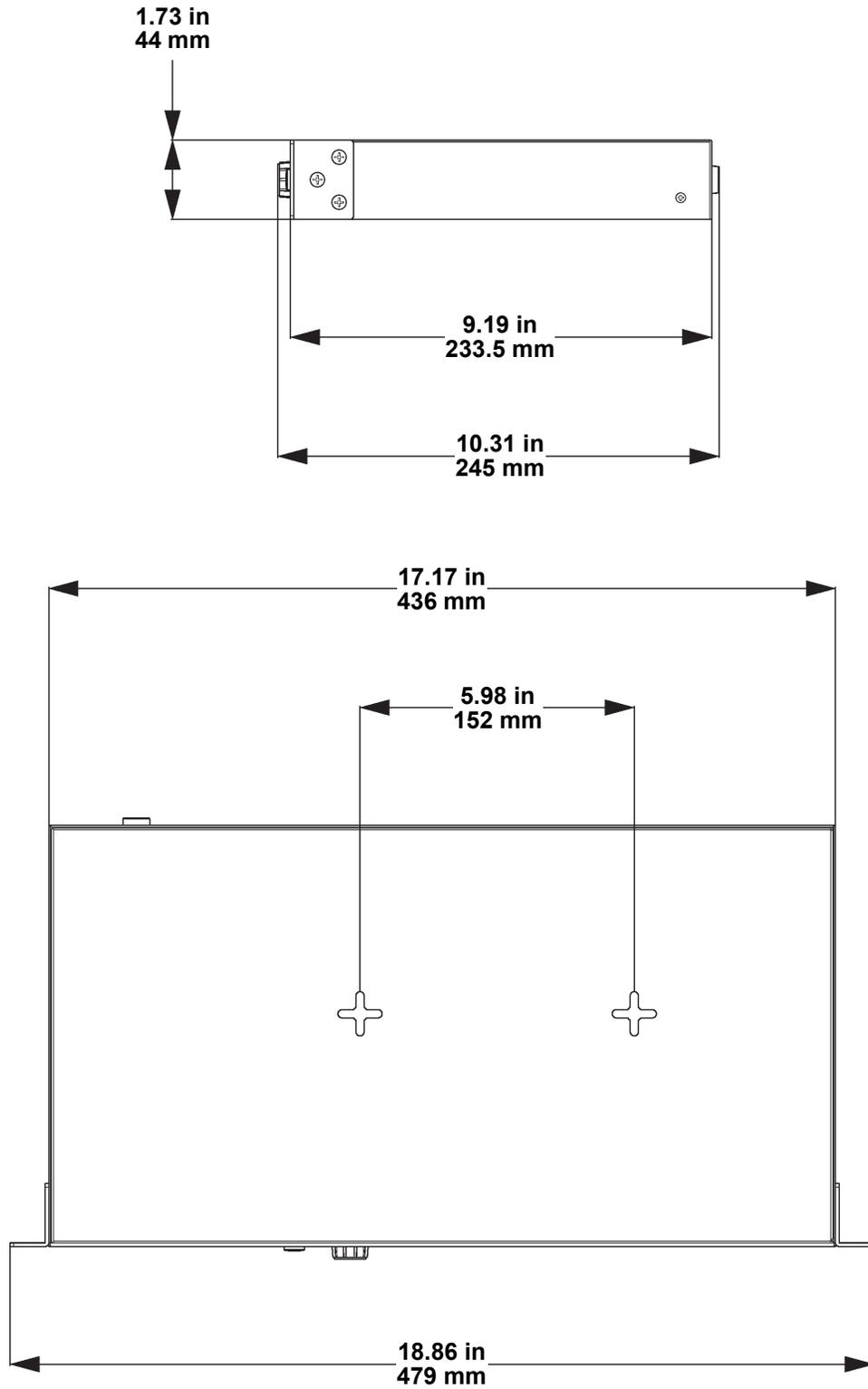
3. Setup

AC Power

The LΩGIC Drive 2X has an auto-ranging power supply and it can work with an input voltage range of 100 to 240 VAC, 50/60 Hz.

To determine the product's power requirements (circuit breaker, power outlet, and wiring), use the current value listed on the label affixed to the product's back panel, or refer to the Technical Specifications. The listed current rating indicates the product's average current draw under normal conditions.

⚠️ **Always connect the product to a protected circuit (a circuit breaker or fuse). Make sure the product has an appropriate electrical ground to avoid the risk of electrocution or fire.**

ℹ️ **Never connect the product to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel serves only as a 0 to 100% switch.**

Emergency Backup Power

To keep the LΩGIC system powered on and maintain the lighting in the case of an emergency, it is recommended to use a battery backup UPS (Uninterruptable Power Supply) between the LΩGIC Drive 2X and the mains power, as well as between each POE injector and the mains power.

This UPS can be one which is hardwired directly to the power cord included with the LΩGIC Drive 2X, or one with 120V Edison ports. See AC Plug for wiring information.
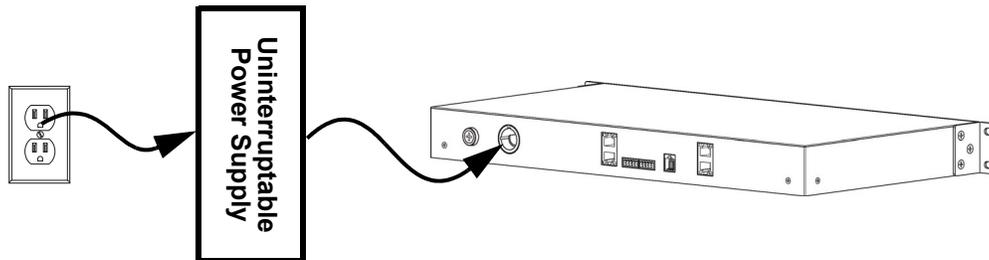
AC Plug

The LΩGIC Drive 2X comes with a power input cord terminated with a Seetronic Powerkon IP65 connector on one end and an Edison plug on the other end (U.S. market). If the power input cord that came with the product has no plug, if the plug must be changed, or if the cable needs to be hardwired to a UPS, use the table below ensure correct wiring.

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

1. Disconnect this product from the power outlet.
2. Using a Phillips-head screwdriver, unscrew the fuse holder cap from the housing.
3. Remove the blown fuse and replace with another fuse of the same type and rating (T 3.15 A, 250V).
4. Screw the fuse holder cap back in place and reconnect power.

ILUMINARC.

LΩGIC Wall Controller

Each LΩGIC Drive 2X comes with a LΩGIC Wall Controller which can plug into the RJ12 connector on the back of the product.

- Buttons 1–8 trigger playback of the assigned recorded scenes (see Record).
- After triggering a scene, press that button again and hold it for 6-10 seconds to lock the controls and prevent tampering. The selected button's LED backlight will flash to indicate success. Press and hold the button again to unlock the controls. See Scene Lock for more information.
- Buttons 9 and 10 decrease and increase the brightness of the connected LΩGIC products.
- 5-bit DIP switches set the address of the LΩGIC Wall Controller with a binary number value. Each LΩGIC Wall Controller must have a unique address set by this DIP switch (from 0–31), or the LΩGIC Drive 2X will be unable to respond to any LΩGIC Wall Controller. The order of addresses does not matter, only that they do not repeat.
- Up to 4 LΩGIC Wall Controller products can be chained to one LΩGIC Drive 2X, allowing versatile and convenient control from multiple locations.
- The LΩGIC Wall Controller requires an RJ12 cable with flipped/reversed wiring. See RJ12 Cable Wiring for more information.
- See Wall Con Configuration for information on assigning connected LΩGIC Wall Controller products to groups and assigning scenes for playback to each button.

DIP switches use binary addressing

5=1	5-1 (ON)
4=2	4-0
3=4	**Example:** 3-1 (ON) = 00101 = 5
2=8	2-0
1=16	1-0

1–8

9 ———→ ←——— 10
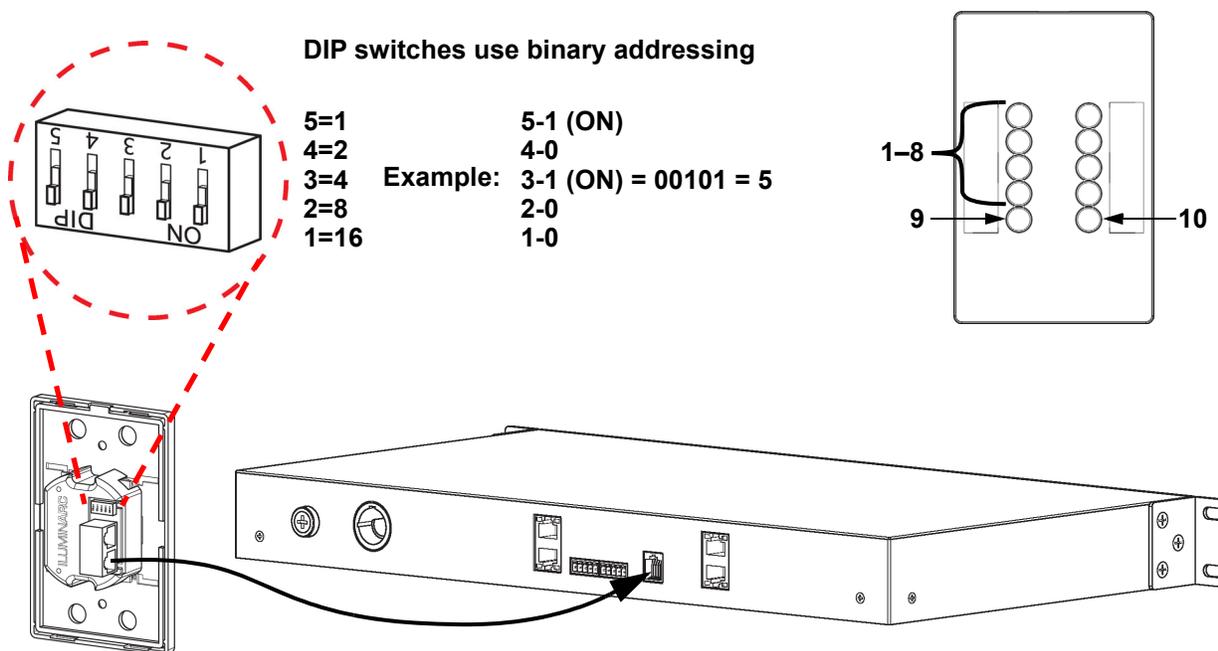
RJ12 Cable Wiring

The LΩGIC Wall Controller requires an RJ12 cable with flipped/reversed wiring. This means that pin 1 on one side connects to pin 6 on the other side, pin 2 connects to pin 5, pin 3 connects to pin 4, and so on. Using an RJ12 cable without flipped wiring may damage the product.

6		6
5		5
4		4
3		3
2		2
1		1

RJ12 6P6C   **RJ12 6P6C**
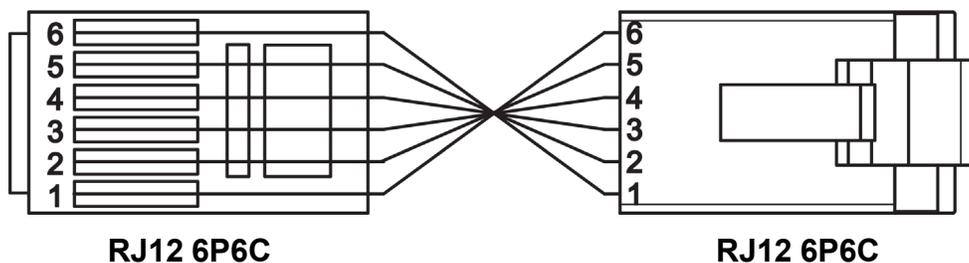
⚠ **WARNING! The LΩGIC Wall Controller requires a flipped/reverse RJ12 cable! Incorrect wiring may damage the product!**

Signal Connections

The LΩGIC Drive 2X can receive a DMX, RDM, Art-Net™, or sACN control signal. If using other compatible products with this product, each can be individually controlled with a single controller.

Control Personalities

The LΩGIC Drive 2X uses a 5-pin phoenix connection to receive DMX or RDM, or an ethernet connection to receive Art-Net™ or sACN, and a CAT6 ethernet connection to send control data to connected products for its 9 control personalities, ranging from 1 to 10 channels.

- Refer to the Operation chapter to learn how to configure the LΩGIC Drive 2X to work in these personalities.
- The Control Channel Assignments and Values section provides detailed information regarding the control personalities.

If you are not familiar with or need more information about DMX standards or the DMX cables needed to link this product to a DMX controller, download the DMX Primer from the Chauvet website: www.iluminarc.com.

DMX Linking

The LΩGIC Drive 2X will work with a DMX controller using a 5-pin phoenix connector. For more information about DMX, read the DMX primer at: https://www.chauvetprofessional.com/wp-content/uploads/2016/06/DMX_Primer.pdf.

DMX Output   **Signal Connector**

1. Ground
2. Data 1 -
3. Data 1 +
4. Not used
5. Not used
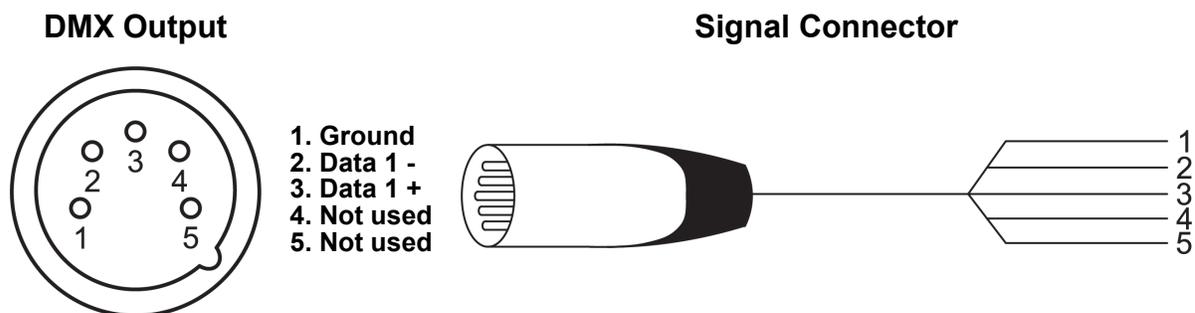
Remote Device Management

Remote Device Management, or RDM, is a standard for allowing DMX-enabled devices to communicate bi-directionally along existing DMX cabling. Check the DMX controller's User Manual or with the manufacturer as not all DMX controllers have this capability. The LΩGIC Drive 2X supports RDM protocol that allows feedback to make changes to menu map options.

DMX/RDM Connection Diagram

DMX or RDM Controller   **LΩGIC Drive 2X**

To other DMX or RDM devices   **To LΩGIC products**
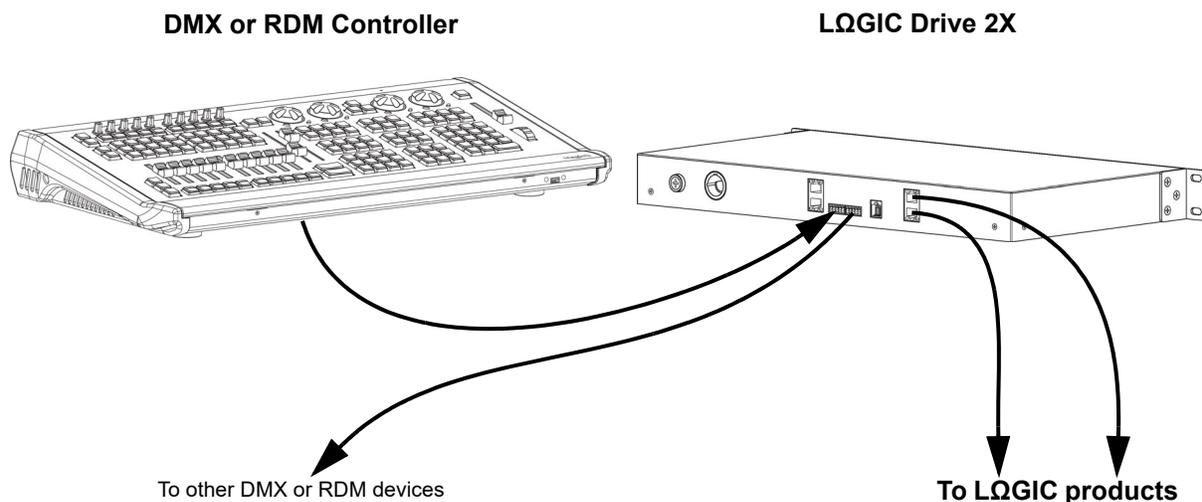
ILUMINARC.

Art-Net™ Connection

Art-Net™ is an Ethernet protocol that uses TCP/IP which transfers a large amount of DMX512 data using an ethernet connection over a large network. An Art-Net™ protocol document is available from www.iluminarc.com.

Art-Net™ designed by and copyright Artistic Licence Holdings Ltd.

sACN Connection

Also known as ANSI E1.31, streaming ACN is an Ethernet protocol that uses the layering and formatting of Architecture for Control Networks to transport DMX512 data over IP or any other ACN compatible network.

Ethernet Connection Diagram

Computer/controller (running Art-Net™ or sACN protocol)

Switch or router

LΩGIC Drive 2X

To other Art-Net™ or sACN devices

To LΩGIC products
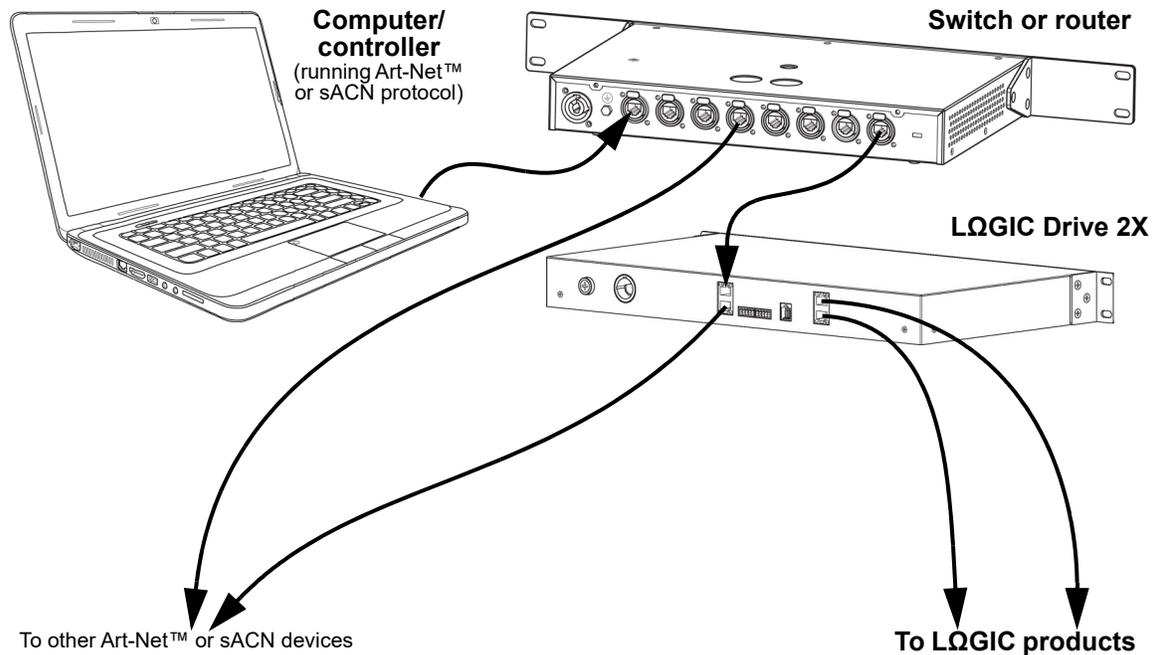
Terminating CAT6 Cables with RJ45 Connectors

The LΩGIC Drive 2X communicates with Art-Net™ or sACN controllers and with connected LΩGIC products via RJ45 ethernet ports. In many applications, a cable with an attached connector will not fit through the required space, but will fit without the connector.

The LΩGIC system requires the use of T568B standard cable termination. Use the following table and diagram to ensure the RJ45 connectors are installed correctly to the CAT6 cables.

Pin	Wire Color	Pair	Diagram
1	White/Orange	2	Pair 2
2	Orange	2	
3	White/Green	3	
4	Blue	1	Pair 1 Pair 3
5	White/Blue	1	
6	Green	3	
7	White/Brown	4	Pair 4
8	Brown	4	

RJ45 T568B   **RJ45 T568B**

LΩGIC Product Chaining

The LΩGIC Drive 2X powers and controls each connected LΩGIC product via a Power Over Ethernet (POE) connection. When linking LΩGIC products to the LΩGIC Drive 2X, there is a set maximum number of each LΩGIC product which can be powered by a single port.

Product	Capacity per Port/POE	Power Consumption (per Product/Total)
LΩGIC AR111 Downlight M	3	27 W each / 81 W total
LΩGIC AR111 Downlight S	5	15.5 W each / 77.5 W total
LΩGIC MR16 Downlight S	8	8.3 W each / 66.4 W total*
LΩGIC Cove M	5	15 W each / 75 W total
LΩGIC Cove S	8	9.3 W each / 74.4 W total
LΩGIC Graze L	2	37.5 W each / 75 W total
LΩGIC Graze S	6	12.5 W each / 75 W total

*The LΩGIC MR16 Downlight S has additional power requirements which affect the maximum number of products that can be linked per port or POE injector. See LΩGIC POE X Linking for more information.

Once that capacity has been reached, a POE injector must be incorporated into the chain to continue adding products. By continuing to add POE injectors as needed, a total of 40 LΩGIC products can be linked to each port of the LΩGIC Drive 2X (GD model, or up to 30 for the STM model), regardless of the power consumption per product, and including LΩGIC POE X and POE injector products.

Use only POE++, IEEE 802.3 bt, type 4 injectors (4PPOE).

When using 3rd party POE injectors with the LΩGIC system, the power consumption monitoring function in the LΩGIC Drive 2X may become unavailable.

Refer to the Technical Specifications for the total maximum cable lengths possible.
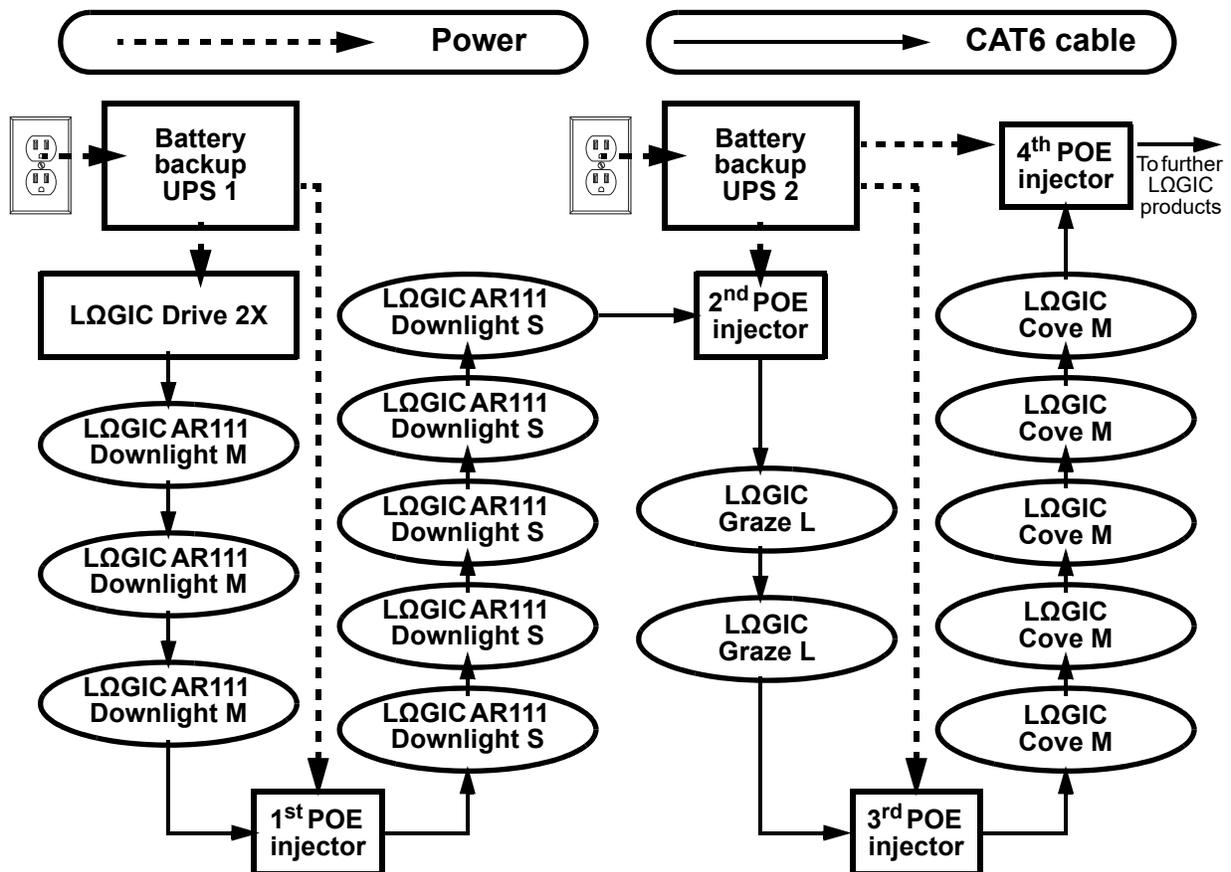
Mixing LΩGIC Products

While it is not recommended to mix different LΩGIC products in a section of chain powered by a single POE injector, it is possible to do so. For the best results when mixing multiple product types, keep the combined power consumption at or under 75 W before adding another POE injector to the chain.

LΩGIC POE X Linking

The LΩGIC MR16 Downlight S requires the use of a LΩGIC POE X between the first LΩGIC MR16 Downlight S in a chain and power source (LΩGIC Drive 2X or a POE injector). The LΩGIC POE X steps down the POE voltage and performs a digital handshake which is necessary to allow the LΩGIC MR16 Downlight S to link correctly with the LΩGIC Drive 2X.

The LΩGIC POE X has 3 ethernet ports:

- INPUT: inputs power (52V) and data signal from the LΩGIC Drive 2X.
- THRU: for long-distance transmission. Outputs only the control signal from the LΩGIC Drive 2X, no power. A POE injector must be used BEFORE the first LOGIC product in the chain to power it and further products connected to this port.
- OUTPUT: outputs power (48V) and data signal from the LΩGIC Drive 2X. It is possible to connect up to 8 LΩGIC MR16 Downlight S products in this way.
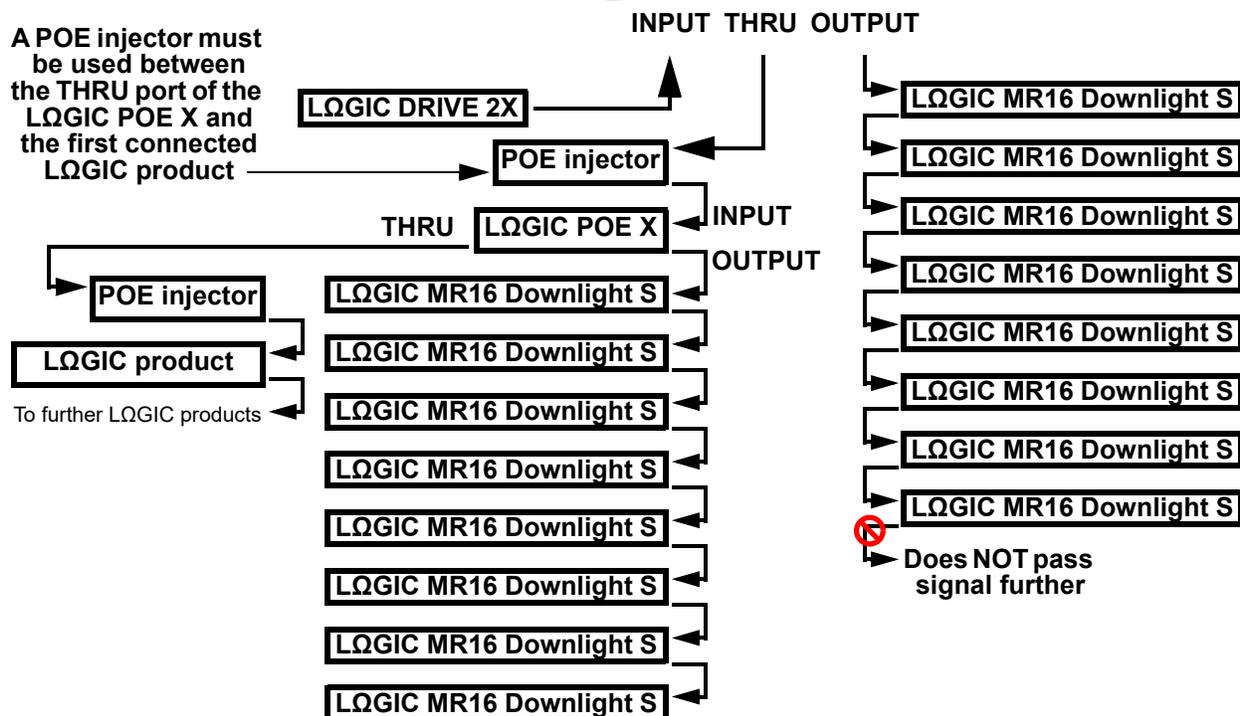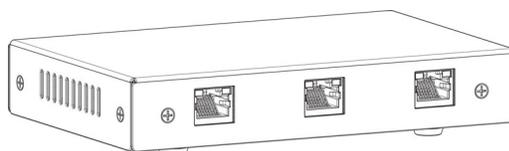
- Each LΩGIC POE X and POE injector product counts towards the total of 30 or 40 products which each port of the LΩGIC Drive 2X can handle, depending on the model.
- With only LΩGIC POE X, POE injector, and LΩGIC MR16 Downlight S products connected as above, each port of the LΩGIC Drive 2X can handle up to:
  - STM model: 24 LΩGIC MR16 Downlight S products, supported by 3 LΩGIC POE X products, 2 connected through a POE injector to the previous THRU port.
  - GD model: 32 LΩGIC MR16 Downlight S products, supported by 4 LΩGIC POE X products, 3 connected through a POE injector to the previous THRU port.

When using 3rd party POE injectors with the LΩGIC system, the power consumption monitoring function in the LΩGIC Drive 2X may become unavailable.

Mounting

Before mounting the product, read and follow the safety recommendations indicated in the Safety Notes.

Orientation

Always mount this product in a safe position, making sure there is adequate room for ventilation, configuration, and maintenance.

Rigging

Chauvet recommends using the following general guidelines when mounting this product.

- Before deciding on a location for the product, make sure there is easy access to the product for maintenance.
- Make sure that the structure onto which the product is being mounted can support the product's weight. See the Technical Specifications for weight information.

Rack Mounting

The LΩGIC Drive 2X fits nicely on a standard 19" rack, or it can be placed on a flat level surface.

Wall/Surface Mounting

The LΩGIC Drive 2X has 2 four-directional tear-drop holes on the bottom for hanging on a wall or securing to a surface. Make sure that the mounting hardware and the surface to which it will be mounted can support the weight of the product.

1. Place the mounting hardware just under 6 inches apart (152 mm).

(i) **For maximum security, it is recommended to place the mounting hardware so they are at an equal height and the spacing between them is horizontal.**

2. Position the four-directional tear-drop holes over the mounting hardware.
3. Shift the LΩGIC Drive 2X in one direction as far as it can go, so that it is fully secure.

(i) **For maximum security, it is recommended to shift the LΩGIC Drive 2X downward on the mounting hardware. Doing otherwise places the product at risk of being dislodged and falling.**

Mounting Diagram

Mounting surface or wall

Four-directional tear-drop holes
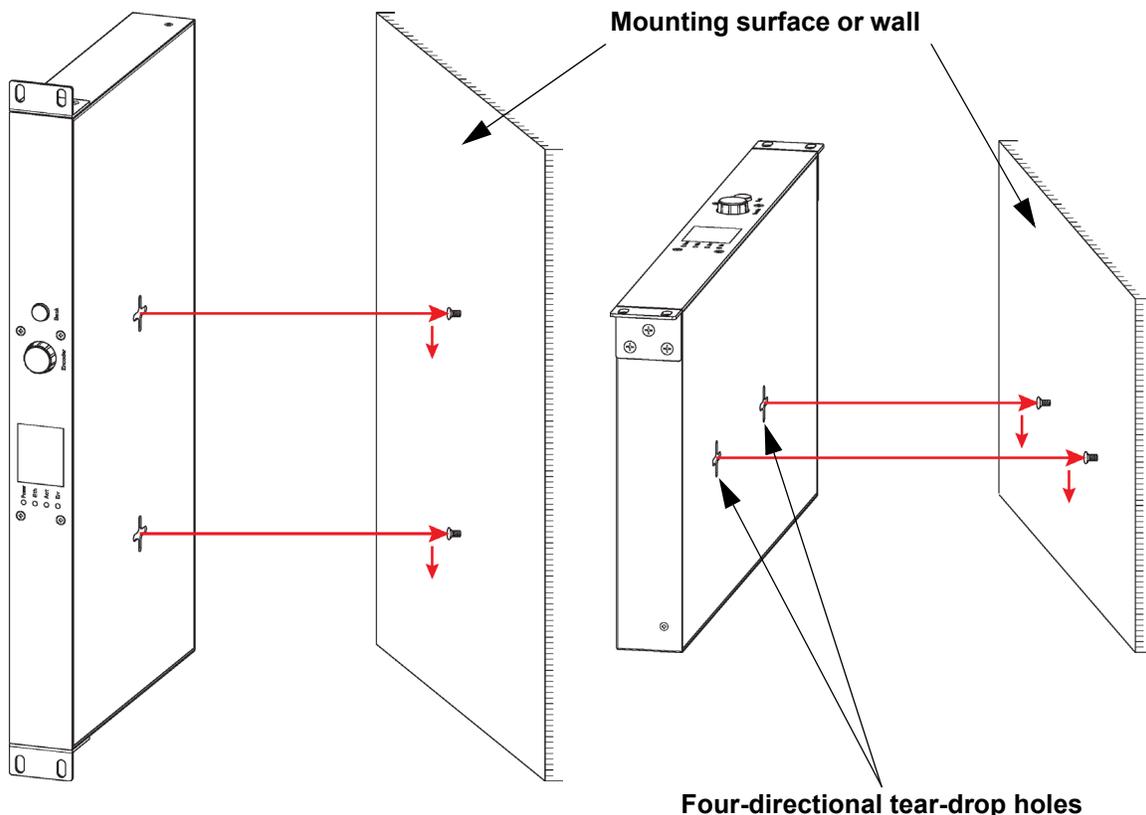
4. Operation

Control Panel Description

See the Product Overview for a detailed description of the control panel.

Programming

Refer to the Menu Map to understand the menu options. The menu map shows the main level and a variable number of programming levels for each option.

- To access the menu from the Home Screen, press the **<MENU>** encoder.
- To scroll through the options on each level of the menu, turn the **<MENU>** encoder. Turn it clockwise to scroll up, and turn it counter-clockwise to scroll down.
- Press the **<MENU>** encoder to select the highlighted option. This will take you to the next programming level for that option, or it will highlight a value that can be edited.
- To decrease a selected number value, turn the **<MENU>** encoder clockwise. To increase a selected number value, turn the **<MENU>** encoder counter-clockwise.
- Press **<ESC/BACK>** to exit to the previous main level, press repeatedly to return to the Home Screen.

Password

After being prompted to enter the password, use the **<MENU>** encoder to select and enter **123456**.

Menu Map

Refer to the LΩGIC Drive 2X product page on www.iluminarc.com for the latest menu maps.

Main Level	Programming Levels				Description
Protocol	**DMX512**				Selects the control protocol
	ArtNet				
	sACN				
Local	**Net Switch**	**2.X.X.X**			Selects the first value of the IP address
		10.X.X.X			
	Universe	**000–255 / 001–256** (Art-Net™) (sACN)			Selects universe
	Password	**ON**			Enables/disables password lock: **123456**
		OFF			
	Output Status	**Output 1 Status**	**Status:** _ _ _ _ _		Shows **Normal** or **Fault**
			Connect: _ _ _		Shows **On** or **Off**
			CLASS: _ _ _ _		Shows **None** or **1–8**
		Output 2 Status	**V1: _._ V Cur 1: _._ mA** **V2: _._ V Cur 2: _._ mA**		Shows voltage and current of output
			Power: _._ W		Shows power of output
	Local Info	**Version**	**V2.17**		Shows current firmware version
		IP Address	_ _ _._ _ _._ _ _._ _ _		Shows the IP address
		Fixture Hours	**_ hours**		Shows length of time product has been on
			_ _minutes		
			_ _ seconds		
		Label	**Logic Drive 2X**		Shows product label
		Device UID	_ _ _ _ _-_ _ _ _ _		Shows device UID
		MAC Address	_ _ _ _ _ _ _ _ _ _ _ _		Shows the MAC address
		Temperature	**_ _._ °C**		Shows the current temperature in °C
		Warning Message	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _		Shows current error(s), e.g. "DMX Signal Lost" or "Devices No Longer Detected"
		Chip Name	**STM32F407VGT6** or **GD32F470VIT6**		Shows the microprocessor chip STM models support up to 30 products per port, while GD support up to 40

Main Level	Programming Levels				Description
Local (cont.)	**Priority**	Wall Con			LΩGIC Wall Con has priority
		Signal			Signal input has priority
	Reset	No			Resets the LΩGIC Drive 2X to factory default settings
		Yes			
	History	List	_ _ _ _ _		Displays connected product history
		Clear	No		Cancel clear
			Yes		Clear history
	Wall Con Zone	**Wall Con Group 1–4**	Wall ID1–4	OFF	Designates which of up to 4 connected LΩGIC Wall Con products are in the selected group
				00–31	
			Sensor	Sensor ID1–4	Reserved for future use
				Sensor Scene	
				Time	
			Group	00	Deactivates the group
				01–254	Sets the group address
				255	Sets the group to master control
			Scene1–8	01–64	Sets a Record slot to a scene button
	Match Net	No			Syncs all connected product **Net Switch** settings to this drive while active
		Yes			
	DHCP	ON			Enables or disables DHCP addressing
		OFF			
Linked Fixture	**Status**	Output 1	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ **(or No device!)**	Dmx Address	Sets selected product settings individually instead of all at once (see Linked LΩGIC Product Menu Map)
				Personality	
				Network	
		Output 2		Information	
				Output Status	
				Factory Reset	
				Group	
		Renew	No		Re-scan for connected products
			Yes		
	Personality	Red			1-channel: dimmer (red only)
		Green			1-channel: dimmer (green only)
		Blue			1-channel: dimmer (blue only)
		White			1-channel: dimmer
		TW			2-channel, Tunable White: dimmer, color temperature
		RGB			3-channel: RGB
		RGBW			4-channel: RGBW
		RGBW+D			5-channel: dimmer, RGBW
		FULL			10-channel: dimmer, RGBW, color macros, strobe, auto programs and speed, dimmer speed
	Power Selection	Power 100%			Enables 100% power
		Power 50%			Sets maximum power to 50%
		Power 30%			Sets maximum power to 30%
	Breaking Signal	Current State			Holds value on signal loss
		Blackout			Blacks out on signal loss
		White			Switches to full on signal loss

Main Level	Programming Levels				Description
Static	**Red**	000–255			Temporary manual control of all connected products. Combine red, green, blue, and white to make a custom color.
	Green	000–255			
	Blue	000–255			
	White	000–255			
	Strobe	000–255			Sets standalone strobe speed
Record	**Play**	Record1–64 __:__:__	▷	**Brightness: 000–255**	Plays back recorded input. Press the **<MENU>** encoder to toggle play and stop.
			⏸		
	Record	**Record 1–64**	▭		Captures/records live controller input to selected Record slot. Press the **<MENU>** encoder to start and stop.
			▢		
	Erase Record	**Record 1–64 Clr**	**No**		Erases selected recording
			Yes		
System Clock	**Schedule**	**Everyday** ○/◉	**Turn on** | **Turn off**		Schedules daily times to turn on and off (stackable with other schedule options)
			00–23:00–59:00–59		
		By date ○/◉	**Turn on** | **Turn off**		Schedules a date and time to turn on and off (stackable with other schedule options)
			Month:01–12		
			Day:01–31		
			Year:2000–99		
		By week ○/◉	**Mon :**	○/◉	Schedules which days of the week to be on or off (stackable with other schedule options)
			Tues :	○/◉	
			Wed :	○/◉	
			Thur :	○/◉	
			Fri :	○/◉	
			Sat :	○/◉	
			Sun :	○/◉	
	Setting Clock	**SysClock:**	**24 hours**		Shows system clock is 24-hour
		Date:	**01–12:01–31:2000–2099**		Sets the current date
		Time:	**00–23:00–59:00–59**		Sets the current time
		Week:	**1–7**		Sets the current day of the week
	Fade In/ Out	**Fade In**	**On-instant**		Sets fade in to instant
			On-3second fade		Sets fade in to 3-second fade
		Fade Out	**Off-instant**		Sets fade out to instant
			Off-3second fade		Sets fade out to 3-second fade
	Enable Clock	**No**			Enables/disables clock functions
		Yes			

RDM Chart

Refer to the LΩGIC Drive 2X product page on www.iluminarc.com for the latest RDM chart.

GET	SET	Category	RDM Parameter IDs (Slot 21-22)	Value	Req.	Detail
		Network Management	DISC_UNIQUE_BRANCH	0x0001	✓	
			DISC_MUTE	0x0002	✓	
			DISC_UN_MUTE	0x0003	✓	
✓		**RDM Information**	QUEUED_MESSAGE	0x0020		
✓			SUPPORTED_PARAMETERS	0x0050	✓	IDENTIFY_DEVICE, DEVICE_INFO, SOFTWARE_VERSION_LABEL, SUPPORTED_PARAMETERS, DMX_START_ADDRESS, DEVICE_MODEL_DESCRIPTION, MANUFACTURER_LABEL, DEVICE_LABEL, DMX_PERSONALITY, PERSONALITY_DESCRIPTION, SENSOR_DEFINITION, SENSOR_VALUE
✓			PARAMETER_DESCRIPTION	0x0051	✓	
✓		**Product Information**	DEVICE_INFO	0x0060	✓	1, RDM Protocol Version: V1.0; 2, Device_Mode_ID: 0x1731; 3, Product Category Defines: PRODUCT_CATEGORY_FIXTURE_FIXED; 4, Software Version ID; 5, DMX512 Footprint; 6, DMX512 Personality; 7, DMX512 Start Address; 8, Sensor Count;
			PRODUCT_DETAIL_ID_LIST	0x0070		
✓			DEVICE_MODEL_DESCRIPTION	0x0080		DRIVE 2X
✓			MANUFACTURER_LABEL	0x0081		ILUMINARC
✓	✓		DEVICE_LABEL	0x0082		DRIVE 2X
✓			SOFTWARE_VERSION_LABEL	0x00C0	✓	V_._
✓	✓		FACTORY_DEFAULTS			FACTORY_DEFAULTS : yes
✓	✓	**DMX Setup**	DMX_PERSONALITY	0x00E0		9pcs persons
✓			DMX_PERSONALITY_DESCRIPTION	0x00E1		RED/1CH, GREEN/1CH, BLUE/1CH, WHITE/1CH, TW/2CH, RGB/3CH, RGBW/4CH, RGBW+D/5CH, FULL/10CH
✓	✓		DMX_START_ADDRESS	0x00F0	✓	1-503
✓		**Sensors**	SENSOR_DEFINITION	0x0200		0.) Product Temperature _ _ °C
✓			SENSOR_VALUE	0x0201		—20° —100°
✓	✓	**Control**	IDENTIFY_DEVICE	0x1000	✓	Identify State: Off

Home Screen

The LΩGIC Drive 2X has a home screen that shows the current control protocol, number of connected LΩGIC products, IP address, and date as set on the internal calendar. The home screen will also indicate if the System Clock has placed the product in **Shut off** mode.

To see the home screen, press **<ESC/BACK>** repeatedly until it shows on the display.

```
Logic Drive 2X

Protocol: DMX512
OnLine: 000
IP: 002.106.000.168
05/04/2022
```
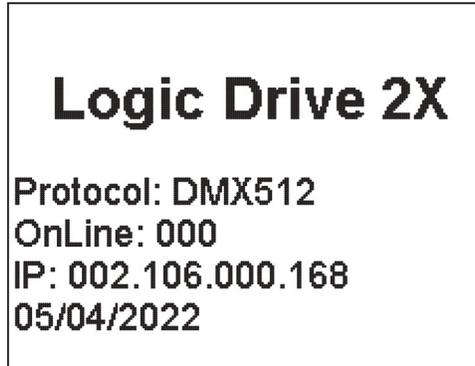
Control Protocol

The LΩGIC Drive 2X works with DMX, Art-Net™, and sACN control signals. To select which protocol to use:

1. Go to the **Protocol** main menu.
2. Select the desired protocol, from **DMX512**, **ArtNet**, or **sACN**.

Local

The Local settings include the network settings for the LΩGIC Drive 2X as well as system information and other general options.

Net Switch

To select the first value of the IP address for the LΩGIC Drive 2X:

1. Go to the **Local** main menu.
2. Select the **Net Switch** option.
3. Select the first value of the IP address from **2.X.X.X** or **10.X.X.X**.

⚠️
- **The first value of the IP address of each connected LΩGIC product MUST match that of the LΩGIC Drive 2X, or they will not be able to link properly.**
- **Changing the Net Switch setting may cause the LΩGIC Drive 2X to disconnect from any connected products.**
- **See the Match Net setting for information on troubleshooting connected products with non-matching Net Switch settings.**

Universe

To assign an Art-Net™ or sACN universe to the LΩGIC Drive 2X:

1. Go to the **Local** main menu.
2. Select the **Universe** option.
3. Set the universe, from **000–255** (for Art-Net™) or from **001–256** (for sACN).

Password Lock

To turn the password lock on or off:

1. Go to the **Local** main menu.
2. Select the **Password** option.
3. Select from **ON** or **OFF**.

📝 **When the password lock is activated, the product will prompt for the password in order to access the menu. Use the <MENU> encoder to select and enter 123456.**

Output Status

To view the status of the output ports:
1. Go to the **Local** main menu.
2. Select the **Output Status** option.
3. Select the output, from **Output 1 Status** or **Output 2 Status**.
4. View the output data:
   - **Status**: Shows **Normal** or **Fault** (if no connection or faulty connection).
   - **Connect**: Shows **On** (connected) or **Off** (not connected).
   - **CLASS**: Shows **None** or the type of POE connection, from **1–8**.
   - **V1**, **Cur 1**, **V2**, **Cur 2**, and **Power**: electrical data in volts, milliamperes, and watts.

Local Information

To view general information about the LΩGIC Drive 2X including the firmware version, microprocessor model, IP address, and any current errors:
1. Go to the **Local** main menu.
2. Select the **Local Info** option.
3. Select which information to view, from:
   - **Version** (current firmware version),
   - **IP Address**,
   - **Fixture Hours** (how long the product has been powered on, in hours, minutes, and seconds),
   - **Label**,
   - **Device UID**,
   - **MAC Address**,
   - **Temperature** (in degrees Celsius),
   - **Warning Messages** (current errors), and
   - **Chip Name** (shows which microprocessor this model uses, which affects the number of connected LΩGIC products each port can support. Will show either **STM32F407VGT6**—30 per port—or **GD32F470VIT6**—40 per port).

Priority

To select whether input from a LΩGIC Wall Controller or input from a control signal (DMX, Art-Net™, or sACN) will take priority over the other:
1. Go to the **Local** main menu.
2. Select the **Priority** option.
3. Select from **Control Panel** or **Signal.** The selected option will have priority.

Reset

To reset the LΩGIC Drive 2X to factory default settings:
1. Go to the **Local** main menu.
2. Select the **Reset** option.
3. Select from **No** or **Yes**.

System Clock settings will not be reset.

History

The LΩGIC Drive 2X keeps a record of all LΩGIC products to which it has linked. To view the history:
1. Go to the **Local** main menu.
2. Select the **History** option.
3. Select the **List** option.

Disconnecting Products from the LΩGIC Drive 2X

When any LΩGIC product which has linked to the LΩGIC Drive 2X is disconnected or removed, it will trigger an error message. To remove the error message, either reconnect the product or clear the history so the LΩGIC Drive 2X no longer has a record of that product being linked. This can also be necessary after firmware updates.

To clear the history:
1. Go to the **Local** main menu.
2. Select the **History** option.
3. Select the **Clear** option.
4. Select from **No** (cancel) or **Yes** (clear).

Wall Con Configuration

The LΩGIC Drive 2X can work with up to 4 connected LΩGIC Wall Controller products. It is possible to separate them into zones for control of specific LΩGIC products, put anywhere between 1 and all of them in the same zone, or have any number of them control all connected LΩGIC products regardless of zone. See LΩGIC Wall Controller for information on connecting the LΩGIC Wall Controller to the LΩGIC Drive 2X, as well as on assigning each product a unique address using the DIP switch.

To access the Wall Con menu:

1. Go to the **Local** main menu.
2. Select the **Wall Con Zone** option
3. The following text will show on the display: **>Instructions: Can choose 1~4pcs Wall Con, address: 0~31 and OFF. Enter to choose. Back to exit.**
4. Press the **<MENU>** encoder to enter.
5. Select which of 4 possible zones to access and configure, from **Wall Con Group 1–4**.

> **The Group number selected here (the Wall Con Zone) is not related to the Group value which tells a LΩGIC product which LΩGIC Wall Controller product(s) to respond to. See Wall Con Group for that setting.**

Wall Con Address

The unique address of each connected LΩGIC Wall Controller product must be assigned to 1 of the 4 possible zones in order to function with the LΩGIC Drive 2X. It is possible to:

- assign them all to a single zone,
- assign 2 to 1 zone and 2 to another zone,
- assign 2 to 1 zone and the other 2 to separate zones, or
- assign them each to separate zone.

To assign addressed LΩGIC Wall Controller products to a **Wall Con Zone**:

1. Access the Wall Con menu, selecting which zone to configure.
2. Select any of the 4 Wall ID slots, from **Wall ID1–4**.
3. Set the selected value to the address of the desired LΩGIC Wall Controller product, from **00–31**, or to **OFF** to leave the selected slot unassigned.

> **Leave any unused Wall ID slots set to OFF.**

> **No LΩGIC Wall Controller address can be assigned to more than 1 Wall ID slot, whether in the same or different groups.**

Wall Con Group

Each **Wall Con Zone** has a Group setting, which determines which LΩGIC products will respond to the LΩGIC Wall Controller product(s) assigned to that **Wall Con Zone**.

- Setting the Group value to **00** will deactivate the **Wall Con Zone**.
- Setting the Group value to **01–254** will make connected LΩGIC products with the same LΩGIC Product Group value respond to LΩGIC Wall Controller products assigned to this **Wall Con Zone**.
- Setting the Group value to **255** will make all connected LΩGIC products, regardless of LΩGIC Product Group value, respond to LΩGIC Wall Controller products assigned to this **Wall Con Zone**.

To set the Group value for a **Wall Con Zone**:

1. Access the Wall Con menu, selecting which zone to configure.
2. Select the **Group** option.
3. Set the value from **00–255**.

Wall Con Scene Buttons

To assign a Record slot to one of the 8 **Scene** buttons of a **Wall Con Zone**:

1. Access the Wall Con menu, selecting which zone to configure.
2. Select which button to configure, from **Scene1–8**.
3. Select the desired recording slot, from **01–64**,

Match Net

While active, the Match Net function changes the Net Switch setting of every connected LΩGIC product to match the setting of the LΩGIC Drive 2X. This allows the LΩGIC Drive 2X to interface with any products which are not set correctly and makes it possible to then correct that setting.

1. Go to the **Local** main menu.
2. Select the **Match Net** option.
3. Select from **No** (to disable) or **Yes** (to match Net Switch settings).

> **If the connected LΩGIC products still do not populate the Linked Fixture lists, it may be necessary to update the firmware of those products. See Firmware Update for more information.**

DHCP

Dynamic Host Configuration Protocol automatically assigns an IP address to the LΩGIC Drive 2X, aside from the first value which is controlled by the Net Switch setting.

1. Go to the **Local** main menu.
2. Select the **DHCP** option.
3. Select from **ON** (to enable) or **OFF** (to disable).

Linked Fixture

Use control configurations to operate the connected LΩGIC products with a DMX, Art-Net™, or sACN controller.

Linked LΩGIC Product Menu Map

To access the menu map for a connected LΩGIC product:

1. Go to the **Linked Fixture** main menu.
2. Select **Status**.
3. Select the output to which the desired LΩGIC product is connected, from **Output 1** or **Output 2**.
4. Select the desired LΩGIC product. The selected product will flash its LEDs for the duration it is being accessed.

Refer to the LΩGIC Drive 2X product page and the product page for the selected LΩGIC product on www.iluminarc.com for the latest menu maps.

Main Level	Programming Levels			Description
Dmx Address	**001–512**			Selects DMX address
Personality		**Red**		1-channel: dimmer (red only)
		Green		1-channel: dimmer (green only)
		Blue		1-channel: dimmer (blue only)
		White		1-channel: dimmer (white only)
		TW		2-channel, Tunable White: dimmer, color temperature
		RGB		3-channel: RGB control
		RGBW		4-channel: RGBW control
		RGBW+D		5-channel: dimmer, RGBW control
		FULL		10-channel: dimmer, RGBW control, color temperature, strobe, auto programs and speed, dimmer speed
Network	**Net Switch**	**2.X.X.X**		Selects the first value of the IP address
		10.X.X.X		
	Universe	**000–255 / 001–256** (Art-Net™) (sACN)		Selects universe
Information	**Version**	**V _-_ _**		Shows current firmware version
	IP Address	**_ _ _-_ _ _-_ _ _-_ _ _**		Shows the IP address
	Fixture Hours	**_ hours**		Shows length of time product has been on
	Label	**_ _ _ _ _ _ _ _ _**		Shows product label
	Device UID	**_ _ _ _ _ _-_ _ _ _ _ _**		Shows device UID
	MAC Address	**_ _ _ _ _ _ _ _ _ _ _ _**		Shows the MAC address
	Temperature	**_ _._ °C**		Shows the current temperature in °C
	Warning Message	**– – – – – – – – –**		Shows any current error(s)
Output Status	**– – – – – – – – –**			Shows technical information, or "**Not supported**"
Factory Reset	**No**			Resets to factory default settings
	Yes			
Group	**000–255**			Sets a group for LΩGIC Wall Con control

Individual LΩGIC Product Configuration
Individual Product Control Personality
To set the control personality individually for the selected LΩGIC product:
1. From the menu of the selected LΩGIC product, select the **Personality** option.
2. Select the desired personality, from **RED**, **GREEN**, **BLUE**, **WHITE**, **TW, RGB**, **RGBW**, **RGBW+D**, or **FULL**.

> • See the Starting Address section for the highest starting address you can select for each personality.
> • Make sure that the starting addresses on the various products do not overlap due to the new personality setting.

Starting Address
Each product will respond to a unique starting address from the controller. All products with the same starting address will respond in unison. To set the starting address for the selected LΩGIC product:
1. From the menu of the selected LΩGIC product, select the **DMX Address** option.
2. Select the starting address (**001**–**512**).

Personality	Channels	Highest Address	Products per Universe
Red	1	512	512
Green	1	512	512
Blue	1	512	512
White	1	512	512
TW	2	511	256
RGB	3	510	170
RGBW	4	509	128
RGBW+D	5	508	102
FULL	10	503	51

Network Settings
The Network Settings control the first value of the IP address and the universe of the selected LΩGIC product.
Net Switch
To select the first value of the IP address for the selected LΩGIC product:
1. From the menu of the selected LΩGIC product, select the **Network** option.
2. Select the **Net Switch** option.
3. Select the first value of the IP address from **2.X.X.X** or **10.X.X.X**.

> • **The first value of the IP address of each connected LΩGIC product MUST match that of the LΩGIC Drive 2X, or they will not be able to link properly.**
> • **Changing the Net Switch setting may cause the selected product to disconnect from the LΩGIC Drive 2X.**

Universe
To assign an Art-Net™ or sACN universe to the selected LΩGIC product:
1. From the menu of the selected LΩGIC product, select the **Network** option.
2. Select the **Universe** option.
3. Set the universe, from **000–255** (for Art-Net™) or from **001–256** (for sACN).
Information
To view additional information for the selected LΩGIC product:
1. From the menu of the selected LΩGIC product, select the **Information** option.
2. Select which information to view, from **Version**, **IP Address**, **Fixture Hours**, **Label**, **Device UID**, **MAC Address**, and **Temperature**.
Output Status
To view output data from the menu of the selected LΩGIC product, select the **Output Status** option.
Factory Reset
To reset the selected LΩGIC product to factory default settings:
1. From the menu of the selected LΩGIC product, select the **Factory Reset** option.
2. Select **Yes** to reset, or **No** to cancel.

LΩGIC Product Group

The Group setting of a connected LΩGIC product informs the LΩGIC Drive 2X to which **Wall Con Zone** it will respond, if any.

- Setting the Group value to **000** will make the LΩGIC product not respond to any **Wall Con Zone**.
- Setting the Group value to **001–255** will make the LΩGIC product respond to LΩGIC Wall Controller products assigned to a **Wall Con Zone** with the same Wall Con Group value.

LΩGIC Wall Controller products in a **Wall Con Zone** with a Wall Con Group value of **255** will control all connected LΩGIC products other than those with a Group value of **000**.

To set the Group value for a connected LΩGIC product:

1. From the menu of the selected LΩGIC product, select the **Group** option.
2. Set the Group value from **000–255**.

Renew

To re-scan for connected LΩGIC products:

1. Go to the **Linked Fixture** main menu.
2. Select **Status**.
3. Select **Renew**.
4. Select from **No** (to cancel) or **Yes** (to renew).

Global Control Personality

To set the control personality of all connected LΩGIC products at once:

1. Go to the **Linked Fixture** main menu.
2. Select the **Personality** option.
3. Select the desired personality, from **Red**, **Green**, **Blue**, **White**, **TW, RGB**, **RGBW**, **RGBW+D**, or **FULL**.

- See the Starting Address section for the highest starting address you can select for each personality.
- Make sure that the starting addresses on the various products do not overlap due to the new personality setting.

Power Selection

To set the maximum output level for all connected LΩGIC products:

1. Go to the **Linked Fixture** main menu.
2. Select **Power Selection**.
3. Select from **Power 100%**, **Power 50%**, or **Power 30%**.

Breaking Signal

To set how the LΩGIC Drive 2X will respond to losing the control signal:

1. Go to the **Linked Fixture** main menu.
2. Select **Breaking Signal**.
3. Select from:
   - **Current State** (holds the current value),
   - **Blackout** (blacks out all connected LΩGIC products), or
   - **White** (sets all connected LΩGIC products to full output).

Control Channel Assignments and Values

Key: **10** = **FULL** (10 channels), **5** = **RGBW+D** (5), **4** = **RGBW** (4), **3** = **RGB** (3), **2** = **TW** (Tunable White; 2),
W = **White** (1), **B** = **Blue** (1), **G** = **Green** (1), **R** = **Red** (1)

R	G	B	W	2	3	4	5	10	Function	Value	Percent/Setting
–	–	–	–	1	–	–	1	1	Dimmer	000 ⇔ 255	0–100%
1	–	–	–	–	1	1	2	2	Red	000 ⇔ 255	0–100%
–	1	–	–	–	2	2	3	3	Green	000 ⇔ 255	0–100%
–	–	1	–	–	3	3	4	4	Blue	000 ⇔ 255	0–100%
–	–	–	1	–	–	4	5	5	White	000 ⇔ 255	0–100%
–	–	–	–	2	–	–	–	6	Color temperature	000 ⇔ 010	No function
										011 ⇔ 020	1800K
										021 ⇔ 030	2200K
										031 ⇔ 040	2700K
										041 ⇔ 050	3000K
										051 ⇔ 060	3200K
										061 ⇔ 070	4000K
										071 ⇔ 080	4500K
										081 ⇔ 090	5000K
										091 ⇔ 100	5600K
										101 ⇔ 110	6000K
										111 ⇔ 120	6500K
										121 ⇔ 130	7000K
										131 ⇔ 140	8000K
										141 ⇔ 150	10000K
										151 ⇔ 255	No function
–	–	–	–	–	–	–	–	7	Strobe	000 ⇔ 009	No function
										010 ⇔ 099	Strobe, 0–25 Hz
										100 ⇔ 109	No function
										110 ⇔ 179	Lightning strobe, slow to fast
										180 ⇔ 189	No function
										190 ⇔ 255	Random strobe, slow to fast
–	–	–	–	–	–	–	–	8	Auto programs	000 ⇔ 040	No function
										041 ⇔ 050	Automatic program 1
										051 ⇔ 060	Automatic program 2
										061 ⇔ 070	Automatic program 3
										071 ⇔ 080	Automatic program 4
										081 ⇔ 090	Automatic program 5
										091 ⇔ 100	Automatic program 6
										101 ⇔ 110	Automatic program 7
										111 ⇔ 120	Automatic program 8
										121 ⇔ 130	Automatic program 9
										131 ⇔ 140	Automatic program 10
										141 ⇔ 255	No function
–	–	–	–	–	–	–	–	9	Auto program speed	000 ⇔ 255	Auto program speed, slow to fast
–	–	–	–	–	–	–	–	10	Dimmer speed	000 ⇔ 129	Dimmer curve on
										130 ⇔ 255	Dimmer curve off

Static

To take temporary manual control of all connected LΩGIC products, custom mix a color, and assign a strobe speed:

1. Go to the **Static** main menu.
2. Select which value to alter, from **Red**, **Green**, **Blue**, **White**, or **Strobe**.
3. Set the selected value, from **000–512**.

   For **Strobe**, reference the following table:

Value	Percent/Setting	Value	Percent/Setting
000 ⇔ 009	No function	110 ⇔ 179	Lightning strobe, slow to fast
010 ⇔ 099	Strobe, 0–25 Hz	180 ⇔ 189	No function
100 ⇔ 109	No function	190 ⇔ 255	Random strobe, slow to fast

4. Press the **<MENU>** encoder to cycle to the next value.
5. Repeat steps 3-4 until the products output as desired.
6. Press **<ESC/BACK>** to finish.

Record

The LΩGIC Drive 2X can record control signal input (DMX, Art-Net™, or sACN) for later playback through the display menu or by a connected LΩGIC Wall Controller.

The LΩGIC Drive 2X has 64 recording slots. When a scene is triggered for playback, it will play continuously until it is stopped or another recording is triggered.

(i) **Due to memory capacity it is only possible to record a single look to each recording slot.**

Recording

To record a scene:

1. Go to the **Record** main menu.
2. Select the **Record** option.
3. Select the desired recording slot, from **Record1–64**.
4. ▢ will show on the display. Press the **<MENU>** encoder to begin recording the current control signal input.

(i) **To prevent errors during the recording of a scene, do not change any control signal values.**

5. ▢ will show on the display. Press the **<MENU>** encoder to stop recording.

Display Menu Playback

To play back a recorded scene with the display menu:

1. Go to the **Record** main menu.
2. Select the **Record** option.
3. Select the desired recording slot, from **Record1–64**.
4. ▷ will show on the display. Press the **<MENU>** encoder to begin playback.
5. ⏸ will show on the display. Press the **<MENU>** encoder to stop playback. The connected products will black out.

• **Pressing the <MENU> encoder again at this point will restart the recording.**
• **If no scene is recorded to a recording slot, it cannot be selected for playback.**

6. Press **<ESC/BACK>** to exit.

Scene Brightness through Display Menu

To set the **Brightness** of the connected LΩGIC products from **000–255** during playback of a scene, turn the **<MENU>** encoder clockwise or counterclockwise.

LΩGIC Wall Controller Playback

To play back a recorded scene with a connected LΩGIC Wall Controller:

1. Follow the instructions under Wall Con Configuration and Wall Con Scene Buttons to configure the LΩGIC Wall Controller and assign recorded scenes to the buttons.
2. Press the numbered button with the desired recording slot assigned to begin playback.
3. Press that same button again to stop playback. The connected products will black out.

- **Pressing the same button again (without holding) at this point will resume the scene.**
- **If no scene is recorded to a recording slot, pressing the corresponding button will do nothing.**

Scene Brightness with LΩGIC Wall Controller

To increase or decrease the brightness of the connected LΩGIC products during playback of a scene, press the **<+>** or **<->** buttons on the LΩGIC Wall Controller.

Scene Lock

To lock a scene in place and prevent tampering:

1. Trigger a scene with the LΩGIC Wall Controller. A scene cannot be locked if no scene is playing back.
2. Press and hold the same button for 6-10 seconds. The backlight will flash to indicate the scene is locked.
3. Press and hold the button again to release the lock.

Erase Recording

To erase a recording slot:

1. Go to the **Record** main menu.
2. Select the **Record Erase** option.
3. Select the desired recording slot, from **Record1–64 Clr**.
4. Select from **No** (cancel) or **Yes** (erase the selected recording slot).

System Clock

The system clock functions allow the LΩGIC Drive 2X to place itself in or out of **Shut off** mode on a set schedule. While in **Shut off** mode:

- The LΩGIC Drive 2X will black out all connected LΩGIC products.
- The LΩGIC Drive 2X will function at minimum power consumption.
- All settings other than the **System Clock** settings will be inaccessible.

Setting Clock

Before setting the schedule, ensure the internal clock and calendar is set correctly:

1. Go to the **System Clock** main menu.
2. Select the **Setting Clock** option.
3. Review the current settings. If they are inaccurate, press the **<MENU>** encoder to begin setting the clock. After setting each option, press the **<MENU>** encoder to move to the next option.
4. Set the month of the current date, from **01–12** (January to December).
5. Set the day of the month, from **01–31**.
6. Set the year, from **2000–2099**.
7. Set the hour of the day, from **00–23** (in a 24-hour clock, **00** is midnight and **13** is 1 PM).
8. Set the minute of the hour, from **00–59**.
9. Set the second of the minute, from **00–59**.
10. Set the day of the week, from **1–7** (Monday to Sunday).
11. Press **<ESC/BACK>** to exit.

Schedule

The LΩGIC Drive 2X can be scheduled by the time of day (**Everyday**), from one date to another (**By date**), and by the day of the week (**By week**) all at the same time.

- Selecting the **Everyday**, **By date**, or **By week** options not only enters the sub-menu for the selected option but also automatically enables it.
- To disable the option, select it again from the **Schedule** menu.
- To alter one of these settings, it must be disabled and then reselected.

ILUMINARC.

Everyday

To set the daily schedule:

1. Go to the **System Clock** main menu.
2. Select the **Schedule** option.
3. Select the **Everyday** option.
4. Review the current settings. To begin editing them, press the **<MENU>** encoder. After setting each option, press the **<MENU>** encoder to move to the next option.
5. Set the **Turn on** hour, from **00–23** (in a 24-hour clock, **00** is midnight and **13** is 1 PM).
6. Set the **Turn on** minute, from **00–59**.
7. Set the **Turn on** second, from **00–59**.
8. Set the **Turn off** hour, from **00–23**.
9. Set the **Turn off** minute, from **00–59**.
10. Set the **Turn off** second, from **00–59**.
11. Press **<ESC/BACK>** to exit.

By date

To set specific dates to turn on and off:

1. Go to the **System Clock** main menu.
2. Select the **Schedule** option.
3. Select the **By date** option.
4. Review the current settings. To begin editing them, press the **<MENU>** encoder. After setting each option, press the **<MENU>** encoder to move to the next option.
5. Set the **Turn on Month**, from **01–12** (January to December).
6. Set the **Turn on Day**, from **01–31**.
7. Set the **Turn on Year**, from **2000–2099**.
8. Set the **Turn off Month**, from **01–12**.
9. Set the **Turn off Day**, from **01–31**.
10. Set the **Turn off Year**, from **2000–2099**.
11. Press **<ESC/BACK>** to exit.

By week

To set which days of the week to turn on:

1. Go to the **System Clock** main menu.
2. Select the **Schedule** option.
3. Select the **By week** option.
4. Review the current settings. To begin editing them, press the **<MENU>** encoder.
5. Select each desired day, from **Mon**, **Tues**, **Wed**, **Thur**, **Fri**, **Sat**, and/or **Sun**.
6. Select any selected day again to deselect it.
7. Press **<ESC/BACK>** to finish, and then again to exit.

Fade In and Fade Out

To set whether the lights will turn on or off instantly when entering or leaving **Shut off** mode, or whether they will fade in or out:

1. Go to the **System Clock** main menu.
2. Select the **Fade In/Out** option.
3. Select which option to set, from **Fade In** or **Fade Out**.
4. For **Fade In**, select from **On-instant** or **On-3second fade**.
   For **Fade Out**, select from **Off-instant** or **Off-3second fade**.

Enable Clock

To enable or disable the system clock functions:

1. Go to the **System Clock** main menu.
2. Select the **Enable Clock** option.
3. Select from **No** (disable) or **Yes** (enable).

Web Server

The LΩGIC Drive 2X web server can be accessed by any computer on the same network as the product. It allows network access to system information, settings such as product addressing, static color testing, and calendar triggers, as well as firmware updates for both the LΩGIC Drive 2X and any connected LΩGIC products.
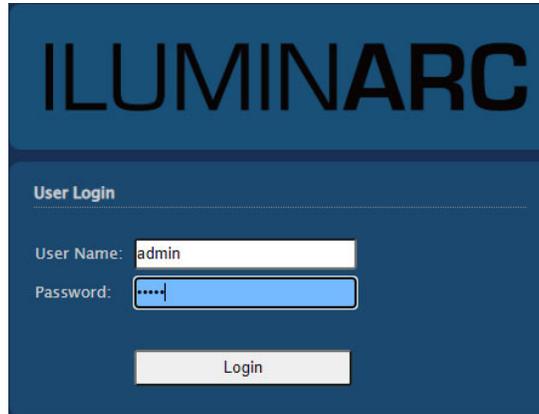
1. Connect the product to a Windows computer with a network cable.
2. On the computer, set the IP address of the new network to have the same value as the Net Switch setting (**002** or **010**).
3. Enter the IP address of the product into the URL bar of a web browser on the computer.
4. Enter both the User Name and Password as **admin** to log in.

Home

The **HOME** screen displays the name of the product and a brief introduction to it.

Status
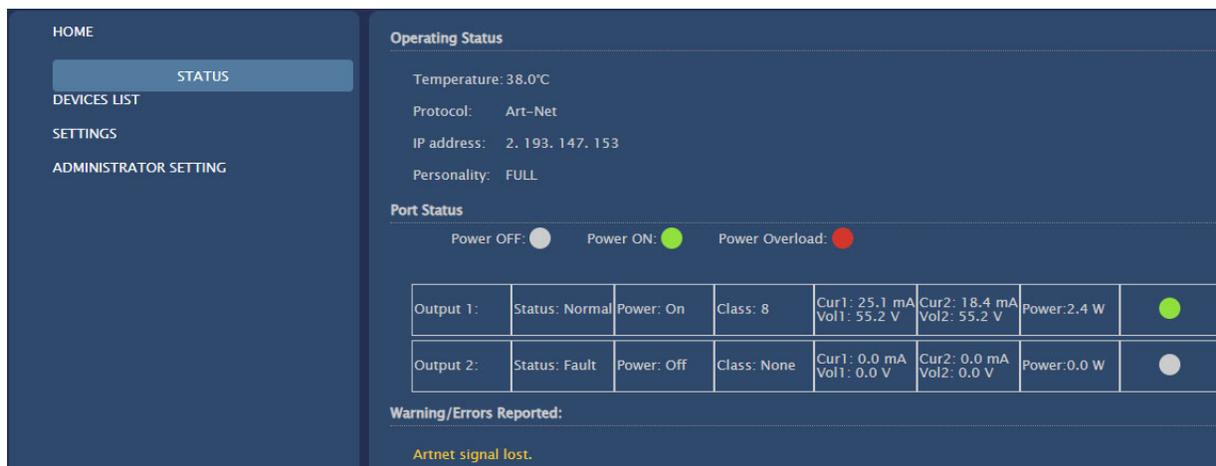
The **STATUS** screen displays the information available in the Local Information and Output Status sections of the display menu.

Devices List

Fixture:	Num:	Port:	RDM Identify:	IP:	DMX Address:	Personality:	Universe:	Protocol:	Group:	Temperature:	Software Version:
LOGICGZS	1	1	☐	2.184.133.39	51	FULL	0	Art-Net	1	38.0°C	V2.10

Fixture
Injector
Wall Con Zone
KeyList

The **DEVICES LIST** screen has a drop-down menu on the right which leads to 4 pages: **Fixture**, **Injector**, **Wall Con Zone**, and **KeyList**.

Every page of the **DEVICES LIST** screen features the following control options:

- **Renew**: rescans for connected LΩGIC products.
- **Save**: sends any changes to the connected LΩGIC products.

The **Fixture** and **Wall Con Zone** pages also feature these options:

- **Export**: Exports the connected LΩGIC product and Wall Con data to another LΩGIC Drive 2X.
- **Import**: Imports the connected LΩGIC product and Wall Con data from another LΩGIC Drive 2X.
- **Export Recordings**: Exports the Record slot and Scene data to another LΩGIC Drive 2X.
- **Import Recordings**: Imports the Record slot and Scene data from another LΩGIC Drive 2X.

Fixture

Fixture:	Num:	Port:	RDM Identify:	IP:	DMX Address:	Personality:	Universe:	Protocol:	Group:	Temperature:	Software Version:
LOGICGZS	1	1	☐	2.184.133.39	51	FULL	0	Art-Net	1	38.0°C	V2.10

: NO API

The **Fixture** page displays information for each connected LΩGIC product which the LΩGIC Drive 2X has detected and provides the following additional control options:

- **RDM Identify**: causes the selected product to blink its LEDs for identification.
- **DMX Address**: displays and sets the DMX Address of the selected product.
- **Personality**: displays and sets the control personality of the selected product.
- **Universe**: displays and sets the universe address of the selected product.

After changing the DMX Address, Personality, or Universe, click Save to send those settings to the selected product(s).

Injector

The Injector page displays information for each LΩGIC POE injector which the LΩGIC Drive 2X has detected, including **Fixture** name, **Num**ber, **Port**, **IP**, **Status**, **Connect**ion, **Class**, **Cur**rents, **Vol**tages, **Power**, **Protocol**, **Temperature**, and **Software Version**.

Key List

Num:	Address:	Identify:	Group:	Software Version:
1	1	☐	1	0.11
2	2	☐	1	0.11
3	3	☐	1	0.11
4	4	☐	2	0.11
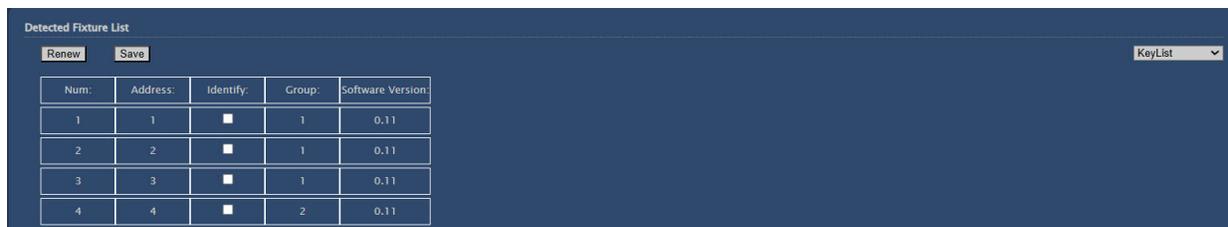
The **KeyList** page provides a quick tool for renewing and identifying connected LΩGIC Wall Controller products. Click **Renew** and the Addresses of connected LΩGIC Wall Controller products will automatically populate. Check the **Identify** box to make the selected LΩGIC Wall Controller product flash the button LEDs.

Wall Con Zone

Detected Fixture List

[Renew] [Save] [Export] [Import] [Export Recordings] [Import Recordings]   [Wall Con Zone ▾]

Wall Con Zone:	Group:	ID1:	ID2:	ID3:	ID4:	Scene:		Sensor ID1:	Sensor ID2:	Sensor ID3:	Sensor ID4:	Sensor Scene:	Sensor Time(/min):
WALL CON 1	1	1	2	3	OFF	Scene1:	1	1	1	1	1	Scene 8 ▾	1
						Scene2:	2						
						Scene3:	3						
						Scene4:	4						
						Scene5:	5						
						Scene6:	6						
						Scene7:	7						
						Scene8:	8						
WALL CON 2	2	4	OFF	OFF	OFF	Scene1:	9	1	1	1	1	Scene 8 ▾	1
						Scene2:	10						
						Scene3:	11						
						Scene4:	12						
						Scene5:	13						
						Scene6:	14						
						Scene7:	15						
						Scene8:	16						
WALL CON 3	32	OFF	OFF	OFF	OFF	Scene1:	1	OFF	OFF	OFF	OFF	Scene 8 ▾	1
						Scene2:	1						
						Scene3:	1						
						Scene4:	1						
						Scene5:	1						
						Scene6:	1						
						Scene7:	1						
						Scene8:	1						
WALL CON 4	32	OFF	OFF	OFF	OFF	Scene1:	1	OFF	OFF	OFF	OFF	Scene 8 ▾	1
						Scene2:	1						
						Scene3:	1						
						Scene4:	1						
						Scene5:	1						
						Scene6:	1						
						Scene7:	1						
						Scene8:	1						
WALL CON 5	255	OFF	OFF	OFF	OFF	Scene1:	1	OFF	OFF	OFF	OFF	Scene 1 ▾	
						Scene2:	1						
						Scene3:	1						
						Scene4:	1						
						Scene5:	1						
						Scene6:	1						
						Scene7:	1						
						Scene8:	1						

The **Wall Con Zone** page displays detailed information for each connected LΩGIC Wall Controller product and provides the following additional control options:

Wall Con Zone: Provides 4 zones with custom group values. LΩGIC Wall Controller products assigned to **WALL CON 5**, which is always set to Group value **255**, control all connected LΩGIC products with a LΩGIC Product Group value other than **000**.

Group: Sets the Group value (**0–254** for **WALL CON 1–4**) for the selected **Wall Con Zone**. Products with the same LΩGIC Product Group value other than **000** will respond to LΩGIC Wall Controller products in the selected **Wall Con Zone**.

ID1–4: Selects a LΩGIC Wall Controller address (**1–32**) or **OFF** to include in the selected **Wall Con Zone**.

Scene1–8: Selects a record slot (**1–64**) for playback when the selected button is pressed in the selected **Wall Con Zone**.

Sensor: These functions are reserved for future use.

Settings

The **SETTINGS** screen displays and provides 9 types of control options:

- **Basic**: displays and sets the control **Protocol**, the first value of the IP address (**Net switch**) for the LΩGIC Drive 2X, **DHCP**, the control **Personality**, and the **Universe** address if applicable. Click **Save** to send any changed settings to the LΩGIC Drive 2X.

⚠ **Changing the Net switch option will cause the computer to disconnect from the LΩGIC Drive 2X.**

- **Local**: displays the product **Temperature** in °C and the **Fixture Time**.
- **Static Test**: displays and provides the same control options as the **Static** section of the display menu.
- **Record Play**: provides drop down menus which display which record slots are assigned to each Wall Con Zone and can select a scene from them. Click ▷ to play a scene.
- **Record List**: displays which Record slots (Record1–64) have a look recorded to them. Click **Record** to record the current look to the selected Record slot. Click **Erase Record** to erase the recorded look from the selected Record slot.
- **System Calendar Trigger Settings**: displays and provides the same control options as the **System Clock** section of the display menu. Click **Save** to send any changed settings to the LΩGIC Drive 2X.

ⓘ **Years beyond those available through the display menu may be selected through this method, but selecting them may cause unforeseen errors.**

- **Reset**: provides the **System Reset** function. Set the drop-down menu to **Yes** and click **Save** to reset the LΩGIC Drive 2X to factory default settings.

✎ **System Clock settings will not be reset.**

- **History**: Provides the **History Clear** function. Set the drop-down menu to **Yes** and click **Save** to clear the connected product history and complete the process of disconnecting LΩGIC products from the LΩGIC Drive 2X.
- **Matching**: Provides the **Network Segment Matching** function. Set the drop-down menu to **Yes** and click **Save** to make the **Net switch** setting of all connected LΩGIC products match the setting of the LΩGIC Drive 2X.

Administrator Settings

The **ADMINISTRATOR SETTINGS** screen displays the current firmware version of the LΩGIC Drive 2X and provides the ability to change the web server password, update the firmware of the LΩGIC Drive 2X, and update the firmware of any connected LΩGIC products.

Firmware Update

The procedure for updating the firmware of the LΩGIC Drive 2X is identical to the procedure for updating the firmware of connected LΩGIC products. Follow these same instructions for either procedure.

1. Download the latest firmware files from the appropriate page on www.github.com (see Firmware Update Links for specific links for each LΩGIC product).
2. Access the web server for LΩGIC Drive 2X according to the instructions under Web Server.
3. Navigate to the **ADMINISTRATOR SETTINGS** screen.
4. Click **Browse** and select the desired firmware file.
5. Click **Update**.
   - At this point the web server may return to the login screen. Enter the password to continue, and then redo steps 4 and 5.
   - The Upload Progress bar will fill, indicating the firmware is being sent to the relevant product(s).
   - Data in the firmware files includes a model type signature which allows only the relevant products to receive it.

⚠ **ALL connected products of the type designated by the firmware file will be updated! Disconnect any products of that type which should not be updated prior to beginning the update procedure!**

ⓘ **When connecting LΩGIC products with early (V1_ _) firmware versions to a LΩGIC Drive 2X or POE X with V2 firmware or later, the products may not populate in the Linked Fixture lists. This will not prevent a firmware update from working. It is possible to update the firmware of connected LΩGIC products even if they do not populate in the Linked Fixture lists.**

🖉 **Connected products which are not of the type designated by the firmware file will not be affected.**

- POE injectors will not filter the firmware file transfer.
- During the update the LΩGIC Drive 2X display menu will freeze and all control signals will be interrupted.
- When updating the LΩGIC Drive 2X, the message **Remove code 1 MCU erasure** will show on the display, followed by **Updating...**. When finished, the LΩGIC Drive 2X will restart.
- When updating connected LΩGIC products, the message **Updata slave Device** will show on the display. When finished, the LΩGIC Drive 2X will rescan for connected products.
- After updating connected LΩGIC products from V1_ _ to V2_ _, it may be necessary to clear the history of connected products (see Disconnecting Products from the LΩGIC Drive 2X or the **History** option under Settings) and then cycle the power of the LΩGIC Drive 2X before the Renew function will find the updated products.

Firmware Update Links

Product	Github Link
LΩGIC Drive 2X	github.com/CHAUVET-ILUMINARC/LOGICDRIVE2X
LΩGIC Wall Panel 16-Port	github.com/CHAUVET-ILUMINARC/LOGICWALLPANEL16PORT
LΩGIC AR111 Downlight M	github.com/CHAUVET-ILUMINARC/LOGICAR111DNM
LΩGIC AR111 Downlight S	github.com/CHAUVET-ILUMINARC/LOGICAR111DNS
LΩGIC MR16 Downlight S	github.com/CHAUVET-ILUMINARC/LOGICMR16
LΩGIC Cove M	github.com/CHAUVET-ILUMINARC/LOGICCVM
LΩGIC Cove S	github.com/CHAUVET-ILUMINARC/LOGICCVS
LΩGIC Graze L	github.com/CHAUVET-ILUMINARC/LOGICGZL
LΩGIC Graze S	github.com/CHAUVET-ILUMINARC/LOGICGZS
LΩGIC POE Injector	github.com/CHAUVET-ILUMINARC/LOGICPOEINJECTOR
LΩGIC POE X	github.com/CHAUVET-ILUMINARC/LOGICPOEX

Error Codes

See the table below for error codes and recommended solutions:

Error Code	Possible Reason	Potential Solution
DMX signal lost	No DMX console connection	Connect to console Double-check cable connection
Network disconnect	No network connection or console signal received	
Artnet signal lost	Not Art-net™ console connection	
Sacn signal lost	No sACN console connection	
Output 1 Overcurrent	Too many LΩGIC products are connected	Reduce the number of connected LΩGIC products to within stated parameters
Output 2 Overcurrent		
Output 1 Short Circuit	Short-circuit detected in a LΩGIC product connected to the port	Check the LΩGIC products connected to that port
Output 2 Short Circuit		
Dev No longer connected	A product is off-line or fewer products are connected than before	Disconnecting Products from the LΩGIC Drive 2X or Renew
Device Error-undefined	Reserved for future use	Contact Iluminarc customer support
Over current protection	Too many LΩGIC products are connected	Reduce the number of connected LΩGIC products to within stated parameters
network hardware error	Network chip failure	Check whether the network chip is damaged
DRVIER 2X Overheat	The temperature of the stated product exceeds 65 °C	Replace the thermal sensor of the product or check the heat dissipation
POE X overheat		
MR16DNS overhead		
AR111DNS overhead		
AR111DNM overhead		
GZS overhead		
GZL overhead		
CVS overhead		
CVM overhead		
INJECT overhead		
port1 excess	Too many LΩGIC products are connected	Reduce the number of connected LΩGIC products to within stated parameters
port2 excess		
port1 and 2 excess		
Network chip fault	Network chip failure	Check whether the network chip is damaged
PSE error	Power supply failure	Check whether the power supply is damaged and if it is connected properly

5. Maintenance

Product Maintenance

Dust build-up reduces light output performance and can cause overheating. This can lead to reduction of the light source's life and/or mechanical wear. To maintain optimum performance and minimize wear, clean your lighting products at least twice a month. However, be aware that usage and environmental conditions could be contributing factors to increase the cleaning frequency.

To clean the product, follow the instructions below:

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

ⓘ **Always dry the transparent surfaces carefully after cleaning them.**

ILUMINARC®

6. Technical Specifications

Dimensions and Weight

Length	Width	Height	Weight
10.31 in (245 mm)	18.86 in (479 mm)	1.73 in (44 mm)	7.6 lb (3.45 kg)

Note: Dimensions in inches are rounded.

Power

Power Supply Type	Range	Voltage Selection
Switching (internal)	100 to 240 VAC, 50/60 Hz	Auto-ranging

Output Port Power Rating	Output Port Voltage	POE Output Connectors	RJ12 Output Voltage
92.5 W per port	54 VDC	RJ45 x2	12 VDC

Parameter	100 V, 60 Hz	120 V, 60 Hz	208 V, 60 Hz	230 V, 50 Hz	240 V, 50 Hz
Consumption	260 W	260 W	260 W	260 W	260 W
Operating Current	2.60 A	2.17 A	1.25 A	1.14 A	1.09 A
Fuse	T 3.15 A, 250V	T 3.15 A, 250V	T 3.15 A, 250V	T 3.15 A, 250V	T 3.15 A, 250V

Power I/O	U.S./Worldwide	UK/Europe
Power Input Connectors	Seetronic TRUE1	Seetronic TRUE1
Power Cord plug	Edison (U.S.)	Local Plug
Recommended Power Cable	3 x 14 AWG	

Data Connectors

DMX/RDM	Ethernet (Art-Net™/sACN)	LΩGIC Wall Controller
5-pin Phoenix in and out	RJ45 x2	RJ12

POE Cabling

Required Cable Type	Minimum Conductor Diameter	Conductor Material
CAT6/A, shielded	23 AWG (0.5733 mm)	Solid bare copper wire (stranded not supported)

Cable Plug	Cable Terminator	Recommended Cable (or equivalent)
RJ45, CAT6/A, Shielded	T568B standard	Belden 2413F, 2412F

Total Max Cable Length (Drive to first fixture)	Total Max Cable Length (Drive to last fixture)	Total Max Cable Length (First fixture to last fixture)
328 ft (100 m)	460 ft (140 m)	131 ft (40 m)

Thermal

Operating Temperature Range	Maximum Surface Temperature	Cooling System
-4 °F–113 °F (-20 °C–45 °C)	158 °F (70 °C)	Fan-assisted convection

Ordering

Product Name	Item Name	Item Code	UPC Number
LΩGIC Drive 2X	LOGICDRIVE2X	01541731	781462220792

RoHS

ART NET ETHERNET   DMX RDM   FC   MET ®   c us   UL 2108, UL 1598A   CSA C22.2 No. 250.2   E115166   UK CA   C E

Contact Us

General Information	Technical Support
Chauvet World Headquarters	
Address: 3360 Davie Rd., Suite 509	Voice: (844) 393-7575
Davie, FL 33314	Fax: (954) 756-8015
Voice: (954) 577-4455	Email: chauvetcs@chauvetlighting.com
Fax: (954) 929-5560	
Toll Free: (800) 762-1084	Website: www.chauvetprofessional.com
Chauvet U.K.	
Address: Pod 1 EVO Park	Email: UKtech@chauvetlighting.eu
Little Oak Drive, Sherwood Park	
Nottinghamshire, NG15 0EB	Website: www.chauvetprofessional.eu
UK	
Voice: +44 (0) 1773 511115	
Fax: +44 (0) 1773 511110	
Chauvet Benelux	
Address: Vaartlaan 9	Email: BNLtech@chauvetlighting.eu
9800 Deinze	
Belgium	Website: www.chauvetprofessional.eu
Voice: +32 9 388 93 97	
Chauvet France	
Address: 3, Rue Ampère	Email: FRtech@chauvetlighting.fr
91380 Chilly-Mazarin	
France	Website: www.chauvetprofessional.eu
Voice: +33 1 78 85 33 59	
Chauvet Germany	
Address: Bruno-Bürgel-Str. 11	Email: DEtech@chauvetlighting.de
28759 Bremen	
Germany	Website: www.chauvetprofessional.eu
Voice: +49 421 62 60 20	
Chauvet Mexico	
Address: Av. de las Partidas 34 - 3B	Email: servicio@chauvet.com.mx
(Entrance by Calle 2)	
Zona Industrial Lerma	Website: www.chauvetprofessional.mx
Lerma, Edo. de México, CP 52000	
Voice: +52 (728) 690-2010	

Warranty & Returns

For warranty terms and conditions and return information, please visit our website.
For customers in the United States and Mexico: www.chauvetlighting.com/warranty-registration.
For customers in the United Kingdom, Republic of Ireland, Belgium, the Netherlands, Luxembourg, France, and Germany: www.chauvetlighting.eu/warranty-registration.