

Instruction Manual

X4 atom[®]



series

preliminary version 0.1



— since 1994 —

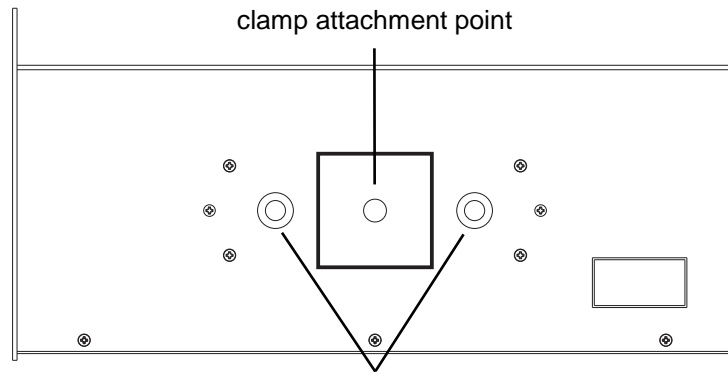
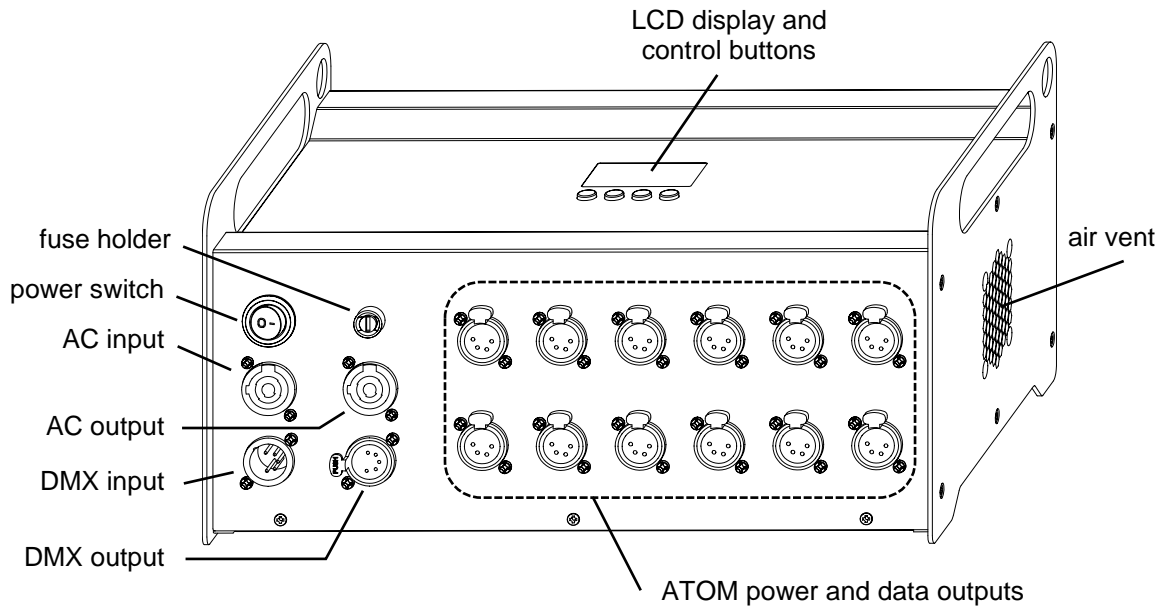
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1 Parts Identification

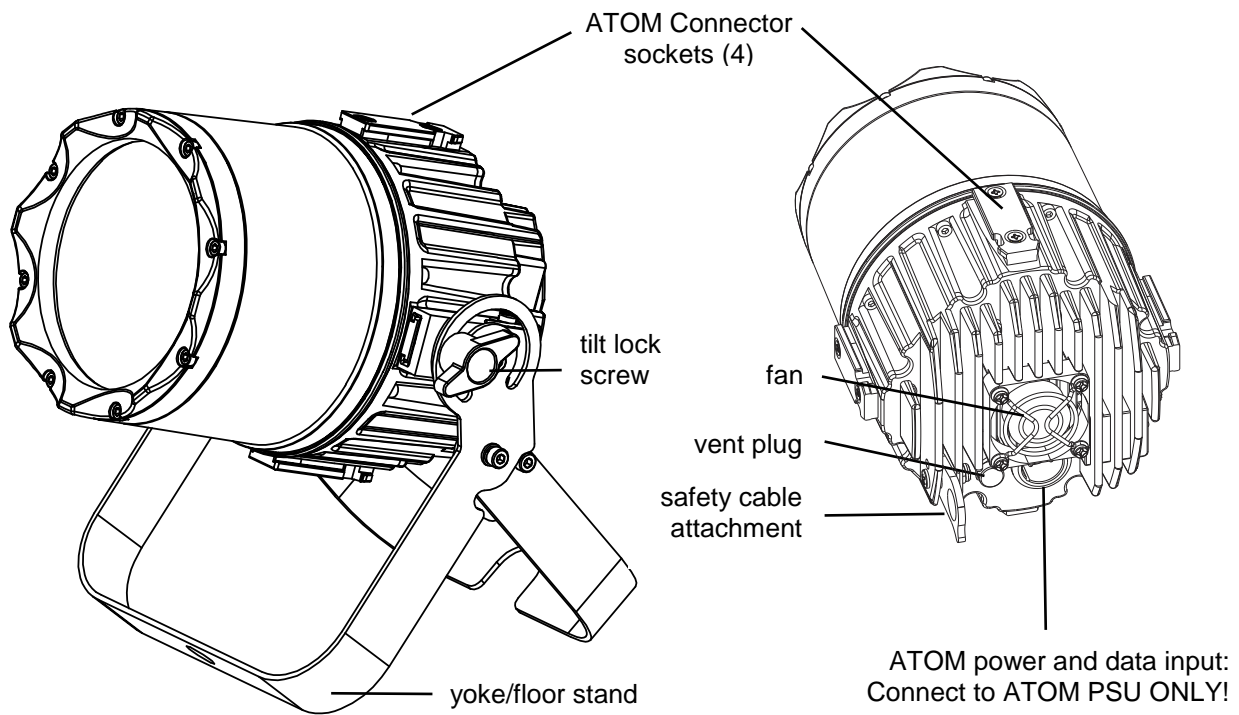
1.1 Power Supply Unit (PSU)

12-output PSU shown. 6-output PSU similar.




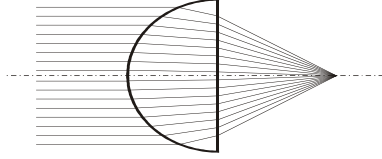


Sockets for Omega bracket attachment

1.2 X4 Atom Head



2 Safety Precautions

	<p>The X4 Atom is powerful lighting equipment intended for use by experienced lighting professionals. Read this manual before installation or use. For safe and trouble-free operation, install and use only as directed.</p> <p>The manufacturer will take no responsibility for damages caused by disregard for the information in this manual. Warranty claims will be invalidated if any piece of the product casing has been removed.</p>
	<p>Attention: Class 2M LED. Brief exposure can cause eye injury within a distance of 0.5 m (20 in.), even without optical instruments.</p> <p>Never look directly into the beam of light or into the LED. Avoid exposing your eyes to direct radiation!</p>
	<p>The X4 ATOM is fitted with a plano-convex lens that focuses and concentrates light just like a magnifying glass. Direct sunlight and other bright light sources can cause internal damage to the fixture. With a high-power light source, this can happen quickly, potentially melting components or starting an internal fire within seconds.</p>  <p>Potentially hazardous light concentration can occur whether fixtures are powered on or off. To avoid problems, observe the following precautions at all times:</p> <ul style="list-style-type: none">• Never expose the front of a fixture to direct sunlight or any other strong light sources.• For outdoor applications during daylight, make sure that the front face of any fixture is either shielded or points away from the sun, even when fixtures are not in use.• Do not modify the front glass or lens of any fixture. <p>Especially when working with high powered beam lights, extreme caution and observance of these safety instructions is mandatory.</p>

Also note the following requirements to ensure safe operation.

1. Before powering up the lights, ensure that fans and air vents are clean and unobstructed.
2. Maintain a minimum distance of 0.5 m (20 in.) between lighting heads and any flammable object.
3. **Hot surfaces!** Avoid touching lights during the operation. This can cause injuries and/or damage.

4. The PSU and lighting head contain no user-serviceable parts. Opening the PSU or lighting head will void all warranties.
5. Wait at least 15 minutes after turning the system off to handle lighting heads. Handle carefully and be aware that some surfaces may be extremely hot.
6. Install **X4 ATOM** system components as directed below with suitable clamps and other hardware including safety cables. Avoid placing lighting heads in locations where there is risk of accidental contact.
7. Repair, maintenance and installation work shall be performed only by GLP- certified technicians or other qualified lighting professionals. These operations require common trade knowledge that is not explicitly provided in this manual.
8. Use only original spare parts. Any structural modification on the system will terminate all warranty claims.
9. Keep this user manual for future reference.

Should you have any questions about the safe operation of your X4 ATOM, please contact your local GLP office, or their authorized distributor, a list of which can be found at www.glp.de.

3 Mounting

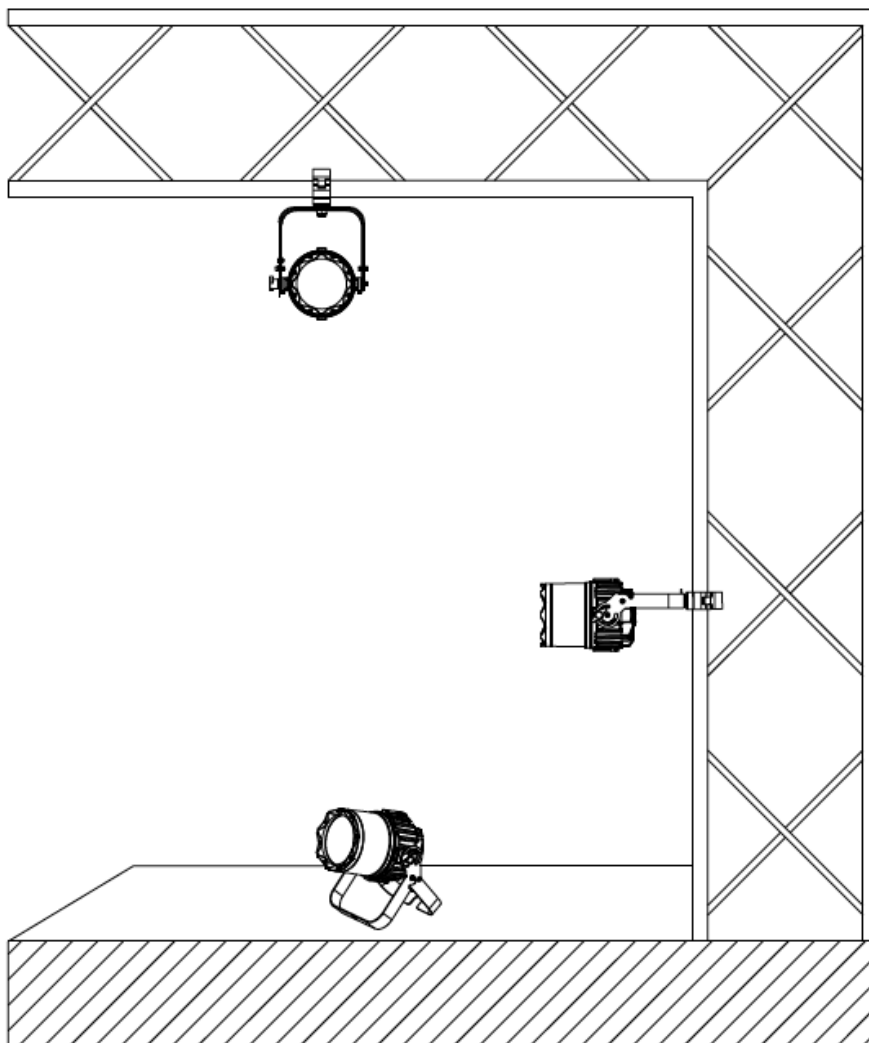


Installation shall be performed by qualified personnel only, in accordance with applicable regulations such as BGV C1 and DIN VDE 0711-217.

3.1 X4 ATOM Heads

With an IP 65 rating, the **X4 ATOM** heads are suitable for outdoor use. (The PSU however must be installed in a dry location.) Heads may be rigged in any orientation or placed on a level surface. When installing, keep the lighting head at least 0.5 m (20 in.) from flammable materials including curtains and stage scenery.

Accessories are available to mount the **X4 ATOM** in a range of configurations. These fasten quickly and securely to the ATOM connectors.



3.1.1 Attaching the Yoke Bracket / Floor Stand

The yoke bracket / floor stand snaps on to the connector sockets on the outside of the head. To attach to a bracket to an **X4 ATOM** head, slide the bracket forwards onto two connector sockets until the bracket locks in place.

To release the bracket, push the lock pins on both sides of the bracket and slide backwards.

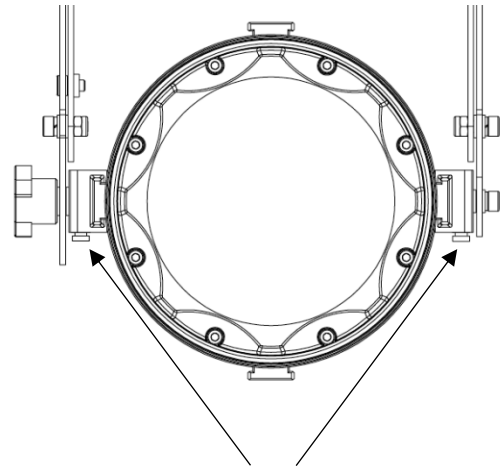
3.1.2 Operating on the Floor (Upright)

The **X4 ATOM** can be placed upright on a floor or other level surface using the included yoke bracket/floor stand unfolded as shown to right.

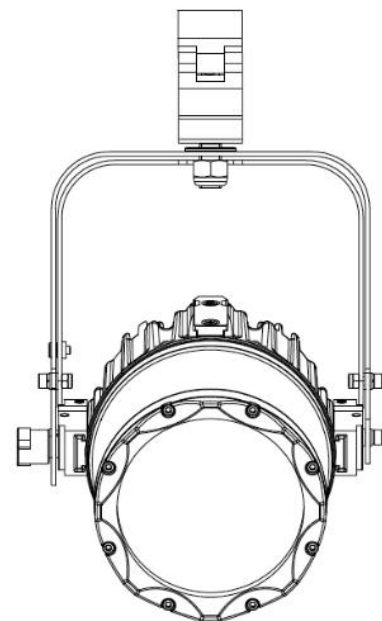
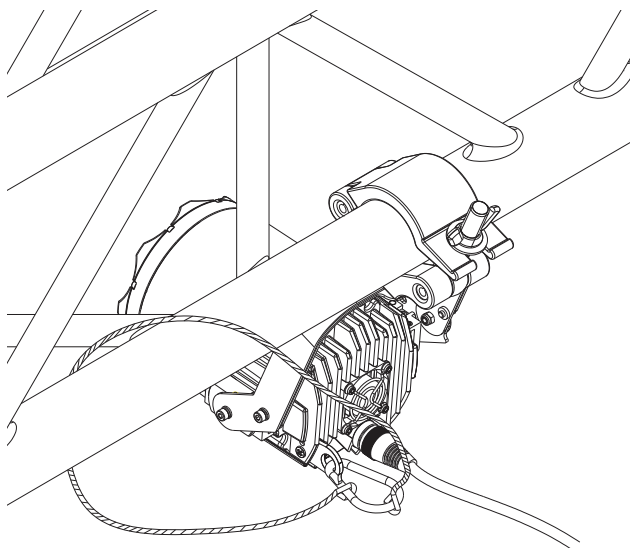
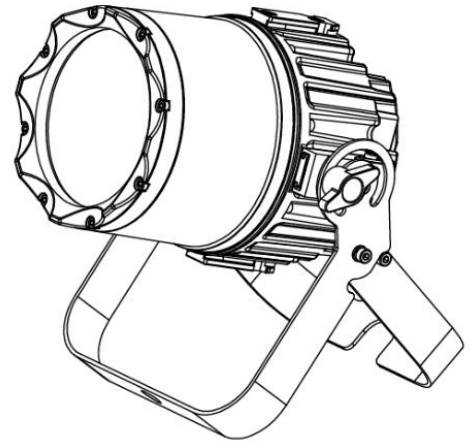
Attach the bracket as described above. Loosen the tilt lock screw, spread the inner and outer brackets, tilt the head to the desired angle, and tighten the tilt lock screw.

3.1.3 Hanging a single head

Heads can be rigged individually on a truss using a suitable rigging clamp fastened to the yoke bracket/floor stand as shown. Loosen the tilt lock screw to adjust tilt angle. Secondary attachment is also required.



Push pins to release



3.1.4 Mounting in a multiple array or matrix setup



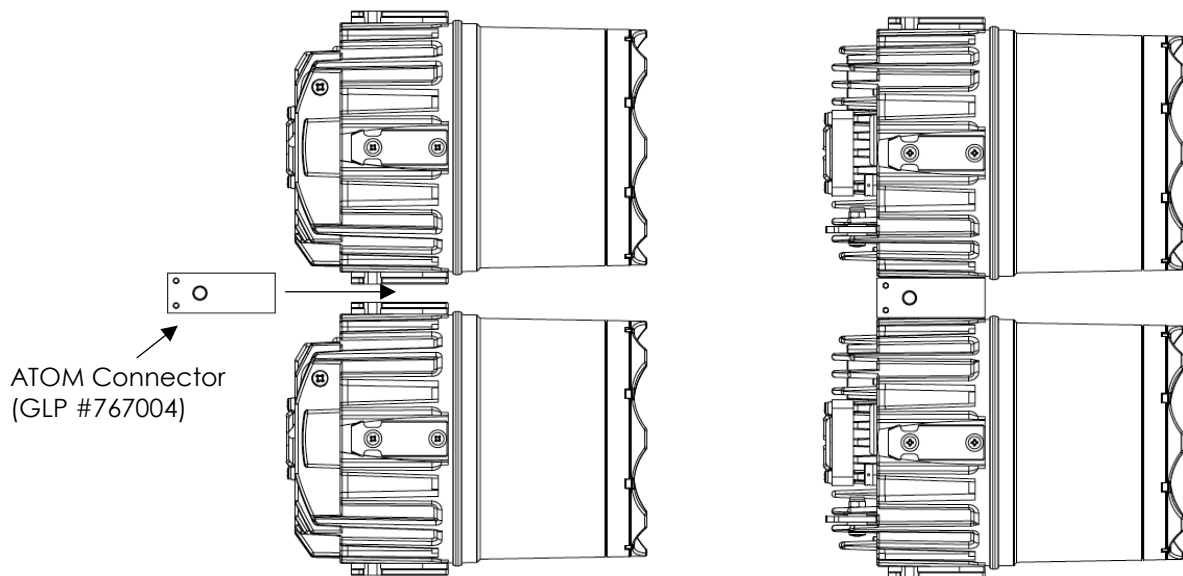
Do not hang more than 12 X4 ATOM heads from a single point.

Do not connect more than 1 X4 ATOM head to either side of the suspended head.

Secure each X4 ATOM head with its own safety cable.

Multiple **X4 ATOM** heads can easily be physically joined using the ATOM connector included with each head to create columns, matrixes, and other configurations, particularly when combined with the X4 ATOM Trussbar and rigging accessories. See page 13 for more information.

To start connecting heads, attach the connector to the first head by sliding it forward onto a connector socket from the back of the head. Then slide the connector socket of the second head backwards onto the other side of the connector. Verify that each head is securely locked to the connector.



To remove an ATOM connector from a socket, press the pin to unlock. Slide the connector backwards off of the socket.

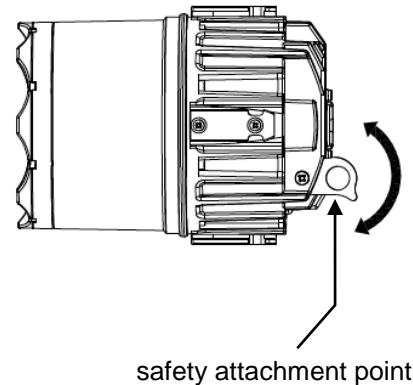
Up to twelve X4 ATOM heads can be connected vertically in a single column. Do not hang more than 1 X4 ATOM horizontally to either side of the suspended head. Secure each head with a separate safety cable.

3.1.5 Secondary Attachment

Whenever the X4 ATOM is suspended above ground, a safety cable must be used to prevent injury in case the primary attachment fails. The head has a dedicated point for attaching a safety cable at the back. The attachment point swivels in and out as shown.

For safe and proper fastening, the safety cable must comply with BGI 810-3 (EN 60598-2-17 Section 17.6.6) and be capable of bearing a static suspended load that is ten times the weight of the fixture and all installed accessories.

When suspending multiple heads from a single clamp or other primary attachment, secure each head with its own safety cable.



3.2 PSU Installation

The **X4 ATOM PSU** can be suspended with a rigging clamp or placed in a rack or on a level surface. It has an IP 22 rating and must be installed in a dry location.

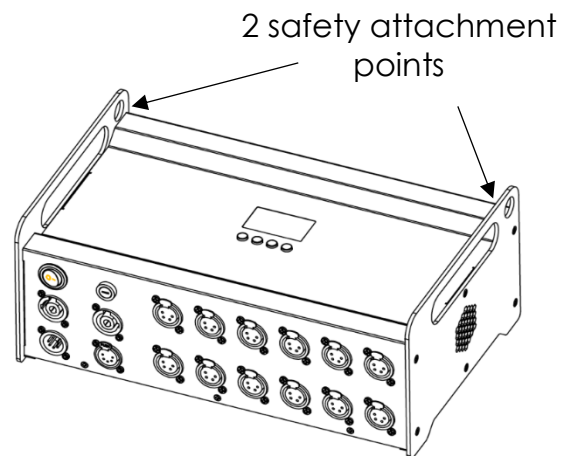
When placed on a level surface or inside a rack, additional securing is usually not required. Provide at least 10 cm (4 in.) clearance on each side for ventilation. **Ensure that the air vents on either side are not blocked.**

If using a rigging clamp to hang the **X4 ATOM PSU**, the clamp can be fastened to the PSU using an omega bracket or bolted directly to the unit with an M10 x 11 mm bolt.

NOTE: Never use a bolt longer than 11 mm as this may damage the device.

Whenever suspended above ground, a safety cable must be used to prevent injury in case the primary attachment fails. Pass the safety cable through a safety attachment point shown to right.

For safe and proper fastening, the safety cable must comply with BGI 810-3 (EN 60598-2-17 Section 17.6.6) and be capable of bearing a static suspended load that is ten times the weight of the fixture and all installed accessories.



4 Connections



Connect the X4 ATOM head only to an X4 ATOM PSU. Connecting the lighting head to any other device may cause damage.

Never connect any other equipment to the PSU. Doing so may damage the PSU and/or the device.

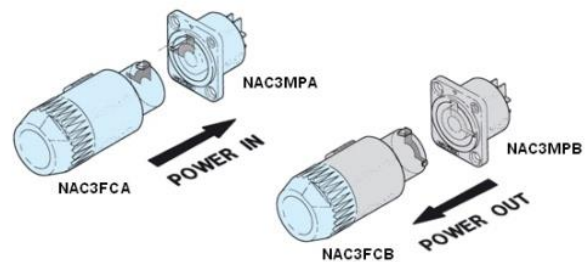
4.1 AC Power

Use NEUTRIK® powerCON locking 3 conductor AC connectors to connect the **X4 ATOM PSU** to ~90-240 Volt, 50-60 Hz AC power.

To prevent arcing and potential damage to the connector, flip the AC power switch to “O” (off) before connecting or disconnecting the AC power cable.

The AC connections are color coded. Use a blue powerCON to supply power at the AC input socket.

The grey AC output socket may be used to supply up to 18 A to additional devices. Connect a suitable cable to the AC output with a grey powerCon connector. Check the current draw of the connected devices and do not exceed a total of 18 A. **The maximum total current load in the AC daisy chain is 20A including the first PSU.**



4.2 DMX Data

The X4 ATOM PSU provides 5-pin male and female XLR sockets for USITT DMX-512 Standard data input and throughput.

Pin 1 = [Ground] / Pin 2 = [-] / Pin 3 = [+] / Pin 4 & 5 N.C.

4.3 X4 ATOM heads

Connect X4 ATOM heads to the X4 ATOM PSU with suitable signal and power cables fitted with 4-pin XLR connectors. **To ensure the IP65 rating of the head, you must use an IP65 rated XLR female connector such as the NEUTRIK® X-HD Series.**

The connections are:

Pin 1 = [Ground] / Pin 2 = [Data +] / Pin 3 = [Data -] / Pin 4 = [V+ 24V]

The maximum cable length is 60 m (200 ft.).

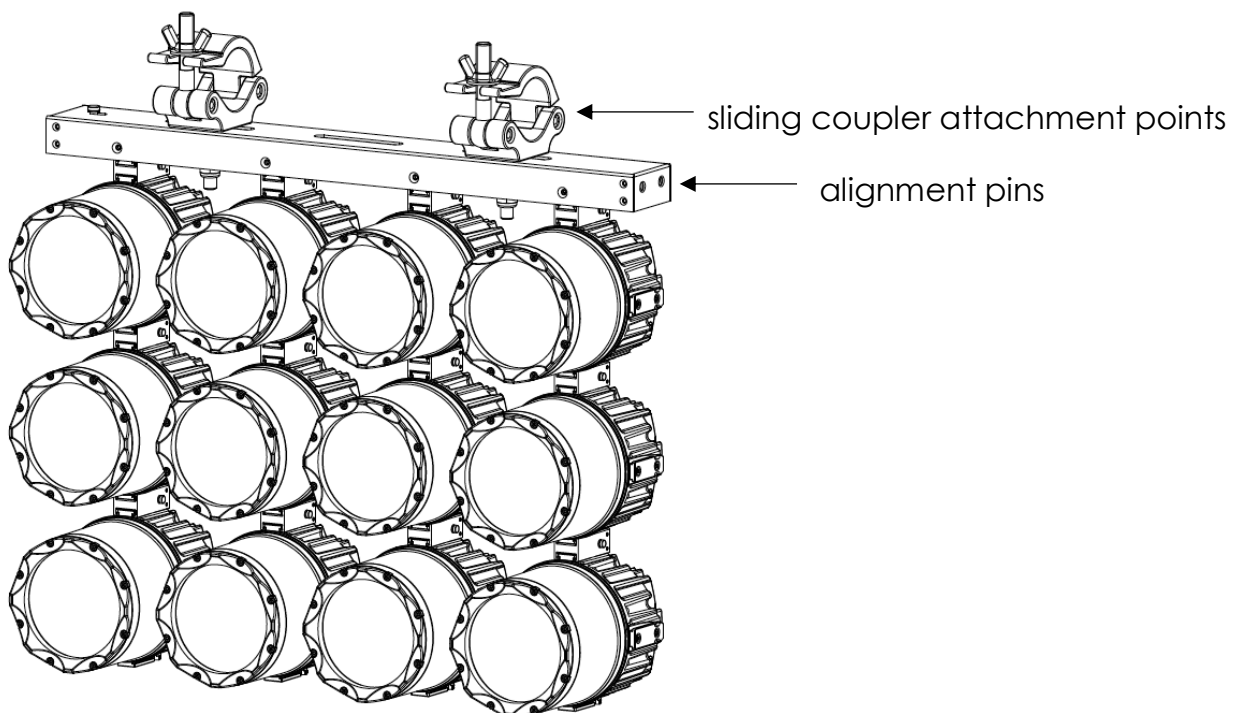
Connect only one (1) GLP X4 ATOM head per PSU output.

5 Accessories

5.1 ATOM Trussbar

The X4 ATOM Trussbar (GLP #767005) holds a row of 4 **X4 ATOM** heads to which additional heads may be connected easily with ATOM Connectors to assemble a matrix up of up to 4 by 12 heads.

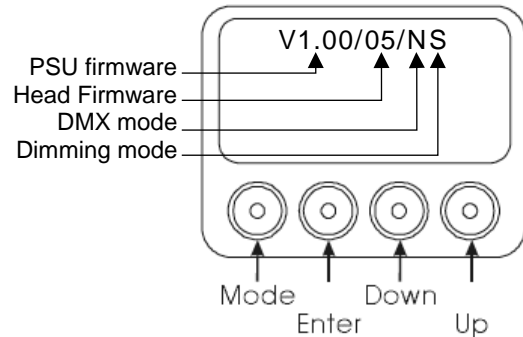
The Trussbar's coupler attachment slots allow the couplers to be positioned between the bracing of any truss. The alignment pins ensure a precise end-to-end installation of multiple units.



6 User settings, utilities, and readouts

The LCD display on the **X4 ATOM PSU** provides access to user settings, utilities, and readouts.

The top line displays the PSU firmware version, head firmware version, DMX mode, and dimming mode.



- The DMX mode options are N (normal), W (white), and C (compressed).
- The dimming mode options are L (linear), S (soft), and E (extra soft).

For example, “V1.00/05/NS” indicates that the PSU is running ver. **1.00** firmware on its CPU with ver. **05** head firmware. It is set for **N**ormal DMX mode and **S**oft dimming mode.

Press Mode to enter the menu. Use Up/Down keys to scroll options. Press Enter to get to the next level or confirm selection. Press Mode to cancel and return to the main menu.

← MODE - ENTER →

Remarks

← MODE - ENTER →		Remarks
DMX Start Address	1-511	DMX start address for PSU
DMX LED Start Address	1-504	DMX start address for output 1
Special		
Manual DMX		Output commands without a controller
Master Intensity	0-255	Set Master Intensity level
Fixture	1-12	Select fixture/output to control
Zoom	0-255	Set zoom level
Special	0-255	Set Special functions
White Temperature	0-255	Set Color temperature level
Dimmer	0-255	Set Dimmer level
Shutter	0-255	Set Shutter level
White	0-255	Set White level
Blue	0-255	Set Blue level
Green	0-255	Set Green level
Red	0-255	Set Red level
Color Wheel	0-255	Set color wheel level
Adjust		
Key code	xxxx	Enter code to unlock Adjust menu ¹
Display Contrast	-8 to 8	Adjustment for the Display contrast
PWM Freq. Adj.	582-618	Adjust PMW frequency ²
Max Zoom adjust	-99 to 99	Calibration of Zoom-offset
Self Inspection	-	Runs a self-diagnostic test and checks head firmware

¹ For service personnel. Contact GLP Service to obtain code.

² PMW freq. can also be adjusted by DMX.

LED adjust		
White adjust red	-99 to 99	Adjust red channel intensity
White adjust blue	-99 to 99	Adjust blue channel intensity
White adjust green	-99 to 99	Adjust green channel intensity
White adjust white	-99 to 99	Adjust white channel intensity
Offset adjust red	-99 to 99	Red calibration
Offset adjust green	-99 to 99	Green calibration
Offset adjust blue	-99 to 99	Blue calibration
Offset adjust white	-99 to 99	White calibration
Fixture	1-12	Select head to adjust
Default full feature		-
Display Black out		ON/OFF
DMX hold		ON/OFF
Set DMX Image		
Set image if DMX off	ON/OFF	Activates a stored scene if DMX is off
Save image in memory	-	Stores the current scene for later recall
Set dimming mode		
Linear dimming	-	Select linear dimming curve
Extra soft dimming	-	Select extra soft dimming curve
Soft dimming	-	Select soft dimming curve
DMX input monitor		Read DMX levels
Master Intensity	0-255	Display Master Intensity DMX value
Fixture	1-12	Select output to monitor
Zoom	0-255	Display Zoom DMX value
Special	0-255	Display Special Functions DMX value
White Temperature	0-255	Display color temperature DMX value
Dimmer	0-255	Display Dimmer DMX value
Shutter	0-255	Display Shutter DMX value
White	0-255	Display White DMX value
Blue	0-255	Display Blue DMX value
Green	0-255	Display Green DMX value
Red	0-255	Display Red DMX value
Color Wheel	0-255	Display color wheel DMX value
Self-test program		ON/OFF
Live time		0-99999
Set DMX Mode		Set head type and DMX option
DMX RGBW mode	-	RGBW heads, Normal DMX mode
DMX White mode	-	White heads, Normal DMX mode
DMX Compressed mode	-	RGBW heads, Compressed DMX mode
Silent Mode		ON/OFF
Reset		ON/OFF

7 Effects

7.1 *Master Intensity*

The master dimmer applies to all outputs and is available in all DMX modes.

7.2 *Special Functions*

The Special Functions apply to all outputs and are available in all DMX modes. These functions allow you to:

- Enable Silent mode. In Silent mode, the head cooling fans are switched off. The heads will run hotter and automatically switch off the LED if they overheat, but can run without fan cooling for extended periods in many situations. Note that operating at higher temperatures may shorten product life. To enable Silent mode, hold the level for 1 second. To cancel Silent mode, set the channel to No Function.
- Change Pulse Width Modulation (PWM) frequency. The PWM frequency is variable from 582 to 618 Hz. The default is 600 Hz (DMX level 150) Changing the PWM frequency may remove banding or other artifacts from video signals. Check video with lights at full intensity and experiment with the PWM frequency for best results. To change the PWM frequency, hold a level for 1 second. To store a setting, hold the level for three seconds. The heads will retain this value until a factory reset is performed or the PWM frequency is re-adjusted via DMX or the control panel.
- Synchronize all fixtures with output 1. For synchronized control of all fixtures, you can force the PSU to copy the DMX levels on output 1 to all other outputs. To initiate synchronized control, hold the level for 0.5 seconds. To resume individual fixture control, set the channel to No Function.
- Reset all fixtures. If necessary, you can force all heads to reset. To execute the reset command, hold the level for 0.5 seconds.

7.3 *Intensity*

The dimming level of each head is controllable in the Normal DMX modes. It is not available in Compressed DMX mode. Three dimming modes are available: Linear, Soft, and Extra Soft.

7.4 *Shutter*

Shutter effects are available in all DMX modes. The shutter channels provides random and variable-speed pulsing light effects at up to 10 flashes per second.

Caution: flashing light, particularly between 5 and 30 flashes per second, may cause seizures in persons with photosensitive epilepsy.

7.5 *Fixed Colors (RGBW model)*

The RGBW model provides a virtual color wheel with 12 named colors and 3 white tones. In addition, it provides a variable speed Rainbow Effect and variable speed random colors.

Note that Fixed Colors override color mixing. To enable RGBW color mixing, take the Fixed Colors channel down to 0%.

7.6 Color Mixing (RGBW model) / White Balance (Tunable White model)

The RGBW model provides control of the mix of red, green, blue, and white in Normal and Compressed modes.

The Tunable White model provides control of the mix of cool white and warm white LEDs. Color temperatures from approximately 2700K to 10,000K can be achieved.

7.7 Zoom

The zoom function is available in all DMX modes. It allows you to vary the beam angle from a narrow 3.5° spot to a wide 34° flood.

7.8 Color Correction

Color correction from 2700K to 10,000K is available on both the RGBW and Tunable White models in Normal DMX mode. It is not available in Compressed DMX mode.

Color correction can be applied on top of a color (or white tone) programmed with other channels. It can also be applied to fixed colors on the RGBW model.

8 DMX Channels

8.1 Normal Mode, RGBW Heads: 56/110 DMX Channels

Channel ¹												Function	%	DMX	
1												Master Intensity (all outputs), 0-100%	0-100	0-255	
2												Special Functions			
												No function	0-19	0-50	
												Silent mode (>1 sec)	20-25	51-64	
												No function	26-39	65-99	
												PWM Frequency: 582 Hz-618 Hz (>1 sec)	40-78	100-200	
												Control all (copy output 1 to all outputs) (>0.5 sec)	79-97	201-247	
												Reset all fixtures (>0.5 sec)	98-100	248-255	
Output												Individual Head Functions	%	DMX	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)				
3	12	21	30	39	48	57	66	75	84	93	102	Intensity, 0-100%		0-100	0-255
4												Shutter			
												Shutter closed	0-5	0-15	
												Random strobe, slow to fast	6-18	16-47	
												Ramp up, random / slow to fast	19-31	48-79	
												Ramp down, random / slow to fast	32-43	80-111	
												Pulse, random / slow to fast	44-56	112-143	
												Strobe with b/o pause, random / slow to fast	57-78	144-199	
												Strobe, slow to fast	79-94	200-239	
												Shutter open	95-100	240-255	
5												Fixed Colors²			
												RGBW control	0-2	0-7	
												Red	3-5	8-15	
												Amber	6-8	16-23	
												Warm Yellow	9-12	24-31	
												Yellow	13-15	32-39	
												Green	16-18	40-47	
												Turquoise	19-21	48-55	
												Cyan	22-24	56-63	
												Blue	25-27	64-71	
												Lavender	28-30	72-79	
												Mauve	31-34	80-87	
												Magenta	35-37	88-95	
												Pink	38-40	96-103	
												White – CTO, 3200K	41-43	104-111	
												White, 5600K	44-46	112-119	
												White – CTB, 7200K	47-49	120-127	
												Rainbow Effect Stop	50	128	
												Rainbow Effect, slow to fast	51-88	129-223	
												Random Colors, slow to fast	89-100	224-255	
6	15	24	33	42	51	60	69	78	87	96	105	Color mixing: Red		0-100	0-255
7	16	25	34	43	52	61	70	79	88	97	106	Color mixing: Green		0-100	0-255
8	17	26	35	44	53	62	71	80	89	98	107	Color mixing: Blue		0-100	0-255
9	18	27	36	45	54	63	72	81	90	99	108	Color mixing: White		0-100	0-255
10	19	28	37	46	55	64	73	82	91	100	109	Zoom, wide (flood) to narrow (spot)		0-100	0-255
11												Color Correction			
												no function	0-3	0-7	
												Color correction: 10,000K to 2700K	4-100	8-255	

¹ ATOM PSU-6 requires 56 channels, ATOM PSU-12 requires 110 channels. We suggest patching the PSU as a 2-channel fixture and each connected Atom head as a 9-channel fixture.

² Any of the 12 named colors (excluding white) may be used to start a synchronized rainbow effect.

8.2 Normal Mode, Tunable White Heads: 38/74 DMX Channels

Channel ¹												Function	%	DMX
1												Master Intensity (all outputs), 0-100%	1-100	0-255
2												Special Functions		
												No function	0-19	0-50
												Silent mode (>1 sec)	20-25	51-64
												No function	26-39	65-99
												PWM Frequency: 582 Hz-618 Hz (>1 sec)	40-78	100-200
												Synchronize all with Output 1 (>0.5 sec)	79-97	201-247
												Reset all fixtures (>0.5 sec)	98-100	248-255
Output												Individual Head Functions	%	DMX
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)			
3	9	15	21	27	33	39	45	51	57	63	69	Intensity, 0-100%	0-100	0-255
4												Shutter		
												Shutter closed	0-5	0-15
												Random strobe, slow to fast	6-18	16-47
												Ramp up, random / slow to fast	19-31	48-79
												Ramp down, random / slow to fast	32-43	80-111
												Pulse, random / slow to fast	44-56	112-143
												Strobe with b/o pause, random / slow to fast	57-78	144-199
												Strobe, random / slow to fast	79-94	200-239
												Shutter open	95-100	240-255
5												White balance: Cool White	0-100	0-255
6												White balance, Warm White	0-100	0-255
7												Zoom, wide (34° flood) to narrow (3.5° spot)	0-100	0-255
8												Color Correction²		
												no function	0-3	0-7
												Color correction, cold (10,000K) to warm (2700K)	4-100	8-255

¹ ATOM PSU-6 requires 38 channels, ATOM PSU-12 requires 74 channels. We suggest patching the PSU as a 2-channel fixture and each connected Atom head as a 6-channel fixture.

² Color correction can be applied in addition to cool white/warm white balance.

8.3 Compressed Mode, RGBW Heads: 38/74 DMX Channels

Channel ¹												Universal Functions	%	DMX
1												Master Intensity, 0-100%	1-100	0-255
2												Special Functions		
												No function	0-19	0-50
												Silent mode (>1 sec)	20-25	51-64
												No function	26-39	65-99
												PWM Frequency: 582 Hz-618 Hz (>1 sec)	40-78	100-200
												Synchronize all with Output 1 (>0.5 sec)	79-97	201-247
												Reset all fixtures (>0.5 sec)	98-100	248-255
Output												Individual Head Functions	%	DMX
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)			
3												Shutter		
												Shutter closed	0-5	0-15
												Random strobe, slow to fast	6-18	16-47
												Ramp up, random / slow to fast	19-31	48-79
												Ramp down, random / slow to fast	32-43	80-111
												Pulse, random / slow to fast	44-56	112-143
												Strobe with b/o pause, random / slow to fast	57-78	144-199
												Strobe, random / slow to fast	79-94	200-239
												Shutter open	95-100	240-255
4												Color mixing: Red	0-100	0-255
5												Color mixing: Green	0-100	0-255
6												Color mixing: Blue	0-100	0-255
7												Color mixing: White	0-100	0-255
8												Zoom, wide (34° flood) to narrow (3.5° spot)	0-100	0-255

¹ ATOM PSU-6 requires 38 channels, ATOM PSU-12 requires 74 channels. We suggest patching the PSU as a 2-channel fixture and each connected Atom head as a 6-channel fixture.

9 Cleaning and Maintenance



Disconnect the PSU from AC mains power before performing any maintenance. Allow lighting heads to cool for at least 15 minutes.

Never use alcohol or solvents to clean the lens! Never let optical parts come into contact with oil, grease, alcohol or similar solvents.

Never touch lens with bare fingers.

Before running the fixture wait until all parts are dry.

9.1 Cleaning

X4 ATOM components require occasional cleaning to prevent the buildup of dust, dirt, and smoke fluid residue. Pay special attention to the air vents (on PSU and heads), and front lens. Failure to keep the PSU and heads clean will significantly reduce light output and may cause damage. Regular cleaning will ensure the maximum performance and reliable operation.

A soft lint-free cloth moistened with any good glass cleaning fluid is recommended to clean the lens.

The cleaning schedule depends on the operating environment. The intervals below are suggestions from our experience with typical installations. Adjust as necessary.

Location	Interval	Method
Lens	weekly	soft brush /lint-free cloth
Fan and air vents	monthly	vacuum cleaner, airbrush, etc.

9.2 Fuse replacement

Disconnect the PSU from AC mains power before replacing the fuse.

If the PSU fails to power up when connected to a known-good source of AC power, replace the main fuse. The fuse is located in a panel-mounted holder next to the power switch.

Always disconnect the PSU from the mains supply to change the fuse and use only the 5 x 20 mm micro-fuse listed below for your PSU.

- X4 ATOM PSU 6: T5A
- X4 ATOM PSU 12: T10A

The X4 ATOM head does not have a user-replaceable fuse.

10 Technical Specifications

10.1 X4 Atom RGBW and CWWW Head Specifications

Power supply	
Power consumption	25 VA (Watt)
Power & Signal Input	1 x 4-pin XLR: Power (24V) & Signal (RS-485) from X4 Atom PSU: Pin 1 = [Ground] Pin 2 = [Data +] Pin 3 = [Data -] Pin 4 = [V+ 24V]
Max. cable length from PSU	60m 200ft
Operational Parameters	
Max. Ambient Temperature	5° - 45°C (integrated overheating switch) 40°-113°F
Protection	IP 65 rated (only if connected with IP65 rated XLR connector)
Mounting Position	Any (see relevant chapter in the manual)
Lighting System - Additive Color mixing	
LED Type	1 x Osram Ostar RGBW multi-chip
Lifetime	50,000 h
Wavelength optimized for maximum presentable color space	
Optical System	
Full RGBW / High efficiency lens system for maximum output	
Shutter / Dimmer	
Strobe- Effect with variable speed between 1-10 flashes per second Random- & Pulse-Effects	
Continuous Dimmer 0 - 100%	
Zoom	
3.5 to 34 degree continuous high speed zoom	
Weights and Measures	
Length	127 mm / 5''
Width	127 mm / 5''
Height	169 mm / 6.63''
Weight (net)	1.4 kg / 3 lbs.
Length (with yoke)	127 mm / 5''
Width (with yoke)	178 mm / 7''
Height (with yoke)	248 mm / 9.75''
Weight (with yoke)	1.8 kg / 4 lbs.

10.2 X4 ATOM PSU12 Specifications

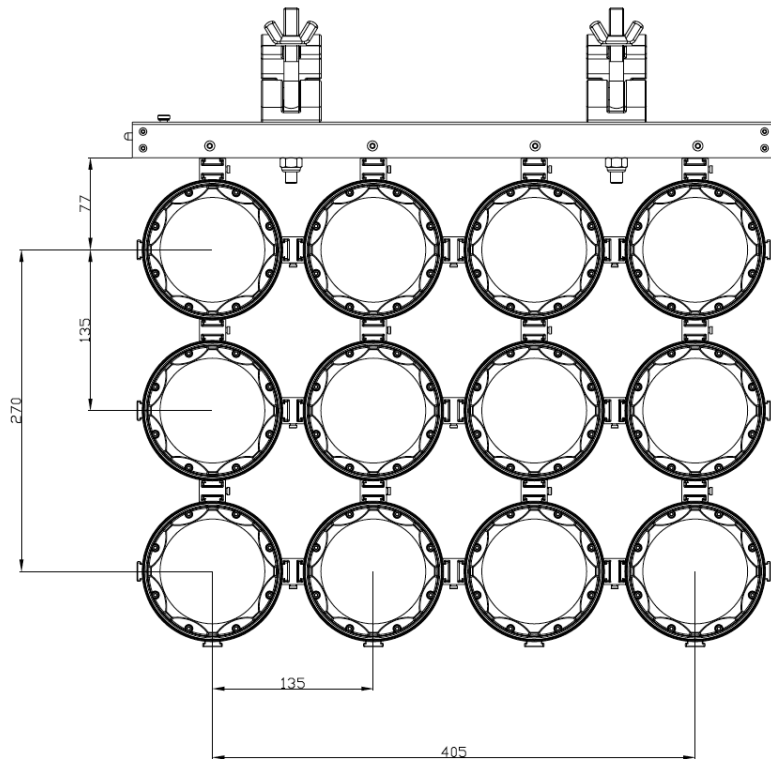
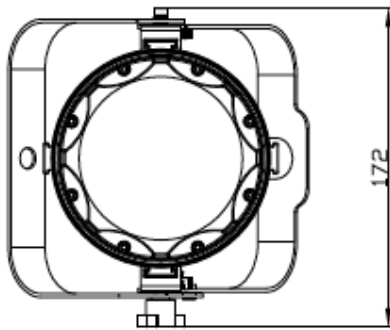
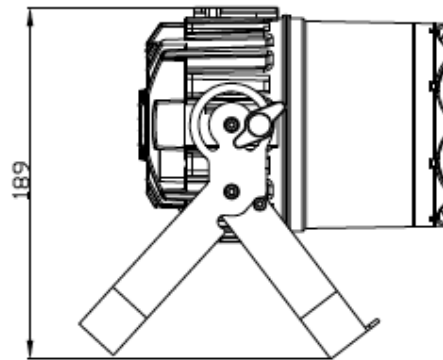
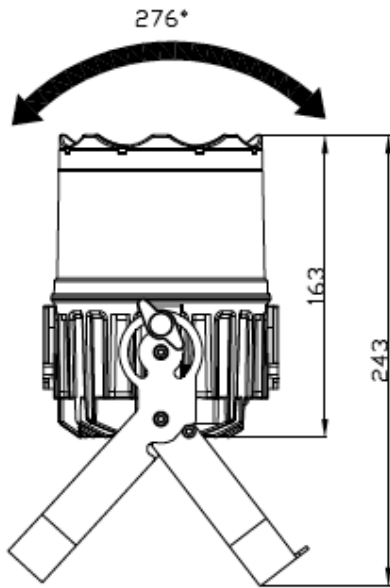
Power supply	
Power consumption	Max. 350 VA (Watt) / 25VA (Watt) per X4 Atom head
Power input	Auto sensing 90-240 V AC, 50-60 Hz
Mains in connector	PowerCON (blue) max 20A
Mains out connector	PowerCON (white) max 18A
Output to Atom head	12 x 4-pin XLR Power (24V) & Signal (RS-485) to X4 Atom head: Pin 1 = [Ground] Pin 2 = [Data +] Pin 3 = [Data -] Pin 4 = [V+ 24V]
Max. cable length to Atom head	60m per output 200ft per output
Fuse protection	Micro-fuse 5x20 mm, T10A
Operational Parameters	
Max. Ambient Temperature	5° - 45°C (integrated overheating switch) 40°-113°F
Protection	IP20 rated
Mounting Position	Any (see relevant chapter in the manual)
Rigging Options	
1 x M10 socket	For direct coupler
2 x Camlock	For omega bracket
2 x Attachment point	For safety cable
Data Entry	
Backlit Graphic LCD Display with 4 button control for addressing and other settings	
DMX Control	
Standard USITT DMX-512, 5-pin XLR: Pin 3 = [+] Pin 2 = [-] Pin 1 = [Ground] Pin 4 & 5 not connected The DMX- Addressing starts at the DMX channel [001]	
Weights and Measures	
Length	324 mm / 12.75"
Width	206 mm / 8.11"
Height	158 mm / 6.22"
Weight (net)	4.1 kg / 9 lbs.

10.3 X4 ATOM PSU6 Specifications

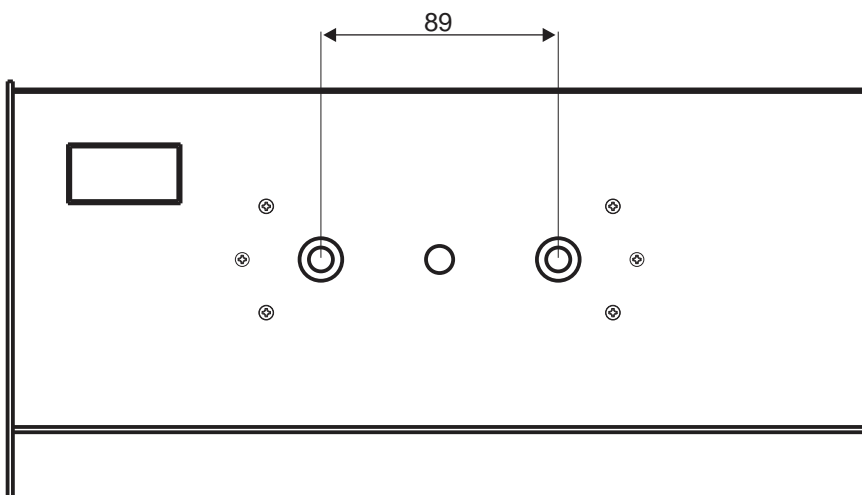
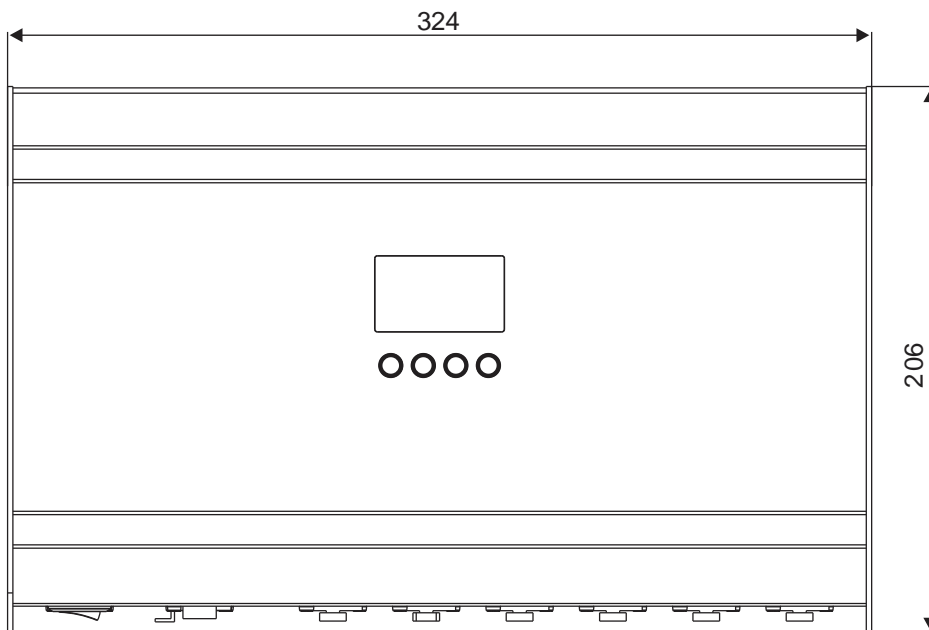
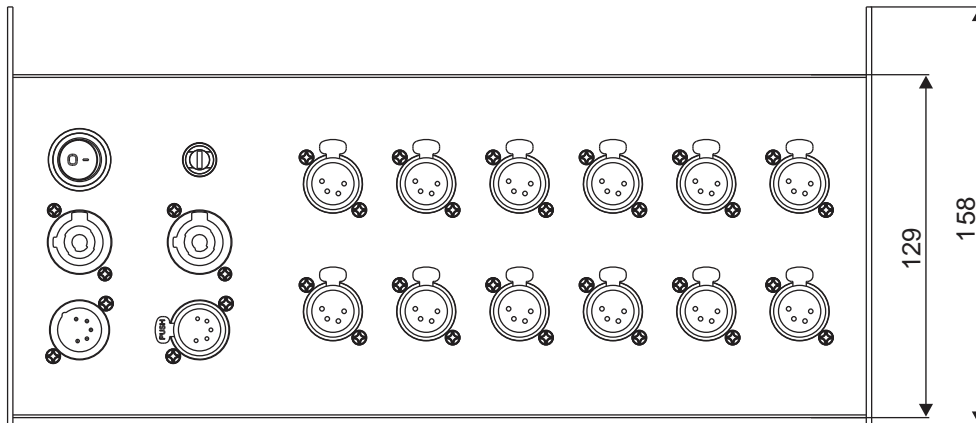
Power supply	
Power consumption	Max. 350 VA (Watt) / 25VA (Watt) per X4 Atom head
Power input	Auto sensing 90-240 V AC, 50-60 Hz
Mains in connector	PowerCON (blue) max 20A
Mains out connector	PowerCON (white) max 18A
Output to Atom head	12 x 4-pin XLR Power (24V) & Signal (RS-485) to X4 Atom head: Pin 1 = [Ground] Pin 2 = [Data +] Pin 3 = [Data -] Pin 4 = [V+ 24V]
Max. cable length to Atom head	60m per output 200ft per output
Fuse protection	Micro-fuse 5x20 mm, T5A
Operational Parameters	
Max. Ambient Temperature	5° - 45° C (integrated overheating switch) 40°-113° F
Protection	IP20 rated
Mounting Position	Any (see relevant chapter in the manual)
Rigging Options	
1 x M10 socket	For direct coupler
2 x Camlock	For omega bracket
2 x Attachment point	For safety cable
Data Entry	
Backlit Graphic LCD Display with 4 button control for addressing and other settings	
DMX Control	
Standard USITT DMX-512, 5-pin XLR: Pin 3 = [+] Pin 2 = [-] Pin 1 = [Ground] Pin 4 & 5 not connected The DMX- Addressing starts at the DMX channel [001]	
Weights and Measures	
Length	254 mm / 10.0"
Width	206 mm / 8.11"
Height	133 mm / 5.24"
Weight (net)	4.1 kg / 9 lbs.

11 Dimensions

11.1 X4 Atom Head Dimensions



11.2 X4 Atom PSU 12 Dimensions



11.3 X4 Atom PSU6 Dimensions

