*i*Solution™ by Acme
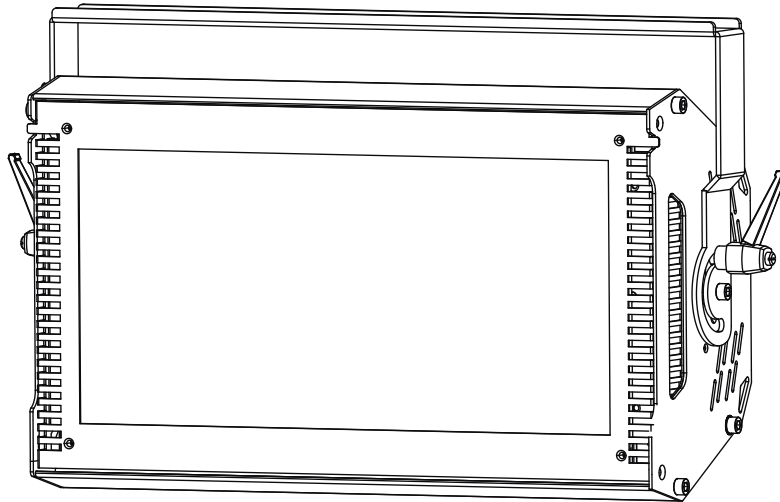
Your *i*ntegrated Solution

ATOM3000

User Manual

Please read before use

Table of Contents

1. Safety Information

Warning: **This product is for professional use only! It is not for domestic use.**

The Atom 3000 presents risks of lethal or severe injury due to fire and heat, electric shock and ultraviolet radiatio. Flashing light is also known to trigger epileptic seizures in persons who are photosensitive. Read this manual before powering or installing the fixture, follow the safety precautions listed below and observe all warnings in this manual and printed on the fixture.

To guard against electric shock

- Disconnect the fixture from AC power and allow the flash capacitor to discharge for 1 minute before changing the lamp or fuse, and when not in use.
- Do not remove the rear cover: there are no user-serviceable parts inside.
- Always ground (earth) the fixture electrically.
- Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault protection.
- Do not expose the fixture to rain or moisture.

Replace the lamp only as described or have it replaced by an authorized service technician.

To guard against UV radiation, burns, and fire

- Never operate the fixture with the front glass open, missing or damaged.
- Do not stare directly into the light. Never look at an exposed lamp while it is lit.
- Replace the lamp when it becomes defective or worn out.
- When replacing the lamp, allow the fixture to cool for at least 10 minutes before opening the fixture or removing the lamp.
- Never attempt to bypass the fuse. Always replace defective fuses with ones of the specified type and rating.
- Verify that the power feed cable is rated for the current draw of all connected fixtures.
- Keep all combustible materials (for example fabric, wood, paper) at least 0.5 meters (20 inches) away from the fixture. Keep flammable materials well away from the fixture.
- Minimum distance to illuminated surface is 10 meters.
- Provide a minimum clearance of 0.1 meters (4 inches) around air vents.
- Never place filters or other materials over the front glass cover.
- The exterior of the fixture can reach temperatures up to 120° C (248° F). Allow the fixture to cool for at least 15 minutes before handling.
- Do not modify the fixture or install other than genuine parts.
- Do not operate the fixture if the ambient air temperature (Ta) exceeds 40° C (104° F).

To guard against falls

- When suspending the fixture above ground level, verify that the structure can hold at least 10 times the weight of all installed units.
- Verify that all external covers and rigging hardware are securely fastened and use an approved means of secondary attachment such as a safety cable.
- Block access below the work area whenever installing or removing the fixture.

To guard against epileptic seizure

- Do not operate the fixture near stairways.
- Provide advance notice that strobe lighting is in use.
- Avoid extended periods of continuous flashing, particularly at frequencies of 10 to 20 flashes per second.

2. Rear Panel
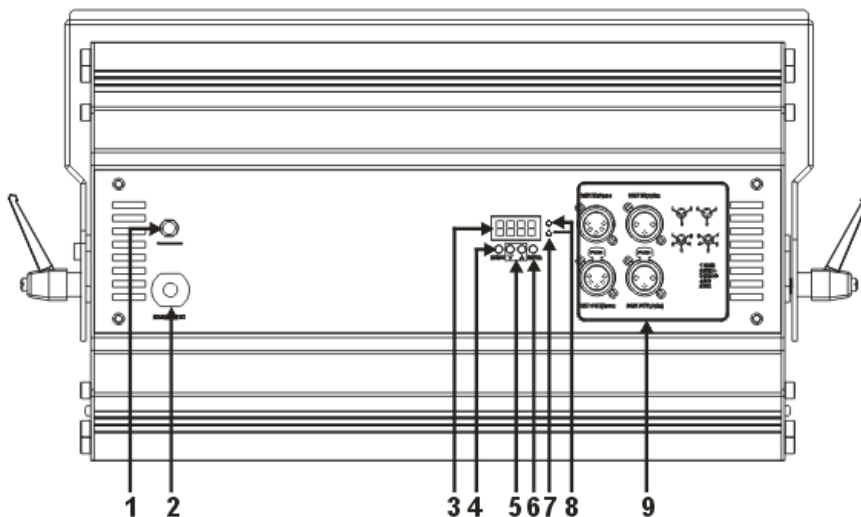
1, Fuse Holder
2, Main Power
3. LED display
4, Menu button
5, UP/DOWN button
6, Enter button
7, Flash indicator
8, DMX signal indicator
9, DMX input/output

3. Preparation for Use

UNPACKING

The Atom 3000 comes with the following items:

- PX-3000xenon lamp (installed)
- Mounting bracket
- User manual
- The packing material protects the fixture during shipment; always use it to transport the fixture.

AC POWER CONNECTION

- The Atom 3000 should be connected with AC power 230V, 50/ 60Hz.
  Use a 32amp 10.3 x 38mm time-delay fuse.
- Use 14 AWG or 2.5 mm2 minimum power feed cables and keep runs as short as possible.

To install a plug on the mains lead

The mains lead must be fitted with a heavy duty power connector with ground connection. A 13A plug is not suitable. Consult a qualified electrician if you have any doubts about proper installation.

Wire	Pin	Marking
brown	live	"L"
blue	neutral	"N"
yellow/green	ground	

Table1: Cable connection diagram

INSTALLATION

The Atom 3000 may be installed in any orientation. The mounting bracket provides five 12 mm holes for direct fastening or attachment of rigging clamps.

To install the mounting bracket

1. Place the fixture face down on a flat surface.
2. Place an aluminum washer on each mounting bracket stud.
3. Check the direction of the left and right sides of the bracket and lock the screws before fitting. After that, tighten one hand knob to lock the mounting bracket in one end of bracket and then the other.

4. Replace the Lamp and Fuse

This section describes the lamp options, the lamp power setting, and how to replace the lamp and fuse. The lamp is electronically regulated to prevent overheating. Lamp regulation can be seen, for example, by the gradually decreasing intensity of the blinder effect.

APPROVED LAMP

Warning: Only PX-3000 xenon lamps are approved in the Atom 3000. Installing a lamp that is not approved may create a safety hazard or damage the fixture!

To replace the lamp

Warning: Verify that the fixture is disconnected from the AC power before opening the front cover! Also, pay attention to the location and installation of cabling before replacement.

1. Disconnect the fixture from the AC power and allow the capacitor to discharge for 1 minute.
2. When the fixture is cool, remove the two marked screws on the sides of the fixture and open the front glass cover.
3. Disconnect the lamp wires at the screw terminals. Lift the old lamp out of the holder.
4. Replace with the new lamp.
5. Lift and turn the lamp over so that the leads loop around the ends as shown, then press the lamp into the clips.
6. Close the front cover and tighten the side screws before applying power.
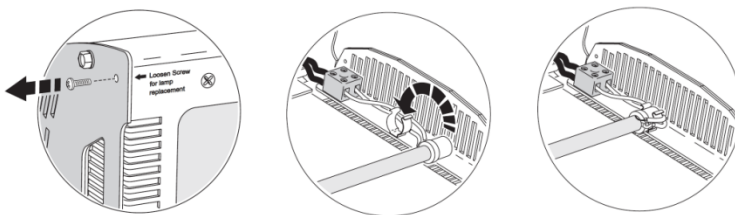
FUSE REPLACEMENT

The Atom 3000 uses a 32 amp time-delay fuse for protection against current overload. If the power diode does not light when power is applied, the fuse may be spent. If the fuse blows repeatedly, there is a fault with the unit that requires service by an authorized technician.

To replace the fuse

1. Disconnect the fixture from the AC power.
2. Unscrew the fuse holder, located on the side plate nearest the power cord. Remove the spent fuse from the holder and replace it with a 32 amp 10.3 x 38 mm time-delay fuse.
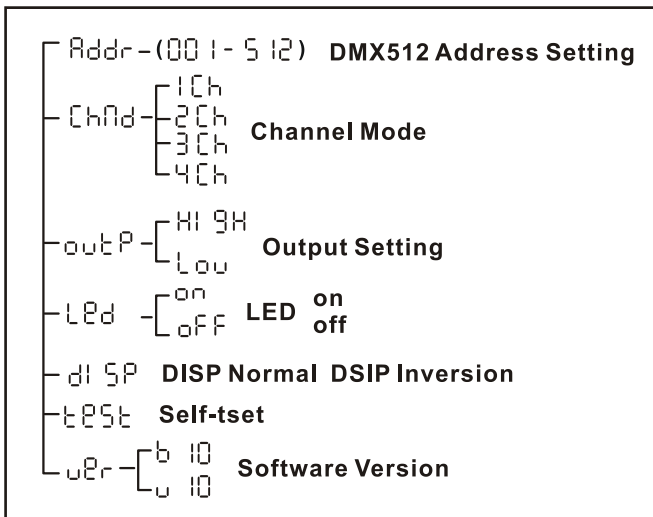3. Replace the fuse holder in the side plate.

5. CONTROLLER OPERATION

This section describes how to operate the Atom 3000 with a DMX controller.

5.1 Main function

Press MENU button and enter the function, then use UP/DOWN or MENU buttons to select the function you want, press ENTER button to confirm the function you selected. Wait for 8 seconds to return to the main menu or hold the MENU button for 1 second.

The main menu as follow:

```
┌ Addr-(001-512)   DMX512 Address Setting
│         ┌1Ch
├ ChMd ─┤2Ch    Channel Mode
│         ├3Ch
│         └4Ch
│        ┌HIGH
├ outP ─┤        Output Setting
│        └Lou
│        ┌on
├ Led ─┤        LED  on
│        └oFF         off
├ diSP   DISP Normal  DSIP Inversion
├ tESt   Self-tset
│       ┌b 10
└ uEr ─┤        Software Version
        └u 10
```

5.2 ⌐Addr⌐ DMX 512 address setting

Select ADDR option and the display will blink, press ENTER button to confirm your selection. You can check the current DMX address on the LED display. The DMX address can be changed by pressing the UP/DOWN buttons and then press the ENTER button to confirm your selection. Wait for 8 seconds to return to the main menu or hold the MENU button for 1 second.

5.3 ⌐ChMd⌐ Channel mode setting

Select CHMD option, press ENTER button to confirm your selection. Change the channel way (1/2/3/4/REM) by press UP/DOWN button. Press the ENTER button to confirm your selection. Wait for 8 seconds to return to the main menu or hold the MENU button for 1 second.

1-CH MODE	2-CH MODE	
	CH1 Flash duration Flash rate	CH2 Flash intensity

1-CH MODE	CH1 Flash duration / Flash rate	CH2 Flash intensity
255 ⚡⚡⚡ — Continuous "Blinder" — 250 — Flash rate, slow to fast ⚡⚡ — 5 ⚡ — Blackuot — 0	255 ⚡⚡⚡ — BLINDER FUNCTION — 247 ⚡⚡ — FLASH RATE FROM SLOW TO FAST — 37 ⚡ — 1 FLASH TRIGGER — 5 — Blackuot — 0	100% — 255 — Minimum to maximum — 5 — Blackuot — 0 — 0%

3-CH MODE		
CH1 Flash intensity	CH2 Flash duration	CH3 Flash rate
100% — 255 — Minimum to maximum — 5 — Blackuot — 0 — 0%	255 ⚡⚡⚡ — ⚡⚡ — 0 ⚡	255 ⚡⚡⚡ — ⚡⚡ — 5 — No flash (single flash with ch. 1) — 0 ⚡

4-CH MODE			
CH1 Flash intensity	CH2 Flash duration	CH3 Flash rate	CH4 Build-in effect
100% — 255 — Minimum to maximum — 5 — Blackuot — 0 — 0%	255 ⚡⚡⚡ — ⚡⚡ — 0 ⚡	255 ⚡⚡⚡ — ⚡⚡ — 5 — No flash (single flash with ch. 1) — 0 ⚡	215~255 **Spikes** 172~214 **Random** 129~171 **Lightning** 86~128 **Ramp up-down** 43~85 **Ramp down** 6~42 **Ramp up** 0~5 **No effect**

7A

5.4 `outP` **Output channel setting**

Select OUTP option, press ENTER button to confirm your selection. Select the output mode (high / low) by pressing the UP/DOWN buttons. Press theENTER button to confirm your selection. Wait for 8 seconds to return to the main menu or hold the MENU button for 1 second.

5.5 `LEd` **LED display setting**

Select the LED option, press ENTER button to confirm your selection. You can see the current ON/OFF status of LED display now. You can change its status by pressing the UP/DOWN buttons. Then press the ENTER button to confirm your selection. Wait for 8 seconds to return to the main menu or hold the MENU button for 1 second.

5.6 `di SP` **LED display direction setting**

Select DISP option, press ENTER button to confirm your selection. Select the DISP / DSIP by pressing the UP/DOWN buttons. Press the ENTER button to confirm your selection. Wait for 8 seconds to return to the main menu or hold the MENU button for 1 second.

5.7 `tESt` **Test setting**

Select TEST option, press ENTER button to confirm your selection. The flash indicator will light up and the unit will self-test automatically. The unit will test for 15 seconds then return to main menu. To go back to the main menu hold the MENU button for 1 second.

5.8 `uEr` **Check the version number**

Select the VER, press ENTER button to confirm. You can see the current version number now e.g. (b 10/v 10) and check it by using the UP/DOWN buttons. Wait for 8 seconds to return to the main menu or hold the MENU button for 1 second.

DMX CONTROL SUMMARY

Intensity

Flash intensity can be set from minimum (blackout) to maximum on channel 1 in the 3- and 4-channel DMX modes. Flash intensity can be set from minimum (blackout) to maximum on channel 2 in the 2-channel DMX mode.

The maximum intensity can be reduced by selecting low power mode.

Duration

The flash duration can be set from 0 to 650 ms on 50 Hz power supplies, or 0 to 530 ms on 60 Hz power supplies.

Rate

The flash rate can be set from 0 flashes per second to 17.5 flashes per second Hz on 50 Hz power supplies, or from 0 to 20 flashes per second on 60 Hz power supplies.

Built-in effects

Six programmed effects are available on channel 4 in the 4-channel DMX mode only. The effects may be altered using the intensity, duration, and rate controls.

- Ramp up: Light gradually increases in intensity, then blacks out.
- Ramp down: Light flashes to full intensity, then gradually fades.
- Ramp up-down: Light gradually increases and decreases.
- Random flash: Light flashes randomly with variable rate and intensity. Multiple units flash independently of each other.
- Lightning: The flashes simulate lightning. Duration is not adjustable.
- Spikes: The lamp remains dimly illuminated between flashes. Set flash intensity, duration, and rate.

Blinder effect

The blinder effect, in which the light remains on for an extended period, is available in all DMX modes. In the 3 and 4 channel modes, the effect is achieved by the combination of flash duration and rate. For example, the blinder effect can be achieved with a flash duration of 0.25 seconds (250 ms) and a flash rate of 4 flashes per second, or a flash duration of 0.05 seconds (50 ms) and a flash rate of 20 flashes per second.

In 3 and 4 channel DMX modes the intensity of the blinder effect is controllable on channel 1. Lamp power is electronically regulated to prevent the lamp from overheating. The intensity falls as power is reduced.

Single Flash

To trigger single flashes, start with the intensity and flash rate at 0 and then set the intensity on channel 1. When the value of channel 1 is changed, the light will flash once with the programmed intensity, duration, and effect.

6. Technical Specifications

AC power . . . . .200 - 240 V nominal, 50/60 Hz

Peak current consumption . . . . 30 A

Typical current consumption . . . . .8 A

AC mains power cable . . . . 14 AWG or 2.5 mm2

Xenon strobe lamp PX-3000

Dimension . . . . 523×154×292mm

Weight 6.7kg

Ambient air temperature . . . . .40° C (104° F)

 Primary fuse . . . . 32 amp

Safety Installation Distance

 Minimum distance to combustible materials. . . . .0.5 m

 Minimum distance to illuminated surfaces 10m
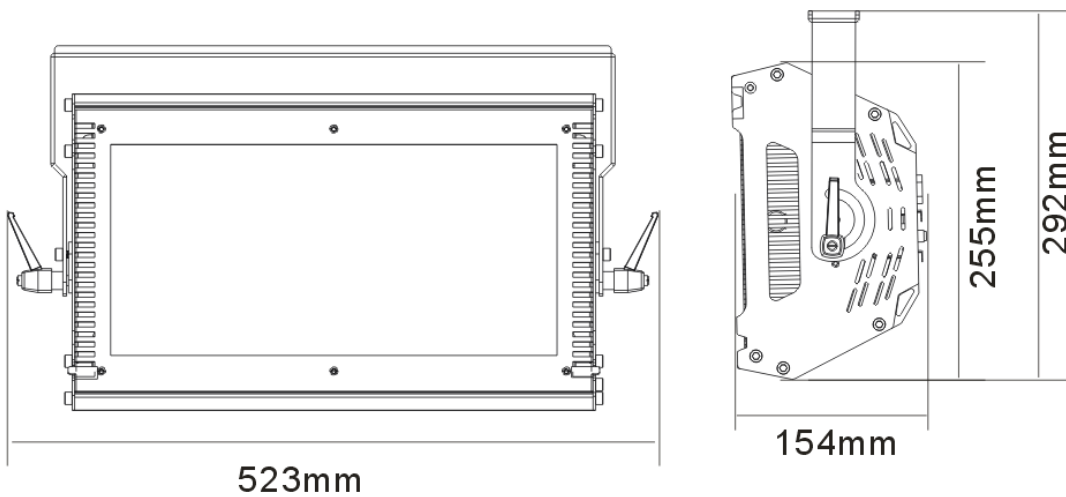
Innovation, Quality, Performance