AYRA

AYRA ALO 019

Dual LED scanner

User manual

Safety precautions

WARNING: This unit may cause serious injury to the eyes when used incorrectly. It is therefore strongly advised to read this user manual carefully, to get familiar with the functions of this device.

WARNING: This unit must be operated by, or under the supervision of an adult. This device is not suitable for children.

WARNING: Do not look directly into the beam from a short distance. This may cause serious injury to the eyes. Ayra is not responsible for any injuries caused by incorrect use of this device.

Installation requirements:
- Always check the power supply to which you want to connect the device. If the voltage requirements do not meet, do not connect the device as this may cause serious damage.
- This device must be installed by a professional technician, in a standing or hanging position. Only use the included mounting bracket if you want to position the unit against a ceiling or truss system.
- When installed in a hanging position above your audience, this unit **MUST** be secured by using a safety cable, capable of holding 10x the weight of this device.
- The unit is designed to be installed with a halfcoupler or G-clamp, by using the included mounting bracket. Direct installation with proper bolts is also possible.
- Make sure there are no flammable objects in the direct environment of the device.
- Do not block the beam-exit.
- Keep a minimum distance of 0.25 meter from any walls to provide sufficient cooling.
- Make sure the beam-exit is not blocked by any objects in the near environment.
- Always use the included power supply. Contact your local dealer for a replacement unit if necessary.

Maintenance and protection
- Keep the unit away from dusty environments, as this may have negative effects on the ventilation and optics. Clean the optics with a small, soft brush and vacuum cleaner when needed. Clean the housing of the unit with a damp cloth. **WARNING:** Always disconnect the unit from the power supply when cleaning the unit. Reconnect the unit only when any moist on the fixture has evaporated completely.
- Do not switch the power on and off frequently, as this may cause serious damage to the unit.
- Avoid heavy shocks and collision during transport and use, as this may cause damage to the LED light source, electronic circuit, optics and housing.
- Keep the device away from moisture, rain, water or any liquids as this may cause a short circuit and/or electric shocks. If any liquid enters the unit, power supply or housing of the unit, disconnect the unit immediately and do not reconnect the power supply. Contact your local dealer or technician to inspect the unit for any damage.

Box contents

Box contents
1x ALO 019 fixture
1x power cable

Unit and accessory inspection
- Always use the supplied power cable to connect the unit to a power supply. If the cable appears broken or has visible damage, do not use it.
- If the unit is not going to be used for a longer period of time, disconnect it from the power supply and store it in a dust-free environment.
- Always check the unit for possible damage before use. If you suspect that something is wrong with the unit, do not connect it to a power source! When you suspect that your unit is broken or damaged, contact your local dealer or a certified technician to inspect the unit.
- When your device does not generate any light, do not look directly into the lens. When the fixture suddenly produces a beam, it may cause injury to your eyes.

Device overview

1. Moving mirrors
2. Adjustable bracket
3. IEC Power inlet with integrated fuse holder
4. DMX dipswitch
5. Built-in microphone for sound active mode
6. Microphone sensitivity
7. DMX input (3P XLR)
8. DMX output (3P XLR)
9. Ventilation slot
10. Cooling fan

Setting up the unit

To activate the unit, connect the included power supply with the unit and a suitable 230V, 50 Hz power outlet. The unit will activate directly after it is plugged in to a wall outlet or other power source.

With the dipswitch panel, it is possible to change the DMX-address of the fixture, but it is also possible to change the working mode.

The following dipswitch-positions trigger certain working modes:

ON	OFF	Function
	1、2、3、4、5、6、7、8、9、10	Auto Run mode
9	1、2、3、4、5、6、7、8、10	Sound active mode
1、2、3、4、5、6、7、8、10	9	Master/slave mode
10	1、2、3、4、5、6、7、8、9	DMX512

The several working modes explained:

Auto run mode:
The fixture will run its automatic internal program on a predefined speed.

Sound active mode:
The fixture will run its automatic internal program on the beat of the music, with the built-in microphone. The microphone sensitivity is adjustable with a potentiometer, located at the bottom of the fixture, below the microphone.

Please note that the fixture will not (properly) respond to high frequencies. It is also possible that speakers are placed too far away from the fixture, which may cause non-responsive behavior in relation to the music.

Master/slave mode:
It is possible to connect several ALO 019 fixtures with standard XLR – XLR cables, without the use of a DMX-controller. In this mode, the first fixture in the chain will perform as master (in the automatic or music controlled mode). The other fixtures in the chain, set to slave-mode, will mimic the performance of the first fixture, for synchronized lightshows.

DMX-512 mode:
With this feature, you have full control over the functions of the ALO 019 dual LED scanner. This requires a DMX controller or DMX software.

A full description of the DMX channels and values for certain actions can be found on the next page of this product manual.

Channel	Value	Function
1CH	0-1	Auto clockwise right mirror rotation
	2-199	Individual control of right mirror (0-360°)
	200-255	Auto anti-clockwise right mirror rotation
2CH	0-1	Auto clockwise left mirror rotation
	2-199	Individual control of left mirror (0-360°)
	200-255	Auto anti-clockwise left mirror rotation
3CH	0-255	Mirror rotation speed (0=fast, 255=slow)
4CH	0-4	Blackout
	5-9	Right mirror auto letter run
	10-14	Right mirror rotating pattern
	15-114	Right mirror letter selection
	145-255	Right mirror pattern selector
5CH	0-4	Blackout
	5-9	Left mirror auto letter run
	10-14	Left mirror rotating pattern
	15-114	Left mirror letter selection
	145-255	Left mirror pattern selector
6CH	0-255	Pattern Speed

Installation and maintenance

Mounting the bracket
A pre-mounted hanging bracket is provided, with screwknobs at both sides of the fixture. This bracket can be used to install the unit to a fixed structure, such as a T-bar or truss.

Installing the scanner in a hanging position
When you wish to hang the scanner against a wall, ceiling or beam, make sure to use proper installation tools and let a skilled technician install the scanner for you.

When you wish to install the scanner to a lighting stand or truss system, use a G-clamp or halfcoupler for optimal, safe and stable fixation. Check the technical specifications of your light stand or truss system to gather more information on maximal loads and other safety precautions.

Transport
When using this fixture in mobile setups, provide sufficient protection during transport. Use the original packaging of this unit, or use a professional flightcase with proper foam inlay. This way the electronics, optics and housing are protected against severe shocks, exterior damage and failing electronics.

Replacing the internal fuse
First check whether a failing power supply may be the cause of malfunction. When you suspect that the internal fuse is broken, the fuse can be replaced by removing the fuse cover, located directly below the power inlet.

WARNING: Before changing the fuse, always disconnect the fixture from your wall outlet or any other power supply to prevent electric shocks.
Always replace a broken fuse with a fuse that has the same type and rating. After the fuse has been replaced, always close the fuse-cover. Reconnect the fixture to your power supply and check whether the problem is solved. When this does not solve your problem, contact your local dealer for help.

Spare parts
This unit has no user serviceable parts inside. When any damage to internal components occur, contact your local dealer or a specialized technician in order to repair the fixture.

Cleaning:
Clean the housing of the fixture frequently with a damp cloth, to remove dust and/or dirt. **WARNING:** Always disconnect the fixture from your wall outlet or other power supply and let the fixture dry before reconnecting it. This prevents possible electrical shocks.

The lenses can be cleaned with a non-aggressive glass cleaning solution, but is not recommended. Ayra recommends to clean the mirror and lens with a fine brush, while removing dust and/or dirt with a vacuum cleaner. Avoid touching the lenses with your bare fingers, to prevent fingerprints on the optics.

Checkup
To prevent dangerous situations, make sure your fixture is in optimal condition before using it. Check your fixture frequently by using the following checklist:
- All screws must be mounted tightly.
- Check all screws and metal parts for corrosion. No visible corrosion may be present.
- The exterior of your fixture must be in optimal condition. Check your fixture for dents, cracks or missing parts.
- Your installation spot must be in optimal condition. Check your installation spot for corrosion, cracks,

dents and strength.
- Electrical components (connectors and cables) must be in optimal condition. Any form of damage (cuts, exposed wire cores or any other visual deformities should not be present.

If any visual or mechanical damage is detected, contact your local dealer or a specialized technician. Do not use a damaged or failing fixture.

Connectors and wiring schematics:

DMX-connections:

DMX-output
XLR mounting-socket:

1: Ground
2: Signal (−)
3: Signal (+)

DMX-input
XLR mounting-plug:

1: Ground
2: Signal (−)
3: Signal (+)

Electrical wiring:

Cable	Pin	International
Brown	Live	L
Blue	Neutral	N
Yellow/Green	Earth	⏚

Technical specifications

- compact dual LED scanner
- 128 x 5mm LEDs
- 64 red, 40 green, 24 blue LEDs, spread over 2 clusters
- each lens/mirror combination has its own LED cluster
- high power output thanks to lens optics
- sound-activated working mode, built-in microphone with adjustable sensitivity
- patterns adjustable for each lens
- mirror movement adjustable for each lens
- expected lifespan LEDs: 100.000h
- several LED patterns with adjustable speed
- complete alphabet included in the pattern selection for each cluster
- DMX-512, stand-alone, sound-control or master/slave mode
- DMX-connection with standard 3p XLR connectors
- Power consumption: 30W max
- working voltage: 100-240V AC, 50/60 Hz
- dimensions: 375 x 220 x 160 mm
- weight: 4.5 kg

Connectors:
- DMX: 3p XLR male and female
- Power: IEC power connector

Included accessories:
- Power cable with Shucko & IEC connectors