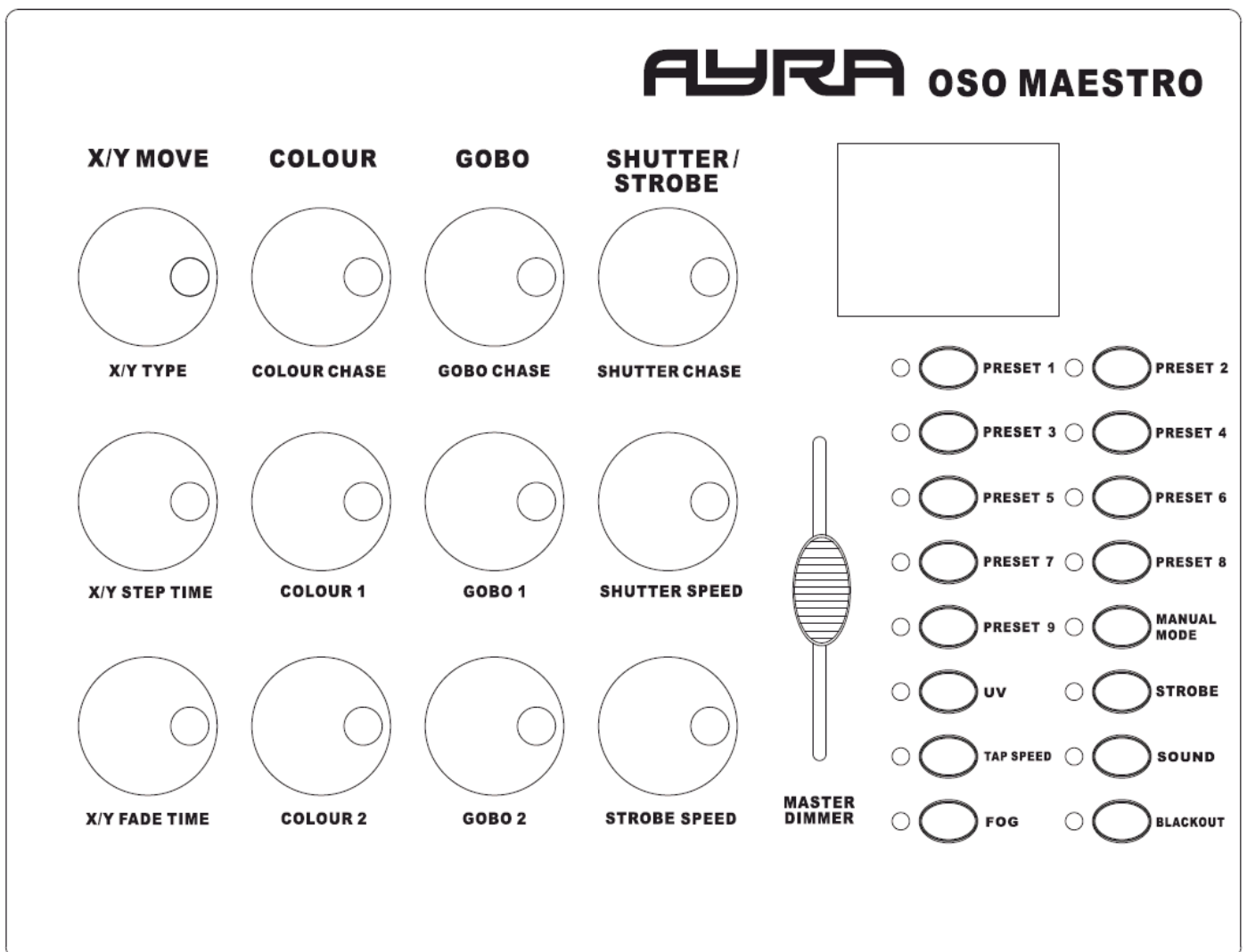


# ALURA

## OSO Maestro DMX controller



## User manual

The information in this user manual is subject to change at any time without notice.

Version: 1.0 Date of creation and author's initials:31-03-2018 RV Revision date and author's initials: -

# Introduction

Thank you for purchasing the Ayra OSO Maestro. This user-friendly DMX controller is designed for professionals and amateur light jockeys alike. The controller is unique because it is configured for use with a wide variety of Ayra fixtures. It is also fully pre-programmed so you can get started right away without having to create any programs first.

We advise that you read this user manual in its entirety before unpacking the contents of the box, so that you are familiar with all of the functionality that this product has to offer. Please be sure to check that all of the parts and accessories listed below under 'Box contents' are included in the package. In the event that the OSO Maestro 406 does not function properly, or if you have any issues while operating it, please remove the plug from the power socket and contact your dealer for assistance.

**Box contents:**

- OSO Maestro DMX controller
- connection cable from IEC C13 to Schuko, 1.5 mm<sup>2</sup>
- connection cable from IEC C13 to UK plug, 1.5 mm<sup>2</sup>

**Please inspect the device and the included accessories.**

Should you discover that either the device or one or more of the included parts have been damaged or rendered defective while in transit, please contact your dealer directly.

*Please note that the pictures in this user manual serve illustrative purposes only and may differ from the product you receive.*



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# Safety instructions



## WARNING!



Keep this device away from moisture, water and rain to avoid the chance of electric shocks.



## WARNING!



Only connect this device to a suitable power socket. This device functions on a specific power voltage. If it is plugged into a power socket with a different voltage, it could result in permanent damage and even dangerous situations such as fire or electric shocks.



## WARNING!



Be careful when operating this device. Touching the wires that are connected to the mains, inside or outside the device, could result in electric shocks.

Everyone involved with the installation, operation and maintenance of this device must:

- Be qualified
- Be skilled
- Have read the instructions in this user manual
- Be sure that neither the device nor the included accessories are damaged. Should the device or the included accessories be damaged, please contact your dealer for more information.
- Ensure that the device is in good working condition and is safe to operate. Please follow the advice and instructions as they are described in this user manual.

Damage caused by misuse and/or modifications made to the device are not covered by the warranty. This device does not contain any parts that need to be repaired or replaced by the user. Should maintenance or repairs be necessary, they must be handled by a qualified technician.

### Important information regarding health and safety:

- Do not remove any labels or stickers from this device.
- Do not leave any cables lying around.
- The device should not be opened up, and any hardware or software that may be present should not be modified.
- To achieve optimal performance, inputs on this device should not be fed with a signal higher than necessary.
- The device should only be used indoors; contact with water, rain and moisture should always be avoided. Do not place any objects containing liquid on top of the device.
- Remove the device from any nearby flames or heat sources; do not place it near flammable fluids, gases or objects.
- Disconnect this device from the power supply if it will not be used for a longer period of time, if maintenance is necessary, or if the device needs to be cleaned.
- Do not pull on the cable to remove a connector, as this could cause damage.

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- Do not use any cables other than the ones described in this manual. Do not use defective cables. Please contact your dealer if the included or necessary cables do not function properly with this device.
- Only use this device with a stable AC power supply.
- Only use this device with power from a grounded power source.
- In the event that the device is exposed to extreme temperature changes (e.g. transported through a cold outdoor environment into a warm indoor environment), it should not be turned on until it has reached room temperature. This is necessary to prevent moisture from forming in the device, which could lead to electric shocks.

#### **Guidelines and operation of this device:**

- This device is intended for use by professionals on stage, in theatres, in clubs, and in similar entertainment locations.
- This device is not suitable for use by children, and should always be operated by an adult.
- This device is designed for controlling light effects for entertainment purposes that are referred to in this user manual. Connecting any other devices can cause permanent damage to the equipment.
- This device may only be used in a suitable environment where no damage to the device can occur. Do not use the device in moist or dusty environments such as:
  - indoor swimming pools where chlorine is used
  - beaches where there is sand and salt
  - outdoors
  - indoors in spaces where intense heat sources are present, or where it reaches temperature levels that would be considered uncomfortable for a person
- Avoid impacts and collisions during use and transport. Do not transport the device while it is in use. Avoid using excessive force when installing and operating the device.
- The user should become familiar with the functions of the device before using it.
- Should the device not be used in the manner described in this user manual, damages or even injuries could occur. Ayra cannot be held responsible for any injuries or damages that occur as a result of improper use of this product.

#### **Storage and transport:**

- This product is designed for mobile use. Always transport the device in its original packaging or in a flight case (mounted in a 19-inch rack or secured by means of foam inlays.)
- This device is not designed for permanent (24/7) use. The expected lifespan of the device will not be affected by occasionally turning the device off. Disconnect the device or turn off the power when it is not actively in use.
- If the device will not be used for a longer period of time, it should be disconnected and stored in a dust-free environment.
- Do not expose the device to extreme temperature differences.




#### **Housing**

- Inspect the device's housing frequently, and always just before use. Avoid operating the device if there are large dents or cracks, or if screws are missing. Do not use the device if the housing is not in good condition. Contact your dealer or a qualified technician if you are unsure about the state of the device.
  - Check the device and the screws for corrosion. Corrosion must not be present on this device. Contact your dealer or a qualified technician if you find any corrosion on the screws.
- Every power and signal connector should be securely mounted. Do not use the device if the connectors are not secure.
- Avoid dust and dirt build-up. Clean the device once a month by disconnecting it from the power supply and wiping it down with a dry or slightly moist cloth. If the device is used frequently, the cleaning intervals should increase.

#### **Symbol explanation:**

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	<p><b>WEEE:</b> Ensure that this device is disposed of properly. This product falls under the WEEE (Waste Electrical and Electronic Equipment) directive. The requirements of this directive apply to all manufacturers and producers of electronic devices in the EU. Do not throw this product away with regular rubbish. Please contact your local authority for more information about how to recycle and dispose of these products in your region. By recycling this product in the proper manner, we can work together to ensure that we can continue to enjoy these kinds of products and still protect the environment as much as possible from pollution.</p>
	<p><b>CE:</b> The CE logo indicates that this product meets the European norms and requirements to which it must legally conform.</p>
	<p><b>Only suitable for indoor use:</b> this product was only designed for indoor use. The maximum environmental temperature must not exceed 40 degrees Celsius (104 degrees Fahrenheit).</p>

# AYRA

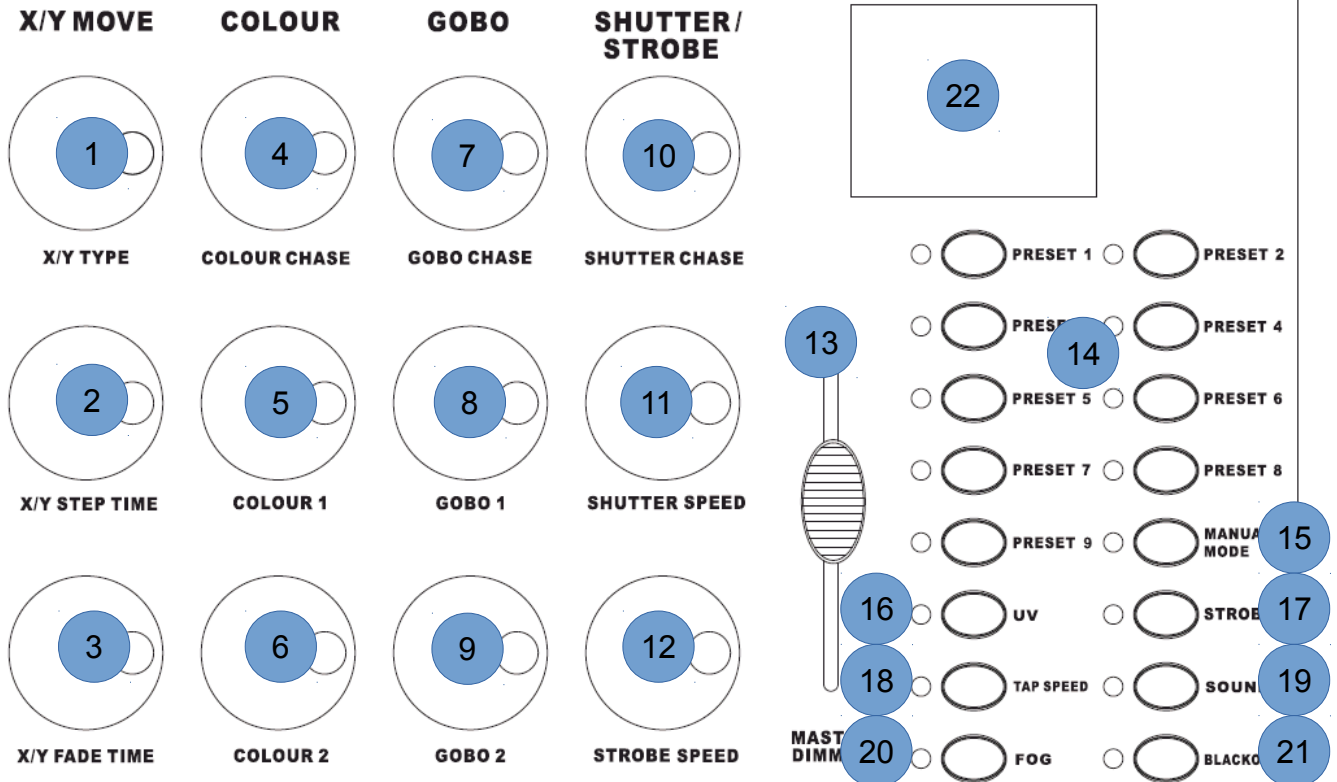
**Contact:**

Ayra professional lighting products  
 Verrijn Stuartweg 18  
 4462 GE Goes  
 The Netherlands

*Please do not send any products to this correspondence address.  
 Should you wish to send in a product for repair or for a refund, please contact your dealer for an RMA  
 (Return Merchandise Authorisation).*

# Guidelines and operation of this device

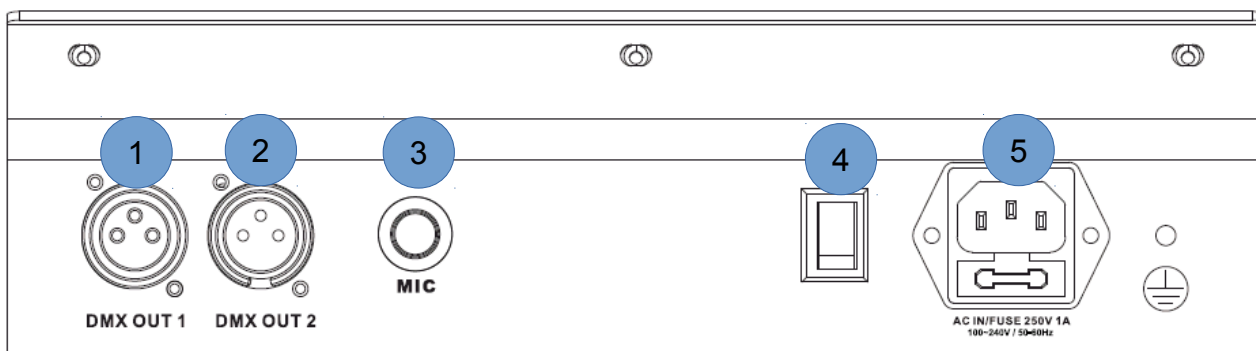
## ALURA OSO MAESTRO



1. Select X/Y type movement program	12. Select Stroboscope speed
2. Select X/Y step time speed	13. Master Dimmer fader (0-100% intensity)
3. Select X/Y fade time speed	14. Preset buttons 1-9
4. Select Colour chase	15. Manual mode button
5. Select Colour 1 (main colour)	16. UV activation button
6. Select Colour 2 (sub colour)	17. Stroboscope activation button
7. Select Gobo chase	18. Tap Speed function button
8. Select Gobo 1 (main gobo)	19. Sound mode activation button
9. Select Gobo 2 (sub gobo)	20. Fog machine activation button
10. Select Shutter chase	21. Blackout activation button
11. Select Shutter speed	22. Central display

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1. DMX output (3-pin XLR)	4. On/off switch
2. DMX output (3-pin XLR)	5. IEC C5 power input with fuse holder
3. Microphone for audio-controlled mode	

# ALURA

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# Operation and mounting

The OSO Maestro works differently than most DMX controllers. It is very user-friendly in that you don't need to create an entire program to put together an impressive light show.

It's important to know which devices are most compatible with the OSO Maestro DMX controller. Generally speaking, it only works with specific Ayra lighting fixtures. Devices that are not listed in this user manual or that are not explicitly indicated to be compatible will not function properly with this DMX controller.

## Patching your lighting

Use the patch list below to ensure that the compatible device is programmed to start from the correct channel and set to the correct channel mode. The OSO Maestro is pre-programmed to send a signal from these specific channels. For each compatible product type, a total of 4 fixtures can be operated individually. This results in better, more dynamic light shows because colour and shutter chases can be programmed over four separate fixtures.

### Patch list:

Product type	Channel mode	Fixture 1 start address	Fixture 2 start address	Fixture 3 start address	Fixture 4 start address
<b>Universal/specific fixtures</b>					
FLASH 30/60 (dimmer + strobe channel)	2	1	-	-	-
UV ON (dimmer + strobe channel)	2	3	-	-	-
Fog machine (1 channel 0-100)	1	5	-	-	-
<b>Moving fixtures Ayra</b>					
ALO Micro Scan	8	6	14	22	30
ERO Micro Spot	8	38	46	54	62
ERO 404 / ERO 704	13	70	83	96	109
ERO 406 / ERO 506 / ERO 706	15	122	137	152	167
ALO 030	8	182	190	198	206
ALO 060	11	214	225	236	247
<b>Static fixtures Ayra</b>					
Q-Par 4 / Q-Par 6 / Compar 30 (RGBW)	4	77	90	103	116
Compar 1 / Compar 10 / Compar 50 / Compar 60	6	129	144	159	174

**PLEASE NOTE: future Ayra products may also be compatible with this controller. Compatibility with this DMX controller is indicated per product. Contact your local dealer for more information about product compatibility.**

### Specific Ayra products:

This DMX controller is designed specifically for Ayra lighting products. At this time, only the devices indicated in this manual are compatible with this DMX controller. Always ensure that the products are set to the correct channel mode and addressed to the right starting channel.

With moving fixtures like scanners and moving heads, it's possible to assign pan and tilt inverts to the fixtures themselves. A light show with eight moving heads can become even more dynamic when you assign two of them to the same address and invert the pan and/or tilt of either one. The possibilities are endless!

### Compatibility with universal products:

It is possible to use certain universal third-party lighting fixtures with the OSO Maestro DMX controller. Below is an overview of all compatible DMX-controlled lighting.

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Type of product from the patch list	Universal compatible product
FLASH 30/60 stroboscope	Every DMX stroboscope with the following channel division: 2-channel mode (CH1 dimmer, CH2 strobe speed)
UV ON	Every DMX-controlled UV product with the following channel division: 1-channel mode (CH1 dimmer)* 2-channel mode (CH1 dimmer, CH2 strobe speed) <i>*Can also be a traditional blacklight fixture connected to a DMX switchpack. Be careful not to turn the device repeatedly on and off!</i>
Fog machine (Ayra WSM MKIII and WSM Black compatible)	Every DMX-controlled smoke machine with the following channel division: 1-channel mode (CH1 intensity 0-100%)
Q-Par 4 / Q-Par 6 / Compar 30 (RGBW)	Every RGBW LED fixture with the following channel division: 4-channel mode (CH1 R, CH2 G, CH3 B, CH4 W)
Compar 1 / Compar 10 / Compar 50 / Compar 60	Every RGBAW or RGBAW+UV LED fixture with the following channel division: 5-channel mode (CH1 R, CH2 G, CH3 B, CH4 W, CH5 A) 6-channel mode (CH1 R, CH2 G, CH3 B, CH4 W, CH5 A, CH6 UV)

If in doubt, please contact your dealer for more information regarding third-party product compatibility.

Bear in mind that DMX-controlled equipment that has extra DMX channels (for instance 8 channels, 5 of which are corresponding channels) as well as a compatible DMX channel division may not function properly with this DMX controller.

## General operation of the controller

If you are familiar with how to use a universal DMX controller, or if you have never worked with a DMX controller before, it will take some time to get used to the OSO Maestro's unique functionality.

The step-by-step instructions below will teach you how to utilise the rotary knob functions so you can create your first preset light show. A preset consists of a specific composition of movements, colours, gobos, shutter effects and can be called up directly.

### Turning on the DMX controller

Make sure that the OSO Maestro is plugged into an active power socket. There is a switch on the rear to turn on the controller.

During start-up, the Ayra brand name will appear in the display together with the firmware version. The display will then show a grid and various values.

Manual Set				COLOR SPEED:
XY TYPE:	COLOR CHASE:	GOGO CHASE:	SHUTTER CHASE:	0
1	1	1	1	GOGO SPEED:
STEP TIME:	COLOR1:	GOGO1:	SHUTTER SPEED:	0
1	1	1	1	SOUND SENSE
FADE TIME:	COLOR2:	GOGO2:	STROBE SPEED:	99
1	1	1	1	MASTER DIMMER
				255

### Select a movement program and enter the Fade Time and Step Time values correctly.

The OSO Maestro has already been equipped with various movement programs for you to choose from. Of course, some movement programs only work with fixtures that have moving capability such as scanners or moving heads. If you're working with static fixtures, then this step is not applicable.

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To select a movement program and determine the speed, use the 3 rotary knobs under the 'X/Y move' section. Each of these controls has its own function:

- **X/Y Type:** Use this knob to select one of the 11 different built-in movement programs. Each program consists of pre-programmed X and Y positions that are played in a continuous loop.

- **X/Y Fade Time:** Use this rotary knob to select the speed in which step 1 transitions into step 2 within the specified movement program. This value can be set from 1 to 255, with 1 being very fast and 255 being very slow. A value of about 30 is a good place to start.

- **X/Y Step Time:** As mentioned with the X/Y Type function, each movement program plays a continuous loop of X and Y positions. With the X/Y Fade Time, you can determine how long the transition between the two steps should take.

With X/Y Step Time, you can indicate how quickly the steps alternate. To create fluid, smooth movement, enter the same value as the X/Y Fade Time function. You can also enter another value, which can have the following effect:

Fade Time value	Step Time value	Effect
30	30	Fluid, smooth movement due to correct alignment of the Fade Time and Step Time values
30	15	Fast movement with limited range because there is not enough time for the ultimate step position to be reached before the next step is activated.
15	30	Fast movement and full range, but the moving fixture stands still in the ultimate position for a (short) period of time.
15	15	Relatively fast, smooth movement due to correct alignment of the Fade Time and Step Time values.
50	50	Relatively calm, smooth movement due to correct alignment of the Fade Time and Step Time values.

There is really no wrong way to create different combinations and the effects vary greatly depending on the values you enter. Don't be afraid to experiment with different values and see what happens!

### Selecting colours, gobos and chases

To make your show even more dynamic, create colour combinations that move to the beat of the music or use static colours. All moving and static fixtures are equipped with various colour options.

This is also the case with gobos. A gobo is a stencil wheel that is placed in front of the light source so that a figure or pattern is projected. Not every fixture has a gobo wheel on board so be sure to check if your fixture is equipped with one before use. Devices like scanners and spotlight moving heads have gobo wheels as standard.

The Colour and Gobo sections function the same way, so we will go through them together.

## Colour section

The Colour section involves everything that has to do with the colours a certain device can produce.

The colour systems in your fixtures operate differently. Spotlight moving heads and scanners make use of a colour wheel where various fixed colour filters are used to change the colour of the light beam.

Static LED spotlights and LED wash moving heads on the other hand use an RGBW or even an RGBAW+UV light source to create countless colour combinations.

To ensure that the colours blend properly, the colour presets are based on a colour wheel with a choice of 9 base colours.

- Colour Chase: use this wheel to choose a built-in Colour Chase. Chase 1 is static and will only make use of the selection you make for Colour 1.

With the other programs (2-8), the colours you chose for Colour 1 and Colour 2 will be alternated on various fixtures.

Please note, when selecting a Colour Chase (2-8), if you set the same colour presets for Colour 1 and Colour 2, then the colour will not alternate.

- Colour 1: select 1 of the 9 available colours as the main colour.

- Colour 2: select 1 of the 9 available colours as the sub colour.

**Please note**, a device with a colour wheel may have more difficulty alternating quickly between colours if the sub colour is located on the other side of the wheel, for instance. The wheel would need to rotate halfway around to get to that colour, and may show the other colours in the process. To avoid this effect, select colours that are next to each other in the colour wheel, select a static colour, or lower the alternating speed.

Devices with a multiple LED light source are able to process alternating colours quickly.

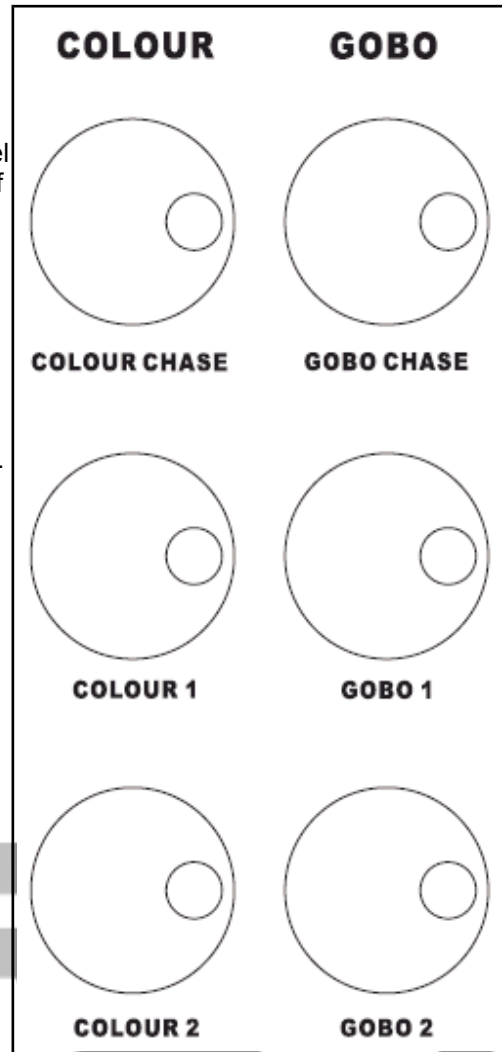
## Gobo section

Because every Ayra fixture is equipped with various types and quantities of gobos, the OSO Maestro has corresponding gobo wheels so the user can choose between the 9 available gobos. Because different devices have different gobos, the Gobo section will usually deviate so that if you select Gobo 3 using the Gobo 1 wheel, you may end up with 2 different gobos on 2 different devices.

The gobo wheel works the same way as the colour wheel. Select the main gobo with Gobo 1 and the sub gobo with Gobo 2 and have them alternate in a Gobo Chase if desired.

It is also recommended to select gobos that are next to each other on the gobo wheel for optimal results.

There is a choice between 9 gobos and for Gobo Chase 1, only the main gobo will be used without chase.



# Shutter Chase and setting the stroboscope speeds

## Shutter

A shutter is a mechanical or digital system that turns off the light beam of a specific fixture.

With most Ayra fixtures, this will turn the light source down to zero if the shutter is active.

A Shutter Chase is a varying effects program where some fixtures show their light beam and others do not. At value 1, the shutter function will not be active and all fixtures will show their light beams. There is a choice between 9 programs.

For each Shutter Chase, you can adjust the speed via the Shutter Speed function from 0 to 255; 0 is very slow and 255 is very fast.

## Stroboscope speed

The OSO Maestro has a stroboscope function that works on all connected fixtures. The flash speed is adjustable between 0 and 255; 0 is very slow and 255 is very fast. The stroboscope function can be activated by pressing the Strobe button on the right side of the panel. It is possible to change the stroboscope speed at any time, also during use.

More information about this button can be found later on in this manual.

## Master Dimmer fader

A fader is a type of control that enables you to change a value by sliding it from one point to another. The Master Dimmer fader controls the maximum light intensity of your lighting fixtures and comes in especially handy when you want more subdued mood lighting.

The Master Dimmer controls the maximum value of all connected fixtures and is adjustable from 0 to 255; 0 is completely dimmed and 255 is completely open (100%). The value is shown in the display on the bottom right of the panel.

The Master Dimmer does not control the UV function that you can address to start channel 3 as well as all devices that are addressed to a device with UV functionality (such as the ERO 406, ERO 506, ERO 706, Compar 50 and Compar 60).

This makes it possible to turn on all UV lighting and dim the rest of the lighting.

## LEDs

The OSO Maestro is equipped with various LED indicators on the right side of the device. When functions are not active, the LEDs will be illuminated at a very low level so you can still navigate the device in areas that are dark or dimly-lit. In this user manual, we will refer to this as activated and deactivated LEDs.

## Working with presets

The OSO Maestro has a variety of built-in effects on board that you can customise as desired, save and call up when needed. The OSO Maestro offers 9 presets that are very easy to use.

### Saving a preset

If you're happy with the light show that you've created, press and hold one of the preset buttons for about 2 seconds in order to save it.

When you see 'Preset saved' appear in the display, let go of the button.

You can call up a preset with the settings you've selected at any time by pressing the corresponding button once. Toggling between presets is just as easy.

Every preset can be adjusted in real-time as desired. A red LED next to the selected preset will light up to indicate which one is active. This is also shown at the top of the LED display.

### Overwriting a preset

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Select the preset of your choice and adjust the parameters as desired by changing the colour, movement program or speed, for instance.

Press the active preset button and hold it down for 2 seconds to overwrite the old preset values.

### **Adjusting a preset without saving it**

If you want to call up a preset and change the colour temporarily, select the preset of your choice and adjust the colour using the Colour rotary knob or select a new colour. This new colour will be used until you switch to another preset or turn off the controller. Changes in a preset are not permanent unless you overwrite them manually.

### **Manual mode**

As well as the 9 presets, the OSO Maestro also features a Manual mode that enables you to make adjustments on the fly that are saved automatically. The Manual mode is a practical way to insert a lot of effects when toggling between presets or to accompany a particularly busy section of music, for instance.

When you switch off the controller (or if the power supply is suddenly cut off), all values in Manual mode automatically return to the factory default settings. Saved presets on the other hand remain intact in the controller's internal memory in the event of a sudden loss of power.

### **UV button**

The UV button is used to activate the UV effect of the corresponding fixture. This can be either a blacklight projector addressed to channel 3 or a moving head or static spotlight with UV functionality. This feature can not be used with fixtures that are not equipped with UV functionality.

When the UV function is activated, a red LED will light up to indicate the status. Press the button again to deactivate the UV functionality. The UV function always works at 100% output when activated, regardless of the position of the Master Dimmer fader.

### **Strobe button**

The strobe button activates the stroboscope function and a red LED lights up to indicate the status. Press the button again to deactivate the function.

When activating the stroboscope function, the Strobe speed value (between 0 and 255) is used for the flashing speed; 0 is very slow and 255 is very fast.

The stroboscope speed can always be adjusted in real time.

It is possible to program the stroboscope speed in a preset, but it needs to be activated by manually pushing the Strobe button.

Fixtures like the Flash 30/60 LED will only turn on when the stroboscope function is activated. When activated, the colours, gobos or movements set for other connected fixtures will flash at the same speed.

It is recommended to use the stroboscope function at certain moments to accentuate a climax in the music, for instance, instead of continuously.

### **Tap Speed button**

The Tap Speed button is actually a multifunctional button that can be used in 3 different ways.

- Deactivated: when the Tap Speed button is deactivated, it will have no effect on the current playing speed.
- Static activation (press once): when the Tap Speed button is pressed once, a static LED will light up and certain rotary knobs will have a different function to offer more speed options.

The following adjustable values are found on the right-hand side of the display:

**Colour Speed** can be adjusted with the Colour Chase rotary knob, which adjusts the speed of the colour changes independently. This can also be programmed and saved in a preset.

The value can be adjusted from 0 to 255; 0 is very slow and 255 is very fast.

The value for each preset can be programmed individually.

**Gobo Speed** can be adjusted by means of the Gobo Chase rotary knob, which adjusts the speed of the gobo changes independently. This can also be programmed and saved in a preset.

The value can be adjusted from 0 to 255; 0 is very slow and 255 is very fast.

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The value for each preset can be programmed individually.

**Sound Sense** can be programmed with the Shutter Chase rotary knob, which can also be used to adjust the sensitivity of the internal microphone.

The value can be adjusted from 0 to 100; 0 is not sensitive and 100 is very sensitive. This value can not be adjusted per individual preset.

Press the Tap Speed button again to exit this mode.

- Press the Tap Speed button and hold it down for 2 seconds to access the Tap Speed function.  
The corresponding LED will flash at a steady tempo to indicate that the Tap Speed function is active.

By using your finger to tap the desired tempo on the Tap Speed button, you can adjust the playing speed of all the variable elements at once.

The following elements will play to the pre-determined tempo and will be overruled:

- Colour Chase
- Gobo Chase
- Shutter Chase

The X/Y speed Tap Speed function remains unchanged.

The success of the Tap Speed button depends on your own timing. Tap the button **4 times** with your finger to set the speed. The controller calculates the average based on the time between each of the four taps.

If you tap the button 4 times quickly, then the LED will flash faster.

If you tap the button 4 times slowly, then the speed will decrease and the LED will flash at a slower speed.

To exit the Tap Speed menu, press the Tap Speed button and hold it down for 2 seconds. Make sure the LED is on or off to see if you're in the correct operating mode.

## Sound

The OSO Maestro is equipped with a built-in microphone that is located on the rear of the controller. The sound sensitivity is determined digitally by the controller, as explained earlier in this manual. The optimal value depends on the audio volume in any given situation as the microphone only reacts to the bass frequency in the music.

The sound-controlled function works best with music that has a four-quarter measure and low tones (particularly with a distinct beat).

If the music has interrupted beats or double kicks, the function will not work optimally. It is a better option to synchronise the lights to the music manually using the Tap Speed function.

If the built-in microphone does not detect any sound, the lighting will slowly alternate a Colour Chase, Gobo Chase and Shutter Chase to create variation where music is audible but a distinct beat is not detected.

To activate the sound-controlled mode, press the Sound button once and the corresponding LED will light up. Press it again to deactivate the function and the LED will turn off.

## Fog

Smoke machines that have DMX compatibility and work in 1-channel mode can also be controlled by the OSO Maestro.

Activate the smoke machine by pressing the Fog button and it will function at 100% output.  
Press the Fog button again to turn the smoke machine off.

The OSO Maestro does not feature bidirectional communication, which means it can only send commands and can not receive information from the smoke machine, like if it needs time to warm up in between use. If you send a command for it to function, it may not produce any smoke until it has warmed up again.

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It is possible to drive multiple machines at once by assigning them the same DMX address. All machines will do the same thing.

## **Blackout**

The Blackout button is very important and is automatically activated when the controller is turned on.

When pressed, the Blackout button overrides all control and brings all values back to zero. This means your fixtures will no longer produce any light and will go into standby mode.

The word 'blackout' is a commonly-used term in the world of entertainment lighting that means standby.

When you press the Blackout button again, the LED will turn off and the Blackout function will deactivate so that all fixtures are capable of receiving normal commands again.

When the Blackout function is active, you can change settings, adjust parameters, switch presets, and so on. Any changes you make are shown on the display and indicated by the status LEDs.

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# Installation and connection requirements

## Using the OSO Maestro as a desktop device

The OSO Maestro is a compact controller that can be used as a desktop device. It fits on a desk, table, DJ booth or shelf and it has rubber feet underneath that provide plenty of grip. The slanted construction ensures an optimal overview of the controls and the display on the control panel.

## Installing the OSO Maestro in a 19-inch rack

The OSO Maestro can easily be installed in a standard 19-inch rack or flight case. This measurement is the standard in audio and lighting rack equipment designed for both mobile and permanent installations.

To install the OSO Maestro into a rack, use the included rack mounts. These are two rectangular plates with one curved side. There are three screws on the side of the controller that can be removed. The holes correspond perfectly with the rack mount plate and you can use the same screws to attach them.

The rack size of the OSO Maestro is 5 U, which stands for Units. Each Unit is 4.45 cm in height. Hardware like nuts and bolts are not included because racks and flight cases are usually equipped with various rack profiles (fixed or gliding).

Bear in mind that the connection inputs and outputs are located on the rear of the controller, and for this reason, part of the connection panel is slightly recessed. It's a good idea to keep 1 Unit free for passing cables through from the front to the rear of your equipment.

If you mount a connection panel above the controller, you will have an organised layout for your connection options without sacrificing any rack space.

Utilise the rack space and label your presets with stickers for an even faster, more intuitive work flow.

## Connecting the OSO Maestro to DMX lighting

The OSO Maestro is equipped with 2 DMX outputs that send exactly the same signal. This is handy when operating two groups of lighting fixtures separately.

DMX lighting is connected by means of a standard 3-pin male to female XLR cable. It is recommended to work with DMX cables (with an impedance of 110 ohms), especially for large-scale setups and situations where there can be no risk of signal interference.

Linking DMX lighting is easy to do. Connect the cable from the controller to the first device in the chain, then from the first to the second device, then from the second to the third device, and so on. Repeat this linking process, which is called daisy-chaining, until you reach the last device.

## DMX terminators

Always use a DMX terminator at the end of every DMX daisy chain, which is the last connected device. A DMX terminator is a small XLR plug with a soldered impedance, usually 120 ohms. It closes off the data bus and prevents reflections in the signal (that can lead to 'nervous' behaviour or 'hiccups' in the signal).



# DMX lighting troubleshooting

If you have a problem with your device, please consult the troubleshooting section for possible solutions. If, after consulting this section, the problem remains unresolved, please contact your dealer for more information and/or help.

This troubleshooting section contains information on how to solve the most common DMX light effect problems, but it does not and cannot cover every eventuality. It is possible that you won't find your problem, cause and solution in this section due to differences between various connecting devices.

Problem	Possible cause	Solution
The device can not be turned on.	A fuse is blown	Check the fuse to rule out if it is blown or not. If it is blown, replace it with a new fuse of the same type and class.
	Power cable not plugged in	Check if the power cable is properly connected to the device and plugged into an active power socket.
The device is not reacting to DMX signals	Incorrect DMX start address	Check if the device has been set to the correct DMX start address
	DMX controller is set to 'Blackout'	Make sure the 'Blackout' function on the DMX controller is not activated
	Make sure the polarity switch on the DMX controller is set correctly	Try to reverse the DMX polarity switch on the DMX controller.
	The device is not reacting, there is no DMX signal indication	Make sure the XLR cables are connected properly and are not defective. Replace if necessary.
The device does not react to sound/music	Incorrect operation mode	Make sure the sound-activated mode has been selected.
	The internal microphone sensitivity is too low	Check the microphone sensitivity level and increase it if necessary.
	The speaker is too far away, or is not producing enough low tones	Place the light effect closer to a speaker (or vice versa) and/or increase the low-frequency level. The built-in microphone is not triggered by high tones.
The amount of projected light is minimal	Dirty or dusty optics	Clean the lens and/or other optics.
	Dimmer is not completely open	Check if the dimmers on the spot lights themselves or if the master dimmer is completely open.
The DMX signal appears to be interrupted and some devices are flashing or behaving strangely	Damaged/defective cables	Check and replace the DMX cables if necessary.
	Power interference on the DMX signal	Avoid connecting signal cables parallel to power cables.
	DMX terminator is missing	Close the DMX circle with a DMX terminator.

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The device is not reacting to DMX commands	Signal loss or interference in the DMX circle	Close the DMX circle with a terminator or connect a booster after maximum 32 fixtures.
The pan and tilt values do not react to DMX commands	Incorrect DMX channel mode	Check if the device is set to the correct DMX channel mode
The operation mode can not be changed	Pan/tilt inversion is activated	Check if pan/tilt inversion is activated in the menu
The operation mode can not be changed	The device is in Slave mode	If the device is in Slave mode, it will wait for a master signal unless there is a DMX signal present. Set the device to Master to activate the sound-controlled or automated operation modes.

# ALURA

# Specifications

- versatile, user-friendly controller
- specifically designed for use with Ayra lighting fixtures
- also compatible with various universal DMX-controlled lighting fixtures
- programming knowledge as with traditional DMX controllers not required
- various built-in, pre-programmed effects for live use
- make up to 9 presets quickly and easily
- manual mode function to adjust parameters by hand
- built-in movement programs with adjustable speeds and fade time
- built-in programs for gobo and colour alternations, pre-programmed for 4 fixtures
- built-in shutter chases, pre-programmed for 4 fixtures
- adjustable stroboscope speed with switch for stroboscope function
- Blackout button to override all functions, reset values to zero and return all fixtures to standby mode
- Master Dimmer fader (0-100%) controls light intensity of all connected devices (except UV)
- special UV override function to activate blacklight effect
- versatile high-resolution display for easy legibility
- various playback options (adjustable speed, sound-controlled, tap sync)
- tap sync function based on four-quarter measure
- sound-controlled function features built-in microphone with adjustable sensitivity, based on four-quarter measure
- specific activation buttons for Fog, UV, Strobe and Blackout functionality
- use as desktop model with slanted construction for optimal overview of functions, or use rack mounts to install in a 19-inch rack

## Technical specifications:

- 12x digital endless rotary knobs with 20 clicks per rotation
- LCD colour high-resolution display for optimal legibility
- Master Dimmer fader
- 9x preset buttons + manual mode button
- LED indicator per function button
- 2x DMX outputs via 3-pin XLR output
- 257x DMX channels with pre-programmed layout
- all built-in chases and effects designed for 4 groups of fixtures
- equipped with power switch
- IEC C14 power input with fuse holder (250V 1A)
- mains voltage: 100-240V AC, 50/60 Hz
- maximum power consumption: 2 W

## Dimensions:

- 19-inch, can be installed in 19-inch rack using rack mounts, 5U (+1U cable management)
- dimensions: 283 x 220 x 80 mm (feet included)

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