

ALURA

TDC Gobo Rainbow

DMX LED gobo projector system



User manual

Safety instructions



WARNING!



Always keep this device away from moisture and rain! Hazardous electrical shocks may occur!



WARNING!



Only connect this device to a matching power outlet. This device is intended to work on a specified AC currency. Connecting this device to power outlets with other voltages may result in permanent damage and possible hazardous situations, such as fire or electrical shocks!



WARNING!



Be careful with every operation of this device. Touching live wires inside and outside the unit may cause hazardous electrical shocks!

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

Every person involved with the installation, operation and maintenance of this device has to:

- Be qualified
- Follow the instructions of this manual
- Make sure there is no damage caused by transport. If the device seems damaged from the outside, do not use it and contact your dealer for more information and consultation.
- To make sure the device maintains in perfect condition and for safe operation, it is necessary for the user to follow the instructions and warning notes of this user manual.
- Damage caused by improper use or modifications to the device are not covered by warranty.
- This device does not have any user-serviceable parts inside. Servicing of this device needs to be done by qualified technicians.

Important notes regarding safety and health:

- Never let the power cord come in contact with other cables. Handle the power cord and all connectors with the mains with caution.
- Never remove any warning or informative labels from the unit
- The ground contact always needs to be connected. Do not cover or remove the ground contact.
- Never leave cables lying around
- Do not open the device and do not modify any hard- or software of this unit.
- Do not insert this object into air vents.
- Do not connect this device to a dimmerpack.
- Do not switch the system on and off frequently as this will reduce the lifespan of the device.
- Do not drive the inputs of the fixture with a signal larger than required to work at full performance.
- Only use this device indoor, avoid contact with water, moist or other liquids. Do not place items filled with liquids on top of the unit.
- Avoid nearby flames or heat sources, do not place this device near flammable liquids, gas or flammable items.
- Always disconnect the device when it is not in use for a longer period or time, when servicing is needed or when the device needs cleaning.

- Only handle the power cord by its connectors. Never pull the cable to remove a connector from its socket, as this could lead to damage and electrical shocks.
- Always operate this device with a stable AC current.
- Always operate this device with the AC ground wire connected to the electrical system's ground.
- Never use other types of cables than specified in the manual, do not use defective or bad functioning cables. Contact your dealer when the included or required cables do not work properly with this device.
- When the device has been exposed to large temperature differences (for example, transport from outdoor to indoor), do not connect the device immediately. Do not activate the unit until it has reached room temperature, as moist might build up inside the unit, which may cause shortcuts and/or electrical shocks.

Guidelines and types of use:

- This device is intended to be used by professionals on stage, in theatres, clubs and other equal venues.
- This device is not suitable for children and always needs to be operated by an adult.
- Only use the device when the environment is suitable and will not cause any damage. Do not use the product in moist or dusty environments, or where long-term damage may occur such as:
 - indoor swimming pools where chlorine is used.
 - Beaches, where sand and salt are present.
 - Outdoor, without roof protection
 - Indoor areas where intense heat sources are present or where the temperature exceeds levels which are comfortable for humans.
- Only use the included power adapter and only connect the device to a suitable power outlet with the correct output voltage. Connecting the device to a power outlet with the wrong type of voltage or using the product with a wrong type of power supply may cause permanent damage to the device.
- Avoid shocks and collision during use and transport. Do not transport the device while in use. Avoid brute force during the installation and operation of this device.
- Familiarise yourself with the functions of the device before use. Do not allow operation of the device by unskilled or unqualified people.
- Use of the device in other ways than described in this user manual may cause damage and injury. Ayra does not take responsibility for any damage or injury caused by improper use.

Storage and transport:

- This device is intended for mobile use. When transported, use the original packaging of the product, or a fitting flightcase, preferably filled with foam.
- This device is not intended for permanent use. Operation breaks will ensure that the lifespan of the device remains unchanged.
- If the device is not used for a longer period of time, disconnect it from its power source and store it in its original packaging, or in a fitting flightcase.
- Store the device indoor, dry and do not expose the device to extreme temperature differences.

Housing:

- Inspect the housing of the device frequently. Severe dents, cracks and missing screws should be avoided at all costs. Do not use the device when the housing is not in optimal condition. Contact your dealer or a skilled technician when in doubt about the state of the device
- Check the fixture and screws for corrosion. Corrosion should not be present on the fixture. Contact your dealer or a skilled technician when corrosion is found on the fixture
- Every power or signal chassis/connector should be mounted tightly. Do not use the device when connectors are loose.
- Do not use the power cord when the cores are visible. Contact your dealer for a replacement if needed.
- Avoid the buildup of dust and dirt. Clean the exterior of the fixture every month with a dry or damp cloth. When using the device intensively, the cleaning frequency needs to be increased.

Fuses:

- The main fuse of this device is to be found on the rear of the device. In most cases, directly next to the power inlet.
- Only replace a fuse for a new one with the same type and rating! Do not use a fuse with a higher or lower rating.
- Do not bridge the fuse with electrical wires, aluminum foil, as the fuse is used for protection against electrical shocks and short circuit.
- Always mount the fuse cover back to the fuse compartment.

Box contents

Box contents

1x TDC Gobo Rainbow 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.

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Device overview



1. Beam output
2. Adjustable bracket
3. IEC power input with fuse
4. IEC power output (Power link)
5. DMX input (3p XLR)
6. DMX output (3p XLR)
7. Built-in microphone
8. Safety eye
9. Cooling fan
10. Menu display with buttons

Replacing or removing the gobos

The Ayra TDC Gobo Rainbow is equipped with 6 lenses, each provided with a separate LED source and a gobo. A gobo is a certain pattern, which shapes the beam output in a certain pattern. It is possible to replace the gobos of the TDC Rainbow, for example with your own company logo, a certain message, or specific figures.

The gobos can be replaced by using the following dimensions:

Inner diameter (visible): 12 mm

Outer diameter: 20 mm

To replace or remove the gobos, please follow the instructions as shown below:

- Turn the fixture upside-down and place it on a soft surface to prevent scratches.
- Use your fingers to loosen the round knobs, used to hold the gobo-holder in place. Do this for all holders (if needed).



- **NOTE:** Do not touch the lens in front of the gobo, as fingerprints and dirt may alter the light-output.
- Place the gobo holder in your hand (or on the table) with the lens faced down.
- Remove the inner ring by pushing the angled wire to the center with a small screwdriver. Do not apply too much force, as the ring might jump away when under too much pressure.



- When the ring is detached, place your hand on top of the gobo and flip the holder over. The gobo will fall onto your hand.
- Replace the gobo with another gobo, if preferred. If the gobos aren't used, keep them in a small container so they won't get lost. Also store the metal rings in there, when not used.
- Mount all the parts back in reverse. Please note that the black, non-reflective side of the gobo always faces the LED engine and the reflective side should be seen from the other side of the gobo-holder lens.

Setting up the unit

To activate the unit, connect the included power supply to the unit and a suitable 230V, 50 Hz power outlet.

The fixture will start up and show the last chosen setting on the display. Usually, with a new product, this is the DMX mode with the value set on 001.

The display shows several settings, each with the possibility to set several values.

Use the display and the menu buttons to set preferences, change settings and scroll through the menu. "Enter" is used to save a certain setting or preset, press "Menu" for at least 2 seconds to discard the change and return to the main menu.

The table below shows an explanation for every feature and value.

display	Mode	Function
ADDR	DMX address setting	A001-A512
CHND	Channel mode	1CH/3CH/8CH/24CH/28CH
SLND	Master/slave mode	Master (default) Slave 1 - Slave 2
Shnd	Show mode	Auto Speed 1 ~ 9 Show 0-16
SOUN	Sound controlled mode	Sound controlled mode on/off
SENE	Sound sensitivity	Sound sensitivity 0-100
Led	LED mode	ON-OFF
DISP	Display inversion	Display Inversion, Idsp-dspl
TEST	Test mode	Self test
Hour	Using time of light	Fixture hours, 0 ~ 9999
UERS	Software version	Ver XXX

ADDR: DMX address setting, used to determine the DMX starting channel. From this channel on, the fixture will respond to values, corresponding with the amount of channels that the fixture is occupying. (For example, when you turn the fixture in 3CH mode and set the starting address to value 003, the fixture will respond to channels 3, 4 and 5.)

CHND: The channel mode of the fixture makes it possible to use the correct channel mode setting for every application. For simple and basic setups, users may prefer to use the 1- or 3-channel mode. For advanced setup, users may prefer to control each pixel in detail, by using the 15- or 18-channel mode.

SLND: When using the master/slave function, you need to connect 2 or more fixtures with XLR-XLR cable. The first fixture in line needs to be set as master, the others as Slave 1 or 2 (synchronized or mirrored performance). This way, the slaves will mimic the behavior of the master fixture for wonderful synchronized lighting shows.

SOUN: Activate or disable the built-in sound controlled mode. This way, the fixture will respond to the beat of the music.

SENE: The sensitivity of the built-in microphone is adjustable, to optimize the built-in sound controlled mode. For example, when your music source (speakers) are placed far away, you might want to increase the sensitivity to make sure that the fixture responds to the sound accurately.

Led: The LED display will shut off automatically after a few seconds when this function is activated. When pressing any button, the display will activate again. When deactivating the feature, the display will be lit permanently.

DISP: Display invert version – When using the fixture in a hanging setup, it is possible to flip the display, so the characters will be shown upside down. This makes reading the several statuses much easier.

TEST: Self test mode, to control all segments and LEDs

Hour: The fixture shows how much hours it has been active. This is very practical for rental companies

which need to perform service intervals on all fixtures after several hours of performing, to maintain optimal shape.

UERS: Displays the software version which is installed on the main PCB.

The TDC Gobo Rainbow is equipped with several working modes, each with its own advantages. For simple events there are stand-alone modes, for advanced situations there are options to create synchronized lightshows, or controlled with a DMX-512 controller. A short description for each mode can be found below:

Auto:

Automatic lightshow with a pre-programmed internal show, on a pre-defined speed.

Sound:

Automatic lightshow with a pre-programmed internal show, on the beat of the music, thanks to an internal microphone which senses the beat of the music and will change a step every time a beat is detected.

Slave:

In master/slave mode, it is possible to link several TDC Gobo Rainbow fixtures together, to create synchronized lightshows in the Auto or Sound mode. The first fixture in the chain needs to be set in the Auto or Music mode. All the next fixtures need to be set to Slave and will mimic the behavior of the first fixture. The master/slave function requires XLR – XLR cables (not included).

DMX:

The TDC Gobo Rainbow can be connected to a DMX-controller with standard XLR – XLR cable. While doing so, a DMX-terminator must be connected to the last fixture, at the end of the DMX-chain. This prevents reflections in the DMX-signal, which could cause flickering and unwanted behavior from your intelligent fixtures.

A DMX terminator is a XLR connector with a resistor of 120 Ohm, placed between pin 2 and 3 as a bridge. See the illustration for more information.

With the following channel assignment, it is possible to control the TDC Gobo Rainbow:

1CH Mode:

CH1	000-007 008-037 038-067 068-097 098-127 128-157 158-187 188-217 218-247 248-255	Blackout Show 01 Show 02 Show 03 Show 04 Show 05 Show 06 Show 07 Show 08 Random Show 01-08
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3CH mode:

CH1	000-007 008-022 023-037 038-052 053-067 068-082 083-097 098-112 113-127 128-142 143-157 158-172 173-187 188-202 203-217 218-232 233-247 248-255	Manual Color chase 1 Color chase 2 Color chase 3 Color chase 4 Color chase 5 Color chase 6 Color chase 7 Color chase 8 Color chase 9 Color chase 10 Color chase 11 Color chase 12 Color chase 13 Color chase 14 Color chase 15 Color chase 16 Stand alone
CH2	000-255	Dimmer 0-100%

CH3	000-007 008-247 248-255	Black out Strobe slow to fast Sound strobe
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8CH mode:

CH1	000-255	Red
CH2	000-255	Green
CH3	000-255	Blue
CH4	000-255	White
CH5	000-255	Dimmer 0-100%
CH6	000-007 008-247 248-255	No function Strobe slow to fast Sound strobe
CH7	000-007 008-022 023-037 038-052 053-067 068-082 083-097 098-112 113-127 128-142 143-157 158-172 173-187 188-202 203-217 218-232 233-247 248-255	Manual Color chase 1 Color chase 2 Color chase 3 Color chase 4 Color chase 5 Color chase 6 Color chase 7 Color chase 8 Color chase 9 Color chase 10 Color chase 11 Color chase 12 Color chase 13 Color chase 14 Color chase 15 Color chase 16 Stand alone
CH8	000-007 008-255	Hold Speed slow to fast

24CH mode:

CH1	000-255 Dimmer 0-100%	Red 1
CH2	000-255 Dimmer 0-100%	Green 1
CH3	000-255 Dimmer 0-100%	Blue 1
CH4	000-255 Dimmer 0-100%	White1
CH5	000-255 Dimmer 0-100%	Red 2
CH6	000-255 Dimmer 0-100%	Green 2
CH7	000-255 Dimmer 0-100%	Blue 2
CH8	000-255 Dimmer 0-100%	White2
CH9	000-255 Dimmer 0-100%	Red 3
CH10	000-255 Dimmer 0-100%	Green 3
CH11	000-255 Dimmer 0-100%	Blue 3
CH12	000-255 Dimmer 0-100%	White3
CH13	000-255 Dimmer 0-100%	Red 4
CH14	000-255 Dimmer 0-100%	Green 4
CH15	000-255 Dimmer 0-100%	Blue 4
CH16	000-255 Dimmer 0-100%	White4
CH17	000-255 Dimmer 0-100%	Red 5
CH18	000-255 Dimmer 0-100%	Green 5
CH19	000-255 Dimmer 0-100%	Blue 5
CH20	000-255 Dimmer 0-100%	White5
CH21	000-255 Dimmer 0-100%	Red 6
CH22	000-255 Dimmer 0-100%	Green 6
CH23	000-255 Dimmer 0-100%	Blue 6
CH24	000-255 Dimmer 0-100%	White6

28CH mode:

CH1	000-255 Dimmer 0-100%	Red 1
CH2	000-255 Dimmer 0-100%	Green 1
CH3	000-255 Dimmer 0-100%	Blue 1
CH4	000-255 Dimmer 0-100%	White1
CH5	000-255 Dimmer 0-100%	Red 2
CH6	000-255 Dimmer 0-100%	Green 2

CH7	000-255 Dimmer 0-100%	Blue 2
CH8	000-255 Dimmer 0-100%	White2
CH9	000-255 Dimmer 0-100%	Red 3
CH10	000-255 Dimmer 0-100%	Green 3
CH11	000-255 Dimmer 0-100%	Blue 3
CH12	000-255 Dimmer 0-100%	White3
CH13	000-255 Dimmer 0-100%	Red 4
CH14	000-255 Dimmer 0-100%	Green 4
CH15	000-255 Dimmer 0-100%	Blue 4
CH16	000-255 Dimmer 0-100%	White4
CH17	000-255 Dimmer 0-100%	Red 5
CH18	000-255 Dimmer 0-100%	Green 5
CH19	000-255 Dimmer 0-100%	Blue 5
CH20	000-255 Dimmer 0-100%	White5
CH21	000-255 Dimmer 0-100%	Red 6
CH22	000-255 Dimmer 0-100%	Green 6
CH23	000-255 Dimmer 0-100%	Blue 6
CH24	000-255 Dimmer 0-100%	White6
CH25	000-255	Dimmer 0-100%
CH26	000-007 008-247 248-255	No function Strobe slow to fast Sound strobe
CH27	000-007 008-022 023-037 038-052 053-067 068-082 083-097 098-112 113-127 128-142 143-157 158-172 173-187 188-202 203-217 218-232 233-247 248-255	Manual Color chase 1 Color chase 2 Color chase 3 Color chase 4 Color chase 5 Color chase 6 Color chase 7 Color chase 8 Color chase 9 Color chase 10 Color chase 11 Color chase 12 Color chase 13 Color chase 14 Color chase 15 Color chase 16 Stand alone
CH28	000-007 008-255	Hold Speed slow to fast

Technical specifications

- Powerful six-fold gobo projector with intense beams
- Wide angle construction for optimal coverage
- Includes 6 replaceable gobo's (also works without gobos as beam effect!)
- Light source: 6x 10W RGBW LED chip
- Individual LED chip control with dimmers for each colour, for creative colour combinations and chases
- Working modes: Automatic, music-controlled, master/slave, DMX
- Exciting built-in programs or full control with a DMX controller
- DMX operation: 1, 3, 8, 24 or 28 channels
- Adjustable microphone sensitivity for music-controlled mode
- Menu display and buttons for easy adjustment of settings
- Low power consumption – High output – Long lifespan

Replaceable gobos:

- Outer size: 20.5 mm
- Viewable size: 12 mm

Power:

- Voltage: AC90-240V 50/60Hz
- Power: 80W

Physical:

- Dimensions: 430 x 175 x 120 mm
- Weight: 3.5 kg

Connectors:

- DMX: 3p XLR male and female
- Power: IEC power in- and output

Included accessories:

- Power cable with Schuko & IEC connectors

Connectors and wiring schematics:

DMX-connections:

DMX-output

XLR mounting-socket:



DMX-input

XLR mounting-plug:



Electrical wiring:

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