

# RETROB700L

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User manual



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## Safety information

**WARNING** This product is for professional use only! It is not for household use.

RETROB700L presents risk of lethal or severe injury due to heat, electric shock, fire or falls. Intense and flashing light could trigger epileptic seizures. Read this manual before your initial start-up and follow the safety information in this manual and engraved on the fixture.

Every person involved with the installation, operation and maintenance of this device has to be qualified and experienced with operations on stage lighting fixtures.

Before your initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

Please consider that damages caused by manual modifications to the device are not subject to warranty.



**CAUTION!** Keep this device away from rain and moisture!



**CAUTION!** Be careful with your operations! With a dangerous voltage you can suffer an electrical shock when touching the fixture and wires!



**CAUTION!** During the operation the fixture surface becomes very hot. Allow the device to cool approximately 30 minutes prior to manipulating with it. Keep a minimum 0,7 meter distance from flammable materials to all exterior surfaces of the fixture .



**CAUTION!** Avoid looking directly into the light source (meant especially for epileptics)!



**CAUTION!** Unplug mains lead before opening the housing, installing the lamp or the fuse. Allow the device to cool approximately 1 hour prior to manipulating with it.

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## Protection against electrical shock

- Disconnect the fixture from AC power when not in use.
- Disconnect the fixture from AC power before any operation.
- Do not remove the rear cover. There are no user-serviceable parts inside.
- Always ground the fixture electrically.
- Use only the wires attached to the kit.
- 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 or fuse only as described.

## Protection against burns and fire

- Never operate when the fixture is damaged or some part is missing.
- Do not touch surface when the fixture is in operation. The exterior of the fixture can reach temperatures up to 150°C (302°F) after 5 minutes of full load and 205°C (401°F) after temperature stabilization. Allow the fixture to cool approximately 30 minutes before any operation.
- Replace the lamp when it becomes defective or worn out.
- Never attempt to bypass the fuse. Always replace defective fuses with ones of the specified type and rating.
- Keep all combustible and flammable materials (for example fabric, wood, paper) at a distance of at least 1 meter away from the fixture. Do not cover the fixture when in operation and when it is hot.
- Do not modify the fixture.
- Do not operate the fixture if the ambient air temperature exceeds 45°C (113°F).
- Do not operate the fixture after extreme change of surrounding environment temperature. Allow the fixture to acclimate for at least an hour before operating.

## Protection against falls

- Use only professional tripods and clamps to mount the fixture. Ensure, that the clamp or tripod is designed to withstand the weight of the fixture.
- Ensure that the structure intended for installation can hold at least 10 times the weight of all installed devices.
- Ensure that all fixtures are attached correctly to the structure, after having checked that the housing is firmly closed and all screws are tightly 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.

## Protection against eyesight damage and epileptic seizure

- Do not stare directly into the light sources. Never look at an exposed lamp while it is lit.
- Provide advance notice that flash light is in use.
- Avoid long cycles of rapid flashing light.

- Always use safety glasses to protect your eyes when changing a lamp or opening front cover.

## Technical specification

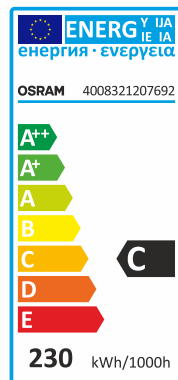
dimensions	842 x 999 x 170 mm
weight	12,5 kg
input voltage	240V 50Hz/60Hz
power consumption	1700W
light source	230W R7s 118mm
channel fuses	F 2.0A
main fuse	T 0.2A
color temperature	2900 K
luminous flux	12 720 lm
CRI	98,4
beam angle	94°
DMX channels	7
connectors	2 x 5pin DMX 2 x 3pin DMX 1 x AC Neutrik powerCON
other features	built-in dimmers built-in display and buttons



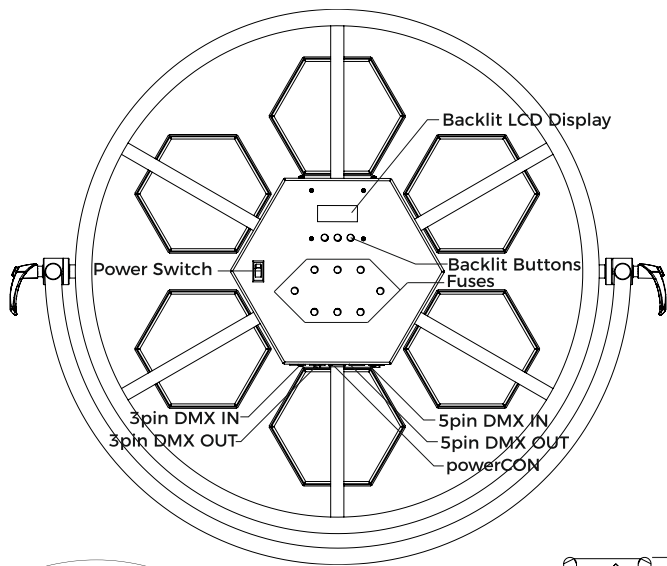
Appliance class I



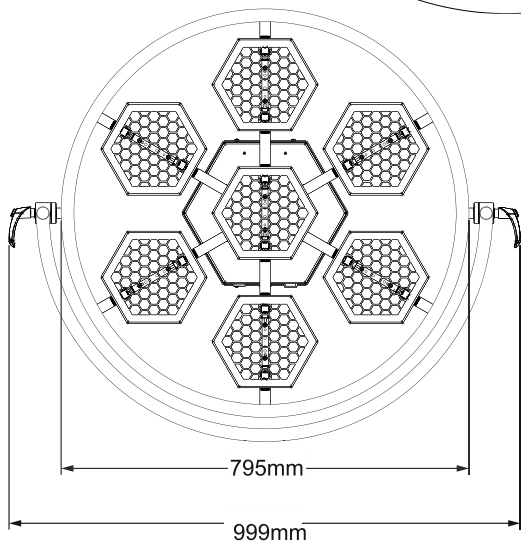
IP 20



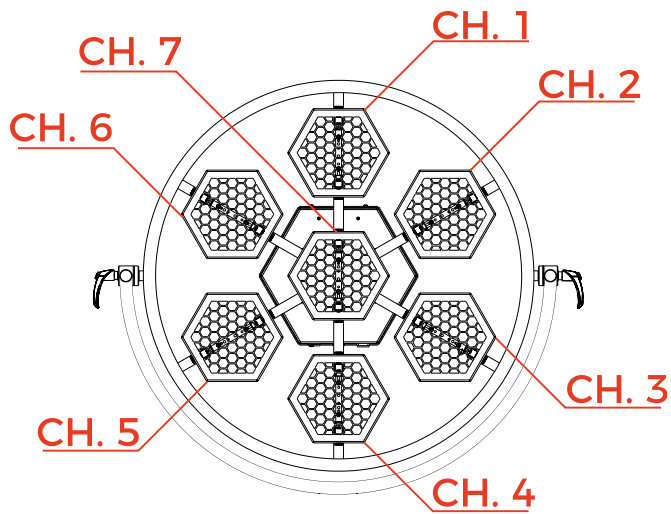
# Fixture Overview



## Dimensions



DMX chart



DMX channel	DMX Value	function
CH.1	0 - 255	0 - 100% smooth dimming
CH.2	0 - 255	0 - 100% smooth dimming
CH.3	0 - 255	0 - 100% smooth dimming
CH.4	0 - 255	0 - 100% smooth dimming
CH.5	0 - 255	0 - 100% smooth dimming
CH.6	0 - 255	0 - 100% smooth dimming
CH.7	0 - 255	0 - 100% smooth dimming

Kit contents

- 1 x RETROB700L Retro Lamp
- 1 x AC power wire (powerCON)
- 1 x User manual
- 1 x Spare lamp

# Preparation for use

## AC power connection

The RETROB700L Retro Lamp must be installed at 200-240V and 50/60Hz AC. Fixture automatically detects the alternating current frequency. To turn on the fixture simply plug in the powerCon and set the power switch to "ON" position. Use only high quality 3 x 2.5 mm<sup>2</sup> or larger mains power cords. Inspect all the power feed cables for damages before use. Make sure you are always connecting the fixtures to a protected circuit with appropriate electrical ground. Do never connect the fixture to a dimmer plug, even if it supplies proper current.

Only qualified electricians in accordance with all known electrical regulations can install the fixtures.

The RETROB700L comes with power input cord terminated with powerCON on one end and Uni - Schuko plug on the other end (for European market). If your cord has got no Uni - Shuko plug, or you want to change the plug follow the rules from table below:

Connection		EU wires	US wires
Live	L	Brown	Black
Neutral	N	Blue	White
Earth	⊕	Green/Yellow	Green or Green/Yellow

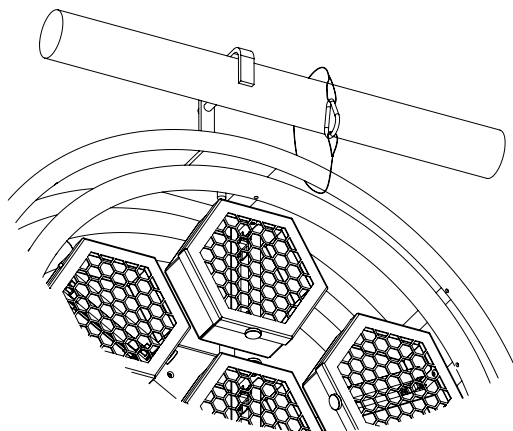
**REMEMBER!** Only qualified person can change or install the plug!

## Installation

Before mounting the fixture read and follow the safety recommendations indicated in the Safety Information.

The RETROB700L Retro Lamp may be installed on a tripod or on a clamp. The fixture has 13 mm (0,512 in) hole for a spigot, rigging clamp or a screw. Before rigging operations make sure, that the structure onto which you are mounting the fixtures can withstand the weight of all of the fixtures. Check if there is enough room for ventilation, configuration and maintenance in a location where you want to place the fixture. You must secure every hanged fixture with appropriate safety wire. You can aim the fixture to any position that you want except towards the rigging structure. The main part can spin 360° in the yoke. Remember not to let power and DMX wires touch the surface of the fixture. Always keep safe distance from the closest object.

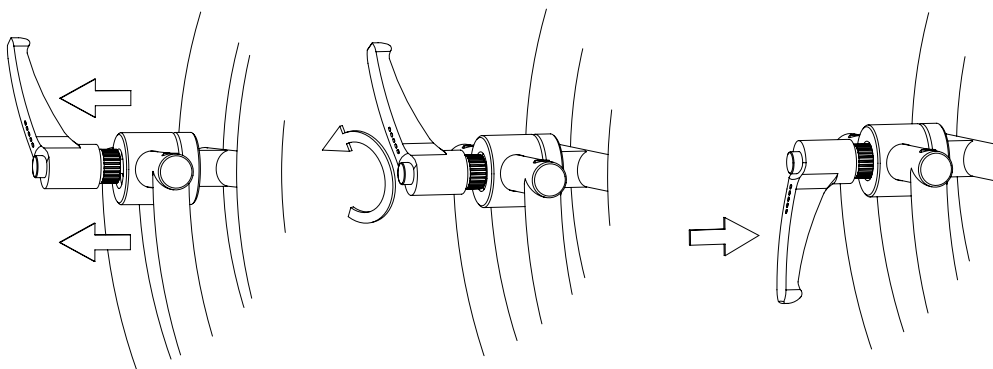




**REMEMBER!** Always secure hung fixture with appropriate safety wire!

To adjust the position of the fixture when aiming it to the desired angle, use the side handles. Loosen them by turning them counterclockwise before adjustment and set the desired angle. Tighten the handles after adjusting the position by turning them clockwise. Operate handles carefully and manually only. Tools can damage them.

You can easily change the orientation of tightened handles to make your rig looks even better. Gently pull the tightened handle to disengage its teeth and rotate it into the desired orientation. By releasing the handle the return spring automatically engages the teeth.

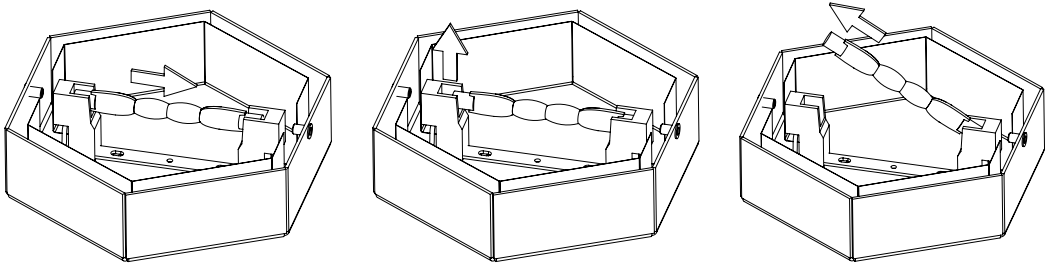


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## Lamp and fuse replacement

To replace the lamp:

- Disconnect the fixture from AC power.
- Make sure the fixture and lamps are cool.
- Open the front cover by releasing a screw located on top of the front cover.
- Gently push the lamp towards one of the mounting brackets and remove the used lamp by pulling it up.
- Put the new lamp onto the mounting brackets.
- Do not touch the new lamp with bare hands. Use gloves or a cloth to hold the lamp.
- Close the front cover and fasten the screw before applying power.



**REMEMBER!** Always use safety glasses to protect your eyes when changing a lamp!

Inspect the front covers and the front cover safety mesh before you use the fixture. If you will notice any damages, holes in the mesh, or if the mesh will get loose, do not use the fixture and immediately swap the front cover for a new one.

To replace the fuse:

- Disconnect the fixture from AC power.
- Make sure the fixture is cool.
- Fuses are located on the back cover of the fixture.
- To unscrew the fuse holder use “flat-blade” screwdriver. First gently push the cover of the fuse holder and rotate it a quarter turn clockwise.
- After you unlock cover of the fuse holder pull it up and replace the fuse.
- Put the cover with new fuse back to the fuse holder, gently push it with screwdriver in the proper orientation and rotate it a quarter turn counterclockwise.

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## Operation modes

The RETROB700L Retro Lamp can work in three operation modes: Wired DMX mode, Wireless DMX mode (if the WDMX card is installed) and standalone mode. You can link The RETROB700L Retro Lamp to a DMX controller using a 5 or 3 pin DMX wire, or Wireless Solution Sweden hardware (if WDMX card is installed). You can control each channel individually whether with a DMX controller or a manual control build in the fixture. The RETROB700L Retro Lamp has got only one 7-channel DMX personality and it does support RDM.

### RDM

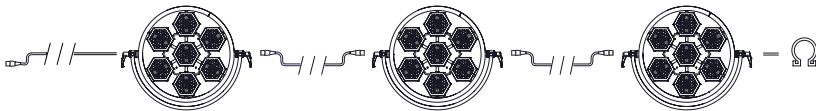
RDM (Remote Device Management) is an enhancement of DMX 512 protocol and allows the bi-directional communication between DMX consoles and fixtures. It works simultaneously with DMX 512 and on the same lines and wires. RDM is not affecting non-RDM devices in a line, however non-RDM devices can disrupt communication with console. RDM allows you to change the fixtures options (such as DMX address) without even touching neither ladder or fixture's buttons. RETROB700L Retro Lamp fully supports the RDM standards.

### Standalone mode

The fixture works in standalone mode when it's not receiving DMX signal whether wired or wireless. You can adjust the brightness of all light sources at once, or you can control each source individually from the "MANUAL CONTROL" option in the menu (refer to the "Menu" chapter to learn how to manually control halogens). To enter menu simply hold enter for 2 seconds.

### DMX 512 modes

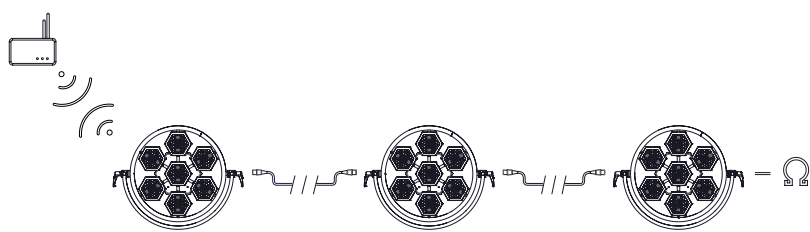
The fixture automatically switches into DMX mode after receiving DMX data. To learn how to change the DMX address or signal source (wired or wireless) refer to the "Menu" chapter. When the fixture works in the wired DMX mode You can daisy chain fixtures using 5 or 3 pin DMX wires. When daisy chaining remember, that you can connect up to 32 devices per DMX 512 universe. Always terminate the DMX 512 line. Put the 120  $\Omega$  terminator into last device's DMX OUT XLR socket.



**REMEMBER!** Always terminate DMX line!

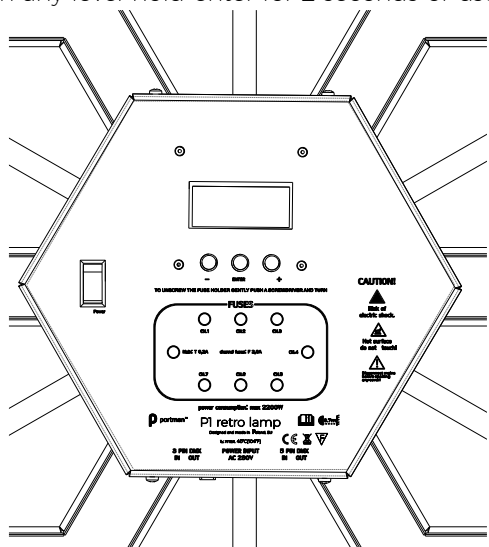
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When the fixture works in the wireless mode (only when WDMX card is installed) it is receiving DMX 512 signal from Wireless Solution Sweden transmitters and can send the signal throughout the 5 or 3 pin DMX OUT XLR socket. You can put the fixture with WDMX card installed as a first fixture in a line and use it as a WDMX receiver. The RETROB700L Retro Lamp supports bi - directional WDMX TRX module. It means, that the fixture supports RDM in wireless mode too. To link RETROB700L Retro Lamp with W-DMX transmitter first use "UPAIR ALL WDMX DEVICES" option from menu, than turn the scanning mode in the transmitter. Transmitter will link with all unlinked devices. For more detailed information please refer to your transmitter's user manual.



## Menu

Navigation buttons are located under the LCD display on the back panel. To enter the menu hold enter button for 2 seconds. To navigate the menu use the "+" and "-" buttons. To exit the menu from any level hold enter for 2 seconds or use the exit function. For confirming simply push the enter button.



Menu map

Main section	Level 1		Description
ADDRESS	1 - 505		Sets up the DMX start address.
DMX INPUT	WIRED		Changes the DMX input to wired (default). In this mode fixture is receiving DMX signal from the DMX IN 5 pin XLR socket.
	WIRELESS		Changes the DMX input to wireless. This mode works only when WDMX card is installed. Fixture is receiving DMX data from WDMX card.
RDM INFO	MANUFACTURER		Shows the name of the fixture's manufacturer.
	DEVICE NAME		Shows the fixture's name given by manufacturer.
	DDEVICE LABEL		Shows the fixture's name given by user.
	RDM ID		Shows the fixture's RDM unique ID number.
	FIRMARE VERSION		Shows the fixture's actual firmware version.
UNPAIR WDMX			Unlinks all linked Wireless Solution Sweden WDMX transmitters.
MANUAL CONTROL	ALL CHAN:	0-100%	Controls the intensity of all channels at once. Individually controls the intensity of selected channel.
	CHAN. 1	0-100%	
	CHAN. 2	0-100%	
	CHAN. 3	0-100%	
	CHAN. 4	0-100%	
	CHAN. 5	0-100%	
	CHAN. 6	0-100%	
	CHAN. 7	0-100%	
EXIT			Exits from main section of the menu to main screen.



Help preserve the environment! Ensure that this product is recycled at the end of its life. Your supplier can give details of local arrangements for the disposal of AVTECHSMART products.