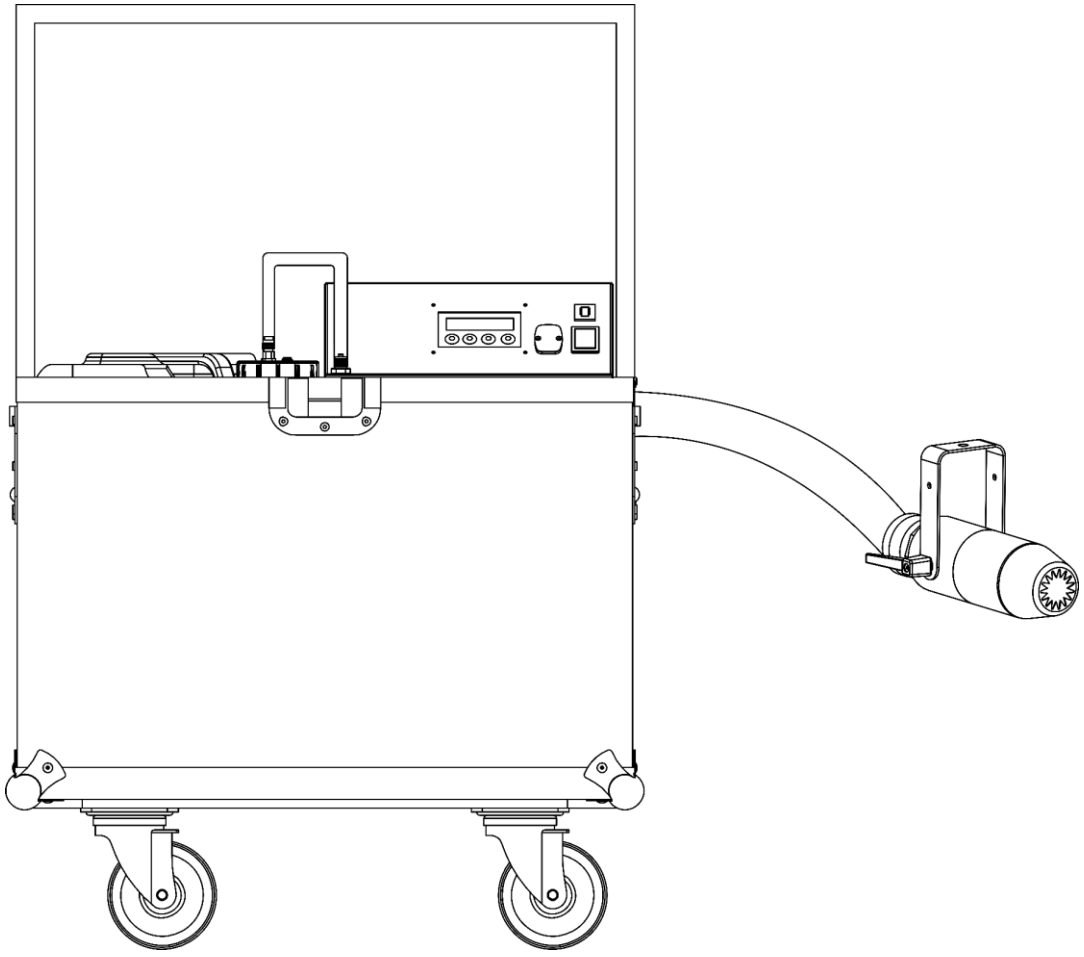
MANUAL



ENGLISH

Antari S-500 Snow Machine V1

Ordercode: 80378

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Warning

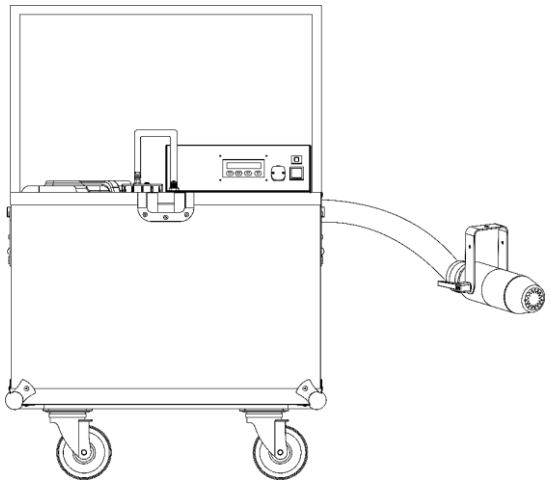
For your own safety, please read this user manual carefully before your initial start-up!

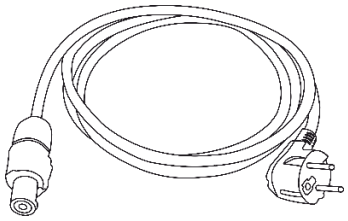
Unpacking Instructions

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Your shipment includes:

- Antari S-500 Snow Machine
- Neutrik powerCON to Schuko power cable (1,7 m)
- 1 x tank hose
- User manual





CAUTION!
Keep this device away from rain and moisture!
Unplug mains lead before opening the housing!

Safety Instructions

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

- be qualified
- follow the instructions of this manual

CAUTION! Be careful with your operations.
With a dangerous voltage you can suffer
a dangerous electric shock when touching the wires!

Before the 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.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

Please consider that damages caused by manual modifications to the device are not subject to warranty.
This device contains no user-serviceable parts. Refer servicing to qualified technicians only.

IMPORTANT:
The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

- Never let the power cord come into contact with other cables! Handle the power cord and all connections with the mains with particular caution!
- Always disconnect power from the mains, when device is not used or before cleaning ! Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.
- Never remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.
- Never aim the output nozzle directly at people.
- Never aim the output nozzle at open flames.
- Never add flammable liquids of any kind (oil, gas, perfume) to the snow liquid.
- Never drink snow liquid. If it is ingested, call a doctor immediately. If snow liquid comes in contact with skin or eyes, rinse thoroughly with water.
- Never lock snow-filled rooms. Risk: panic among the locked persons!
- Never use the device permanently! The output should be active only for short periods of time.
- Do not insert objects into air vents.
- Do not open the device and do not modify the device.
- Do not connect this device to a dimmer pack.
- Do not switch the device on and off in short intervals, as this would reduce the device's life.
- Do not touch the output nozzle bare-handed during its operation (output becomes very hot).
- Do not shake the device. Avoid brute force when installing or operating the device.
- Only use device indoors, avoid contact with water or other liquids.
- Only use device in well-ventilated rooms.
- Only use the high-quality snow liquid, recommended by your dealer (ordercodes: 60588, 60589 and 80359). Other snow liquids may cause poor effect.
- Avoid flames and do not put close to flammable liquids or gases.
- Always make sure there is sufficient liquid in the snow liquid tank. Operating this unit without liquid can cause damage to the pump and the heater.
- Always allow free air space of at least 50 cm around the unit for ventilation.
- Make sure that the device is not exposed to extreme heat, moisture or dust.
- Make sure that all the required safety devices are in good condition and function properly.
- If text and/or icons are missing, damaged or illegible on the S-500, they should be replaced.
- Always drain tank before shipping or transporting this unit.
- Always keep tank cap closed while operating.
- Always keep the device upright.
- Always unplug the S-500 before filling its tank.
- For adult use only. The snow machine must be installed out of the reach of children. Never leave the device running unattended.
- Always keep the nozzle at least 50 cm away from contact with anything, while in operation.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power cord is never crimped or damaged. Check the device and the power-cord from time to time.
- If the external cable is damaged, it has to be replaced by a qualified technician.
- If device is dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- If the S-500 fails to work properly, discontinue use immediately. Remove all snow liquid from the tank. Pack the unit securely (preferably in the original packing material), and return it to your Antari dealer for service.
- The use of snow liquid is only allowed for adults.
- In dense, snow-saturated surroundings, the oxygen portion is substantially reduced!

- The snow density must be portioned in a way that the visibility of at least 5 m is preserved. Risk: danger of anxiety state due to missing orientation!
- Every snow-filled room must be overseen by a skilled person.
- Allow time to cool down, before cleaning or servicing.
- Provide sufficient lighting of the surroundings when installing the device.
- The user is responsible for correct positioning and operating of the S-500. The manufacturer will not accept liability for unsafe situations, accidents, damages caused by:
  - The misuse or incorrect installation of this device.
  - Ignoring warnings or instructions as shown in this manual.
  - Using the S-500 for purposes or in conditions other than specified in this manual.
  - Changes to the S-500. This includes the use of other than original spare parts.
  - Inadequate maintenance.
  - The unauthorized removal of safety symbols, safety covers and/or guards.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.

CAUTION!
Do not perform any repairs on your own!
If in doubt, always contact service@highlite.com!

CAUTION!
Follow all warnings and safety instructions during installation/operation!
Non-observance could lead to severe injuries or even death !!!

Operating Determinations

- This device is not designed for permanent operation. Consistent operation breaks will ensure that the device will serve you for a long time without defects.
- The maximum ambient temperature ta = 40 °C must never be exceeded.
- In order to eliminate wear and improve the device's lifespan, during periods of non-use, completely disconnect from power source via breaker or by unplugging.
- The relative humidity must not exceed 50 % with an ambient temperature of 40 °C.
- If this device is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.
- Any other operation may lead to dangers like short-circuit, burns, electric shock, crash etc.

We presume that you, your employees and others who come into contact with the S-500 are familiar with how the device must be dealt with. This includes the correct use, maintenance and repair of the S-500 as described in this user manual. The employees should be familiar with the use of devices through training and/or experience.

Improper installation can cause serious damage to people and property !

You endanger your own safety and the safety of others!

Antari excludes liability for unsafe situations, accidents and damage that are the result of:

- disregard for the warnings or regulations as set out on the S-500 or in this manual.
- use for other purposes or under other circumstances than those set out in this documentation.
- alterations to the S-500. This also includes the use of replacement parts other than the original ones.
- insufficient maintenance.
- unauthorized removal of safety caps and/or safeguards.
- incompetent operation of the machine.

Antari is not liable for any consequential loss in the event of a S-500 breakdown.
This user manual has been drawn up with the utmost care. Antari cannot be held responsible for any mistakes made in this publication or for any consequences thereof.

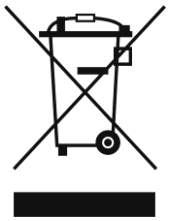
Connection with the mains

Connect the device to the mains with the power-plug.
Always pay attention, that the right color cable is connected to the right place.

International	EU Cable	UK Cable	US Cable	Pin
L	BROWN	RED	YELLOW/COPPER	PHASE
N	BLUE	BLACK	SILVER	NEUTRAL
⏚	YELLOW/GREEN	GREEN	GREEN	PROTECTIVE GROUND

Make sure that the device is always connected properly to the earth!

Improper installation can cause serious damage to people and property!



Return Procedure

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail aftersales@highlite.com and request an RMA prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:

01) Your name
02) Your address
03) Your phone number
04) A brief description of the symptoms

Claims

The client has the obligation to check the delivered goods immediately upon delivery for any short-comings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.
It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.
Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless otherwise agreed in writing.
Complaints against us must be made known in writing or by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.
Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.

Description of the device

Features

The S-500 is a professional silent snow machine for medium and large events. Unlike the traditional snow machines where you need to rig the complete snow machine, the S-500 can stay on the ground. It has a long flexible hose (10 m) with a nozzle that can be mounted in the truss.

- Input voltage: 220–240 V AC, 50/60 Hz
- Peak power: 1600 W
- Continuous power consumption: 730 W
- Wireless DMX: Optional
- Output: 80 m^3/min
- Tank capacity: 20 L
- Liquid consumption: 400 ml/min
- Onboard: LCD display + control buttons
- Control modes: Manual, Timer, Remote control, Wireless remote control, DMX-512/W-DMX
- DMX mode: 2 channels
- Color: Black
- Housing: Flight case
- Data connection: 3-pin/5-pin XLR IN/OUT, 4-pin remote control connector IN
- Power connection: Neutrik powerCON connector (Blue) IN
- IP rating: IP20
- Dimensions: 592 x 551 x 640 mm (LxWxH)
- Weight: 35 kg

Optional accessories:

60587 – Antari SC-3, remote control with a cable (9,5 m)
60588 – Antari Snow Liquid SL-5AN, premium fine (5 L)
60589 – Antari Snow Liquid SL-5N, fine (5 L)
60896 – Antari W2 wireless transmitter
60897 – Antari W2R wireless receiver
80359 – Showtec Snow/Foam Liquid, concentrate (5 L)
80378P – Antari PM-1, pan motor for S-500
80389 – Antari ST-10, black extension hose for S-500 (10 m)

Front

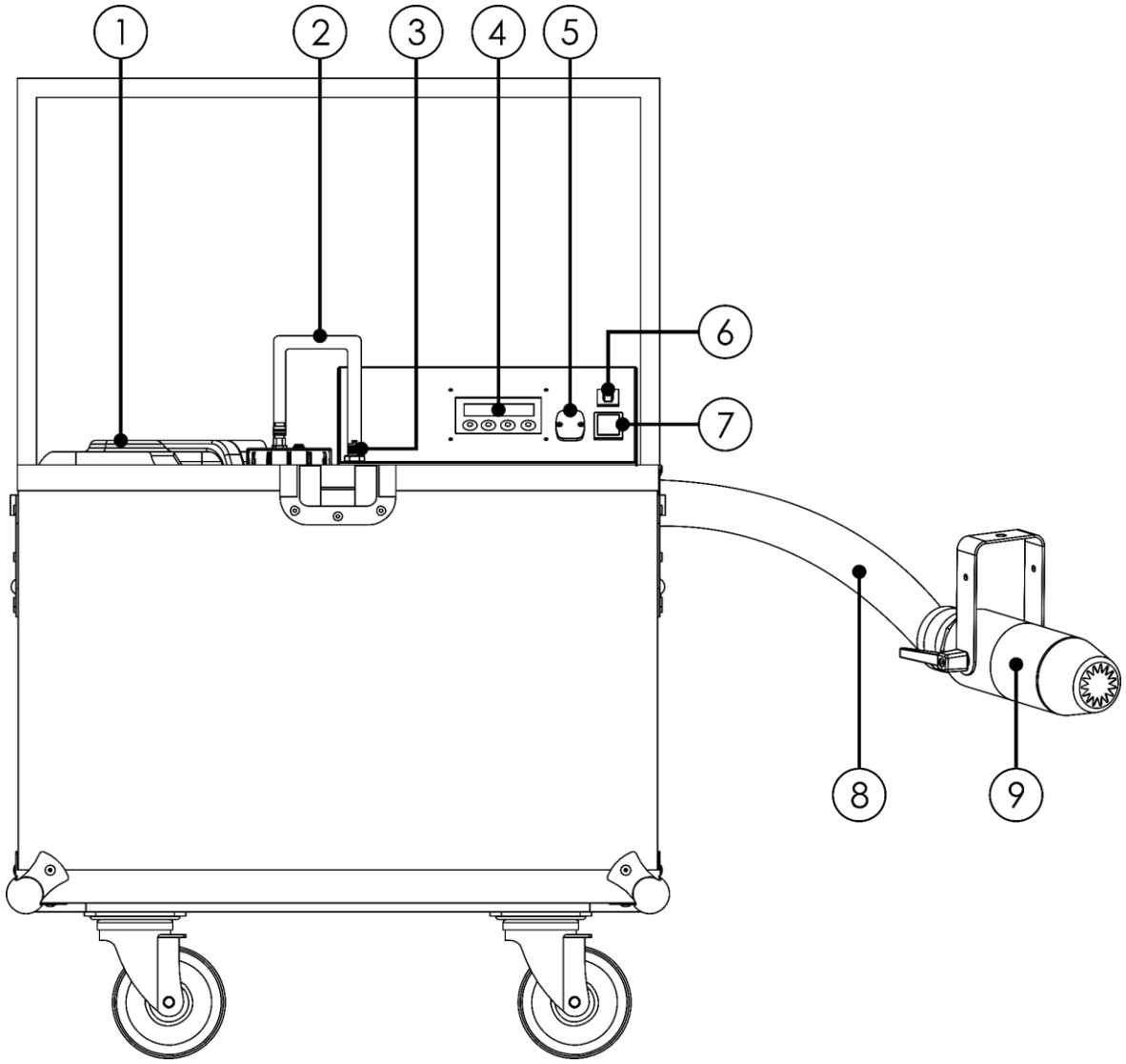


Fig. 01

01) Snow liquid tank (20 L)
02) Tank hose
03) Snow liquid input
04) LCD display + control buttons
05) Wireless receiver housing cover
06) Circuit breaker
07) Power switch ON/OFF
08) Output hose (10 m)
09) Output nozzle

Top

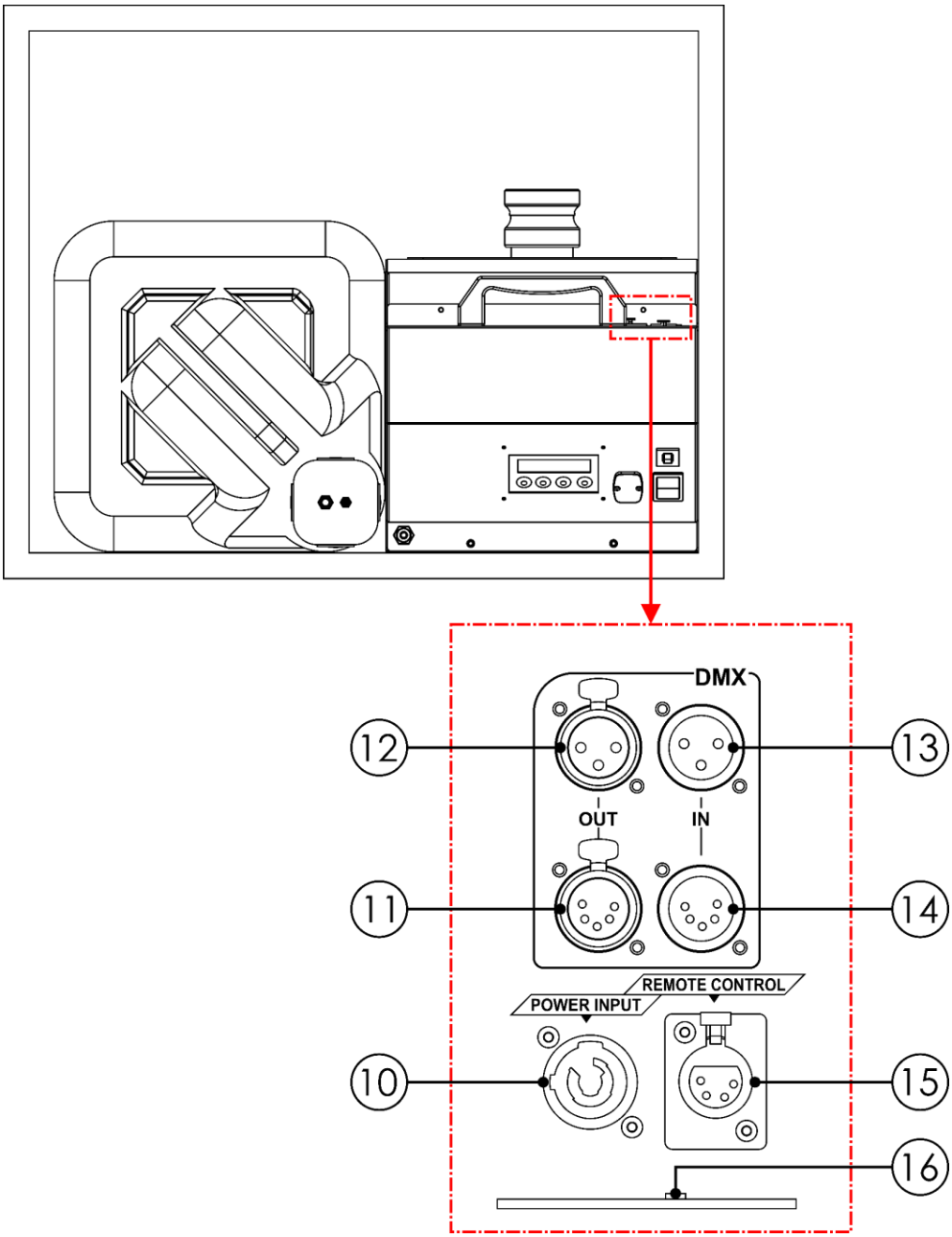


Fig. 02

10) Neutrik powerCON power connector (Blue) IN
11) 5-pin DMX signal connector OUT
12) 3-pin DMX signal connector OUT
13) 3-pin DMX signal connector IN
14) 5-pin DMX signal connector IN
15) 4-pin SC-3 remote control IN
16) Ground/earth connection

Installation

Remove all packing materials from the S-500. Check if all foam and plastic padding is removed, especially in the snow output area.
Carefully add a snow liquid to the snow liquid tank. Do not overfill the tank! Use the S-500 only with the Antari or Showtec snow liquids (ordercodes: 60588, 60589 and 80359). Any other types of liquid can damage the unit.
Firmly attach the remote control cable (ordercode: 60587) to the input connector on the rear of the device.
The device can be operated at floor level or be placed on any regular surface.
Regardless of the installation method, always place the device in horizontal position.
The maximum inclination angle of the flight case should not exceed 15°.
Always disconnect from electric mains power supply before cleaning or servicing.
Damages caused by non-observance are not subject to warranty.

CAUTION!
Read all the warnings and safety instructions before installation!
Knowledge of safety instructions is CRUCIAL for a safe use!

CAUTION!
Follow all warnings and safety instructions during installation/operation!
Non-observance could lead to severe injuries or even death !!!

Always follow the instructions from this manual and from local authorities.

Precautions for operation

Using a damaged or an improperly installed machine can lead to death, serious injury or property damage. Always inspect the machine thoroughly before operation.

Missing or obscured safety symbols on the machine can cause unawareness, which in turn can lead to death, serious injury or property damage. Make sure all safety symbols are correctly in place and visible. See front side of the device.

Setup and Operation

Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 110 V specification product on 240 V power, or vice versa.
Note:

- **Always monitor the snow tank liquid level!**
- **Do not exceed the maximum snow liquid level. DO NOT OVERFILL!**
- **You can only fill 80 % of the tank (not more than 16 L in the tank, due to compression).**
- **Do not operate the S-500 without snow liquid. It can permanently damage the device!**
- **Never aim the output nozzle directly at people.**
- **Never shut down the S-500 while the device is operating.**
- **Installation and operation of the S-500 requires professional and trained personnel.**

Tank Hose Installation

01) Loosen the cap on the snow liquid input **(03)** and remove it. See Fig. 03.
02) Put the tank hose through the cap and attach it firmly to the snow liquid input **(03)**. See Fig. 04.
03) Replace the cap and tighten it around the snow liquid input **(03)**. See Fig. 05.

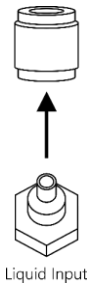


Fig. 03

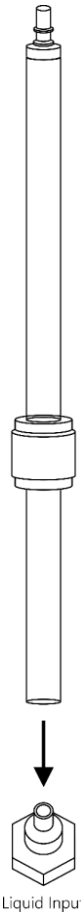


Fig. 04

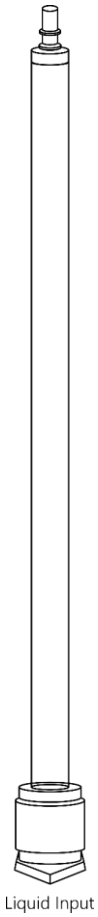


Fig. 05

04) Attach the other end of the tank hose to the fog liquid tank cap. See Fig. 06.

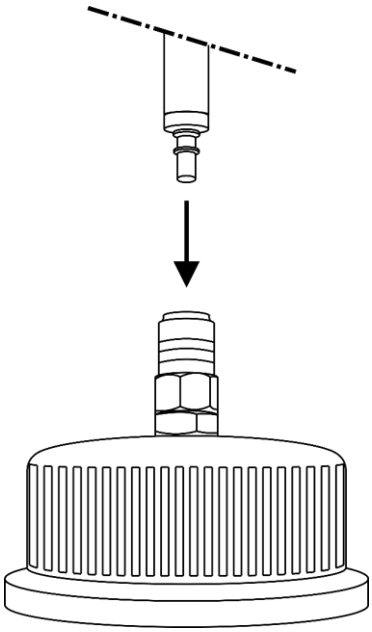


Fig. 06

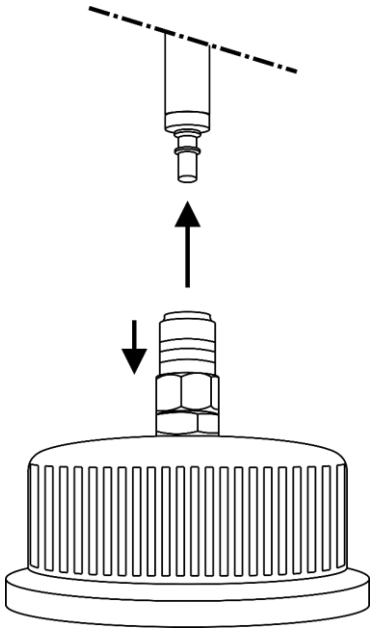


Fig. 07

05) To uninstall the tank hose, pull on the quick lock located on the snow liquid tank cap and remove the tank hose. See Fig. 07.

Extension Hose Installation

It is possible to extend the default output hose with the optional 10-meter ST-10 extension hose (80389).

The total length of the output hose must not exceed 20 m.
It is forbidden to install more than one ST-10 extension hose.

01) Release the safety locks and separate the output nozzle **(09)** from the output hose **(08)**.
02) Disconnect the snow liquid hose located inside. See Fig. 08.

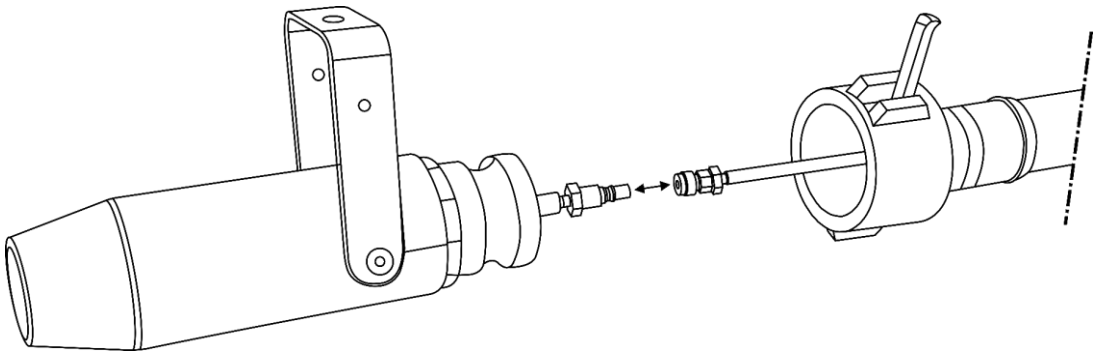


Fig. 08

03) Connect the snow liquid hose inside the ST-10 extension hose (red) to the output nozzle **(09)**. See Fig. 09.
04) Connect the snow liquid hose on the other end of the ST-10 extension hose to the output hose **(08)**. See Fig. 09.

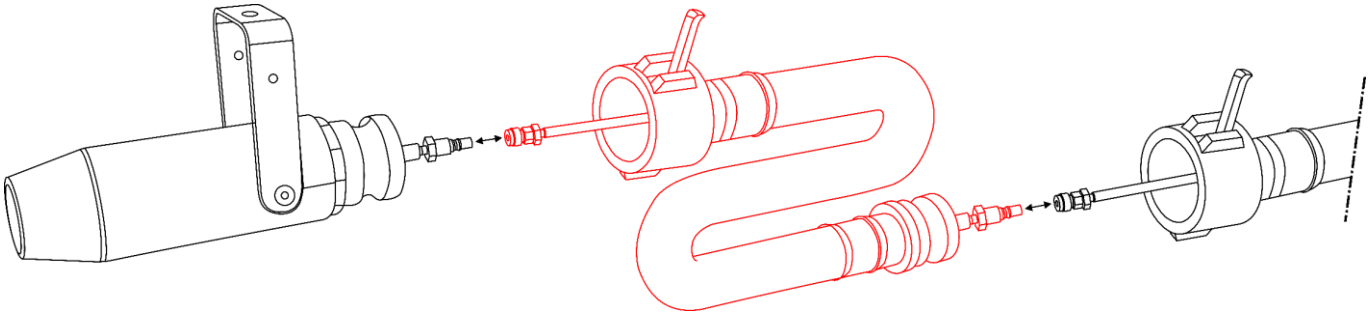


Fig. 09

05) Connect the output nozzle **(09)** to the ST-10 extension hose and secure the safety locks. Connect the other end of the ST-10 extension hose to the output hose **(08)** and secure the safety locks. See Fig. 10.

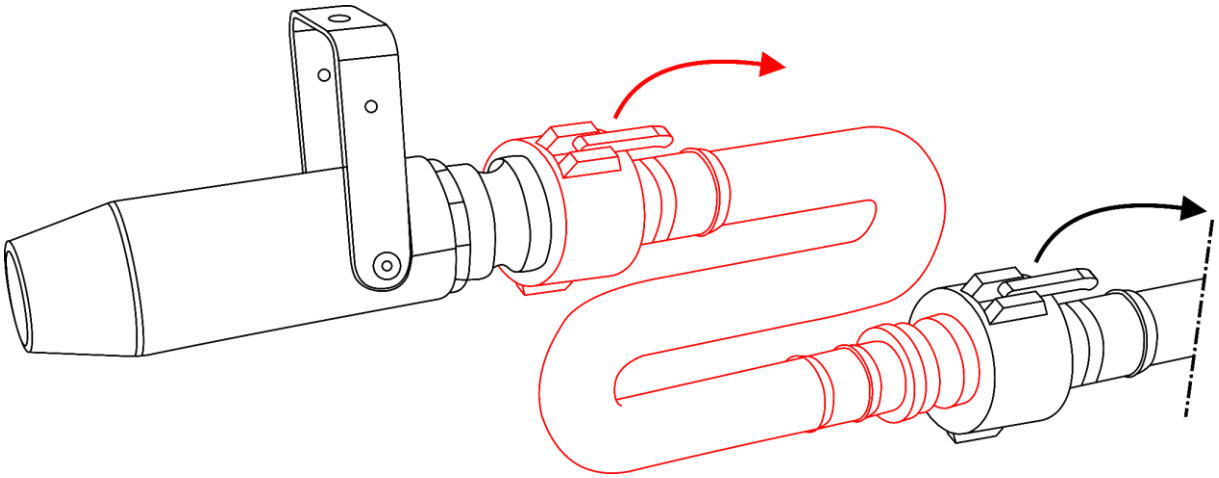


Fig. 10

Output Nozzle Installation

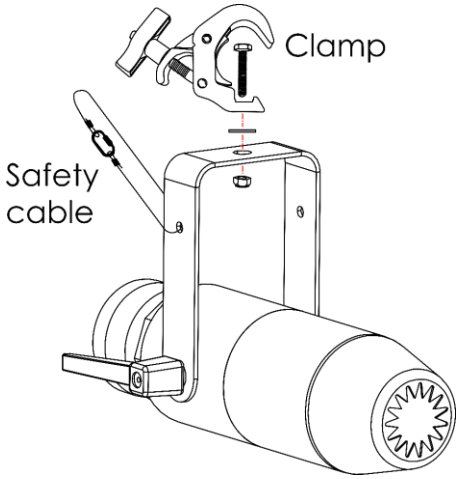


Fig. 11

The output nozzle can be mounted to any kind of truss with a clamp.

- Use professional trussing systems if the output nozzle is lowered from the ceiling or high joists.
- Use a clamp to mount the output nozzle, with the mounting bracket, to the trussing system.
- Never fix the output nozzle swinging freely in the room.
- Secure the installation with a safety attachment, e.g. an appropriate safety net or safety cable.
- Always make sure that the area below the installation site is secured and that there are not any unauthorized people around, when rigging, derigging or servicing the device.

Please follow the European and national guidelines concerning rigging, trussing and all other safety issues.

Do not attempt the installation yourself !
Always let the installation be carried out by an authorized dealer !

Improper installation can cause serious injuries and/or damage of property!

Output Nozzle Angle Adjustment

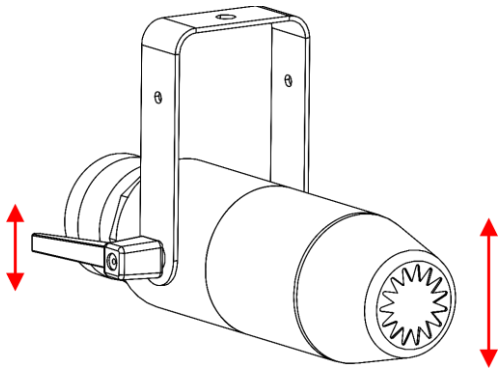


Fig. 12

01) Loosen the adjustment screw on the output nozzle **(09)**.
02) Tilt the output nozzle **(09)** to the desired position.
03) Tighten the adjustment screw to secure the output nozzle **(09)** in position.

Output Nozzle Pan Control

It is possible to install the output nozzle on the Antari PM-1, pan motor for the S-500 (ordercode: 80378P) for automated pan control. For more information concerning installation and operation, refer to the user manual of the Antari PM-1.

Control Modes

There are 5 modes:

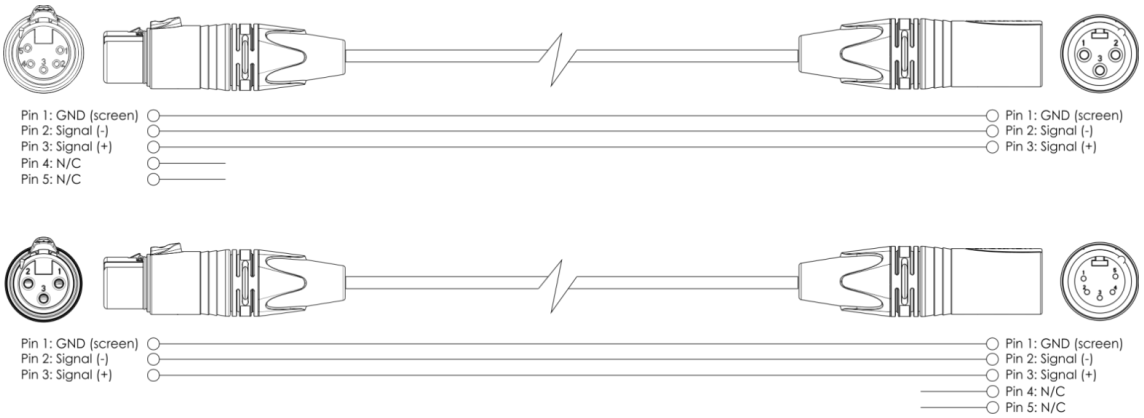
- Manual
- Timer
- Remote control
- Wireless remote control
- DMX-512 (2CH)

One S-500 (Manual, Timer, Remote control, Wireless remote control)

01) Leave at least 0,5 meter on all sides for air circulation.
02) Plug the end of the electric mains power cord into a proper electric power supply socket.
03) When the S-500 is not connected with a DMX cable, it functions as a stand-alone device.
04) Please see page 19–22 for more information about Manual, Timer, Remote control and Wireless remote control modes.

Multiple S-500 fixtures (DMX Control)

01) Leave at least 0,5 meter on all sides for air circulation.
02) Plug the end of the electric mains power cord into a proper electric power supply socket.
03) Use a 3-pin/5-pin XLR cable to connect the S-500s and other devices.



04) Link the units as shown in Fig. 13. Connect a DMX signal cable from the first unit's DMX "out" socket to the second unit's "in" socket. Repeat this process to link the second, third, and fourth units.
05) Supply electric power: Plug electric mains power cords into proper electric power supply sockets, starting with the first unit. Do not supply power before the whole system is set up and connected properly.

Multiple S-500 fixtures DMX Setup

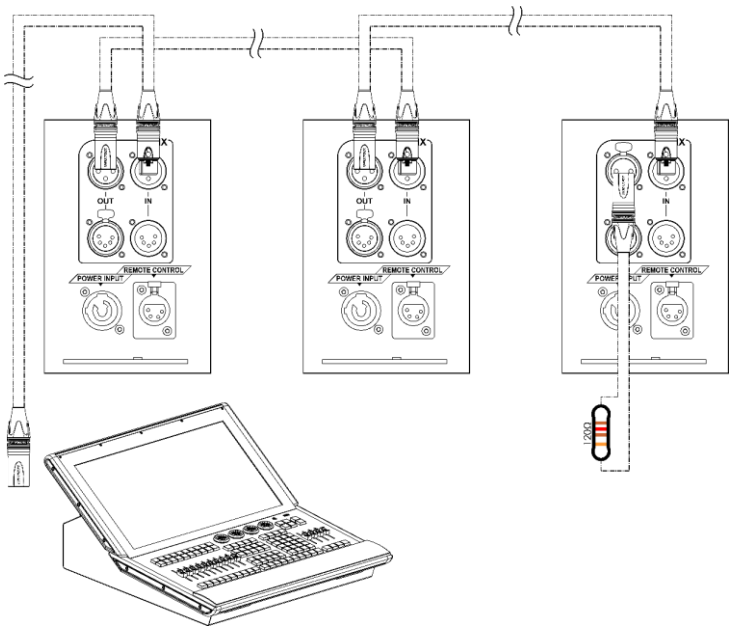


Fig. 13

Note: Link all cables before connecting electric power

Fixture Linking

You will need a serial data link to run light shows of one or more fixtures using a DMX-512 controller. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Important: Fixtures on a serial data link must be daisy-chained in a single line. To comply with the EIA-485 standard, no more than 30 devices should be connected on one data link. Connecting more than 30 fixtures on one serial data link without the use of a DMX optically isolated splitter may result in deterioration of the digital DMX signal.

Maximum recommended DMX data link distance: 100 meters
Maximum recommended number of fixtures on a DMX data link: 30 fixtures
Maximum recommended number of fixtures on a power link @ 240 V: 1 fixture

Data Cabling

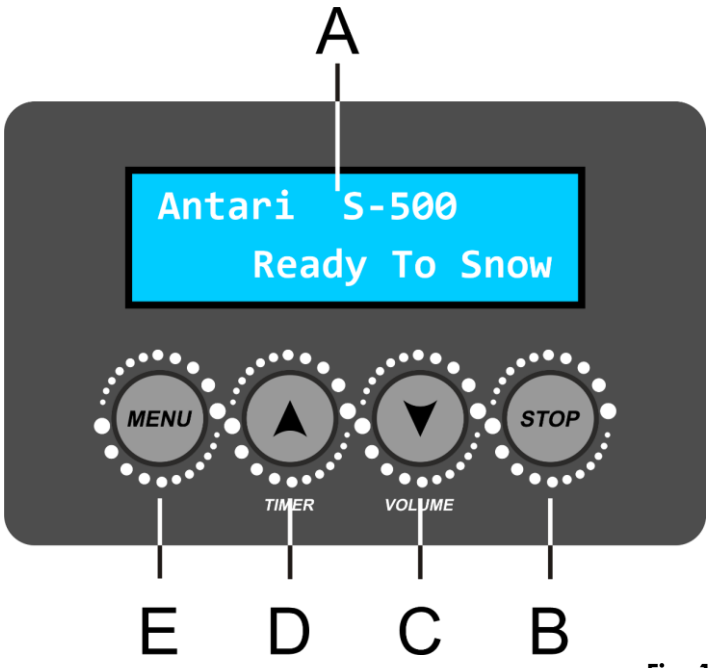
To link fixtures together, you must obtain data cables. You can purchase DAP Audio certified DMX cables directly from a dealer/distributor or construct your own cable. If you choose to create your own cable, please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

DAP Audio DMX Data Cables

- DAP Audio Basic microphone cable for allround use. bal. XLR/M 3-pin > XLR/F 3-pin. **Ordercode** FL01150 (1,5 m), FL013 (3 m), FL016 (6 m), FL0110 (10 m), FL0115 (15 m), FL0120 (20 m).
- DAP Audio X-type data cable XLR/M 3-pin > XLR/F 3-pin. **Ordercode** FLX0175 (0,75 m), FLX01150 (1,5 m), FLX013 (3 m), FLX016 (6 m), FLX0110 (10 m).
- DAP Audio cable for the demanding user with exceptional audio-qualities and connector made by Neutrik®. **Ordercode** FL71150 (1,5 m), FL713 (3 m), FL716 (6 m), FL7110 (10 m).
- DAP Audio cable for the demanding user with exceptional audio-qualities and connector made by Neutrik®. **Ordercode** FL7275 (0,75 m), FL72150 (1,5 m), FL723 (3 m), FL726 (6 m), FL7210 (10 m).
- DAP Audio 110 Ohm cable with digital signal transmission. **Ordercode** FL0975 (0,75 m), FL09150 (1,5 m), FL093 (3 m), FL096 (6 m), FL0910 (10 m), FL0915 (15 m), FL0920 (20 m).
- DAP Audio data cable FL08 DMX/AES-EBU, XLR/M 5-pin > XLR/F 5-pin. **Ordercode** FL08150 (1,5 m), FL083 (3 m), FL086 (6 m), FL0810 (10 m), FL0820 (20 m).
- DAP Audio DMX adapter: 5-pin/3-pin. **Ordercode** FLA29.
- DAP Audio DMX adapter: 3-pin/5-pin. **Ordercode** FLA30.
- DAP Audio DMX Terminator 3-pin. **Ordercode** FLA42.
- DAP Audio DMX Terminator 5-pin. **Ordercode** FLA43.

The S-500 can be operated with a controller in **control mode** or without the controller in **stand-alone mode**.

Control Panel



A) LCD display
B) STOP button
C) DOWN/VOLUME button
D) UP/TIMER button
E) MENU button

Fig. 14

Control Mode

The fixtures are individually addressed on a data-link and connected to the controller.
The fixtures respond to the DMX signal from the controller. (When you select the DMX address and save it, the controller will display the saved DMX address, next time.)

DMX Addressing

The control panel allows you to assign DMX fixture addresses, which is the first channel with which the S-500 will respond to the controller.
Please note when you use the controller, the device has **2** channels.
When using multiple S-500 fixtures, make sure that you set the DMX addresses right.
Therefore, the DMX address of the first S-500 should be **1(001)**; the DMX address of the second S-500 should be **1+2=3 (003)**; the DMX address of the third S-500 should be **3+2=5 (005)**, etc.
Please, make sure that you do not have any overlapping channels in order to control each S-500 correctly. If two or more S-500 fixtures are addressed similarly, they will work similarly.

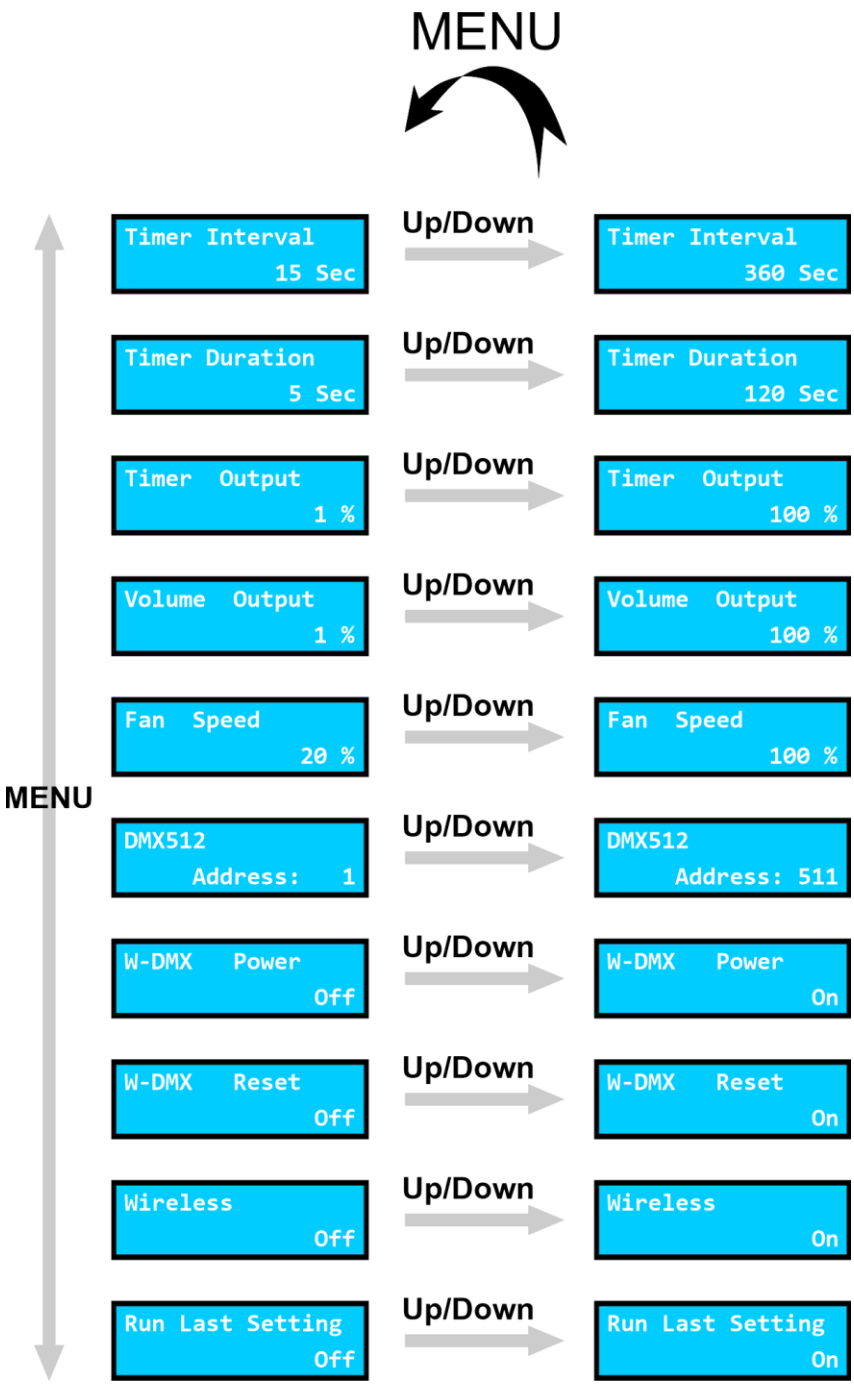
Controlling:

After having addressed all S-500 fixtures, you may now start operating these via your lighting controller.
Note: After switching on, the S-500 will automatically detect whether DMX 512 data is received or not.
If it does not, the problem may be:

- The XLR cable from the controller is not connected with the input of the S-500.
- The controller is switched off or defective, the cable or connector is detective, or the signal wires are swapped in the input connector.

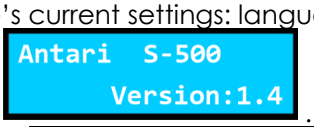
Note: It is necessary to insert an XLR termination plug (with 120 Ohm) in the last fixture in order to ensure proper transmission on the DMX data link.

Menu Overview



Main Menu Options

01) Upon start-up, the display will show the device's current settings: language, software version, voltage and frequency. The current software version is

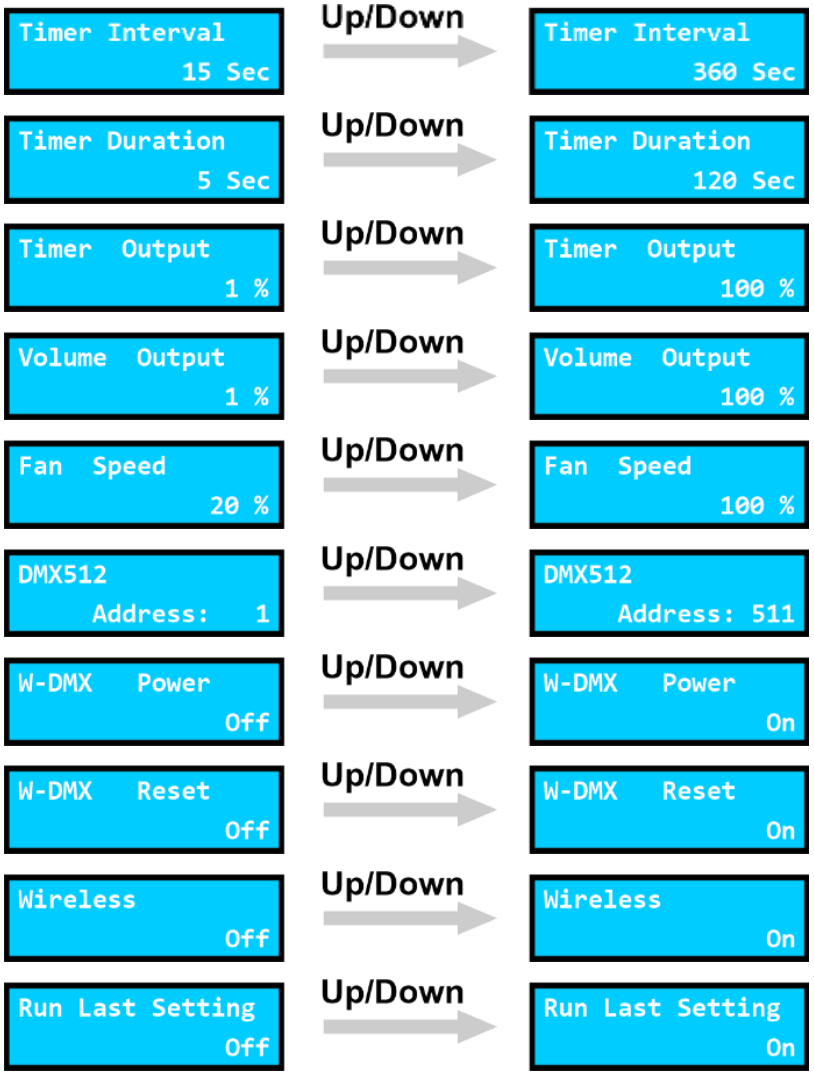


.

02) After a couple of seconds, the display will show:

.

03) Press the **MENU** button to enter the main menu.



1. Timer Interval
In this menu you can set the time between snow bursts in Timer mode.
01) Press the **MENU** button until the display shows TIMER INTERVAL.
02) Press the **UP/DOWN** buttons to set the interval time. The adjustment range is 15–360 seconds.
03) Press the **STOP** button to confirm. The display will show READY TO SNOW.

2. Timer Duration
In this menu you can set the snow burst duration in Timer mode.
01) Press the **MENU** button until the display shows TIMER DURATION.
02) Press the **UP/DOWN** buttons to set the duration time. The adjustment range is 5–120 seconds.
03) Press the **STOP** button to confirm. The display will show READY TO SNOW.

3. Timer Output
In this menu you can set the output volume in Timer mode.
01) Press the **MENU** button until the display shows TIMER OUTPUT.
02) Press the **UP/DOWN** buttons to set the output volume. The adjustment range is 1–100 %, from low to high output.
03) Press the **STOP** button to confirm. The display will show READY TO SNOW.

4. Volume Output
In this menu you can set the output volume in Volume mode.
01) Press the **MENU** button until the display shows VOLUME OUTPUT.
02) Press the **UP/DOWN** buttons to set the output volume. The adjustment range is 1–100 %, from low to high output.
03) Press the **STOP** button to confirm. The display will show READY TO SNOW.

5. Fan Speed
In this menu you can set the fan speed.
01) Press the **MENU** button until the display shows FAN SPEED.
02) Press the **UP/DOWN** buttons to set the fan speed. The adjustment range is 20–100 %, from slow to fast.
03) Press the **STOP** button to confirm. The display will show READY TO SNOW.

6. DMX Address
In this menu you can set the DMX address.
01) In main menu, press the **MENU** button until the display shows DMX512.
02) Press the **UP/DOWN** buttons to select the required address. The adjustment range is 001–511.
03) Press the **STOP** button to confirm. The display will show READY TO SNOW.

7. Wireless DMX
In this menu you can activate/deactivate Wireless DMX.
01) In main menu, press the **MENU** button until the display shows W-DMX POWER.
02) Press the **UP/DOWN** buttons to select ON/OFF.
03) Press the **STOP** button to confirm. The display will show READY TO SNOW.

Wireless DMX will not function. The S-500 is not equipped with a wireless DMX module. Contact your Antari dealer to purchase the wireless DMX upgrade kit.

The wireless DMX upgrade kit should be installed ONLY by a qualified technician. Do not attempt installation yourself!

8. Wireless DMX Reset
In this menu you can unlink the S-500 from its wireless DMX transmitter.
01) In main menu, press the **MENU** button until the display shows W-DMX RESET.
02) Press the **UP/DOWN** buttons to select ON/OFF.
03) If you have selected ON, the S-500 will automatically start unlinking process.

9. Wireless Transmitter
In this menu you can activate/deactivate the W2 wireless transmitter (60896, not included).
01) In main menu, press the **MENU** button until the display shows WIRELESS.
02) Press the **UP/DOWN** buttons to select ON/OFF.
03) If you have chosen ON, the device will try to detect the W2 wireless transmitter.
04) Use the W2 wireless transmitter to operate the S-500.

The W2 wireless transmitter needs to be linked before activation. Otherwise, it will not function. See *Linking*, *Unlinking* and *Operation* on page 22 for more information.

10. Run Last Setting
In this menu you can set whether the device, upon power-up, will perform last action from before shutdown.
01) In main menu, press the **MENU** button until the display shows RUN LAST SETTING.
02) Press the **UP/DOWN** buttons to select ON/OFF.
03) Press the **ENTER** button to confirm. The display will show READY TO STOP.
04) If you selected ON, upon power-up, the device will perform last action from before shutdown.

Manual Mode

1. Timer Mode
In this menu you can set Timer mode.
01) Set the interval and duration times. (See page 18 for more information.)
02) Set the timer output volume. (See page 18 for more information.)
03) Set the fan speed. (See page 18 for more information.)
04) When the display shows READY TO SNOW, press the **UP/TIMER** button to activate Timer mode. The device will start creating snow.
05) Press the **STOP** button to stop Timer mode.

2. Volume Mode
In this menu you can set Volume mode.
01) Set the output volume. (See page 18 for more information.)
02) Set the fan speed. (See page 18 for more information.)
03) When the display shows READY TO SNOW, press the **DOWN/VOLUME** button to activate Volume mode. The device will start creating snow.
04) Press the **STOP** button to stop Volume mode.

Remote Control Operation

It is possible to use the SC-3 remote control to operate the S-500. The SC-3 remote control is not included and can be purchased separately (60587).

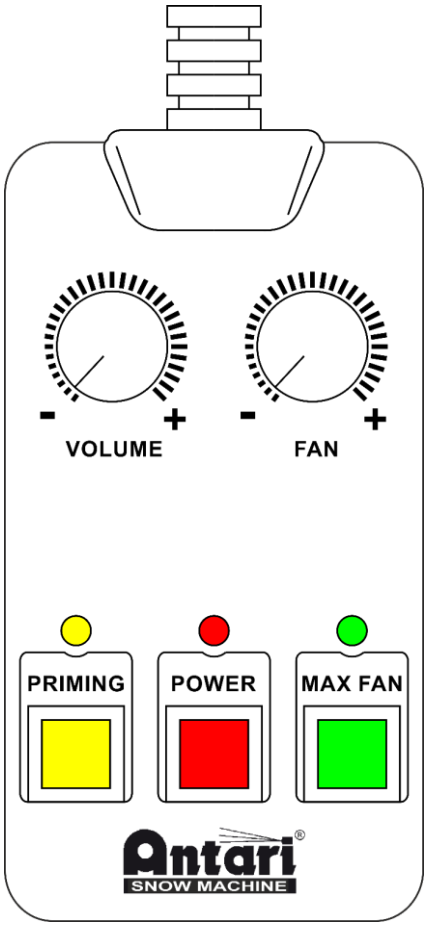


Fig. 15

01) Plug the SC-3 remote control into the 4-pin remote control connector IN **(15)**.
02) Turn the **VOLUME** control to the left or right to set the pump output level. The adjustment range is from from low to high.
03) Turn the **FAN** control to the left or right to set the fan speed . The adjustment range is from low to high.
04) Press the **POWER** button to activate the SC-3 remote control.
05) Press the **PRIMING** button set the maximum pump output level.
    - Pressing this button will override the current setting of the **VOLUME** control.
    - Use this button in order to flush the system and remove air bubbles, especially after refilling the snow liquid tank.
06) Press the **MAX FAN** button to set the maximum fan speed.
    - Pressing this button will override the current setting of the **FAN** control.
    - Use this button in order to remove residue in the output nozzle.

Wireless Operation

It is possible to use the W2 wireless transmitter to operate the S-500. The W2 wireless transmitter (60896) and the W2R wireless receiver (60897) are not included and can be purchased separately. Contact your Antari dealer for more information.

In order to use the W2 wireless transmitter, install the W2R wireless receiver first.

W2R Wireless Receiver

Fig. 16

01) Use a screwdriver to remove the 2 mounting screws and then remove the wireless receiver housing cover **(05)**.

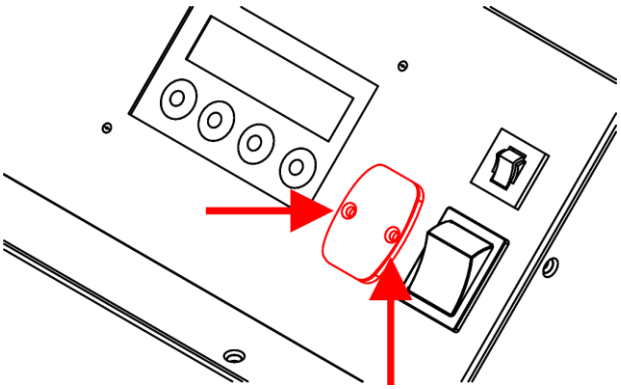


Fig. 17

02) Connect the W2R wireless receiver to the connector located in the housing. Replace and tighten the mounting screws.

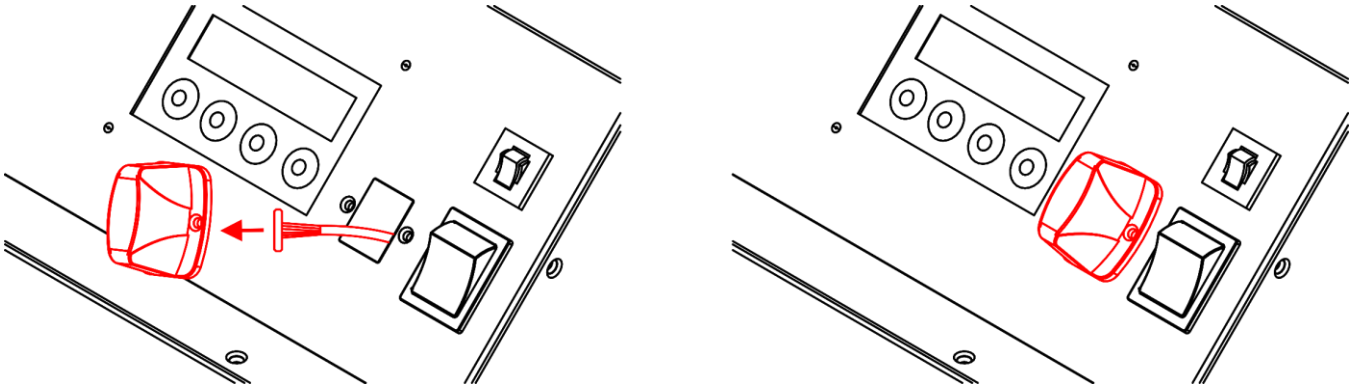


Fig. 18

W2 Wireless Transmitter

Fig. 19

Linking

01) **Before start-up** of the S-500, press and hold down the **DOWN** button and then flick the power switch **(07)** to ON position. The display will show `Wireless Register` / `Up:Pair  Down:Del`.

02) Press the **UP** button. The display will show `Wireless Register` / `Press button`.

03) Repeatedly press one of the 4 buttons on the W2 wireless transmitter (A, B, C or D) until the display shows `Wireless Register` / `Pair Completed`.

The W2 wireless transmitter needs to be activated before use. Otherwise, it will not function. See 9. *Wireless Transmitter* on page 19 for more information.

Unlinking

01) **Before start-up** of the S-500, press and hold down the **DOWN** button and then flick the power switch **(07)** to ON position. The display will show `Wireless Register` / `Up:Pair  Down:Del`.

02) Press the **DOWN** button. The display will show `Wireless Register` / `Delete ...` and shortly afterwards it will show `Wireless Register` / `Delete Completed`.

Operation

01) In main menu, press the **MENU** button until the display shows WIRELESS.
02) Press the **UP/DOWN** buttons to select ON.
03) The device will try to detect the W2 wireless transmitter. If everything is correct, the display will show WIRELESS DETECT: PASS.
04) Press the following 4 buttons on the W2 wireless transmitter:
    - A: Activate snow output.
    - B: Deactivate snow output.
    - C: Increase snow output.
    - D: Decrease snow output.

DMX Channels

2 Channels

Channel 1 – Snow effect	
0–5	Snow OFF
6–255	Snow ON: 1–100 %

Channel 2 – Fan speed	
0–5	Fan speed: 20 %
6–255	Fan speed: 21–100 %

Maintenance

The S-500 requires almost no maintenance. However, you should keep the unit clean. Disconnect the mains power supply and then wipe the cover with a damp cloth. Do not use alcohol or solvents. Do not immerse in liquid.
Keep connections clean. Disconnect electric power, and then wipe the connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.
Remove dust from the air vents with an air compressor, vacuum or a soft brush (excessive dust, liquid and dirt built up will degrade performance and may cause overheating). Run the machine on monthly basis in order to achieve best performance and output condition.

Do not allow the snow liquid to become contaminated. Always close the snow liquid tank immediately after adding the snow liquid to the tank.

Performance Note:

- Snow machines develop condensation around the output nozzle. Because this may result in moisture accumulation on the surface below the output nozzle, consider this condensation when installing your machine. Snow machines may occasionally sputter small amounts of snow, during operation and/or after being turned off.
- Only use the recommended snow liquids.

Cleaning

Before storing the S-500, it needs to be cleaned.

01) Remove the snow liquid from the snow liquid tank.
02) Add water to the snow liquid tank.
03) When the display shows READY TO SNOW, press the **DOWN(VOLUME)** button to start snowing. See ***2. Volume Mode*** on page 19 for more information.
04) After 2 minutes, press the **STOP** button to stop snowing.
05) Unplug the device.
06) Remove the remaining water from the snow liquid tank.

Replacing the Fuse

You do not have to replace the fuse on this device as the fuse is automatic.

01) In case of a power surge, short-circuit or inappropriate power supply, press the circuit breaker **(06)** and the device will function normally.
02) Try to determine the cause of the problem, so that the situation does not happen in the future.

Troubleshooting

This troubleshooting guide is meant to help solve simple problems.
Always monitor the snow tank liquid level when operating the device. Running the device without snow liquid can cause permanent damage to the device.
If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.
If the S-500 does not operate properly, refer servicing to a technician.

01) If you experience low output or no output at all, unplug immediately.
02) Check the snow liquid level and the power from the wall.
03) Check if the tank hose is properly attached to the snow liquid tank.
04) Check the fuse. See page 23.
05) If all of the above appears to be O.K., plug the unit in again.
06) If you are unable to determine the cause of the problem, do not simply continue, as this may damage the device.
07) Return the S-500 to your Antari dealer.

No Response to DMX

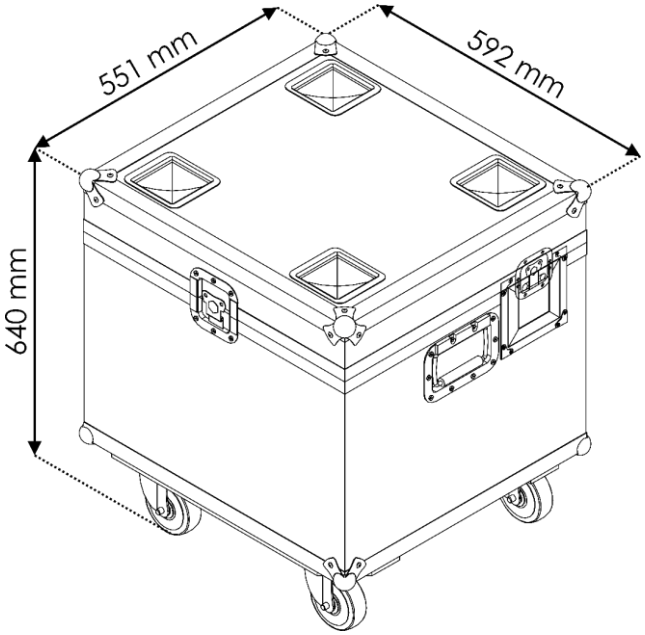
Suspect the DMX cable or connectors, a controller malfunction, a light effect DMX card malfunction.

01) Check the DMX setting. Make sure that DMX addresses are correct.
02) Check the DMX cable: Unplug the unit; change the DMX cable; then reconnect to electrical power. Try your DMX control again.
03) Determine whether the controller or light effect is at fault. Does the controller operate properly with other DMX products? If not, take the controller in for repair. If so, take the DMX cable and the light effect to a qualified technician.

Problem	Probable cause(s)	Remedy
One or more fixtures do not function at all.	No power to the fixture.	• Check if power is switched on and cables are plugged in.
	Circuit breaker is active.	• Reset the circuit breaker.
Devices reset correctly, but all respond erratically or not at all to the controller.	The controller is not connected.	• Connect controller.
	XLR Out of the controller does not match XLR In of the first device on the link (i.e. signal is reversed).	• Install a phase reversing cable between the controller and the first device on the link.
Devices reset correctly, but some respond erratically or not at all to the controller.	Poor data quality.	• Check data quality. If much lower than 100 percent, the problem may be a bad data link connection, poor quality or broken cables, missing termination plug, or a defective device disturbing the link.
	Bad data link connection.	• Inspect connections and cables. Correct poor connections. Repair or replace damaged cables.
	Data link not terminated with 120 Ohm termination plug.	• Insert termination plug in output jack of the last device on the link.
	Incorrect addressing of the devices.	• Check address setting.
	One of the devices is defective and disturbs data transmission on the link.	• Bypass one device at a time until normal operation is regained: unplug both connectors and connect them directly together. • Have the defective device serviced by a qualified technician.
	XLR Out on the device does not match (pins 2 and 3 reversed).	• Install a phase-reversing cable between the devices or swap pin 2 and 3 in the device that behaves erratically.
No snow output.	Device is too hot.	• Allow device to cool. • Make sure air vents are not blocked. • Turn up the air conditioning.
	The device is damaged.	• Disconnect device and return to your dealer.
	The power supply settings do not match local AC voltage and frequency.	• Disconnect device. Check settings and correct if necessary.

Product Specifications

Model:	Antari S-500
Input voltage:	220–240 V AC, 50/60 Hz
Peak power:	1600 W
Continuous power consumption:	730 W
Wireless DMX:	Optional
Output:	80 m^3/min
Tank capacity:	20 L
Liquid consumption:	400 ml/min
Onboard:	LCD display + control buttons
Control modes:	Manual, Timer, Remote control, Wireless remote control, DMX-512/W-DMX
DMX mode:	2 channels
Color:	Black
Housing:	Flight case
Data connection:	3-pin/5-pin XLR IN/OUT, 4-pin remote control connector IN
Power connection:	Neutrik powerCON connector (Blue) IN
IP rating:	IP20
Dimensions:	592 x 551 x 640 mm (LxWxH)
Weight:	35 kg
Max. ambient temperature t_a:	40 °C
Minimum distance:	
Minimum distance from surfaces:	0,5 m
Minimum distance from objects:	0,5 m



Design and product specifications are subject to change without prior notice.

CE

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