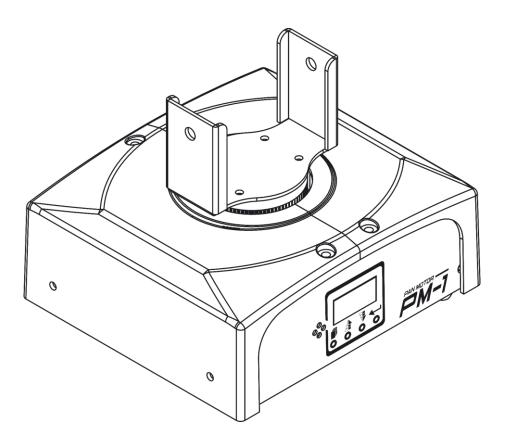


# MANUAL





Antari PM-1 Pan Motor for S-500 V1

Ordercode: 80378P

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## Warning



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

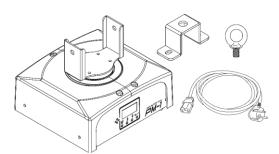


## **Unpacking Instructions**

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 PM-1 Pan Motor for S-500
- Schuko to IEC power cable (1,2 m)
- 1 x mounting bracket
- 1 x safety eye
- 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!
- Never remove warning or informative labels from the unit.



- Never use anything to cover the ground contact.
- Never leave any cables lying around.
- Do not insert objects into air vents.
- Do not connect this device to a dimmer pack.
- Do not switch the device on and off in short intervals, as this will reduce the device's life.
- Do not shake the device. Avoid brute force when installing or operating the device.
- Only use the device indoors, avoid contact with water or other liquids.
- Only operate the fixture after having checked if the housing is firmly closed and all screws are tightly fastened.
- Only operate the device after having familiarized with its functions.
- Avoid flames and do not put close to flammable liquids or gases.
- Always keep the case closed while operating.
- Always allow a free air space of at least 50 cm around the unit for ventilation.
- Always disconnect power from the mains, when device is not used or before cleaning! Only handle the power cord holding it by the plug. Never pull out the plug by tugging the power cord.
- Make sure that the device is not exposed to extreme heat, moisture or dust.
- 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 device was 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 your Antari device fails to work properly, discontinue the use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Antari dealer for service.
- For adult use only. The device must be installed beyond the reach of children. Never leave the device running unattended.
- Never attempt to bypass the thermostatic switch or fuses.
- For replacement use fuses of same type and rating only.
- The user is responsible for correct positioning and operating of the PM-1. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this device.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- 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!



## **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.

Improper installation can cause serious damage to people and property !

You endanger your own safety and the safety of others!



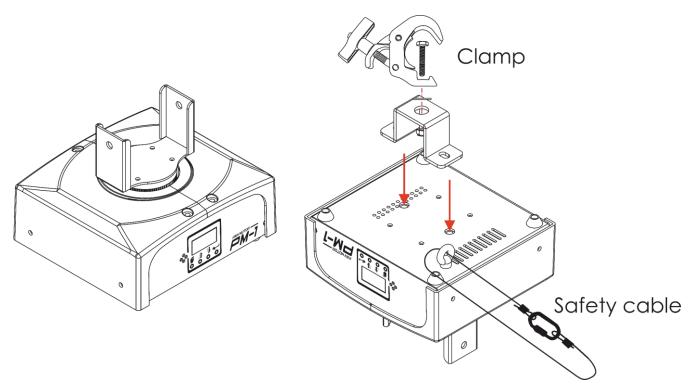
## Rigging

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!

## Procedure:

- If the PM-1 is lowered from the ceiling or high joists, professional trussing systems have to be used.
- Use a clamp to mount the PM-1, with the mounting bracket, to the trussing system.
- The PM-1 must never be fixed swinging freely in the room.
- The installation must always be secured with a safety attachment, e.g. an appropriate safety net or safety cable.
- When rigging, derigging or servicing the PM-1, always make sure, that the area below the installation site is secured and that there are not any unauthorized people around.



The PM-1 can be placed on a flat stage floor or mounted to any kind of truss with a clamp.

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

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 PM-1 or in this manual.
- use for other purposes or under other circumstances than those set out in this documentation.
- alterations to the PM-1. 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 device.

Antari is not liable for any consequential loss in the event of a PM-1 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
Ν	BLUE	BLACK	SILVER	NEUTRAL
Ð	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!



# A 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 <u>aftersales@highlite.com</u> 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 shortcomings 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 PM-1 is an optional pan motor which can be used in combination with the Antari S-500 snow machine and allows you to control its pan movement. The PM-1 helps you increase the coverage of this already powerful machine.

- Input voltage: 100–240 V AC, 50/60 Hz
- Power consumption: 12 W
- Pan angle: 60°/90°/120°
- Control protocol: DMX-512
- Onboard: LED display + control buttons
- Control modes: Stand-alone, Master/Slave, DMX-512
- DMX mode: 1, 2 channels
- Color: Black
- Housing: Metal chassis with plastic cover
- Data connection: 3-pin XLR IN/OUT
- Power connection: IEC power connector IN
- IP rating: IP20
- Fuse: T1AL/250 V
- Dimensions: 170 x 152 x 153 mm (LxWxH)
- Weight: 2 kg

#### **Optional accessories:**

80378 – Antari S-500 Snow Machine

#### Front

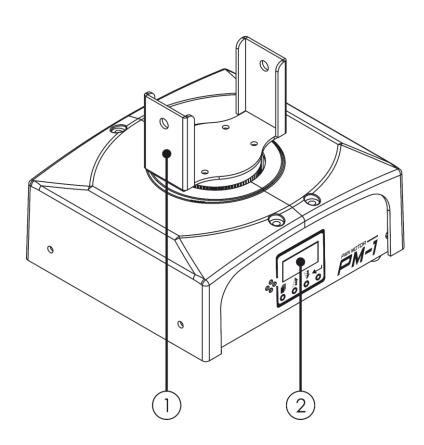


Fig. 01

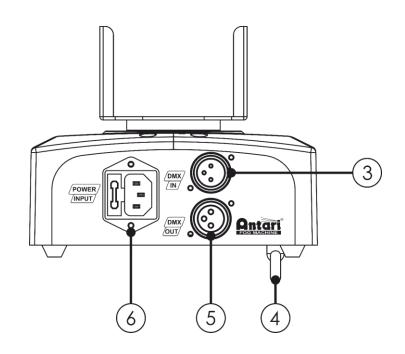
Porterie Fogmachine



01) S-500 output nozzle installation bracket

02) LED display + control buttons

#### Back



03) 3-pin DMX signal connector IN

- 04) Safety eye
- 05) 3-pin DMX signal connector OUT
- 06) IEC power connector IN + Fuse T1AL/250V

## Installation

Remove all packing materials from the PM-1 Pan Motor for S-500. Check if all foam and plastic padding is removed. Connect all cables.

Do not supply power before the whole system is set up and connected properly. Always disconnect from electric mains power supply before cleaning or servicing. Damages caused by non-observance are not subject to warranty.

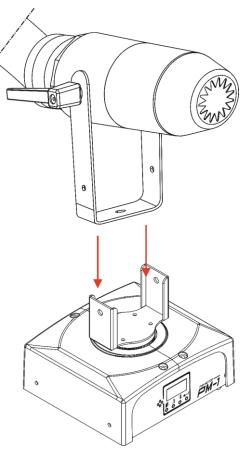




## Output Nozzle Pan Control

You can install the output nozzle of the S-500 Snow Machine on the Antari PM-1. Follow the instructions below.

01) Put the output nozzle of the S-500 Snow Machine in the installation bracket (01) of the PM-1 (Fig. 03).



02) Insert and tighten the mounting screws (Fig. 04).

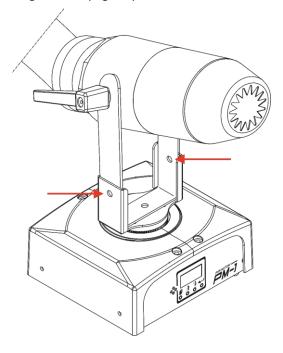


Fig. 04



Fig. 03

## Setup and Operation

Follow the directions below, as they pertain to your preferred operation mode.

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. Connect the device to the main power supply.

## **Control Modes**

There are 3 modes:

- Stand-alone
- Master/Slave
- DMX-512 (1CH, 2CH)

#### One PM-1 device (Stand-alone)

- 01) Fasten the device to a firm trussing. Leave at least 0,5 meter on all sides for air circulation.
- 02) Always use a safety cable (ordercode 70140/70141).
- 03) Plug the end of the electric mains power cord into a proper electric power supply socket.
- 04) When the PM-1 is not connected with a DMX cable, it functions as a stand-alone device.
- 05) See **3. Pan Mode** on page 15 for more information about stand-alone mode.

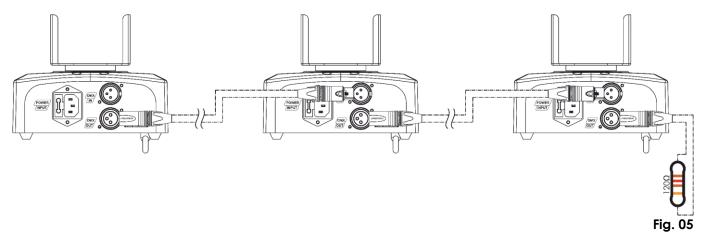
#### Multiple PM-1 devices (Master/Slave control)

- 01) Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
- 02) Always use a safety cable (ordercode 70140/70141).
- 03) Use a 3-pin XLR cable to connect the PM-1.



04) Link the units as shown in Fig. 05. Connect the first unit's DMX "out" socket with the second unit's "in" socket, using a DMX signal cable. Repeat this process to link the second, third, and fourth units. You can use the same functions on the master device as described in **3. Pan Mode** on page 15 (Standalone mode). This means that you can set your desired operation mode on the master device and all slave devices will react the same as the master device.

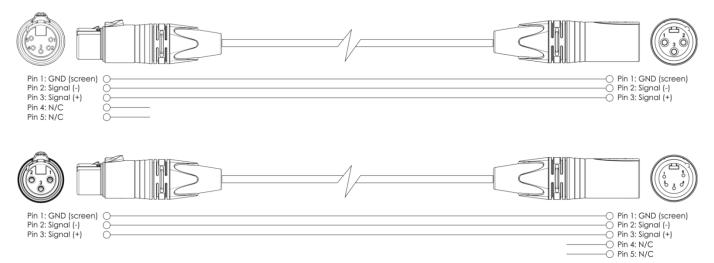
#### Multiple PM-1 devices (Master/Slave control)





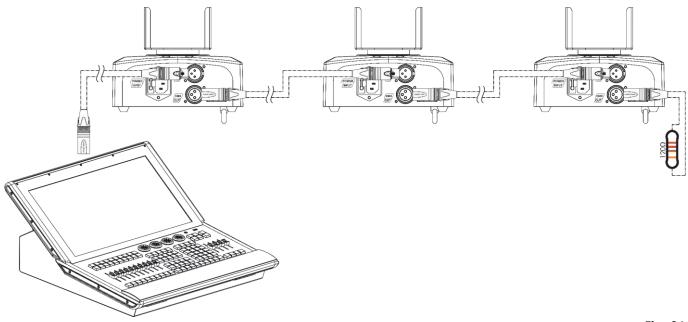
#### Multiple PM-1 devices (DMX Control)

- 01) Fasten the effect light to a firm trussing. Leave at least 0,5 meter on all sides for air circulation.
- 02) Always use a safety cable (ordercode 70140/70141).
- 03) Use a 3-pin XLR cable to connect the PM-1 and other devices.



- 04) Link the units as shown in Fig. 06. Connect the first unit's DMX "out" socket with the second unit's "in" socket, using a DMX signal cable. Repeat this process to link the second, third, and fourth units.
- 05) Supply electric power: Plug electric mains power cords into each unit's IEC socket, then plug the other end of the mains power cord 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 PM-1 devices DMX Setup



#### Note : Link all cables before connecting electric power

Fig. 06



## **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.



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

## **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

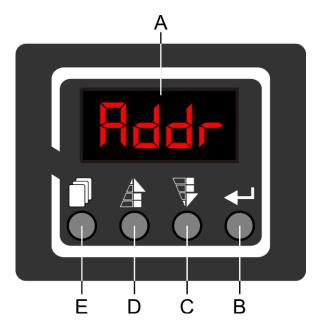
- DAP Audio Basic microphone cable for allround use. bal. XLR/M 3-pin > XLR/F 3-pin.
   Ordercode FL01150 (1,5 m), FL013 (3 m), FL016 (6 m), FL0110 (10 m), FL0115 (15 m), FL0120 (20 m).
- DAP Audio X-type data cable XLR/M 3-pin > XLR/F 3-pin. Ordercode FLX0175 (0,75 m), FLX01150 (1,5 m), FLX013 (3 m), 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.



## Antari PM-1 Pan Motor for S-500

The PM-1 can be operated with a controller in **control mode** or without the controller in **stand-alone mode**.

## **Control Panel**



- A) LED display
- B) ENTER button
- C) DOWN button
- D) UP button
- E) MENU button

Fig. 07

## **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 PM-1 will respond to the controller.

Please note when you use the controller, the device has 2 channels.

When using multiple PM-1 fixtures, make sure that you set the DMX addresses right.

Therefore, the DMX address of the first PM-1 should be 1(001); the DMX address of the second PM-1

should be 1+2=3 (003); the DMX address of the third PM-1 should be 3+2=5 (005), etc.

Please, make sure that you do not have any overlapping channels in order to control each PM-1 correctly. If two or more PM-1 fixtures are addressed similarly, they will work similarly.

## **Controlling:**

After having addressed all PM-1 fixtures, you may now start operating these via your lighting controller. **Note:** After switching on, the PM-1 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 PM-1.
- 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.

## 🛕 Display Off after 90 seconds 🛛 🖊

When no button is pressed for 30 seconds, the display will show the DMX starting address and after 60 more seconds the display will turn off.

Press the MENU, ENTER, UP or DOWN button to light up the display. See **8**. Display Options on page 16 for more information.



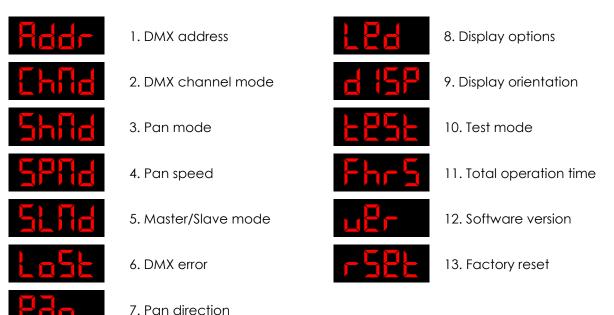
Menu Overview

		MENU					
	Rddr	ENTER	ł	UP/DOWN	5 12		
	EhNd	ENTER	I[]⊦	UP/DOWN	2[h		
	ShNd	ENTER	68	UP/DOWN	98	UP/DOWN	120
	SPNd	ENTER	5P {	UP/DOWN	SP S		
	SLNd	ENTER	Nasf	UP/DOWN	51 {	UP/DOWN	51 2
	LoSt	ENTER	ShNd	UP/DOWN	blld	UP/DOWN	hold
MENU	Pan	ENTER	ΠΟ	UP/DOWN	485		
	169	ENTER	οπ	UP/DOWN	<sub>o</sub> ff		
	d (SP	ENTER	d5) P				
	EB2E	ENTER	EB2E				
	Fhr5	ENTER					
	uer	ENTER	и 🗓	ENTER	Ь		
	r58£						



## **Main Menu Options**

The main menu has the following options:



- 01) Press the **MENU** button to navigate through the main menu.
- 02) Press the ENTER button to open the submenus.

#### 1. DMX Address

In this menu you can set the DMX starting address of the device.

- 01) Press the **MENU** button until the display shows
- 02) Press the ENTER button to open the menu.
- 03) Press the UP/DOWN buttons to select the DMX starting address. The selection range is





04) Press the ENTER button to confirm the selection.

#### 2. DMX Channel Mode

In this menu you can select the DMX channel mode.



- 01) Press the **MENU** button until the display shows
- 02) Press the ENTER button to open the menu.
- 03) Press the UP/DOWN buttons to select one of the 2 DMX channel modes:



1 channel

2 channels

04) Press the ENTER button to confirm the selection.



#### 3. Pan Mode

In this menu you can set the pan range and run the auto program.



- 01) Press the **MENU** button until the display shows
- 02) Press the **ENTER** button to open the menu.
- 03) Press the UP/DOWN buttons to select one of the 3 options:



60 degrees

90 degrees

120 degrees

04) Press the **ENTER** button to confirm the selection. The device will automatically start rotating at the set range.

**Note:** The device must be set as a master for this operation mode to be functional. See **5. Master/Slave Mode** on page 15 for more information.

#### 4. Pan Speed

In this menu you can set the pan movement speed.



- 01) Press the **MENU** button until the display shows02) Press the **ENTER** button to open the menu.
- 03) Press the UP/DOWN buttons to set the pan movement speed. The adjustment range is
- **UP/DOWN SP 5**, from slow to fast.
- 04) Press the ENTER button to confirm the selection.

#### 5. Master/Slave Mode

In this menu you can set the device as a master or a slave device in master/slave control mode.



- 01) Press the **MENU** button until the display shows
- 02) Press the ENTER button to open the menu.
- 03) Press the UP/DOWN buttons to select one of the 3 options:



Master: The device operates as a master and sends DMX signals to other devices.

Slave 1: The device operates as a slave and copies the behavior of the master device.

Slave 2: The device operates as a slave and mirrors the behavior of the master device.

- 04) Press the ENTER button to confirm the selection.
- 05) Press and hold down the **MENU** button for 2 seconds until the display shows the currently selected master/slave control mode, in order to activate it.



#### 6. DMX Error

In this menu you can determine the device's behavior in case of a DMX signal error.



- 01) Press the **MENU** button until the display shows02) Press the **ENTER** button to open the menu.
- 03) Press the **UP/DOWN** buttons to select one of the 3 options:



The device will operate in Pan mode.

The device will stop working.



The device will use last working DMX signal, to ensure undisrupted performance.

04) Press the ENTER button to confirm the selection.

#### 7. Pan Direction

In this menu you can reverse the pan movement direction.

- 01) Press the **MENU** button until the display shows
- 02) Press the ENTER button to open the menu.
- 03) Press the UP/DOWN buttons to select one of the 2 options:



Pan reverse off

Pan reverse on

04) When the display shows current movement direction.

, each pressing of the ENTER button will reverse the device's

#### 8. Display Options

In this menu you can select whether the display will remain on or will turn off after 90 seconds of inactivity.

- 01) Press the **MENU** button until the display shows
- 02) Press the ENTER button to open the menu.
- 03) Press the UP/DOWN buttons to select one of the 2 options:



The LED display remains on

When no button is pressed for 30 seconds, the display will show the DMX starting address and after 60 more seconds the display will turn off. Press any button to turn the display on.

04) Press the ENTER button to confirm the selection.



#### 9. Display Orientation

In this menu you can select the orientation of the display.



- 01) Press the **MENU** button until the display shows
- 02) Repeatedly press the ENTER button to choose one of the 2 display orientations:



Normal display

Inverted display

#### 10. Test Mode

In this menu you can test the device's functions.

- 01) Press the **MENU** button until the display shows
- 02) Press the ENTER button to test the device's functions.

#### 11. Total Operation Time

In this menu you can view the device's total operation time.

- 01) Press the **MENU** button until the display shows
- 02) Press the ENTER button to view the device's total operation time (hours).

#### 12. Software Version

In this menu you can view the device's currently installed software version.

- 01) Press the **MENU** button until the display shows
- 02) Repeatedly press the ENTER button to toggle between the 2 screens displaying the software version.

The currently installed software version is

#### 13. Factory Reset

In this menu you can reset the pan to home position.

- 01) Press the **MENU** button until the display shows
- 02) Press the ENTER button to reset the pan.





## **DMX Channels**

#### 1 channel

#### Channel 1 – Horizontal movement (Pan)

Move the slider up, in order to move head horizontally (PAN). Gradual head adjustment from one end of the slider to the other (0–255, 127-center). The head can be turned by 120° and stopped at any position you wish.

#### 2 channels

## Channel 1 – Horizontal movement (Pan) 🛆 CH2 must be set between 0–15 \Lambda

Move the slider up, in order to move head horizontally (PAN). Gradual head adjustment from one end of the slider to the other (0–255, 127-center). The head can be turned by 120° and stopped at any position you wish.

#### Channel 2 – Built-in programs

0–15	Manual pan
16–31	Pan 60°, Speed 1
32–47	Pan 60°, Speed 2
48–63	Pan 60°, Speed 3
64–79	Pan 60°, Speed 4
80–95	Pan 60°, Speed 5
96–111	Pan 90°, Speed 1
112-127	Pan 90°, Speed 2
128–143	Pan 90°, Speed 3
144–159	Pan 90°, Speed 4
160–175	Pan 90°, Speed 5
176–191	Pan 120°, Speed 1
192–207	Pan 120°, Speed 2
208–223	Pan 120°, Speed 3
224–239	Pan 120°, Speed 4
240–255	Pan 120°, Speed 5



## Maintenance

The operator has to make sure that safety-related and machine-technical installations are to be inspected by an expert after every year in the course of an acceptance test. The operator has to make sure that safety-related and machine-technical installations are to be inspected by a skilled person once a year.

The following points have to be considered during the inspection:

- 01) All screws used for installing the device or parts of the device have to be tightly connected and must not be corroded.
- 02) There may not be any deformations on housings, fixations and installation spots.
- 03) Mechanically moving parts like axles, eyes and others may not show any traces of wearing.
- 04) The electric power supply cables must not show any damages or material fatigue.

The PM-1 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 immerse in liquid. Do not use alcohol or solvents.

Keep connections clean. Disconnect electric power, and then wipe the DMX connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

## **Replacing the Fuse**

Power surges, short-circuit or inappropriate electrical power supply may cause a fuse to burn out. If the fuse burns out, the product will not function whatsoever. If this happens, follow the directions below.

- 01) Unplug the unit from electric power source.
- 02) Insert a screwdriver into the slot in the fuse cover. Gently pry up the fuse cover. The fuse will come out.
- 03) Remove the used fuse. If brown or unclear, it is burned out.
- 04) Insert the replacement fuse into the holder where the old fuse was. Reinsert the fuse cover. Be sure to use a fuse of the same type and specification. See the product specification label for details.

## Troubleshooting

This troubleshooting guide is meant to help solve simple problems.

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 device does not operate properly, refer servicing to a technician.

- Suspect two potential problem areas as: the power supply and the fuse.
- 01) Power supply. Check if the unit is plugged into an appropriate power supply.
- 02) The fuse. Replace the fuse. See page 19 for replacing the fuse.
- 03) If all of the above appears to be O.K., plug the unit in again.
- 04) If you are unable to determine the cause of the problem, do not open the PM-1, as this may damage the unit and the warranty will become void.
- 05) Return the device to your Antari dealer.



## No Response to DMX

Suspect the DMX cable or connectors, a controller malfunction, a device's DMX card malfunction.

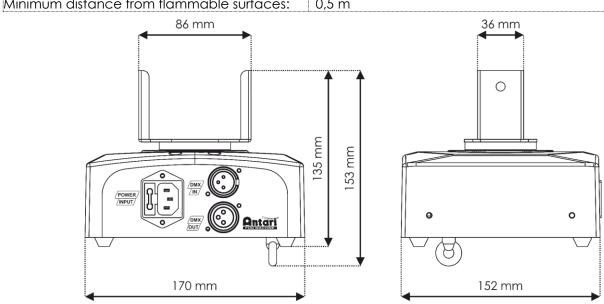
- 01) Check the DMX setting. Make sure that DMX addresses are correct.
- 02) Check the DMX cable: Unplug the device; change the DMX cable; then reconnect to electrical power. Try your DMX control again.
- 03) Determine whether the controller or the device is at fault. Does the controller operate properly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

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



# **Product Specifications**

Model:	Antari PM-1 Pan Motor for S-500
Input voltage:	100–240 V AC, 50/60 Hz
Power consumption:	12 W
DMX linking:	30 pcs
Fuse:	T1AL/250 V
Dimensions:	170 x 152 x 153 mm (LxWxH)
Weight:	2 kg
Operating and Programming:	
Signal pin OUT:	Pin 1 (earth), pin 2 (-), pin 3 (+)
DMX personalities:	1, 2 channels
Signal input:	3-pin DMX IN
Signal output:	3-pin DMX OUT
Electro-mechanical properties:	
Pan angle:	60°/90°/120°
Control protocol:	DMX-512
Onboard:	LED display + control buttons
Control modes:	Stand-alone, Master/Slave, DMX-512
DMX mode:	1, 2 channels
Color:	Black
Housing:	Metal chassis with plastic cover
Data connection:	3-pin XLR IN/OUT
Power connection:	IEC power connector IN
IP rating:	IP20
Ambient temperature $t_{a}$ :	40 °C
Max. housing temperature $t_{B}$ :	80 °C
Minimum distance:	
Minimum distance from flammable surfaces:	0,5 m



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

CE

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