



PM-1
Pan Motor
User Manual
- English
- 中文



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1. Introduction	1
2. Safety Information.....	1
3. Package Contents & Inspection.....	2
4. Machine Details.....	2
5. Technical Label Information.....	2
6. Setting and Manual Operation	3
7. Control Settings	4
8. DMX Connection	5
9. Service and Maintenance.....	5
10. Technical Specifications	6
11. Warranty Disclaimer.....	6
12. Machine Dimension.....	6
1. 前言	7
2. 安全注意事項	7
3. 包裝內容與檢查	8
4. 機器訊息	8
5. 技術標籤資訊	8
6. 設定與手動操作說明	9
7. 控制設定	10
8. DMX 說明	10
9. 維護和保養	11
10. 技術規格	12
11. 保固聲明	12
12. 機器尺寸圖	12

PAN MOTOR **PM-1** *User Manual*

1. Introduction

Please read all the user manual before operating the machine, and place the manual where the user can refer to it at all time. The manual includes how to install and operate the machine under safe condition and explain all the labels printed on the machine. If you encounter any problem, contact your local Antari dealer for assistant immediately.

2. Safety Information

	DANGER	If the danger is not avoided, it will cause death or serious injury
	WARNING	If the warning is not heeded, it can cause death or serious injury.
	CAUTION	If the precaution is not taken, it may cause minor or moderate injury.



DANGER

- Must connect the machine to the correct rated voltage or it might lead to an electrical shock or a burn and may cause serious consequences.
- Do not operate the machine with a bundled power cord, it could lead to a fire hazard.
- When operating the machine, do not point at people, animals, or fire.



WARNING

- Please operate the machine on a flat, level hard and well ventilated surface area, reserve at least 50cm space around the machine and make sure there is no flammable gas or material nearby.
- Do not disassemble, repair or modify the machine, it may cause damages, malfunction, risk of electrical shock or result in fire.
- The machine can only be operated by adults or professionals, is not intended for use by person with reduced physical sensory, mental capabilities, or lack of experience and knowledge including children.
- Do not leave the machine running unattended, make sure all powers are off when leaving.
- Children should be supervised to ensure that they do not play with the machine.
- Do not use the machine upside down or tilt it, it might cause damages or malfunction.



CAUTION

- Keep the machine dry at all time. The machine is not waterproof, do not expose the machine to water, rain, or moisture environment.
- Please make sure the power outlet is not damaged or loose before plug in the power cord.
- If the power cord is damaged, it must be replaced by Antari or its local dealers, otherwise the warranty will be void.
- The machine is for indoor use only.
- Do not operate the machine in any area with unstable voltage.
- If you experience strange sound or malfunction, turn off the power and unplug the power cord immediately and contact your local Antari dealer for assistant.
- Do not contact any moving part.
- Only use accessories recommended or sold by Antari.
- Please make sure the power is off when not using the machine and unplug the power cord if not intend to use for a long period of time.
- To disconnect, turn all controls to the off position, then remove plug from outlet.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- Unplug from outlet before servicing or cleaning.

- Do not operate the machine with a damaged cord or plug, or after the machine malfunctions or is dropped or damaged in any manner. Return machine to the nearest authorized service facility for examination, repair, or electrical or mechanical adjustment.

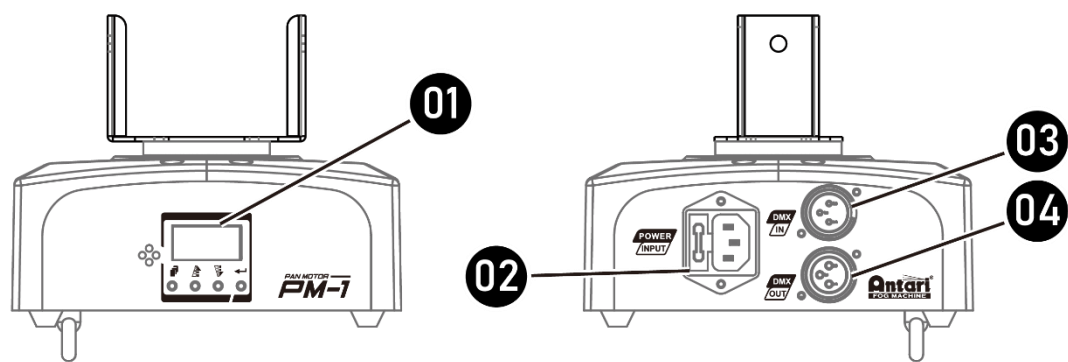
3. Package Contents & Inspection

Immediately upon receiving the machine, carefully unpack the carton, check the content to ensure it is the correct model and all parts are included. If any part appears to be damaged or missing during transportation, please contact your local dealer and return in original package for inspection.

3.1 Package Contents

- 1 x PM-1 Pan Motor
- 1 x IEC Power Cable
- 1 x Safety Ring
- 1 x Omega Clamp
- 1 x User Manual or Scan QR Code on the Machine

4. Machine Details



01. Onboard Digital Control Interface	03. XLR 3-Pin In Connector (DMX)
02. IEC Connector	04. XLR 3-Pin Out Connector (DMX)

5. Technical Label Information

Please read the technical label information on the back of the machine before operating it.

1 XXXX 2 INPUT VOLTAGE: 3 FREQUENCY: 4 RATED POWER: 5 BREAKER/FUSE: XXXX Vac 50/60Hz XXXW XXA 250V MADE IN TAIWAN XXXXXMMYYXXXXX 6  Scan It for User Manual 7 	
1. Model Name	5. Breaker/Fuse
2. Input Voltage	6. QR CODE for User Manual
3. Frequency	7. Serial No.
4. Rated Power	

6. Setting and Manual Operation



WARNING

Machine falling off might cause serious injury, please make sure it is secure and firm on the overhead.

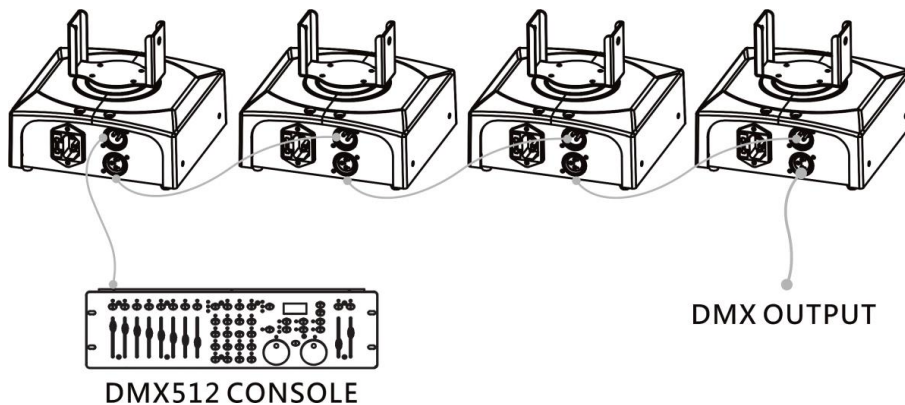
- Step 1.** Place the machine on a flat, level hard and well ventilated surface area and reserve at least 50cm open space around the machine, and make sure there is no flammable gas or material nearby;
- Step 2.** Connect the machine to the power outlet. Please read the technical label on the back of the machine and make sure the power outlet is the correspond to the rated voltage for the machine;
- Step 3.** Use onboard digital control interface to start and set up the machine.
- Step 4.** To turn off the power, please make sure the machine is not operating. If you will not use the machine a long period of time, please unplug the power cord.

Data Linking

Serial data link is available when operating the machine using DMX controller.

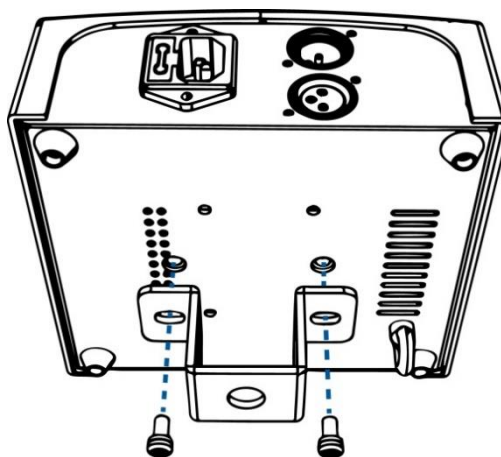
Please see below before set up the serial data link;

- Maximum recommended length of data link is 500 meters
- Maximum recommended number of data-linked machine is 32 units
- Machine must be daisy-chained by linking one data output to next data input (see graph below)
- Data output must be terminated on the last machine of each chain using a termination plug.
- Avoid long parallel runs of AC power and data cables as it may cause interference on the data link



Mounting

Use omega clamps for truss mounting, see graph below;



Installation Precaution

- Use mounting bracket or claps to install the PM-1.
- Please make sure installation place 、fixed joint 、hanging lock can hold 10 times weights of PM-1's weight.
- Please make sure there is no flammable material nearby.
- When install, please use safety harness can hold 10 times weights of the PM-1.

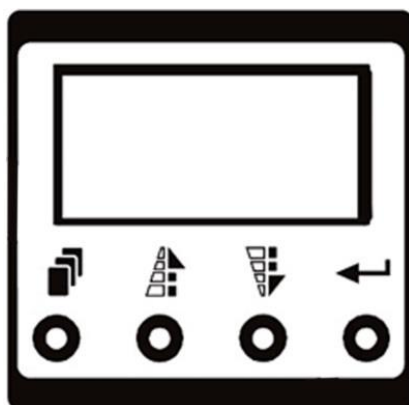
- Please install the PM-1 in a well ventilated area.
- When choosing installation site, please put position and the convenience of regular maintenance into consideration.

7. Control Settings

PM-1 Pan Motor can be operated in the following modes. The machine can only accept 1 type of signal at a time. When using different control modes at the same time, the machine will work according to built-in control priority:

- Manual
- DMX512

7.1 Control Panel Description



PM-1 Pan Motor can be operated with the onboard digital control interface.

Button	Operating Method	Function
 MENU	Press	To enter and scroll through setting menu
 UP	Press	Up
 DOWN	Press	Down
 ENTER	Press	Setup / Confirm

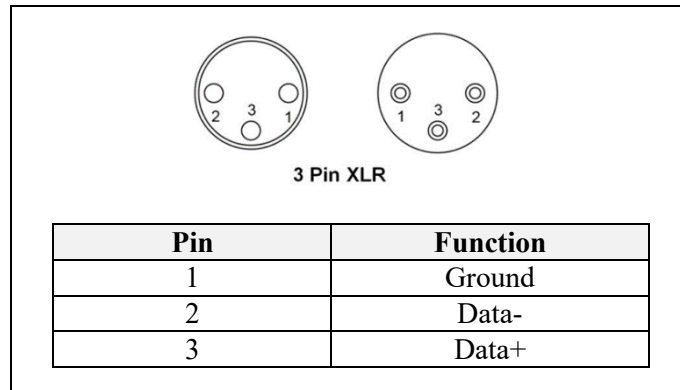
7.2 Menu Options Description

Options	Description
Addr	Set DMX address from 001 – 512
ChNd	Set DMX channel mode 01 or 02
ShNd	Select auto chase pan movement 60/90/120 degrees
SPNd	Select auto chase speed from 1-5
SLND	Set machine as Master/Slave 1/Slave 2
LoSt	When DMX signal is lost, use this function to set machine to Master/Slave, Black out or run last signal
Pan	Turn On or Off pan inversion
LeD	Turn On or Off display auto shut off
DISP	Turn on or off display inversion
Test	Activate self-testing mode
FhrS	Show machine running hour
ver	Show software version
RSet	Reset machine to factory default setting

8. DMX Connection

8.1 DMX Connector Pin Assignment

The machine has a XLR 3-Pin for DMX connection. The diagram below indicates pin assignment information.



8.2 DMX Setting

Channel Mode	Channel	DMX Value Range	Function
1	1 (Pan Movement)	0 – 255	0-120 degrees
	2 (Auto Chase)	0-15	OFF
		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

9. Service and Maintenance



DANGER

Disconnect the power cord before starting maintenance operation!

- Always keep the machine clean.
- Can use an air compressor, a vacuum or a soft brush to remove the dust on the machine.

- Can use a slightly damp cloth to clean the casing.
- Before store the machine, please make sure the machine is completely cool down to avoid moisture inside the machine causing malfunction.
- It is recommended to run the machine at least once a month in order to maintain its best performance and output condition.
- Excessive dust and build up liquid residue will reduce the performance and cause overheat.

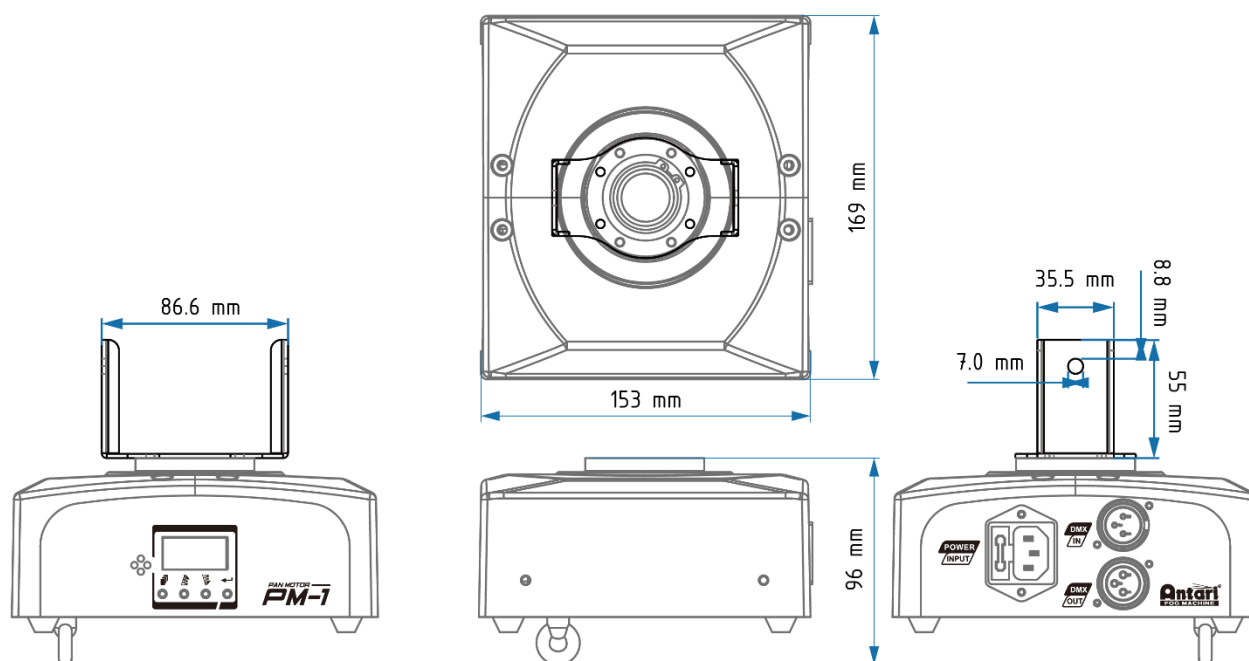
10. Technical Specifications

PM-1	
Rated Voltage	AC 100-240V, 50/60Hz
Rated Power	11W
Pan Angle	120 degrees
Control Methods	Manual 、DMX512
Interface	XLR 3-Pin Connector (DMX) 、IEC Connector (Power)
DMX Channels	2 Channels
Protection Rating	IP-20 Indoor Use Only
Included Accessories	Omega Clamp 、Safety Ring
Dimension	L 169 W 153 H 151 mm (L 6.65 W 6.02 H 5.95 inch)
Weight	1.9 kg (4.19 lbs.)

11. Warranty Disclaimer

We guarantee the merchandise manufactured by us to be free from defect in material and workmanship for a period of one year. Our obligation and liability under this warranty shall be restricted to repair or replacement at our factory or local authorized dealer. We assume no liability of the products that are improperly used or used for any purpose other than that for which they are specially designed. This warranty shall not apply to any merchandise which has been repaired, altered or assembled outside our factory in any way so as in our judgment to affect its performance, nor which has been subjected to misuse, negligence, or accident nor to any merchandise operated contrary to our printed instructions. We will not allow or be liable of any loss or any damages of any kind in connection with the use, sale, or repair of any merchandise purchased from us.

12. Machine Dimension



PAN MOTOR PM-1

中文使用說明

1. 前言

在操作本機器之前，請務必仔細詳閱本說明書然後請將本說明書放置在機器使用者可隨時查閱之處存放。此說明書包含如何安全的安裝及操作本機器以及說明所有在機器上的標示。如果您有任何操作上的問題，請立即聯繫當地的 Antari 經銷商尋求協助。

2. 安全注意事項

	危險	若不確實避免這些指示，可能導致嚴重人身傷害甚至死亡。
	警告	若不確實遵循這些指示，可能導致嚴重人身傷害甚至死亡。
	注意	若不確實注意這些指示，可能導致人身傷害甚至死亡，嚴重程度視情況而定。



危險

- 請務必使用正確電壓。如果使用錯誤電壓，可能會遭受危險的電擊燒傷或更嚴重的後果。
- 請勿在捆綁電源線的情況下使用，可能會發熱導致火災。
- 操作機器時請勿將機器對著人體、動物或火焰使用。



警告

- 請於堅固、平坦、穩定且通風良好的表面上使用機器。請勿遮蓋機器散熱部份，機器周邊至少應保留 50 公分的空間並確認附近沒有易燃性物質或可揮發性氣體。
- 請勿隨意拆卸、修理或改造機器，這可能會導致機器故障、損壞、觸電危險或造成火災。
- 本機器僅限有行為能力之成人或專業人員操作，不預期提供生理、感知、心智能力、經驗或知識不足者之使用者(包含孩童)使用本機器。
- 請勿在無人看管時讓機器運作，並於外出離去時確實關閉電源。
- 孩童應受監督，以確保孩童不能操作或嬉戲玩本機器。
- 請勿將機器放倒或傾斜使用，可能導致機器動作不正常或損壞。



注意

- 本機器無防水設計，請隨時保持機器乾燥，嚴禁將其潑水、浸水、淋雨或放在潮溼的環境。
- 在插入電源插座前，請確認電源插座無損壞或鬆動。
- 若電源線損壞，必須使用原廠電源線或組件進行更換，否則將導致保固無效。
- 本產品僅限室內使用。
- 請勿在電壓不穩定的地區使用本機器。
- 如果機器出現異常聲音或有任何不正常現象時，請立即停止工作，將電源關閉及拔下機器電源線，並請聯繫當地的 Antari 經銷商尋求協助。
- 請勿觸碰機器內部運轉零件。
- 只能使用原廠建議或販售之配件。
- 請確認機器不在使用的狀態下電源已關。如果長時間不使用機器，請拔掉電源線。
- 關閉機器時，將控制開關轉到關閉的位置，然後再將插頭從插座拔除。
- 拔除電源線時，請抓住插頭不是電線。
- 在保養及清潔前，請把電源線從插座拔除。

- 在電線或插座有損毀、機器故障或有掉落或損壞的情形發生時，請勿操作機器。請將機器送回最近的維修站，做檢查、維修及電源或機械的調整。

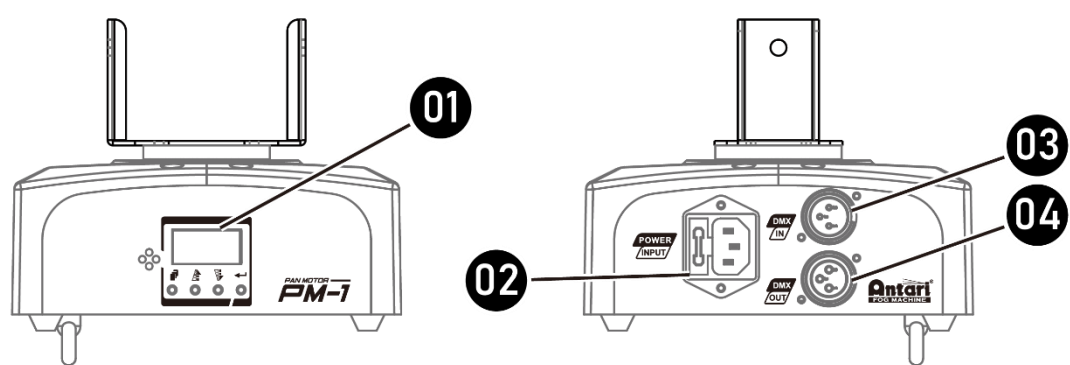
3. 包裝內容與檢查

在收到機器後，請立即小心地打開包裝紙箱，檢查所有內容，確認您所購買的機型及配件。如果有任何部件因運輸過程出現損壞或缺少，請立即連絡經銷商，並以原包裝退回檢查。

3.1 包裝內容

- 1 x PM-1 搖頭旋轉台
- 1 x IEC 電源線
- 1 x 安全吊環
- 1 x Omega 夾具
- 1 x 說明書或掃描機身 QR CODE

4. 機器訊息



01. 數位控制面板	03. XLR 3-Pin In 連接頭(DMX)
02. IEC 電源連接頭	04. XLR 3-Pin Out 連接頭(DMX)

5. 技術標籤資訊

使用本機器前，請詳閱技術標籤上的訊息

1 XXXX 2 INPUT VOLTAGE: 3 FREQUENCY: 4 RATED POWER: 5 BREAKER/FUSE: 6 XXXX Vac 50/60Hz XXXW XXA 250V MADE IN TAIWAN XXXXXXMMYYXXXXXX 7 Scan It for User Manual	
1. 機器型號	5. 斷路器/保險絲
2. 工作電壓	6. 說明書 QR CODE
3. 頻率	7. 機器流水序號
4. 瓦特數	

6. 設定與手動操作說明



警告

機台掉落可能會造成嚴重傷害，請確保本機台安裝牢固且不會掉落。

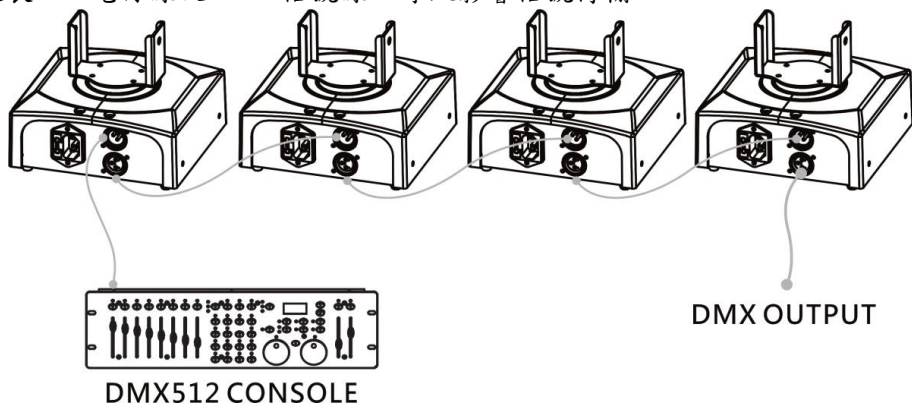
- 步驟1.** 將機器平放在堅固、平坦、穩定且通風良好的表面上，機器周圍至少應保留 50 公分的空間並確認附近沒有易燃性物質或可揮發性氣體；
- 步驟2.** 將機器連接電源，連接之前，確認機器背後技術標籤上所標示要求功率，是否與電源插座相符；
- 步驟3.** 開啟電源使用當機器準備好可以進行操作；
- 步驟4.** 需關閉本機時，請確認機器已停止運轉，再將電源關閉即可，長時間不使用時請移除電源線。

數據連結

使用 DMX 控制器操作 PM-1 時，具有串聯傳輸功能。

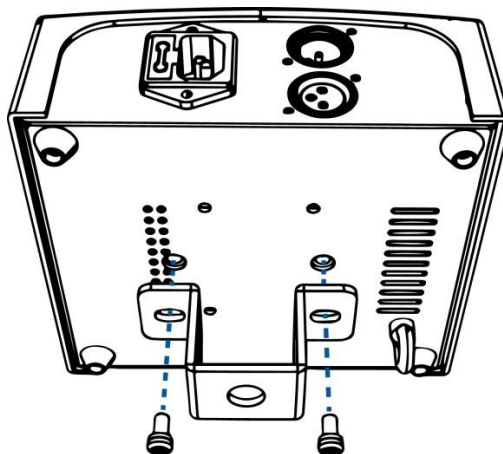
使用串聯傳輸功能前，請參考下列：

- 最長數據連接距離為 500 公尺
- 最多連接數量為 32 台
- 用 DMX XLR 信號線連接裝置，一端接到裝置的輸出口，另一端接到下一個裝置的輸入口(請參考下圖)
- 在最後一個裝置上，需使用終端插頭
- 請避免過度延長 AC 電源線及 XLR 信號線，導致影響信號傳輸



倒掛安裝

欲安裝在桁架上時，請使用 Omega 夾具，請參照下圖；



安裝注意事項

- 使用安裝支架或吊掛夾具來安裝旋轉台。

- 確認安裝處、固定接頭以及吊掛索具可支撐旋轉台 10 倍以上的重量。
- 確認周邊沒有任何易燃的材料。
- 安裝旋轉台時，請務必使用可以支撐 10 倍以上重量的安全繩索。
- 請將旋轉台安裝在通風良好的地方。
- 在選擇安裝地點時，請將裝置的擺放位置以及定期維護的方便性納入考量。

7. 控制設定

PM-1 搖頭旋轉台可以使用下列操作模式，機器每次接受一種訊號

- 手動控制
- DMX512

7.1 控制面板說明

PM-1 搖頭旋轉台可以使用機器上的數位控制面板來操作。

按鈕	操作方式	功能
 選單	按	進入選單畫面及瀏覽
 上	按	上
 下	按	下
 確認	按	停止/確認

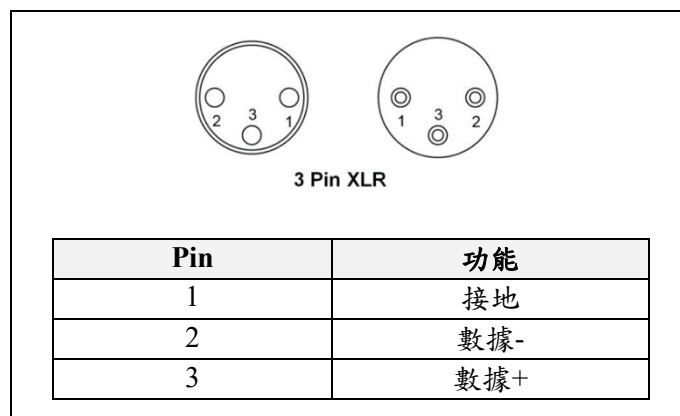
7.2 選單說明

選單	敘述
Addr	設置 DMX 從 001 至 512 的位址
ChNd	設置 DMX 頻道模式 01 或 02
ShNd	設定旋轉頭台自轉循環，60/90/120 旋轉角度
SPNd	設定旋轉台自轉速度，範圍為 1 至 5
SLND	設定旋轉台主從模式(Master/Slave 1/Slave 2)
LoSt	DMX 訊號遺失時，使用此功能將機器設定主從模式、待機模式或執行後設定模式
Pan	開啟或關閉水平反向
LeD	開啟或關閉 LED 顯示螢幕/自動關閉
DISP	開啟或關閉顯示反向
Test	啟動自主測試模式
FhrS	顯示機器使用時間
ver	顯示軟體版本
RSet	還原為原廠設定

8. DMX 說明

8.1 DMX 說明

本機可提供一個 XLR 3-PIN 的 DMX 連接頭選擇。下為 PIN 的接點說明：



8.2 DMX 通道功能設定

通道模式	DMX 通道	DMX 數值範圍	功能
1	1 (旋轉角度)	0-255	0-120 旋轉角度
	2 (自轉)	0-15	關閉
		16-31	旋轉 60°、速度 1
		32-47	旋轉 60°、速度 2
		48-63	旋轉 60°、速度 3
		64-79	旋轉 60°、速度 4
		80-95	旋轉 60°、速度 5
		96-111	旋轉 90°、速度 1
		112-127	旋轉 90°、速度 2
		128-143	旋轉 90°、速度 3
		144-159	旋轉 90°、速度 4
		160-175	旋轉 90°、速度 5
		176-191	旋轉 120°、速度 1
		192-207	旋轉 120°、速度 2
		208-223	旋轉 120°、速度 3
		224-239	旋轉 120°、速度 4
		240-255	旋轉 120°、速度 5

9. 維護和保養

 危險	維修保養之前，請務必拔除電源線！
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- 隨時保持機器清潔。
- 可以使用空氣壓縮機、吸塵器或軟刷除去機器上的灰塵。
- 機殼可使用濕布擦拭。
- 在存放或收起機器前，請確認機器完全冷卻，避免機器內部潮濕導致故障。
- 建議每月至少讓機器運轉一次，以保持機器處於最佳的性能和輸出條件。
- 機器上過多的灰塵、液體殘餘累積的髒污會降低機器工作性能，導至散熱不良。

10. 技術規格

PM-1	
電壓	AC 120 - 240V, 50 / 60 Hz
額定功率	11 瓦
旋轉角度	120 度
控制方式	手動控制、DMX512
連接座	XLR 3-Pin 連接頭 (DMX)、IEC 連接頭(主電源)
DMX 512 通道	2 個頻道
防護等級	IP-20 僅限室內使用
隨附配件	Omega 夾具、安全吊環
尺寸	長 169 寬 153 高 151 公釐 (長 6.65 寬 6.02 高 5.95 英寸)
重量	1.9 公斤 (4.19 磅)

11. 保固聲明

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12. 機器尺寸圖

