



FT-20X

Fire Training Fog Machine

User Manual

- English

- 中文



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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.
- Must connect the machine to a protected circuit and ensure it is properly grounded to avoid the risk of electrocution. For grounding instruction, please refer to the last page.
- 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

- Machine's nozzle is extremely hot, please keep at least 50cm distance from the nozzle when the machine is running.
- 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.
- Please store the fluid inside in a well ventilated area without direct sunlight and keep out of reach of children. In case of eye contact or accidentally swallow the fluid, please seek medical attention immediately.



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.
- Before operating the machine, please sure the fluid is filled in the fluid tank to avoid the pump in idling state which could lead to overeat or malfunction.
- Before transporting the machine, please make sure the fluid is drained and tank is empty. (Recommend using original package)
- 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.
- To ensure the lifespan of the machine, please only use the fluid manufactured by Antari, do not use other fluid or additive, otherwise it may clog the heater and cause malfunction.

Before operating the machine, please read all warning labels on the machine, description as below;

Front Cover Printing

CAUTION

Hot Nozzle & Surface

Top Cover Printing

WARNING!

HOT NOZZLE!

KEEP AT LEAST 50 CM DISTANCE

Battery Cover Printing

WARNING!

DISCONNECT POWER BEFORE CHANGING FUSE

USE ONLY WITH ADULT SUPERVISION

DO NOT OPERATE WITHOUT LIQUID

FOR INDOOR USE ONLY. KEEP DRY

NO USER SERVICEABLE PARTS INSIDE

WARNING!

Remove all jewelry and conductive article when changing battery

Keep tools and other metal object away from battery terminal or connectors

3. Package Contents & Inspection

3.1 Package Contents

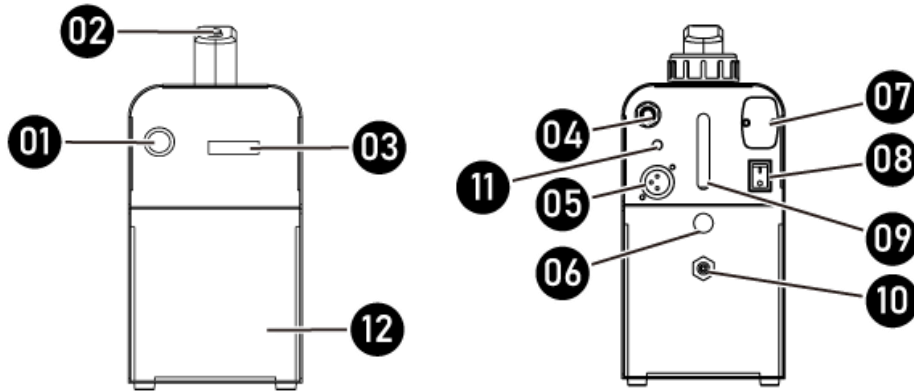
Immediately upon receiving the machine, carefully unpack the carton, check the content to ensure it is the correct model and all parts are included. If any part appears to be damaged or missing during transportation, please contact your local dealer and return in original package for inspection.

- 1 x FT-20X Fire Training Fog Machine
- 1 x Battery Base
- 1 x Battery Charger
- 1 x FLM-05P Fire Training Fog Fluid 500ml
- 1 x Flight Case
- 1 x Quick Start Guide

3.2 Optional Accessories

Item Code	Description
Z-3	Cable Remote
WTR-20	Wireless Remote
FT-20XS	Power Unit

4. Machine Details



01. Nozzle	07. Expansion Socket
02. Button/Indicator Light	08. Power Switch
03. Dip Switch	09. Fluid Indicator
04. Cable Remote Connector	10. Charger Connector
05. XLR 3-Pin DMX Connector	11. Output Adjustment Knob
06. Latch	12. Battery Base Unit

5. Technical Label Information

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

1. Model Name	4. QR CODE for User Manual
2. Input Voltage	5. Serial No.
3. Frequency	

6. Fog Fluid

CAUTION	Always turn off the power before filling the fluid tank. Do not add flammable liquid to the fluid tank. If fluid gets inside the machine, please contact your local Antari dealer for assistant.
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- Only the fog fluid manufactured by Antari can be used, do not mix or dilute the fog fluid. Due to improper storage or using other fluid might clog the heater and cause malfunction.
- The machine is tested and calibrated with the specific fog fluid (FLM-05P) to get the best performance.
- Please empty the fluid in the tank before switching to another fluid to avoid mixing.
- Only the essence manufactured by Antari can be used, and add according to the ratio recommended by Antari

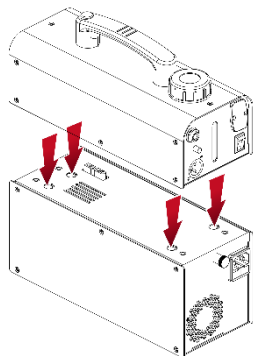
(Recommended ratio is 1:1000), if using other essence or different ratio might clog the heater and cause malfunction.

- The warranty on your fog machine will be void if you use fog fluid not manufactured by Antari.

7. Battery Installation, Removal and Precaution

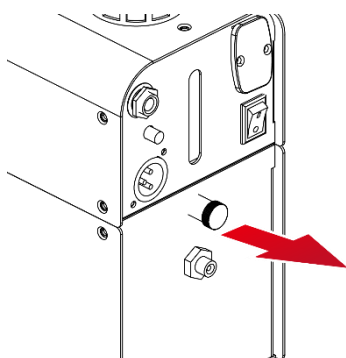
Upon receiving the product, please charge the battery for 3 hours to reach a full charge. To maintain optimal battery performance, ensure the battery is fully charged before and after each use (refer to sections 14.1 and 14.2 for battery-related details).

To install the battery, refer to the diagram below: Align the main unit and insert in into the battery base.

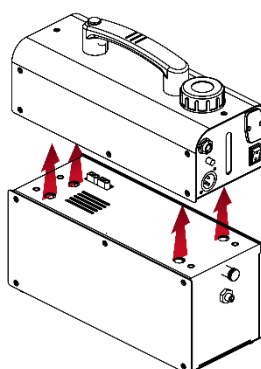


To remove the battery, refer to the diagram below:

1. Pull the latch backward;
2. Then lift the main unit upward to remove it.



Graph 1.



Graph 2.

8. Setting and Manual Operation

	WARNING	Do not charge the battery while fogging or switch is on.
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- 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.** Fill the fluid tank with Antari approved fog fluid (FLM-05P);
- Step 3.** Please refer to Section 7 for battery installation; if using power base, before 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 4.** Turn on the machine, warm up process takes approximately 10 seconds. Once the machine has reached operating temperature, the LED indicator light will be constant red; Now the machine is ready for operation;
- Step 5.** When Dip Switch No.12 is OFF (ON/OFF Mode), to start fogging, press the button, and to stop fogging, press the button again, turn the knob to adjust the output;

- Step 6.** When Dip Switch No.12 is ON (Continuous Mode), to start fogging, press and hold the button, to stop fogging, release the button, turn the knob to adjust the output;
- Step 7.** To turn off the machine, please make sure the machine is not operating then turn of the power. If you will not use the machine a long period of time, please remove the battery or the power cord.

9. Control Settings

FT-20X Fire Training Fog Machine 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 as follow:

- Manual
- DMX512
- Wireless
- Cable Remote

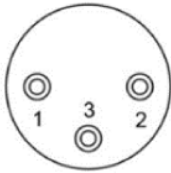
9.1 LED Status Indicator

Status	LED Indicator
Standby/Ready	Constant On
Fogging	0.7 Second Slow Flash
Fogging via DMX	0.7 Second Slow Flash
Low Battery	Every 2 Seconds, Quick Flash Twice
Machine Error	0.1 Second Quick Flash

10. DMX Connection

10.1 DMX Connector Pin Assignment

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

 3 Pin XLR <table border="1"> <thead> <tr> <th>Pin</th><th>Function</th></tr> </thead> <tbody> <tr> <td>1</td><td>Ground</td></tr> <tr> <td>2</td><td>Data-</td></tr> <tr> <td>3</td><td>Data+</td></tr> </tbody> </table>	Pin	Function	1	Ground	2	Data-	3	Data+	**There is a protection cap on DMX IN, please remove it with your finger before operation. 
Pin	Function								
1	Ground								
2	Data-								
3	Data+								

10.2 DMX Channel Function

1 Channel Mode		DMX Value Range	Function
Channel 1	Fog Output Level	0 – 4	Off
		5 – 255	1 – 100%

10.3 DMX Addressing

Each device occupies 1 channel. To ensure that the control signals are properly directed to each device, they require addressing. This is to be adjusted for every single device by changing the DIP-switches as set out in the table below. The starting address is defined as the first channel from which the device will respond to the controller.

Please make sure that you do not have any overlapping channels in order to control each device correctly and independently from any other fixture on the DMX data link. If two, three or more devices are addressed similarly, they will work similarly.

Occupation of the DIP-Switches:

SW.	1	2	3	4	5	6	7	8	9	10	11	12
CH.	1	2	4	8	16	32	64	128	256	WIRELESS CANCEL	WIRELESS SETUP	OUTPUT MODE

DIP Switch No.12	Function	Description
OFF	On/Off Mode	Press to start fogging; Press again to stop fogging
ON	Continuous Mode	Press and hold to start fogging; Release to stop fogging

11. WTR-20 Wireless Remote (Optional)

WTR-20 Wireless Remote is an optional accessory for FT-20X Fire Training Fog Machine, it included a W-2 wireless transmitter and a W-2 wireless receiver. If you already purchased the wireless model, it's ready to use. If you purchase the WTR-20 Wireless Remote afterwards, please follow the instruction below. If you encounter any problem, please contact your local Antari dealer for assistant.

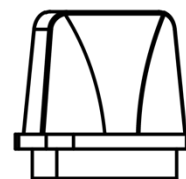
11.1 W-2 Wireless Transmitter & Receiver

- Battery : 27A 12V
- Effective Range : The effective range is approximately 50 meter, depends on actual condition, it may vary.
- W-2 wireless transmitter has 4 buttons, each function as follow:

Button	Function
[A]	Start Fogging
[B]	Stop Fogging
[C]	Increase fog output
[D]	Decrease fog output



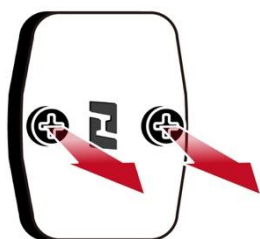
W-2 Wireless Transmitter



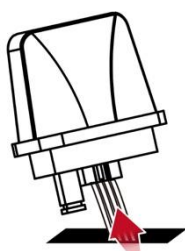
W-2 Wireless Receiver

11.2 W-2 Wireless Receiver Installation

If you purchased the WTR-20 Wireless Remote afterwards, please follow the instructions below to install the receiver. If you encounter any problem, please contact your local Antari dealer for assistant.



Graph 1



Graph 2



Graph 3

1. Please see graph 1, remove the cover from the pointed place;
2. You will see a white cable like graph 2, pull it out and connect to the W-2 wireless receiver;
3. Screw it back to the machine like graph 3 and follow the instruction on 11.3 for pairing.

11.3 Pair & Unpair

Each receiver can pair up to 5 transmitters, please follow the steps below to pair or unpair the transmitter;

To Pair

- Step 1.** Set DIP switch No.11 to “ON” position;
- Step 2.** LED indicator on the handle start to blink, press and hold [A];
- Step 3.** When pairing you will hear a long beep, once pairing successful, LED indicator goes out;
- Step 4.** Put DIP switch No. 11 to “OFF” position to start operation.

To Unpair

- Step 1.** Set DIP switch No.10 to “ON” position;
- Step 2.** LED indicator will start flashing, and you will hear a long beep, once unpairing successful, LED indicator goes out;
- Step 3.** Put DIP switch No. 10 to “OFF” position to start operation.

12. Z-3 Cable Remote (Optional)



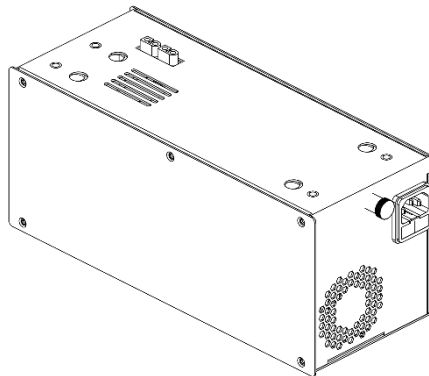
Z-3 Cable Remote is an optional accessory for FT-20X Fire Training Fog Machine, please see instruction below;

1. Plug the cable remote to the connector on the back of the machine, red indicator light is solid;
2. Press the red button to turn the power of the remote;
3. Turn the knob to activate fogging and adjust the output.

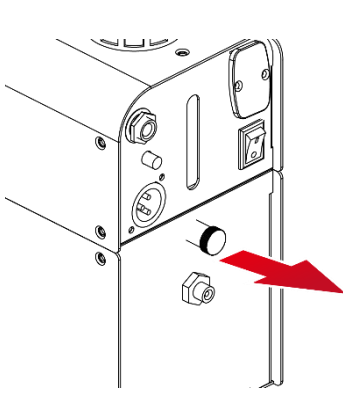
** If you encounter any problem, please contact your local Antari dealer for assistant

13. FT-20XS Power Unit (Optional)

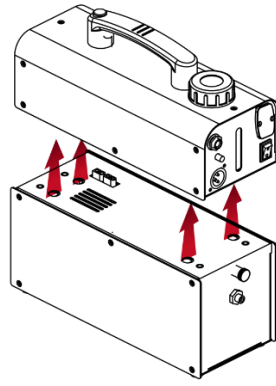
FT-20XS Power Base is an optional accessory for FT-20X Fire Training Fog Machine, can use this as an alternative power source for the machine, please see swap instruction below;



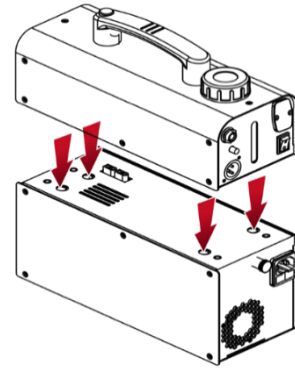
Swap Instruction as follow,



Graph 1



Graph 2



Graph 3

Step 1: Pull the latch (Graph 1) and pull the main unit (Graph 2);

Step 2: Install the power unit, see Graph 3.

14. Service and Maintenance



DANGER!

Disconnect the power cord before starting maintenance operation!

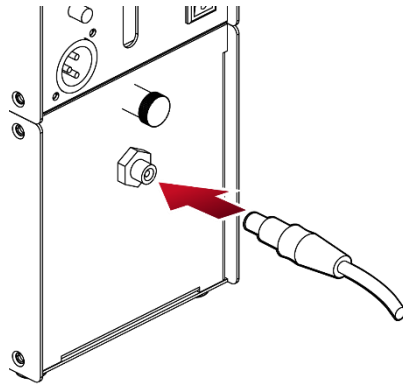
- Always keep the machine clean.
- Can use air compressor, vacuum or a soft brush to remove the dust on the machine.
- Can use a slightly damp cloth to clean the casing.
- Before store the machine, please make sure the machine is completely cool down to avoid moisture inside causing malfunction.
- It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

14.1 Rechargeable Lead-Acid Battery Maintenance

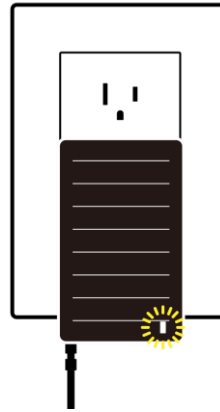
To ensure the lifespan and performance of the rechargeable battery, please follow the instruction below;

- **Initial Charge:** Upon receiving the product, please charge the battery for 3 hours to reach a full charge.
- **Daily Use:** To ensure peak performance, fully charge the battery before and after each use.
- **Self-Discharge:** Batteries will self-discharge when not in use; please check the battery status every 2–4 weeks.
- **Long-term Storage:** Even if the device is not being used, fully charge the battery once every 2–3 months.
- **Low Battery Alert:** If the battery level becomes critically low, please recharge it within 1 hour.
- **Environmental Factors:** Please note that ambient temperature and humidity can affect battery capacity and runtime.

14.2 Charging Battery



Graph 1



Graph 2

Step 1: Insert the charging cable into the charging connector.

Step 2: A red light indicates charging is in progress; a green light indicates charging is complete.

*** It takes approximately 3 hours to fully charge the battery. Once fully charged, the device can be used continuously for about 12 minutes. (Actual runtime may vary depending on battery condition, device settings, usage patterns, and environmental factors.)

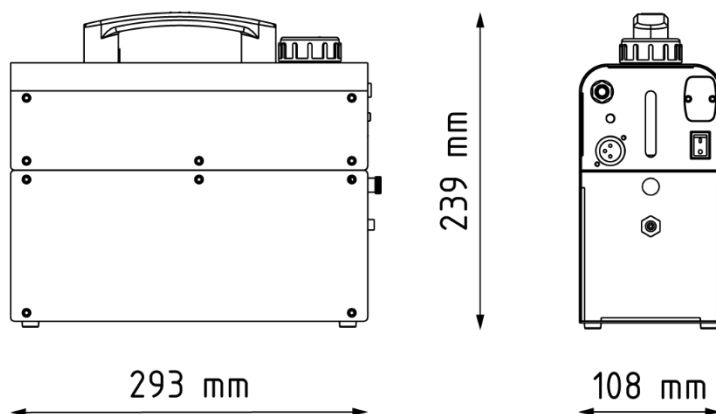
15. Technical Specifications

FT-20X	
Input Voltage	DC 12V (Rechargeable Battery) AC 100 - 240V ,50 /60 Hz (Battery charger)
Rated Power	600W
Warm-Up Time	1 Second (approx)
Fluid Consumption	16 ml/min (100% Output)
Fluid Tank Capacity	0.4 Liters (0.11 Gallon)
Compatible Fluid	Antari FLM-05P Fog Fluid
Ambient Temp. Range	0 °C - 40 °C (32 °F - 104 °F)
Control Methods	Manual DMX 512 Wireless (Optional) Cable Remote (Optional)
DMX Channels	1 Channel
Interface	XLR 3-Pin (DMX)
Included Accessories	FLM-05P Fog Fluid 500 ML FFT-20 Flightcase FT-20X-B Battery FT-20X-BCL Charger
Optional Accessories	Z-3 Cable Remote WTR-20 Wireless Module FT-20XS Power Base
Dimension	L293 W108 H239 mm L11.54 W4.26 H9.41 inch
Weight	8.5 kg 18.74 lbs

16. 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.

17. Machine Dimension





中文使用說明書

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。
- 請務必將機器連結到有保護的電路，並確保有正確地接地，以避免觸電的危險。關於接地方式請參考最後一頁。
- 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

- 機器的噴嘴非常燙。當機器工作時，請遠離噴嘴 50 公分以上。
- 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。
- 請勿將機器倒放或傾斜使用，可能導致機器動作不正常或損壞。
- 請將液體存放在室內孩童無法取得之處，保持通風及避免陽光直射。如果有觸碰眼睛或誤食機器，請立即尋求醫生的協助。

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。
- 請在使用機器之前，先填裝好煙霧水，避免機器幫浦空轉過熱造成損害。機器在搬運前或使用完畢後，請清空油桶。
- 在運輸本機器前，請確認機器的油箱已清空並且包裝完整。(建議使用原廠包裝)
- 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，將所以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。
- 為確保機器的使用壽命，請使用 Antari 原廠製造之煙霧水，勿使用其它非 Antari 原廠製造煙霧水或添加劑，否則可能會導致電熱管阻塞和故障。

在使用本機之前，請詳細閱讀機器上的警語標示，說明如下：

前蓋印刷

CAUTION 警告

Hot Nozzle & Surface 出煙口及表面高溫

上蓋印刷

WARNING! 警告!

HOT NOZZLE! 出煙口高溫!

KEEP AT LEAST 50 CM DISTANCE 請保持至少 50 公分的距離

電池上蓋印刷

前

WARNING! 警告!

DISCONNECT POWER BEFORE CHANGING FUSE. 更換保險絲前請務必斷開電源

USE ONLY WITH ADULT SUPERVISION. 僅在成人監督下使用

DO NOT OPERATE WITHOUT LIQUID. 請勿在沒有液體的情況操作本機台

FOR INDOOR USE ONLY. KEEP DRY. 僅限室內使用 請保持乾燥

NO USER SERVICEABLE PARTS INSIDE. 內部無使用者可維修之零配件

上

WARNING 警告

Remove all jewelry and conductive article when changing battery.

電池充電時請移除所有珠寶及導電物品

Keep tools and other metal object away from battery terminal or connectors

確保工具及其他鐵的器具遠離電池端子及連接頭

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。

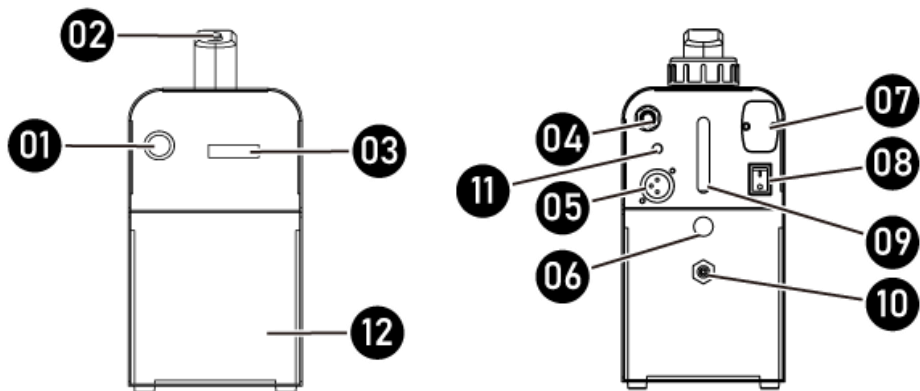
3.1 包裝內容

- 1 x FT-20X 便攜式煙霧機
- 1 x 電池底座
- 1 x 電池充電器
- 1 x FLM-05P 煙霧水 500 毫升
- 1 x 飛行箱
- 1 x 快速入門指南

3.2 選配說明

品項	描述
Z-3	有線控制器
WTR-20	無線控制器
FT-20XS	電源供應器

4. 機器訊息



01. 噴煙口	07. 擴充槽
02. 按鈕/指示燈	08. 電源開關
03. 指撥開關	09. 油量顯示
04. 有線控制器連接頭	10. 充電連接頭
05. XLR 3-Pin (DMX)連接頭	11. 輸出量調整旋鈕
06. 拉桿	12. 電池底座

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: DC XXV XXXW MADE IN TAIWAN XXXXXXMMYYXXXXXX 4  Scan It for User Manual 5 	
1. 機器型號	4. 說明書 QR CODE
2. 工作電壓	5. 機器流水序號
3. 頻率	

6. 煙霧水



危險

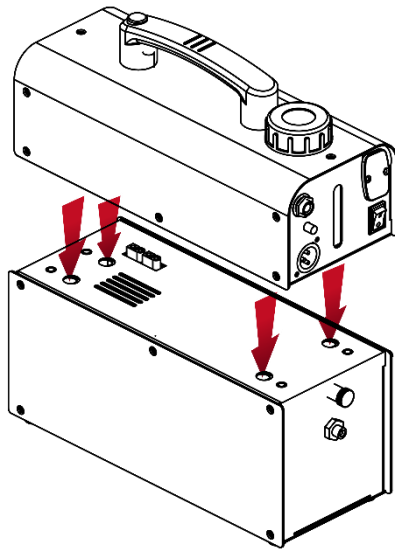
將液體加入機器之前，請務必先拔除電源線。請勿添加易燃液體。如果發現液體流入機器內部，請洽 Antari 原廠或其經銷商尋求協助。

- 僅能使用 Antari 原廠製造之煙霧水，不可混用或稀釋。若因保存不當而變質或使用非原廠煙霧水，將可能造成電熱管堵塞而導致機器故障。
- 本機器是使用專屬的煙霧水(FLM-05P)做測試與校正來取得最佳的效能。
- 如需更換另一種液體，請在使用前，先將油桶中的液體清空，以避免混合。
- 僅能使用 Antari 原廠製造之香精，並依照原廠建議比例添加(原廠建議比例為 1:1000)，如果使用非原廠的香精或比例添加有誤，將可能造成電熱管阻塞而導致機器故障。
- 如果使用非原廠製造之煙霧水或香精而導致煙霧機損壞將不在保固範圍內。

7. 電池安裝移除及注意事項

收到產品後，請先充電 3 小時將電池充飽，請在每次使用前及使用後將電池充飽，以維持電池最佳效能。(電池相關事項請參照”14.1”及”14.2”)。

電池安裝時請參照下圖，將主機對準並插入電池底座



電池移除請參照下圖，先將拉桿向後拉出，在向上抽出主機。

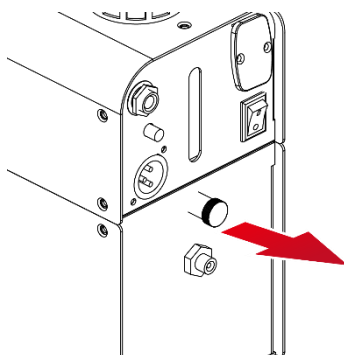


圖 1

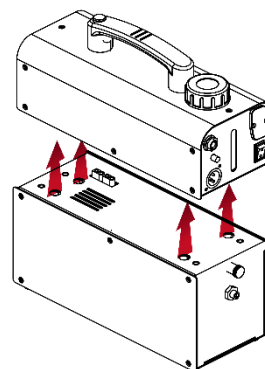


圖 2

8. 設定與手動操作說明



警告

請勿在使用機器時或電源開啟時，進行充電。

- 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.** 使用 ANTARI 原廠專用煙霧水(FLM-05P)注入機器所附的油桶；
- 步驟3.** 電池安裝至機器請參照”7”；如果使用電源供應器，請將機器連接電源，連接之前，確認電源供應器技術標籤上所標示要求功率，是否與電源插座相符；
- 步驟4.** 啟動機器電源後，待機器把手指示燈恆亮紅色，表示機器已經準備好可進行操作；
- 步驟5.** 指撥開關 No.12 是”OFF”，按一下按鈕開始噴煙，再按一下按鈕停止噴煙，旋轉旋鈕調整輸出大小；
- 步驟6.** 指撥開關 No.12 是”ON”，按著按鈕開始噴煙，放開按鈕停止噴煙，旋轉旋鈕調整輸出大小；
- 步驟7.** 需關閉本機時，請確認機器已停止運轉，再將電源開關關閉即可，長時間不使用時請移除電池或電源線。

9. 控制設定

FT-20X 便攜式煙霧機可以使用下列操作模式，機器每次接受一種訊號。當同時使用多種訊號時機器將根據原廠內建訊號的優先順序來進行工作：

- 手動控制
- DMX512
- 無線控制
- 有線控制

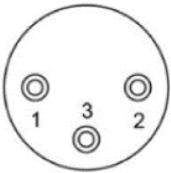
9.1 LED 指示燈訊息

狀態	LED 指示燈
待機/準備好	長亮
噴煙	0.7 秒慢閃
使用 DMX 噴煙	0.7 秒慢閃
電池低電力	每隔 2 秒、快速閃動 2 次
機器故障	0.1 秒快閃

10. DMX 說明

10.1 DMX 說明

本機提供 XLR 3-PIN 的 DMX 連接頭。PIN 的接點說明如下；

 3 Pin XLR <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Pin</th><th style="width: 70%;">功能</th></tr> </thead> <tbody> <tr> <td>1</td><td>接地</td></tr> <tr> <td>2</td><td>數據-</td></tr> <tr> <td>3</td><td>數據+</td></tr> </tbody> </table>	Pin	功能	1	接地	2	數據-	3	數據+	**DMX IN 連接頭上有一個保護蓋，操作前，請用手指撥開即可將其取下。 
Pin	功能								
1	接地								
2	數據-								
3	數據+								

10.2 DMX 通道功能

1 通道模式		DMX 數值範圍	功能
通道 1	煙霧輸出量	0-4	關閉
		5-255	1-100%

10.3 DMX 地址說明

每台機器會佔據一個通道。他們都需要一個地址來確保控制訊號是正確指向每台機器。請按照下圖，使用前，必須針對每一台機器透過指撥開關來調整。起始地址是定義為機器響應控制器的第一個通道。請確保你沒有任何重複的通道才能夠正確及獨立的透過 DMX 數據鏈結來操控每台機器。如果二、三或多台機器有類似的地址他們將運作相似。

指撥開關控制說明：

SW.	1	2	3	4	5	6	7	8	9	10	11	12
CH.	1	2	4	8	16	32	64	128	256	WIRELESS CANCEL	WIRELESS SETUP	OUTPUT MODE

指撥開關 No.12	功能	描述
關閉	On/Off Mode	按一下按鈕開始噴煙，再按一下按鈕停止噴煙
開啟	Continuous Mode	按著按鈕開始噴煙，放開按鈕停止噴煙

11. WTR-20 無線控制器(選配)

WTR-20 無線控制器組包含一個 W-2 的無線發射器及 W-2 無線接收器，此為 FT-20X 便攜式煙霧機的選購配件。若您採購的版本已含無線功能即已安裝至機器上，可直接使用。若是後續採購 WTR-20 無線控制器，請按照下方說明進行安裝與配對。如果遇到任何困難與問題，請與當地的 Antari 經銷商尋求協助。

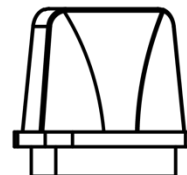
11.1 W-2 無線發射器&無線接收器

- 發射器：使用 27A 12V 電池
- 收發距離：有效距離為 50 公尺，實際收訊狀況根據現場環境因素而有所不同。
- W-2 無線發射器配有 4 個按鈕，控制功能為：

按鈕	功能
[A] 鍵	啟動噴煙
[B] 鍵	關閉噴煙
[C] 鍵	增加煙霧輸出量
[D] 鍵	減少煙霧輸出量



W-2 無線發射器



W-2 無線接收器

11.2 W-2 無線接收器安裝說明

如果是後續採購 WTR-20 無線控制器，請按照下方說明進行安裝與配對。如果遇到任何困難與問題，請與當地的 Antari 經銷商尋求協助。

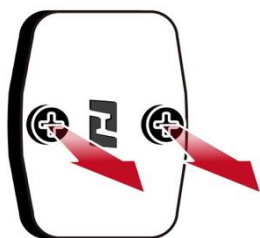


圖 1

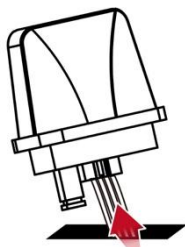


圖 2



圖 3

1. 請看圖一，取下蓋子;
2. 請看圖二，取下後，你會看到一條白色的線，請拉出來接在 W-2 無線接收器上;
3. 請看圖三，將接收器鎖回去原本的地方，然後按照 11.3 的步驟開始配對。

11.3 配對 & 取消配對

每個接收器可以配對最多 5 個控制器，請參考下面步驟配對和取消配對控制器。

配對

- 步驟 1：將指撥開關 11 號撥到“ON”的位置;
- 步驟 2：把手上的 LED 指示燈會開始閃爍，此時長按發射器上的[A]開始配對。
- 步驟 3：配對時，蜂鳴器會長嗶一聲，LED 指示燈熄滅代表配對完成。
- 步驟 4：將指撥開關 11 號撥到“OFF”位置，即可開始使用。

解除配對

- 步驟 1：將指撥開關 10 號撥到“ON”的位置。
- 步驟 2：把手上的 LED 指示燈會開始閃爍，蜂鳴器會長嗶一聲，LED 指示燈熄滅代表解除配對完成。
- 步驟 3：將指撥開關 10 號撥到“OFF”位置，即可完成。

12. Z-3 有線控制器(選配)



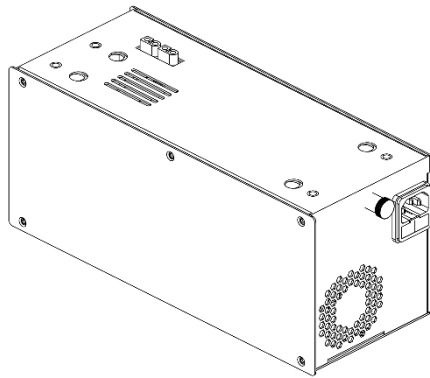
Z-3 有線控制器是 FT-20X 便攜式煙霧機的選購配件，使用方法如下；

1. 將有線控制器插入機器後方有線控制器接頭，紅色指示燈(電源)亮起。
2. 按下紅色按鈕開啟電源。
3. 旋轉旋鈕啟動噴煙(橘燈亮起)並調整輸出量。

**如果有任何問題，請聯繫當地的 Antari 經銷商尋求協助。

13. FT-20XS 電源供應器 (選配)

FT-20XS 電源供應器是 FT-20X 便攜式煙霧機的選購配件，作為另外一種機器電源供應，請參考下列更換方法；



更換方式如下；

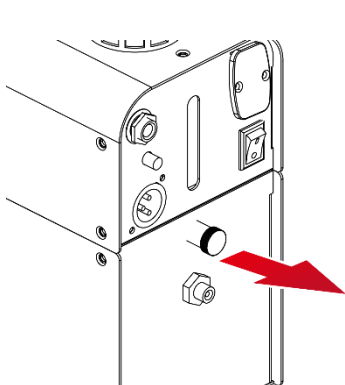


圖 1

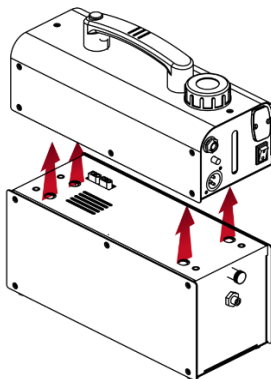


圖 2

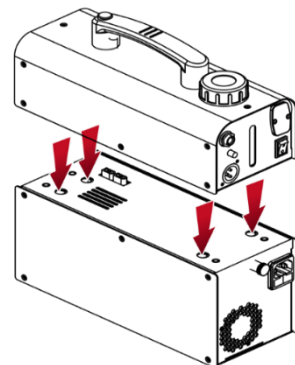


圖 3

Step 1: 將拉桿向後拉出(圖 1)，在向上抽出主機(圖 2)。

Step 2: 安裝電源組(圖 3)。

14. 維護和保養



危險!

維修保養之前，請務必拔除電源線！

- 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，導致散熱不良。

14.1 充電電池的維護

確保充電電池的壽命及效能，請參考下列

- 收到產品後，請先充電3小時將電池充飽，請在每次使用前及使用後將電池充飽。
- 電池在不使用時會自我放電，請每2-4週檢查一下電池。
- 每2-3個月將電池充飽一次。
- 果電池電力過低，請在1小時內將其充電。
- 周遭環境的溫度及濕度會影響電池的容量。

14.2 電池充電

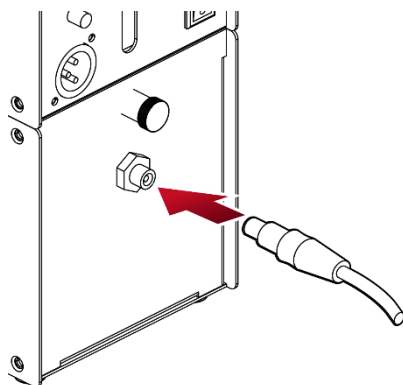


圖 1

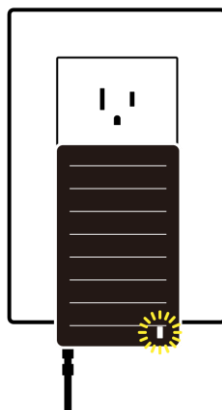


圖 2

Step 1: 將充電線插入充電連接頭。

Step 2: 紅燈為充電中，綠燈為充電完成。

***充滿電池需約3小時，充滿電後可以連續使用約12分鐘(使用時間將根據電池狀態、機器設定、使用方式及使用環境有所不同)

15. 技術規格

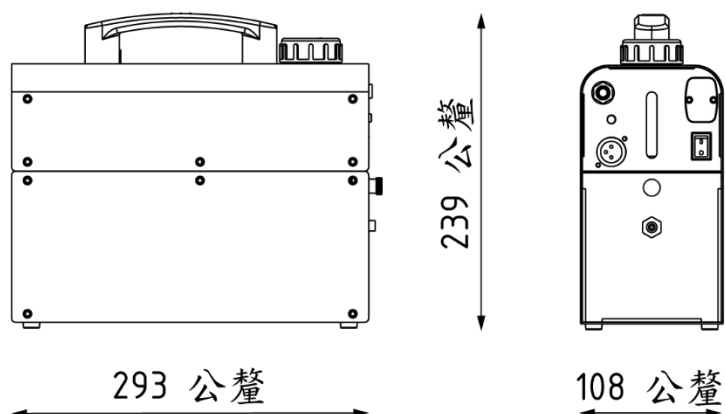
FT-20X	
輸入電壓	DC 12V (充電式電池) AC 100-240V, 50 / 60 Hz (電池充電器)
額定功率	600 瓦
加熱時間	約 1 秒
耗油量	16 毫升/分鐘 (100% 輸出)
油桶容量	0.4 公升 (0.11 加侖)

適用煙霧水	Antari FLM-05P 煙霧水
適用環溫	0°C - 40°C (32°F - 104°F)
控制模式	手動控制 DMX512 無線控制 (選配) 有線控制 (選配)
DMX 頻道	1 個頻道
介面	XLR 3-Pin (DMX)
隨附配件	FLM-05P 500 毫升煙霧水 FFT-20 飛行箱 FT-20X-B 電池底座 FT-20X-BCL 電池充電器
選購配件	Z-3 有線控制器 WTR-20 無線控制模組 FT-20XS 電源轉換底座
尺寸	長 293 寬 108 高 239 公釐 長 11.54 寬 4.26 高 9.41 英寸
重量	8.5 公斤 18.74 磅

16. 保固聲明

本公司保證我們的商品在一年內沒有材料和製作缺陷。我們在本保證下的義務和責任僅限於在原廠或當地授權經銷商進行的維修或更換。我們對不當使用或用於非專門設計目的以外之用途不承擔任何責任。本保固不適用於以任何方式在原廠或當地授權經銷商外修理、改動或組裝的任何商品，以便我們判斷影響其性能，沒有受到誤用、疏忽或事故的影響，也沒有違反我們的任何商品操作印刷說明。本公司對於從我們這邊購買的商品不會允許也不對於使用、銷售或修理任何產品有關的任何類型的任何損失或損害承擔責任。

17. 機器尺寸圖



Appendix I – Grounding Instruction

This appliance must be grounded. In the event of malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER – Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal. Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the appliance is properly grounded. Do not modify the plug provided with the appliance – if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

This appliance is for use on a nominal 120V circuit, and has a grounding plug that looks like the plug illustrated in sketch A in Figure. A temporary adaptor, which looks like the adaptor illustrated in sketches B and C, may be used to connect this plug to a 2-pole receptacle as shown in sketch B if a properly grounded outlet is not available. The temporary adaptor should be used only until a properly grounded outlet can be installed by a qualified electrician. The green colored rigid ear, lug, and the like, extending from the adaptor must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adaptor is used, it must be held in place by the metal screw.

