



# Z-1200II / Z-1500II / Z-3000II Fog Machine User Manual



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## User Manual

# Antari **Z-1200II, Z-1500II and Z-3000II** Fog Machine



***Congratulations on the purchase of your new  
ANTARI Z-Series II FOG MACHINE.***

### **Introduction**

Thank you for choosing a ANTARI Z-Series II Fog Machine. You now own a rugged and powerful state-of-the-art machine. Prior to use, we suggest that you carefully read all of the instructions. By following the suggestions found in this user manual, you can look forward to the reliable and satisfactory performance of your ANTARI Fog Machine for years to come.

Please follow these operation, safety and maintenance instructions to ensure a long and safe life for your fog machine.

### **CAUTION:**

Risk of electric shock. Disconnect the appliance from the electric supply before refilling liquid, cleaning or performing maintenance on the machine.

### **Danger of Electric Shock**

- Keep this device dry.
- For inside use only. Not designed for outside use.
- For the 110V models, use 3-prong grounded electrical outlet only. Prior to use take care to determine that the unit is installed at the rated voltage.
- Always unplug your ANTARI Z-Series II Fog Machine before filling its tank.
- Always keep fog machine in upright position.
- Turn off or unplug the machine when not in use.
- This machine is not water-proof. If moisture, water, or fog fluid gets inside the housing, immediately unplug the unit and wipe it with clean dry cloth.
- No user serviceable parts inside. Refer to your ANTARI dealer or other qualified service personnel.

### **Danger of Burns**

- This device is for adult use only and must be installed out of the reach of children. Never leave the unit running unattended.
- Never aim the output nozzle directly at people.
- Fog machine output is very hot. Avoid coming within 60 cm of the output nozzle during operation.
- Locate the fog machine in a well-ventilated area. Never cover the unit's vents. In order to guarantee adequate ventilation, allow a free air space of at least 20 cm around the sides and top of the unit.
- Never aim the output nozzle at open flames.
- If the supply cord is damaged, it must be replaced by manufacturer or its service agent or similarly qualified personnel in order to avoid a hazard.
- The output nozzle becomes very hot during operation (200°C). Keep flammable materials at least 50 cm away

from the nozzle.

- Always allow your ANTARI Fog Machine to cool down before attempting to clean or service it.

## Danger of Explosion

- Never add flammable liquids of any kind (such as oil, gas, perfume) to the fog liquid.
- Use only high-quality, water-based fog liquid that your dealer recommends. Other fog liquids may cause clogging or “spitting”.
- Always make sure there is sufficient liquid in the tank. Operating this unit without liquid will cause damage to the pump as well as over-heating of the heater.
- Always drain tank before mailing or transporting this unit.
- Never drink fog liquid. If it is ingested, call a doctor immediately. If fog liquid comes in contact with skin or eyes, rinse thoroughly with water.

**Note:** Pay attention to all warning labels and instructions printed on the exterior of your ANTARI Fog Machine

## Unpacking & Inspection

Open the shipping carton and verify that all equipment necessary to operate the system has arrived intact. The shipping carton should contain the following items:

1. One unit of Z-Series II Fog Machine with power cord
2. Mounting brackets with washers/screws (for Z-1200II)
3. Z-8 Multi-function remote control with attached cord (for Z-1200II)
4. Z-20 multi-function remote control with attached cord (for Z-1500II & Z-3000II)
5. User Manual

If any equipment is missing contact your ANTARI dealer immediately.

Before beginning your initial setup on ANTARI Z-1200II, Z-1500II or Z-3000II Fog Machine, make sure that there is no evident damage caused by transportation. In the event that the unit’s housing or cable is damaged, do not plug it in and do not attempt to use it until after contacting your ANTARI dealer for assistance.

## Setup

- Remove all packing materials from shipping box. Check that all foam and plastic padding is removed, especially in the nozzle area.
- Place fog machine on a flat surface and remove fog liquid tank cap.
- Fill with high-quality, water-based fog liquid recommended by ANTARI dealer. Any other types of fluid can damage the unit resulting in spitting and serious clogging problem. When filled, place cap back on liquid tank.
- Be careful not to exceed the maximum fluid level. DO NOT OVERFILL.
- Firmly attach the Z-8 or Z-20 control module cable to the connector inside the rear chamber of the machine.

## Z-1200II Operation

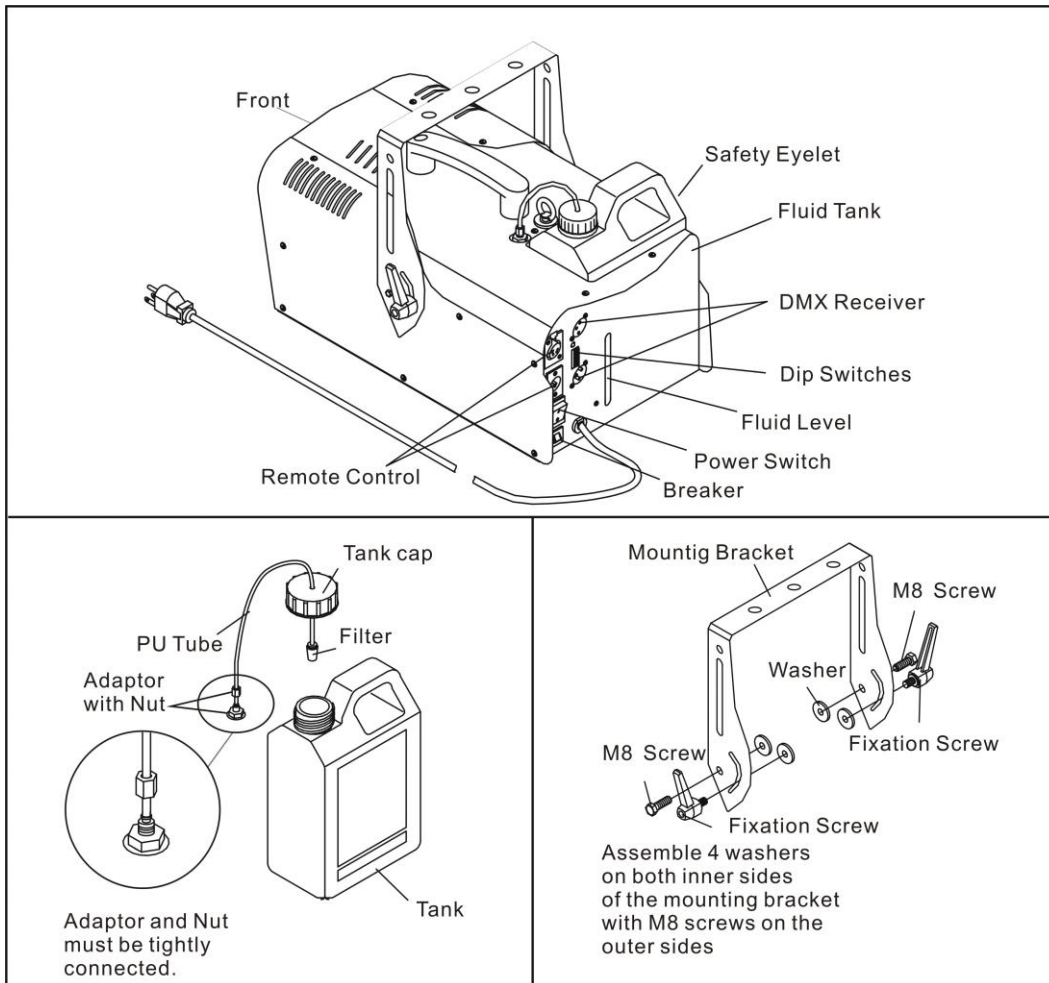
- Add fluid carefully to the liquid tank. Do not overfill the tank.
- Plug the remote control cord into the slot marked remote control on the back of the machine.
- Plug power cord into a grounded electrical outlet. Turn the power switch to “ON” on the back of the machine. The red light on the remote will turn ON once the machine is plugged into a power outlet and the ON/OFF switch is turn ON. The unit will take a couple of minutes to warm up the heater. During this time the machine cannot generate fog. The green light on the remote will turn ON once the machine is ready to produce fog.
- To emit fog press the green button on the remote. Z-1200II is controlled via the Z-8 remote control.
- For detailed instruction on the various functions on operating your Z-1200II Fog Machine, see the section titled “Remote Control Operation”.

**Important:** Always monitor tank fluid level as you are fogging. Running a fog machine with no fluid can permanently damage the unit.

**Z-1200II:** Your model includes a mounting bracket designed for overhead installation; it may be installed at floor level or suspended overhead. If the unit is to be mounted using the bracket, it is

important that the fog does not shoot directly at any one's face. Whatever installation method you choose, do not allow the unit to have more than a 25 degree angle of inclination.

## Z-1200II Description



**Note:** If you experience low output, pump noise or no output at all, unplug immediately. Check fluid level, the external fuse, remote control connection and power from the wall. If all of the above appears to be O.K., plug the unit again. If fog does not come out after holding the remote button down for 30 seconds, check the hose attached to the tank to make sure there is fluid going through the hose. If you are unable to determine the cause of the problem, do not simply continue pushing the remote button, as this may damage the unit. Return the machine to your ANTARI dealer.

## Technical Specifications

Model	Z-1200II
Power Supply	AC 100~120V or AC 220~240V, 50/60 Hz
Power Consumption	1200 W
Output Volume	18,000 cu. ft/min.
Tank Capacity	2.5 liters
Fluid Consumption	15 min./ liter (100% output)
Weight	10.9 kgs
Dimensions (mm)	L458 W243 H177
Remote Included	Z-8
Warm-up Time	9 mins

## Remote Control Operation

- ◆ Z-8: 25 feet wired multi-function remote control with 4-PIN plug for ANTARI Fog Machine model Z-1200II.

The **Interval** knob adjusts the time between discharges when the timer function is engaged. The range is from 10 seconds to 250 seconds.

The **Volume** knob controls the volume of the fog produced. The range is from 0% - 100% of maximum output.

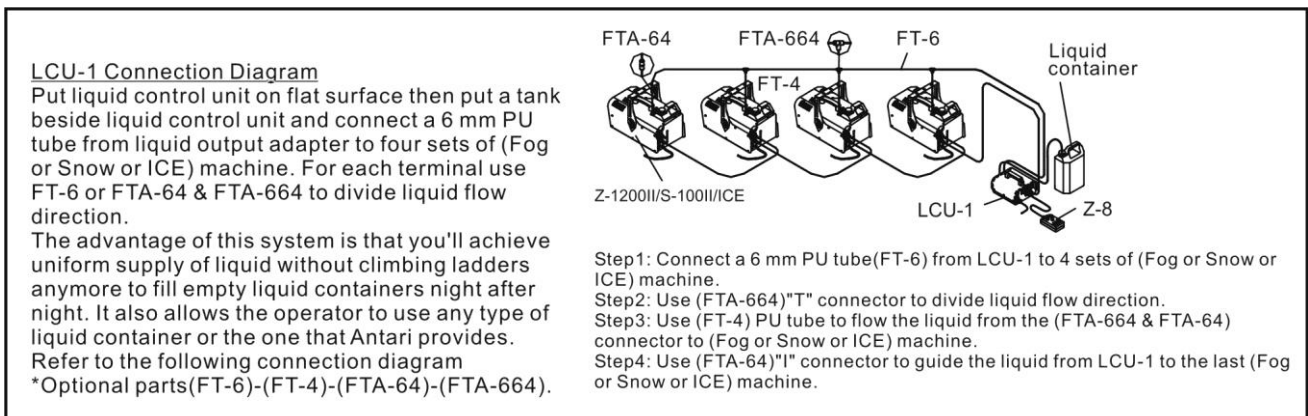
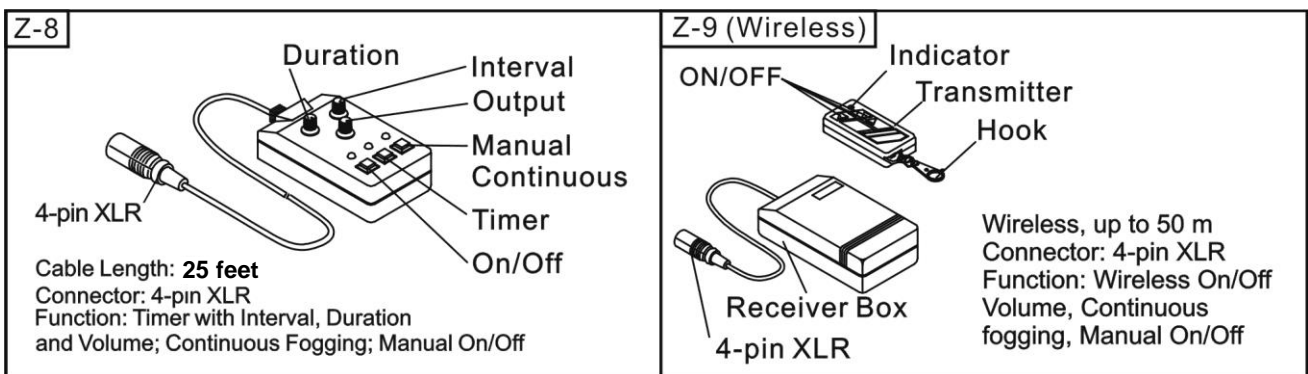
Adjust the **Duration** control knob of each fog emission (within the range of 1 to 15 seconds).

The yellow **TIMER** button controls the timer function. Depress the button to activate. When activated, the yellow light will turn ON. Adjusting the interval knob will determine the time between fog output (10 – 250 seconds). The duration of output is set at 15 seconds. The volume can be adjusted using the volume knob to control the amount of fog produced.

The red **CONTINUOUS** button sets the machine to constant fog production. To activate this function, depress the red button. The volume knob can be used to regulate the volume of the steady stream of fog produced.

The green **MANUAL** button will produce a continuous blast at maximum volume while the button is held down. When released, the manual function stops and the machine will return to the previous setting; timer, continuous, or stationary.

**Note:** The continuous function will override the Timer function. Therefore, if both buttons have been depressed the Z-1200II will fog continuously. The manual function overrides all functions. When depressed and held down the Z-1200II will fog at maximum volume for as long as the button is held down, regardless of the machine's setting at the time.



## Z-1500II & Z-3000II Operation

- Add fluid carefully to the liquid tank. Do not overfill the tank.
- The Plug should be in a position that is accessible when using the machine.
- Plug power cord into a grounded electrical outlet. Turn the power switch to "ON" on the back of the machine. Warm-up is completed when the display on the control module shows "Ready to Fog"
- To emit fog press the appropriate button on the control module for the desired length of time.
- The control unit display will display "Warming up" as the machine re-heats to the proper operating temperature.
- For further information on operating your Z-1500II, Z-3000II Fog Machine, see the section titled "Control Module Operation".

**CAUTION: “Visibility during operation is reduced”.**

This model can be operated at a floor level or sitting on any regular surface. Whatever installation method you choose, do not allow the unit to have more than 25 degree angle of inclination.

**Important:** Always monitor tank fluid level as you are fogging. Running a fog machine with no fluid can permanently damage the unit.

**Note:** If you experience low output, pump noise or no output at all, unplug immediately. Check fluid level, the external fuse, remote control connection and power from the wall. If all of the above appears to be O.K., plug the unit again. If fog does not come out after holding the remote button down for 30 seconds, check the hose attached to the tank to make sure there is fluid going through the hose. If you are unable to determine the cause of the problem, do not simply continue pushing the remote button, as this may damage the unit. Return the machine to your ANTARI dealer.

**Technical Specifications**

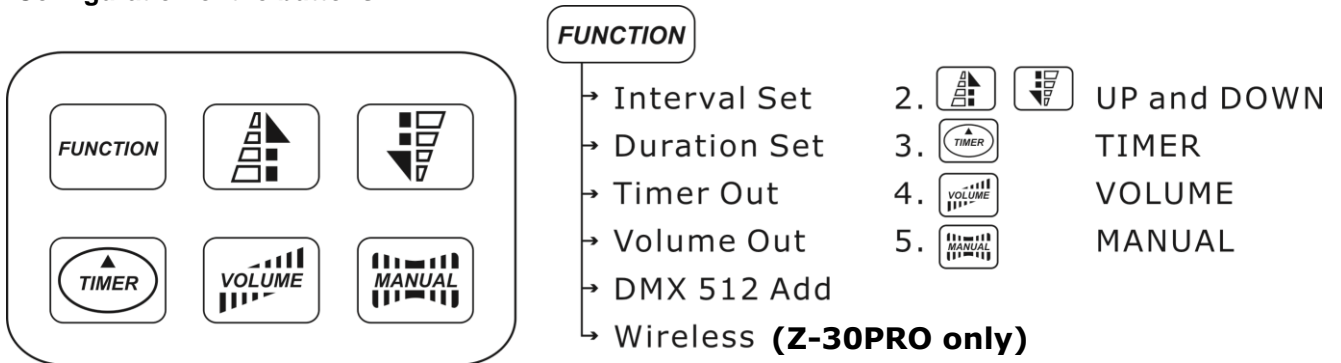
Model	Z-1500II	Z-3000II
Power Supply	AC 100~120V or AC 220~240V, 50/60 Hz	AC 220~240V, 50~60 Hz
Power Consumption	1500 W	3000 W
Output Volume	20,000 cu.ft/min.	40,000 cu.ft/min.
Tank Capacity	6 liters	6 liters
Fluid Consumption	9 mins/ liter (100% output)	5 mins/ liter (100% output)
Weight	14 kgs	19.9 kgs
Dimensions(mm)	L688 W285 H188	L735 W310 H192
Remote Included	Z-20	Z-20
Optional Remote	Z-30PRO	Z-30PRO
Warm-Up Time	8.5 mins	12 mins

**Z-20 Control Module Operation:**

A 2 meter wired multi-function remote control with 5-pin XLR connector for ANTARI Fog Machine models Z-1500II and Z-3000II. Its interface allows the operator to customize fog machine functions by adjusting fogging duration, interval and volume. Its LCD displays current operating parameters, which are automatically stored in non-volatile memory, allowing the machine to be powered down without losing function settings. Instructions below:

After switching on, the display shortly indicates »Antari Z-20«. Then the fog machine starts with the warm-up process and the display indicates »Warming Up«. While the unit is warming up, fog output will not be possible yet. Program the necessary menu settings with the control panel. Once the warm-up process is completed, fog output will be possible. The display indicates »Ready to Fog«.

**-Configuration of the buttons**



**-Menu settings with the button FUNCTION**

## Setting time intervals for timer operation

Press the button FUNCTION until the display indicates »Interval Set«. Use the buttons UP and DOWN to adjust the intervals between the individual fog outputs in timer mode within the range of 1 and 200 seconds.

## Setting the output duration for timer operation

Press the button FUNCTION until the display indicates »Duration Set«. Use the buttons UP and DOWN to adjust the duration of the fog outputs in timer mode within the range of 1 and 200 seconds.

## Setting the fog output volume for timer operation

Press the button FUNCTION until the display indicates »Timer Out«. Use the buttons UP and DOWN to adjust the fog output volume in timer mode within the range of 1 % and 100 %.

## Setting the fog output volume for continuous operation

1. Press the button FUNCTION until the display indicates »Volume Out«. Use the buttons UP and DOWN to adjust the fog output volume in continuous mode within the range of 1 % and 100 %.
2. To set the unit to continuous fog output in continuous mode, select »NON STOP BURST« below a value of 1 % or above a value of 100 %.

**NOTE:** When setting a fog output volume higher than 30 % for continuous operation, the fog machine occasionally needs to stop the fog output to reheat.

When »NON STOP BURST« is selected, the fog machine adjusts the fog output volume and heater temperature automatically and does not need to stop the fog output to reheat.

## Setting the DMX512 address

Press the FUNCTION until the display indicates »DMX 512 Add.«. Use the buttons UP and DOWN, to set the machine to the same address as your DMX controller. Please refer to chapter DMX512 settings for more information on DMX operation.

### -Continuous operation

Press the button VOLUME, to activate continuous fog output. The display indicates »Volume« followed by

The value that was set in menu item »Volume Out« or »NON STOP BURST« when continuous fog output was selected. To stop the fog output, press the button VOLUME once again.

**NOTE:** When a fog output volume higher than 30 % was set for continuous operation, the fog machine occasionally needs to stop the fog output to reheat. When »NON STOP BURST« was selected, the fog machine adjusts the fog output volume and heater temperature automatically and does not need to stop to reheat.

### -Manual operation

For immediate fog output at the maximum volume of fog, keep the button MANUAL pressed. The display indicates »Manual 100 %«. As soon as you release the button, the fog output will stop. The manual operation will take priority over the continuous operation and the timer operation. Even if one of these operating modes is activated, the fog machine will always emit the maximum volume of fog when the button MANUAL is pressed.

### -Timer operation

In the timer mode, the fog machine will automatically emit fog. The time intervals, duration and fog volume depend on the corresponding menu settings. Press the button TIMER, to activate the timer mode. The display indicates the set time interval. The unit counts down to 0 seconds and emits fog. To deactivate the timer mode, press the button TIMER again

## Z-30PRO Wireless Control Module Operation

The wireless control module Z-30PRO consists of a transmitter equipped with two buttons for fog on and off, and a receiver pre-attached to the panel of each Z-30PRO.



**\* Transmitter:**



With the transmitter it is possible to emit fog via radio over a distance of up to 50 meters. The transmitter is compatible to any receiver of the Z-30PRO and can control an unlimited number of machines in parallel.

Press the button "A", to emit fog. The button "A" has the same function as the button VOLUME on the control panel, i.e. the fog output depends on the setting of menu item »Volume Out«. The display indicates »Volume« followed by the defined value or »NON STOP BURST« when continuous fog output was selected. To stop the fog output, press the button "B".

**\* Receiver:**



The receiver is tested and pre-attached to the panel of each Z-30PRO. Please do not try to remove it. The receiver responds to up to 5 different transmitters that are registered with the machine. The included transmitter has been registered to the machine before shipment. It can be directly operated without any start-up setting.

**-Registering transmitters**

To operate the machine with a different transmitter than the included one, or to operate it with up to 5 different transmitters, each transmitter must be registered first. For this purpose, turn on the machine. When the display indicates »Wireless Setup«, press the button "A" 1 second on each transmitter. Thus the previous transmitters are cleared from the memory of the receiver. The setting must be completed within 15 seconds after switching on the machine. Then the machine will automatically exit the transmitter setting mode. The display shows »Wireless Setup OK«. At this point, no further transmitter can be added.

If no transmitter is registered when the machine is switched on, the memory of the receiver will keep the record of the previous operation.

**Setting Example 1:**

In order to register several transmitters with a machine, turn on the machine. When the display indicates »Wireless Setup«, press the button "A" 1 second on each transmitter within 15 seconds to establish the signal transmission.

**Setting Example 2:**

In order to use 1 transmitter to control 2 or more machines, turn on the machines respectively. When the displays indicate »Wireless Setup«, press the button "A" 1 second on the transmitter within 15 seconds to establish the signal transmission.

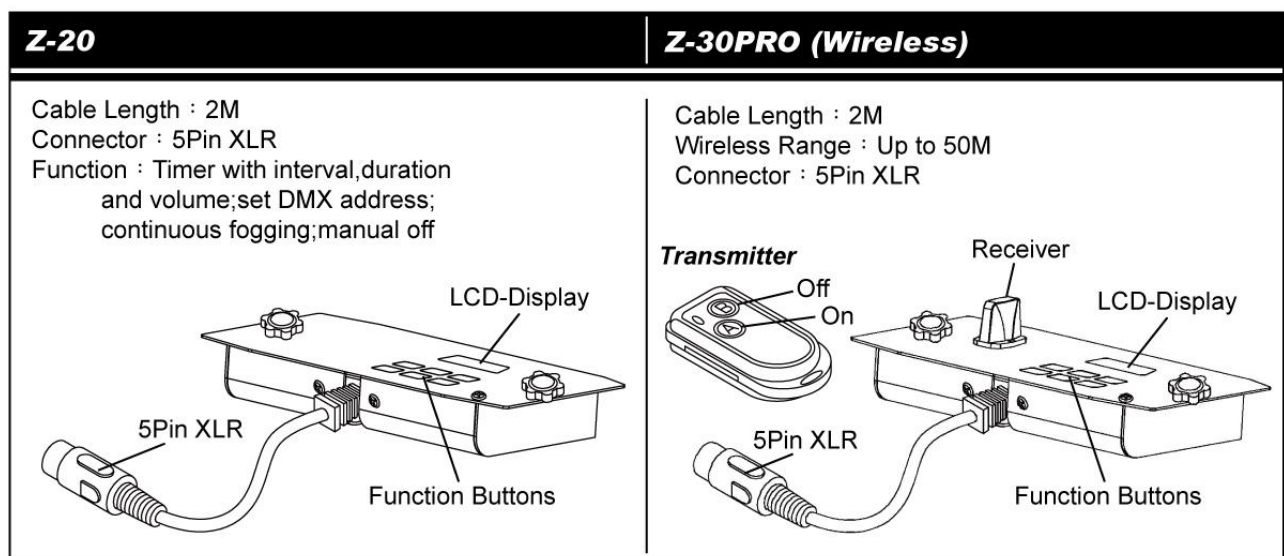
### -Battery change on the transmitter

If the range of the transmitter decreases, the battery is probably exhausted and must be replaced. For this purpose, take off the housing cover and remove the used battery. Insert a fresh DC 12V battery as indicated in the battery compartment and refit the housing cover.

## Switching the wireless function on and off

Press the button FUNCTION until the display indicates »Wireless On«. Use the buttons UP and DOWN to deactivate the wireless function (indication »Wireless Off«) and to reactivate it (indication »Wireless On«).

- Note: When warming-up process is completed and wireless function is activated the LCD screen indicates "Ready To Fog W". ("W" means Wireless) On the contrary, when the wireless function is deactivated the LCD screen shows "Ready To Fog" (Without "W").



### Performance Note

- All fog machines develop condensation around the output nozzle. Because this may result in some moisture accumulation on the surface below the output nozzle, consider this condensation when installing your unit.
- All fog machines may sputter small amounts of fog occasionally during operation and for a minute or so after being turned off.
- All fog machines have a recycling period after long bursts when the machine will shut itself down for a short period in order to heat up again. During this time no fog can be produced.

### Cleaning and Storage

Cleaning your fog machine regularly can help you reduce the frequency of parts replacement and the cost of maintenance.

After 2,000 hours operation, we suggest you use distilled water to clean the heater as following steps:

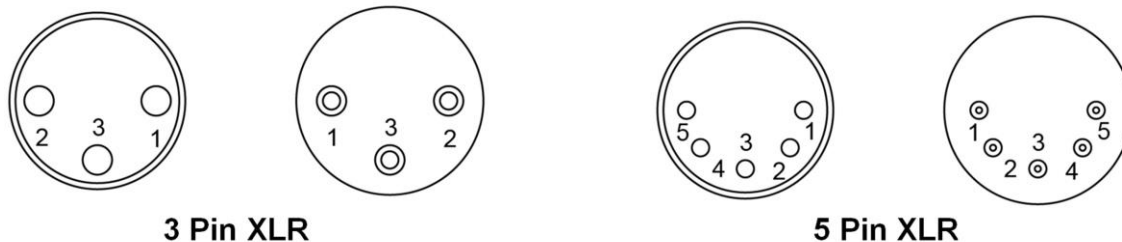
1. Fill proper distilled water into a clean tank and connect the fluid tube of the fog machine to the tank.
2. Run the fog machine in a well ventilated place until the tank is empty.
3. Use dry cloth to wipe the fog machine.

If the fog machine is not in use, please clean it before storage. Store the fog machine in a dry and cool place. At least run the fog machine once a month.

Please read and save these instructions.

## DMX Connector Pin Assignment

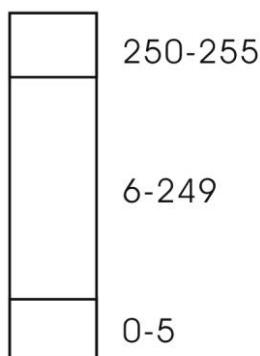
The machine provide 3 or 5 pin XLR connector for DMX connection. Diagram below indicate pin assignment information



Pin	Function
1	Ground
2	Data-
3	Data+

## Antari Z-1200II, Z-1500II, Z-3000II on-board DMX settings

### Channel A



**0 - 5 = OFF**

**6 – 249 = Volume Control ( 5% - 95%)**

**250 – 255 = Maximum Volume Output (100%)**

The Z-1200 II, Z-1500II & Z-3000II Fog Machines have on-board DMX control. These models use 1 channel to control volume output operation. Each channel has a value range of 0 to 255. Timer functions such as duration and interval can be programmed using the DMX controller or the DMX control software being used by lighting and effects operator.

**If Channel A has a value from 0 to 5, the unit is OFF.**

**Between the values 6 to 249 the volume of fog output is regulated.** With 6 being the minimum volume of fog produced and 249 approaching the maximum. The volume output rises as the DMX value is increased.

**If Channel A has a value from 250 TO 255, the machine will operate at maximum output.**

**Note:** In the example above, if the machine were assigned the DMX address of 124, Channel A would correspond to DMX address 124.

In general, Antari fog machines with onboard DMX conform to the following performance specifications:

1. Average Operating temperature = 250°C
2. Fogger can maintain maximum output for 30 seconds or more
3. Fogger can maintain constant output at 25% volume setting (roughly a value of 75).

## Addressing (Z-1200II)

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:

Setting the DMX-starting address:	DIP-switch no.	1	2	3	4	5	6	7	8	9
Device number & channels	Starting address	1	2	4	8	16	32	64	128	256
Device 1 - channel 1	On	▲								
	Off		▼	▼	▼	▼	▼	▼	▼	▼
Device 2 - channel 2	On		▲							
	Off	▼		▼	▼	▼	▼	▼	▼	▼
Device 3 - channel 3	On	▲	▲							
	Off			▼	▼	▼	▼	▼	▼	▼
Device 4 - channel 4	On			▲						
	Off	▼	▼		▼	▼	▼	▼	▼	▼
Device 5 - channel 5	On	▲		▲						
	Off		▼		▼	▼	▼	▼	▼	▼