



Z-1020

ORDERCODE 60677



SHOWELECTRONICS FOR PROFESSIONALS

Congratulations!

You have bought a great, innovative product from Antari.
The Antari Z-1020 fogger brings excitement to any venue.
You now own a rugged and powerful state-of-the-art machine.

You can rely on Antari, for more excellent products.
We design and manufacture professional equipment for the entertainment industry.
New products are being launched regularly. We work hard to keep you, our customer, satisfied.

You can get some of the best quality, best priced products on the market from Antari.
So next time, turn to Antari for more great equipment.
Always get the best -- with Antari !

Thank you!



Antari Fogger™ Product Guide

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WARNING



**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY
BEFORE YOUR INITIAL START-UP!**

SAFETY INSTRUCTIONS

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

- be qualified
- follow the instructions of this manual



Before your 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 aim the output nozzle directly at people.
- Never aim the output nozzle at open flames.
- Never add flammable liquids of any kind (oil, gas, perfume) to the fog liquid.
- 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.
- Never lock smoke-filled rooms. Risk : panic among the locked persons!
- Never smoke permanently! The smoke must only be used for a short period -
- Do not insert objects into air vents.
- Do not open the device and do not modify the device.
- Do not connect this device to a dimmerpack.
- Do not switch the device on and off in short intervals, as this would reduce the device's life.
- Do not touch the fogger output bare-handed during its operation (output becomes very hot).
- Do not shake the device. Avoid brute force when installing or operating the device.

- Only use device indoor, avoid contact with water or other liquids.
- Only use smoke in well ventilated rooms.
- Only use the high-quality, water-based fog liquid, that your Antari dealer recommends. (5L fogger fluid ordercode 60603) Other fog liquids may cause poor effect fog, clogging and “spitting” of unevaporated liquid.
- Avoid flames and do not put close to flammable liquids or gases.
- Always make sure there is sufficient liquid in the fog liquid tank. Operating this unit without liquid will cause damage to the pump and the heater.
- Always allow free air space of at least 20 cm around the sides and top of the unit.
- Always drain tank before shipping or otherwise transporting this unit.
- Always keep tank cap closed while operating.
- Always keep the fog machine upright.
- Always unplug your ANTARI Z-Series II Fog Machine before filling its tank.
- For adult use only. Fog machine must be installed out of the reach of children. Never leave the unit running unattended. Leave the grid guarding the nozzle in place if the machine is to be used in the presence of children
- Always keep the nozzle at least 50 cm away from contact with anything, while in operation.
- Always disconnect power from the mains, when device is not used or before cleaning ! Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.
- 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.
- Make sure that the core diameter of extension cords and power cords is sufficient for the required power consumption of the device.
- The cable insert or the female part in the device must never be strained. There must always be sufficient cable to the device. Otherwise, the cable may be damaged which may lead to deadly electrical shocks.
- If the external cable is damaged, it has to be replaced by a qualified technician.
- If device is dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- If your Antari Fog Machine fails to work properly, discontinue use immediately. Drain all fog liquid from the tank, pack the unit securely (preferably in the original packing material), and return it to your Antari dealer for service.
- For replacement use fuses of same type and rating only.
- Allow time to cool down, before cleaning or servicing.
- The residence time of persons in smoke-filled rooms with less than 15 m of sight must never exceed 5 minutes.
- The fog vapour at point of release is under pressure and is extremely hot.
- The output nozzle becomes very hot during operation (300 degrees C). Keep flammable materials at least 50 cm away from the nozzle.
- The use of smoke-fluid is only allowed for adults.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- In dense, smoke-saturated surroundings, the oxygen portion is substantially reduced!
- The smoke density must be portioned in a way that the sight will always be above 5 m - Danger of anxiety state due to missing orientation!
- The user is responsible for correct positioning and operating of the Z-1020. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this device.
- Every smoke-filled room must be overseen by a skilled person.
- WARRANTY: Till one year after date of purchase.

Operating instructions:

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 minimum distance between light-output and the illuminated surface must be more than 0,5 meters.

The maximum ambient temperature $t_a = 45^\circ\text{C}$ must never be exceeded.

The relative humidity must not exceed 50 % with an ambient temperature of 45°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, explosion, crash etc.

You endanger your own safety and the safety of others

Improper installation can cause serious damage to people and property !

Description of the device

Features

The Z-1020 fogger is a small, versatile and yet powerful fogger from Antari.

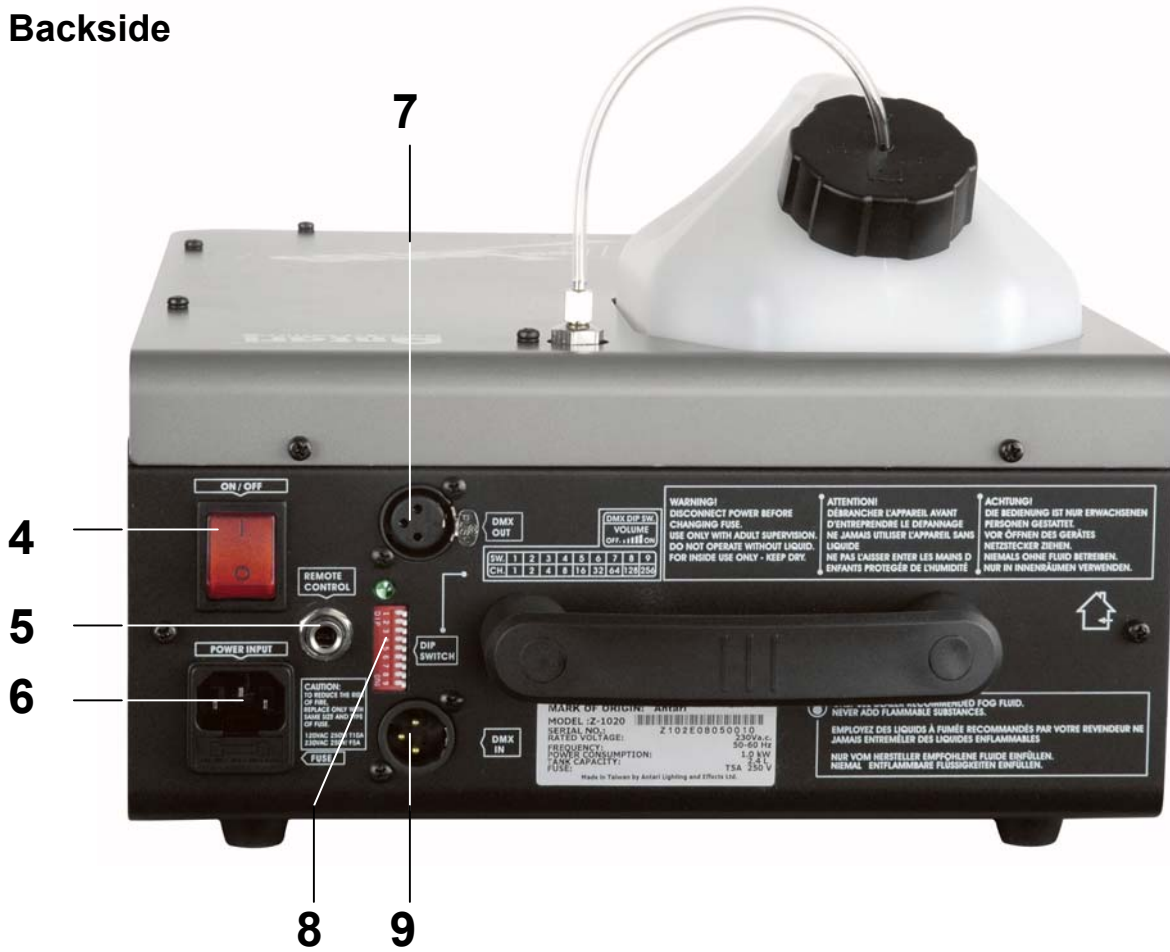
- 1000 W Heater
- Warm-up time approx. 4,5 min.
- Fog output min. 285m³
- Tank Capacity: 2.5L.
- Fluid Consumption Rate: 24 Min./L. (100% Output)
- 1 DMX channel
- Included: Z-10 Remote Control; Cable length 10m.
- Optional Remotes: Z-40 Timer Remote control: Ordercode: 60690
Z-50 Wireless Remote control: Ordercode: 60678

Overview



- 1) 1,7 L Liquid tank
- 2) Nozzle output
- 3) Remote control type Z-10 included (ordercode 60700)

Backside



- 4) ON / OFF
- 5) Remote control input
- 6) IEC Connector + Fuse
- 7) DMX OUT
- 8) Dip Switches
- 9) DMX IN

Fig. 2

Installation

Installing the Fogger

Remove all packing materials from the fog machine. Check that all foam and plastic padding is removed, especially in the nozzle area.

Fill with Fog Liquid (ordercode 60603) or other high-quality water-based fog fluid. Any other types of fluid can damage the unit. Be careful not to exceed the maximum fluid level. **DO NOT OVERFILL.**

When filled, place cap back on liquid tank.

Firmly attach the remote control cable to the proper input on the rear of the machine

The unit can also be operated at floor level or sitting on any regular surface as well.

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. Therefore, do not point the nozzle in a direction that will aim directly at a person.

Whatever installation method you choose, do not allow the unit to have more than a 15 degree angle of inclination.

Always disconnect from electric mains power supply before cleaning or servicing.

Damages caused by non-observance are not subject to warranty.

Set Up and Operation

Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

Pay Attention !! Always monitor tank fluid level as you are fogging.

Running a fog machine with no fluid can permanently damage the unit.

Procedure :

1. Plug power cord into a grounded electrical outlet. Turn power switch on rear of unit to "ON" .
Warm-up is complete when green LED lights up on remote unit.
2. To emit fog, press the button on the remote and hold for the desired length of time.
3. The remote unit's lamp will cycle on and off as the machine re-heats to the proper operating temperature.
4. For further information on operating your Antari Fog Machine, see Optional Remote Control Operation.

Optional Remote Control Operation



Z-40 Timer Remote control: Ordercode: 60690
Cable Length: 10m
Connector: 6,3mm Stereo Jack
Function: timer with interval and duration;
manual on/off
Compatible with: Z-800II, Z-1000II, Z-1020,
HZ-100, HZ-300, HZ-400,
B-100X, B-200



Z-50 Wireless Remote control: Ordercode: 60678
Cable Length: Wireless, up to 50 m
Connector: 6,3mm Stereo Jack
Function: Wireless ON/OFF
Compatible with: Z-800II, Z-1000II, Z-1020
HZ-100, HZ-300, HZ-400,
B-100X, B-200

Z-40 Controls

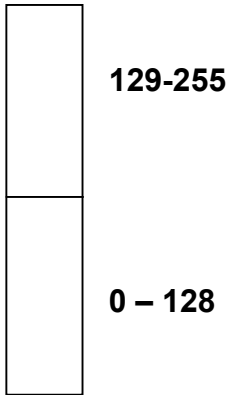


Its two controls (1+2) knobs allow the operator to customize fog machine functions by adjusting output duration and interval.

1. Adjust the duration of each fog emission (within the range of 1 to 10 seconds) by means of the DURATION control knob
2. Adjust the interval between each fog emission (within the range of 10 seconds to 5 minutes) by means of the INTERVAL control knob.
3. Press the yellow TIMERS button to activate the timer function.
4. Press the red CONTINUOUS button for continuous output.
5. When pressed, the green MANUAL button overrides all other function controls, and activates maximum output.

DMX Setting for Z-1020 fog machine with onboard DMX

Channel A



0 - 128 = OFF

129 – 255 = Maximum Volume Output (100%)

The Z-1020 fog machine has onboard DMX control. Currently this model uses 1 channel to control volume output operation. Each channel has a value range of 0 to 255. On/Off function 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 128, the unit is OFF.

Between the values 129 to 255 the volume of fog output is at maximum output.

Note: In the example above, if the machine were assigned the DMX address of 130, Channel A would correspond to DMX address 130.

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 30% volume setting (roughly a value of 75).

DMX Dip Switch Setting

DMX products must have their own "address" to receive DMX signals. Addresses on the Showtec Z-1020 are set by flipping the appropriate DMX dipswitches.

Dip Switch no.	1	2	3	4	5	6	7	8	9
Starting address	1	2	4	8	16	32	64	128	256

A standard DMX address for a Showtec Z-1020, which has 1 channel is as follow:

Z-1020	Address Value	DMX Dip Switches "ON"
Unit 1	1	#1
Unit 2	2	#2
Unit 3	3	#1 and #2
Unit 4	4	#3

Explanation: Since each unit has 1 channel, each address advances 1 value (See Address Value above). Once address values are determined, set the appropriate DMX dip switches on each unit.

Example:

1. If you want to give a Z-1020 DMX address 133, you first have to find the number 133 in the DMX Chart.
2. Then look at the left side (Dip Switches #1-#5) horizontally from 133.
In the Table you'll see #1=ON, #2=OFF, #3=ON, #4=OFF, #5=OFF.
3. Finally look at the upper side of the table (Dip Switches #6-#9) vertically from 133.
In the Table you'll see #6=OFF, #7=OFF, #8=ON, #9=OFF.

DMX Address Quick Reference Chart

DMX DIP SWITCH SET					#9	0	0	0	0	0	0
0=OFF					#8	0	0	0	0	1	1
1=ON					#7	0	0	1	1	0	0
					#6	0	1	0	1	0	1
#1	#2	#3	#4	#5							
0	0	0	0	0		32	64	96	128	160	
1	0	0	0	0	1	33	65	97	129	161	
0	1	0	0	0	2	34	66	98	130	162	
1	1	0	0	0	3	35	67	99	131	163	
0	0	1	0	0	4	36	68	100	132	164	
1	0	1	0	0	5	37	69	101	133	165	
0	1	1	0	0	6	38	70	102	134	166	

DMX Address Quick Reference Chart

Dip Switch Position

DMX DIP SWITCH SET 0=OFF 1=ON																					
					#9	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	
					#8	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
					#7	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
					#6	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
#1	#2	#3	#4	#5																	
0	0	0	0	0		32	64	96	128	160	192	224	256	288	320	352	384	416	448	480	
1	0	0	0	0	1	33	65	97	129	161	193	225	257	289	321	353	385	417	449	481	
0	1	0	0	0	2	34	66	98	130	162	194	226	258	290	322	354	386	418	450	482	
1	1	0	0	0	3	35	67	99	131	163	195	227	259	291	323	355	387	419	451	483	
0	0	1	0	0	4	36	68	100	132	164	196	228	260	292	324	356	388	420	452	484	
1	0	1	0	0	5	37	69	101	133	165	197	229	261	293	325	357	389	421	453	485	
0	1	1	0	0	6	38	70	102	134	166	198	230	262	294	326	358	390	422	454	486	
1	1	1	0	0	7	39	71	103	135	167	199	231	263	295	327	359	391	423	455	487	
0	0	0	1	0	8	40	72	104	136	168	200	232	264	296	328	360	392	424	456	488	
1	0	0	1	0	9	41	73	105	137	169	201	233	265	297	329	361	393	425	457	489	
0	1	0	1	0	10	42	74	106	138	170	202	234	266	298	330	362	394	426	458	490	
1	1	0	1	0	11	43	75	107	139	171	203	235	267	299	331	363	395	427	459	491	
0	0	1	1	0	12	44	76	108	140	172	204	236	268	300	332	364	396	428	460	492	
1	0	1	1	0	13	45	77	109	141	173	205	237	269	301	333	365	397	429	461	493	
0	1	1	1	0	14	46	78	110	142	174	206	238	270	302	334	366	398	430	462	494	
1	1	1	1	0	15	47	79	111	143	175	207	239	271	303	335	367	399	431	463	495	
0	0	0	0	1	16	48	80	112	144	176	208	240	272	304	336	368	400	432	464	496	
1	0	0	0	1	17	49	81	113	145	177	209	241	273	305	337	369	401	433	465	497	
0	1	0	0	1	18	50	82	114	146	178	210	242	274	306	338	370	402	434	466	498	
1	1	0	0	1	19	51	83	115	147	179	211	243	275	307	339	371	403	435	467	499	
0	0	1	0	1	20	52	84	116	148	180	212	244	276	308	340	372	404	436	468	500	
1	0	1	0	1	21	53	85	117	149	181	213	245	277	309	341	373	405	437	469	501	
0	1	1	0	1	22	54	86	118	150	182	214	246	278	310	342	374	406	438	470	502	
1	1	1	0	1	23	55	87	119	151	183	215	247	279	311	343	375	407	439	471	503	
0	0	0	1	1	24	56	88	120	152	184	216	248	280	312	344	376	408	440	472	504	
1	0	0	1	1	25	57	89	121	153	185	217	249	281	313	345	377	409	441	473	505	
0	1	0	1	1	26	58	90	122	154	186	218	250	282	314	346	378	410	442	474	506	
1	1	0	1	1	27	59	91	123	155	187	219	251	283	315	347	379	411	443	475	507	
0	0	1	1	1	28	60	92	124	156	188	220	252	284	316	348	380	412	444	476	508	
1	0	1	1	1	29	61	93	125	157	189	221	253	285	317	349	381	413	445	477	509	
0	1	1	1	1	30	62	94	126	158	190	222	254	286	318	350	382	414	446	478	510	
1	1	1	1	1	31	63	95	127	159	191	223	255	287	319	351	383	415	447	479	511	

Dip Switch Position

DMX Address

Maintenance

The Z-1020 fogger 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. Please clean internal components once a year with a light brush and vacuum cleaner. Do not use alcohol or solvents.

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

Do not allow the fog liquid to become contaminated. Always replace the caps on the fog liquid container and the fog machine liquid tank immediately after filling.

After every 40 hours of continuous operation, it is recommended to run a cleaning solution composed of 80% distilled water/20% white vinegar through the system to prevent the accumulation of particulate matter in the heating element.

When cleaning, use only a clean, lint-free soft cloth. An effective cleaning regimen is as follows:

1. While unit is unplugged and cool, unscrew nozzle at very front of unit and clean out debris with vinegar and a pipe cleaner, making sure that the hole is free of clogs.
2. Empty all fog fluid from machine. Add cleaning solution to tank. Plug unit in and begin warm up.
3. Run unit in a well-ventilated area until tank is empty.
4. Replace nozzle and refill with liquid.

Performance Notes

- 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.
- 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 bursts of fog, when the machine will shut itself down for a short period in order to heat back up. During this time no fog can be produced.

Troubleshooting

Antari Z-1020 Fogger

This troubleshooting guide is meant to help solve simple problems.

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

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

1. If you experience low output, pump noise or no output at all, unplug immediately.
2. Check fluid level, the external fuse, remote connection, and power from the wall.
3. If all of the above appears to be O.K., plug the unit in again.
4. 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. Make sure the fogger isn't warming up.
5. 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.
6. Return the machine to your Antari dealer.

Product Specification

Model: Antari Z-1020 Fogger
Voltage: AC 230V-50Hz (CE)
Power consumption: 1000W(230V)
Warm-up time: approx. 4,5 min.
Output: 285m³/min.
Tank Capacity: 2.5L.
Fluid Consumption Rate: 24 Min./L.(100% Output)
1 DMX channel
Dimensions 370x295x135mm
Weight: 9,7 kg

Included: Z-10 Remote Control; Cable length 10m.

Optional Remotes: Z-40 Timer Remote control: Ordercode: 60690
Z-50 Wireless Remote control: Ordercode: 60678

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





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