

UR FOG



Notification of successful installation

Hereby informs that UR FOG machine, model
has been connected to the alarm system at:

Company Name	
Address	
Referent	E-mail address
Phone number	Mobile number

The fog machine generates a dense fog when an intrusion occurs to impede the visibility to the intruder.
The fog is safe for people, animals, things and food.
This notification has been sent or delivered to:

Firemen	
Referent	E-mail address
Phone number	Mobile number
Public security	
Referent	E-mail address
Phone number	Mobile number
Private security	
Referent	E-mail address
Phone number	Mobile number

AUTHORIZED INSTALLER:

PLACE:DATE:

SIGNATURE AND STAMP:

*UR FOG S.r.l. Sede legale / Legal Office : via Giacinto Collegno n°11 - 10143 Torino - Italy
Sede operativa e magazzini / Operation and delivery to : via Toscana n° 38 - 10099 San Mauro T.se (Torino) - Italy
C.F./P. Iva 10724850010 - Reg. imprese TO - 1157030 - Cap. Soc. Euro 10,000 int. versati
Tel. +39 011 0133037 - Fax +39 011 0133005 - e-mail : amministrazione@urfog.com*

**N.B. Ask for the PDF module
writing to: support@urfog.com**



**TO USE UR FOG FOGGING SYSTEMS WITH
PURIFOG/PURIFOG HYPO FLUIDS FOLLOW THE DATASHEETS
INSTRUCTIONS AVAILABLE FOR DOWNLOAD ON www.purifog.com**



UR FOG srl Via Toscana n° 38 - 10099 San Mauro Torinese - Italy

UR FOG

Installation and use manual



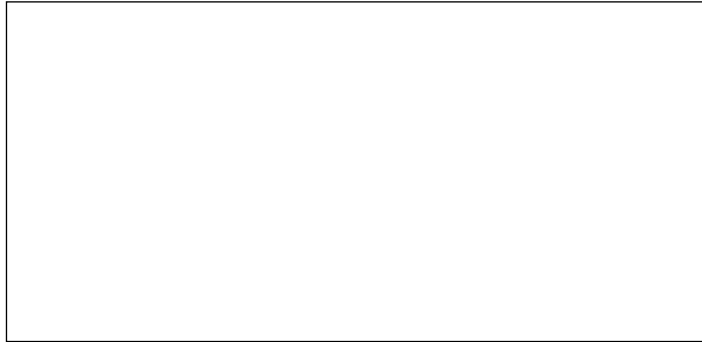
MODULAR PLUS SERIES

ENGLISH MANUAL

The warranty of **UR Fog** is two years and is handled directly from the dealer or authorized installer, so please contact your supplier to take advantage of warranty with the copy of the purchase document that contains the serial number of the machine. Not included in the warranty: moving parts and/or damages depending on the incorrect use unless it is found a manufacturing defect in origin. Liquid and bags are not covered by warranty.

BY BREAKING THE SECURITY LABELS AND THE OPENING OF THE MACHINE YOU WILL ACCEPT WHAT IS WRITTEN ON THIS MANUAL AND ON THE WEB SITE: **www.urfog.com**

UR Fog srl, Via Toscana n°38 - 10099 - San Mauro Torinese - Italy
Tel 011/01.33.037 Fax 011/01.33.005
support@urfog.com.



Legal office: Via Giacinto Collegno 11 - 10143 - Torino - Italy

RESELLER/INSTALLER STAMP
(company to contact for the warranty)

Serial number.....
Date of installation.....
Signature of installer

At the end of the installation, write down the identification number of the machines, the date of the installation and sign in the dedicated spaces.

Thank you for purchasing UR Fog product.

The great patented technological innovations such as the moduled liquid injection system, the revolutionary heating system, and the ActiveCloud ready technology make the Modular CPlus fog generators the best fog devices with the best performance in the security market.
- Simple: Machine easy to install and able to be integrated to any existing alarm system.

The fog generated by **UR Fog** does not create particular problems or injuries for a human being for a short stay in a fogged room if the system is used according to the manufacturer's recommendations. Generated fog is certified as safe for people and animals from an authorized international certification company and is proved that it does not leave any residual. **UR Fog** systems are certified respecting European laws and regulations. Any certifications required in specific countries are a responsibility of the distributor of that specific country. The documents related to certifications can be requested by mail to support@urfog.com. It is not guaranteed by the manufacturer the use of **UR Fog** system in the presence of objects that may be damaged anyway by the contact with substances based on glycol, water and alcohol. Any employee or worker that may be exposed to fog must be warned in advance and must be checked for any allergy to the substances listed above. At the date of printing of this manual it has never been pointed out any problem related to any allergy. **UR Fog** is in no way responsible for any damage or condition of use that has not been required and specifically approved by any specific written request prior to the installation of its products. For fog fluid please refer to **UR Fog** fluid safety data sheet published on the website and carefully read it at **www.urfog.com**. Contact a doctor if for any reason you swallow fog fluid or if after contact with eyes or skin you have any kind of reaction, and in any case wash it immediately with water and soap. Do never stay for a long time in a room filled with fog. Do not use charged bags that are not the ones suggested by **UR Fog** and never try to recharge them, they are made for a single use. Follow your national rules for the dispose of empty bags. Keep **UR Fog** bags out of reach of babies and animals. The nozzle may be hot and touching it may cause burns. Do not look directly into the nozzle. Never use **UR Fog** products for any purpose that is not related to protection from thief or robbery (the choice of the conditions of use in case of robbery will be suggested by your security consultant). Never use different fog fluids or add any other substance into the cylinders. Do not use or keep charged **UR Fog** machines in vehicles and do never transport **UR Fog** before 24 hours since it has been shut off. During transport it must be not armed.

Please observe the following instructions for installing UR Fog:

1. The unit must be installed avoiding to obstruct escape routes.
2. Verify the fog does not limit the visibility near: stairs, landings, moving objects that may cause: falls down, injuries or any damage to persons.
3. Do not look directly into the nozzle. Use only authorized fluids and original bags.
4. The heater box may reach high temperatures, touch it may cause burns.
5. When **UR Fog** produces fog avoid staying closer than 1 meter from the unit.
7. Report the Fog Unit installation to the firefighters in your area and eventually to other institutions if needed. Before testing the unit remember to report it to the firefighters in your area to avoid false alarms.
8. Remember to stick on a window in a visible place the included warning label.
9. Do not move the machine when it is still hot.
10. It is necessary to add an external switch to separate the fog generator from the alarm system and it should be activated before the maintenance to avoid that input tests, for example, can activate the fog generator.
11. Never direct the fog jet towards an object or a wall less than 2 meters away and if possible increase the suggested minimum distance. Thanks to the power of the jet, **UR Fog** reaches and exceeds more than 10 meters away in the first 3 seconds from the point where the machine is installed.
12. Setting the shooting time interval between the minimum and maximum shown in the shooting table, avoid "overshooting" even if the produced fog is dry and generally doesn't leave residue. A shot that goes far beyond the recommended seconds can create a residue problems in the room.
13. **UR Fog** continues to be effective for up to 2 hours without 220V and 110V mains power thanks to the insulation system which maintains the temperature in the heating system.
14. Install at an height of about 2,5 meters not to let it be reached, avoiding possible tampering.
15. The unit has a nozzle inclination of 15° oriented to the floor.
16. The main body of **UR Fog**, which has the heating system enclosed inside a metal frame, should not be opened unless by specific and authorized service centers. Do not open and touch for any reason the insulation before 24 hours the unit has been shut off. The internal part may reach really high temperature.
17. Do not activate the **UR Fog** machine before the installation is completed.
18. Insert the bag as last installation procedure.
19. When the installation is finished, always test the system with a trial shoot (suggested 4 seconds)
20. After connection to mains power at least one hour is necessary to reach the minimum temperature needed to generate fog.
21. Install **UR Fog** avoiding any obstacles in front of it which can prevent the spreading of the fog.
22. The external temperature of **UR Fog** can be higher from room temperature up to 50 °C.
23. Connecting to the mains the edge of a stranded conductor should not be soft-soldered
24. The **UR Fog** machine should not be exposed to water spray or dripping.
25. The content of fluid bags is mechanically pre-determined , the tolerance is in the range -10% +10%
26. Request to **UR Fog** or its distributors to take part in courses for installers to ensure the optimal installation of the equipment.

DEFECT FOUND	POSSIBLE CAUSE	POSSIBLE SOLUTION
Unit ARMED (BLUE LED ON) but don't execute trig command	Red front led ON	Bag changed ,reset needed Follow instructions Paragraph 13 Empty bag- replace it following instructions on Paragraph 13
	Green front led is OFF	Unit still warming , wait max 120min. with the unit connected to the mains power for 1st time activation
	Wires error	Verify to have 12V beetween TRGP and TRGN when alarm is ON.
	Mains power overload	Try a complete power down (mains and battery) to recover unit. With no results board needs to be replaced
	Electronic Board overheath	Clean side air flow holes
Unit cannot be ARMED BLU LED OFF	Wires error	Verify to have 12V beetween ARMP and ARMN when alarm panel is active.

DEFECT FOUND	POSSIBLE CAUSE	POSSIBLE SOLUTION
Small fog flow coming out from nozzle	All products are 100% tested before shipping and a small amount of liquid could be still in the warming unit	This condition is normal and can happen on first installation, it will completely disappear in a while when the unit will become completely hot.
RED Led ON (Error)	Too low battery level or exhaust	Replace Battery
	Bag in Reserve or Empty	Replace fluid Bag
	No Mains power	check mains power or F5 fuse
RED Led ON(Fault)	Disturbance/ interference or potential differences between devices	In the evenience of high noise on mains power (lightings) an error while reading thermocouple values can occur. Execute a complete Power Down (mains and battery) to recover unit. If even recovery fails the unit may be faulty
		In very large installations or with more than one fog units connected to the same alarm panel , a mains power difference can occur , in that evenience the units have to be decoupled
	Error in the thermal loop	Error on thermocouple, resistor. Please refer to technical service
	Heater Temperature too high or thermocouple error	Switch off the unit and verify the screw on TC2 connector
	Poor ventilation	Switch off the unit and clean air holes

	MODULAR 2 PLUS	MODULAR 3 PLUS	MODULAR 4 PLUS	MODULAR 5 PLUS	MODULAR 8 PLUS
Weight without bag	8 Kg	9 Kg	10 Kg	10 Kg	11 Kg
Max fog emission in a single shot	200 m ³	300 m ³	400 m ³	500 m ³	800 m ³
Total fog emission capacity x bag	1250 m ³	1250 m ³	1700 m ³	1700 m ³	1700 m ³
Fog bag capacity	750 ml	750 ml	1000 ml	1000 ml	1000 ml
Working time without mains power	2 hours	2 hours	2 hours	2 hours	2 hours
Average power consumption during heating	170 W + 10	170 W + 10	280 W + 10	280 W + 10	280 W + 10
Heating time	120 minutes	120 minutes	140 minutes	140 minutes	150 minutes
Average power consumption range	37- 41 W	37 - 41 W	42 - 47 W	42 - 47 W	48 - 53 W
Maximum current consumption at 12 V	1,2 A	1,4 A	1,7 A	1,9 A	2,1 A
Batteries type suggested	Pb 2 Ah 12V	Pb 2 Ah 12V	Pb 2 Ah 12V	Pb 2 Ah 12V	Pb 2 Ah 12V
Cover tamper	microswitch	microswitch	microswitch	microswitch	microswitch
RTC real time clock	Yes	Yes	Yes	Yes	Yes
LAN & WIFI board support	Yes	Yes	Yes	Yes	Yes

The “empty” signal does not mean only that the bag is empty, but also warns that the system has shot at least 100 seconds (Modular 2 CPlus) or 80 seconds (Modular 3 Cplus).Warning : press “RESET” button only when you actually exchange the bag or you will lose the seconds counting.

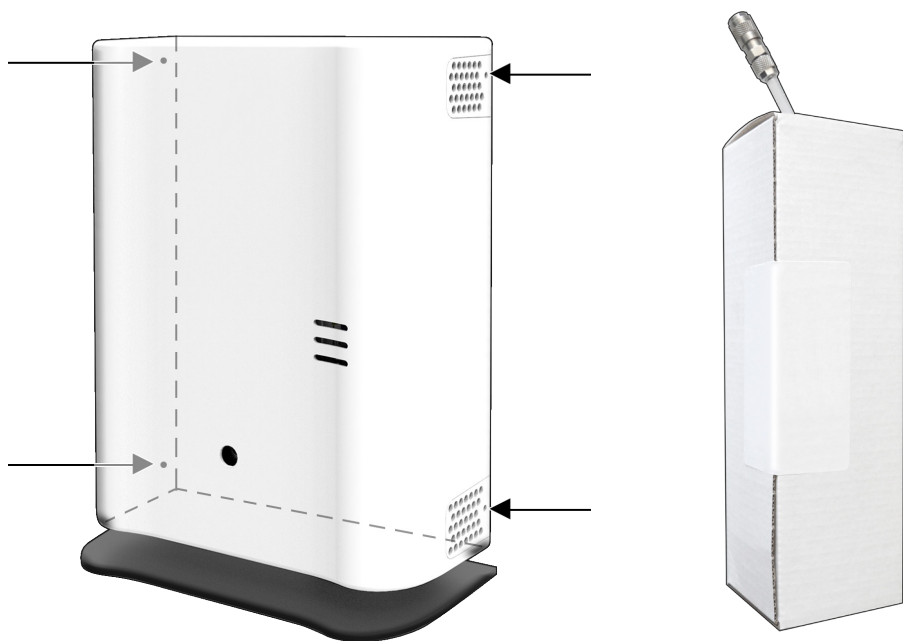
WARNING :

- Do not disconnect the machine immediately after the shot
- Change the battery every two years
- Change the bag as soon as the “empty” signal appears
- The generator must have the side holes free for air ventilation

To avoid injuries please securely fix the fogging machine to the wall according to the installation instructions. It is suggested not to install the machine behind walls in a limited closed area without a specific ventilation, in order to prevent a possible overheating.

CAUTION: It is always recommended to fix the fog generator to a wall even when it is placed on a flat surface. The optional VESA bracket, mainly recommended for ceiling installation, can also simplify standard installation, by allowing to use back holes for the passage of cables. Always verify that the bracket or the support surface are suitable for the weight of the machine.

After removing the machine from the package, unscrew the 4 screws fixing the front panel and remove it.



UR FOG fogging systems don't need special maintenance, nevertheless is suggested a periodical check to the following parts by skilled operators:

- 1) Verify battery and power supply status.
- 2) Verify screws are firmly closed.
- 3) Verify the output nozzle is not damaged and without anything inside.
- 4) Verify pneumatic circuit.
- 5) Verify once a year liquid pump.

BATTERY AND POWER SUPPLY CHECK

Verify that the output of the power supply without any load (battery unplugged) is 14,1 V on the PSU and 13,8 V on FASTON battery connectors. If a different value is noticed, set the trimmer on power supply.

Verify battery status (integrity check, no overheating); is suggested to replace the battery on 2 years base due to the heavy load during shots without mains power.

SCREWS

Verify that all fixing screws are correctly setted and eventually rescrew them.

OUTPUT NOZZLE

Verify that output nozzle is not damaged and that there is nothing inside blocking the fog ejection flow.

YEARLY PUMP FUNCTIONALITY TEST

The test is done executing a trial shot on the unit. To avoid creating too much fog during the test is suggested to stop the flow after a few seconds dearming the unit under test. The fog flow will immediatly stop.



EMPTY BAG

RED LED (right)**ON:** Error (Empty bag or low fluid , Mains power off/Battery low) or Fault**OFF :** No error conditionARMED AND
READY**BLU LED (center)****ON:** Unit is armed and ready to shoot (with green led ON).**OFF:** Unit is disarmed , shot not possible.

WARMING

GREEN LED (left)**ON:** Unit has reached the correct temperature**OFF:** Unit in warming condition, no shot possible.

The top right RED led light (DL1) means unit is powered on. The RED FAULT led (DL7) is located in the middle of the board.

Mains power (110V or 230V) source supplies energy to the heating system and to the internal power supply. A DC 12v 2.0Ah battery (not included) must be connect to the recharge circuit to allow unit to shoot even without mains power. The heating element is of 180W, at the heating startup the power consumption is about 170W and in some minutes it goes down. The average consumption range is from around 37 W (Modular 2) to 53 W (Modular 8). Ambient temperature and battery loading can influence the average power consumption.

Do not use inverter or UPS if you are not sure that they generate a true sine wave, not a rebuilt one. Please refer to the UPS manufacturer the correspondance of such features before proceeding with the connection.

-The max current to be considered for the system is 3,15A

-The connection to the electricity grid (110v or 230V) must be performed by a qualified technician.

-Connect the equipment to the electricity grid only after you have completed the installation.

- It is necessary to connect the ground terminal.

- The system must be connected to the mains trough on automatic switch (automatic switch, curie C, with $I_n = 10 A$ and $I_{dif} = 30 mA, \dots$) with breching capacity based on the assumed fault current of the fogging system in the sampling point.

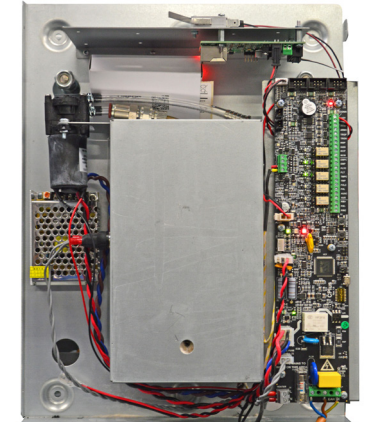
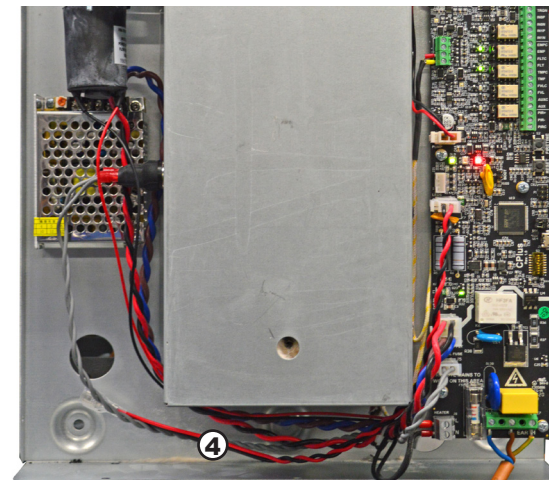
PLEASE NOTE THAT, AS ALL POWERED EQUIPMENT FROM THE ELECTRICITY GRID REQUIRING INSTALLATION, IT IS SUBJECT TO COMPLIANCE WITH RULES OF THE COUNTRY IN WHICH IT IS INSTALLED

For section and types of wires, fuses, suitability of materials to installation sites etc..

REPLACE FUSE ONLY USING SAME TYPE ,FOLLOWING THOSE SPECIFICATIONS:

CERAMIC BODY FILLED WITH QUARTZ, REF. STD. EN60127-2-3/DIN41660 3,15Ah (EXAMPLE OMEGA GT520231)

- The battery is necessary to use the system in a safe way. The battery is recharged by system board.
- The placing of the lead-acid battery 2 Ah DC 12 V is under the heat exchanger, in flat position with poles facing the plastic cover.
- In order to accede to the battery case is necessary to remove the frontal cover.



- ①- Power supply main connections
- ②- Mains power
- ③- Ground connection
- ④- Battery holder (battery not included)

While connecting the machine to the mains power, it is recommended to never disconnect existing ground cable. The fact of disconnecting or modifying existing cables voids the warranty and can cause troubles or accidents related to the temperature control.

8 DESCRIPTION OF INPUT AND OUTPUT CONNECTIONS

Discrete signals port

The discrete signal port is hosted on a multiple way screwed connector, visible on the right side of Fig. 1.

In Tab. 1 is indicated the pinout, along with some important notes about each signal.

IMPORTANT: the descriptions in Tab. 1 are valid if DIP-SWITCH 4 is on OFF position (passive security, relays are normally NOT active). The signals present on this port will always be available to the user and will work in parallel with the commands received by the serial interface. In no case a voltage greater than the board's power supply should be applied to any pin of this port, except for relay outputs that can manage up to 60V, 500mA. Some interface options depend on S3 (Dip Switch) configuration and W1 and W2 jumpers: Fig.2 shows their position on the board.

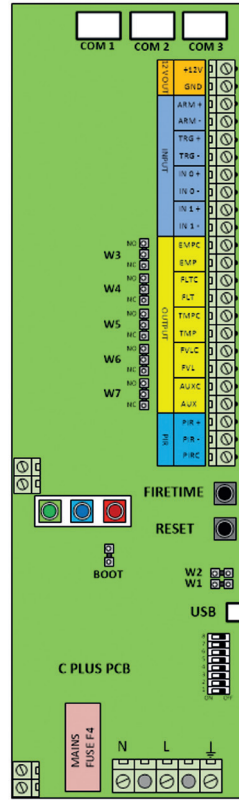
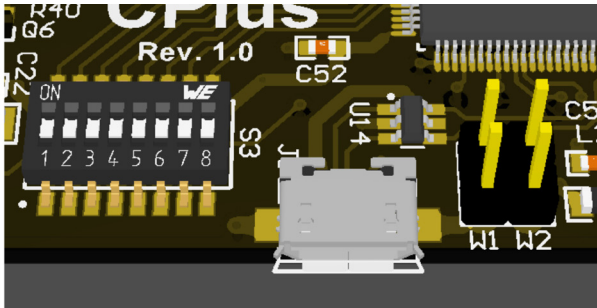


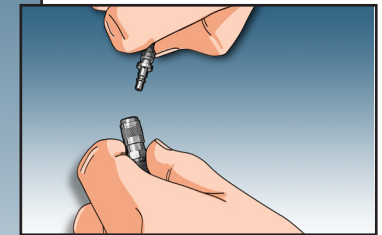
fig 1

DIP SWITCH	FUNCTION
1	Fire Validation Output setting, see FIRE VALIDATION on Table 1
2	OFF – main signalling leds enabled, ON – main signalling leds disabled (panels leds, green blu and red)
3	OFF – signalling sound enabled, ON – signalling sound disabled
4	OFF – Passive security (relays are normally inactive, the event will activate relay) ON – Active security (relays are normally active, the event will deactivate relay)
5	OFF – Panic input (IN1P, IN1N) not enabled ON – Panic input (IN1P, IN1N) enabled
6	(Reserved for future use)
7	(Reserved for future use)
8	OFF – Normal mode ON – Service Mode (the machine will be not operative, no led, no outputs)

Tab. 1



Insert the plastic bag in the compartment as shown in the picture



metal plug

After that, insert a new bag until you hear the “click” of the metal plug (pictures at page 17) entering in its housing, then close the door.

N.B. When you close the cover, the buzzer will make a sound to confirm the tamper is closed. **Attention:** Before opening the cover, make sure that the alarm control panel is in “service” mode, so that the opening of the “anti-sabotage or tamper” circuit does not cause any alarm.

Modular Plus family fogging systems are designed to be simply connected to any existing Alarm Panel available on the market.

In compliance to the existing rules and for security purpose the activation of the fog emission should be as a result of a “double confirmation” input. The meaning of the “ARM” signal is to be intended as a 1st confirmation. If a TRIG command or a PIR validation input (if active) is received by the unit in “ARM” status (Blue led on), the unit will generate fog for the time previously defined and stored in the unit with the time setting procedure.

The unit is able to handle both activation procedure commonly available on fogging systems.

A) Siren emulation:

1)ARMING: when the alarm system is activated (local monitoring with sensors and active zones) a continuous signal of first consent must be sent to the unit (12v DC + to the ARMP PIN and 12v DC - to the ARMN PIN). The Blue LED on the unit lights up to signal the armament status

2)SHOOTING: In case of activation of the alarm system for an event signaled by an area or sensor, the alarm panel must send a impulse signal (duration >500ms) to the unit (12v DC + to the PIN TRGP and 12v DC - to the PIN TRGN). The device activates instantaneously and emits fog for the previously set time.

B) Relay activation:

1)ARMING: Define on the alarm panel an area dedicated to the arming of the fog device. The relay in this area (NO) will have to close when the alarm system is activated.

2)SHOOTING: Define on the alarm panel an area dedicated to allow the emission of fog by the unit. The relay in this area (NO) will have to close when the alarm system is activated by an event detected by an area or sensor.

Please note that is ARM costant signal is removed during the shooting, the units immediatly stops fog emission.

Optional shooting methods.

There are also some other activation methods on Modular Plus series , some of them depending also from other optional devices, that let the installer able to satisfy the most common customer’s requests.

A) Additional TRIG button

The input IN0P/IN0N is an optional trig command device that can be added to command the fog emission. It acts exactly as TRGP/TRGN input and follows the same rules.

B) Antirobbery TRIG button

The input IN1P/IN1N is an optional trig command that enables the device to create fog EVEN WITHOUT BEING ARMED. This option must be used only by a skilled about use and prescriptions person. To prevent accidental activation this function must be activated by the installer only , that take the responsibility to train users how and when use this option. To activate antirobbery functions , move SW5 to ON position , turn off and back on the unit.

C) Cloud Monitoring/Activation by remote

The Modular Plus Series can be equipped with the URF0g ActiveCloud LAN board , that allows Ethernet (RJ45 or WiFi) connectivity to full monitor , diagnostic and be interactive with the unit by remote. Please refer to you local URFog dealer for more details

D) DUAL TECHNOLOGY PIR INPUT

A local PIR sensor can be installed near the device and directly connect to the Modular Plus board to activate the trig only if presence is detected in the shooting area. This function is activated by closing the W1 (PIR INPUT ACTIVE) and works in AND with the normal TRIG input received from the alarm panel. By closing ALSO W2 Jumper the PIR INPUT confirmation will let the PIR work as standalone activation device. Turn off and back on the unit after Jumper setting.

Label	Direction	Description
+12V	Out (power)	+12V output, max 200mA
-	-	0 V ground terminal internally connected to mains earth.
ARMP	in	Arm signal input, ARMP positive terminal, ARMN negative terminal: <ul style="list-style-type: none"> voltage 12V : machine armed 0V or left open: machine NOT armed;
ARMN		
TRGP	in	Shoot signal input, TRGP positive terminal, TRGN negative terminal: <ul style="list-style-type: none"> voltage 12V : triggers a shot if <i>READY</i> signal is TRUE and the machine is armed; 0V or left open: machine not shooting The machine will be shooting for all the firetime set and will stop shooting when <i>READY</i> goes off (signalling the inability of the fog generator to continue shooting) or the machine is disarmed.
TRGN		
IN0P	in	Secondary shoot signal input, IN0P positive terminal, IN0N negative terminal: <ul style="list-style-type: none"> voltage 12V : triggers a shot if <i>READY</i> signal is TRUE and the machine is armed; 0V or left open: machine not shooting The machine will be shooting for all the firetime set and will stop shooting when <i>READY</i> goes off (signalling the inability of the fog generator to continue shooting) or the machine is disarmed.
IN0N		
IN1P	in	Panic shoot signal input, IN1P positive terminal, IN0P negative terminal: <ul style="list-style-type: none"> voltage 12V : triggers a shot if <i>READY</i> signal is TRUE and DIP-SWITCH 5 is in ON position (prior a restart of the machine) 0V or left open: machine not shooting The machine will be shooting for all the firetime set and will stop shooting when <i>READY</i> goes off (signalling the inability of the fog generator to continue shooting).
IN1P		
EMPC	out (relay C pin)	EMPTY indication, relays contacts output; the relay activation signals that the fluid level is under a threshold level and the fluid bag need to be replaced as soon as possible. Use W3 to select the normal state (open or closed contact selection)
EMP	out (relay pin)	
FLTC	out (relay C pin)	FAULT indication, relays contacts output; the relay activation signals that an anomalous condition has been detected. This could be due to hardware faults (that will necessarily need a technical maintenance operation) or simply because of potentially self-recoverable problems like a power loss or battery low. Use W4 to select the normal state (open or closed contact selection)
FLT	out (relay pin)	
TMPC	out (relay C pin)	TAMPER violation indication, relative to the tamper input: the relay activation signals that the tamper input is open. Use W5 to select the normal state (open or closed contact selection)
TMP	out (relay pin)	
FVLC	out (relay C pin)	FIRE VALIDATION relays output: the relais activates to signal a shooting. Its behaviour depends on the setting of the position of Dip Switch 1: <ul style="list-style-type: none"> if Dip Switch 1 is OFF, in case of a completed shooting the output will be activated for 10s after the shooting is completed if Dip Switch 1 is ON, in case of a completed shooting the output will be activated from the starting of the shooting and for 10s after the shooting is completed In case shooting is not completed for whatever cause, the output will not be activated (if DSW1 is OFF) or will be deactivated as soon he shooting stops (if DSW1 is ON)
FVL	out (relay pin)	
AUXC	out (relay C pin)	(Reserved for future use)
AUX	out (relay pin)	
PIR+	Out (power)	+12V output, max 200mA (PIR supply)
PIR-	-	0 V ground terminal internally connected to mains earth.
PIRC	in	Open active input from PIR. If jumper W1 is not inserted, the PIR input will be ignored If jumper W1 is inserted, the fog machine will shoot if all these conditions are met: <ul style="list-style-type: none"> machine is ready machine is armed TRIG is active (within one minute from the condition below) PIRC open (within one minute from the condition above) If W1 and W2 are both inserted there is no need for TRIG signal to be active to shoot.

To set the shooting time, after removing the plastic front cover, in the middle of PCB is located the FIRETIME (S2) button. Holding down the button, the 3 coloured front leds will flash and a sound signal is executed by the buzzer, each flash/beep is equivalent to one second of fog emission of the device.

Pressing the button again, the shooting time is not added to the one previously set, but will restart from zero.

If the button is pressed for a time higher of the unit capabilities, the fog emission will be set to the maximum allowed for the unit.

N.B. Before opening the cover ensure that the control panel is set to "service", so that the opening of "anti-sabotage or tamper" circuit does not cause any shooting.

N.B. Shooting time can be set according to wished seconds, but to correctly activate the bag reserve in full security, it must be set to a minimum 4 seconds of shooting.

RECOMMENDED SHOOTING SECONDS ACCORDING TO THE VOLUME SPACE TO PROTECT (m³)

Fogging systems Modular CPlus are able to produce fog continuously till the maximum time allowed, according to the model specifications. There might be cases in which, due to specific characteristic of the location, levels of air temperature and pressure, degree of the fog density and light in the target area, that the shooting time can be increased or decreased. For example, above 5 m of height the shooting time must be 20% more and above 7 m, every additional meter should be considered as double.

$$(H \times L \times P) \times D \times V \times R \times I$$

HxLxP-----Height x Width x Depth of the area to protect

D-----Density of the produced fog

V-----Temperature and air pressure

R-----Acceptable residue in case of saturation of V parameter

I-----Intensity of the surface light

The following tables indicate the suggested fog emission in relation to the number of seconds of shooting set in average condition of temperature, air pressure and humidity.

N.B. To correctly dimension the machines it is needed to verify that the saturation of the area occurs in faster time than the one supposed for the theft.

SHOOTING TABLE MODULAR 2 PLUS (max 28 sec.)

m ³ to protect	Seconds of emission	m ³ to protect	Seconds of emission	m ³ to protect	Seconds of emission
50 (150*)	7	100 (300*)	14	200 (600*)	28
75 (225*)	9	150 (450*)	21		

SHOOTING TABLE MODULAR 3 PLUS (max 40 sec.)

m ³ to protect	Seconds of emission	m ³ to protect	Seconds of emission	m ³ to protect	Seconds of emission
50 (150*)	7	150 (450*)	21	300 (900*)	40
75 (225*)	9	200 (600*)	28		
100 (300*)	14	250 (750*)	35		

SHOOTING TABLE MODULAR 4 PLUS (max 46 sec.)

m ³ to protect	Seconds of emission	m ³ to protect	Seconds of emission	m ³ to protect	Seconds of emission
50 (150*)	6	150 (450*)	21	300 (900*)	40
75 (225*)	9	200 (600*)	23	400 (1200*)	46
100 (300*)	12	250 (750*)	35		

SHOOTING TABLE MODULAR 5 PLUS (max 48 sec.)

m ³ to protect	Seconds of emission	m ³ to protect	Seconds of emission	m ³ to protect	Seconds of emission
50 (150*)	6	150 (450*)	16	300 (900*)	27
75 (225*)	9	200 (600)	21	400 (1200*)	37
100 (300*)	12	250 (750*)	24	500 (1500*)	48

SHOOTING TABLE MODULAR 8 PLUS (max 69 sec.)

m ³ to protect	Seconds of emission	m ³ to protect	Seconds of emission	m ³ to protect	Seconds of emission
50 (150*)	5	200 (600*)	19	500 (1500*)	43
75 (225*)	8	250 (750*)	22	600 (1800*)	51
100 (300*)	10	300 (900*)	26	700 (2100*)	60
150 (450*)	14	400 (1200*)	35	800 (2400*)	69

*Industrial standard as from other manufacturers

The value in the first column indicates the volume of the room to be protected, with respective seconds of emission reported in the second column. The value in m³ varies depending on the density to be obtained. With the suggested value it is possible to get the maximum density recommended to ensure the absence of any residual. In places where a little residual causes no problems, it is possible to increase the shooting time. Please note that the more fog released, the more the time required to recover visibility. High levels of fog, over recommended limits, can leave residual. Any residue usually goes away by itself within 24/48 hours, otherwise, being soluble in water, it is enough to use a wet cloth for cleaning. If you desire to obtain an average of 1 meter visibility after 60 seconds, as specified by the standard EN 50131-8 : 2019, as used as reference by all manufacturers of Fog generators, the number of shooting seconds it is to be reduced in half.



Do not obstruct the nozzle when the generator is armed and bag is in.