

# UR FOG

Installation and use manual



mod. **EASY**

**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 cylinders 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, legal office: Via Giacinto Collegno 11 - 10143 - Torino - Italy  
Tel 011/01.33.037 Fax 011/01.33.005  
**support@urfog.com.**

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 liquid injection system, the disposable cylinders, the fact that they don't need to be refilled, the ecological and economic system for the complete emptying of the cylinders, together with the heating system, all of them make the Easy fog generators the best fog devices with the best performance in the security market.

- **Reliable:** There are no high pressure pumps which lose fluid or tend to stop working. There are no high pressure pumps that must be tested periodically.
- **Competitive:** Complete use of cylinders liquid avoiding any waste of liquid thanks to pressure control low power consumption. Fast and powerful.
- **Simple:** Easy to install machines. Can 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 Easy** is 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 cylinders 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 cylinders. Keep **UR Fog** cylinders 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.

## 4 INSTALLATION TIPS OF FOGGING SYSTEMS - RECOMMENDATIONS

Si raccomanda cortesemente di osservare le seguenti indicazioni nel montaggio del dispositivo **UR Fog**:



- 1. The machine must be installed avoiding to block escape routes.**
- 2. Verify the fog does not limit the visibility near: stairs, landing, moving objects that may cause: fall downs, injuries or any damage to persons.**

3. Do not look directly into the nozzle. Do not add any other substance into the cylinders.
4. The nozzle may reach high temperatures, touching it may cause burns.
5. When UR Fog produces fog avoid staying closer than 1 meter from the machine.
6. When UR Fog is armed avoid staying closer than 50 cm from the nozzle.
7. Before testing of UR Fog, remember to report it in advance to the firefighters in your area to avoid false alarms.
8. Remember to put warning labels about the presence of UR Fog on the windows.
9. Report its installation to the firefighters in your area and eventually to other institutions if needed.
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. When the fogging system UR Fog is ready to use, do not stay at less than 20-50 cm from the nozzle during the emission.
11. Never direct the fog jet towards an object or a wall less than 2 meters, if it is possible increase suggested minimum distance. Thanks to the power of the jet, UR Fog reaches and exceeds more than 10 meters away for 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 time table, avoid doing "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 over 1,5 hours without main power 220V thanks to the insulation system that maintains long-temperature in the heating system.
14. Install the device at least at 2,5 meters in height, to limit the possibility of tampering.
15. Install with a maximum inclination of 20°.
16. Do not move the machine when it is still hot.
17. The main body of UR Fog EASY, 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 UR Fog has been shut off. The internal part may reach really high temperature.
18. Do not activate the UR Fog machine before the installation is not completed.
19. Insert the cylinders as the last procedure and verify the anti-tampering function.
20. When the installation is over, always test the system.
21. Remember that from the moment of UR Fog activation, it is necessary at least one hour to reach the minimum temperature need for the fog shoot.
22. Install UR Fog avoiding an obstacle in front area which can prevent spreading of the fog.
23. The external temperature of UR Fog can change from room temperature to 50 °C.
24. Ask UR Fog or its distributors to take part in courses for installers to ensure the optimal installation of the equipment of UR Fog

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## RESET FROM FAULT CONDITION

This process is useful to discriminate false interpretations of faults caused by electrical shocks or serious problems on power supply from thermal loop problems.

1 )Serious fault signal occurs with a first phase when the buzzer emits a sound for 20 minutes and the green led flashes

2) After 20 minutes, the buzzer stops, while led goes on flashing,  
This phase remains permanently, until the machine is completely disarmed.

3) When you connect again the machine, green led flashes and the buzzer emits a sound every 2 minutes.  
This phase lasts for 30 minutes, then the generator starts to work again.

If during this process the generator is disconnected, when you connect it again the time start again from the beginning and for 30 minutes.

If at the end of this process, the generator start to work again regularly is not necessary any further operation.  
If occurs again the fault condition within the following 20 minutes, it's necessary a check from the assistance center, or to send the machine back to the factory.

DEFECT FOUND	POSSIBLE CAUSE	POSSIBLE SOLUTION
The buzzer emits 2 beeps/minute	Low battery but can still shoot	Replace battery - See paragraph 7
The buzzer emits 3 beeps/minute	Low battery power, can not shoot	Replace battery - See paragraph 7
The buzzer emits 10 consecutive beeps every minute	Battery absent	Insert battery
	False contact battery case	Remove the battery and insert again
In any case it is useful the use of a tester, to verify the presence of tension of the on the battery-box		
The machine is armed but doesn't shoot (LED WITH FREQUENT FLASHING)	The cylinder is empty - replace the cylinder as described in paragraph 14	
	The front green LED flashes SLOWLY	The heat exchanger has not yet reached the minimum temperature of shooting, wait for stop flashing (standard time of heating 60 min)
	The machine does not shoot immediately after arming	For security reasons and to avoid false fog emissions in power, when the machine is armed, it becomes operative only after 20". After this time, the emission is instantaneous.
	Wiring error	Verify the connector with a tester, so that when the antitheft systems sounds, there would be a minimum tension of 8V among - GND + SHOOTs
The buzzer sounds continuously and the LED flashes	Temporary/persistent fault condition	Make a reset (see par. 17) If this happens again contact technical support. Do not try to repair.
Cannot arm	Wiring error	Verify on the connector with a tester, so that when the antitheft systems sounds, there would be a minimum tension of 8V among - GND + SHOOTs
The cylinder does not enter	The plate is left down	Follow the instructions of paragraph 15
The cylinder does not exit	The cylinder is stuck in the valvebody	Pressure up and then pull

	EASY
Weight without cylinders and battery	8,5 Kg
Generated fog (3 formats of cylinders)	70/140/200 m³
Work time without main power	Over 1,5 hours
Max power of heating system	300W
Average consumption in heating mode	250W
Heating time	At least 1 hour
Average power consumption	30W
Max current in exit 24h	100 mA
Average battery lifetime	12 months with 10 shoots
Average NiMH battery lifetime	3 anni
Door anti tampering	NC contact

**EASY is the first fogging alarm system with disposable cylinders in a single shot. Instead of setting the time of shooting, you use a cylinder containing the fog fluid according to the area to defend.**

**EASY** is provided with an inner power supply for the functioning of the electronic circuit, for this reason to start heating the device, you just need to insert an alkaline battery (LR61 type) of 9V or rechargeable Ni-MH (6F22 type, minimum 270 mAh real) of 8,4V (see 9 paragraph) and supply the power source 220V on the clamps for the power supply (see 8 paragraph).

After the heating time (more or less 60 min) **EASY** is ready to start the fog emission.

Since you can't set the time of shooting with **EASY**, it's necessary to choose the size of the cylinder suitable for the place that has to be protected (paragraph 13) avoiding to fill excessively or insufficiently, and insert them in the appropriate compartment (paragraph 14).

For the emission of the fog it's necessary, as specified in the current regulations, a double approval (paragraph 11) arming and shooting.

For security reasons, the command of arming only have effect after 20 seconds after the activation. When the command of shooting is given, the jack goes down thus opening the cylinder.

The jack stays down, avoiding the extraction of the cylinder (paragraph 14) for a minute, till arming command it's cancelled.

After the emission of the fog, the cylinder is empty and needs to be changed.

In case of absence of the power supply, **EASY** remains operative till it uses up its thermic autonomy (more than 1,5 hours), after that it shuts down automatically and it's restored when the power supply 220V is back.



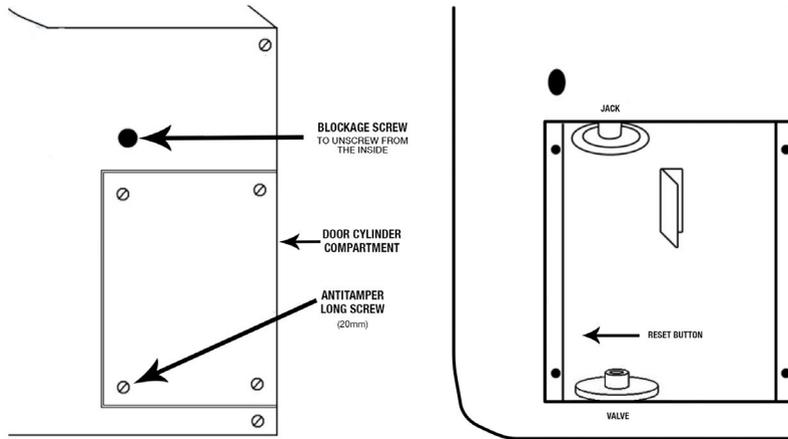
We recommend you to fix the fog generator to a wall or to a solid anchoring even when it is leaned against a piece of furniture or laid over a shelf.

Always verify that the bolster or the anchoring system are appropriate for the weight of the device.

We always recommend to assure a correct ventilation to the UR Fog device to avoid overheating, verify that it is not installed behind walls in cramped spaces, without a suitable ventilation.

### DOOR COMPARTMENT OF CYLINDERS

After the removal of the equipment from the box, unscrew the four screws that stop the door compartment of the cylinder and remove it. The screw on the lower left activates the protection anti-tamper, and for this reason is long 20mm instead of 8mm. (it is recommended to remember the order of the screw for a correct reassembly)

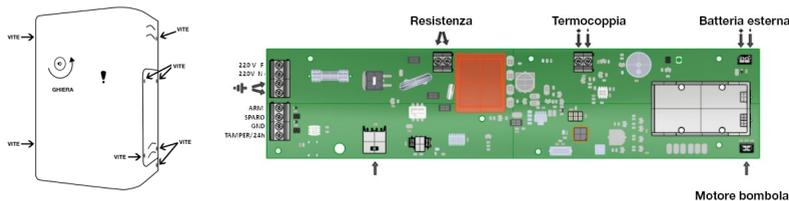


### REMOVAL OF THE COVERING PANEL

THIS OPERATION CAN ONLY BE DONE BY QUALIFIED PERSONNEL (INSTALLER)

The panel locks are 6.

The front nozzle must be unscrewed counterclockwise, the four screws visible at the corners, and the lock screw hidden inside the cylinders compartment at the corner in the higher on the left. Once the covering panel is removed, you can see the electronic circuit, from now on called PCB.



**UR Fog** generators do not require special care, however, it is recommended to use the support of qualified and authorized personnel with periodic annual monitoring, taking into account the following:

- The charged cylinders have a limit of predetermined duration of 3 years.
- Verify annually the functioning of the cylinder plates.
- The efficiency of the batteries is crucial to guarantee the functioning
- It is recommended to return to your dealer before their expiration date even if not empty
- Empty cylinders, being aluminum / steel can be recycled as common cans

### OPERATIONS TO FOLLOW:

#### Test battery:

To make this test you just have to press the button RESET, indicated in paragraph 7, and described in paragraph 9

#### Verify the integrity and the deadline of the cylinders

The deadline is printed on the top of the cylinder. To test the integrity of the cylinders, weigh them:

Weight should be: 190g for the 50m<sup>3</sup>, 240g for the 100m<sup>3</sup> e 280g for the 150m<sup>3</sup>

If the weight changes for more than 10%, it means that the cylinder must be considered not intact, and needs to be replaced.

### UP / DOWN CYLINDER PLATES

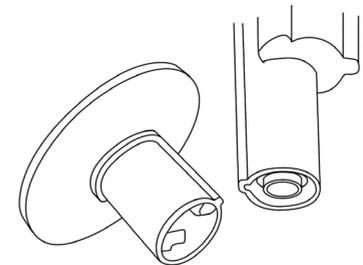
To test the functionality of the cylinder plates, it is recommended to extract the cylinder.

With an extended pressing of the button RESET, cylinder plate will raise, while keeping the button pressed, the cylinder plate will descend until it unhooks.

To insert again, one just needs to place it correctly as shown in the guide (see the image), and press again the RESET button.



It is recommended to do the RESET cylinder procedure every time the cylinder is replaced thus carrying out the battery test procedure.



## 13 SELECTION OF THE SIZE OF THE CYLINDERS ACCORDING TO THE SPACE TO PROTECT

The sizes available for the cylinders are three, **from 50 to 70 m<sup>3</sup>, from 100 to 140 m<sup>3</sup> e from 150 to 210 m<sup>3</sup>**

The value in m<sup>3</sup> may vary depending on the fog density that you desire to obtain.

In places where a slight residue is not a problem, it is possible to use a bigger size of cylinder.

We remind you that the more fog is released the more time it takes to have visibility back. High levels of fog over suggested limits may leave residue.

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.



**WARNING! After the fog emission, and for a few minutes the nozzle is very hot!  
RISK OF BURNS IF TOUCHED by bare hands!**

## 14 INSTALLATION AND EXCHANGE OF THE CYLINDERS

**Before opening side doors ensure that the alarm control panel is in the “service” function, so that the opening of the circuit “anti-sabotage or tamper” does not cause any alarm.**

Cylinders for EASY line fogging security systems are guaranteed till the printed expired date on the upper part on them. It is recommend returning the same expired ones to the dealer, who will take care of disposal.

After that date cylinders should be changed even if they are not used.



After removing the screws from the door, take away the cylinders and reset the warning light for empty cylinder. After this operation, insert the new cylinder until you hear the “click” of the plastic support at its top that goes into the slot and then close the door of the cylinder.



If the cylinder seemed “stuck” in the upper part DO NOT pull with force, make a pressure with two fingers on top of the cylinder, such as to lower it. Then try again to remove it.

If the cylinder does not enter, check if the cylinder plate of the motor remains lifted. If so see paragraph 15.

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## ELECTRICITY SUPPLY

Power 220V supplies energy only to the heating system. The electronic card and the motors of the cylinders are supplied from the alarm system and batteries. (see paragraph 9). The heating element is of 0,3KW, at the very beginning power consumption is about 250W and in some minutes it goes down reaching average consumption which is about 30W - 40W.



**Do not use: inverter or UPS unless you have the certainty that they generate a real sine wave, not a rebuilt one.**

- The max current to be considered for the system is 1,3A
- The connection to the electricity grid 230V must be performed by a qualified technician.
- It is necessary to connect the ground terminal.
- The equipment must be connected to the electrical power through a sectioning, possibly a thermal magnetic and differential, to protect the system from earth fault current.

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

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

**IF YOU NEED TO REPLACE THE FUSE, USE THE ONE WITH EXACTLY THE SAME SPECIFICATIONS. IF ANY DOUBT, ASK YOUR AUTHORIZED DEALER**

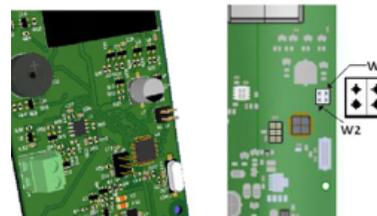
## 9

## BATTERY POWER

The battery is intended to **maintain the efficiency of the electronic card**, allowing the fog emission even in absence of power supply from the electricity grid, until the heating system has a sufficient temperature, but are also intended to activate the motor that opens the cylinder, in the presence of the electrical power.



**Without the battery, or with a low, defective or broken battery, EASY would not be able to emit the fog.**  
For the fog generators of the EASY line, it is possible to choose to use an alkaline battery or a rechargeable battery NiMH



**Selection of battery/ rechargeable battery**

**Jumper W1 inserted for battery NiMH  
Jumper W1 removed for alkaline batteries**



**he Jumper must be moved only when the equipment is not supplied by alimentation and without the battery**

After the insertion of the battery, it is recommended always to press the button **RESET**, accessible from the cylinders compartment, near to the spring anti-tamper (see the paragraph 7)  
Pressing the button implements a test on the battery, and, in case that the jumper W1 is inserted, starts a brief recharging cycle.

It is fundamental:

- To use only high quality alkaline or NiMH batteries
- To replace them within the expiry date
- To replace them anyway every 12 months (and 3 years for battery NiMH)
- When EASY reports the signal of low battery (paragraph 11 and 14)

Batteries must be changed:

- After a year of using
- Within the deadline printed on them
- When depletion is reported

If the batteries run down, a sequence of acoustic signals starts:

- 2beeps/minute - battery is low,
- 3beeps/minute - machine is out of use, battery too low,
- 10beeps/minute - battery missing or bad contact on battery case, plug or cable interrupted.

When the empty battery is removed from the battery case, the buzzer will sound a sequence of 10bips for each minute. After re-inserting the new batteries, it is suggested to wait at least one minute, to verify that the beeps sequence is not repeated.

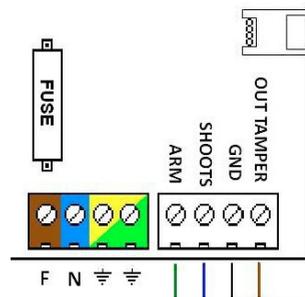
If the sequence of beeps does not stop, you have to check the polarity of the battery, and, if yes, check the batteries are in correct contact with the battery case. We recommend to throw away the batteries in the appropriate waste containers for recycling. Heavy metals contained in them are recoverable



## 10 DESCRIPTION OF INPUT AND OUTPUT CONNECTIONS

### TERMINAL 220v

- 1 Alimentation phase 220V
- 2 Neutral alimentation 220V
- 3 Ground connection electricity
- 4 Inner ground connection electricity



### TERMINAL LOW VOLTAGE

#### 1 ARM Arming input

Connecting this input to positive, EASY is armed, frontal led starts lighting and when the machine reaches proper temperature it means that it is ready to shoot. In case of alarm, opening ARM input, the fog emission stops immediately, even if the cylinder isn't empty.

#### 2 SHOOTS Shooting input

Putting this input to positive, if EASY is hot and armed, will start fog emission.

#### 3 GND Negative reference connected to terminal 1

#### 4 24h Antitamper output

This output closes towards negative direction when the door for the cylinder is closed.

## To respect the requirements of the reference norm EN50131-8

In order to avoid accidental activation with subsequent fog emission, the inputs are in "negative security", for this reason the disconnection of a wire does not cause activation.

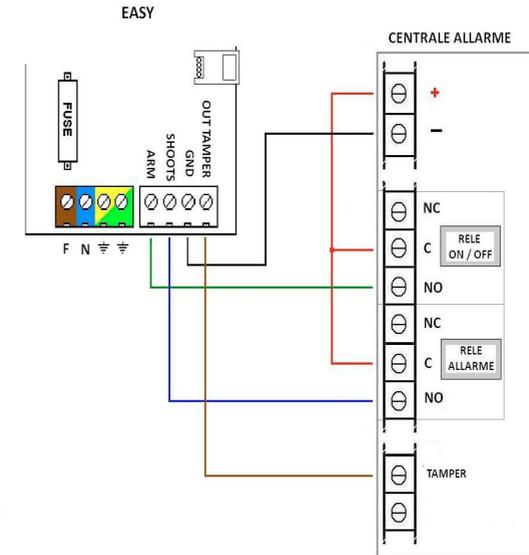
So it is necessary to check carefully the reliability of connections and protect the cables to the control panel to avoid the risk of accidental damages.

## 11

## CONNECTION EXAMPLES



The diagrams and examples below are intended only to a "better understanding" of the operation of the inputs / outputs. None of the diagrams below represents the "single scheme to perform" as, in respect of the reference standard, there are precise indications that must be examined case by case carefully from whoever accomplishes the installation.



For safety reasons and to avoid false fog emissions in power, when EASY is armed, it becomes operative only after 20". After this time, the emission of fog is immediate.

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## MEANING OF FRONT LEDS

#### FIXED LIGHT

#### QUICK FLASHING

#### SLOW FLASHING

#### PULSE AND QUICK LIGHTING

Machine in temperature not armed

Machine in temperature armed

Machine in heating not armed

Machine in heating armed



IF THE BLUE LED FLASHING, TOGETHER WITH THE SOUND OF CONTINUOUS BUZZER, A SERIOUS PROBLEM IS DETECTED. SEE PARAGRAPH 15