

# TINY FX



## Set of Equipment supplied

- 1 Tiny FX
- 1 battery cable with push-pull plugs
- 1 remote with cable
- 1 rechargeable battery-pack 11.1 V
- 1 charger
- 6 fluid reservoirs filled with 5 milliliter fluid each  
to be screwed in
- 1 refill set  
to refill the fluid reservoir
- 1 bottle of fluid (250 milliliter)

When the order includes a radio remote, the following items are supplied additionally:

- 1 receiver with stereo jack
- 1 4-button transmitter
- 1 instruction manual "Radio remote control"

Please check whether all ordered products are supplied.

# Contents

<b>1. Procedure of the Tiny FX</b>	<b>4</b>
<b>2. Safety Instructions</b>	<b>5</b>
<b>3. Descriptions of the parts</b>	<b>6</b>
<b>4. Fluid</b>	<b>8</b>
4.1 General	8
4.2 Refill the fluid reservoir	8
<b>5. Operating the Tiny FX</b>	<b>8</b>
5.1 Selecting the Location	8
5.2 Mounting the Tiny FX	8
5.3 Starting-up the Tiny FX	9
5.4 Programming of a fixed fogging time	9
5.4.1 Programming the fogging time	
5.4.2 Deleting a fixed fogging time	
5.5 Status Display of the battery	10
5.6 Wiring of connectors	10
<b>6. The rechargeable Battery</b>	<b>11</b>
6.1 General	11
6.2 Capacity and life time	11
6.3 Operating and Storing	11
6.4 Charging the battery-pack	11
6.5 Fuse	12
6.6 Safety Instructions	12
6.7 Technical Data	13
<b>7. Service and Maintenance</b>	<b>14</b>
7.1 Changing the Vaporizer	14
7.1.1 Removal of the Vaporizer	
7.1.2 Installation of the Vaporizer	
7.1.3 Calibrating the Vaporizer	
7.2 If the machine does not work perfectly	16
7.2.1 There will be no fog if...	
7.2.2 Status and error display	
7.3 Care and Maintenance	17
<b>8. Technical Data</b>	<b>18</b>
<b>9. Warranty Conditions</b>	<b>19</b>

# 1. Procedure of the Tiny FX

The **Tiny FX** is a battery-powered, microprocessor-controlled mini fog generator. It is based (as most fog generators are) on the vaporizer principle, i.e. a glycol fluid is evaporated and condenses into fog when leaving the fog nozzle. However, the **Tiny FX** only heats when fog is actually produced.

The machine switches off automatically after approx. one minute. Thus, the electronics of the **Tiny FX** does not use any current.

If the receiver of the radio remote is connected to the machine, some current will be needed. **Please note:** Thus, the battery can be destroyed by completely discharging and cannot be used anymore!

**Generally the battery must be disconnected and regularly recharged (at least every 6 months) if the machine will be not in use or stored for a longer period.**

When emitting fog a strong current of 5 to 6 A runs with peak levels of 12 to 13 A.

The following sequence produces fog:

- a) Warm up (1 second, without pumping fluid).
- b) The pump runs
- c) Post-run mode (15 seconds to vaporize the fluid remaining in the vaporizer).

In the post-run mode the fogging process can be started via the start button in the lid or via the start button on the cable remote or radio remote.

## 2. Safety instructions

### A fog machine is not a toy!

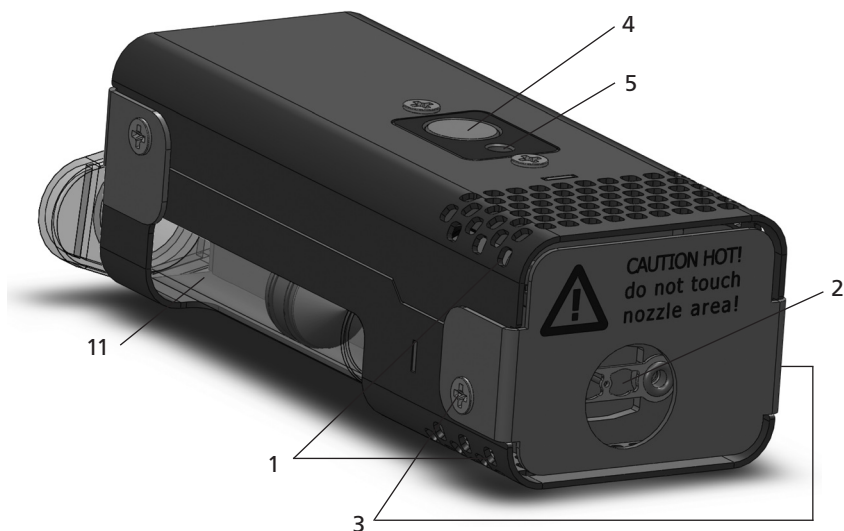
- Very hot steam escapes from the nozzle. Risk of scalding.
- Occasionally very hot droplets of fluid may escape when in operation. Thus never aim at persons directly and keep a minimum distance of 3 m to the nozzle.
- Never touch the nozzle when in operation. Risk of getting burnt.
- The location for the machine must be non-flammable, non-combustible and not sensitive to heat. Its surface area has to be twice as big as the machine.
- Keep a minimum distance of 60 cm to all flammable, combustible objects and objects sensitive to heat.
- Glycol is alcohol and burns with a slightly bluish, almost invisible flame. Never point the fog at strong sources of ignition like fire or pyrotechnic effects.
- Never open the machine and leave it unattended when connected to a power supply.
- The visibility has to be more than 2 m in rooms where people walk around.
- Only use the supplied TINY-FLUID. Different types of fluid do not generate the fog you require and will damage your fog generator.
- Do not swallow the fog fluid. Keep it away from children. In case of eye contact, rinse well with water. Consult a doctor should you accidentally swallowed some fluid.
- Spilled fluid or splashed fluid droplets can cause a slip hazard. Mop up the fluid and dispose of it according to regulations. TINY-FLUID is completely water-soluble and biodegradable.
- Fog may activate smoke detectors.

Artificially-made fog can be produced in many different ways. The method used here to produce fog, with a device which works according to the vaporizer principle, is the most harmless one.

No case has so far been reported in which a healthy human being has been harmed because of using our device to produce artificial fog. However, this can only be guaranteed if the professional fog generators are used appropriately, i.e. at the correct vaporization temperatures as well as with the correctly mixed fog fluid.

We, however, recommend: **People with health problems or problems of the respiratory tract or with an inclination for allergies should avoid any contact with artificially-made fog.**

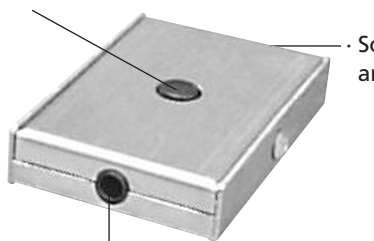
### 3. Description of the parts



- 1: · Ventilation slots
- 2: · Fog nozzle
- 3: · Screws to unscrew the stainless steel hood

- 4: · Start button
- 5: · Yellow LED
- 11: · Fluid reservoir to be screwed in

- Start button



- Sockets for connecting cable and radio remote

### 3. Description of the parts

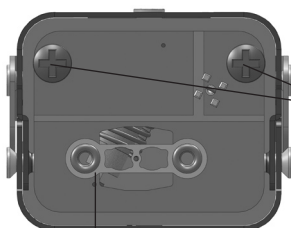
- Socket for connecting the cable of the control panel or the receiver of the radio remote

- Socket for connecting the battery cable

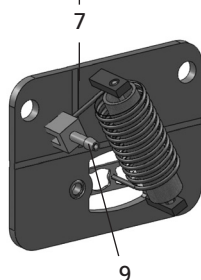


- Connector for fluid reservoir

- Calibrating button to calibrate the vaporizer



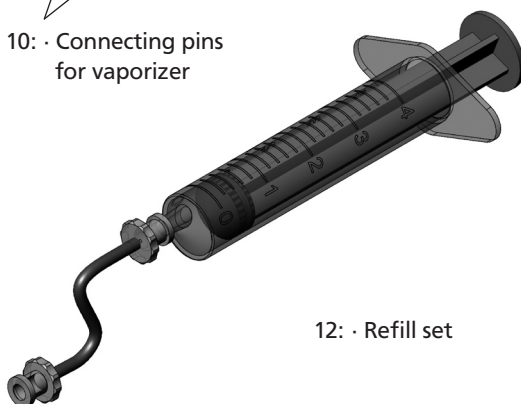
- 6: · Screws for connecting the vaporizer to the connecting pins



- 7: · Vaporizer
- 8: · Fluid tube
- 9: · Tubing spout



- 10: · Connecting pins for vaporizer



- 12: · Refill set

## 4. Fluid

### 4.1 General

The **Tiny FX** is built to be used with original Look Tiny-Fluid. Use of other liquids will clog the vaporizer and void the warranty.

### 4.2 Refilling the fluid reservoir

The fluid reservoir can be refilled using the delivered refilling set [12]. Thus, the reservoirs can be used several times.

- a) Mount 5 ml of Tiny-Fluid from the original fluid bottle with the refilling set.
- b) Connect the adaptor of the refilling set with the reservoir you would like to refill.
- c) Disconnect the adaptor and screw the refilled reservoir into the **Tiny FX**. If you refill reservoirs for stock, please use the covers to avoid small bits of dirt inside the reservoir and make sure the reservoir cannot leak.

## 5. Operating the Tiny FX

### 5.1 Selecting the Location

The location for the **Tiny FX** must

- be dry
- guarantee sufficient air supply
- be at least 60 cm from inflammable materials
- have very little vibration
- have an ambient operating temperature between 5° C and 45° C
- have a relative air humidity of less than 80%.



## 5. Operating the Tiny FX

### 5.2 Mounting the Tiny FX

If the **Tiny FX** is to be built into props or similar, make sure that a fog-free air supply is guaranteed. Too high a fog concentration can condense inside the machine and can result in damages caused by moisture.

When installing the **Tiny FX** make sure that

- no fog is passed back into the fog generator,
- no condensed fluid runs into the apparatus,
- the air vents [1] are not covered or concealed,
- no objects protrude into the fog nozzle [2]. This may destroy the vaporizer.

### 5.3 Starting up

- a) Remove both covers from the already filled fluid reservoir. Screw the reservoir into the **Tiny FX**.

The covers should be stored. The reservoirs can be refilled with the delivered refilling set and can be used several times. Check the cleanliness, so that no dirt (fluff etc.) can be sucked in by the pump. Even the smallest impurity immediately leads to clogging of the machine.

- b) Connect the machine and the battery-pack to the battery cable, using the right sockets. The yellow LED [5] will start to flash.

- c) Press and hold the start button in the lid of the machine [4]. After approx. 1 second the unit generates fog as long as the button is held.

If you would like to control the machine via the cable remote or radio remote, connect the control cable for the remote or the receiver of the radio remote to the machine. You can start the fogging process by pressing the start button at the cable remote or radio remote.

**Caution:** Do not put anything into the fog nozzle. This may destroy the vaporizer and it then has to be changed (see point 7.1)

If the **Tiny FX** is not generating fog, the machine switches off automatically after approx. 1 minute. The yellow LED [5] does not light anymore. The machine can still be activated at any time by pressing the start button in the machine's lid, the cable remote or the radio remote.

## 5. Operating the Tiny FX

### 5.4 Programming a fixed fogging time

For some applications it will be useful to program in a fixed fog amount, which can be easily reproduced later.

The shortest fog time is pre-programmed. If a new fog time is programmed, the pre-programmed fog time will be deleted.

#### 5.4.1 Programming the fogging time

- a) Connect the battery-pack and the cable remote or the receiver of the radio remote to the machine.
- b) Press and hold the start button in the machines lid [4]. When the requested fogging time is reached, press and release the start button at the cable remote or one of the buttons at the transmitter of the radio remote to confirm the fogging period. Now the fogging time is saved and the start button in the machines lid [4] can be released.

The microprocessor saves the fogging time and this programmed fogging time can now be recalled by **pressing the start button on the cable remote or at the transmitter of the radio remote** (option) **momentarily** provided no new fogging period has been programmed in or not.

**The programmed fogging time cannot be recalled by pressing the start button in the machines lid [4].** If the start button in the lid is pressed, the **Tiny FX** will produce fog as long as the button is held down, regardless of whether a fogging time has been programmed in.

#### 5.4.2 Delete a programmed fogging time

The programmed fogging time can be deleted in two ways. Therefor connect the battery-pack and the cable remote or the receiver of the radio remote to the machine.

- 1) Press the start button in the machines lid [4] momentarily and press the start button on the cable remote for confirmation. The programmed fogging time is now deleted.
- 2) Press and hold the start button on the cable remote and confirm by pressing the start button in the machines lid [4].

The **Tiny FX** now produces fog for as long as the start button in the machines lid [4], on the cable remote or the transmitter of the radio remote is held down.

## 5. Operating the Tiny FX

### 5.5 Battery Status Display

The yellow LED [5] on the **Tiny FX** indicates (among other things (see point 7.2)) how strong the battery still is and/or when it may need to be recharged.

- 1) LED flashes slowly:  
Battery capacity of 15% – 100%, the battery is fully operational
- 2) LED flashes fast:  
Battery capacity below 15% – the battery should be changed and/or charged.
- 3) LED lights up permanently:  
The battery is flat

### 5.6 Wiring of Connectors

**Mini-Stereo jack plug:**

Sleeve = Ground, Ring = switch on/off, Tip = 11.1 V DC (+) output

## 6. The Battery

### 6.1 General

The supplied battery is a maintenance-free 11.1V Lithium-Ion battery. It can be used in any position.

The connection to the **Tiny FX** is established by a battery cable with a push-pull-plug.

The connection to the charger is established by a low volt plug at the charger.

### 6.2 Capacity and Lifetime

The battery has a capacity of 1.5 Ah and is supplied in a 50% charged status.

Charge the battery before using it the first time with the supplied charger. Please note the operating instructions of the charger (see point 6.4).

A fully-charged battery can generate more than 100 fog emissions of 4-5 seconds. The permanent fogging time amounts to approx. 10 minutes.

The battery will lose its capacity with use and will wear out after approximately two or three years.

## 6. The Battery

### 6.3 Operating and Storing

Lithium-Ion batteries are modern energy suppliers with huge capacity, small dimensions and light weight. Due to its high energy seal and the materials used these batteries may be harmful. Therefore please read the safety instructions carefully (see point 6.6)!

Optimal storage of the fully charged battery at 15° C and an air humidity of 45 - 85%.

**If the battery will not be used for a long time it must be recharged regularly (approx. every six months).**

### 6.4 Charging the Battery-pack

For charging the battery please use the supplied automatic charger. A discharged battery can be charged within 2 hours.

- Connect the charger to a power socket (100-240 V~/50Hz–60Hz).
- Connect the output line of the charger to the battery-pack.

The Charge-LED lights as long as the battery is charging.

When the battery is fully charged, the Charge-LED will extinguish or change its colour, depending on what type of charger is delivered.

- Disconnect the charger from the battery.

Disconnect the battery-pack from the **Tiny FX** after each use and recharge it, or, when the yellow control-LED in the machines lid [5] flashes fast, recharge immediately.

**Avoid complete discharge (control-LED does not light at all) because this will cause irreversible damage to the battery-pack.**

Lithium-Ion batteries must only be recharged and stored on fireproofed and non-flammable surfaces! The battery must not be recharged unsupervised.

The ambient operating temperature while charging should be between 10° C and 40° C.

### 6.5 Fuse

To avoid overcurrent, the battery-pack is equipped with a 7.5 A Miniblade-fuse. This fuse has to be replaced if it blows.

## 6. The Battery

### 6.6 Safety Regulations

- Keep away from children
- Do not heat up over 60° C (for example by sun exposure) or expose to fire
- Keep away from moisture
- Do not short-circuit
- Do not dismantle or deform
- Do not use defective or deformed battery-packs

Batteries can leak or be damaged if used incorrectly.

In some extreme cases, there is danger of:

- Fire
- Explosion
- Smoke- and gas exposure

In this event, please note:

- If there is no suitable extinguisher available, let the battery burn down and avoid breathing the fumes
- To extinguish the fire use sand or a fire extinguisher filled with powder only
- Never use water to put out the fire. Danger of explosion!
- If the electrolyte inside the battery comes into contact with skin or eyes, immediately rinse with water or consult a doctor.

### 6.7 Technical Data

<b>Model</b>	Lithium-Ion battery
<b>Output voltage</b>	11.1 V
<b>Capacity</b>	1500 mAh
<b>Temperature range</b>	10° C to 40° C
<b>Fuse</b>	7.5 A Miniblade, Art. No. 40177
<b>Dimensions</b>	10.5 x 4.4 x 4.1 cm
<b>Weight</b>	200 g

## 7. Service and Maintenance

### 7.1 Changing the Vaporizer

The micro vaporizer especially developed for the **Tiny FX** has a limited working life. Depending on application duration, the fogging output will reduce after a while and the vaporizer will need to be changed.

#### 7.1.1 Removal of the Vaporizer

- a) Separate the **Tiny FX** from the battery-pack.
- b) Unscrew the two screws [3] with a suitable screwdriver to release the stainless steel hood.
- c) Remove the stainless steel hood.
- d) Unscrew the two screws [6] at the vaporizer with a suitable screwdriver.
- e) Slide out the vaporizer [7] forwards.
- f) Remove the fluid tube [8] from tubing spout [9] of the vaporizer. If the tubing does not come off, you can pull on it with a pair of small pliers or a similar tool.
- g) Clean the interior of the unit with an absorbant, fluff-free cloth.

#### 7.1.2 Installation of the Vaporizer

- a) Plug the fluid tube [8] onto tubing spout [9] of the new vaporizer.
- b) Mount the new vaporizer to the connecting pins [10] with the two screws [6] .
- c) Check the connections and make sure that the fluid tubing is not twisted or bent.
- d) Mount the stainless steel hood with the two screws [3] at the machines cover. Ensure that the hood engages into the corresponding guide groove of the lid part.

## 7. Service and Maintenance

### 7.1.3 Calibrating the Vaporizer

Since all vaporizers have different electrical qualities, the **Tiny FX** must be recalibrated after every exchange of the vaporizer.

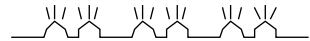
**IMPORTANT:** During the calibration process the vaporizer temperature must be at 20° C. Never start fogging before the calibrating process. Too cold or too warm units must first adapt to the room temperature (20° C).

a) Connect the battery-pack to the machine.

**Please note:** Do **not** switch on the machine by pressing the start button in the machines lid. If the LED is flashing wait until the machine switches off and the LED stop flashing (approx. 1 minute).

b) Press the calibration button at the back of the machine with a small screwdriver or something similar.

The calibrating process now starts automatically. The yellow LED [5] flashes six times with a short pause after the second and the fourth flash to confirm the calibration.



c) The calibration process is now complete.

## 7. Service and Maintenance

### 7.2 If the machine does not work perfectly

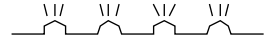
#### 7.2.1 There will be no fog, if...

- the battery is discharged (yellow charge indicator (LED) [5] lights up permanently, the pump automatically cuts off) => charge the battery
- the fluid reservoir or the fluid tubing is empty  
=> refill the fluid reservoir, check whether the reservoir is properly screwed in
- the vaporizer is clogged or broken => change the vaporizer (see point 7.1)

#### 7.2.2 Status and error display

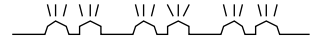
The yellow LED [5]...

- flashes once



Battery status display: if the LED flashes slowly, the battery is well charged, if the LED flashes quickly the battery has to be recharged.

- flashes twice in a row



Vaporizer is broken: change the vaporizer as described in point 7.1.

Important: The new vaporizer must be calibrated!

- flashes five times in a row



Vaporizer cannot be calibrated: Try once again to calibrate the vaporizer as explained in point 7.1. If this should not help, the vaporizer is broken and cannot be used.

- lights permanently



The battery is completely discharged: Disconnect the **Tiny FX** from the battery-pack and recharge the battery.



## 7. Service and Maintenance

### 7.3 Care and Maintenance

To ensure optimal performance of the **Tiny FX**, you should consider the following notes:

- Make sure the fluid reservoir as well as the connecting spout and the quick connector are clean and free from small bits of dirt.
- Clean the unit from time to time, especially if you use it in a built-in state/condition. Unscrew the unit with a suitable screwdriver and wipe it out carefully using a dry, fluff-free cloth.
- Should the vaporizer become clogged, please change as described in section 7.1.
- The battery should always be charged before storing and recharged every six months.

## 8. Technical Data

Procedure	Vaporizing fog generator
Power requirement	70 Watt
Voltage	11.1 V battery
Warm up time	< 1 sec
Fluid tank capacity	50 ml
Fluid consumption	2.3 ml/min. at continuous output
Fogging time	programmable
Continuous output with battery	approx. 10 min.
Temperature control	Microprocessor
Control	Cable remote Radio remote
Dimensions Tiny FX (L x W x H)	9.8 x 4.4 x 3.4 cm
Weight Tiny FX	approx. 180 g
Manufactured for	<b>Look Solutions</b> - Fog machines made in Germany

## 9. Warranty conditions

For the miniature fog machine **Tiny FX Look'** warranty is:

1. Free of charge, subject to the following conditions (No. 2 - 6) we will repair any defect or fault in the unit if it is caused by a proven factory fault and has been advised immediately after identification and within 24 months of delivery to the end user. Insignificant deviations of the regular production quality does not guarantee replacement rights, nor do faults or defects caused by water, wrong fog fluid, by generally abnormal environment conditions or Force Majeure.
2. Warranty Service will be done in the following way: Faulty parts will be repaired or replaced (our choice) with correct parts. Faulty units have to be returned to us or our service centres or to be sent to us or our service centres at customer's expense. The invoice and/or receipt showing the purchase date and the serial number has to come with the faulty unit, otherwise the repair will not be covered under warranty. Replaced parts become our property.
3. The micro vaporizer is a consummable part with limited lifetime. No warranty can be given on this part.
4. The customer loses all rights for warranty services if any repairs or adjustments are done to the units by unauthorized persons and/or if spare parts are used which are not approved by us. The right of warranty service is also lost if fluids other than the original Look Tiny-Fluid have been used or if units are sent to us with full fluid bottles. Also non compliance with the instructions in this manual or mistakes by incorrect handling/treating of the machine will lead to a loss of warranty and also any faults and damages caused by undue force.
5. Any freight costs arising in connection with the warranty services have to be born by the customer.
6. Warranty services do not cause an extension of the warranty time or the start of a new warranty period. The warranty for replaced parts ends with the guarantee time of the whole unit.
7. If a defect/fault can not be repaired by us in a satisfactory time, we will, within 6 months after sale of the unit, on choice of the customer, either:
  - replace the whole unit for free or
  - refund the lesser value or
  - take back the whole unit and refund the purchase price, but not more than the usual market price at the time of the refund.
8. Further claims, especially for damages, losses etc. outside the unit are excluded.

Other warranty regulations may be valid outside Germany. Please check with your dealer!

If you should send the unit for service, do not forget to remove any liquid from the fluid bottle.

