

## Instruction Manual

### Fontan Electrically Operated ULV Aerosol Generators (Cold Fogging Aerosol Applicators)

Fontan devices are provided with protective equipment and have been carefully tested before delivery.

We cannot be held liable for injuries to persons, damage to property and consequential damage if the device is not used or operated in accordance with the provisions of this instruction manual. The instruction manual is included with every device. In addition, a comprehensive manual in English, Spanish, French or German is included with every device.

All regulations valid for electrically operated devices must be heeded.



Use only clean containers for filling the spraying tank.



Make sure the power supply is connected properly.



Only start up devices that are free of defects and faults. Do not modify or remove protective devices.



The applicable legal regulations and specifications of the preparation manufacturer must be observed when selecting and using chemical preparations and carrier substances.

The following safety measures must be taken:



Read, understand and heed the instruction manual



Wear protective clothing



Wear protective gloves



Wear respiratory protection



Wear safety goggles



Fire, ignition sources and smoking are prohibited when operating the device



Attention: hot surfaces



Residual amounts of fog fluid must be disposed of in accordance with the legal regulations.



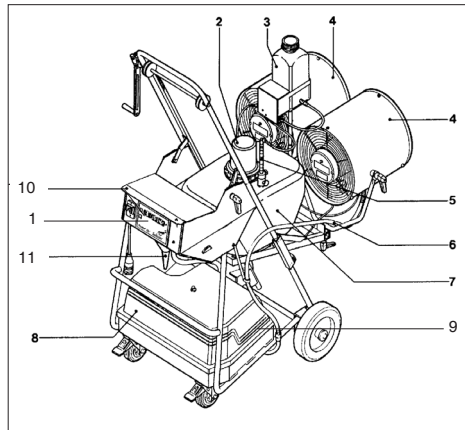
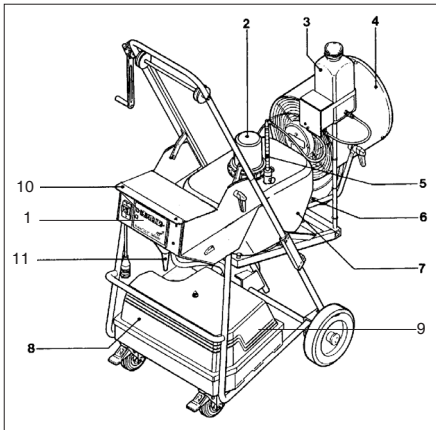
Avoid reaching an explosive concentration when fogging combustible substances indoors.  
Safety limit: Output max. 3 l per 1000 m<sup>3</sup>.  
Materials for extinguishing fires must be available.



Prevent tipping over of the device during transport.

For questions, please contact your local supplier or Swingtec GmbH.  
E-mail: [info@swingtec.de](mailto:info@swingtec.de)

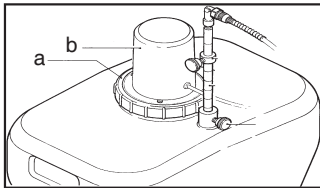
## Fontan Turbostar - Fontan Twinstar - Commissioning



- |  |                                  |   |
|--|----------------------------------|---|
| 1 Switch box   | 5 Suction tube                   | 9 Air filter                                  |
| 2 Agitator   | 6 Air hose                       | 10 Set of dosing nozzles (standard accessory) |
| 3 Cleaning tank                                      | 7 Spraying tank                  | Dosing nozzle 74 already installed in (4)*    |
| 4 Fan with stator, Spraying device and dosing nozzle | 8 Cover for motor and compressor | 11 Chemical funnel with strainer              |

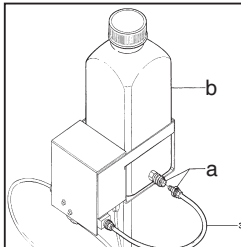
\* Nozzle change and standard nozzle set with flow rates on page 8

### Filling the spraying tank (7), using the funnel with strainer (11, standard accessory)



- Open the ring nut (a).
- Remove the agitator motor (b).
- Attach the agitator motor and ring nut again.

### Filling the cleaning tank (3), using the funnel with strainer (11)



- Release the quick coupling (a) from the cleaning tank.
- Remove the cleaning tank (b).
- Reconnect the quick coupling after filling.

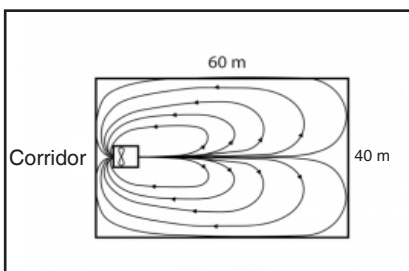
### Positioning of the device

Fontan Turbostar and Fontan Twinstar devices are used indoors, are programmable and work fully automatically without having to monitor them.

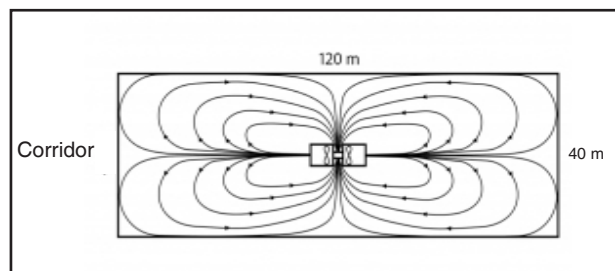
The stator in the fan tube developed by us allows you to treat large surfaces/rooms without moving the device. The stator facilitates uniform horizontal and vertical droplet distribution over an area of 60 x 40 m (Fontan Turbostar) and 120 x 40 m (Fontan Twinstar).

The volume median diameter (VMD) for all standard dosing nozzles is < 30 µm.

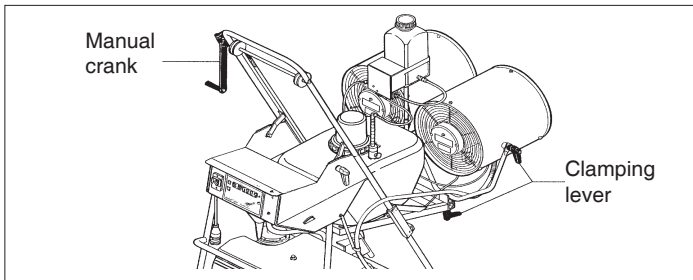
#### Fontan Turbostar



#### Fontan Twinstar

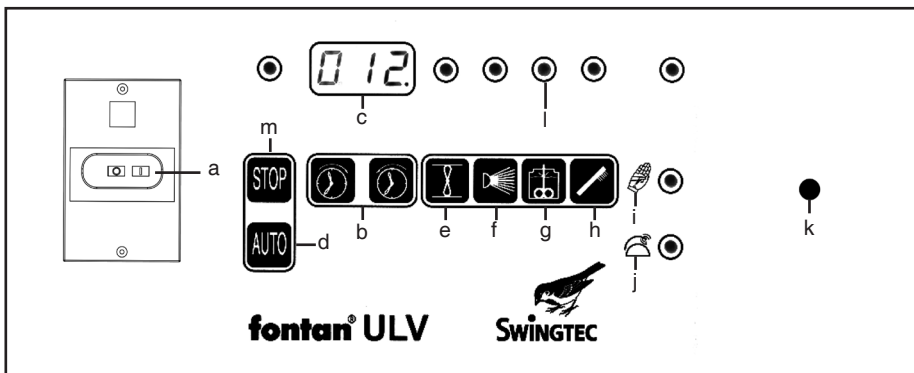


### Adjusting the fan (4) (height, inclination and lateral adjustment)



When treating short plants in greenhouses, the fan should be aimed approx. 1 m above the plants with a slight upward inclination. The fan position can be fixed in place with the clamping lever.  
 For tall plant populations (e.g. tomatoes and cucumbers), the fan is set to the lowest position, but also at a slight upward inclination.  
 For all other applications, the fan must blow freely. No obstacles may remain within about 20 m in front of the fan, which would be fogged directly.

### Device control

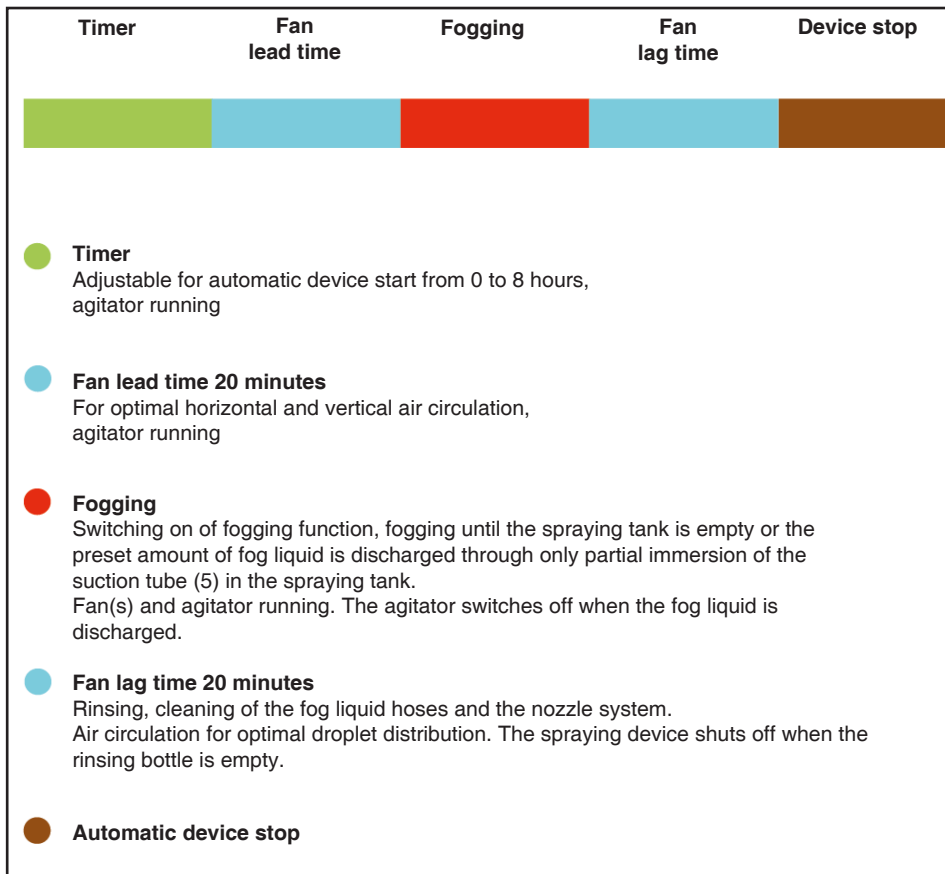


- a Main switch
- b Timer / start time
- c Time display
- d Automatic button
- e Fan
- f Fogging
- g Agitator
- h Rinsing
- i Display of manual control
- j Alarm display
- k Switch agitator ON-OFF
- l LEDs
- m Stop button

### Device start

- Connect the power supply.  
Protect the device plug from moisture.
- Press the black button of the main switch (a).
- Enter the start time (b) (0 to 8 hours), which is then shown on the display (c).
- Press the automatic button (d).  
(The automatic program starts immediately if no start time is entered.)

### Automatic program run

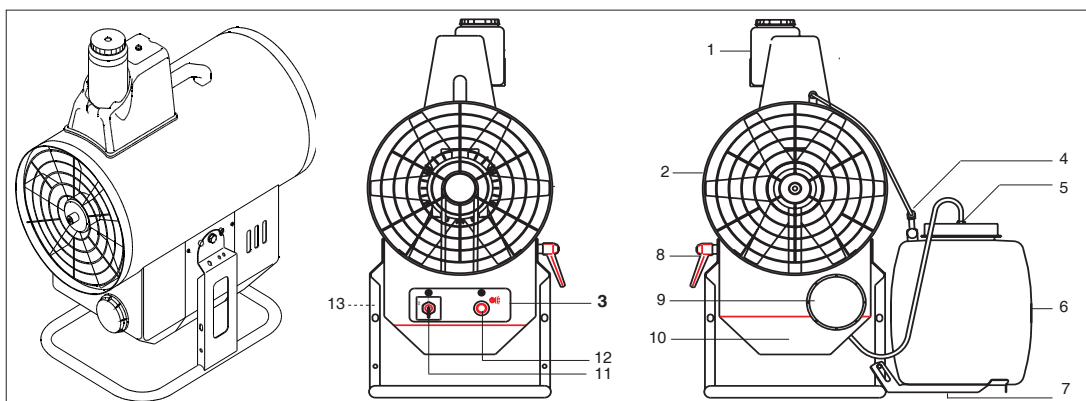


- The LEDs (l) indicate the individual functions.
- The functions (e, f, g and h) can also be operated manually after pressing the stop button (m).
- The automatic program can be stopped by pressing the stop button. This also applies to the functions (e, f, g and h).
- The agitator can be switched off by pressing the (k) button.

### Switching off

- Press the red button of the main switch (a).
- Disconnect the device plug from the power supply.
- Check the air filter (9).  
Make sure the air filter is not contaminated, blocked due to deposits or saturated with moisture. This could damage the compressor and possibly also the motor. Minor deposits on the air filter can be brushed off or removed with compressed air. Heavily contaminated or wet air filters must be replaced.

## Fontan Compactstar - Commissioning



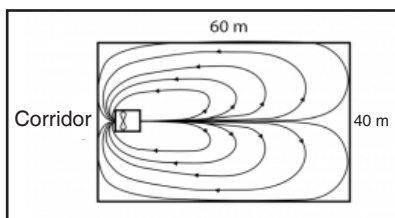
- |  |                           |   |
|--|---------------------------|---|
| 1 Cleaning tank                                      | 4 Suction tube            | 9 Air filter                                  |
| 2 Fan with stator, spraying device and dosing nozzle | 5 Pneumatic mixing device | 10 Compressor cover                           |
| 3 Switch box   | 6 Spraying tank           | 11 Main switch                                |
|  | 7 Tank holder             | 12 Start button                               |
|  | 8 Clamping lever          | 13 Set of dosing nozzles (standard accessory) |
|  |                           | Dosing nozzle 74 already installed in (2)*    |

\* Nozzle change and standard nozzle set with flow rates on page 8

The Fontan Compactstar device is used indoors and works semi-automatically without having to monitor it. The start time can be programmed by means of a timer (optional accessory, article No. 107 9620). Two spraying tanks are available with a capacity of 15 l and 34 l, respectively.

The stator in the fan tube developed by us allows you to treat large surfaces/rooms without moving the device. The stator facilitates uniform horizontal and vertical droplet distribution over an area of 60 x 40 m.

The volume median diameter (VMD) for all standard dosing nozzles is < 30 µm.



When treating relatively short plants in greenhouses, position the device correspondingly high and place the fan (2) about 1 m above the plants with a slight upward inclination. The fan position can be fixed in place with the clamping lever (8).

For tall plant populations (e.g. tomatoes and cucumbers), the fan must be placed at the lowest position on the ground, but also at a slight upward inclination.

For all other applications the fan must blow freely. No obstacles may remain within about 20 m in front of the fan, which would be fogged directly.

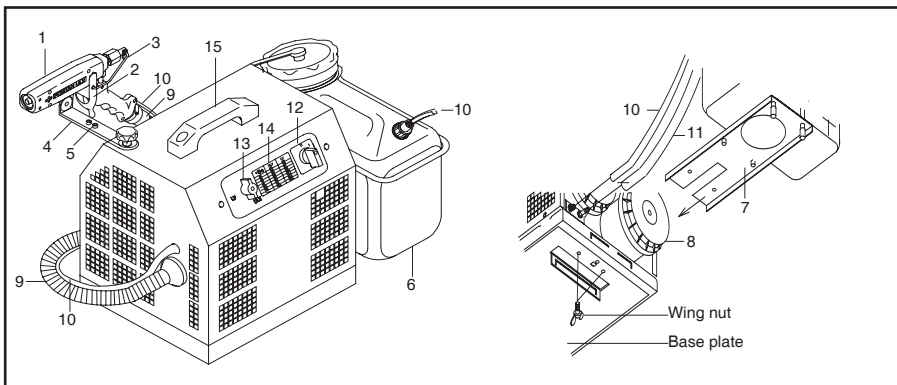
### Device start

- Fill the spraying tank (6) and use the funnel with strainer to do so (standard accessory).
- Fill the cleaning tank (1) and use the funnel with strainer.
- Connect the power supply.  
Protect the device plug from moisture.
- Set the main switch (11) to the "1" position.
- Press the start button (12).  
The fan (2) starts and the unit fogs.  
The pneumatic mixing device (5) operates simultaneously to keep the fog liquid in suspension and to prevent settling (e.g. when using wettable powder preparations).  
The mixing device can be stopped by means of a clamp.
- When using the timer (optional accessory, Article No. 107 9620), connect the timer to the socket on the switch box (3). The device starts automatically and fogs at the selected time.
- The device fogs until the spraying tank (6) is empty or the preselected quantity of the fog liquid is discharged through partial immersion of the suction tube (4) in the spraying tank.
- The fan continues to run for about 20 minutes.  
This maintains air circulation and ensures an optimal horizontal and vertical droplet distribution.

### Switching off

- To clean the solution lines and the nozzle system, insert the suction tube (4) into the opening in the lid of the cleaning tank (1) and press the start button (12) on the control box. When the cleaning tank is empty, set the main switch (11) to the "0" position.
- Disconnect the device plug from the power supply.
- Check the air filter (9).  
Make sure the air filter is not contaminated, blocked due to deposits or saturated with moisture. This could damage the compressor and possibly also the motor. Minor deposits on the air filter can be brushed off or removed with compressed air. Heavily contaminated or wet air filters must be replaced.

## Fontan Starlet - Commissioning



- 1 Spray gun with spraying device and dosing nozzle  
The gun can be dismantled for manual operation.
- 2 Spray lever
- 3 Spray lever lock
- 4 Spray gun holder
- 5 Set of dosing nozzles (standard accessory)  
Dosing nozzle 74 already installed in (1)\*
- 6 Spraying tank
- 7 Spraying tank holder
- 8 Air filter (two air filters)
- 9 Flexible air hose
- 10 Solution line
- 11 Pressure line for LV operation
- 12 Main switch
- 13 Selector switch ULV/LV operation
- 14 Table of flow rates and dosing nozzles for ULV/LV operation
- 15 Carry handle

\* Nozzle change and standard nozzle set with flow rates on page 8

The Fontan Starlet is used indoors for pest control and disinfection purposes.

The device can be operated using either the ULV (Ultra Low Volume) or LV (Low Volume) spraying method.

Three spraying tanks with respective capacities of 6 l, 11 l or 34 l are optionally available.

In ULV operation, the Fontan Starlet is capable of treating surface areas / rooms of approx. 500 m<sup>2</sup> / 2,000 m<sup>3</sup> from a single position.

Make sure the immediate area in front of the spray gun is free of obstacles.

The volume median diameter (VMD) for all standard dosing nozzles is < 30 µm when using the ULV method, and about 75 µm when using the LV method.

An air and fog liquid hose extension with a length of 2 m and connectors is available (optional accessory, Article No. 108 0130).

### Device start

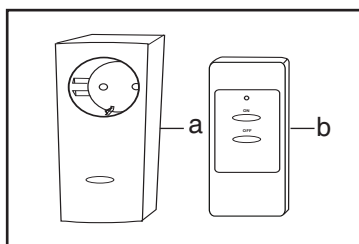
- Fill the spraying tank (6). Use the funnel with strainer to do so (standard accessory).
- Set ULV or LV operating mode on the switch (13).

#### Manual device start

- Actuate the spray lever (2) and lock (3).
- Connect the power supply.
- Protect the device plug from moisture.
- Set the main switch (12) to the "1" position.
- The device starts and fogs.

#### Starting via radio remote control

(Optional accessory, Article No. 210 2330)



a = Receiver

b = Transmitter

- Actuate the spray lever (2) and lock (3).
- Connect the receiver (a) to a socket in the room to be treated.
- Connect the device plug of the Fontan Starlet to the receiver (a).
- Set the main switch on the Fontan Starlet (12) to the "1" position.
- Press the "ON" button on the transmitter (b).
- The device starts and fogs.

### Switching off

#### For manual operation

- Briefly press the spray lever (2) to release the lock (3).
- Set the main switch on the Fontan Starlet (12) to the "0" position.
- Disconnect the device plug from the power supply.

#### When operating with the radio remote control

- Briefly press the spray lever (2) to release the lock (3).
- Stop the device by pressing the "OFF" button on the transmitter (b).
- Disconnect the device plug from the receiver (a).
- Pull the receiver (a) out of the socket.
- Set the main switch on the Fontan Starlet (12) to the "0" position.
- Check the air filter (8).  
Make sure the air filters are not contaminated, blocked due to deposits or saturated with moisture. This could damage the compressor motor. Minor deposits on the air filter can be brushed off or removed with compressed air. Heavily contaminated or wet air filters must be replaced.

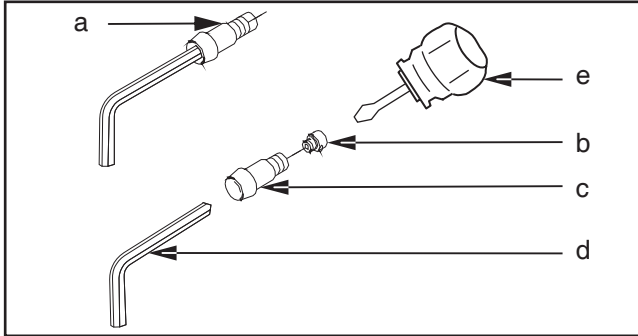
### Changing the dosing nozzles

The dosing nozzles are mounted in the spraying fixture of the devices:

Fontan Turbostar and Fontan Twinstar (4)

Fontan Compactstar (2)

Fontan Starlet in the spray gun (1)



- a Atomiser nozzle with mounted dosing nozzle
- b Dosing nozzle
- c Atomiser nozzle
- d Allen key 3 mm, standard accessory
- e Screwdriver, standard accessory

- Unscrew the atomiser nozzle with mounted dosing nozzle (a) with the Allen key (d).
- Unscrew the dosing nozzle (b) with the screwdriver (c), using the Allen key as a hold.
- Screw the new dosing nozzle into the atomisers. Use the screwdriver and the Allen key as a hold.
- Screw the atomiser nozzle with mounted dosing nozzle into the spraying device using the Allen key.

#### Standard dosing nozzles stainless steel with nozzle designation and flow rates (measured with water):

fontan® Compactstar		fontan® Turbostar		fontan® Twinstar		fontan® Starlet		
						<u>ULV</u>		<u>LV</u>
62	2.9 l/h	62	3.6 l/h	2 x 62	7.2 l/h	62	2.9 l/h	7.7 l/h
68	3.6 l/h	68	4.4 l/h	2 x 68	8.8 l/h	68	3.6 l/h	9.0 l/h
74	4.2 l/h	74	5.2 l/h	2 x 74	10.4 l/h	74	4.2 l/h	10.8 l/h
92	5.9 l/h	92	7.6 l/h	2 x 92	15.2 l/h	92	5.6 l/h	16.8 l/h
						without nozzle	10.7 l/h	44.6 l/h