

# **SMOKE FACTORY**

## **Operating Instructions**

### **Enterprise TC4**



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## 1 Instruduction

The **ENTERPRISE TC4** is a very powerful fog generator. It unites the current digital technology with proven technique and power. New features guarantee a much more simple operation place and fog, reducing the amount of time needed to set up the machine. An external fan with one phase and max. 800 watts can be connected to the machine.

## 2 Safety instructions

### *A fog machine is not a toy!*

#### 2.1 Scalding Hazard

- Very hot steam escapes from the nozzle. Danger of getting burnt. 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. Danger of getting burnt.
- The location for the machine must be non-flammable, non-combustible and not sensitive to heat. It 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.
- During operation small amounts of hot fluid-drops may emerge Therefore you should make sure, that these do not become a danger to anyone.

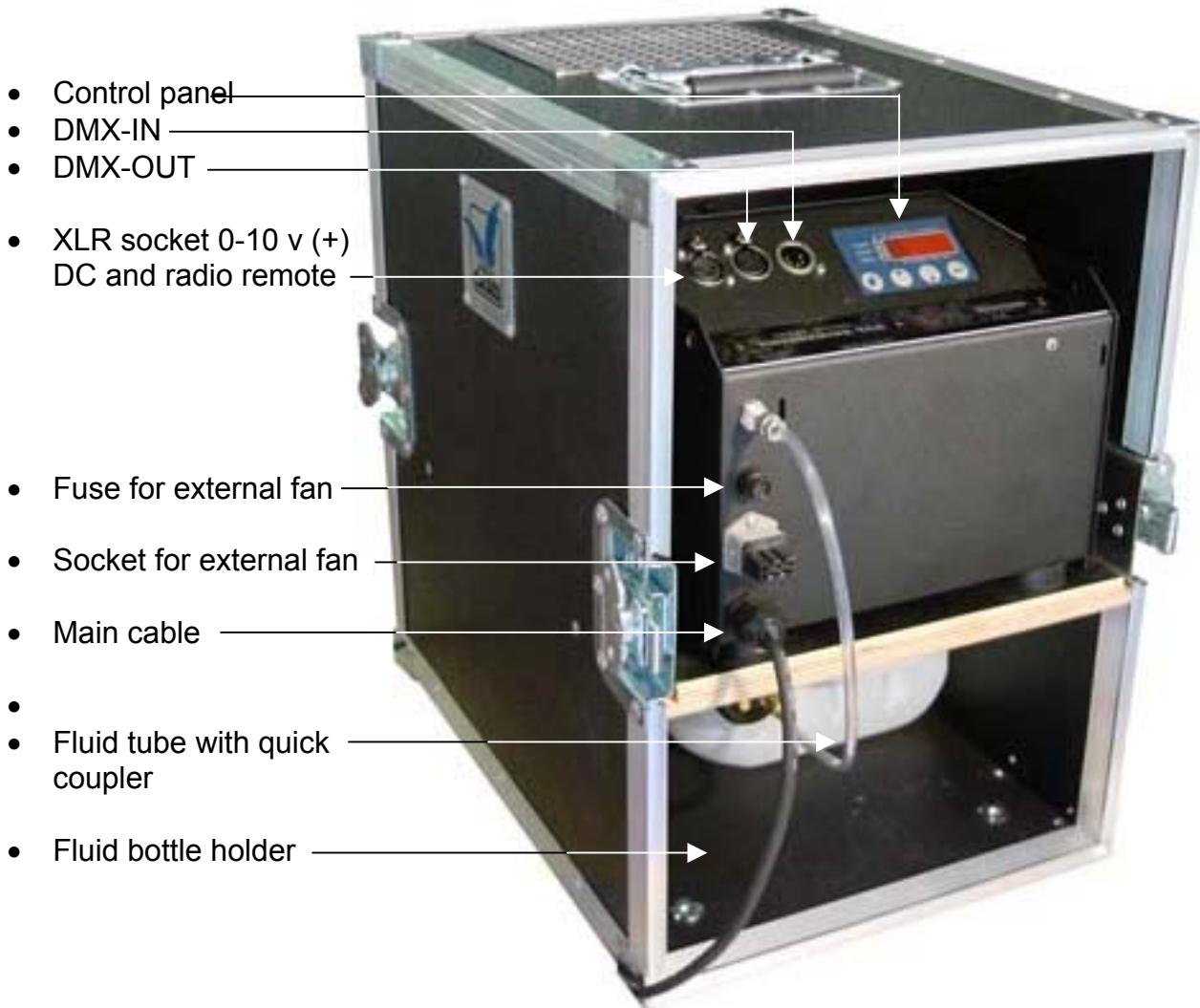
#### 2.2 General Safety

- 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.
- The visibility has to be more than 2 m in rooms where people walk around.
- Never open the machine and leave the machine unattended when connected to a power supply.
- Do not swallow the fog fluid. Keep it away from children. In case of eye contact, rinse with a lot of water. Consult a doctor should you have accidentally swallowed some fluid.
- Fog may activate smoke detectors.
- Spilled fluid or splashed fluid droplets can cause slip hazard. Mop up the fluid and dispose of it according to regulations **SMOKE FACTORY fog fluids is an enviromentally safe product and it can be recycled biologically.**
- 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 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 accordingly, i.e. at the correct vaporization temperatures as well as with the correctly mixed fog fluid.

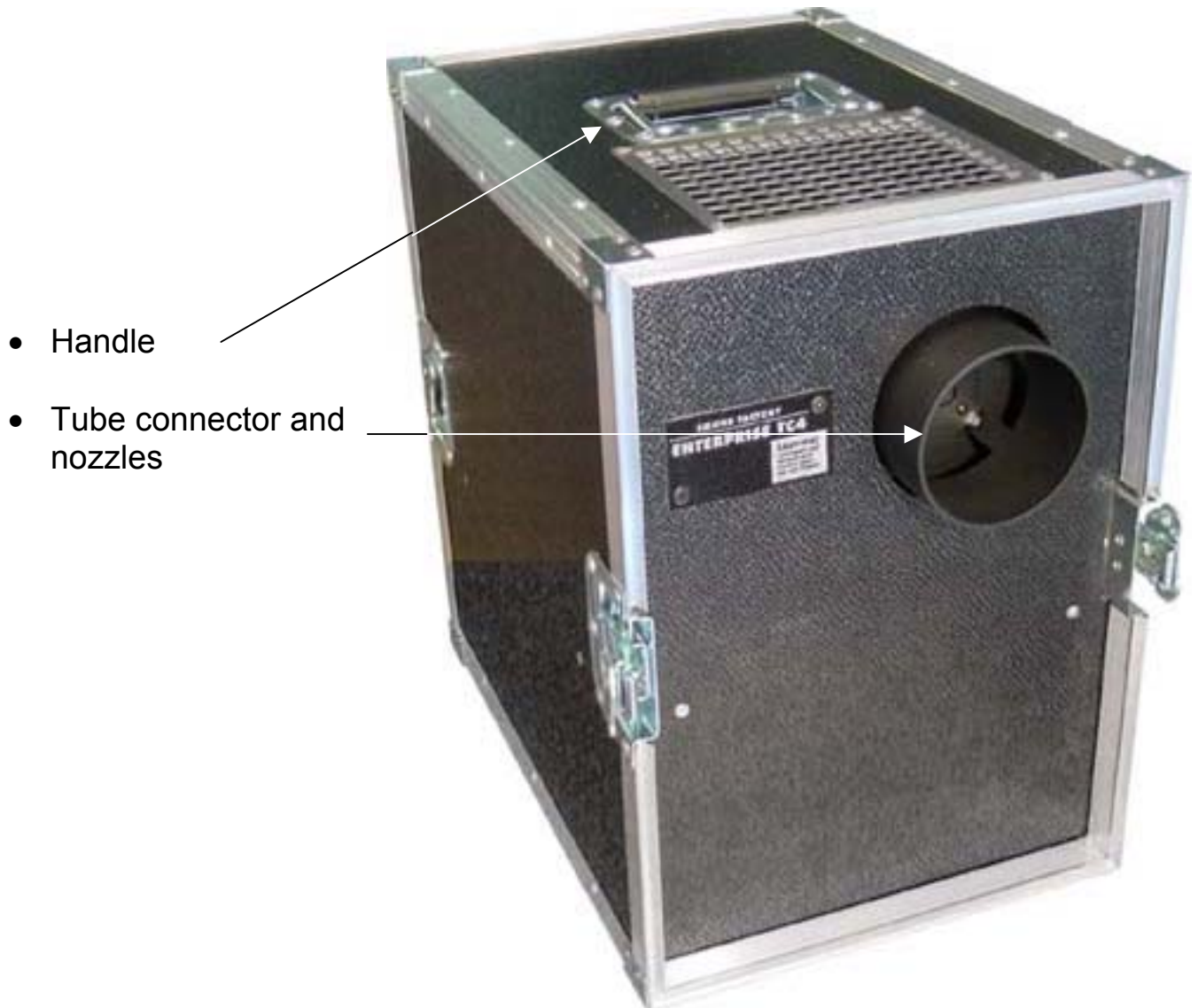
We, however, recommend:

**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 parts**



**3.1 Front view:**



## 4 Operating the Enterprise TC4

### 4.1 Selecting the location

- The location in which the **ENTERPRISE TC4** is to be operated must be dry.
- Free from dusty or polluted air.
- Free from vibrations.
- Located on a non-flammable place or surface.
- Well-ventilated with fog-free air keeping the ambient operating temperature between 5° C and 45° C and the relative air humidity below 80%.

### 4.2 Changing the fluid container

- Disconnect the fluid tube from the lid by retracting the brass collar and removing the coupling .
- Remove the container from the tank housing of the **ENTERPRISE TC4**
- Unscrew the lid of the empty container and screw it onto the new container.
- Place the full container into the tank housing.
- Push the brass coupling into the brass collar until you hear a click. The brass collar is now locked firmly.

### 4.3 Fog fluids

The **ENTERPRISE TC4** has been designed to be used with SMOKE FACTORY fog fluids.

- FAST-FOG                      Thick fog, very quickly dispersing.
- SUPER-FOG                  Medium thick standard fog, long lasting.
- HEAVY-FOG                  Thick fog, very long lasting.
- DESIGNER-FOG              Transparent fog, very long lasting, high light reflexion grade.

**Use only original SMOKE FACTORY fog fluids. Other Fluids can cause considerable damage to the unit and void the warranty. You can get more general information about fog fluids from your dealer or SMOKE FACTORY directly.**  
**SMOKE FACTORY fog fluids is an environmentally safe product and it can be recycled biologically.**

### 4.4 Putting into operation



Connect to the mains supply. Make sure the correct voltage is selected (230 V/50 Hz).

A „P” and two figures appear on the display like **P 15**.

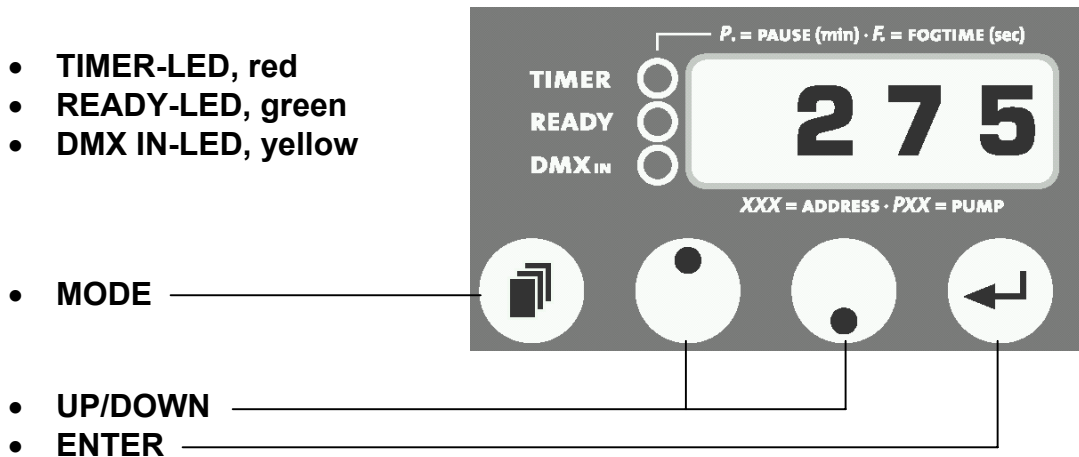
After a warm up time of approx. seven minutes the **ENTERPRISE TC4** is ready to start. The green Ready-Led blinks if the working temperature is reached. As soon as the final temperature is reached, the LED illuminates permanently. Adjust the required output via the control panel and press the Enter-button

( see 5.1) once to start and once to end the fogging process.

## 5 Operating the ENTERPRISE TC4

The ENTERPRISE TC4 is a powerful fog generator, producing every desired effect from a tiny puff of smoke to the thickest fog. Digital technology makes fine adjustments of the pump possible. In steps of 1% the output can be adjusted from 1-99%.

### 5.1 Control panel ENTERPRISE TC4



### 5.2 Switch of the device

Press the Mode button  til „OFF“ appears on the display.



After 15 seconds the machine will switch off automatically. On the right bottom edge of the display a red decimal point appear.



You can also switch off the machine within these 15 seconds by pressing the Enter-button.

**When you switch off the DMX signal, the machine will be switched off automatically after 15 seconds.**

Please note that the Mode button is not  designed to scroll between the different menus.

If you press the mode button longer than 2 sec. the display will change into the timer menu.

## 5.3 Control choices

### 5.3.1 External control

You may control the **ENTERPRISE TC4** externally through the XLR sockets .

**Please note:** DMX takes priority. That means: when the machine is controlled via DMX 512 this data takes priority over 0-10 V (+) DC and Stand alone operation. Also there are optional available:

- cable remote
- radio remote

### 5.3.2 Operating via DMX 512

Connecting the **ENTERPRISE TC4** to a DMX-desk use the 5pin XLR socket . As soon as the machine receives a correct DMX signal, the yellow DMX-LED shines. Now the pump and the fan can be adjusted via the desk.

**Please note:** If a fan is connected to the machine, the **ENTERPRISE TC4** uses two channels at your desk. Channel 1 = Pump, Channel 2 = Fan.

#### Adjusting the DMX start address

Press the Mode-button  
on the LED display



at the control panel, until three figures will appear



Adjust the requested start address by pressing the Up/Down-buttons .



Save the start address by pressing the Enter-button once. The start address will also be saved when you disconnect the machine from the mains supply.

Now the pump and the fan can be adjusted via the desk.

**When you switch off the DMX signal, the machine will be switched off automatically after 15 seconds.**



### 5.3.3 Stand-alone

The **ENTERPRISE TC4** can be used in the Stand alone mode. In this mode the control of the pump and an external fan must be adjusted at the machine.

Press and release the Mode-



button until a „P” and two figures appear on the display .



Adjust the pump output with the Up/Down-buttons



Press the Enter-button once to start the fogging process. The machine now produces fog until the Enter-button is pressed again. The output can be changed during the fogging process.



Press Mode again to adjust the fan output.



Adjust the fan output with the Up/Down-buttons (0-99%).



Press the Enter-button once to start the fan. The output can be changed during the process. The fan will work until the Enter-button is pressed again

### 5.3.4 Operating cable remote and 0-10V (+) DC

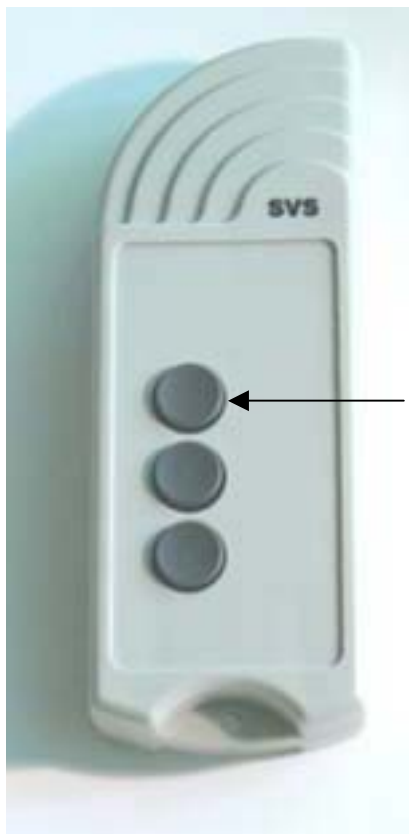
Connect the **ENTERPRISE TC4** to an analog desk or to the cable remote (available as an optional extra), use the 3pin XLR socket at the back of the machine.

**Please note:** With analog control the pump can be adjusted from the desk and/ or the cable remote. The fan has to be adjusted directly at the machine.

- Connect the cable from the desk or the cable remote into the XLR socket at the back of the machine.
- The knob on the cable remote or the fader on the analog desk will control the level of the pump.
- Pressing the On/Off switch at the cable remote starts the fog process. To adjust the fan output press the Mode-button until a „F“ and two figures appear on the display.
- Adjust the fan output with the Up/Down-buttons .

### 5.3.5 Control via Radio remote

A radio remote is available as an option. It will be delivered with a 3pin XLR plug. Connect the receiver of the radio remote to the machine by using the 3pin XLR socket on the back of the machine. Adjust the requested pump output at the machine (see point 6.3.3). Press the first button at the transmitter of the radio remote as long as you want fog to be produced (see manual „Radio remote“).



XLR 3pol connector  
radio reciver

Start button fogging  
process transmitter.



### 5.3.6 Wiring of DMX und Analog 0-10V DC

**DMX:**

Pin 1 = Ground (Masse), Pin 2 = DMX-, Pin 3 = DMX+, Pin 4 und 5 = nc

**3pol-XLR (analog):**

Pin 1 = Ground (Masse), Pin 2 = 0-10 V + DC in, Pin 3 = 12 V + DC out, max. 50mA

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## 5.4 Operating with internal Timer

With the internal timer the „fog time” and ”wait time” as well as the output can be adjusted. The output of the external fan has to be adjusted in the Standard-Menue and can't be changed in the Timer-Menue.

To start the Timer-Mode, press the Mode-button for more than 2 seconds.



The red Timer-LED shines as soon as the machine has switched to the Timer-Mode. As long as the timer is in operation, the red Timer-LED blinks.



With the Up/Down-buttons you can adjust the output (Pxx), **(1-99%)**



Pressing the Mode button once, will bring you to the setting for the wait-time.



With the Up/Down-buttons you can adjust the wait-time( **0.1-99 minutes**).



Pressing the Mode button once, will bring you to the setting for the fog-time.



With the Up/Down-buttons you can adjust the fog time in seconds **(1-99 sec.)**

*Please note that with beginning of the fogging process the external fan also will start .*



Pressing the Mode button once, will bring you to „Escape“



Pressing the Enter button will bring you back to the standard menu where you start the programming.



Pressing the enter button during the programming in *Timer-menus* will start the cycle with the last time shown on the display. (P.xx = Starts with wait time, F.xx = Starts with fog time).



You can switch back to the Standard-Menu by pressing the Mode-button for more than 2 seconds or by switching to „ESC“ (Escape) in the Timer-Mode and then press the Enter-button.

## 5.5 Autostart

If the timer is in operation and you disconnect the machine from the mains cable, the **ENTERPRISE TC4** will re-start in the Timer-Mode as soon as it's reconnected to the mains. To stop this press the Mode-button for more than 2 seconds or by switching to „ESC“ in the Timer-Mode and then press the Enter-button.

## 6 Cleaning, care and maintenance

- Ensure the air vents are not clogged by dust. If necessary remove the dust.
- Take care that the machine can not get overheated.
- Do not run the **ENTERPRISE TC4** without any fluid, as the pump will run dry.
- Wipe up spilled Fluid immediately. Moisture – also fluid – can destroy the electric of the machine.
- Check the state of the air valve filter from time to time and clean or replace it when necessary. When frequently using the same fluid can it should be cleaned thoroughly before adding new fluid. This reduces the chances of the machine clogging up.
- If you install the **ENTERPRISE TC4** make 100% shure that a permanent fog-free air supply for the unit is guaranteed. Cooling air with too high fog concentration very often in Clubs and Discos) can condense inside the machine and cause moisture damage.
- For cleaning the surface the device use a suitable, solvent-free cleaner.
- The differens between ENTERPRISE TC4/pump and fluid bottle shut not mor than 1,5m.

## **7 Trouble-Shooting**

### **The ENTERPRISE TC4 does not fog**

- Check external control signals
- Check mains supply
- Check fluid tank (empty?)
- Check for correct connections at the fluid bottle
- Check for fluid in the fluid tube
- Check if fluid filter is clogged

### **The ENTERPRISE TC4 fogs uncontrollably**

- Check mains supply
- Check unit for moisture (moisture inside the machine, especially on the PCB can cause fogging)

### **The ENTERPRISE TC4 switches off suddenly**

- The „Temperature cutout“ has switched off due to overheating. Remove external heat source (for instance projector shining right onto the housing) and/or make shure sufficient fresh air supply. After 15 to 30 minutes the unit should switch back to „on“ again.

### **Loud droning sound during fogging**

- The pump is running dry. Avoid this absolutely!
- Refill fluid bottle
- Double check connection fluid tube and fluid bottle.

### **E-4 appears on the LED display**

- The machine is getting too hot. The heating switches off and the machine cools down.  
*Solution:* Disconnect the machine from the main supply for a moment and then re-connect it.

### **E-1/E-2/E-3 appears on the LED display**

- **Please send the machine to the service-station or your local dealer.**

## 8 Specifications

<b>Procedure:</b>	vaporizing fog generator
<b>Power requirement:</b>	2600 Watt
<b>Voltage:</b>	230 V/ 50 Hz
<b>Warm up time:</b>	approx. 7 min.
<b>Fluid consumption:</b>	at max. output 240 ml/min at cont. output 120 ml/min
<b>Fluid tank capacity:</b>	5 Liter
<b>Fog output:</b>	adjustable in steps à 1% ( 0-99)
<b>Fogging time:</b>	at 100% output approx. 40 sec. at < 50% output continuous output
<b>eternal Fan:</b>	max. 800 Watt, fan with one phase
<b>Air quantity:</b>	adjustable from 0-99%
<b>Control:</b>	DMX 512 0 - 10 V analog internal Timer Stand alone mode Radio remote (Option)
<b>Temperature control:</b>	Microprocessor controlled
<b>Overheating protection:</b>	Heater block/Thermostat Pump/Thermal switch
<b>Fuse external fan:</b>	5 Ampere slow blow
<b>Dimension (L x B x H):</b>	55 x 32 x 47 cm
<b>Weight without Fluid:</b>	24 kg
<b>Options:</b>	Cable remote Radio remote Tube

## 9. Warranty conditions

For the fog machine **ENTERPRISE TC4 SMOKE FACTORY** guarantee 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 appearance and within 24 month 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, by generally abnormal environment conditions or Force Majeure.
2. Guarantee 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 brought to us or our service centres or to be sent to us or our service centres at customer's expenses. The invoice and/or receipt showing the purchase date and the serial number has to come with the faulty unit, otherwise this will not be guarantee service. Replaced parts become our property.
3. The customer loses all rights for guarantee services, if any repairs or adjustments are not done to the units by unauthorized persons and/or if spare parts are used which are not approved by us. The right of guarantee service is also lost if fluids other than Glycolwater-based fluids 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 guarantee and also any faults and damages caused by undue force.
4. Certain parts of the machine are „consumable parts“ and are not covered by the warranty.
5. Guarantee services do not cause an extension of the guarantee time or the start of a new guarantee time. The warranty for replaced parts ends with the guarantee time of the whole unit.
6. 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.
7. Further claims, especially for damages, losses etc. outside the unit are excluded. Other guarantee 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.**