## Steam Turbine TU 120

## **Operating Instructions**

The enclosed power supply is necessary in order to start the turbine. The plug fits into the jack plug of the turbine.

The required voltage is 12V /2-3 amp.

Position the turbine on a flat surface.

Use distilled or lime-free water for operating the turbine.

The water level should lie between the two rings on the filler tube.

The lower digital display indicates steam temperature; the upper digital display rotation speed.

The starting rotation speed is around 3000 rpm.

The usual operating rotation speed is between 3000 and 5000 rpm.

Before starting ensure that the free-wheeling rotor is seated all the way down in the bearings. (The rotor can be removed upwards).

- 1.) To start connect the power supply.
- 2.) Fill the tank with gas.
- 3.) Pour water into the filler tube.
- 4.) Hold down the black button until a rotation speed of approximately 3000 rpm is reached.
- 5.) Open the gas valve on the gas tank.
- 6.) Operate the piezo ignition (repeatedly if necessary) or use a cigarette lighter until the gas burner is firing.
- 7.) The turbine will start after approximately 30 seconds. (Hold the black button down until rotation speed increases independently).
- 8.) Rotation speed can now be regulated at the gas valve or flame.

Water drops form at the periphery of the glass container at the height of the turbine nozzle. This is an indication that the turbine is full of water and ready for operating.

## **Beware**

The flame must not burn on an empty or stationary turbine for an extended period of time.

Should the turbine sound not be in evidence when operating this indicates that turbine is out of water. Extinguish the flame / turn off the gas valve on the gas tank. The water level or the rotation speed is too low.

The connecting hose below can be removed for water drainage. (Do not clean the plexiglass with alcohol).

## **Safety Advice**

Ensure that no flammable objects are in the area during turbine operation.

Open windows when re-filling gas.

The turbine is not a children's toy.

Do not allow the rotation speed to exceed 5000 rpm.

Do not allow the machine to operate unsupervised.