

## Concept Air Trace

Thank you for choosing Concept's AirTrace. You now own a sturdy and portable state-of-the-art smoke machine, ideal for tracing air movements. Prior to use, we suggest that you carefully read all the instructions. By following the suggestions found in this user manual, you can look forward to exceptional performance from your unit for years to come.

### Specifications

- **Output: 2.8m<sup>3</sup>/ min**
- **Power Consumption: 75W**
- **Tank Capacity: 110 cc**
- **Battery: DC 12V / 2.3 Ah**
- **Consumption: 2 cc / min**
- **Weight: 2.7kg**
- **Dimensions (mm): L 227 W 66 H 81**
- **Continuous Output Duration: 10 – 12 minutes (battery)  
50 – 60 min (power adaptor)**

### Important Notes and Warnings

- Keep this device dry.
- Always **remove the battery** or **unplug the power adaptor** to your Concept AirTrace Smoke Machine before filling the liquid tank.
- Keep the unit upright.
- **Remove the battery** or unplug the power adaptor when not in use.
- This machine is not water proof or splash proof. If moisture, water, or fog liquid gets inside the housing, immediately remove power and contact Concept before using again.
- No user serviceable parts inside. Refer to your Concept dealer or other qualified service personnel.
- Never leave the unit running unattended.
- Keep nozzle at least 50cm away from contact with anything while in operation.
- The fog vapour at point of release is under pressure and is hot.
- Never aim the output nozzle directly at people.
- Use in a well-ventilated area. Never cover the vents on the front of the AirTrace. Never aim the output nozzle at open flames.
- The output nozzle becomes hot during operation. Keep flammable materials at least 50cm away from the nozzle.
- Always allow your Concept AirTrace to cool down before attempting to clean or service it.
- Do not expose the battery to excessive heat, keep away from open flames.
- Only use the supplied Concept AirTrace Smoke Fluid.
- Always make sure there is sufficient liquid in the liquid tank. The fluid level can be monitored via the window at the back of the machine.
- Operating this unit without Smoke Fluid will cause damage to the pump and the heater.
- If your Concept AirTrace fails to work properly, discontinue use immediately. Drain all Smoke Fluid from the tank, pack the unit securely (preferably in the original packing material), and return it to your Concept dealer for service.
- Always drain Smoke Fluid from tank before shipping or transporting this unit.
- Never drink Smoke Fluid. If it is ingested, call a doctor immediately. If Smoke Fluid comes in contact with skin or eyes, rinse thoroughly with water.



## Unpacking & Inspection

- Open the shipping carton and check that all equipment necessary to operate the system has arrived intact. If transit damage is evident, contact your Concept dealer immediately. In addition to this user manual, you should receive the following items:
  - **Concept AirTrace smoke system**
  - **12V – 2.3Ah rechargeable battery**
  - **Rechargeable battery charger and cable**
  - **500 cc bottle of Concept AirTrace Smoke Fluid**
  - **Flight Case**

## Setup

- Remove all packing materials. Check that all foam and plastic padding is removed, especially in the nozzle area.
- Fill the unit with Concept AirTrace Smoke Fluid. When filled, place cap back on liquid tank and tighten
- Charge the battery. Plug the adaptor into a grounded electrical outlet. The green light on the battery charger will light up when it is connected to the power supply. Then connect the charging head to the battery. Please note the battery requires 8hr charging time on first charge. The battery will be fully charged in approximately 2-3hrs thereafter
- The charge will last between 10-12 minutes of constant smoke output before needing to be re-charged.
- Align the charged battery with the AirTrace (with the electrical contact of the battery on the right hand side of the centreline)
- Lift the silver Battery Retaining Clip on the rear face of the AirTrace
- Slide the battery into the AirTrace, pushing fully home.

## Operation

**Note:** There is no warm-up time with the Concept AirTrace.

The AirTrace can either make smoke on a **Momentary** basis (slide switch on the right hand side of the machine towards the reservoir - ie only when the smoke button is held down) or on a **Toggle** basis (slide switch to the smoke outlet - ie pressing the smoke button once starts smoke, pressing again stops smoke).

Select which mode of operation you require (**Momentary** ⇐ or **Toggle** ⇔ )

- Start smoke by pressing the button on the handle. The LED will flash green, and after 1 or 2 seconds smoke will be produced.
- The AirTrace will fog continuously until the button is pressed a second time (if **Toggle**) or until the button is released ( if **Momentary**) Note that the Green LED will continue to flash for approximately 10 seconds after switch off
- When the LED goes Red the battery needs to be charged. The machine will still be able to make smoke for a short period of time after the red light begins flashing.
- **VERY IMPORTANT – to give you optimum battery life, remove the battery from the AirTrace when you have finished using the machine**
- The machine will fog until the battery charge runs down or the AirTrace runs out of fog fluid. When the AirTrace is connected to the optional power adaptor, carefully monitor the level of the fog liquid to make sure the machine does not run out of liquid. A full fluid reservoir is equivalent to approximately 50 minutes of smoke.
- A full battery charge will power the AirTrace for a period of 10-12 minutes before needing to be recharged.
- The machine can be operated at an angle that ensures the smoke fluid in the bottle is drawn into the machine. In practise this means that, provided the reservoir is full on the sightglass the unit can be used to generate smoke +/- 45° from the horizontal plane. Ensure that the filler cap is tightened though!

Note: to remove the battery lift the silver Battery Retaining Clip on the rear face of the AirTrace and then pull the battery out.



Concept Smoke Systems  
7 Woodlands Business Park, Maidenhead, Berks, UK SL6 3UA

T +44 (0)1628 825555

[www.conceptsmoke.com](http://www.conceptsmoke.com)

## Important

- Always monitor tank fluid level as you are producing smoke. Running a AirTrace with no fluid can permanently damage the unit.
- If you experience low output, pump noise or no output at all, remove the battery immediately. Check fluid level and re-charge the battery. When the liquid tank is full and the battery is charged, plug the battery in and press the button on the handle.
- If the machine is still not working and you are unable to determine the cause of the problem, do not open the case. There are no user serviceable parts inside. Return the machine to a Concept dealer for service.

## Performance Notes

- All smoke machines develop condensation around the output nozzle.
- The AirTrace may produce small puffs of smoke occasionally during operation and for a minute or so after being turned off. This is normal and is not indicative of a defect.
- After continuous operation, the case of the AirTrace will become warm, especially at the front of the machine. Take care in handling the machine during and shortly after fogging. Only carry the AirTrace by the handle and let the machine cool down before packing it in a carry case.

## Extension Tube

- If fitting the extension tube for precise smoke placement, ensure that the breather holes in the tube are at the end closest to the machine. They are designed to draw air into the vapour stream and help the formation of smoke.
- A small amount of deposition will occur over time in the extension tube due to the restriction of the smoke particles. Always clean the extension tube after use.

## Optional Power Adaptor

- When desired the AirTrace can be powered by an optional power adaptor which plugs into a standard electrical outlet. The adaptor connects to a dummy battery which plugs into the battery slot on the AirTrace. This allows for extended operation of the AirTrace

## Optional Remote Control Operation

- An optional Wireless Remote Control is available on request:



If using the Radio Remote always ensure the battery is fully charged or use a mains adaptor with dummy battery. Always ensure the Air Trace has sufficient smoke chemical.

Adjust the Slide Switch using a miniature screw driver towards the reservoir as indicated by Yellow Arrow (this is the momentary smoke position)

### Preparation

Connect receiver to Air Trace as shown

### To Make Smoke

Press the **A** button on the key fob to make smoke

### To Stop Producing

Press the **B** button on the key fob. Smoke will stop within 10 secs. Remove the receiver from the Air Trace when not in use.

If you wish to maintain momentary switching (so the smoke generator will only produce smoke when the smoke button on the handle is depressed) leave the Slide Switch in the position detailed above.



If you require the smoke button on the machine to latch on put the Slide Switch away from the reservoir.

# Concept Air Trace Smoke System

## User Manual



Concept Smoke Systems  
7 Woodlands Business Park, Maidenhead, Berks, UK SL6 3UA

T +44 (0)1628 825555

[www.conceptsmoke.com](http://www.conceptsmoke.com)