6. Instructions for Replacement of Filter

Wear gloves and a face mask when replacing or moving the filter after use for a period of time. When an alarm is given, it indicates that the filter needs to be replaced.

1. Replace the pre-filter.

Open the locking key of the upper cover of the purifier, take out the pre-filter, and replace it with a new one.

Note: The old pre-filter can be used for a short time after being cleaned by air purge.

2. Replace the primary filter.

Open the locking key of the upper cover of the purifier, take out the primary filter, and replace it with a new one.

7. Precautions

- The smoke purifier uses 110V60Hz or 220V50Hz power supply and needs to be reliably earthed.
- Before use, please check the overall sealing condition of the equipment, such as whether the sealing strip at the bottom of the filter is complete, whether the filter is placed flat, and whether the pipeline connection is sealed.

Note: It is forbidden to use the smoke purifier after the filter is removed!

- 3. Cut off the power supply if the smoke purifier is not in use for a long time.
- Do not expose the equipment to direct sunlight; otherwise, its casing may be deformed, or it may fail to work normally.
- The equipment should work in an ambient temperature of no more than 80°C, and should not work in an environment with a very high humidity and a high concentration of flammable gas.
- Wear gloves and a face mask when replacing or moving the filter after use for a period of time.
- In case of any abnormalities, please cut off the power supply and inform the seller to send technical personnel for repair.

ST-100XP Smoke Purifier Instruction Manual

Contents

- 1. Introduction to Smoke Purification System
- 2. Main Technical Parameters
- 3. Structural Schematic Diagram
- 4. Instructions for Control System Operation
- 5. Instructions for Installation
- 6. Instructions for Replacement of Filters
- 7. Precautions

1. Introduction to Smoke Purification System

ST-100XP smoke purifier, desktop type, has been specially developed for purifying smoke and dust generated from soldering, laser marking, engraving and laboratories. A single machine can support one workstation, which can be used alone or in multiple clusters. It is convenient to install, with no special installation requirements.

The control system of ST-100XP uses a knob for speed regulation, which can continuously and accurately adjust the air volume according to the exhaust smoke. This model is equipped with a fan with high wind pressure and low noise, which can effectively absorb smoke and waste gas and maximize the service life of the filters. The filtration system consists of a pre-filter and a primary filter. The pre-filter can absorb large particles in the airflow so that the primary filter will not be blocked too early. The primary filter is composed of an HEPA and a gas filter. The efficiency of HEPA for filtering out $0.3~\mu m$ particles reaches 99.99%, and the gas filter can effectively remove harmful gases from the airflow.

ST-100XP is easy to install, with a power of 15 W. After being treated by it, the waste gas meets the indoor air emission standard, thus improving the indoor air quality.

2. Main Technical Parameters

Overall dimensions (W×T×H)	Power supply	Input power	Noise level	Maximum flow	Control mode	Pipe joint	Weight
200 mm × 200 mm × 110 mm	220 V, 50 Hz	15 W	48 dB	15 m³/h	Knob	1 × 50 mm	1.8 kg

3. Structural Schematic Diagram



4. Instructions for Control System Operation





1. Power switch

Press down the power switch, the digital display lights up, and the smoke purifier starts running.

Note: The pre-filter should be replaced every 1-3 months, and the primary filter and gas filter should be replaced every 6-12 months.

2. Control knob

Adjust the air volume of the purifier: Turn the knob clockwise, the air volume will increase, and thus the vacuum degree will increase accordingly; turn the knob counterclockwise, the air volume will decrease, and the vacuum degree will decrease accordingly. When the air volume is increased or decreased to reach the vacuum degree set by the user, there will be a short time of delay.

Tip: As long as the smoke generated can be absorbed, the vacuum degree should be minimized as much as possible, so as to prolong the service life of the filter element.

5. Instructions for Installation

1. Connection of power supply

Before connecting the power supply, check whether the voltage frequency of power supply to be connected matches the rated voltage frequency of the equipment.

2. Hose installation Method and Adjustment direction



The connection between the hose and the equipment should be properly sealed, and the hose should not be compressed or folded to block the passage of the air flow.