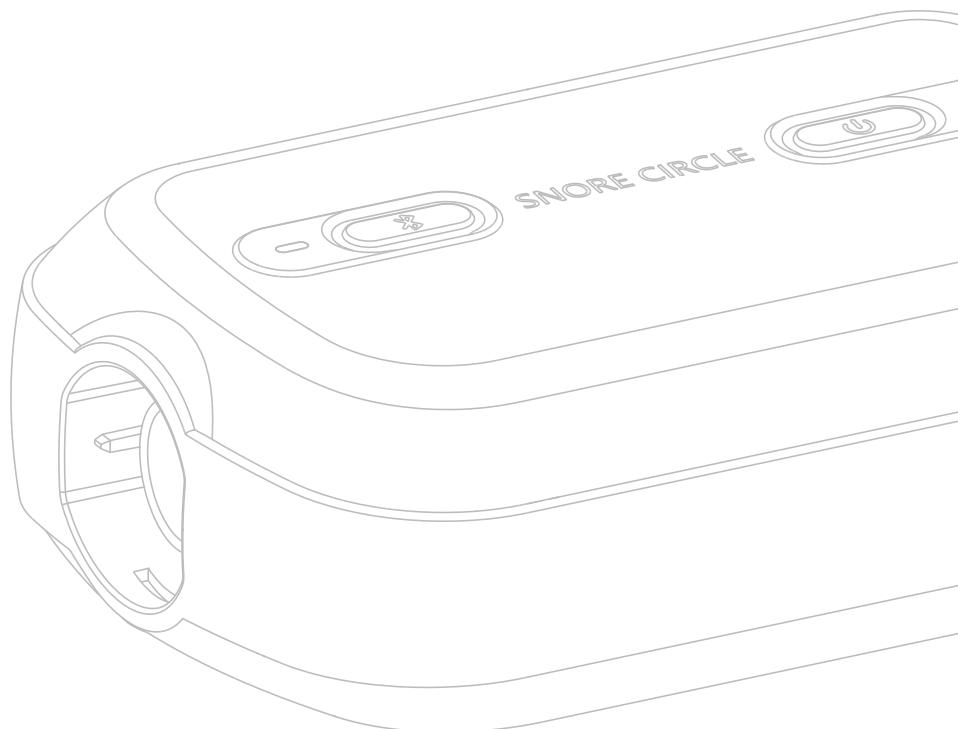




User Manual

WFLY Massager Device (YA50 Series)



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This User Manual describes the main structure, performance, specifications, and method for correct assembly, use, operation, repair, maintenance, and storage according to product characteristics and needs, as well as the measures to ensure the safety of the operator and the product. Please refer to relevant sections for details.

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Preparations for Use

Thank you for using VVFLY's YA50 series Massager Device. This manual provides guidance on the installation, use and routine maintenance of the YA50 series Massager Device, which includes models YA50A and YA50G.

Warning

Patients or operators should read this manual carefully before using the device, and strictly follow the instructions and prompts in this manual to ensure product safety and effectiveness.

1 Product Introduction

VVFLY's YA50 series Massager Device is a portable non-invasive APAP product independently developed by Shenzhen VVFLY Electronics Co., Ltd. A single level of continuous positive pressure is applied to the patient's upper respiratory tract through non-invasive methods such as a mask to help alleviate snoring, hypopnea and sleep apnea.

1.1 Working Principle

Based on a preset range of pressure values, the device delivers a continuous stream of positive pressure and airflow through a tube and into a mask. The positive airway pressure helps to keep the user's upper airway open and unobstructed, eliminating snoring, hypopnea, and sleep apnea.

1.2 Scope of Application

This device is easy to operate and suitable for patients weighing at least 30kg in rehabilitation settings such as hospitals and health clinics.

1.3 Available Models

Model	Difference
YA50A	Fan model: 5025; Color: Silver
YA50G	Fan model: 037; Color: Gold

2 Indications and Contraindications

2.1 Indications

Obstructive sleep apnea-hypopnea syndrome (OSAHS) and snoring.

2.2 Contraindications

The device should not be used if the user has any of the following symptoms. However, if the device must be used, it should be done so at the discretion of a physician. Contraindications include:

(1) Absolute contraindications

Pneumothorax or mediastinal emphysema; cerebrospinal fluid leak, craniocerebral or intracranial trauma, or intracranial pneumatoisis; shock caused by a variety of conditions and not treated; active epistaxis; uncontrolled upper gastrointestinal bleeding; coma or impaired consciousness making mask-based therapy impossible; large vocal cord polyps, etc.

(2) Relative contraindications

Severe coronary heart disease with left ventricular failure; acute otitis media; excessive respiratory secretions and weak cough; weak spontaneous breathing; tracheal intubation (nasal or oral) and tracheotomy; untreatable severe nasal congestion caused by a variety of conditions; pulmonary bullae; allergies to respiratory masks, etc.

Note

The following side effects may occur during the use of this device:

- Dry mouth, nose or throat
- Nosebleed
- Abdominal bloating
- Ear or sinus discomfort
- Eye irritation
- Skin discomfort due to the use of the mask
- Chest discomfort

In case of any unusual chest pain, severe headache or increased difficulty breathing, please contact your attending physician. Treatment may need to be discontinued in the event of an acute upper respiratory infection.

3 Product Structure

This product consists of a host, control software, power adapter, air filter, pipeline (optional), and ventilation nose mask (optional).

3.1 Main Unit

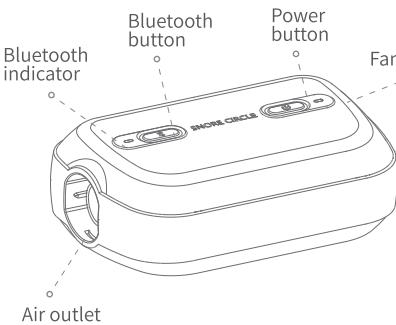


Figure 3-1 Front view

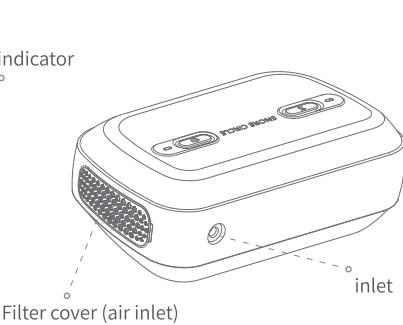
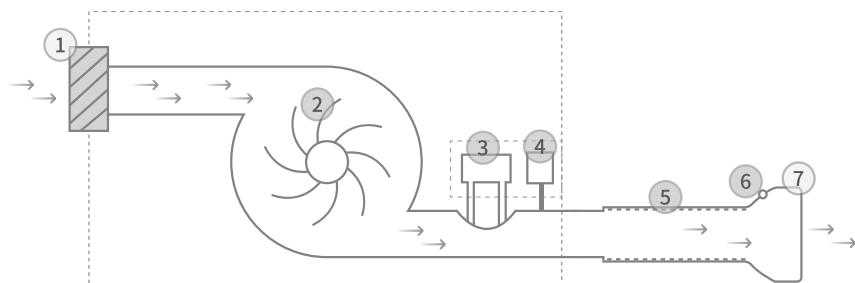


Figure 3-2 Rear view



① Air filter ② Fan ③ Flow sensor ④ Pressure sensor ⑤ Tubing ⑥ Vent ⑦ Mask

Figure 3-3 Device airflow schematic

Table 3-1 Device functions

No.	Part Name	Function
1	Power button	Press to start/stop the fan.
2	Bluetooth button	Press to check the Bluetooth status. Press and hold for 3 seconds to turn on/off Bluetooth. Press and hold for 10 seconds to reset Bluetooth.

3	Fan indicator	Connected to power supply: Steady green light. Fan on: Steady white light then turns off after 60 seconds.
4	Bluetooth indicator	Not connected: Flashing blue light then turns off. Connected: Steady blue light then turns off.
5	Air outlet	Fan outlet used to connect the tubing.
6	Filter cover (air inlet)	Installed over the air filter, which is used to trap dust and pollen in the air entering the device.
7	inlet	Power input interface

3.2 Control Software

The WVFLY APAP app is the supporting software through which users can configure settings and control their device. Data can be transmitted from the device to be displayed and stored on the app or uploaded to the cloud. The app can also obtain cloud-based parameter settings and used to update the device firmware online.

3.2.1 Operating Environment

Phones running Android 6.0 or above.

⚠ Note

Subsequent app updates may result in higher system requirements.

3.2.2 App Download and Installation

- 1) Android: Download and install "WVFLY YA50" via Google Play.
- 2) Scan the QR code below.



⚠ Note

The device only needs to be paired once, unless it is later unpaired.

3.2.3 Registration and Login

- 1) Open the VVFLY YA50 app and read the Privacy Statement and Terms of Use. Check the box to confirm you have read relevant documents, and then tap "Agree".
- 2) Select email to login ,Enter your email account and password to complete the registration and login.

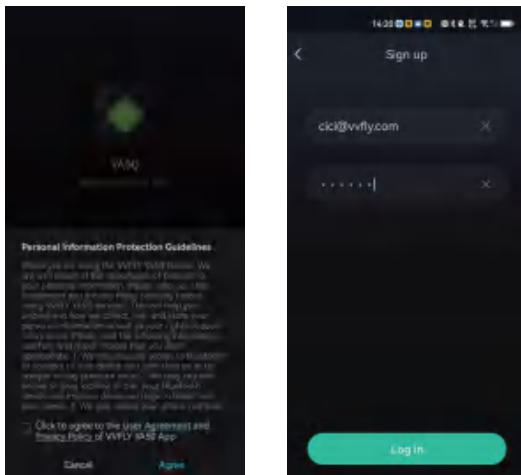


Figure 3-4 Registration and login page

3.2.4 Device Pairing

- 1) Check the device is connected to the power supply and powered on (the power indicator will light up).
- 2) Tap to add a device. The app will search for nearby devices and list available devices.
- 3) If your device cannot be found, please check the following conditions are met:
 - You have granted the necessary permissions during installation. If not, please uninstall the app and download it again, granting necessary permissions.
 - Bluetooth is enabled on the phone.
 - The device is within 3 meters of the phone and in the same room.
 - The phone has a stable network connection.
 - There are no large metal objects between the phone and the device.

If all the preceding conditions are met, reconnect the device to the power supply, and tap "Search again". If the issue persists, please contact customer service.

- 4) Once your device is connected, you can tap the three-dot icon in the upper-right corner to manage your device, including changing the device name, viewing device information and the user guide, and deleting the device.

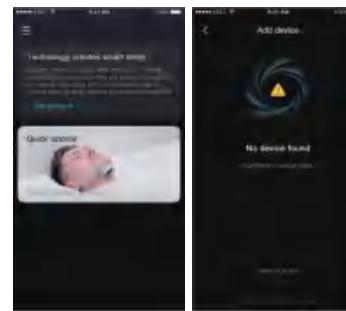


Figure 3-5 No device paired and no device found

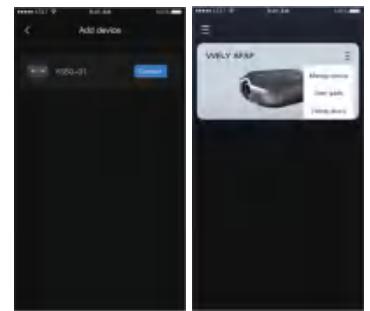


Figure 3-6 List of available devices and connected devices

⚠ Note

Deleting a device will delete all data about the device from the phone and app. You will need to add the device again to use it in the future.

3.2.5 Main Function Pages

3.2.5.1 Real-Time Data Page

- 1) With the device powered on and connected to the app, tap the device icon to open the real-time data interface. Press the power button on the device or tap the  icon in the upper-right corner to start the device.
- 2)  (Real-time data icon): Displays the respiratory waveform, respiratory rate, and mask seal.

⚠ Note

Please refer to the actual interface for details.



Figure 3-7 Real-time data page

3.2.5.2 Basic Settings Page

Tap the basic settings icon  to adjust device settings, including:

- 1) **Ramp time:** The period during which the therapy pressure gradually increases from a low start pressure to the prescribed treatment pressure. This feature is designed to make the beginning of therapy more comfortable while trying to fall asleep. Ramp time can be set to Auto, Off, or a custom interval from 5 minutes to 60 minutes (5-minute increments).
- 2) **Pressure relief:** An advanced option that will provide pressure relief during exhalation, ensuring greater comfort during therapy. You can enable or disable this feature.
- 3) **Auto start/stop:** When enabled, the device will automatically start or stop according to the change of pressure monitored in the tubing. The device will automatically initiate therapy when you breathe into the mask and discontinue therapy when the mask is removed.

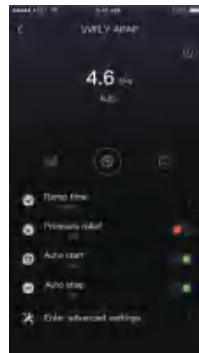


Figure 3-8 Basic settings page

3.2.5.3 Advanced Settings Page

Warning

Advanced settings are provided professionals to configure device parameters according to medical advice. The following instructions are for medical professionals only. After adjusting the parameters, tap "Start test" to verify that the adjusted parameters meet expectations. Tap to save the settings; otherwise, the system will run based on the previously saved settings.

- 1) **Treatment mode:** Two modes are available: APAP and CPAP.
- 2) **Set pressure:** After choosing the desired mode, select the required pressure and tap to confirm. You can adjust the pressure from 4 hPa (cmH_2O) to 20 hPa (cmH_2O) in 0.5 hPa (cmH_2O) increments. Pressure settings vary between APAP and CPAP modes.
 - APAP mode: Minimum and maximum pressure values.
 - CPAP mode: Constant pressure value.

3) **Ramp time:** Turned off by default. Ramp time can be set to Auto, Off, or a custom interval from 5 minutes to 60 minutes (5-minute increments).

- 4) **Pressure relief:** Level 3 by default. Five options are available: Levels 1, 2, and 3, Auto, or Off. Levels 1 to 3 represent the degree at which the pressure is reduced. The higher the level, the greater the pressure relief. Auto means that the pressure is automatically adjusted on a breath-by-breath basis.
- 5) **Auto start/stop:** When enabled, the device will automatically start or stop according to the change of pressure monitored in the tubing. The device will automatically initiate therapy when you breathe into the mask and discontinue therapy when the mask is removed.
- 6) **Air leak alert:** When this feature is enabled, you will receive alerts when a significant air leak is detected, such as when the mask falls off or the tubing is disconnected.

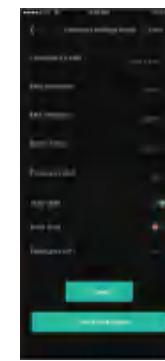


Figure 3-9 Advanced settings page

3.2.5.4 Other Pages

Tap  to view treatment reports and information about consumables.

3.2.5.4.1 Report Page

The report page mainly displays detailed data generated by the device. You can view the overall score, usage duration, maximum pressure, respiratory rate, respiratory event index, mask seal, pressure chart, respiratory rate chart, and respiratory event chart.

- 1) The overall score is calculated based on the usage duration, mask seal, and respiratory events.
- 2) The usage duration is the time from the fan being turned on to being turned off.
- 3) The maximum pressure settings range from 4 hPa to 20 hPa. In APAP mode, the maximum pressure is automatically adjusted according to the user's breathing.
- 4) The respiratory event index is calculated as the number of respiratory events divided by the total sleep time.
- 5) The mask seal refers to the airtightness of the mask as measured by the sensor in the main unit.

6) The horizontal axis on the pressure chart represents the usage duration, while the vertical axis represents the pressure value. Tapping a point in time on the chart will display the maximum pressure value per minute.

7) The horizontal axis on the respiratory rate chart represents the usage duration, while the vertical axis represents the respiratory rate. Tapping a point in time on the chart will display the respiratory rate per minute.

8) The horizontal axis on the respiratory event chart represents the time, while the vertical axis represents the number of respiratory events . Tapping a certain bar will display the number of respiratory events at that point in time.

⚠ Note

Only data for the current day is displayed on the report page. If no data is available for that day, you will be prompted with "No data". Data for a single day is measured over a 24-hour period (from noon on one day to noon on the following day) based on the time set on your phone. For example, data obtained before noon on December 10 will be recorded as data for December 9, while that obtained after noon will be recorded as data for December 10. Tap the calendar icon in the upper-right corner to view historical data. Dates for which data is available will be displayed in green.

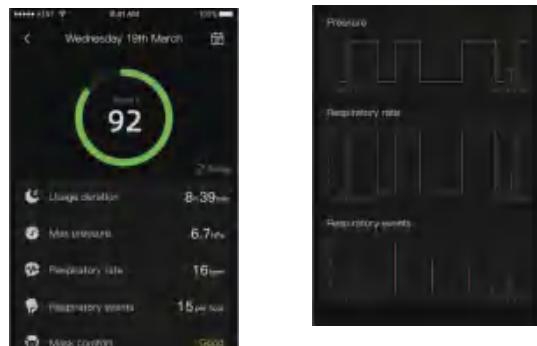


Figure 3-10 Report page and calendar view

3.2.5.4.2 Consumables Page

The consumables page provides a switch to turn on/off the replacement alert feature. This feature is turned on by default.

1) The replacement cycle for the air filter can be set to Off, 7 days, 14 days, 21 days, 30 days, 60 days, or 90 days. The default is 30 days.

2) The replacement cycle for the mask can be set to Off or from 30 days to 720 days (30-day increments). The default is 360 days.

3) The replacement cycle for the tubing can be set to Off or from 30 days to 720 days (30-day increments). The default is 180 days.

4) The replacement cycle for the HME filter can be set to Off, 7 days, 14 days, 21 days, or 28 days. The default is 28 days.

5) The replacement cycle for the mask filter can be set to Off, 7 days, 14 days, 21 days, or 28 days. The default is 28 days.

6) The maintenance cycle for the entire device can be set to Off, 180 days, or 360 days. The default is 180 days.

7) Reset button: Reset all cycles to their default values.

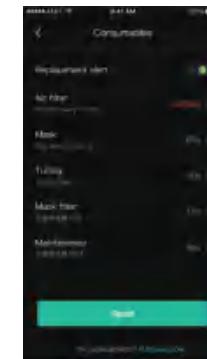


Figure 3-11 Consumables page

3.2.6 Account Management Page

1) Tap the menu icon in the upper-left corner to open the menu bar.

2) Select "More settings > Manage account" to manage your account, configure app permissions, search for common issues, and view device information.

3) To cancel your account, tap "Manage account > Cancel account". Please read the information related to account cancellation before canceling your account.

⚠ Note

After your account is canceled, all data in the account will be deleted and cannot be recovered. By canceling your account, you voluntarily give up all rights and interests related to the account. VVFLY will not liable for any adverse effects caused by account cancellation.

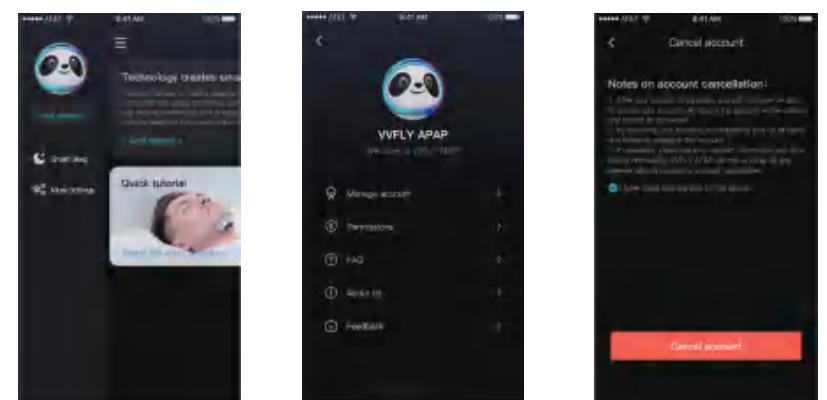


Figure 3-12 Account management and cancellation pages

4 Operating Procedure

4.1 Downloading and Installing the App

Download and install the VVFLY APAP app as instructed in Section 3.2.2.

4.2 Installing the Air Filter

1) Remove the filter cover and install the air filter in the main unit, as shown in Figure 4-1.

2) Reinstall the filter cover.



Figure 4-1 Installing the air filter

4.3 Connecting the Device to the Power Supply

1) Insert the jack of the power adapter into the inlet on the back of the device, as shown in Figure 4-2.

2) Plug the power adapter cable into the 220V power outlet.

If the power supply is interrupted and then restored, the device will automatically return to its operating state and settings prior to interruption.

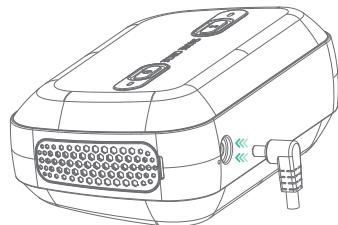


Figure 4-2 Power adapter

⚠ Warning

- Using the device at an AC voltage outside the specified range may damage the device or cause device failure.
- Check the power cable frequently for signs of damage. Replace a damaged cable immediately.

4.4 Assembling the Tubing and Mask

1) As shown in Figure 4-3, connect the thicker end of the tubing to the air outlet, clipping it into the corresponding slots until secure.

2) Wear your mask as instructed, and connect the other end of the tubing to the mask, ensuring it will not disconnect if you gently shake your head.

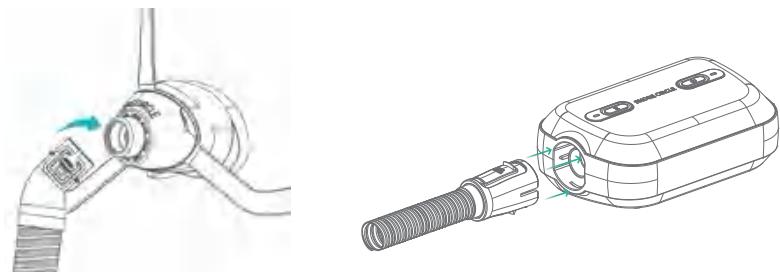


Figure 4-3 Connecting the tubing

⚠ Warning

- When using the device in conjunction with the mask, both parts should be at least 1 meter away from any oxygen source. Do not use the device in an oxygen-enriched environment with flammable gas.
- Before each use, check the tubing for damage or foreign objects. If necessary, clean or replace the tubing.
- Do not stack the long tubing at the head of the bed, as it may become entangled around the head or neck of the patient during sleep.
- In order to minimize the possibility of repeated inhalation of CO₂, users should pay attention to the following:
 - a) Use the accompanying tubing and mask provided by VVFLY (recommended);
 - b) Do not wear the mask for a prolonged period while the device is not in use;
 - c) Use a vented mask, and ensure that the vents are not blocked or sealed.
- Please contact the supplier to purchase accessories for the device.
- Do not use any non-standard parts unless recommended by VVFLY or your physician. If you experience chest discomfort, shortness of breath, bloating, severe headaches, or other discomfort while using this device, please contact your physician or qualified medical personnel immediately.

4.5 Starting/Stopping Treatment

Once the device is connected to the power supply, you can start/stop the device in any of the following ways:

- 1) **Power button:** Press the power button on the device;
- 2) **Power button icon on the app:** Tap the power button icon on the VVFLY APAP app (the device must be paired);
- 3) **Self-turn-on after breathing:** With Auto start/stop enabled (the device must be paired), take a few deep breaths with the mask on to automatically start the device. The device will automatically stop if the mask or tubing is disconnected or a significant air leak is detected.

⚠ Note

Methods 1 and 3 above can be used without connecting to the app. In such cases, the device will operate based on the pressure settings from the previous use. If pressing the power button to start the device for the first time, the device will operate based on the default pressure settings (Auto; min. pressure: 4 hPa; max. pressure: 20 hPa).

5 Cleaning and Maintenance

5.1 Mask and Tubing Accessories

The device is recommended to be used with the VVFLY YF50 Mask and YT50/YT50H Tubing. The following content describes the methods for cleaning and disinfecting such models. For other brand accessories that are compatible with this device, please read the relevant instructions on cleaning and maintenance.

5.1.1 Mask and Headband

1) Cleaning the mask (daily/after each use): Disassemble the mask parts following the instructions. Gently clean the parts with warm (about 30°C) soapy water to remove any dirt or grease. Rinse well and air-dry away from direct sunlight.

2) Cleaning the headband (weekly): Gently clean the headband in warm (about 30°C) soapy water. Rinse well and air-dry away from direct sunlight.

3) Disinfecting the mask: The YF50 Mask is intended for use by a single user only. If you have strictly followed the above cleaning instructions, it is generally not necessary to disinfect the mask. If the mask has not been used for a long time or it has been contaminated, use a soft cloth soaked in 70%–80% (v/v) ethanol solution to wipe the surface of the mask twice. Rinse well and air-dry away from direct sunlight.

⚠ Note

- The YF50 Mask should not be disinfected more than 60 times.
- Please clean parts according to the manufacturer's requirements and the specified frequency.

5.1.2 Tubing and Accessories

1) Cleaning the tubing (weekly): Separate the tubing from the device and the mask following the instructions, and remove the HME filter (if used). Rinse the tubing with running water to remove any residue. Gently clean the tubing (without the HME filter) in warm (about 30°C) soapy water. Rinse well and air-dry away from direct sunlight.

2) Disinfecting the tubing: The YT50/YT50H Tubing should not be disinfected. In the event of significant contamination, please replace the tubing.

⚠ Note

- The standard tubing for this device has a diameter of 15 mm.
- Do not clean the HME filter or add water. Replace the filter every 30 days.
- If you find any signs of damage, aging or deterioration of the mask and tubing, please stop using them and promptly replace them.

5.2 Main Unit

1) Cleaning the exterior (weekly): Wipe the surface of the device with a clean, soft, slightly damp cloth.

2) Disinfecting the device: The main unit does not need disinfecting.

3) Replacing the air filter: It is recommended to replace the air filter once a month (it may be replaced more frequently based on the actual air quality). If the air filter is damaged or cracked, replace it promptly. Figure 5-1 shows how to remove the air filter, while Section 4.2 describes the installation procedure.

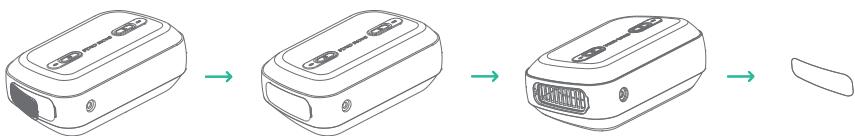


Figure 5-1 Removing the air filter

⚠ Warning

- Clean the device and its accessories regularly to prevent respiratory infections.
- Always unplug the device before cleaning, so as to avoid electric shock.
- Ensure the exterior is completely dry before using the device, so as to prevent moisture from entering the device.
- Use a cleaning solution that is nontoxic to humans and will not cause allergies, such as mild soapy water.
- Do not use solutions containing bleach, chlorine or fragrances to clean the device and its accessories. Soap containing moisturizing agents or antibacterials should also not be used. These solutions may harden the materials being cleaned or reduce their lifespan.
- Do not clean or dry the device and its accessories at temperatures higher than 80°C (176°F). High temperatures could reduce the product's lifespan.
- Do not immerse the device in any fluids.
- To avoid damage to the material, spare air filters should not be exposed to direct sunlight, humid environments, or freezing temperatures.

6 Traveling with the Device

If the device is used when the atmospheric pressure is outside the specified range, the accuracy of the leak alert will be affected.

1) Use the VVFLY carrying case to carry the device and accessories along with you. Do not put them in your checked baggage.

2) Remember to bring a spare air filter.

3) For convenience at security checkpoints, there is a note on the bottom of the device stating that it is medical device. It may be helpful to bring this manual with you to help security personnel understand the device.

7 Transferring the Device to Another Patient

If the device is transferred to another patient, components in close contact with the previous user, such as the mask, must be cleaned and disinfected to prevent cross-infection.

Note

Tubing and accessories are intended for use by a single user only. The air filter should not be cleaned. If it is transferred to another patient, the unused air filter should be replaced immediately.

8 Troubleshooting

The table below lists common problems you may encounter with the device and possible solutions to resolve them. If none of the corrective actions solve the problem, please contact your physician or device supplier.

Table 8-1 Common problems related to the user and corresponding solutions

Problem	Possible Cause	Solution
Air leaks from the mask	1.The mask may not be worn correctly. The mask may be the wrong size or type.	1. Check the mask is worn correctly. 2. Use an appropriate size and type
The pressure is too low	1.The ramp feature may be enabled. 2.The mask gasket (humidifier) may be blocked. 3.The HME filter may be blocked.	1.Wait for the pressure to increase, or disable the ramp feature. 2.Replace the gasket. 3.Replace the HME filter.

The pressure is too high	1.Patients may experience discomfort when the pressure exceeds 13 hPa. However, pressure is set based on the patient's conditions during sleep, and a low pressure setting may not prevent sleep apnea.	1.It may take up to 4 weeks to become accustomed to the pressurized air. Relax and breath through your nose. If the issue persists, please contact your physician.
The device is very loud	1.The mask may not be worn correctly. 2.The device may not be assembled correctly.	1.Check the mask is worn correctly. 2.Check the device is assembled correctly.
Dry or blocked nose	1.The mask may not be worn correctly. 2.The device may require more humidity. 3.There may be another underlying nasal issue.	1.Check the mask is worn correctly. 2.Try using the HME filter or the mask's gasket (humidifier). 3.Contact your physician.
Dry or uncomfortable mouth	1.You may be exhaling pressurized air through your mouth.	1.Use a full-face mask or contact your physician.
Water in mask or tubing	1. The humidity setting is too high. 2.The temperature inside the mask differs greatly from the room temperature.	1. Remove the HME filter or the mask's gasket (humidifier). 2.Keep the ambient temperature between 20°C and 30°C.
Eye irritation	1.The mask may be the wrong size or model, or it may be incorrectly positioned, resulting in an air leak. 2.The mask cushion has hardened.	1.Adjust the frame support to better fit your forehead. Note that adjusting the mask too tight may leave marks on your face. Add additional padding around the mask to prevent air leaks. 2.Replace the mask.
Facial reddening	1.The mask is too tight. 2.You may be allergic to the mask material.	1.Loose the headband. 2.Contact your physician or the device supplier.

Table 8-2 Common problems related to the device and corresponding solutions

Problem	Possible Cause	Solution
unable powered on	1.The device may not be connected to the power supply and the fan indicator is green. 2.The device needs to be reset.	1.Check the device is properly connected to the power supply and the fan indicator is green. 2.Disconnect the device from the power supply and wait 10 seconds before reconnecting and trying again.
The fan stops abruptly during use	1.The tubing may be disconnected. 2.Significant air leaks may be activating the auto stop feature.	1. Check the tubing is properly connected to the relevant parts. 2.Disable the auto stop feature.
The device cannot be paired with the app	1.Bluetooth is disabled. 2.The device is paired to another user's app.	1.Press and hold the Bluetooth button for 3 seconds. The Bluetooth indicator will flash when Bluetooth is enabled. 2.Press and hold the Bluetooth button for 10 seconds. The Bluetooth indicator will flash quickly 3 times when the device has been reset.

9 Safety Precautions

Note

- The instructions in this manual are not intended to supersede established medical protocols. Please use the device under the guidance of a physician.
- If the device has been exposed to very hot or very cold temperatures, allow it to acclimate to room temperature for approximately 2 hours before use.
- Keep the device away from any heating or cooling equipment (such as exhaust fans, radiators or air conditioners).
- The device is not suitable for use in high humidity environments. Make sure that no liquid enters the device.
- Make sure that bedding, curtains, or other items do not block the filter or vents of the device.
- The device should only be used with the mask and accessories manufactured or recommended by VVFLY or your physician. The use of incorrect masks and accessories may make the treatment less effective, cause excessive inhalation of carbon dioxide, or damage the device. For more information on compatible masks and accessories, please refer to www.vvfly.cn.
- Make sure the tubing is arranged so that it does not wrap around the user's head or neck during sleep.
- Blocking the tubing and/or air inlet while the device is running may cause it to overheat.

Warning

- The device cannot be used as any form of life support system.
- Keep the power cable away from hot surfaces.
- Make sure that the power cable and jack are in good condition and the device is not damaged in any way.
- Do not use oxygen with the device. Any oxygen source must be more than 1 meter away from the device to avoid risk of fire and burns.
- Do not use the device in the presence of flammable gases (such as anesthetics) to avoid explosion.
- Portable and mobile RF communication equipment may affect the use of this device. It is recommended to keep this device away from portable and mobile RF communication equipment or keep such equipment turned off during use of the device.
- When the device is connected with other equipment to form an ME system, it must meet the relevant requirements of GB 9706.15: Safety Requirements for Medical Electrical Systems.
 - If you notice any unexplained changes in the performance of this device, if it makes any unusual sounds, if the device or power adapter has been dropped or mishandled, or if the casing is damaged, please discontinue use and contact VVFLY immediately.
 - Do not open or modify the device. There are no user serviceable parts inside. Repairs and service should only be performed by an authorized service agent.
 - Beware of electric shock. Do not immerse the device, power adapter, or power cable in water. If liquid has spilled into or on the device, unplug it and allow the part to dry. Make sure all parts are dry before reconnecting to the power supply. Please contact VVFLY if the device cannot be used after drying.

- Do not perform any maintenance work while the device is operating.
- Persons with reduced physical, sensory and mental capabilities, including children, should not use this device without professional supervision.

10 Product Performance

10.1 Specifications

Table 10-1 Device specifications

Operating mode	Continuous (no less than 8 hours)					
Pressure range	4 to 20 hPa (± 0.5 hPa) under normal conditions; ≤ 30 hPa under single fault conditions.					
Treatment mode	CPAP, APAP					
Ramp time	The ramp time ranges from 0 to 60 minutes (5-minute increments) with an accuracy of ± 1 minute.					
	Set pressure (hPa)	4	8	12	16	20
Maximum flow	YA50A					
	Measured pressure at the patient connection port (hPa)	3	8	11	15	19
	Average flow at the patient connection port (L/min)	81	111	118	106	99
YA50G						
	Measured pressure at the patient connection port (hPa)	4	8	11	15	19
	Average flow at the patient connection port (L/min)	78	102	105	101	92
Margin of error	± 0.5 hPa					
Sound	< 37 dB (A), when the device is working at the pressure of 10 hPa in CPAP mode.					
Pressure relief	Five options are available: Levels 1, 2, and 3, Auto, or Off (Level 0). Level 0 means this feature is turned off. Levels 1 to 3 represent the degree at which the pressure is reduced. The higher the level, the greater the pressure relief. Auto means that the pressure is automatically adjusted on a breath-by-breath basis.					
Wireless transmission	Bluetooth					

Auto start	With this feature turned on, the device automatically initiates therapy at the set pressure when the user breathes continuously into the mask with an outlet flow rate greater than 15 LPM. When this feature is turned off the device can only be started manually using the mobile app or the device buttons.
Auto stop	With this feature turned on, the device will automatically discontinue therapy when no respiratory cycle is detected, the outlet flow rate varies by more than 50%, and this rate lasts for at least 15 seconds. When this feature is turned off, the device can only be stopped manually using the mobile app or the device buttons.
Air leak alert	With the auto stop feature turned off, the device will alert the user if a significant air leak is detected, such as when the mask falls off or the tubing is disconnected, (i.e., the immediate flow rate at the air outlet varies by more than 50%) and the flow rate lasts for at least 10 seconds. The margin of error is ± 5 seconds.
Parameter lock	The operating mode, working pressure, ramp time, and pressure relief settings can be locked.
Data recording	Treatment data can be recorded in the app.
Patient connection port specifications	$\phi 15$ mm non-tapered connector (suitable for YT50H/YT50 Tubing)
Pressure	Range: 0 to 20 hPa; margin of error: $\pm (2\% \text{ full scale} + 4\% \text{ actual reading})$.

10.2 Other Specifications

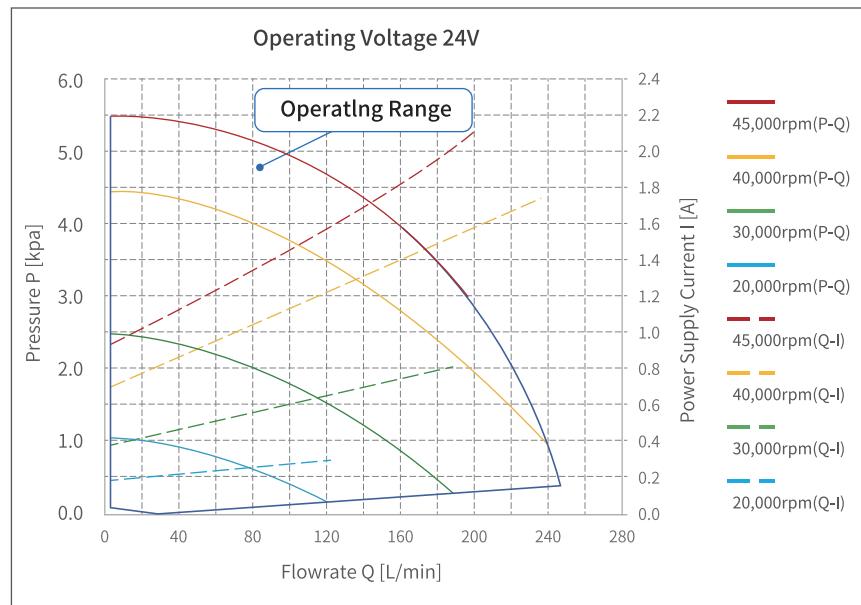
Table 10-2 Other specifications

Dimensions	143 mm x 90 mm x 54.75 mm	
Environmental conditions	Operation	Storage and Transportation
	Temperature: 5°C to 35°C (41°F to 95°F)	-25°C to +70°C (-13°F to +158°F)
	Humidity: $\leq 93\%$, non-condensing	$\leq 93\%$, non-condensing
	Atmospheric pressure: 760 to 1060 hPa	760 to 1060 hPa
Note: Pressure value is given in hPa, 1 cm of water column (cmH_2O) = 0.98 hPa		
Test conditions	ATPD	
Date of manufacture	See the device nameplate	
Service life	The product's service life is five years if it is used, maintained, cleaned and disinfected in strict accordance with the user manual.	
Power supply	AC voltage: 220 V~, 50 Hz; input power: 0.19 A	
Electrical safety	<input checked="" type="checkbox"/> (Class II), <input checked="" type="checkbox"/> (Type BF Applied Part)	
Ingress protection	IPX2	
Tubing	Tubing should have a medical device registration certificate and be able to connect with the device. Length: 1.8 m; deviation: ± 0.18 m.	
Weight	YA50A: 339g; YA50G: 320g.	

⚠ Note

- The above parameters are measured under normal working conditions. The manufacturer reserves the right to modify the parameters.
- Operating the device beyond the scope specified in the above environmental conditions may result in inaccurate measurement or output.

10.3 P-Q/Q-I Curve



11 After-sales Service

After-sales service for the device is provided by VVFLY Electronics Co., Ltd. The user is obliged to carry out maintenance of the device. In the event of device malfunction, please contact your supplier for service and repair. Repairs and adjustments must be performed by VVFLY-authorized service personnel only.

11.1 Warranty Period and Conditions

During the warranty period, failures due to material and manufacturing defects (non-human failures) can be repaired free of charge according to the warranty terms. The corresponding warranty periods are as follows:

- 1) Main unit: maintenance within 2 years from the date of purchase;
- 2) Power adapter and cable: maintenance within 1 year from the date of purchase.

Date of manufacture: See the product label.
Life time: Five years.

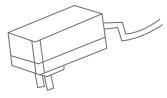
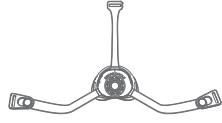
11.2 Disclaimer

VVFLY will not be liable for any of the following circumstances:

- 1) Damage to the device caused by assembly, upgrade, adjustment or repair carried out by non-authorized service personnel.
- 2) Damage to the device caused by failure to comply with the operating specifications in this user manual.
- 3) Damage to the device as a result of using accessories that are not provided or approved by VVFLY.
- 4) Damage to the device caused by any technical adjustment made without the consent of VVFLY.

12 Package Contents

After unpacking the device, make sure you have everything shown here (different models may contain different components):

1.Main Unit		2.Power Adapter	
3.Air Filter		4.Accompanying Documents	
5.Tubing (optional)		6.Mask (optional)	
7.Universal connector			

13 Disposal

In general, when the device reaches the end of its service life, it should be wrapped in cardboard and protective plastic packaging and sent to a recycling facility that can handle plastics, glass, metal parts, printed circuit boards, wires and cables, heating plates, motors, and other materials. The mask and tubing accessories can be disposed of as general recyclable waste.

14 Symbols

	Consult Instructions For Use		Warning or Caution
	Type BF Applied Part		Class II Equipment
	Service Life		Date of Manufacture
	Batch Code		AC Power
	DC Power		Ingress Protection
	Hot Surface		No SpO2 Alert
	Disassembly Prohibited		Non-Ionizing Radiation
	Catalog Number		WEEE Marking
	Air Inlet		Air Outlet
	Manufacturer		Company Logo

15 Manufacturer

Name of registrant/manufacturer: VVFLY Electronics Co., Ltd.

Registered address: Room 2103-2104, Changhong Technology Building, No.18 Keji South 12th Road, High-tech Industrial Park, Yuehai Subdistrict, Nanshan District, Shenzhen, China

Production address: 5A04, Building 1, Tonglixing Industrial Plant, No. 8 Lanzhu East Road, Zhukeng Community, Longtian Subdistrict, Pingshan District, Shenzhen, China

After-sales service provider: VVFLY Electronics Co., Ltd.

Tel.: 400-8058192

Date of manufacture: See the product label

life time: Five years

Version: A0

Date of preparation/revision: December 2022

Language: English

16 FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

FCC ID:2AW7X-YA50

材质说明

说明书尺寸:130x240mm

封皮材质: 95克哑粉, 覆亚膜

内纸材质: 95克哑粉