vian™

# Blood Pressure ECG Monitor
ECG Pen
OmniPAP
Quick Start Guide

Preparation Before Taking Measurement

1 Install four "AAA" alkaline batteries by following the + (positive) and - (negative) polarities indicated on the battery compartment.
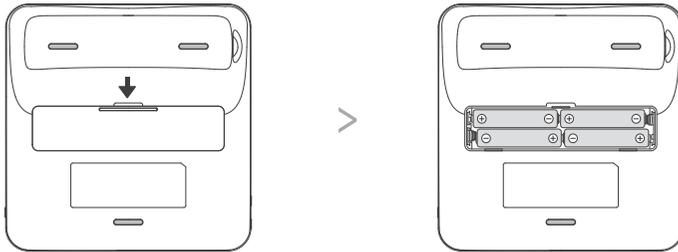

> Note : Four new "AAA" alkaline batteries will last for approximately 300 measurements.

2 Insert the air plug into air jack on the left side of main unit. Insert the cable connector of ECG Pen to ECG port on the right side of main unit.
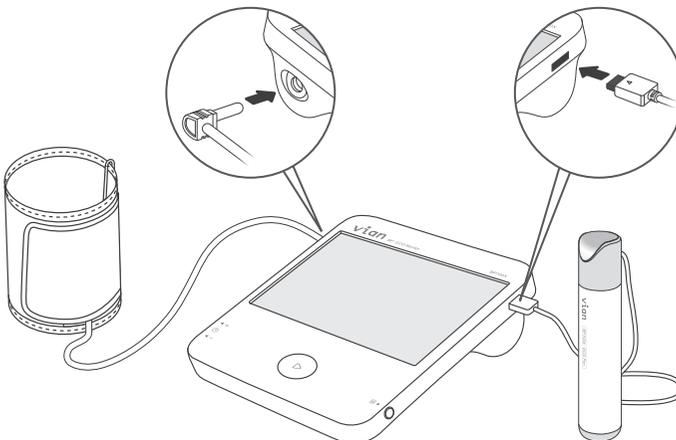
Date, Time & Alarm Settings

1 Press and hold the + button on the left side for more than 3 seconds to enter Date/Time setting mode. Press + and − buttons to adjust the values, then press Ⓜ button to apply your settings.
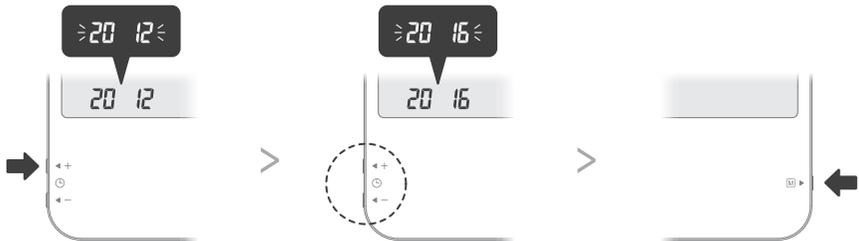
2 Press and hold the − button on the left side for more than 3 seconds to enter Alarm setting mode. Press + and − buttons to turn on the alarm function and adjust values, then press Ⓜ button to apply your settings.
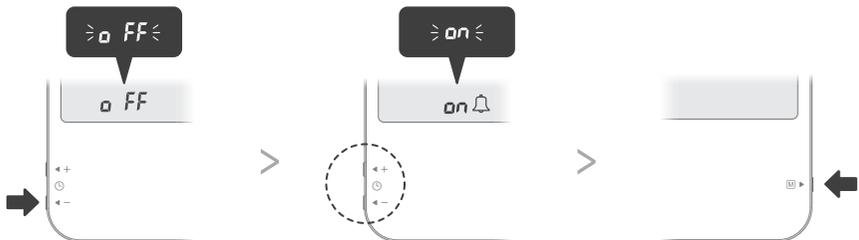
Blood Pressure
Cautions & Components Introduction

To assure accurate blood pressure measurement, please:

- Rest for at least 20~30 minutes after exercising, bathing, eating, smoking or drinking alcohol before taking measurement.

- Take the measurement in a quiet place and under appropriate temperature.

- Relax for 5~10 minutes before taking measurement.

- Make sure the center of arm cuff is at the same level with your heart.

- Do not move or talk during the measurement.

- Wait at least 5 minutes before taking another blood pressure measurement.

Components
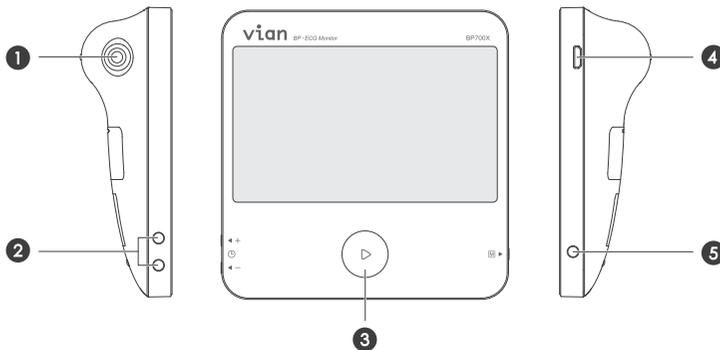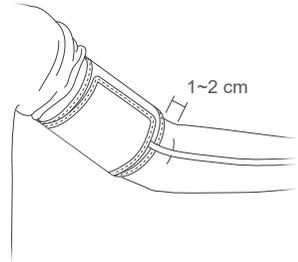

❶ **Air Jack:** connect air tube of arm cuff.

❷ **Adjust Button:** increase/decrease values of settings.

❸ **Main Button:** start the inflation, power off the device.

❹ **ECG/USB Port:** connect ECG Pen/USB extension cord.

❺ **Memory Key:** review records, switch user account and apply settings.

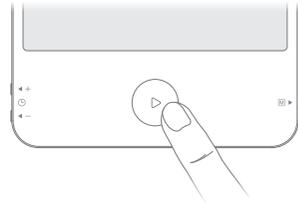# Taking Blood Pressure Measurement

1 Position the arm cuff 1~2 cm above your elbow with the air tube running down inside of your forearm.

> **Note :** *Avoid lying your arm on the air tube and not over tighten the cuff.*

1~2 cm

2 Press ▷ button to start your measurement automatically.

3 The measurement result will be displayed on LCD after the measurement is completed.
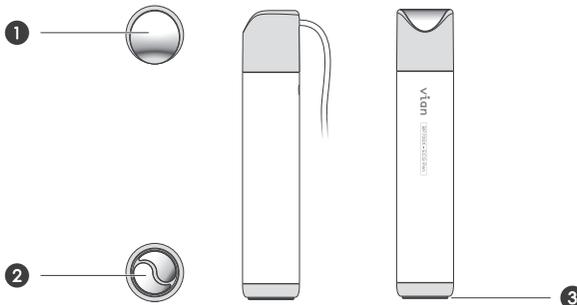
ECG
Cautions & Components Introduction

To assure accurate ECG measurement, please:

- Remove the foil on the top and bottom electrodes.

- Make sure the electrodes are directly contacting your skin.

- If your skin or hands are dry, moisten them with damp cloth before taking measurement.

- Do not let your right hand in contact with your body and avoid heavily pressing the top and bottom electrodes while taking measurement.

- Do not use the ECG Pen in upside down direction.

- Do not talk while taking measurement and keep the balance of your body to avoid influencing the accuracy of measurement result.
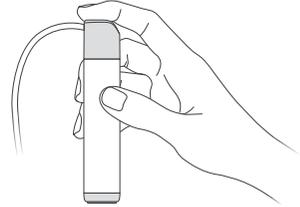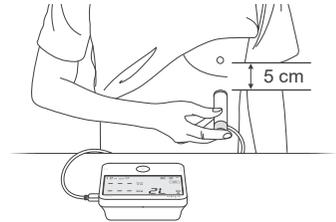
Components

- ❶ Top Electrode
- ❷ Bottom Electrodes
- ❸ Detection Switch

Taking ECG Measurement

1 Place your right index finger on the top electrode.

2 Place the bottom electrodes on your lower-left chest supported by the ribcage.

5 cm

3 Press the ECG Pen **GENTLY** until you hear the click sound.

Click

> *Note1 : Avoid heavily pressing the electrodes. Excessive muscle tension will affect the accuracy of measurement.*
>
> *Note2 : If the bottom electrodes are released within 3 seconds, the measurement will be aborted.*

4 After 30 seconds measurement, the result will be displayed on LCD.

HR
BPM
72
SYS
mmHg
- - -

OK

DIA
mmHg
- - -

No.
26
ECG

LCD Display

❶ **Heartbeat Indicator**

❷ **Heart Rate**

❸ **ECG Result Display**
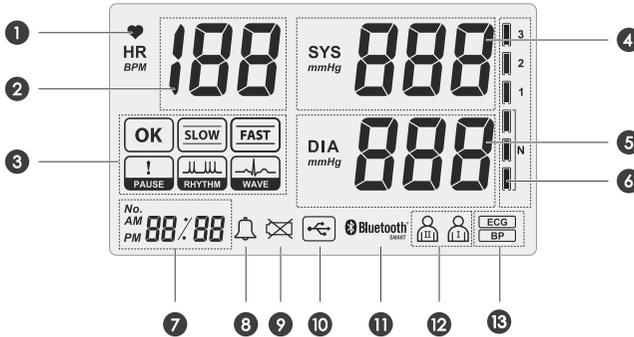
❹ **Systolic Blood Pressure**

❺ **Diastolic Blood Pressure**

❻ **WHO Classification Indicator**

❼ **Time/Records No./Countdown**

❽ **Alarm Indicator**

❾ **Low Battery Indicator**

❿ **USB Connection**

⓫ **Bluetooth Connection**

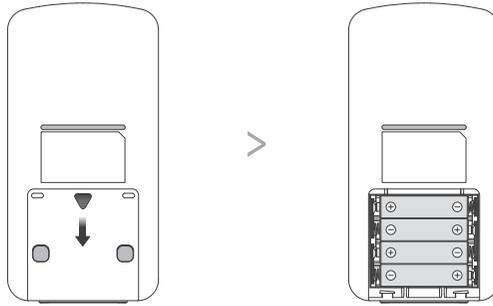⓬ **User Account**

⓭ **Type of Measurement**

Reviewing Measurement Records

When the device is shut down or in standby mode, you may review the previous measurement results in cyclic order by pressing Ⓜ button repeatedly.

> *Note :* You may press and hold the Ⓜ button for more than 3 seconds to switch between user account 👤 and 👤 .
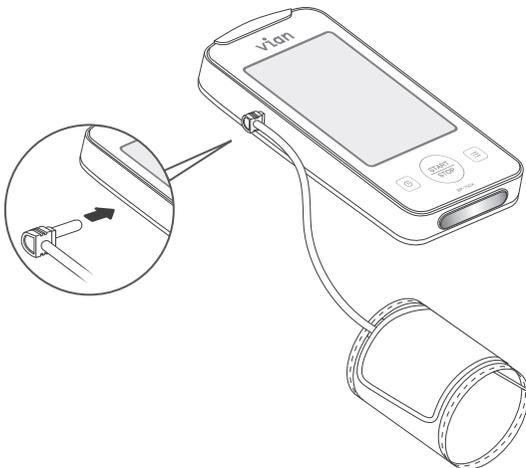
Preparation Before Taking Measurement

1 Install four "AAA" alkaline batteries by following the + (positive) and
- (negative) polarities indicated on the battery compartment.

Note : Four new "AAA" alkaline batteries will last for approximately 300 measurements.

2 Insert the air plug into air jack on the left side of the main unit.

Date, Time & Alarm Settings

1 Press and hold the ⊙ button for more than 3 seconds and the device will enter Alarm Setting mode. Press the ⊙ button again to switch the alarm function on, then press the ▤ button to apply setting. Press the ⊙ button to adjust values and the ▤ button to apply your alarm settings.

2 The display will turn to Date and Time Setting mode after completing the setting of alarm. Press the ⊙ button to adjust the values, then press the ▤ button to apply your settings.
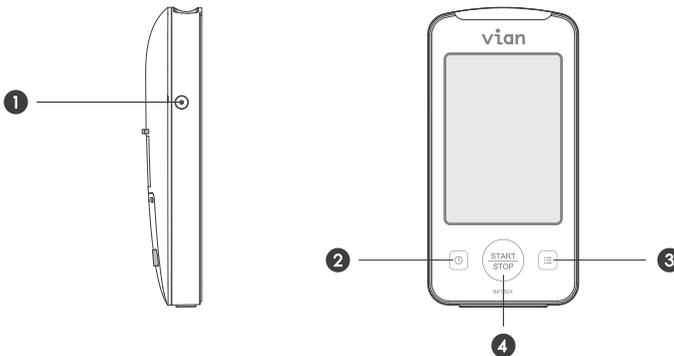
Blood Pressure
Cautions & Components Introduction

To assure accurate blood pressure measurement, please:

■ Rest for at least 20~30 minutes after exercising, bathing, eating, smoking or drinking alcohol before taking measurement.

■ Take the measurement in a quiet place and under appropriate temperature.

■ Relax for 5~10 minutes before taking measurement.

■ Make sure the center of arm cuff is at the same level with your heart.

■ Do not move or talk during the measurement.

■ Wait at least 5 minutes before taking another blood pressure measurement.

Components
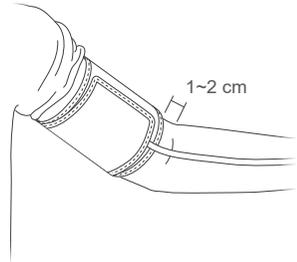

❶ **Air Jack:** connect air tube of arm cuff.

❷ **Adjust Button:** increase/decrease values of alarm/time settings.

❸ **Memory Key:** review records, switch user account and apply settings.

❹ **Main Button:** start inflation, power off the device.
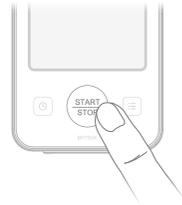
Taking Blood Pressure Measurement

1 Position the arm cuff 1~2 cm
above your elbow with the air tube
running down inside of your
forearm.

> **Note :** Avoid lying your arm on the air tube
> and not over tighten the cuff.

1~2 cm

2 Press ⬭ button to start your
measurement automatically.

3 The measurement result will be
displayed on LCD after the
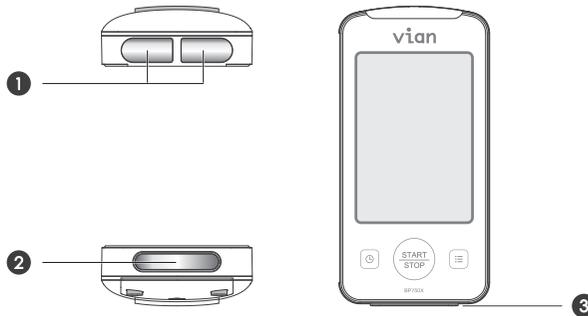measurement is completed.

ECG
Cautions & Components Introduction

To assure accurate ECG measurement, please:

- Remove the foil on the top and bottom electrodes.

- Make sure the electrodes are directly contacting your skin.

- If your skin or hands are dry, moisten them with damp cloth before taking measurement.

- Do not let your right hand in contact with your body and avoid heavily pressing the top and bottom electrodes while taking measurement.

- Do not use the ECG Pen in upside down direction.

- Do not talk while taking measurement and keep the balance of your body to avoid influencing the accuracy of measurement result.
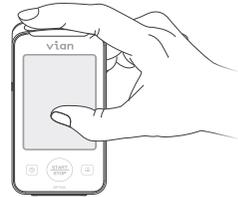
Components

❶ **Top Electrodes**
❷ **Bottom Electrode**
❸ **Detection Switch**

Taking ECG Measurement

1 Place your right index finger on
the top electrodes.

2 Place the bottom electrode on
your lower-left chest supported
by the ribcage.

5 cm
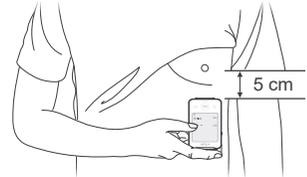
3 Press the device **GENTLY** until you
hear the click sound.

Click

> **Note1 :** *Avoid heavily pressing the*
> *electrodes. Excessive muscle tension will*
> *affect the accuracy of measurement.*
>
> **Note2 :** *If the bottom electrode is released*
> *within 3 seconds, the measurement will be*
> *aborted.*

4 After 30 seconds measurement,
the result will be displayed on
LCD.

PULSE /min
72
OK
ECG
No.
29
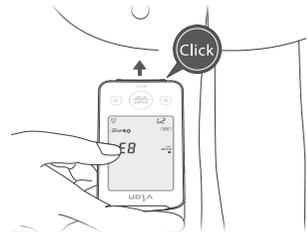
LCD Display

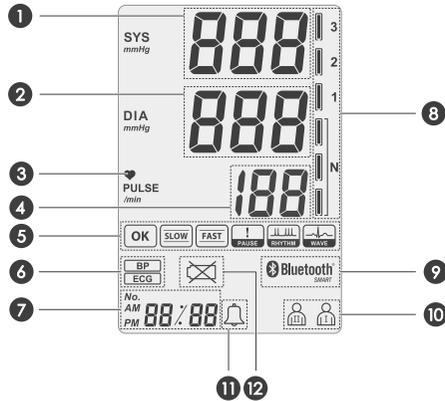|				
❶	**Systolic Blood Pressure**	❼	**Time/Records No./Countdown**
❷	**Diastolic Blood Pressure**	❽	**WHO Classification Indicator**
❸	**Heartbeat Indicator**	❾	**Bluetooth Connection**
❹	**Heart Rate**	❿	**User Account**
❺	**ECG Result Display**	⓫	**Alarm Indicator**
❻	**Type of Measurement**	⓬	**Low Battery Indicator**

Reviewing Measurement Records

When the device is shut down or in standby mode, you may review the previous measurement results in cyclic order by pressing ▤ button repeatedly.

> **Note :** *You may press and hold the* ▤ *button for more than 3 seconds to switch between user account* 👤 *and* 👤 *.*

Preparation Before Taking Measurement

1 Remove the battery cover and install two coin-typed battery by following the + (positive) and - (negative) polarities indicated on the battery compartment.
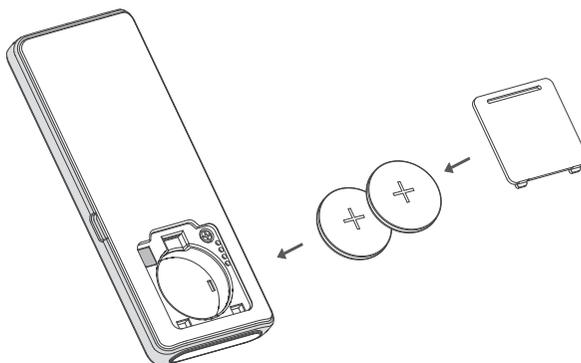
2 Connect the device with iBP Monitor APP* on your Smartphone/pad, or connect with BP ECG Studio* on your computer, You may change the time setting of the device by entering [Setting] mode.

* iBP Monitor APP : Please refer to page 22 for further introduction.
* BP ECG Studio : Please refer to page 20 for further introduction.

ECG
Cautions & Components Introduction

To assure accurate ECG measurement, please:

- Remove the foil on the top and bottom electrodes.

- Make sure the electrodes are directly contacting your skin.

- If your skin or hands are dry, moisten them with damp cloth before taking measurement.

- Do not let your right hand in contact with your body and avoid heavily pressing the top and bottom electrodes while taking measurement.

- Do not use the ECG Pen in upside down direction.

- Do not talk while taking measurement and keep the balance of your body to avoid influencing the accuracy of measurement result.

Components
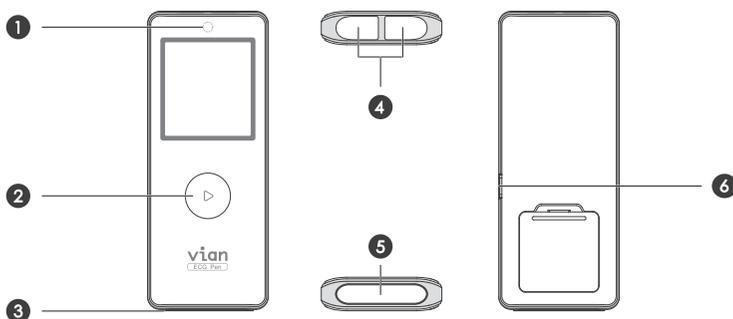
❶ **Heartbeat LED**

❷ **Power Button:** Press 3 sec to turn on/off.
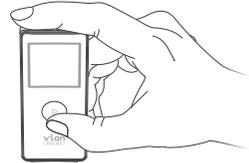
❸ **Detection Switch**

❹ **Top Electrodes**

❺ **Bottom Electrode**

❻ **Micro USB Port**

Taking ECG Measurement

1. Place your right index finger on the two top electrodes of the device and hold the ECG Pen face up in your hand.

2. Place the bottom electrode of the ECG Pen on your lower-left chest supported by the ribcage.
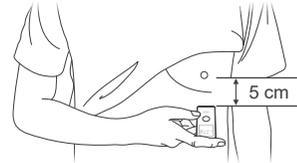
   5 cm

3. Press the ECG Pen **GENTLY** until you hear the click sound.

   Click

   > *Note1 : Avoid heavily pressing the electrodes. Excessive muscle tension will affect the accuracy of measurement.*
   >
   > *Note2 : If the bottom electrode is released within 3 seconds, the measurement will be aborted.*
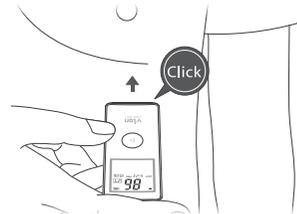
4. After 30 seconds measurement, the result will be displayed on LCD.

LCD Display
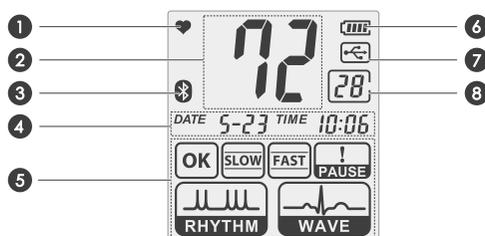
❶ **Heartbeat Indicator**

❷ **Heart Rate**

❸ **Bluetooth Connection**

❹ **Time and Date**

❺ **ECG Result Display**

❻ **Battery Level Indicator**

❼ **USB Connection**

❽ **Records No./Countdown**

Reviewing Measurement Records

When the ECG Pen is on, you may review the previous measurement results in cyclic order by pressing the power button repeatedly.

BP ECG Studio

1 Use the companion CD to install BP ECG Studio.

2 Create/select a user account and log in.

3 Plug the connector of USB extension cord into USB port of your computer.

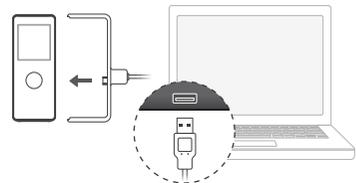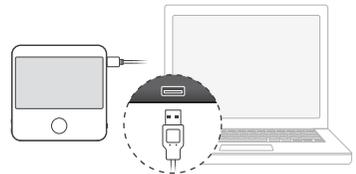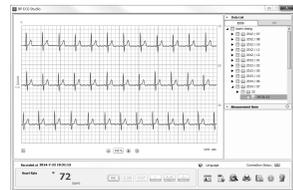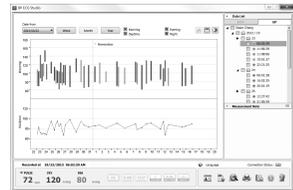# BP ECG Studio

4 You may review, manage and
generate reports of your BP/ECG
records after downloading.

OmniPAP Description
Main Features

Intended Use

The OmniPAP system is intended to be used in the treatment of adult OSA (Obstructive Sleep Apnea).

Upgradable Function

By connecting with the Integrated Upgrading Component, the OmniPAP CPAP system can be easily upgraded to APAP system with more powerful function. The air pressure delivered can change from only one constant air pressure to automatically increasing/decreasing the pressure depending on the condition of airway for you to experience a much more comfortable treatment in an economical way.

Ramp Feature

OmniPAP system provides "Ramp Function," which gradually increases the pressure to the prescription pressure setting in a preset period of time to allow you to fall asleep more comfortably.

Auto ON/OFF

When Auto ON/OFF is enabled, air delivery will start automatically after you breathe into the mask for 3 to 5 times, and the air delivery will automatically stop and return to Standby Mode after you remove the mask from your face for 30 to 60 seconds.

Altitude Compensation

The altitude where the OmniPAP system is used may influence the output pressure. Altitude Compensation can help OmniPAP system deliver pressure closer to the prescription pressure setting at higher altitude.

Main Unit Description
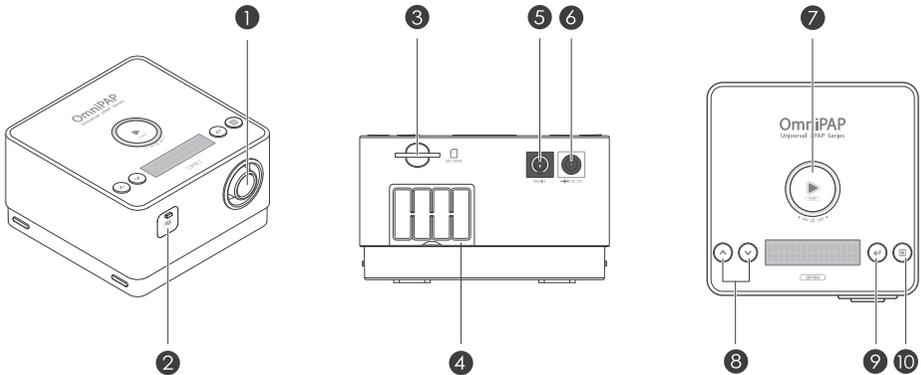
❶ **Air outlet**

❷ **Integrated Upgrading Component extension port (for OH850)**

❸ **SD card slot (for OH850)**

❹ **Filter cover**

❺ **Serial port**

❻ **Power socket**

❼ **START / RAMP / POWER OFF**
To start the treatment or the ramp period.

❽ **UP and DOWN**
To scroll selection options or adjust values in menu operation.

❾ **ENTER**
To apply the selected option/value in menu operation.

❿ **MENU**
To enter menu operation.

Integrated Upgrading Component Description
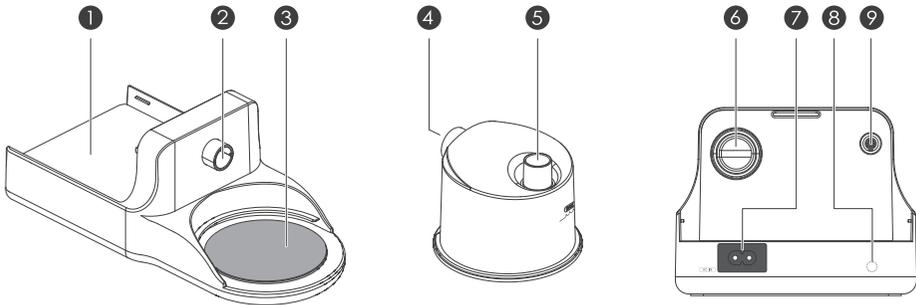
❶ **OmniPAP main unit placed area**

❷ **Air outlet**

❸ **Chamber placed area (heater)**

❹ **Chamber inlet**

❺ **Chamber outlet**

❻ **Air inlet**

❼ **Power plug port**

❽ **Humidifier indicator**
   Green light : Humidifier is on
   Orange light : the heater is heating

❾ **Connection port with main unit**

OP700
OmniPAP CPAP SETUP

Intended Use

1 Place the device on a stable surface beside the bed.

2 Connect the power adapter to the power supply connector at the rear end of the device, and plug the power cord to the wall outlet.
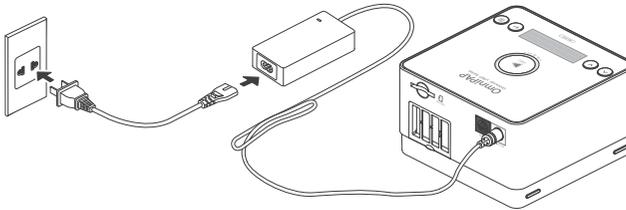
> *Note :* Make sure the power adapter will not be pulled during your treatment.

Set up the Mask

1 Assemble your mask system according to the mask user's manual.

2 Connect your mask to one end of the air tubing.

3 Connect the other end of the air tubing to the air outlet of the device.

OH850
OmniPAP APAP SETUP

Set up the Integrated Upgrading Component

Connect the Integrated Upgrading Component to the extension port of the device.
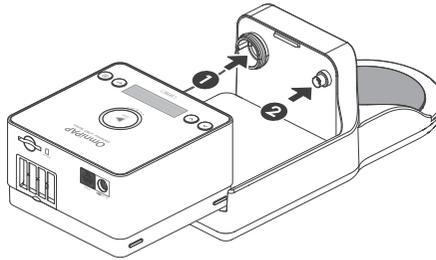
Note : Make sure the device is unplugged when you insert/remove the Integrated Upgrading Component.
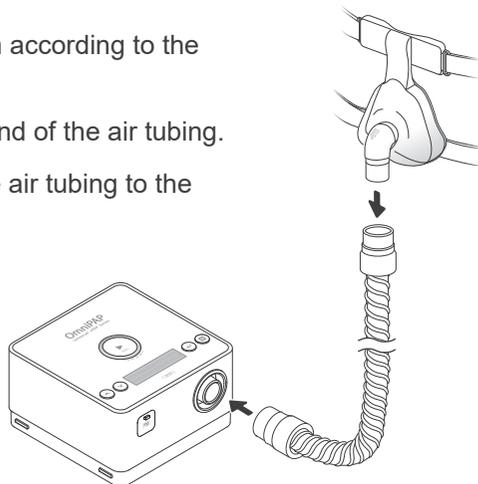
Install the System

1. Place the device on a stable surface beside the bed.

2. Connect the power adapter to the power supply connector at the rear end of the device, and plug the power cord to the wall outlet.
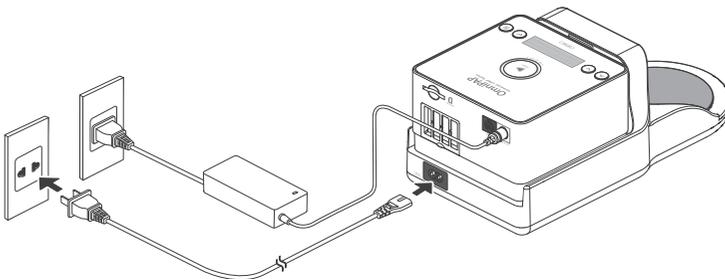
Note : Make sure the power adapter will not be pulled during your treatment.

OH850
OmniPAP APAP SETUP

Chamber

Pour the drinking water into the chamber, and do not exceed the maximum level.

Set up the Mask

1. Assemble your mask system according to the mask user's manual.

2. Connect your mask to the other end of the tubing.

HOW TO USE OmniPAP

Enter Standby Mode

After connecting to the power source, the device will enter the Standby Mode and LCD will display the welcome message.

```
OmniPAP
Welcome!
```

Start Air Delivery

1 Manually :

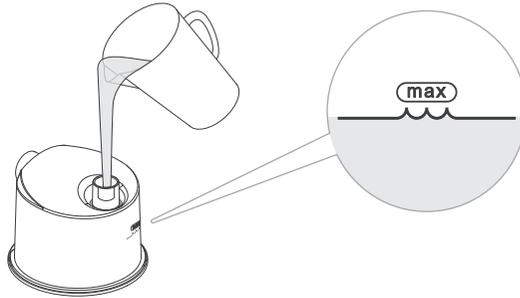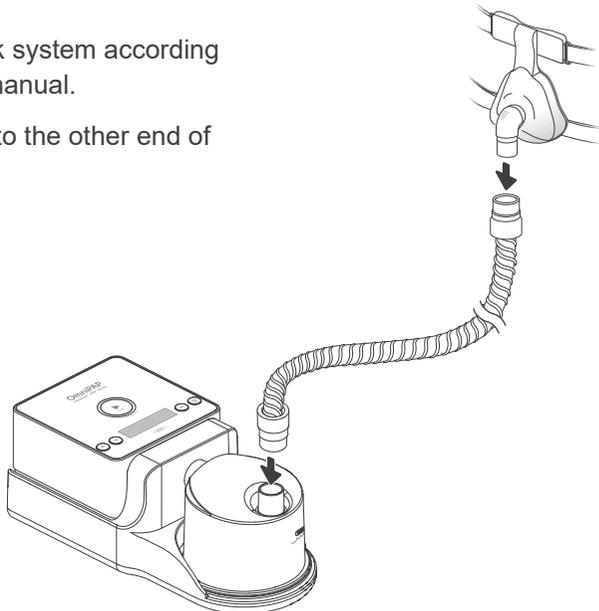Press the ▶ button and the air delivery will start immediately.

2 Automatically (OH850) :

When the Auto ON/OFF function is enabled, the air delivery will start automatically after you breathe into your mask directly for 3 to 5 times.

```
Auto ON/OFF
Enable
```

Note : *To enable the Auto ON/OFF function, please refer to Menu Introduction.*

Using the Ramp Feature

At the beginning of treatment, the "Ramp Function" will enable pressure to gradually increase to the prescription pressure setting in a preset period of time. The default ramp period is 10 minutes, and the delivered pressure will increase proportionally (OP700) or remain at the minimum pressure (OH850) during ramp period.

```
CPAP
Settling :10 min
```

Note : *To adjust the ramp period, please refer to Menu Introduction.*

HOW TO USE OmniPAP

Mask Fitting

Attach the mask to your face and adjust the mask position to ensure minimum or no leakage.

Start Treatment

Lie on your bed to start the treatment.

Stop Treatment

1 **Manually :**

After taking off your mask, press the 🔘 button for 3 seconds and the air delivery will stop immediately. The device will then return to Standby Mode.

2 **Automatically (OH850) :**

When the Auto ON/OFF function is enabled, the air delivery will stop automatically after you take off the mask for 30 to 60 seconds. The device will then return to Standby Mode.

> *Note : To enable the Auto ON/OFF function, please refer to Menu Introduction.*

MENU INTRODUCTION

To enter Clinician Menu, simultaneously press ⌄ and ↵ keys for 3 seconds at standby mode. Use ⌃ and ⌄ keys to scroll the options and increase/decrease the values, and use ↵ key to enter the selected option and to apply your selection.

OmniPAP Welcome!	Auto ON/OFF Enable
⌄	⌄
Therapy Mode CPAP	Humidity Setting 0
⌄	⌄
Settling Time 10 min	SET DATE/TIME 2012/09/26 11:06
⌄	⌄
Therapy Pressure 10.0 cmH2O	Compliance Time 12345.0 Hour(s)
⌄	⌄
Max. Pressure 15.0 cmH2O	Operation Time 12345.0 Hour(s)
⌄	⌄
Min. Pressure 5.0 cmH2O	Software Version 1.22
⌄	⌄
LCD Backlight Auto	Exit
⌄	

MENU INTRODUCTION

|	
`Init. Pressure` `10.0 cmH2O`	This option sets the pressure level at the start of ramp. It is adjustable between 4 cmH2O and Therapy Pressure in 0.5-cmH2O increments. The default value is 4 cmH2O.
`Therapy Mode` `CPAP`	The setting of OmniPAP working mode to be CPAP or APAP.
`Settling Time` `10 min`	Settling Time is adjustable between 0 and 45 minutes in 5-minute increments. Settling function is disabled when the value is 0. The default value is 10 minutes.
`Therapy Pressure` `10.0 cmH2O`	Option for CPAP. This is a prescription setting which controls the operating pressure. It is adjustable between 4 and 20 cmH2O in 0.5-cmH2O increments. The default value is 10.0 cmH2O.
`Max. Pressure` `15.0 cmH2O`	Option for APAP. This is a prescription setting which controls the maximum operating pressure. It is adjustable between 4 and 20 cmH2O in 0.5-cmH2O increments. The default value is 15.0 cmH2O.
`Min. Pressure` `5.0 cmH2O`	Option for APAP. This is a prescription setting which controls the minimum operating pressure. It is adjustable between 4 and 20 cmH2O in 0.5-cmH2O increments. The default value is 5.0 cmH2O.
`LCD Backlight` `Auto`	This option controls the backlight. Auto indicates the LCD backlight lasts for 15 seconds no matter which key is pressed. Enable indicates the backlight will shine eternally, and Disable indicates to turn it off. The default setting is Auto.
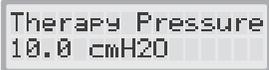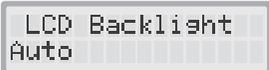
MENU INTRODUCTION

`Auto ON/OFF` `Enable`	Option for APAP. When the device is connected with the Integrated Upgrading Component, this function controls the automatic start/stop of the air delivery. "Enable" indicates to turn on the function, and "Disable" indicates to turn it off. The default setting is "Disable".
`Humidity Setting` `0`	To set 1~6 scale of humidity setting when operating with Integrated Upgrading Component. Set at O scale when not in use.
`SET DATE/TIME` `2012/09/26 11:06`	For setting Date/Time, use ▤ key to select the item and use ⌃ ⌄ keys to increase/decrease the value.
`Compliance Time` `12345.0 Hour(s)`	Compliance Time shows total number of hours (in 1/10 hour increments) that the device has been used with mask on. By pressing ⌃ and ⌄ keys simultaneously for 3 seconds, it can be cleared.
`Operation Time` `12345.0 Hour(s)`	Operation Time shows total number of hours (in 1/10 hour increments) that the device has been in operation. By pressing ⌃ and ⌄ keys simultaneously for 3 seconds, it can be cleared.
`Software Version` `1.22`	Displays the version of installed software.

MENU INTRODUCTION
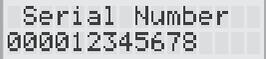
`Serial Number` `000012345678`	Displays the serial number of the device.
`Exit`	Press ↵ key to exit Menu Operation.

BIOMEDICAL