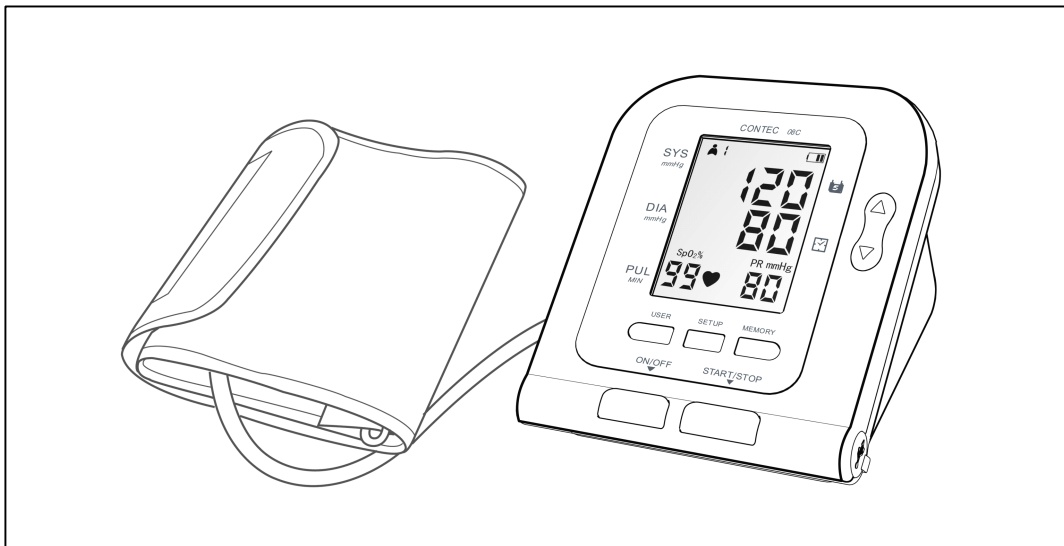


User Manual

Electronic Sphygmomanometer

Model CONTEC08C



- To assure the correct use of the product safety measures, please carefully read user manual before using.
- After reading, please validly keeping to refer and consult at any moment.

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Chapter1 Safety Precautions

- In order to use it correctly, please read the "Safety Precautions" carefully before using it.
- To prevent users from suffering hurt or damnification due to improper use, please refer to these "Safety Precautions" and use this product properly.

For safety reasons, be sure to comply with safety precautions.

Cautions

If not to use correctly, it exists that a potentially hazardous situation which may result in injury to the user or patient or damage to the equipment or other property.

Cautions

Self-diagnosis and treatment using measured results may be dangerous.

Follow the instructions of your physician.

Contact your physician for specific information about your blood pressure.

Please hand measurement results to the doctor who know your health to accept diagnosis.
For severe blood circulation disorder or arrhythmia patients, please use the device under the guidance of a doctor.

Otherwise it may lead to acute hemorrhage, or measurement error as a result of squeezed arm.

This device is intended for using in measuring blood pressure and pulse rate.

Do not use for any other purpose.

Otherwise it may cause accident or hold back..

Please use special cuff.

Otherwise it is possible that measurement result is incorrect.

Do not disassemble or attempt to repair the unit or components.

Otherwise it cannot gain accurate measurement.

Operation for AC Adapter (Separate Sale)

Cautions

Please use sold separately dedicated AC adapter.

Otherwise it may cause trouble.

Sold separately dedicated AC adapter be sure to use the AC 220V. Be sure to use a separate socket.

Otherwise it may cause electric shock or injury.

When sold separately dedicated AC adapter plug or wire breakage, please immediately pulled the plug from the socket.

Otherwise it may cause electric shock or injury.

Do not plug or unplug the adapter power cord with wet hands.

Otherwise it may cause electric shock or injury.

Operation for battery

Cautions

Please use 4 "AA" size manganese or alkaline batteries, do not use batteries of other types.

Otherwise it may cause fire.

New and old batteries, different kinds batteries can not be confusion.

Otherwise it may cause battery leakage, heat, rupture, and damage to Electronic Sphygmomanometer.

+ and - polarities of the batteries must match the polarities of the battery compartment as indicated. When the batteries power exhausts, replace with four new batteries at the same time. Please take out the batteries when you do not use the device for a long time (more than 3 months).

Otherwise it may cause battery leakage, heat, rupture, and damage to Electronic Sphygmomanometer.

If battery fluid get in your eyes, immediately rinse with plenty of clean water.

Contact a physician immediately.

Otherwise it will cause blindness or other hazards.

If electrolyte of the batteries immodestly glues on the skin or the clothes, please immediately flush with a great deal of clear water.

Otherwise it may hurt the skin.

Advice

Do not subject the device to strong shocks, such as dropping the unit on the floor.

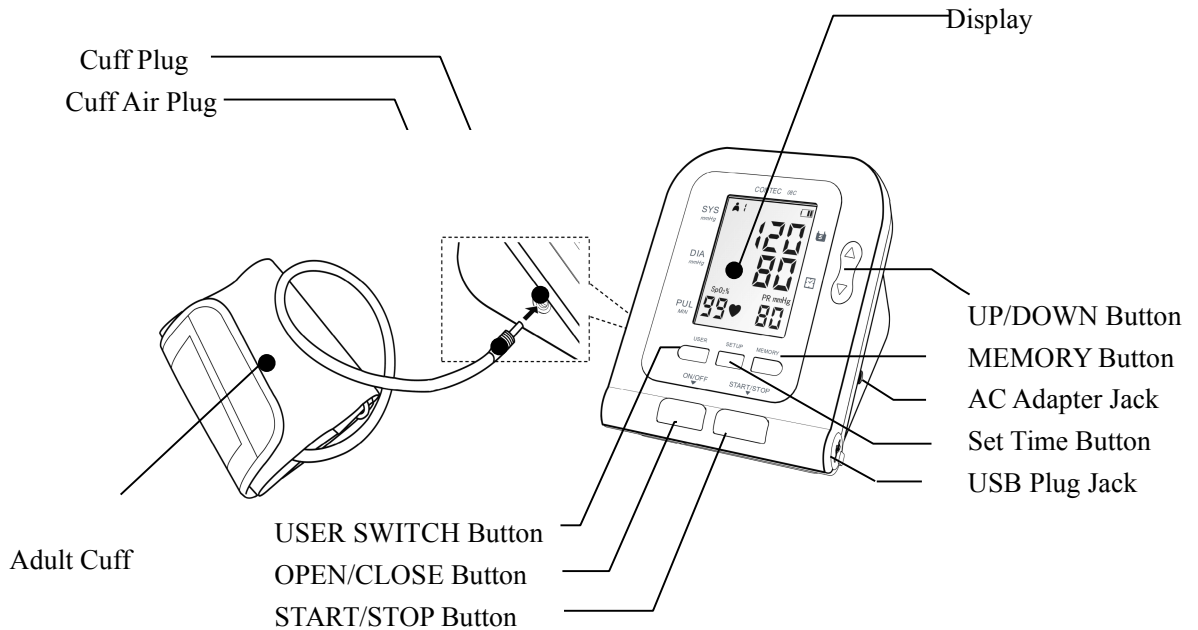
Do not add pressure before cuff wraps around the arm

Do not force the cuff and the cuff air tube bending

The device applies measurement Blood Pressure (BP) and Pulse of adult .

Chapter2 Main Unit

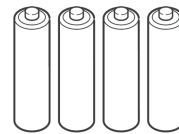
The production is in the package .Open the package and confirm whether the production is whole.



Accessories:

Adult Cuff

Dry Battery

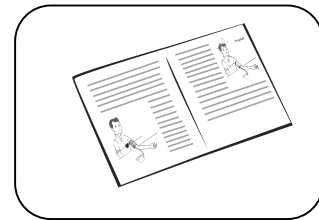
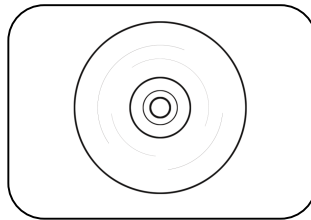
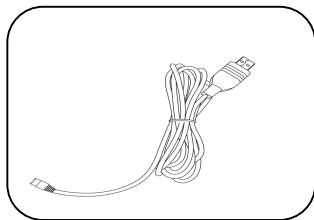


(Specification: limb circumference 22-32cm (middle part of upper arm), please choice suited cuff when measuring other.)

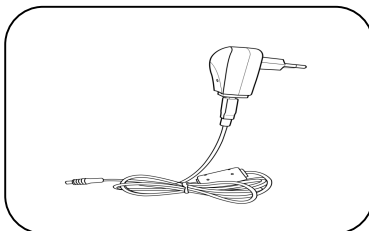
USB Data Line

Software CD

User Manual



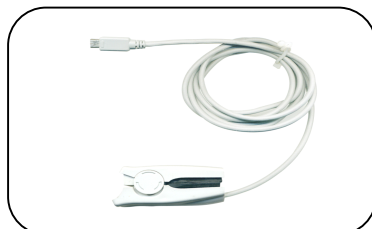
Separate Sale:



AC Adapter

Input AC100-240V 50/60Hz AC 150mA

Output DC 6.0V±0.2V 1.0A



SpO₂ Probe Y10UCH150

SpO₂ Measurement Range 35%~ 100 %

Measurement Accuracy 70% ~ 100% ±2 %

Pulse Measurement Range 30 ~ 250bpm

Chapter3 Button Functions

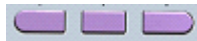
All the operations to the Electronic Sphygmomanometer are through the buttons. The names of the buttons are above them. The buttons are listed. As follows:



【ON/OFF】 Press the button and the system will start. Press the button for a long time and the device will boot-strap or close.



【START/STOP】 Press to inflate the cuff to start a blood pressure measurement. When measuring, press it to cancel the measurement and deflate the cuff.



Left button **【USER】** uses to switch user.

Middle button **【SETUP】** uses to set year, month, date.

Right button **【MEMORY】** uses to review user data.



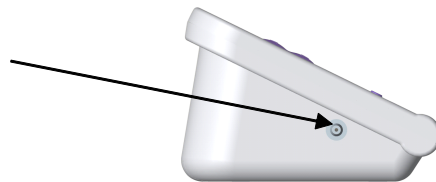
Up and down buttons respectively carry on the functions that changing date and switching state by up or down moving the cursor.

Chapter4 External Interfaces

⚠ Note ⚠

When removing NIBP cuff, please take the front of the tracheal to pull the plug.

① Cuff Socket



left side

The right side of the instrument is USB socket and AC adapter socket.

① USB socket

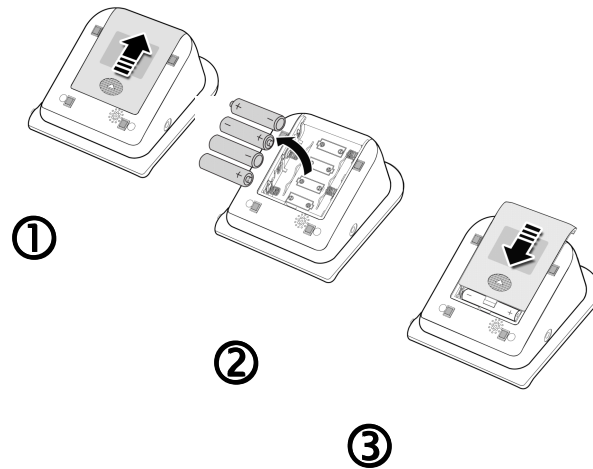
② AC adapter socket



right side

Chapter5 Dry Battery/AC Adapter Installation

The production can use dry battery and AC adapter.



5.1 Dry Battery Installation

- ① Press the▲indicator on the battery cover and slide the cover off in the direction of the arrow.
- ② Install 4 "AA" size dry batteries so the +(positive) and – (negative) polarities match the polarities of the battery compartment as indicated.
- ③ Replace the battery cover.

Icon “”: the batteries power will exhaust.

Replace with four new batteries(the same sort) at the same time.

Turn the unit off before replacing the batteries.

⚠ Note ⚠

Dispose of the batteries according to applicable local regulations about environmental.

5.2 Using the AC Adapter

- ① Connect device and the AC Adapter. Insert the AC Adapter Plug into the AC Adapter Jack on the right side of the device.
- ② Plug the AC Adapter into a 220V AC outlet.

⚠ Note ⚠

Hold and pull the power to remove the AC Adapter from the electrical outlet. Do not remove by pulling on the cord, and then remove the AC Adapter plug from the device. Please be sure to use dedicated AC adapter.

⚠ Note ⚠

When adapter and dry battery are used at the same time, the dry battery can not be consumed. Switch adapter and battery as power supply when the device is off, otherwise

the device may shutdown due to power failure.

Chapter6 Setting The Date And Time

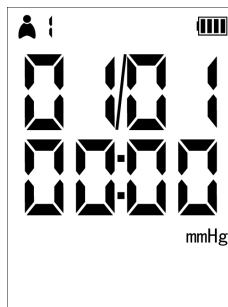
- It is necessary to set date and time after turning on the device.
- The Electronic Sphygmomanometer automatically stores measurement results with date and time.
- If dry battery power exhausts or removed ,then, after the device turned on, the date resumes from the last setting value and the time from 00:00:00, set the date and time again

The Electronic Sphygmomanometer stores the measure results of three users automatically, and up to 99 items for every user.The results can be uploaded to PC via USB and processed with the PC software. If the date and time are set correctly, the measurement data and time will be stored correctly in the memory, otherwise it may not be correct.

⚠ Note ⚠

If correctly use data upload function:

1.Turn on the device to enter the main interface shown as the follow:



2.Press **【SETUP】** button to enter the setup date and time, LCD will display 2009.

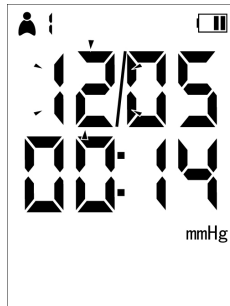


3.Every press **【UP】** button to make the number increase 1, press **【DOWN】** buttons to make the number reduce 1.

⚠ Note ⚠

The year can be set between 2000 and 2099. When the display reaches 2099, it will return to 2000.

4.When displaying year on the screen, press **【SETUP】** button to confirm the setup value, and enter the next step, if you want to end the setup, press **【MEMORY】** button.



5.Repeat the 3 and 4 steps to set month and day.

6.Repeat the 3 and 4 steps to set hour and minute.

7.After completing the above steps ,press 【SETUP】 / 【MEMORY】 button to end.

Reset the date and time

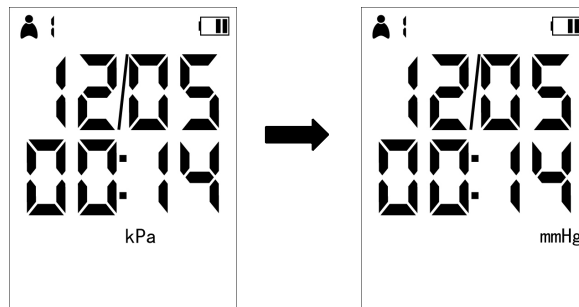
Reset the date and time according to 2~7 items of chapter 6.

Chapter7 Unit

There are two units: "mmHg" and "kPa".

The default is: "mmHg".

To switch "mmHg" and "kPa" units, press 【UP】 or 【DOWN】 button for more 5 seconds. In the same way, if you want to switch as "mmHg", press 【UP】 or 【DOWN】 button for more 5 seconds.

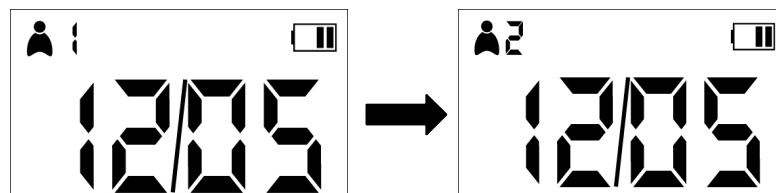


Chapter8 User Switch

The Electronic Sphygmomanometer stores the measure results of three users automatically, and up to 99 items for every user.

Press 【USER】 button in time interface to switch users.

You can also switch in the memory interface. (Refer to section 11.1)

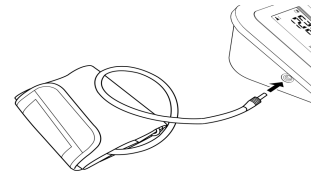


Chapter9 Applying the Arm Cuff

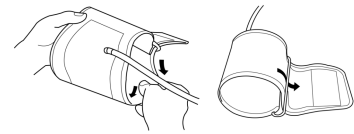
The measurement can be carried out by applying the cuff on left or right arm.
Remove tight-fitting clothing from your upper arms.
Carry out the operation in a room with comfortable temperature.

When measuring, take the thick clothes off instead of rolling up the sleeves.
In order to measure accurately, pay attention to applying the cuff properly (left arm).

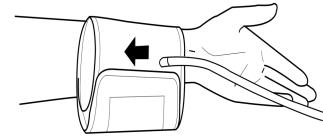
① Make sure that the air plug is securely inserted in the main unit.



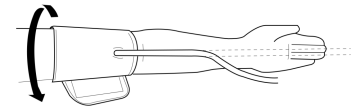
② Stretch cuff into a barrel, as the arm can conformable enter into the barrel.



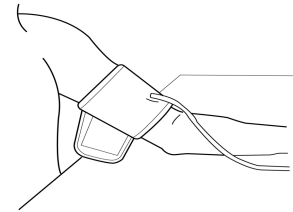
③ Arm penetrate throught the cuff, the air tube of the cuff will pass the top of your palm



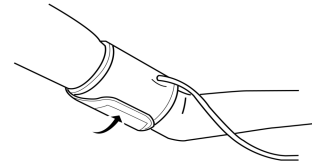
④ Apply the cuff to your upper arm. The color marker is on the inside center of your arm and make the air tube aligned with your middle forger.



⑤ The bottom of the cuff should be approximately 2cm~3cm above your elbow.



⑥ Be fixed with cloths, and wrapped tight cuff, the arm and the cuff should not have gaps.

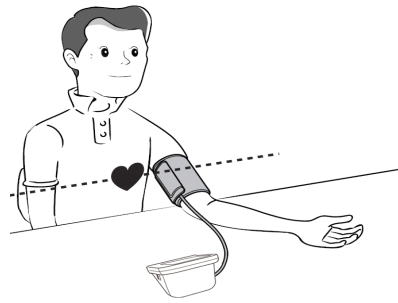


Chapter10 BP Measurement

10.1 Accurate Measurement Way

Measurement in quiet and relaxing state.

1. Place your arm on a table.
2. The cuff is level with your heart.
3. The palm of the hand is up, and the body relax.



Try to measure your blood pressure at the same time every day with the same arm and the same pose for consistency.

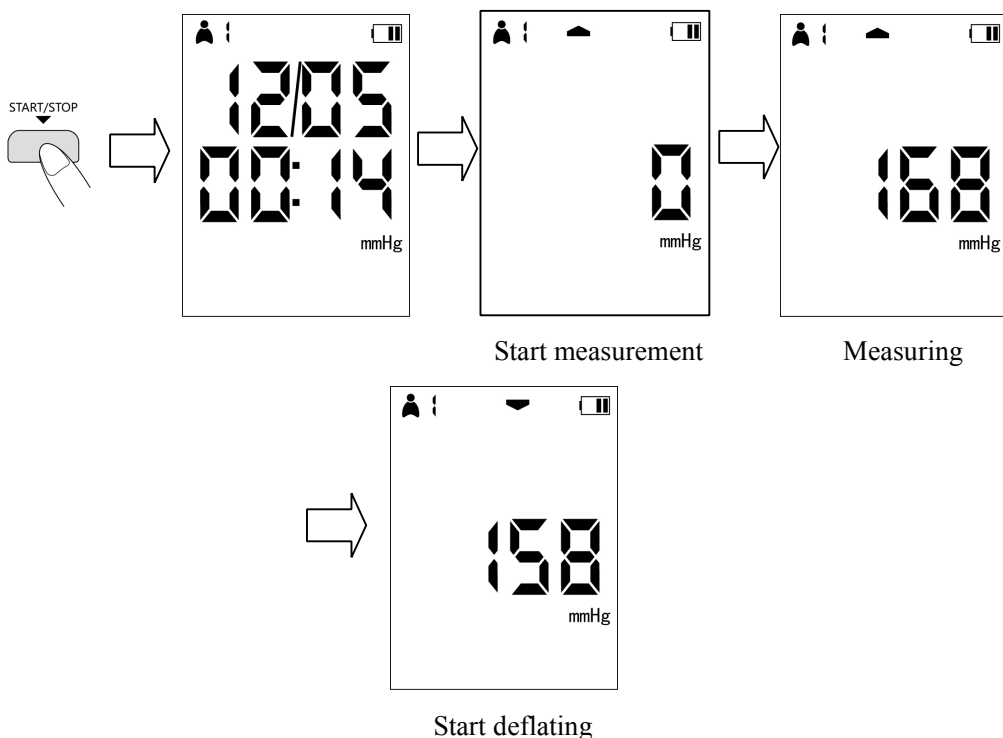
The high and low location of cuff will cause changes in measurement results.
Do not touch unit, cuff and windpipe during measurement.

Measurements should be taken in a quiet place and the body should relax.

Remain still 4~5 minutes before measurement.
Relax the body, do not let the muscle activity.
Do not talk and move during the measurement.
Wait 4~5 minutes between measurements.
Do not use a cellular phone near the device.

10.2 Measurement BP

① Press **【START/STOP】** button to take a measurement.

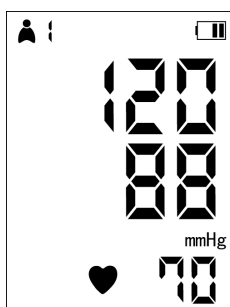


During measurement, please keep correct pose and quiet state, the body could not move.

Stop Measurement

Press **【START/STOP】** button, The device will stop inflating, start deflating and then will back time interface.

②End measurement after displaying measurement values.



③Confirm Measurement Value

Measurement value can be automatically stored.([Use memory function] refer to chapter 11)


*Self-diagnosis and treatment using measured results may be dangerous. Follow the instructions of your physician.

⚠ Note ⚠

- **Wait 4-5 minutes between measurements.**

Repeated measurements, because the arm appears congestion, it may not get correct blood pressure measurement. After the blood flow, take a measurement again.

- If the body move in measuring, icon  will appear ,you should keep the body still, and restart a measurement.

- When the screen appear 

Err
Oxx

, the measurement can not carry. (refer to chapter 16)

④Press any button to return the date and time interface.

⑤Take down cuff, press **【ON/OFF】** button to turn the device off.

*The device will automatically turn off after five minutes in which there is no operation to the device, even if you forget to turn the power off.

Chapter11 Memory Function

The device is designed to store the blood pressure, the pulse rate and measurement data and time, which can display 99 measurement results.Press **【USER】** button to switch users, the switch function can be disabled in measuring and setting the date and time.

- The device automatically stores up to 99 sets of measurement values. When 100 sets of measurement values are stored, the pioneer record is deleted to save the latest datas.

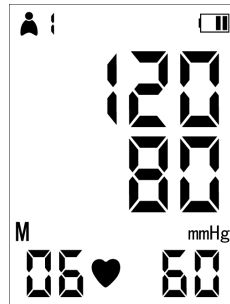
- The memory function can not be used in measuring.

- If no measurement values, the memory values can be not numerated.

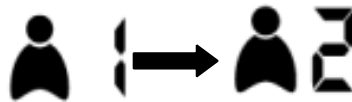
11.1 Review The Memory Value

1. Press **【MEMORY】** button can display the recent measurement results. When numerate the

memory values, display the memory values number from 1 to 99. [^M 06] M shows the memory value, number shows the measurement time.

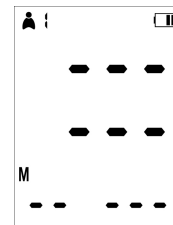


2. Every time press **【UP】** / **【DOWN】** button to circularly switch the former measurement values.



3. Press **【USER】** button to switch the users to view the memory result.

*The right figure show that there is not visible Measurement results.



4. End to display the measurement values.

Press **【MEMORY】** to return the time interface or press **【ON/OFF】** button to turn the power off.

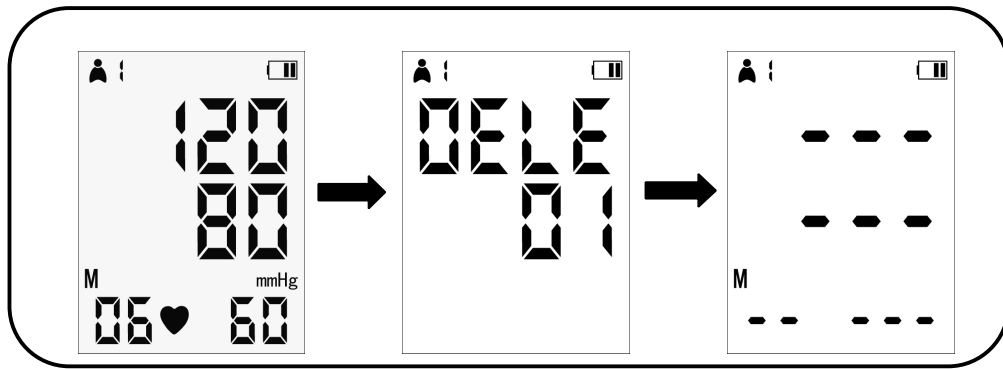
* The device will automatically turn off after five minutes in which there is no operation to the device, even if you forget to turn the power off.

11.2 Delete Memory Values

User cannot partially delete values stored in the memory. All values of every user will be deleted.

1. During numerate the measurement record

Press **【SETUP】** button for more 5 seconds to delete all measurement results of the current user, as the following figure.



2、 End Operation

Press **【MEMORY】** to return the time interface, or press **【ON/OFF】** button to turn the power off.

*The device will automatically turn off after five minutes in which there is no operation to the device, even if you forget to turn the power off.

Chapter12 SpO₂ Measurement Function(Separate Sale)

Please pay attention to:

⚠ Warning ⚠

◎ **Pulse oximeter can overestimate the SpO₂ value in the presence of Hb-CO, Met-Hb or dye dilution chemicals.**

◎ ES (Electrosurgery) equipment wire and SpO₂ cable must not be tangled up.

◎ Do not put the sensor on extremities with arterial catheter or venous syringe.

◎ Do not perform SpO₂ measuring and NIBP measuring on same arm at one time, because obstruction of blood flow during NIBP measuring may adversely affect the reading of SpO₂ value.

⚠ Note ⚠

◎ Make sure the nail covers the light window.

◎ the wire should be on the backside of the hand.

◎ SpO₂ value always displays in the fixed place.

⚠ Warning ⚠

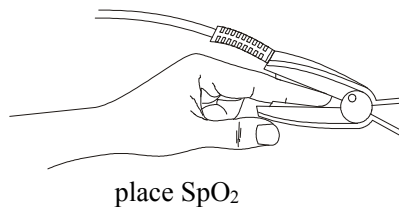
Ⓞ **Check if the sensor cable is in normal condition before monitoring. After unplugging the SpO₂ probe cable from the socket, the %SpO₂ and bmp will disappear.**

Ⓞ Do not use the SpO₂ probe once the package or the sensor is found damaged. Instead, you shall return it to the vendor.

Ⓞ Prolonged and continuous monitoring may increase jeopardy of unexpected change of dermal condition such as abnormal sensitivity, erubescence, vesicle, repressive putrescence, Particularly in newborns or in a Perfusion disorders and changes or immature skin form of the patient. According to skin quality change, correct optical path alignment and attachment methods to regularly check the place of SpO₂ probe, and change the attachment position when the quality of skin decline. More frequent examinations may be required for different patients.

Chapter13 Monitoring Procedure

1. Attach the sensor to the appropriate site of the patient finger as following figure.



2. Plug the connector of the SpO₂ probe cable into the USB socket on the lower right of Electronic Sphygmomanometer.

Measurement Limitations

In operation, the accuracy of oximeter readings can be affected by:

- High-frequency electrical noise, including noise created by the host system, or noise from external sources, such as electrosurgical apparatus connected to the system.
- Intravascular dye injections.
- Excessive patient movement.
- External light radiation.
- Improper sensor installation or incorrect contact position of the patient.
- SpO₂ probe temperature (optimal temperature between 28°C and 40°C).
- Placement of the SpO₂ probe on an extremity that has a blood pressure cuff, arterial catheter, or intravascular line.
- Significant concentrations of dysfunctional hemoglobin, such as carboxyhemoglobin and methemoglobin.
- SpO₂ too low.
- Bad circular injection of the part being measured.
- It is required to use SpO₂ probe which is provided by our company, contact with our sale department when changes SpO₂ probe.

Chapter14 Maintenance and Cleaning

Warning

Turn off the device before cleaning the device or the SpO₂ probe.

Caution

- Do not subject the sensor to autoclaving.
- Do not immerse the SpO₂ probe into any liquid.
- Do not use any SpO₂ probe or cable that may be damaged or deteriorated.

Cleaning:

- Use a cotton ball or a soft mull moistened with hospital-grade ethanol to wipe the surface of the SpO₂ probe, and then dry it with a cloth. This cleaning method can also be applied to the luminotron and receiving unit.
- The cable can be cleaned with 3% hydrogen dioxide, 70% isopropanol, or other active reagent. However, connector of the SpO₂ probe shall not be subjected to such solution.

Chapter15 Installation Of The Software

15.1 Demand Of Editor

Pentium IV 1.8G or more

Operation System: Windows XP

EMS memory: 256M and more

Hard Disk: 40G or more

Display: 17 inch or more

CD-ROM

USB: 2 or more

Resolution of printer: 600 DPI

15.2 Installation Of Software

- 1、 Place the CD-ROM in the CD-ROM compartment located on your computer.
- 2、 If Auto Play for CDs is enabled, place CD in reader and follow instructions when they appear in the screen; otherwise follow install instructions below:

Open Windows Explorer.

Click on the root CD-ROM directory.

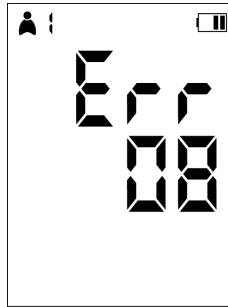
Double click file Contec08C_Setup.EXE.

Follow the instructions in the screen.

Refer to "Software Help" for details about the operation method of the PC software.

Chapter16 Error Message

In the event that measurement is abnormal, the error message prompts will display. As the following figure: when the high pressure position appears "Err" and the low pressure position appears the error number, the measurement can not normally carry.(Error numbers are 02, 06~13,15, 19)



Error Mark	Causes	Solutions
Err02 Err15	The exceptional function cause trouble	Please contact our company
Err06	Cuff is not connected correctly.	Correctly connect cuff (refer to chapter 9)
Err07	Cuff plug fall off	Make sure the cuff plug is securely inserted in the windpipe (refer to chapter 9)
Err08	Atmospheric pressure error	Keep arm, body still, again measure
Err09	Object measuring the pulse is too weak or the cuff is loose.	Correctly connect cuff (refer to chapter 9)
Err10	Cuff is blocked or squeezed	Correctly connect cuff (refer to chapter 9)
Err11 Err12 Err13	The signal range is too big owing to the arm or body moving or other reasons in measurement	Keep arm, body still, again measure
Err19	It spends too much time	

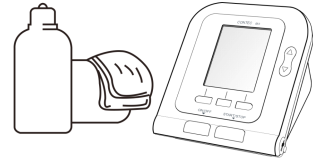
Chapter17 TROUBLESHOOTING

Exceptional Phenomenon	Causes	Solutions
BP measurement values too high or too low.	Cuff is not connected correctly.	Correctly connect cuff (refer to chapter 9)
	Talk or move arm in measurement	Keep quiet and restart a measurement
	The turnup close oppress the arm	Shuck off the close which oppress the arm, and restart a measurement
No pressure	Cuff leakage	Buy a new cuff
	The cuff windpipe is not correctly connected with cuff	Correctly connect
Cuff deflate in short time	Loose cuff	Correctly tangle cuff
It can not carry on measurement ,even if press the measurement button		Return on the power and restart a measurement
Abruptly turn the power off in adding pressure	No use for a long time, the dry batteries can be exhausted owing to the changed temperature	Replace all four batteries with new ones.
After press the boot-strap button ,no any display	Batteries are worn	Replace all four batteries with new ones.
	The battery polarities is reversed	Check the battery installation for proper placement of the battery polarities.
Other phenomenon		Press power button and restart a operation. Replace the batteries, if no,please contact our company.

Chapter18 Care And Maintenance

*Please follow the instructions in the the user manual. If you do not comply, the Company will not assume responsibilities for quality.

- Frequently clean the Blood Pressure.
- If the unit has dunghill, Clean the unit with a soft dry cloth.
- If the unit is particularly dirty, you can clean it with a soft cloth dampened with water or neutral detergent after the cloth can be full twisted.



Warning

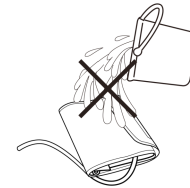
Do not submerge the device in water.

Advice

- Do not use any naphtha, thinner or gas to clean.



- Do not attempt to clean or wash the cuff.



Keeping:

Advice

Do not place the machine on the following areas:

- Easy to splash water areas.
- Direct sunlight, extreme hot, humidity, dust, causticity gas areas.
- Lean or the area which can cause vibration, impact.
- Chemicals or corrosive gas storage areas.
- Remove the batteries if the unit will not be used for long time (more three months).



Chapter19 Specification

Name	Electronic Sphygmomanometer
Model	CONTEC08C
Harmful liquid proof degree	Ordinary equipment (sealed equipment without liquid proof)
Display	2.8" Code Segment LCD Display
NIBP Specifications	
Measurement Method	Oscillometric method
Working modes	Automatic
Measurement Range	Pressure: 0~290mmHg (0~36.0kPa) Pulse: 40~240/min
Resolution	
Pressure	1mmHg
Measurement Accuracy	
Cuff Pressure Accuracy	±3mmHg
Error	The BP Value of the device is equivalence with the measurement value of Stethoscopy, which error accord with request of YY0667-2008.
Operating Temperature/ Humidity	+5°C~40 °C . 15%RH~80%RH
Transport and Storage Temperature/Humidity	-20°C~+55°C . ≤95%RH
Atmospheric pressure	80KPa~105KPa
Battery	4 "AA" alkaline batteries, AC Adapter (AC 220V) separately sold
Main Unit Dimensions	130*110*80mm
Main Unit Weight	300 gram
Anti-electroshock type	II class BF digital device

Accessories	Normal Configure: Adult Cuff: limb circumference 22-32cm (upper arm center) Soft CD, User Manual, USB data line, four "AA" alkaline batteries Separate Sale: AC Adapter Input: AC 100-240V 50/60Hz AC 150mA Output: DC 6.0V±0.2V 1.0A SpO ₂ Probe: Y10UCH150 SpO ₂ Measurement Range: 35%~ 100 % Measurement Accuracy: 70% ~ 100% ±2 % Pulse Measurement Range: 30 ~ 250bpm
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