

CE 0123

TRANSTEK

User Manual

Blood Pressure Monitor LS805-B

Arm Type



CE 0123

 Bluetooth[®]
SMART GUANGDONG TRANSTEK MEDICAL ELECTRONICS CO.,LTD
Zone A, 5/F., Investment Building, No. 12, Huizhan East Rd., Torch
Development District, Zhongshan, Guangdong, 528437, China

EC REP

MDSS - Medical Device Safety Service GmbH
Schiffgraben 41, 30175 Hannover, Germany

- Thank you very much for selecting TRANSTEK Blood Pressure Monitor LS805-B.
- Please do read the user manual carefully and thoroughly so as to ensure the safe usage of this product, and keep the manual well for further reference in case you have problems.

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Thank you for selecting TRANSTEK arm type blood pressure Monitor (LS805-B). The monitor features blood pressure measurement, pulse rate measurement and the result storage. The design provides you with two years of reliable service.

Reading taken by the LS805-B are equivalent to those obtained by a trained observer using the cuff and stethoscope auscultation method.

This manual contains important safety and care information, and provides step by step instruction for using the product.

Read the manual thoroughly before using the product.

Features:

- 128mm x 50mm Blue LCD display with white backlight
- Up to 60 pieces of record stored for each user
- Measure-during-inflating Technology

♥ Safety information

The below signs might be in the user manual, labeling or other component. they are the requirement of standard and using.

	Symbol for "THE OPERATION GUIDE MUST BE READ"		Symbol for "TYPE BF APPLIED PARTS"
	Symbol for "COMPLIES WITH MDD93/42/EEC REQUIREMENTS"		Symbol for "ENVIRONMENT PROTECTION – Waste electrical products should not be disposed of with household waste. Please follow local guidelines."
	Symbol for "MANUFACTURER"		Symbol for "DIRECT CURRENT"
	Symbol for "SERIAL NUMBER"		Symbol for "Authorised Representative in the European Community"
	For indoor use only		Symbol for "Class II Equipment"
	The Bluetooth Combination Mark		T1A/250V Φ3.6*10CCC
	Symbol for "MANUFACTURE DATE"		



CAUTION

Please do read this user manual carefully and thoroughly before use.

This device is intended for adult use in the home/domestic only.

This device is intended for non-invasive measuring and monitoring of arterial blood pressure. It is not intended for use on extremities other than the upper arm or for functions other than obtaining a blood pressure measurement.

Do not confuse self-monitoring with self-diagnosis. This unit allows you to monitor your blood pressure. Please start or end medical treatment basing solely on physician's treatment advice.

If you are taking medication, consult your physician to determine the most appropriate time for your measurement. Never change a prescribed medication without your physician's consent.

This unit is not suitable for continuous monitoring during medical emergencies or operations.

If the pressure of the cuff exceeds 40 kPa (300 mmHg), the unit will automatically deflate. Should the cuff not deflate when its pressure exceeds 40 kPa (300 mmHg), detach the cuff from the upper arm and press the homologous button to stop inflation.

Do not use the monitor under the conditions of strong electromagnetic field (e.g. mobile) that radiates interference signal or electrical fast transient / burst signal, especially when the AC adaptor is applied.

Do not touch the output of AC adapter and the patient simultaneously.

The device is not AP/APG equipment. It is not suitable for use in the presence of a flammable anesthetic mixture with air (or oxygen, nitrous oxide).

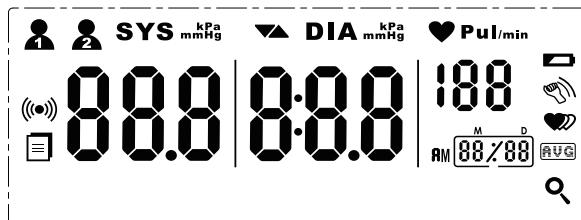
Please keep the unit out of reach of infants or children, since inhalation or swallowing of small parts is dangerous or even fatal.

Please use ACCESSORIES and detachable parts specified / authorised by MANUFACTURER. Otherwise, it may cause damage to the unit or danger to the user / patient.

The materials of the cuff have been tested and found to comply with requirements of ISO 10993-5: 2009 and ISO 10993-10:2010. It will not cause any potential allergic reaction or contact injury.

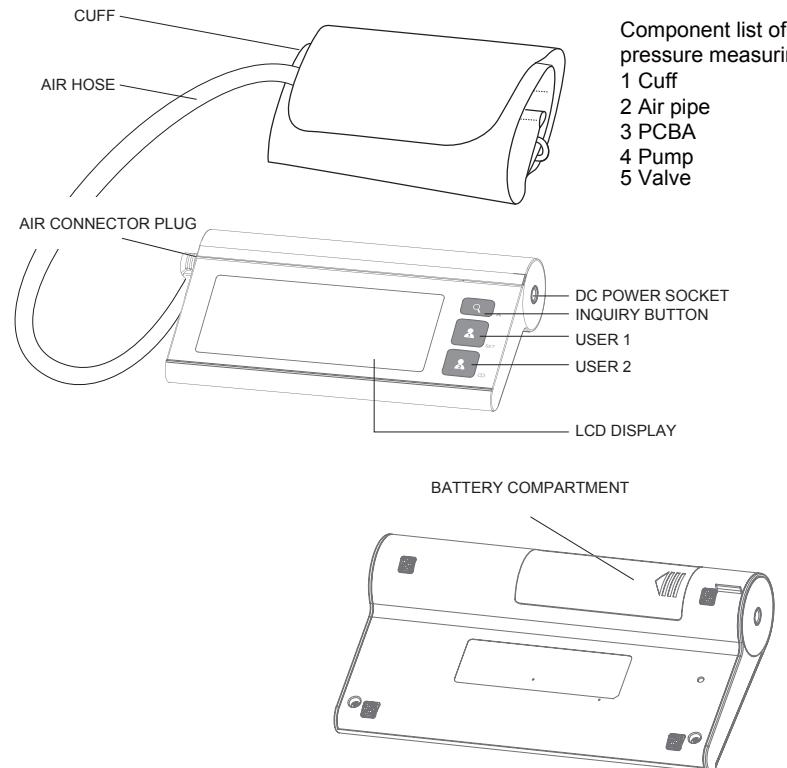
Please make sure the unit functions safely and it is in proper working conditions before use.

♥ LCD Display Signal



SYMBOL	DESCRIPTION	EXPLANATION
SYS	Systolic Blood Pressure	High blood pressure
DIA	Diastolic Blood Pressure	Low blood pressure
Pul/min	Pulse per minute	Beats per minute, BPM
1	User 1	Start measurement for user 1 and transmit the measuring result
2	User 2	Start measurement for user 2 and transmit the measuring result
Heartbeat	Heartbeat	Heartbeat detection during the measurement
Data Pending to Transmit	Data Pending to Transmit	Measurement data stored in the equipment
Data Transmitting	Data Transmitting	Data is transmitting
Avg	Average Value	Average value of last three measurements
Shock	Shocking reminder	Shocking will result in inaccurate
Low Battery	Low Battery	Low battery and please replace the batteries
mmHg kPa	Unit	Measurement unit of blood pressure (1mmHg=0.133kPa) (1kPa=7.5mmHg)
RM 88/88	Current Time	Month/Day (Hour:Minute)
Deflate	Deflating	Exhaust the air in the cuff
Search	Data Enquiry Mode	Recall the records
Arrhythmia	Arrhythmia	Irregular Heartbeat
Memory	Memory	Display the serial number of the measurement

♥ Monitor Components

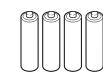


♥ List

- 1.Blood Pressure Monitor
(LS805-B)



3. 4*AAA alkaline batteries



- 2.Cuff (Type BF applied part) (AC2232-03)
(Please use TRANSTEK authorized cuff.)



- 4.User manual

♥ The Choice of Power Supply

1.Battery powered mode:

6VDC 4*AAA alkaline batteries

2.AC adaptor powered mode:

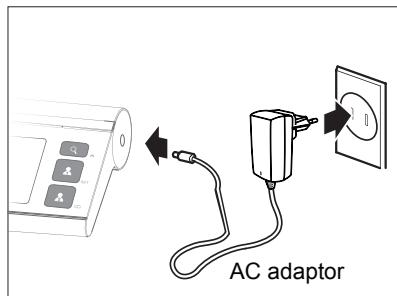
100-240V~, 50-60HZ,400mA

(Can be supplied by AC adaptor model
UE08WCP-060100SPA only!)

Please unplug the adaptor to depart from the using utility power.

Note:

The adaptor interface is located on the right side of the monitor. Place NO obstacles on the right side for easy pull-off adaptro.



In order to achieve the best performance and protect you monitor, please use the authorized / specified battery and power adaptor.

♥ Installing and Replacing the Batteries

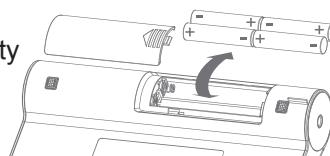
1. Open the battery door.

2. Insert the batteries according to the polarity indications.

3. Close the battery door.

Battery Life: Approx. 44 days

(Battery capacity: 600 mAH. If measured three times per day, each measurement takes 35s, measuring result display takes 20s and data transmission takes 10s. The current for measurement is 400 mA and that for records display and data transmission is 50 mA and 50 mA separately, while the current when shutdown is 35 uA.



Replace the batteries under following circumstances:

- displays on the LCD.
- The LCD display dims.
- When powering on the monitor, the LCD doesn't light up.



- Remove batteries if the device is not likely to be used for some time.
- Worn batteries are harmful to the environment. Do not dispose with daily garbage.
- Remove the old batteries from the device following your local recycling guidelines.

♥ Setting Date, Time and Measurement Unit

Please proceed to time setting before your initial use so as to ensure each piece of record is labeled with a time stamp.

NOTE: The monitor will shut off in 60 seconds after last operation when in Setting Interface.

1. When the monitor is OFF, press and hold "User 1" button to enter Time Setting Mode.



2. As picture on the right, the blinking numeral represents the [HOUR]. Press "Query" button to change the numeral. Each press will increase the numeral by one in a cycling manner.



3. Press "User 1" button to confirm the [HOUR]. Then the monitor diverts to [MINUTE] setting .



4. Repeat step 2 and 3 to confirm the [MINUTE]. Then the monitor diverts to [MONTH] and [DAY] setting.



MONTH



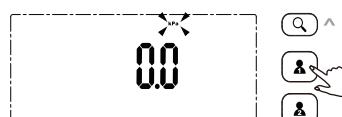
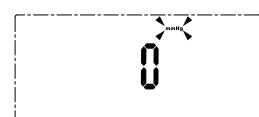
DAY

5. Repeat step 2 and 3 to confirm [MONTH] and [DAY]. Then the monitor diverts to [YEAR] setting.



YEAR

6. Repeat step 2 and 3 to confirm [YEAR]. Then the monitor diverts to [UNIT] setting.



7. After confirming the measurement unit, the LCD will display "dOnE" and the monitor will shut off.



♥ Install App and Pair-Up

With the advanced Bluetooth 4.0 technology applied, the mobile or portable equipments, which are equipped with Bluetooth function in line with BLE Technical Specifications as well as BLP Protocol established by global organization Bluetooth SIG, are capable to receive your personal health data.

Just simply install the specially-designed app and pair up you scale with your mobile or portable equipments. Then you may enjoy the comprehensive health solution provided by Transtek.

1. The App is now available in App Store



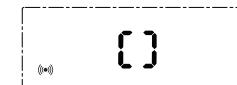
You may search the app, then download and install the app in your iPhone. Simple and convenient!

2. Turn on Bluetooth and the App. Make sure both are ON when pair-up is proceeding.

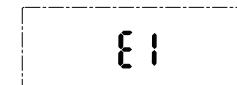
3. When the monitor is off, press and hold "User 2" button to start pair-up. Symbol and symbol will be shown on the LCD alternatively, indicating Pair-up is proceeding.



If SUCCEED, symbol will be shown on the LCD.



If FAIL, symbol will be shown on the LCD.



Bluetooth Module No.: AW8001

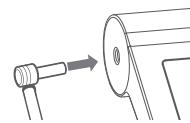
RF Frequency Range: 2402 MHz to 2480 MHz

Output Power Range: 4 dBm

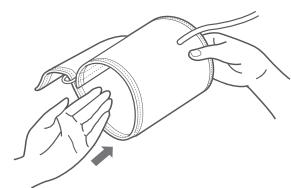
Supply Voltage: 3-3.6 V

♥ Apply the Cuff

- 1.Insert the plug of cuff's air pipe into the interface located on the right side of the monitor.

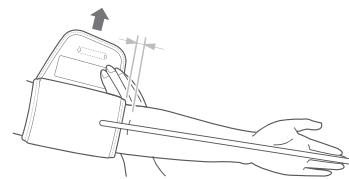


- 2.As pictured on the right, wear the cuff on your upper arm.



- 3.Tighten the cuff up. Make sure the cuff is fixed 2 to 3 centimeters above your elbow.

Appropriate to insert one finger when the cuff is tightened around your upper arm.



4.Correct Posture:

Bare your arm or wear tights only when starting measurement.

Sit comfortably and relaxed on a proper-size chair.

The central of the cuff should maintain at the same level as your heart.

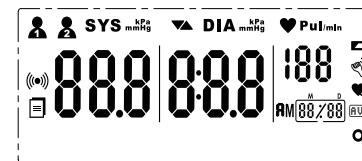
Legs relaxed with the feet falling outwards.
Palms up.



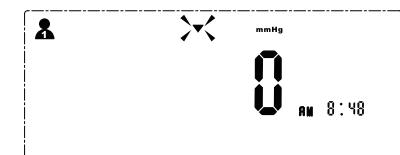
♥ Start the Measurement

After correctly positioning the cuff, when the monitor is off, press "User 1" (or "User 2") button to turn on the monitor, and it will complete the measurement process.

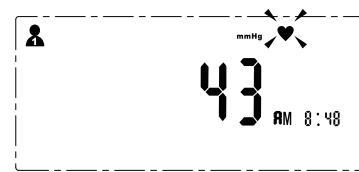
- 1.LCD display



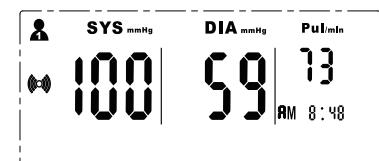
- 2.Adjust to zero.



- 3.Inflating and measuring.



- 4.Display and save the results, and the data will be transmitted.



5. Press "User 1" ("User 2") button to turn off the monitor. Otherwise, the monitor will shut off within 1 minute after last operation.

Tips:

A.when finish the whole measurement, press another user button ,the blood monitor will begin measuring again.

B.Maximum 60 records are both for user 1 and user 2.

♥ Recall the Records

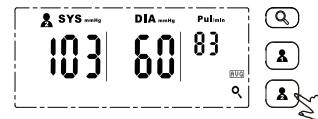
1. When the monitor is OFF, press "Query" button to retrieve the memory. The monitor will display the average value of last three measurements.



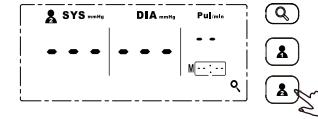
2. Press "Query" button again to rotate the records. Up to 60 records will be stored under each user ID. The order of the record, date and time will be displayed alternatively.



3. Press another user button to switch to display another user's measurement data.



4. When User 2 has no record, the LCD will display just like the picture on the right.



5. Press the corresponding User ID button to turn off the monitor. Otherwise, the monitor will shut off within 1 minute after last operation.



The most recent record (1) is shown first. Each new measurement is assigned to the first (1) record. All other records are pushed back one digit (e.g., 2 becomes 3, and so on), and the last record (60) is dropped from the list.

♥ Delete the Records

1. When under data enquiry mode, press and hold "Query" button for 3 seconds to clear memory. The LCD will display the blinking "dEL ALL".



2. Press "Query" button to confirm clearing memory. The LCD will display "dEL dOnE" indicates that the deletion is complete, and then turn off.



♥ Data Transmission

1. With LS805-B successfully pair-up with your iPhone, the measurement data will be automatically transmitted to your mobile via Bluetooth.
 2. The symbol will disappear after successful data transmission, and you may check your personal health data stored in your iPhone.
 3. If the data transmission fails, the symbol will remain. The pending measurement data will be transmitted to your iPhone when next measurement is complete.

CAUTION

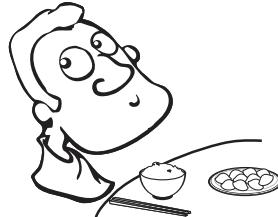
- Interference may occur in the vicinity of equipment marked with the following symbol . And the monitor may interfere with nearby electrical equipment.
- To enable the data transmission function, this product should be paired to a Bluetooth end at 2.4 GHz.

How to mitigate possible interference?

1. The range between the monitor and the Bluetooth end should be reasonably close, from 1 meter to 10 meters. Please ensure no obstacles between the monitor and the Bluetooth end so as to obtain quality connection.
2. To avoid interference, other electronic devices (particularly those with Bluetooth transmission / Transmitter) should be kept at least 1 meter away from the monitor.

♥ Tips for Measurement

It can cause inaccuracy if the measurement is taken in the following circumstances.



Within 1 hour
after dinner or drinking



Immediate measurement
after tea, coffee, smoking



Within 20 minutes
after taking a bath



When talking or moving your fingers



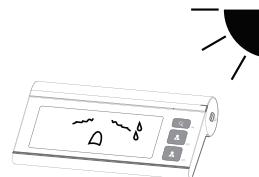
In a very cold environment



When you want to discharge urine

♥ Maintenance

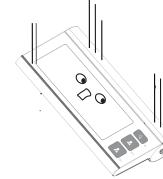
To obtain the best performance, please follow below instructions.



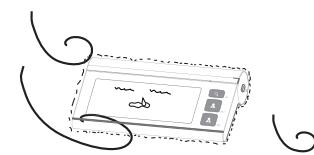
Put in a dry place and
avoid the sunshine



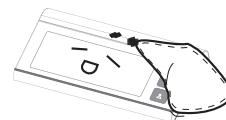
Avoid immersing it in the water.
Clean it with a dry cloth in case.



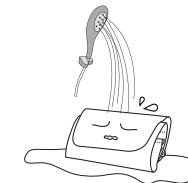
Avoid shaking and collision



Avoid dusty environment and
unstable temperature surrounding.



Use the slightly damp cloth
to remove the dirt.



Avoid washing the cuff.

Cleaning: Before Use - Pick out the whole unit of the storage bag. Use the soft cloth to remove the dirt on the monitor and apply some alcohol to disinfect the cuff before tying the cuff.

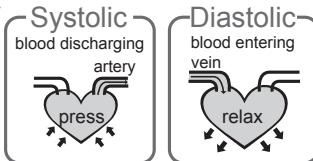
After Use - Use the soft cloth to wipe the unit and apply some alcohol to disinfect the cuff before putting the whole unit back in the bag. Please always disinfect the cuff before applying to another patient.

Please follow the instructions for correct replacement of interchangeable or detachable parts specified by SERVICE PERSONNEL of MANUFACTURER as "replaceable".

Disposal: Degraded sensors may result in inaccurate measurement while loosened electrodes may cause the monitor's failure to power on. The expected life of the monitor is two years. Please dispose of ACCESSORIES, detachable parts, and the ME EQUIPMENT according to the local guidelines.

♥ What are systolic pressure and diastolic pressure?

When ventricles contract and pump blood out of the heart, the blood pressure reaches its maximum value in the cycle, which is called systolic pressure. When the ventricles relax, the blood pressure reaches its minimum value in the cycle, which is called diastolic pressure.

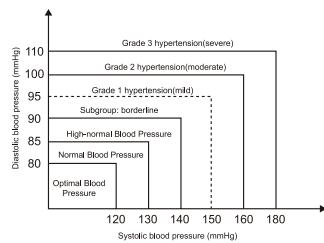


♥ What is the standard blood pressure classification?

The blood pressure classification published by World Health Organization (WHO) and International Society of Hypertension (ISH) in 1999 is as follows:

CAUTION

Only a physician can tell your normal BP range. Please contact a physician if your measuring result falls out of the range. Kindly note that only a physician could tell whether your blood pressure value has reached a dangerous point.



Blood Pressure (mm Hg)	Level	Optimal	Normal	High-normal	Mild	Moderate	Severe
SYS	<120	120-129	130-139	140-159	160-179	≥180	
DIA	<80	80-84	85-89	90-99	100-109	≥110	

♥ Irregular Heartbeat Detector

This Blood Pressure Monitor is equipped with an intelligent function of Irregular Heartbeat (IHB) Detector. During each measurement, this equipment records the heartbeat intervals and works out the standard deviation. If the calculated value is larger than or equal to 15, this equipment will light up the IHB symbol on the screen when displaying the measuring result.

CAUTION

The appearance of the IHB icon indicates that a pulse irregularity consistent with an irregular heartbeat was detected during measurement. Usually this is NOT a cause for concern. However, if the symbol appears often, we recommend you seek medical advice. Please note that the device does not replace a cardiac examination, but serves to detect pulse irregularities at an early stage.

♥ Why my blood pressure is varies even in one day?

1. Individual blood pressure varies every in one day, it also affected by the way you tie your cuff and the your measurement position, so please take the measurement at the same condition.
2. The varies of the pressure is greater if the person take medicine.
3. Waiting at least 3 minutes for another measurement.

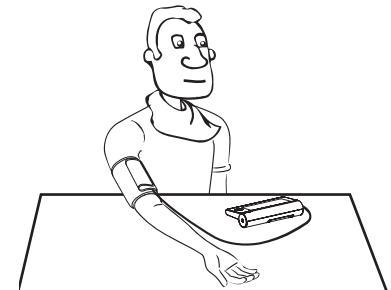


The attention need to pay when you measure you blood pressure at home:

- If the cuff is tied properly.
- If the cuff is too tight or too loose.
- If the cuff is tied on the upper arm.
- If you feel anxious pressured.
- You had better take deep breath 2-3 times before beginning.
- Advice:adjust yourself for 4-5 minutes until you calm down.

♥ If the result is the same if measuring on the right arm?

It is ok for both arms, but there will be some different results for different arm, so suggest you measure the same arm every time.



This section includes a list of error messages and frequently asked questions for problems you may encounter with your blood pressure monitor. If the products not operating as you think it should, check here before arranging for servicing.

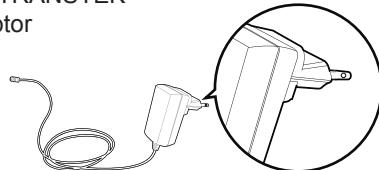
PROBLEM	SYMPTOM	CHECK THIS	REMEDY
No power	Display will not light up.	Batteries are exhausted.	Replace with new batteries
		Batteries are inserted incorrectly.	Insert the batteries correctly
		AC adaptor is inserted incorrectly.	Insert the AC adaptor tightly
Low batteries	Display is dim or shows 	Batteries are low.	Replace with new batteries
Error message	E 1 shows	Communication error	Check if the APP is on, operate and send the data again.
	E 3 shows	The cuff is not secure.	Readjust the cuff and relax for a moment and then measure again.
	E10 or E11 shows	The monitor detected motion while measuring.	movement can affect the measurement.Relax for a moment and then measure again.
	E20 shows	The measurement process does not detect the pulse signal.	Loosen the clothing on the arm and then measure again
	E21 shows	The treatment of the measurement failed.	Relax for a moment and then measure again.
	EExx,shows on the display.	A calibration error occurred.	Retake the measurement. If the problem persists, contact the retailer or our customer service department for further assistance.Refer to the warranty for contact information and return instructions.

Power supply	Battery Powered Mode: 6V (4 x AAA-size alkaline-battery) AC Adaptor Powered Mode: 100-240 V~, 50-60 Hz, 400 Ma (Can be supplied by AC adaptor model UE08WCP-060100SPA only!)
Display mode	Blue LCD with White Backlight V.A. = 128mm(L) x 50mm(W)
Measurement mode	Oscillographic testing mode
Measurement range	Pressure: 0-40kpa(0~300mmHg) pulse value:(40-199)times/minute
Accuracy	Pressure: 5°C-40°C within ±0.4 kPa (3 mm Hg) 0°C-45°C(out of 5°C-40°C) within ±0.7 kPa (5 mm Hg); Pulse Value: ±5%
Working condition	Temperature:5°C-40°C Relative Humidity ≤85%RH Atmospheric Pressure: 86-106 kPa
Storage & transportation condition	Temperature:-20°C-60°C Relative Humidity 10%-93%RH Atmospheric Pressure: 50-106 kPa
Measurement perimeter of the upper arm	About 22cm-32cm
Weight	Approx.300g(Excluding the dry cells)
External dimensions	Approx.180*100*39mm
Attachment	4*AAA alkaline batteries,user manual
Mode of operation	Continuous operation
Degree of protection	Type BF applied part
Device Classification	Battery Powered Mode: Internally Powered ME Equipment AC Adaptor Powered Mode: Class II ME Equipment
IP Classification	IP22
Software Version	V01

WARNING: No modification of this equipment is allowed.

♥ Authorized Component

1. Please use the TRANSTEK authorized adaptor



Adaptor

Type: UE08WCP-060100SPA
Input: 100-240V, 50-60Hz, 400mA
Output: 6V --- 1A
(Conforms to UL Certification)

♥ Contact Information

For more information about our products, please visit www.transtek.cn. You can get customer service, usual problems and customer download, transtek will serve you anytime.

Manufactured by: GUANGDONG TRANSTEK MEDICAL ELECTRONICS CO., LTD
Company: GUANGDONG TRANSTEK MEDICAL ELECTRONICS CO., LTD
Address: Zone A, 5/F., Investment Building , No. 12, Huizhan East Rd., Torch Development District, Zhongshan, Guangdong, 528437, China

Authorized European Representative:

Company: MDSS - Medical Device Safety Service GmbH
Address: Schiffgraben 41, 30175 Hannover, Germany

♥ Complied European Standards List

Risk Management	EN/ISO 14971:2007
Labeling	EN 980:2008
User Manual	EN 1041:2008
General Requirements for Safety	EN 60601-1:2006/AC:2010 EN 62304:2006/AC:2008 EN 60601-1-6:2010 EN 60601-1-11:2010
Non-invasive Sphygmomanometers General Requirements	EN 1060-1:1995+A2:2009 EN 1060-3:1997+A2:2009 EN 1060-4:2004
Electromagnetic Compatibility	EN 60601-1-2:2007/AC:2010

♥ EMC guidance

Table 1 – Guidance and MANUFACTURER'S declaration – ELECTROMAGNETIC EMISSIONS – for all ME EQUIPMENT and ME SYSTEMS

Guidance and manufacturer's declaration – electromagnetic emissions		
Emissions test	Compliance	Electromagnetic environment – guidance
RF emissions CISPR 11	Group 2	The device must emit electromagnetic energy in order to perform its intended function. Nearby electronic equipment may be affected.
RF emissions CISPR 11	Class B	
Harmonic emissions IEC 61000-3-2	Not applicable	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Not applicable	

Table 2 – Guidance and MANUFACTURER'S declaration – electromagnetic IMMUNITY – for all ME EQUIPMENT and ME SYSTEMS

Guidance and manufacturer's declaration – electromagnetic immunity			
The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.			
IMMUNITY test	IEC 60601 test level	Compliance level	Electromagnetic environment – guidance
Electrostatic discharge (ESD) IEC 61000-4-2	± 6 kV contact ± 8 kV air	± 6 kV contact ± 8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrical fast transient/burst IEC 61000-4-4	± 2 kV for power supply lines ± 1 kV for input/output lines	± 2 kV for power supply lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV line(s) to line(s) ± 2 kV line(s) to earth	± 1 kV line(s) to line(s)	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5 % U_T (>95 % dip in U_T) for 0,5 cycle 40 % U_T (60 % dip in U_T) for 5 cycles 70 % U_T (30 % dip in U_T) for 25 cycles <5 % U_T (>95 % dip in U_T) for 5 s	<5 % U_T (>95 % dip in U_T) for 0,5 cycle 40 % U_T (60 % dip in U_T) for 5 cycles 70 % U_T (30 % dip in U_T) for 25 cycles <5 % U_T (>95 % dip in U_T) for 5 s	Mains power quality should be that of a typical commercial or hospital environment. If the user of the device requires continued operation during power mains interruptions, it is recommended that the device be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

NOTE U_T is the a.c. mains voltage prior to application of the test level.

Table 4 – Guidance and MANUFACTURER'S declaration – electromagnetic IMMUNITY – for ME EQUIPMENT and ME SYSTEMS that are not LIFE-SUPPORTING

Guidance and manufacturer's declaration – electromagnetic immunity			
The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.			
IMMUNITY test	IEC 60601 TEST LEVEL	Compliance level	Electromagnetic environment – guidance
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms	Portable and mobile RF communications equipment should be used no closer to any part of the device, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d = 1.167 \sqrt{P}$
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2,5 GHz	3 V/m	$d = 1.167 \sqrt{P}$ 80 MHz to 800 MHz $d = 2.333 \sqrt{P}$ 800 MHz to 2,5 GHz where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, ^a should be less than the compliance level in each frequency range. ^b Interference may occur in the vicinity of equipment marked with the following symbol: 

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the device is used exceeds the applicable RF compliance level above, the device should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the device.

b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Table 6 – Recommended separation distances between portable and mobile RF communications equipment and the ME EQUIPMENT or ME SYSTEM – for ME EQUIPMENT and ME SYSTEMS that are not LIFE-SUPPORTING

Recommended separation distances between portable and mobile RF communications equipment and the device			
Rated maximum output power of transmitter W	Separation distance according to frequency of transmitter m		
	150 kHz to 80 MHz $d = 1.167 \sqrt{P}$	80 MHz to 800 MHz $d = 1.167 \sqrt{P}$	800 MHz to 2,5 GHz $d = 2.333 \sqrt{P}$
0,01	0,117	0,117	0,233
0,1	0,369	0,369	0,738
1	1,167	1,167	2,333
10	3,690	3,690	7,378
100	11,67	11,67	23,33

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.