

Taiwan
Scientific

ANSWatch-Mini[®]

Wrist Monitor

- Autonomic Nervous System

- Sympathetic
- Para-sympathetic
- Sympatho-vagal balance

- Irregular heartbeat

- Cardiac arrhythmia

- Blood pressure

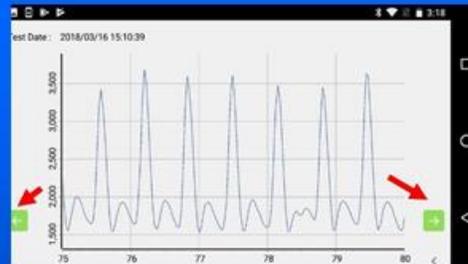
- Systolic
- Diastolic

- Heart rate



ANSWatch[®] Model TS-0411-Mini

Smart mobile medical device -Bluetooth enabled



- World first
- US & Taiwan human clinical
- Global patents
- Personal health management
- Disease treatment/monitoring
- Clinic/university/hospital

- ✓ Medical device GMP
- ✓ US FDA
- ✓ CE Mark
- ✓ Taiwan FDA
- ✓ ISO 13485
- ✓ EN 60601

§ Content §

Unpacking information	1
Name and function of parts	2
Precaution before use	2
Warning	3
Software installation	3
Intended use / Device functions	5
Wearing procedure and testing posture	5
Operating procedure - BP test (skip IRRHB and HRV test)	6
Operating procedure - BP and HRV test (standard)	7
Operating procedure – Real-time test (user defined test)	10
If a test fails	13
Battery charging and replacement	13
Auto power-off	14
Are my BP and HRV parameters normal?	14
Do I have cardiac arrhythmias?	15
How to take a Real-time test	16
Self-monitoring	16
Cleaning and maintenance	16
Product disposal	17
Product specification	17
Product certification	18
Warranty	18

(Dear ANSWatch-Mini customers: you are invited to visit our website for more user and device information. You can also join membership to get timely e-health news: www.answatch.com)

ANSWatch is registered with US FDA under the name of HRVWatch.

Unpacking information

After unpacking, examine and locate the following items: (Fig 1):

- (1) ANSWatch-Mini wrist monitor (x1)
- (2) USB-to-MicroUSB connection cable (x1)
- (3) Charge adaptor (x1)
- (4) User's manual(x1)
- (5) Soft yellow wrist support (x1).



Fig 1: content in package



Fig 2: Name and function of parts

Name and function of parts

The names and functions of parts in the ANSWatch-Mini wrist monitor are shown in Fig 2: (1) Device main body and wrist cuff (bio-sensors inside) (2) Power On-Off button (3) LED light indicator (power-on, test, charge, Bluetooth wireless) (4) MicroUSB/charge port (pull the rubbery cover off for charging)

Precaution before use

- The device is to be used by customers under the supervision of a professional
- ANSWatch battery must be charged before use (Use a qualified charging cable and adaptor only).
- Do not substitute professional instructions with self-interpretation. Test results of blood pressures, heart rate variability (autonomic nervous system functions), and irregular heartbeats should be analyzed by physicians or health professionals who understand your health condition.
- If you are currently taking medicine, consult with your doctor to determine the best times for conducting blood pressure and heart rate variability tests. *Do not stop taking or switch medicine without your doctor's permission.
- ANSWatch is designed for use by adults. Tests for children must be conducted under a health professional's supervision. *ANSWatch should never be used on babies.
- To improve data consistency, efforts should be made to conduct tests under similar conditions at same time zones of the day. Avoid time periods of before meal, after meal, or after heavy exercise. Suggested time periods for testing are: 9 ~ 11:30 AM, 2 ~ 6 PM, and 8 ~ 10 PM. Rest for at least 15 minutes between two consecutive tests.
- To prepare for a test, remove any wearing (watch, jewelry, etc.) on the left wrist.

Lie down or sit comfortably for 10 minutes. When ready, wear ANSWatch-Mini on your **left** wrist according to instructions in this User's manual.

- During the test, keep quiet and maintain stable. *No talking or body movement is allowed. It has been noted that blood pressures could be affected by muscle tightness or postural change. Autonomic nervous system could also respond to environmental, physical, or mental disturbances.
- Keep the product and package in its "original" condition in case of product return, replacement, or repair.

Warning (READ CAREFULLY BEFORE USE)

- Users are prohibited from altering or changing product design or parts
- Users should not conduct maintenance work during device test
- ANSWatch-Mini should not be used on patients with severe cardiovascular diseases, poor blood circulation, or late-stage cancers. Always consult with your physician first.
- Press "Power" key to stop if the patient feels discomfort for any reason during a test. **Promptly remove the device from the wrist if the device fails to pump or to release air pressure.**
- If an "error" message appears on the screen of connected devices (smart phone, tablet, etc.) during a test, follow the instructions on the screen. If conducting a second test is needed, wait for 15 minutes. If error messages keep appearing, notify your sales representative immediately. Consultation with your physician is also recommended. *It is noted that patients with weak pulses may not be suitable for ANSWatch tests.
- During or after a test, if severe skin color change is observed, stop the test. **Promptly remove the device from the wrist if the device fails to pump or to release air pressure.** *Do not use the device again. Notify your sales representative immediately. Consultation with your physician is also recommended.
- Do not unscrew or open the product outer box (product warranty is nullified if the outer box is opened); Do not modify the product.

Software installation

(check our website for any new information www.answatch.com)

- Android operating system (smartphones; tablets)
 - (1) Confirm that the Android version is 8.0 or newer for full compatibility.
(Most Android phones or tablets with a version 6.0 or newer purchased after 2016 are also fully compatible)

- (2) Tap Google Play (app store) and search for ANSWatch
- (3) Install ANSWatch app following on-screen instructions
- (4) The home page of the device will show the icon of <ANSWatch> APP

(Fig 3)

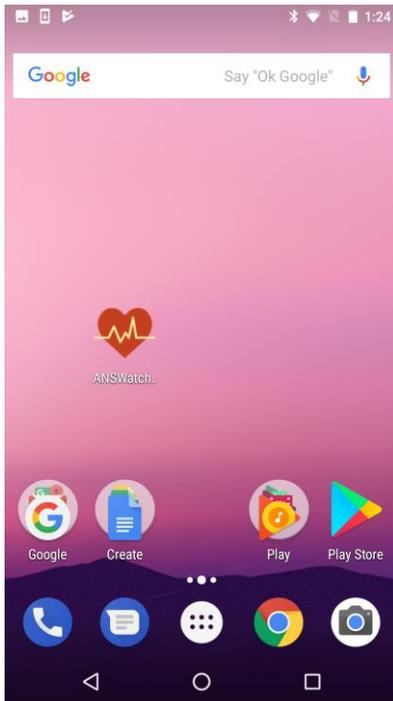


Fig 3: ANSWatch app on the home page

- (5) Tap <ANSWatch> APP to enter the home page (Fig 4). Tap <Tools> again to set up language, birthday, and sex (Fig 5)
- (6) Done with app installation

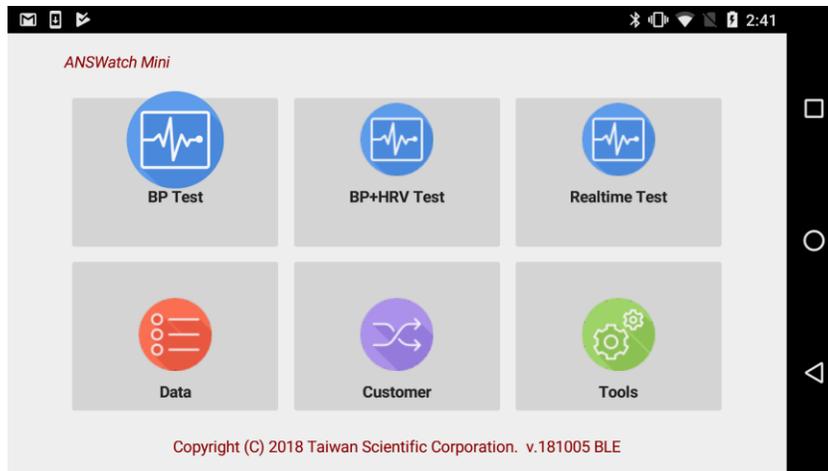


Fig 4: Home page of ANSWatch app

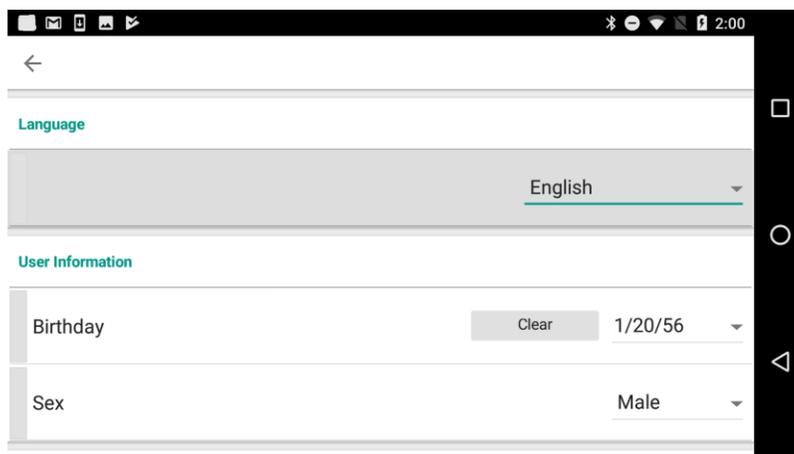


Fig 5: Setup page for language, birthday, and sex

- iOS operating system (smartphones; tablets)
 - (1) Confirm that the iOS version is 11.0 or newer for full compatibility (Most iPhone 6 or newer models are compatible; Most iPad Air 2 or newer tablets are compatible)
 - (2) Tap App Store and search for ANSWatch
 - (3) Install ANSWatch app following on-screen instructions
 - (4) The home page of the device will show the icon of <ANSWatch> APP (Fig 3)
 - (5) Tap <ANSWatch> APP to enter the home page (Fig 4). Tap <Tools> again to set up language, birthday, and sex (Fig 5)
 - (6) Done with app installation

Intended use / Device functions

- This device is designed for non-invasive measurement of heart rate, systolic pressure, diastolic pressure, irregular heartbeats, and heart rate variability (HRV). The device shall be used by the professionals (doctors, nurses, professors, trained technicians), or by general public under the supervision of a professional. The device is to be used indoors under sitting or supine position. Patients are allowed to operate the device under the supervision of a professional.

Wearing procedure and testing posture (You must follow this instruction, or the test will fail)

- Referring to Fig 6-1, wear ANSWatch-Mini on your **left** wrist. Follow these key points when wearing: (i) Both the palm and the device should face up-straight (ii) The centerlines of the palm and the device body should be aligned; the power button is close to the body (iii) The front edge of the wearing cuff should be at the dividing line between wrist and palm (slight coverage of the palm by the cuff is most ideal) (iv) Pull and close the cuff firmly when the conditions of (i) through (iii) are met (do not leave a space between the wrist and the cuff), and (v) Move the left hand around and confirm that ANSWatch is securely fastened on the wrist (if ANSWatch is judged too loose, open the cuff and repeat the above procedures). Common wearing mistakes to avoid are shown in Fig 6-2, 6-3, and 6-4.
- For rare situations where wearing on the left wrist is unavailable, turn ANSWatch-Mini 180 Degree and wear the device on the **right** wrist (see Fig 6-5; the power button is now away from the body; This position will allow the alignment of biosensors in the cuff with the radial artery location). Please consult with your physicians or our staff for such unusual circumstances.
- Sitting or lying positions are suitable. In either posture, ensure that the left wrist is at the similar height as the heart. Once selecting a posture, stick to it for subsequent tests
- It is a requirement to place the soft yellow pillow (provided) under the wrist (not the palm) to add comfort and maintain stability. In such a position, the palm is elevated in air and bent naturally downward for strong pulse signals. Fingers can make a soft grasp or extend loosely.
- During test, keep the shoulder and arm relaxed. Do not talk or move.



Figure 6: (1) Correct wearing (on left wrist; Power button close to body; mid-lines aligned; front edge of cuff at wrist-palm separation line) (2) Incorrect wearing (front edge of cuff away from wrist-palm separation line) (3) Incorrect wearing

(device centerline is not at wrist centerline; too much left) (4) Incorrect wearing (device centerline is not at wrist centerline; too much right) (5) Correct wearing (on right wrist; Power button away from body; mid-lines aligned; front edge of cuff at wrist-palm separation line)

Operating procedure - BP test (skip IRRHB and HRV test)

- Wear ANSWatch-Mini on your **left** wrist (referring to **Wearing procedure**)
- Open Android or iOS device (smart phone or tablet); Tap <ANSWatch> app
- Using your right hand to press **POWER** key to turn on ANSWatch-Mini (LED light blue)
- Using your right hand to tap <BP TEST> and <OK> on ANSWatch app to start the test (Fig 7-1)
- When done, the device screen will show the test data (see Fig 7-1), where **SYS** stands for systolic pressure (mmHg), **DIA** for diastolic pressure (mmHg), **HR** for heart rate (1/min)
- The test data is automatically downloaded into the Android or iOS device
- Tap <Data> icon on the app to view the test data page (Fig 7-2)
- Turn off ANSWatch-Mini

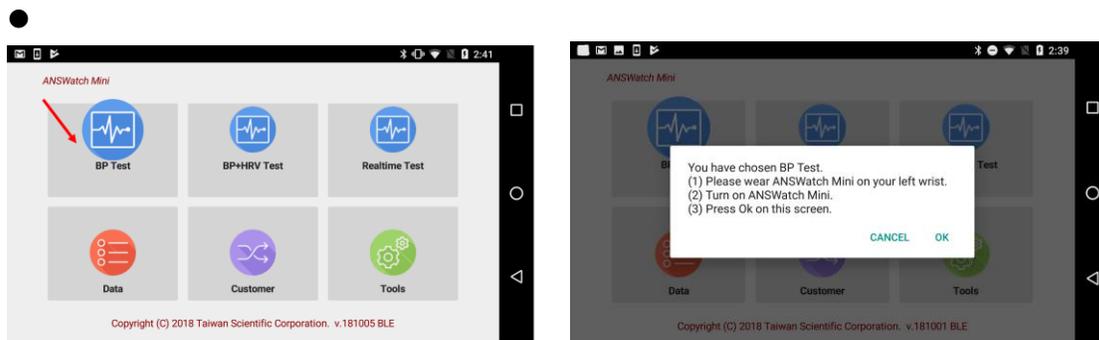


圖7: (1) Tap <BP Test> on the app and then <OK> to start BP test

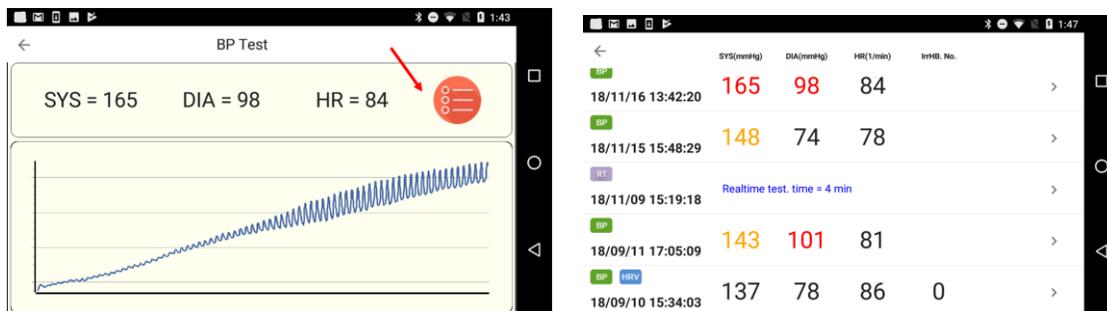


圖7: (2) Tap <Data Display> icon on the app (left) to view the test data page (right)

Operating procedure - BP and HRV test (standard)

- Wear ANSWatch-Mini on your **left** wrist (referring to **Wearing procedure**)
- Open Android or iOS device (smart phone or tablet); Tap <ANSWatch> app
- Using your right hand to press **POWER** key to turn on ANSWatch-Mini (LED light blue)
- Using your right hand to tap <BP+HRV TEST> and <OK> on ANSWatch app to start the test (Fig 8-1)
- When done, the test data is automatically downloaded into the Android or iOS device
- Tap <Data> icon on the app to view the detailed test data page (Fig 8-2)
- Tap <More> to enter the test report page (Fig 8-3a, b,c).
- The device screen will show the test data and ranking (Fig 8-2 and 8-3), where **SYS** stands for systolic pressure (mmHg), **DIA** for diastolic pressure (mmHg), **HR** for heart rate (1/min), **HRV** for heart rate variability (ms; autonomic nervous system total activity index), **LF** for low frequency (sympathetic nerve activity index, %), **HF** for high frequency (para-sympathetic nerve activity index, %), **LF/HF** for low frequency/high frequency ratio (sympathetic-parasympathetic balance index); **Irregular No.** for number of irregular heartbeats
- ANSWatch-Mini also measures the wrist temperature (shown as Temp (° C) on the test report page; Fig 8-3c); Wrist temperature is in general lower than that measured at tongue or ears (by about 1-2 degrees). It is close to the forehead temperature (35 - 37 ° C). This temperature reading is used by clinicians or users to determine if the measured physiological parameters are affected by the body temperature (colder or warmer than normal)
- Tap <Pulse Wave> on the test report page to view the recorded pulse waveforms (Fig 8-4)
- If irregular heartbeats (IRRHB) are detected, tap <IRRHB> and arrow keys (left or right) to examine irregular heartbeats (Fig 8-5) (IRRHB could be due to cardiac arrhythmias, cough, or body movement; Consult with your physicians. Also refer to “**Do I have cardiac arrhythmias?**” section; Also visit our website for related articles www.answatch.com).

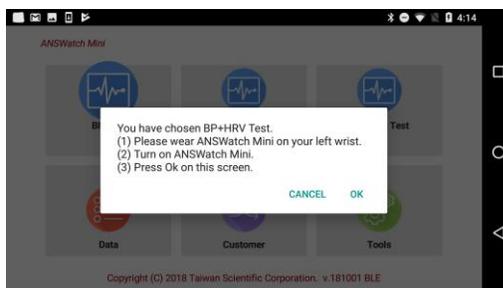


Fig 8 (1): Tap <BP+HRV Test> on the app and then <OK> to start BP test

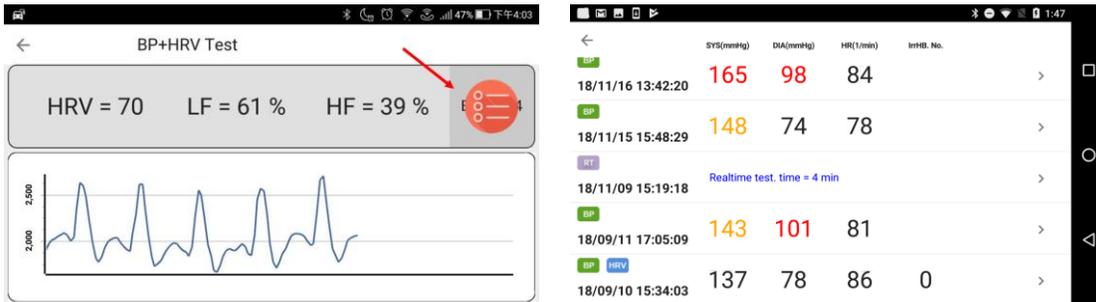


Fig 8 (2) Tap <Data Display> icon on the app (2a) to view the test data page (2b)

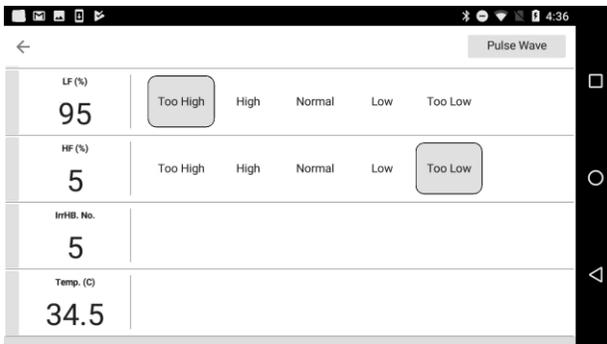
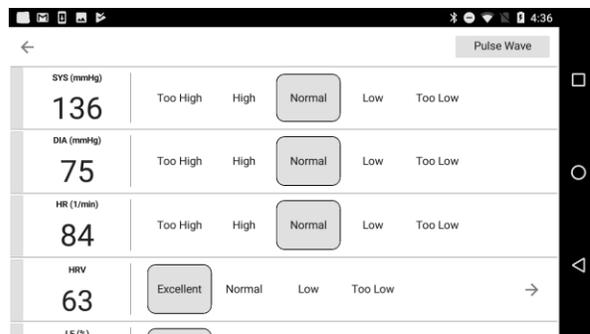
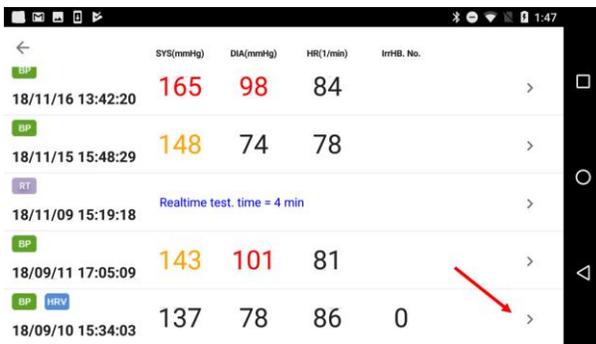


Fig 8: (3a) Tap <More> to enter the test report pages (3b, 3c)

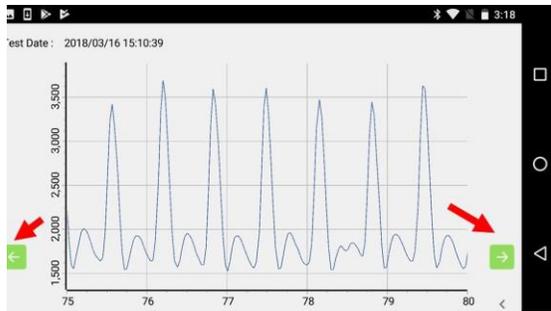


Fig 8: (4) Tap <Pulse Wave> button to view the detailed 5-min pulse wave plot

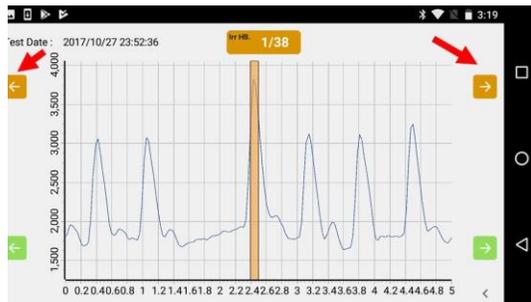


Fig 8: (5) Tap <IRRHB> and arrow keys (left or right) to examine irregular heartbeats

- During test, pay attention to the quality of pulse waves shown on the smart phone or tablet. If pulse waves are weak and accompanied by irregular noises, press **Power** key to stop the test. Take ANSWatch-Mini off the wrist, wait for 10-15 minutes, re-wear, and re-test.
- During test, do not talk. Any body movement (head, hands, legs) is prohibited
- Turn off ANSWatch-Mini

Operating procedure – Real-time test (user defined test)

- Wear ANSWatch-Mini on your **left** wrist (referring to **Wearing procedure**)
- Open Android or iOS device (smart phone or tablet); Tap <ANSWatch> app
- Using your right hand to press **POWER** key to turn on ANSWatch-Mini (LED light blue)
- Using your right hand to tap <Real-time Test> on the app and then set up the test time (minutes) for each step (maximum 3 steps). Total test time is limited to 20 minutes. Tap <Start> to start the test (Fig 9-1)
- Test plan (test duration, number of steps) is determined by the user; also referring to the section: **How to take a Real-time test** for more information. During test, do not talk. Any body movement (head, hands, legs) is prohibited
- During test, the smart phone or tablet will show the instant pulse waveforms

and peak-to-peak intervals (RRI). The same screen will also show heart rate (HR) and HRV at 10-second interval (Fig 9-2).

- After test, go back to the app's <Home> page, tap <Data> and then tap <More> on the just-finished <Realtime test> set to view detailed test data (including averages of HR and HRV for each step) and pulse plot (Fig 9-3)
- Turn off ANSWatch-Mini

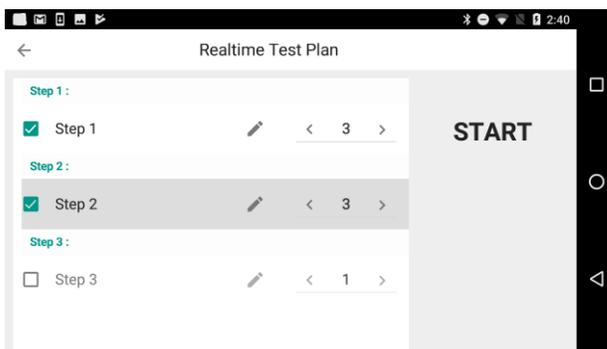
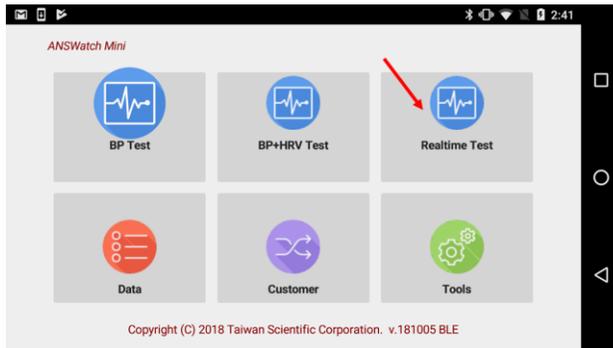


Fig 9: (1a) Tap <Real-time Test> on the app and then set up the test time (minutes) for each step (maximum 3 steps; total time duration not exceeding 10 minutes)(1b). Tap <Start> to start the test (1b)

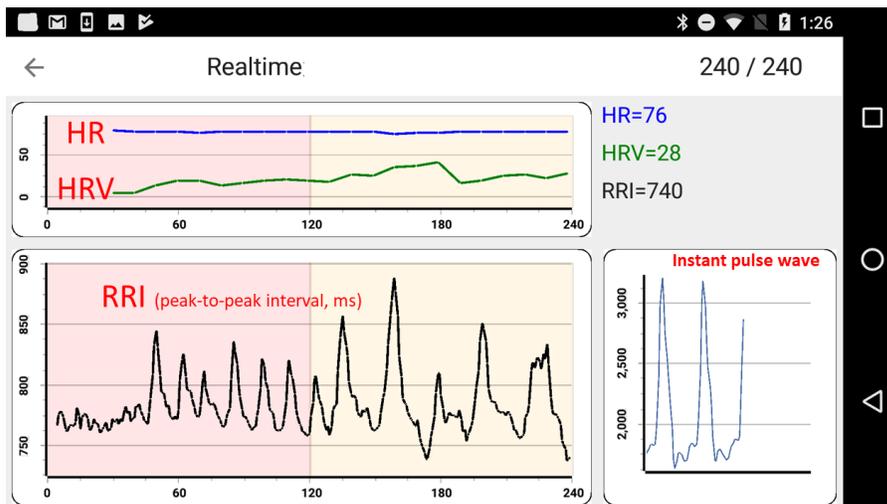


Fig 9-2 During <Realtime test>, the smart phone or tablet will show the instant

pulse waveforms, peak-to-peak intervals (RRI). The same screen will also show heart rate (HR) and HRV at 10-second interval

Step-1		Step-2	
2	80.5	6.7	739.0
Duration (mins)	Avg. HR	Avg. HRV	Avg. RRI
18	80.6	16.5	739.0
Duration (mins)	Avg. HR	Avg. HRV	Avg. RRI

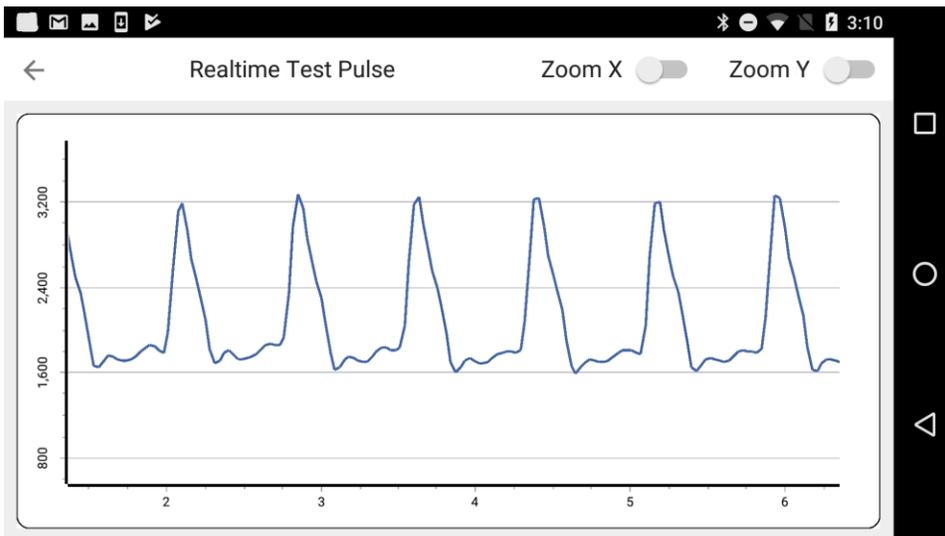


Fig 9-3 <Realtime test> data page(3a). Tap <Plot> to examine HR, HRV and RRI

plots (3b). Tap <Pulse> to examine recorded pulse waveforms (3c).

If a test fails

- During or after test, if you see warning or error (W-xxx or E-xxx) messages, the test is failed. The most likely causes of failure and the suggested actions are:
 - App unable to connect to ANSWatch-Mini (Connection failure). Please check the setting of Bluetooth on the smartphone or tablet. Close the ANSWatch app and re-open it again (this will help refresh Bluetooth connection; Note: follow the steps as instructed for closing apps on phones or tablets)
 - Insufficient battery power (battery too low); Charge the battery (see **“Battery charging and replacement”** section) and re-test
 - Incorrect wearing position causing weak pulse signals; Re-wear (see **“Wearing procedure”**) and re-test
 - Pump failure; if re-wear and re-test still fails, contact our sales representative or technical support
 - Weak pulses or rapid heartbeats (re-wearing still failed); Allow the body to calm down and re-test
 - Blood pressures too high (>180 mmHg) or too low (<50 mmHg); Contact your doctor
 - If you follow the above actions and the problem still persists, contact our sales representative or technical support

Battery charging and replacement

- ANSWatch employs an environmentally-friendly rechargeable lithium battery. Each charge can provide power for 15 to 20 tests. Stand-by time is at least 20 days.
- To charge, use the charge cable provided (see Fig 1-2). Insert the micro-USB connector to ANSWatch-Mini and USB connector to a PC or a charging adaptor, the charging will start immediately (Fig 10-1).
- The LED light indicator on ANSWatch-Mini is in red color during charging and turns green when done.
- Lithium battery will lose charging capacity gradually. When the full charge is no longer obtained or each charge is unable to provide 5 tests or more, it is time to replace the battery. ANSWatch-Mini uses a high quality and safe lithium battery coupled with a control circuit. **Customers are not allowed to replace battery.** If you need to replace the battery, visit our website www.answatch.com or contact your sales representative.



Fig 10: (1)ANSWatch-Mini being charged (using the provided charge cable; MicroUSB connector to ANSWatch-Min, while USB to PC or adaptor; LED light red during charging).LED light turns green after full charge

Auto power-off

- To save power, ANSWatch-Mini turns off after 3 minutes of inactivity.

Are my BP and HRV parameters normal?

Patient parameters, such as blood pressures, heart rate variability (HRV), and functions of autonomic nervous system (ANS), are often influenced by age, sex, season, region of living, medication, and other body conditions. Whether these values are normal (or healthy) require professional diagnosis based upon several related tests. It is strongly suggested that you show your test results to your physician for data interpretation. Based upon published literature (World Health Organization, European Society of Cardiology, North American Society of Pacing and Electrophysiology, and other related journal articles) and our own research, the tables below offer users a first-hand reference on normal and warning ranges of the eight patient parameters measured by ANSWatch-Mini. Do not use these tables for diagnosis of any disease without consultation with your doctors.

Table 1: Definition and normal value for ANSWatch measured patient parameters

Patient Parameter	Physiological Meaning	Normal Range	Warning Range
HR (1/min)	Heartbeat per min	60 – 100 (ave. 72)	Below 60 or above 100
SYS (mmHg)	Systolic Pressure	90 – 140 (ave. 110)	Below 70 or above 140
DIA (mmHg)	Diastolic Pressure	60 – 90 (ave. 70)	Below 60 or above 90
HRV (ms)	Heart rate variability; ANS activity index	25 – 65 (ave. 45)	Below 15
HF (%)	High frequency %; para-sympathetic activity	40 – 60 (ave. 50)	Below 30% or above 70%

	index		
LF (%)	Low frequency %; sympathetic activity index	40 – 60 (ave. 50)	Below 30% or above 70%
LF/HF	Low frequency/High frequency; sympathetic-parasympathetic balance index	0.5 – 2.5 (ave. 1.5)	Below 0.4 or above 3

Note: Large scale human clinical trials are being conducted by the world medical community to generate consensus on normal ranges of HRV indexes. The above table is for your initial reference only.

Table 2: HRV normal values (unit: ms) in relation to age and sex

Age	15	20	25	30	35	40	45	50	55	60	65	70	75	80
Male HRV	60	56	46	41	36	31	29	27	26	25	20	20	17	15
Female HRV	65	60	50	44	39	34	31	28	26	25	20	20	17	15

Table 3: Sympathetic- parasympathetic balance index ranking

LF/HF	Above 3.0	1.5-3.0	0.8-1.5	0.3-0.8	Below 0.3
Ranking	Sympathetic over-dominanc e	Sympathetic dominance	Normal	Parasympathetic dominance	Parasympathetic over-dominanc e

Do I have cardiac arrhythmias?

- If irregular heartbeats are detected by ANSWatch-Mini, the test data page will show a number greater than zero for **Irregular No.** (Fig 8-3a and Fig 8-5).
- Tap <Irr HB.> to view the details of irregular heartbeat pulse waves (Fig 8-5)
- Whether or not irregular heartbeats are caused by cardiac arrhythmias require professional judgment. Please consult with your physicians.
- Pulse waves of common cardiac arrhythmias are shown in Fig 11.

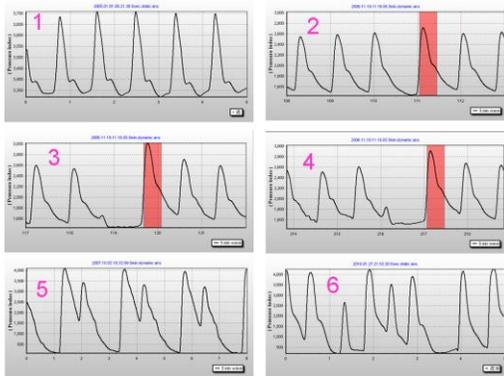


Fig 11: (1)Normal pulse waves
(2)Delayed heartbeat
(3)Skipped heartbeat
(4)Early heartbeat followed by delayed heartbeat

- (5)Constant cardiac arrhythmias
- (6)Random cardiac arrhythmias

How to take a Real-time test

- Deep breathing (Qi practice): Inhale and exhale slowly and deeply (sitting or lying position; using the time clock on a smart phone or PC to monitor). During practice, the whole body is relaxed, any anxiety is gone, the sympathetic tone is attenuated while the parasympathetic tone is significantly raised. RRI (peak-to-peak interval) plot becomes “wavy” (instead of “flat” under normal shallow breathing), heart rate HR goes down, and ANS total activity index **HRV** rises gradually. You can set the step 1 for natural breathing and step 2 for deep breathing (total time limit 20 minutes)
- Music therapy (sitting or lying): Let go any thought in mind, concentrate on listening to music; same effect on **HR** and **HRV** as above; You can set the step 1 for no music and step 2 for music listening
- Stand-up test: testing for 3-min under sitting position (step 1) followed by standing up for 3-min (step 2). Note the difference of HR and HRV between two positions. Standing should have a higher HR and lower HRV than sitting, indicating healthy ANS adjustment.
- Recovery rate after exercise: After heavy exercise, wear ANSWatch-Mini and start <Realtime test>. As the body recovers, HR goes down gradually while HRV goes up. A fast HR recovery (slow-down) indicates healthy ANS, heart, and circulation.

Self-monitoring

- Establish first the baselines of body parameters by consecutive tests at the same time zone (morning, afternoon, or evening) for several days
- Continue to monitor. Ignore occasional outliers (caused by cold, flu, drinking, or bad sleep, etc.)
- Pay attention to any trendy change or deviation from the baseline. If the new trend is in the direction of improvement, it means any action taken recently is working. Conversely, if the change is towards worsening, consult with your physicians.

Cleaning and maintenance

- No cleaning or maintenance is allowed during test
- Product cleaning: use a lightly wetted cloth (by immersed in tap water) to wipe the product outer box from time to time. Do not allow water to enter the product. The cuff (wrist band) of the product should not be washed or wiped. It should be kept dry at all time.
- Referring to “**Battery charging and replacement**” section, when a new battery is needed, customers should send the device package back to our company (or its agents/representatives; please contact us first by visiting our website www.answatch.com) for replacement. **Customers are not allowed to replace battery.** The lithium battery is a disposable component and is not included in the product warranty.

- During each test, the strength of pulse signals should be watched. Good or strong pulse signals are considered normal or standard. If weak pulse signals are observed and persist, customers should send the device package back to our company (or its agents/representatives; please contact us first by visiting our website www.answatch.com) for repair or replacement. The cuff-biosensor module is a disposable component and is not included in the product warranty.

Product disposal

- Product disposal guideline: this product contains lithium battery and electrical circuit board; please follow the local regulations/rules/policies for disposal.

Product specification

Model: TS-0411-Mini; Size: Mini (ANSWatch is registered with US FDA under the name of HRVWatch).

Physical dimension: Length 7 cm x width 5 cm x thickness 2 cm (cuff not included)

Weight: 75 g

Power: rechargeable lithium battery (Battery pack rating 3.7V, 500mA max. current)

Battery capacity: 250 mA*Hr (more than 15 tests per full charge; power-off stand-by 20 days or longer)

Charge cable: USB 2.0 charge cable (USB to Micro USB)

Charge time: 4 hours

Charge port: Micro-USB (Virtual COM Port and USB)

Blue-tooth wireless: support Blue-tooth 4.0 and above

Android OP: support Android 4.2 (Ice Cream Sandwich) or higher

iOS OP: support iOS 11 or higher

Patient parameters measured: Systolic Pressure, Diastolic Pressure, Heart Rate, Heart Rate Variability (HRV), High Frequency Component (HF), Low Frequency Component (LF), LF/HF, Number of Irregular Heartbeats.

Physiological parameters Accuracy: Blood pressure range and accuracy: 50-180 mmHg (± 8 mmHg); Heart rate range and accuracy: 40-250 beat/min (± 1 beat/min); HRV range and accuracy: 0-999 ms ($\pm 5\%$); HF% range and accuracy: 0-100% ($\pm 5\%$); LF% range and accuracy: 0-100% ($\pm 5\%$); LF/HF range and accuracy: 0-999 ($\pm 5\%$); Number of irregular heartbeats: 0-999 (± 1)

Operating environment: max temperature 40°C

Transport/storage conditions: temperature 5-40 °C; humidity 0-100%

Maximum altitude above sea level 3000 M; Atmospheric pressure 700hPa-1060hPa

For indoor use only



Product certification

- Taiwan FDA; US FDA; ISO 13485; CE Mark; IEC EN60601-1; EN60601-1-2

Warranty

ANSWatch products are sold with a one-year (12-month) limited warranty (**except for the bio-sensor module and the lithium battery, both are disposable components and without warranty**). Within the warranty period, if your product does not work properly because of a defect in materials or workmanship, we will repair your product with new or refurbished parts or replace it with a new or a refurbished product. Customers should visit our website www.answatch.com first to arrange for sending the device package back for repair. **Customers are responsible for the one-way shipping fee.** After repair, the device package will be shipped back to you. There will be no charge for labor or parts or shipping. The limited warranty does not cover normal wear, mechanical damage, or water damage. Warranty is invalidated if the product cover fixed by screws has been opened. Product repair with a charge is available for work not covered in the warranty. Contact your sales representative for details.

 Product Warranty

- (一) This product carries one-year limited warranty (parts and labor)
- (二) Water, fire, and mechanical damages are excluded from coverage.
 Repairs with a charge are available
- (三) Contact your sales representative for carry-in or mail-in instructions

Product model: _____

Device ID: _____

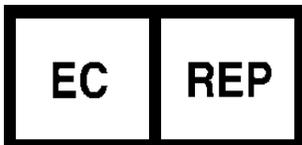
Sales representative: _____

Date of purchase: _____

Distributor:



Manufacturer: Taiwan Scientific Corporation, 10F, 88-4, Ming-Chiuan Road, Shin-Dian District, New Taipei, Taiwan 231



Authorized EU Representative (EUR): Orthoplastics Ltd,
Grove Mill, Todmorden Road, Lancashire, OL13 9EF, UK



2460

(Notify body: DNV GL Nemko Presafe AS)

All rights reserved, Taiwan Scientific Corp., 2019-2.

(For EU countries requiring a regional or local language other than used in this document, please contact our local representative for availability of IFU in your language; Free auto translation service from our e-User's Manual is in general provided by Google Translate at <https://translate.google.com/>)