



**TW-100**

**Wearable Watch Tracker  
User Manual**

Ver 1.0

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## *Introduction*

TW-100 is a wearable type of personal tracker that designed in wrist watch style and intended for safety monitoring for elders and children. TW-100 equips with both microphone and speaker that allows hands-free two-way communication capability. Also, the Notification button offers an easy way to make a phone call to those pre-set phone books and sends Notification alert together with just a single click. The device integrates with a back-end platform services allows user to configure device remotely and also help user to get understood where the device is immediately or periodically by sending GPRS/SMS commands to the device.

## *Features*

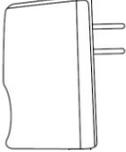
- Quad-Band GSM/GPRS
- 2 Way-Voice communication
- Notification button for instant call out and SMS/GPRS alert.
- Configurable phone book for making phone call.
- Speaker-phone capability
- Regular/Real-time tracking by remote configuration
- Power Low/Off alert via SMS/GPRS
- OLED display 96x64 resolution
- Support web services for location tracking.
- IPX4 waterproof.
- Rechargeable Li-ion battery.

## Specifications

<b>Hardware Specifications</b>	
<b>Network</b>	Quad-Band GSM/GPRS
<b>GSM Antenna Type</b>	Monopole antenna
<b>GPS</b>	High Sensitivity GPS
<b>GPS Antenna Type</b>	Patch Antenna 12x12x4
<b>Operating Temperature</b>	-20°~45°C
<b>Humidity</b>	5% to 95% Non-condensing
<b>Battery</b>	Rechargeable 320 mAh battery
<b>Hardware Buttons</b>	4 Buttons
<b>Flash memory size</b>	Internal 4MB
<b>Display</b>	OLED display
<b>Charging connector</b>	DC 5V /1A, micro USB
<b>Charging time</b>	Up to 3 Hours
<b>Dimension</b>	47.8mm(D) x 14.3mm(H)
<b>Weight</b>	50g
<b>Speaker/Mic</b>	Yes
<b>Device functions</b>	<ul style="list-style-type: none"><li>- Location report modes (ping/periodic)</li><li>- Notification report mode via SMS/GPRS</li><li>- Preset 3 contacts and 10 white list contacts allow to call-in</li><li>- Speaker phone capability for 2 way voice comm.</li><li>- Voice monitor function</li><li>- Auto power saving mode</li></ul>
<b>Waterproof</b>	Support IPX4 Waterproof

## Getting Started

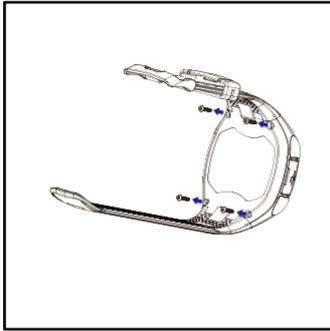
- Included accessories

 <p>TW-100</p>	 <p>Micro USB Cable</p>
 <p>AC Charger (Option)</p>	

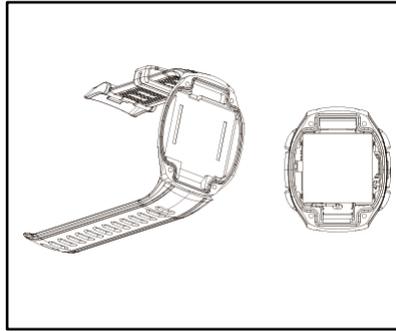
- Preparing your SIM Card for GPRS-activation

1. Inform your GSM service provider to activate the GPRS function, get the APN information, the user name, and user password.

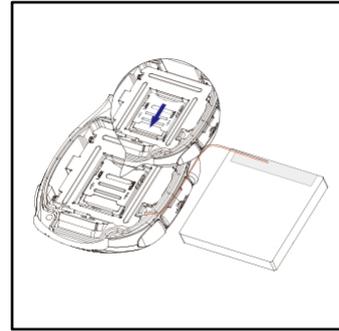
- Install the SIM Card



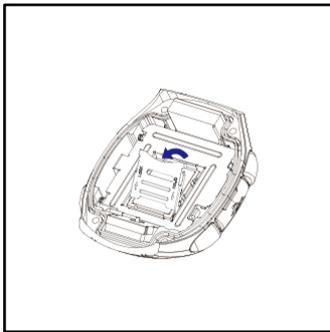
1. Please make sure TW-100 is power off. Unlock 4 screws with the proper screwdriver.



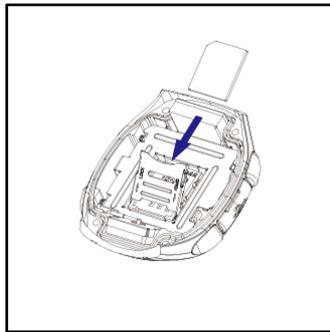
2. Remove the rear cover.



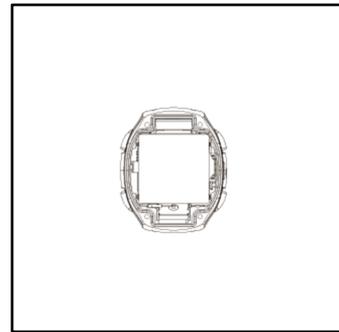
3. Remove the battery carefully and then push the SIM card cover downward (opened).



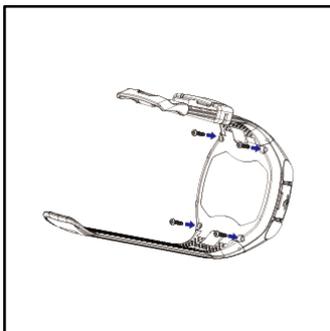
4. Open the SIM card cover.



5. Carefully make sure the SIM card is installed correctly, with the contact (gold part) of the SIM card facing downward. Close SIM card cover and push it upward (locked).



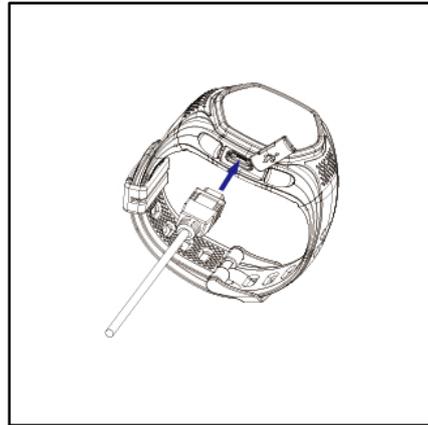
6. Put the battery on the original place.



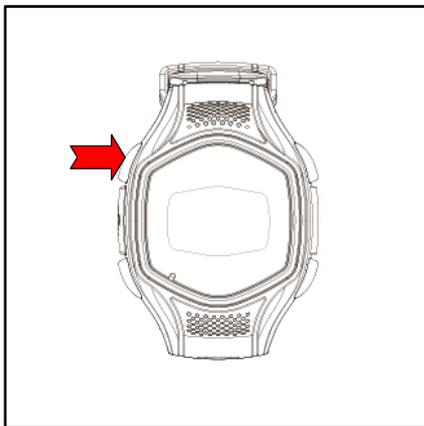
7. Put the rear cover and then Lock 4 screws accordingly.

- **Charge TW-100**

If you are using the TW-100 for the first time, charge the TW-100 for at least 3 hours. (The included battery is manufacturer-approved for use with the TW-100. The use of any other battery might damage TW-100.)



- **Power TW-100 On/Off**



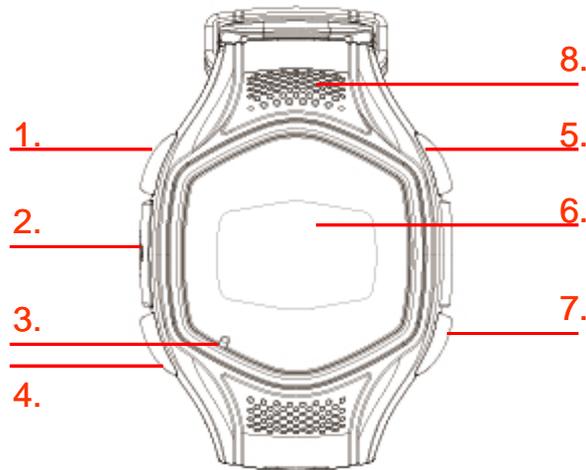
**Power On:**

Press and hold the “Power” key for 5 seconds. The LCD and backlight will turn on.

**Power Off:**

Press and hold the Power key until the display’s power off bar fully finishes. Then the LCD and backlight will turn off.

## TW-100 Device Configuration



1	Power(Long click)/Reject /Back	Hold down to power the device on/off. When there is an incoming call or during a phone call, press to reject or hang up the call. In the “Settings Menu”, press to cancel the setting and back to the last page.
2	Micro USB Port	Used for charging the TW-100.
3	Microphone	Microphone.
4	Notification (Long click)/Answer/Confirm /Menu	Make sure UI is displayed first. Hold to send a notification message to the assigned phone number and make a notification call to the assign number. When there is an incoming call, press to answer the phone call. Press to enter into the “Settings Menu”. In “Settings Menu”, press to confirm that setting.
5	Speed Dial #1(Long click)/ Increase Volume/ Up/Clock Switch	Hold the button down to call the speed dial #1. During a phone call, press this button to increase the volume level. In “Settings Menu”, pressing this button will

		<p>scroll up.</p> <p>Short press the button to switch to the other kind of clock.</p>
<b>6</b>	LCD	LCD.
<b>7</b>	Speed Dial #2 (Long click)/Decrease Volume/Down/Clock Switch	<p>Hold the button down to call the speed dial #2.</p> <p>During a phone call, press this button to decrease the volume level.</p> <p>In “Settings Menu”, pressing this button will scroll down.</p> <p>Short press the button to switch to the other kind of clock.</p>
<b>8</b>	Speaker	Used for listening to the other party during the phone call.

## Operation Mode

### General Icons

Call Fails		This icon would be displayed, when you call someone but it fails.
Ending Call		This icon would be displayed, when the phone call is ended.
Battery Charge (shutdown status)		Battery is being charged.
fully charged		Battery is fully charged.
Alert -Low Battery		Battery capacity is very low.
Alert - Alarm		This icon would be displayed when the alarm clock is triggered.

### Text Info



Local Time	It will show the local time after your time zone is selected on the server. You could refer to the
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	details in the chapter of Settings of TW-100.
Date	Shows the present date. When TW-100 is used for the first time, the date is set to factory settings. You could refer to the details in the chapter of Settings of TW-100.
Alarm Status	This icon would be displayed if you enable one of the alarm settings.
GSM Signal	The more bars that are visible, the stronger is the signal. If you don't install SIM card in TW-100, the GSM signal bars would turn white.
Battery Capacity	The more bars that are visible, the more is the battery capacity.

## Settings of TW-100



In operation mode, you could press “Up” or “Down” or “ Confirm” key to access to the “Setting Menu.”

There are 7 settings in the “Setting Menu” as shown below.

- 1) Time
- 2) Alarm
- 3) Ringtone/Volume
- 4) Language
- 5) Power Saving
- 6) Restore Factory Setting
- 7) About

## 1) Time

Use  $\triangle$  or  $\nabla$  to reach “Time” setting and press  (Confirm). There are 2 selections for the “Time” setting: “Auto time adjust” and “Time Setting”.



- “Auto time adjust”

- ① Complete the time zone setting on the server.
- ② Use  $\triangle$  or  $\nabla$  to reach “Auto time adjust” and press  (Confirm).
- ③ Use  $\triangle$  or  $\nabla$  to reach “Enable” and press  (Confirm). “Done” would be displayed on UI.
- ④ TW-100 would show the time according to UTC time + time zone hour after TW-100 is rebooted.

- “Time Setting”

- ① Use  $\triangle$  or  $\nabla$  to reach “Time Setting” and press  (Confirm).
- ② Use  $\triangle$  or  $\nabla$  to reach the number which you want and press  (Confirm) to set Year/Month/Day.
- ③ Use  $\triangle$  or  $\nabla$  to set the format of 24 hours or of 12hours and press  (Confirm).
- ④ Use  $\triangle$  or  $\nabla$  to reach the number which you want and press  (Confirm) to set Hour/Minute. “Done” would be displayed on UI.

## 2) Alarm

Use  $\triangle$  or  $\nabla$  to reach “Alarm” setting and press  (Confirm). You could set 5 sets of alarm clock.

- ① Use  $\triangle$  or  $\nabla$  to reach one of the clock settings and press  (Confirm).
- ② Use  $\triangle$  or  $\nabla$  to reach “Enable” and press  (Confirm).
- ③ Use  $\triangle$  or  $\nabla$  to reach the number which you want and press  (Confirm) to set Hour/Minute. “Done” would be displayed on UI. For example, you set 3:30 as your alarm setting. You would see **03:30-am ON** displayed on UI.
- ④ You could disable this clock setting by using  $\triangle$  or  $\nabla$  to reach the above setting **03:30-am ON** and press  (Confirm).
- ⑤ And then use  $\triangle$  or  $\nabla$  to reach “Disable” and press  (Confirm). “Done” would be displayed on UI. You would see **03:30-am OFF** displayed on UI.
- ⑥ You could follow step 1 to 5 to set more alarm settings or disable them.

## 3) Ringtone/Volume

Use  $\triangle$  or  $\nabla$  to reach “Ringtone/Volume” setting and press  (Confirm).

There are 2 selections for the “Ringtone/Volume” setting: “Ringtone” and “Volume”.



- “Ringtone”

- ① Use  $\triangle$  or  $\nabla$  to reach “Ringtone” setting and press  (Confirm).
- ② Use  $\triangle$  or  $\nabla$  to reach the ringtone you prefer. TW-100 would play the

selected ringtone. Press  (Confirm) to select it. “Done” would be displayed on UI.

- “Volume”

① Use  or  to reach “Volume” setting and press  (Confirm).

② Press  to increase or  to decrease the volume level. When you reach your volume level, press  (Confirm). “Done” would be displayed on UI.



P.S. You could adjust the volume of TW-100 during the call.

#### 4) Language

Use  or  to reach “Language” setting and press  (Confirm). There are 2 selections for the “Language” setting: “English” and “简体中文 (Simplified Chinese)”.



- “English”

① Use  or  to reach “English” setting and press  (Confirm). “Done” would be displayed on UI.

② You would see your UI language is changed to English.

- “简体中文”

① Use  $\triangle$  or  $\nabla$  to reach “简体中文” setting and press  (Confirm). “Done” would be displayed on UI.

② You would see your UI language is changed to Simplified Chinese.

## 5) Power Saving

Power saving is for reducing the power consumption by setting the time of LCD off without any key press.

Use  $\triangle$  or  $\nabla$  to reach “Power Saving” setting and press  (Confirm). There are 4 selections for the “Power Saving” setting: “off”, “5 seconds”, “15 seconds” and “30 seconds”.



① Use  $\triangle$  or  $\nabla$  to choose which setting you prefer and press  (Confirm). “Done” would be displayed on UI.

## 6) Restore Factory Setting

Use  $\triangle$  or  $\nabla$  to reach “Restore Factory Setting” setting and press  (Confirm) two times. It would be automatically rebooted and restore factory setting.

## 7) About

Use  $\triangle$  or  $\nabla$  to reach “About” setting and press  (Confirm). You could see TW-100 SW version, IMEI, server name, server port number, APN and report interval. After you change the settings above by the server’s command, you could check your setting here.

## *FCC Warning*

### FCC RF Exposure Information (SAR)

This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. The exposure standard for wireless devices employs a unit of measurement known as the Specific Absorption Rate (SAR). The peak spatial-average SAR limits for general population/uncontrolled exposure is 1.6 W/kg averaged over any 1 gram of tissue, with the exceptions for the parts of the human body treated as extremities, such as hands, wrists, feet, ankles, and pinnae, where the peak spatial-average SAR limit is 4 W/kg, averaged over any 10 grams of tissue. Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands. The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines.

### FCC Part 15. 19 Labelling requirement.

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

FCC Part 15.21 Warning

Notice:

Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.