# GT2000 User Guide



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This is the August 2009 release (Revision A) of the GT2000 User Guide.

#### Canada

This Class B digital apparatus complies with Canadian ICES-003.

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

Cet appareil numérique de la classe B est conforme à la norme NNB-003 du Canada. Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Classe B prescrites dans le règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

### **Europe**

This product has been tested and found to comply with all requirements for CE Marking and sale within the European Economic Area (EEA). It is classified and marked as being Class 2 Radio Equipment under 2000/299/EC, as Bluetooth and wireless LAN approvals are country specific. Please consult your local distributor for more information.

The GT2000 has Bluetooth and wireless LAN approval in most EU countries, and the GT2000 is also compliant with GSM and UMTS conformity assessment requirements specified by the Radio and Telecommunication Terminal Equipment specified by European Council Directive 1999/5/EC. These requirements provide reasonable protection against harmful interference when the equipment is operated appropriately in a residential or commercial environment.

### Taiwan – Battery Recycling Requirements

The product contains an internal Lithium-ion battery. Taiwanese regulations require that waste batteries are recycled.

廢電池請回收

### **Notice to Our European Union Customers**

DO NOT throw the GT2000 in municipal waste. This product has been designed to enable proper reuse of parts and recycling. The symbol of the crossed out wheeled bin indicates that the product (electrical, electronic equipment and mercury-containing button cell battery) should not be placed in municipal waste. Check local regulations for disposal of electronic products.

# **Safety Information**



WARNING – Do not damage the GT2000. A damaged GT2000 can cause an explosion or fire, and can result in personal injury and/or property damage. To prevent injury or damage:

- Do not store or leave your device near a heat source such as near a fireplace or other heat-generating appliance, or otherwise expose it to temperatures in excess of 60°C (140°F) such as on a vehicle dashboard. When heated to excessive temperatures, battery inside the GT2000 could explode or vent, posing a risk of
- Do not drop or puncture the GT2000.
- Do not open the GT2000 or short-circuit its contacts.
- Avoid contact with the GT2000 if it appears to be leaking. Battery fluid is corrosive, and contact with it can result in personal injury and/or property damage. To prevent injury or damage.
- Charge the Lithium-ion battery only in a GT2000 product that is specified to charge it. Be sure to follow all instructions that are provided with the battery charger.
- GT2000 is using the non-replaceable Lithium-ion battery, please consult your dealer if you have any question regarding to the battery.

# **AC power adaptor safety**



**WARNING** – To use AC power adaptor safely:

- Use only the AC power adaptor intended for the GT2000. Using any other AC adaptor can damage the handheld and may void your warranty. Do not use the AC adaptor with any other product.
- Make certain that the input voltage on the AC power adaptor matches the voltage and frequency in your location.
- Make certain that the power adaptor has prongs compatible with your outlets.
- Do not use the AC power adaptor in wet outdoor areas; it is designed for indoor
- Unplug the AC power adaptor from power when not in use.
- Do not short the output connector.
- If the AC power adaptor becomes damaged, replace it with a new GT2000 AC power adaptor.

In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety.

### Waterproof



NOTE – The GT2000 complies with IEC 60529 IP67 waterproof standard. Note; however, that failing to heed the following precautions may result in damage or injury that is not cover by the warranty. Please take the time to carefully read and heed the following cautions.

- The waterproof properties of the GT2000 apply to fresh water and saltwater at room temperature only
- Do not immerse GT2000 in water at a depth greater than 1.0 meter
- Do not immerse GT2000 in water for longer than 30 minutes
- Do not operate GT2000 in water
- Make sure that the "USB cover" and "Power switch cover" are completely and securely closed to prevent water from getting inside the GT2000 and damaging it.
- When closing the "USB cover" and "Power switch cover", make sure that no foreign object such as sand, hair, dust. Etc. is caught in the seal.
- Do not open the "USB cover" or "Power switch cover" when GT2000 is wet or while it is immersed in water.
- After GT2000 has been immersed in water, use fresh water to wash it. Never use soap or detergent to clean the GT2000 or it will cause of GT2000's waterproof capability.
- After washing the GT2000, take care the completely drain it and use a dry cloth to wipe off any drops of water adhering to it. Leave the GT2000 to dry completely in a well-ventilated place away from direct sunlight.
- Do not use hair dryer or the like to dry the GT2000. Exposing the GT2000 to high temperatures may cause the GT2000 "USB cover" and "Power switch cover" waterproof seal to become deformed.
- Do not leave the GT2000 in an environment colder than -10°C (14°F) or warmer than 60°C (140°F) or it may cause deterioration of the GT2000 waterproof capability.
- Please note that the GT2000 accessories are not waterproof.
- It is recommended that the "USB cover" and "Power switch cover" to be replaced every year with new ones in order to secure the waterproof function. Please consult your dealer for the replacing and be noted that there will be a fee for the replacing.

# **IMPORTANT NOTICES**

### **FOR USA**

- 1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- 2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device was tested with the belt-chips (Brand name: Fourier Model: 001-A-B-GPS-03-YYMMDD, the thickness: 21mm) directly to the human body. To maintain compliance with FCC RF exposure compliance requirements, this equipment should be set up with minimum distance 21mm between the radiator and your body. Use only belt-clips, holsters or similar accessories that does not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

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

### **FOR CANADA**

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of Industry Canada.

Cet appareil numerique respecte les limites de bruits radioelectriques applicables aux appareils numeriques de Classe B prescrites dans la norme sur le material brouilleur: "Appareils Numeriques," NMB-003 edictee par l'Industrie.

# **Content**

Sarety Information3
AC power adaptor safety3
Waterproof4
What's in the BOX?6
Getting Started7
Parts of the GT20007
How to operate GT20008
Button and Indication10
Using GT2000 at the very beginning11
Charging the battery and check the battery status11
How to charge GT200011
Installing and removing the SIM card11
What is GT200012
Setting the devices13
Install PWM_PPC. cab into PDA13
Save PWM_PC.exe and PWM_DLG.dll into your notebook14
Pair Bluetooth between PDA and GT200014
Using Bluetooth to connect PDA with GT2000 and access to the Internet 14
Using Wi-Fi to connect PDA with GT2000 and access to the Internet17
First user (owner) to establish internet connection from PDA17
Using Wi-Fi to connect notebook with GT2000 and access to the Internet 19
First user (owner) to establish internet connection from notebook 19
Set APN20
Set Band
Set Dialing
GT2000 Wi-Fi setting21
Wi-Fi Advance setting22
Update "GT2000 OS"24
Others
Trouble shooting26

# What's in the BOX?

When you unpack the GT2000, check that you received all the components, as shown below.

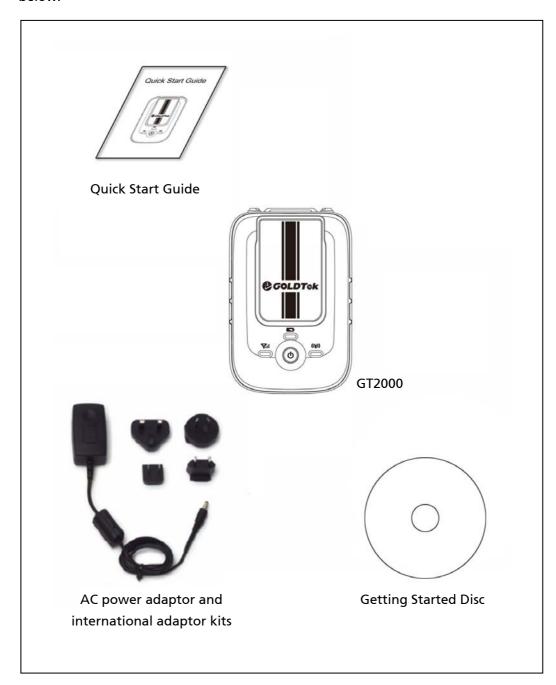


Figure 1.1 Items included with the GT2000

Inspect all contents for visible damage (scratches, dents) and if any components appear damaged, notify the shipping carrier. Keep the shipping and packaging material for the carrier's inspection.

# **Getting Started**

### Parts of the GT2000

The following pages show the main parts of GT2000.

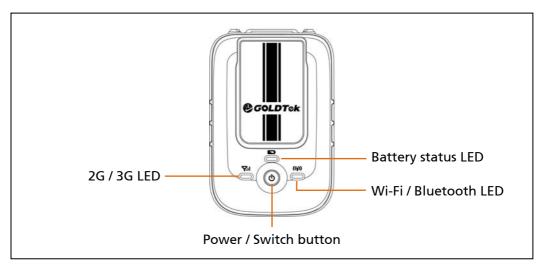


Figure 2.1 GT2000 – front view

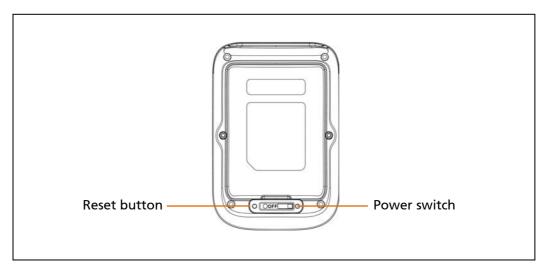


Figure 2.2 GT2000 – back view

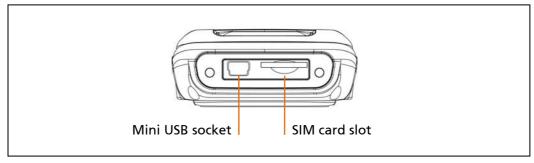
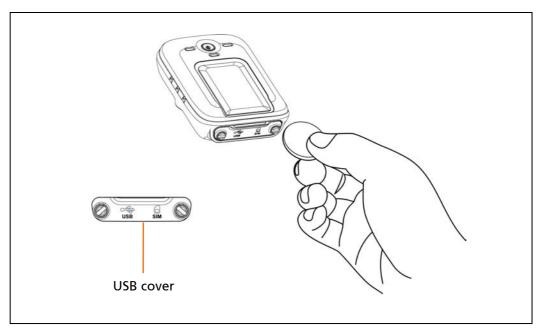


Figure 2.3 GT2000 – bottom view

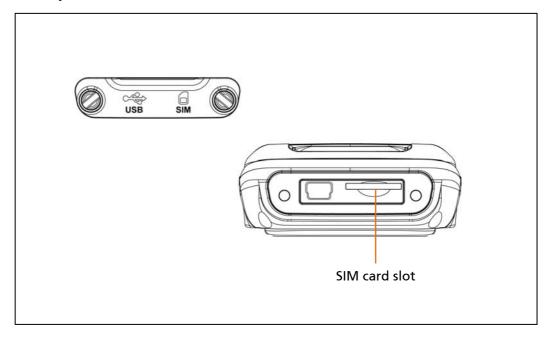
### **How to operate GT2000**

1. Screw off the "USB cover" by a coin or screwdriver and then remove the "USB cover"

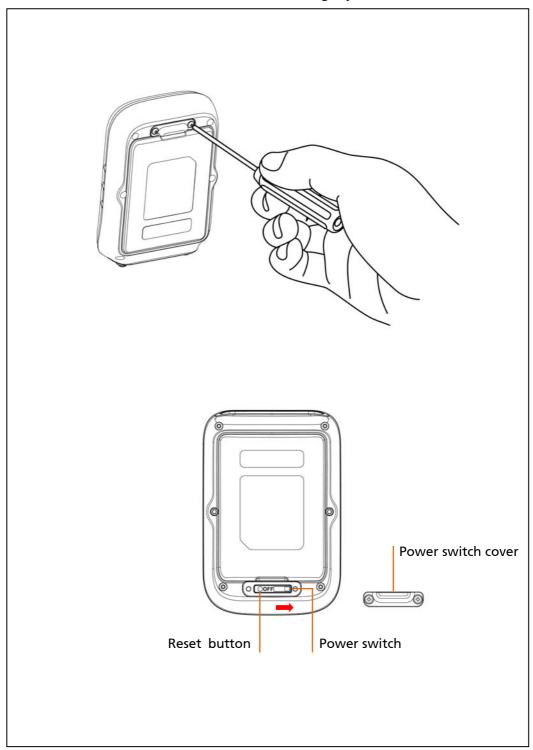


Screw off the "USB cover" by a coin

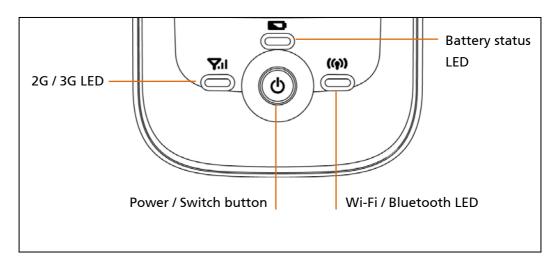
2. Insert SIM card into the "SIM card slot" (please make sure the SIM card doesn't require PIN code) and screw the "USB cover" back to the device completely and securely.



3. Screw off the "Power switch cover" by screwdriver, and switch the Power Switch to "ON" and then screw the "Power switch cover" tightly back to the device.



### **Button and Indication**



#### 1. Power / Switch button

Press and hold Power / Switch button to turn on the GT2000 (Power switch need to set to "ON" and SIM card is inserted)

Press and hold "Power / Switch button" until "Wi-Fi / Bluetooth LED" and "2G/3G LED" are lighting → "Wi-Fi / Bluetooth LED" flashing in blue means Bluetooth is "ON" → 2G/3G LED flashing in green (connect to 3G network) or amber (connect to 2G network) means connecting to the network

#### 2. Press "Power/Switch button" to switch between Bluetooth and Wi-Fi

### 3. Press and hold "Power/Switch button" to "Power OFF" the GT2000

After Wi-Fi and Bluetooth are disconnected for 15 minutes, the GT2000 will be "Power OFF" automatically.

#### 4. 2G/3G LED

Amber flashing: GSM, GPRS, EDGE connecting

Green flashing: 3G or 3.5G connecting

### 5. Battery Status LED

Indicator for battery status Green flashing: charging Green on: charge completed Red flashing: battery low

### 6. Wi-Fi/ Bluetooth LED

Indicator for Wi-Fi and Bluetooth status

Amber flashing: Wi-Fi ON Blue flashing: Bluetooth

# Using GT2000 at the very beginning

### Charging the battery and check the battery status

Before using GT2000 at the very beginning, set the Power Switch to "ON" and please fully charge the battery for 4 hours first.



#### **NOTE**

- GT2000 battery cannot be charged is the temperature is lower than 0°C(-32°F) or higher than 45°C(113°F)
- When GT2000 has not been used for a long time, please fully charge for 4 hours first before start using it again.
- When Battery Status LED flashing in red, means the battery is low, please charge GT2000.

### **How to charge GT2000**

- 1. Please plug in the "AC power adaptor" into GT2000 "Mini USB port" → "Battery status LED" flashing in green means charging → when complete charged, LED will lighting in Green→ remove the "AC power adaptor"
- 2. Connect GT2000 with computer via USB Data Cable can also charge GT2000.

# Installing and removing the SIM card



### WARNING

- The SIM card and its contents can be easily damaged by scratches or bending. Use caution when inserting or removing the card.
- When inserting or removing a SIM card, place the GT2000 on a dust-free indoor surface.
- Static electricity can harm electronic components inside the GT2000. To prevent static damage, discharge static electricity from your body before you touch any of the electronic components inside the GT2000
- Please "Power OFF" the GT2000 first before removing SIM card
- After installing SIM card, please make sure the "USB cover" is securely screw back to the device.

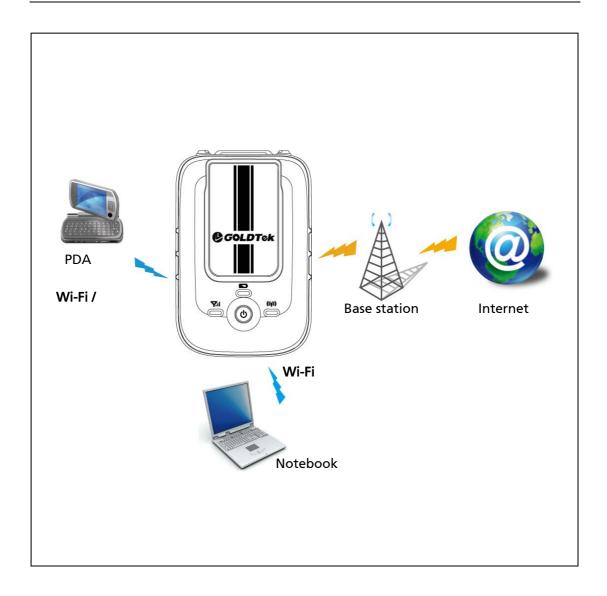
# What is GT2000

GT2000 is a portable wireless modem. Any device such as PDA (Personal Digital Assistant) or notebook which does not have 3.5G internet access ability but has Wi-Fi or Bluetooth function can connect with GT2000 via Wi-Fi or Bluetooth and then access to the Internet by GT2000.



### **NOTE**

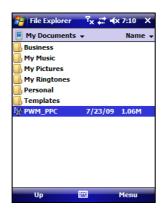
- Notebook can only connect with GT2000 via Wi-Fi but not Bluetooth.
- Only one user can change GT2000 setting at the same time.



# **Setting the devices**

### Install PWM\_PPC. cab into PDA

- 1. Copy "PWM\_PPC.cab" into the PDA (with Windows Mobile 5 and 6.1 OS) from "Getting Started Disc" through memory card or using ActiveSync
- 2. Click "PWM\_PPC" to install



3. After install completed, please restart the PDA



Note: if there is new PWM\_PPC.cab released, please update "PWM\_PPC.cab" in PDA Repeat step 1 and 2, → click "OK" to complete the update process



### Save PWM\_PC.exe and PWM\_DLG.dll into your notebook

- 1. Save the "PWM\_PC.exe" and "PWM\_DLG.dll" in the same folder from "Getting Started Disc" into the notebook
- 2. "PWM\_PC.exe" and "PWM\_DLG.dll" can only be executed in the Windows Vista or Windows XP notebook
- 3. Whenever want to connect to GT2000 via Wi-Fi, please execute the "PWM\_PC.exe"

### Pair Bluetooth between PDA and GT2000

- 1. Turn on GT2000 and make sure Bluetooth is "ON"
- 2. Turn on PDA Bluetooth function
- 3. Use PDA Bluetooth to inquiry and pair with GT2000
- 4. Create a new outgoing port on PDA for GT2000.



### **NOTE**

When pairing with GT2000, the Pass code is "0000".

# Using Bluetooth to connect PDA with GT2000 and access to the Internet

- 1. Turn on GT2000 and make sure Bluetooth is "ON"
- 2. Turn on PDA Bluetooth function
- 3. Go to "Start" → "Setting"



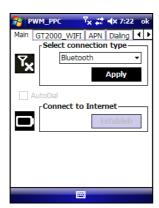
4. Click "PWM\_PPC"



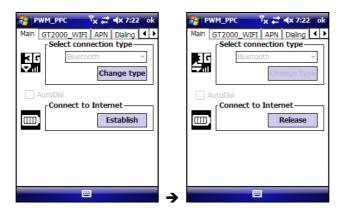
5. Select "Main" → set "Select connection type" to "Bluetooth"



6. Select "Main" and the "Apply" turn to gray → click "Apply"



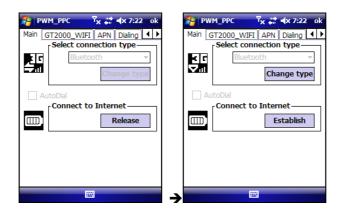
7. Click "Establish" button and then start to connect to Internet



8. After connection established, surf the web via Internet Explorer



9. Click "Release" to disconnect with Internet



# Using Wi-Fi to connect PDA with GT2000 and access to the Internet

- 1. Turn on GT2000 and make sure Wi-Fi is "ON"
- 2. Turn on PDA Wi-Fi function.
- 3. PDA will search for the available Wi-Fi networks and please select and connect with "GT2000Adhoc"



### **NOTE**

Please select network "Only Computer - to - Computer" or "All Available".

### First user (owner) to establish internet connection from PDA

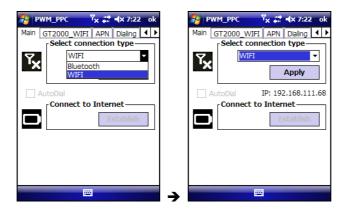
1. Go to "Start" → "Setting"



2. Click "PWM\_PPC"



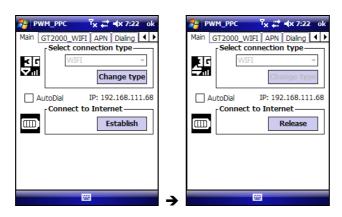
3. Select "Main" → set "Select connection type" to "Wi-Fi" and Wait for **DHCP-assigned IP address** 



4. Click "Apply" and screen will stay for several seconds to check Internet connection status



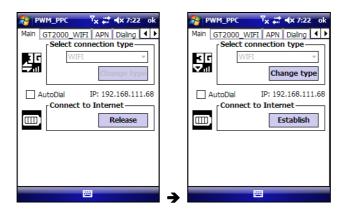
5. Click "Establish" button and then start to connect to Internet



6. After connection established, surf the web via Internet Explorer



7. Click "release" to disconnect with Internet





### **NOTE**

After first user (owner) established internet connection, second user can access Internet via GT2000 when connect with GT2000.

# Using Wi-Fi to connect notebook with GT2000 and access to the Internet

- 1. Turn on GT2000 and make sure Wi-Fi is "ON"
- 2. Turn on notebook Wi-Fi function.
- 3. Notebook will search for the available Wi-Fi networks and please select and connect with "GT2000Adhoc"

### First user (owner) to establish internet connection from notebook

1. Click "PWM\_PC.exe" and then repeat step 3-7 in First user (owner) to establish internet connection from PDA

#### **Set APN**

Start → Setting → PWM\_PPC → select "APN", after setting → click "Apply"



### **Set Band**

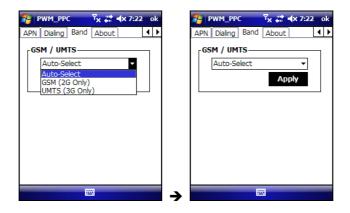
Start → Settings → PWM\_PPC → select "Band", after selection, please wait until the bank is changed successfully → click "Apply".

The options are defined as below:

- 1. Auto-Select: Automatically select the band depends on the network condition. **Default is Auto-Select**
- 2. GSM (2G Only): Force to use GSM only.
- 3. UMTS (3G Only): Force to use UMTS only.

After changing the setting, the PDA will disconnect from GT2000 first → "2G/3G LED lighting" (if change the setting to GSM network, amber LED ON, and if change to UMTS network, green LED ON)and process of changing to the selected band→ when changing complete, "2G/3G LED" flashing(if change the setting to GSM network, amber LED flashing, and if change to UMTS network, green LED flashing)→ please click "Apply" to make the PDA reconnect with GT2000.

When clean boot GT2000, the setting will back to "Auto-Select"



### **Set Dialing**

Start → Setting → PWM\_PPC → select "Dialing" → check "Require Name / PW to login" → enter name and password → click "Apply". The default phone number is "\*99#"



### **GT2000 Wi-Fi setting**

Start → Setting → PWM\_PPC → select "GT2000\_WI-FI" → after setting, click "Apply"



- 1. SSID default is "GT2000Adhoc"
- 2. If want to change "channel", please modify SSID first
- 3. If ever change the setting in "GT2000\_WI-FI", the PDA will disconnect from GT2000. User will also need to execute Wi-Fi Advance Setting.
- 4. Network Key format
  - A. 5 or 13 digits (any ASCII character)
  - B. 10 or 26 digits hexadecimal (0.1.2.3.4.5.6.7.8.9.A.B.C.D.E.F). In this case, capital or small letters do not make any different since they are all considered as the associated hexadecimal values.

# **Wi-Fi Advance setting**

1. Go to "Start" → "Settings"



2. Select "Connections" → click "Wi-Fi" icon



3. Select "Only Computer - to - Computer" or "All Available"



4. Searching and click "GT2000Adhoc"



5. Click "Next"



6. Click "Next" → Set "Authentication" to "Open", "Data Encryption" setting need to be same as "GT2000\_Wi-Fi"



7. After setting → click "Next" → click "Finish"



# Update "GT2000 OS"

If there is any new release for GT2000 OS, please save the new OS to computer and update the OS in GT2000.

- 1. Please "Power OFF" the GT2000
- 2. Connect GT2000 with computer via "USB Data Cable"
- 3. Press and hold "Power button" until "2G/3G LED" and "Wi-Fi/Bluetooth LED" flashing by turns
- 4. Click "ImageInstall.exe"



5. Update success



If there is any new release for GT2000 OS, please save the new OS to computer and  $\Box$ update the OS in GT2000. However, this update could be only performed by the  $\Box$ manufacturer or professional agency.

### **Others**

- 1. Clean boot: "Power OFF" GT200 first → Press and hold "Power/Switch button" and press reset key at the same time and wait until both "2G/3G LED" and "Wi-Fi/Bluetooth LED" stop flashing (both LEDs will remain "ON") → release "Power/Switch button" and "Reset button" → back to the default setting.
- 2. Reset: when GT2000 is "Power ON" → press reset key to reset the device. All settings will remain the same.
- 3. Switch between Wi-Fi and Bluetooth Whenever want to change the connection way with GT2000, please disconnect PDA with GT2000 first → press "Power/Switch button" to switch Wi-Fi (Bluetooth) to Bluetooth (Wi-Fi) on GT2000 → execute "PWM\_PPC" connection again.
- 4. Battery status is to be presented as below:

  - : Medium
  - : High

  - : charging
- 5. 2G/3G network status is to be presented as below:
  - stands for stand by at GSM (2G) network and its signal strength, if there is antenna only ., means there is no signal
  - stands for stand by at UMTS (3G) network and its signal strength, if there is antenna only means there is no signal
  - stands that GT2000 is connecting with GSM (2G) network.
  - stands that GT2000 is connecting with UMTS (3G) network.
- 6. SIM card related error is to be presented as below:
  - no SIM card is inserted in GT2000.
  - the SIM card does not work properly. For example, this SIM card request PIN.

# **Trouble shooting**

### Power issue

Problem	Cause	Solution
Cannot power on	"Power switch" is set to OFF	Remove "Power switch cover" and set the "Power switch" to "ON" (please refer page 9)
	Battery low	Please charge GT2000 for 4 hours (please refer to page 11)
GT2000 is not charging	The internal temperature has risen above the allowed maximum for charging the battery	- "Power OFF" the GT2000 - Remove GT2000 from any external heat surface (for example sunlight)

### 2G/3G LED issue

Problem	Cause	Solution
LED is not ON	No SIM card	Please insert SIM card to GT2000 (please refer to
		page 8)
	SIM card request PIN	Please change a SIM card which does not request PIN
	Does not register successfully into network	Please make sure GT2000 register to the network successfully, for example  - Poor signal so please move to the network service area  - press "Reset button" to reset the GT2000 (please refer to page 25)  - User set GT2000 band to UMTS but insert a 2G only SIM card, please change to 3G SIM card or clean boot GT2000 and make the band setting back to "Auto-Select"

### **Connection issue**

Problem	Cause	Solution
Cannot connect to	GT2000 hangs	Press "Reset button" or "Power OFF" and "ON"
the 2G/3G network	Poor signal	again
	Poor signal	Please move to the network service area
PDA/notebook cannot connect with GT2000 via Wi-Fi	Ever changed the GT2000 Wi-Fi setting but enter wrong Data encryption or Key Index	<ul> <li>Enter the correct Data encryption and Key Index (please refer to page 21)</li> <li>Clean boot GT2000 and make all the setting back to default (please refer to page 25)</li> </ul>
	Connect to the wrong SSID	<ul> <li>Make sure PDA/notebook connect to the correct SSID</li> <li>Clean boot GT2000 and make all the setting back to default</li> </ul>
	Poor Wi-Fi signal	Put PDA/notebook closer to the GT2000
PDA cannot connect with GT2000 via Bluetooth	Poor Bluetooth Signal	Put PDA/notebook closer to the GT2000
	GT2000 ever clean boot after PDA been paired with GT2000	Please pair PDA with GT2000 again