

# TDL 3G

## User Guide



Version 1.00  
Revision A  
October 2009

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This is the September 2009 release (Revision A) of the TDL 3G 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 BT and wireless LAN approvals are country specific. Please consult your local distributor for more information.

The TDL 3G has BT and wireless LAN approval in most EU countries, and the TDL 3G 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 TDL 3G 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 TDL 3G. A damaged TDL 3G 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 TDL 3G could explode or vent, posing a risk of fire.
- Do not drop or puncture the TDL 3G.
- Do not open the TDL 3G or short-circuit its contacts.
- Avoid contact with the TDL 3G 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 TDL 3G product that is specified to charge it. Be sure to follow all instructions that are provided with the battery charger.
- TDL 3G 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 TDL 3G. 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 use only.
- 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 TDL 3G 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 TDL 3G 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 TDL 3G apply to fresh water and saltwater at room temperature only.
- Do not immerse TDL 3G in water at a depth greater than 1.0 meter.
- Do not immerse TDL 3G in water for longer than 30 minutes.
- Do not operate TDL 3G in water.
- Make sure that the "USB cover" and "Power switch cover" are completely and securely closed to prevent water from getting inside the TDL 3G 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 TDL 3G is wet or while it is immersed in water.
- After TDL 3G has been immersed in water, use fresh water to wash it. Never use soap or detergent to clean the TDL 3G or it will cause of TDL 3G's waterproof capability.
- After washing the TDL 3G, take care the completely drain it and use a dry cloth to wipe off any drops of water adhering to it. Leave the TDL 3G to dry completely in a well-ventilated place away from direct sunlight.
- Do not use hair dryer or the like to dry the TDL 3G. Exposing the TDL 3G to high temperatures may cause the TDL 3G "USB cover" and "Power switch cover" waterproof seal to become deformed.
- Do not leave the TDL 3G in an environment colder than -10°C (14°F) or warmer than 60°C (140°F) or it may cause deterioration of the TDL 3G waterproof capability.
- Please note that the TDL 3G 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.

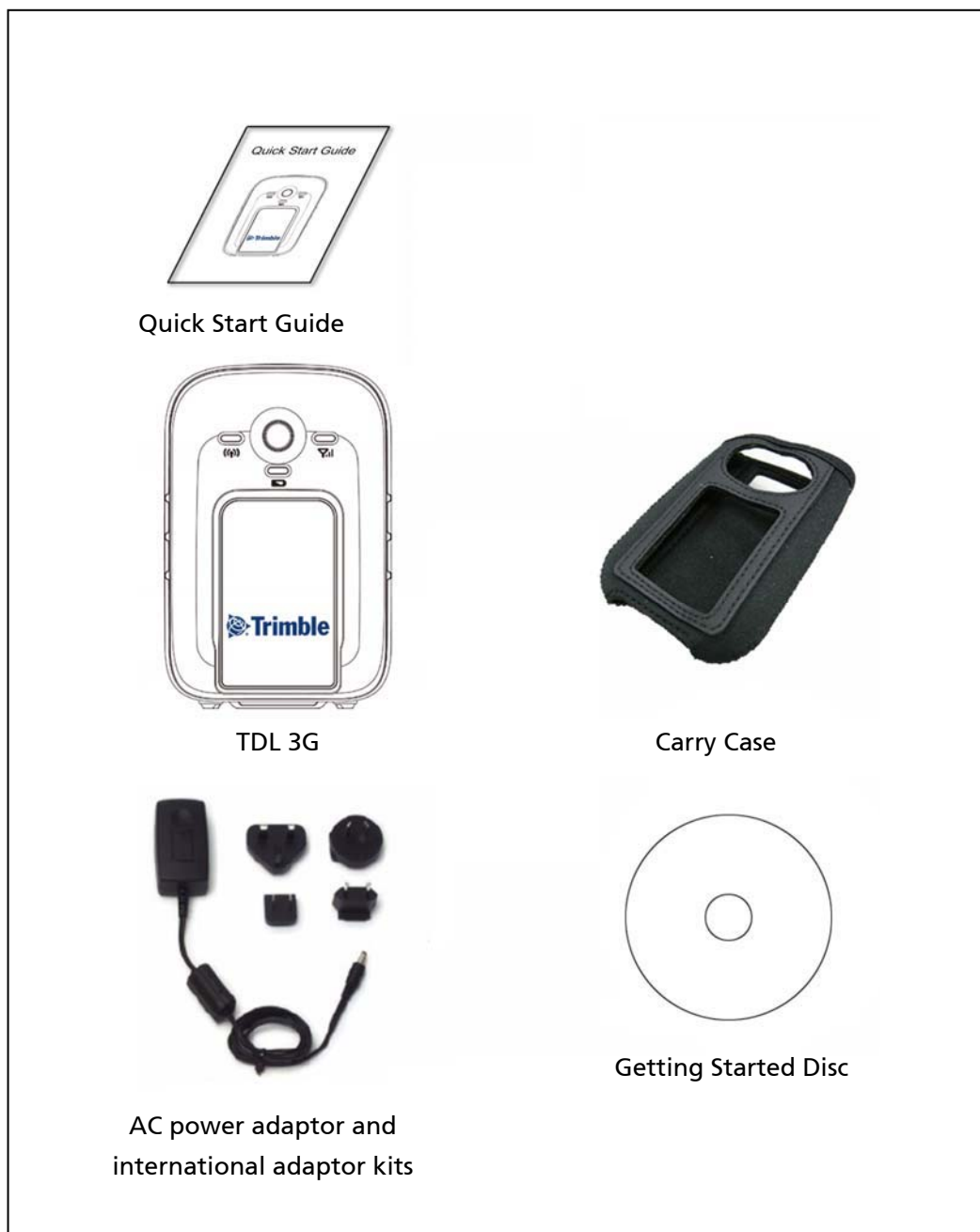
Cet appareil numerique respecte les limites de bruits radioelectriques applicables aux appareils numeriques de Classe B prescrites dans la norme sur le material brouilleur: "Appareils Numeriques," NMB-003 edictee par l'Industrie.

## Content

<b>Safety Information .....</b>	<b>3</b>
AC power adaptor safety .....	3
Waterproof .....	4
<b>What's in the BOX? .....</b>	<b>7</b>
<b>Getting Started .....</b>	<b>8</b>
Parts of the TDL 3G .....	8
How to operate TDL 3G .....	9
Button and Indication.....	11
<b>Using TDL 3G at the very beginning .....</b>	<b>12</b>
Charging the battery and check the battery status.....	12
How to charge TDL 3G .....	12
Installing and removing the SIM card.....	12
<b>What is TDL 3G .....</b>	<b>13</b>
<b>Setting the devices .....</b>	<b>14</b>
Install PWM_PPC. cab into PDA .....	14
Save PWM_PC.exe and PWM_DLG.dll into your notebook .....	15
Pair BT between PDA and TDL 3G .....	15
Using BT to connect PDA with TDL 3G and access to the Internet.....	15
Using Wi-Fi to connect PDA with TDL 3G and access to the Internet .....	18
First user (owner) to establish internet connection from PDA.....	18
Using Wi-Fi to connect notebook with TDL 3G and access to the Internet .....	21
First user (owner) to establish internet connection from notebook .....	21
Set APN .....	21
Set Band .....	22
Set Dialing .....	22
TDL 3G Wi-Fi setting .....	23
Wi-Fi Advance setting.....	23
Update "TDL 3G OS" .....	26
Others .....	27
Trouble shooting .....	28

## What's in the BOX?

When you unpack the TDL 3G, check that you received all the components, as shown below.



**Figure 1.1** Items included with the TDL 3G

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 TDL 3G

The following pages show the main parts of TDL 3G.

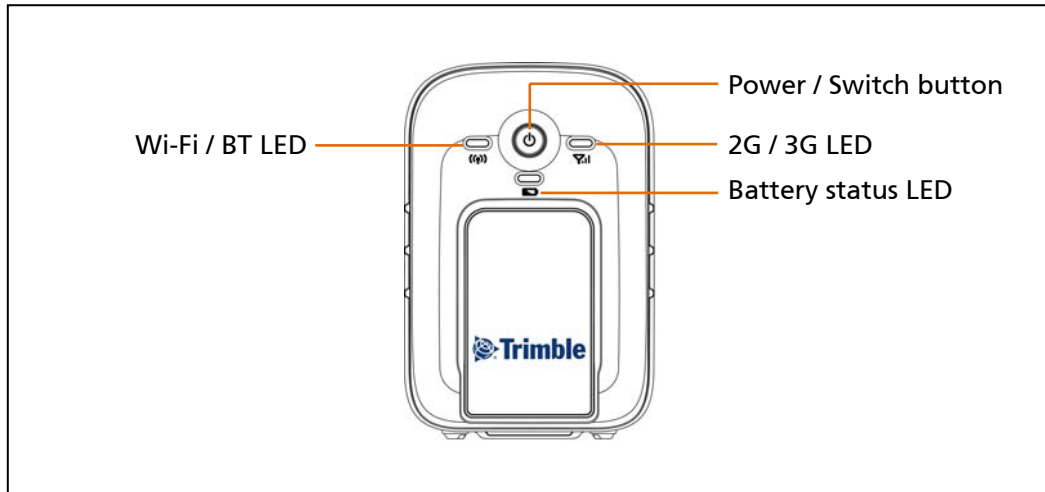


Figure 2.1 TDL 3G – front view

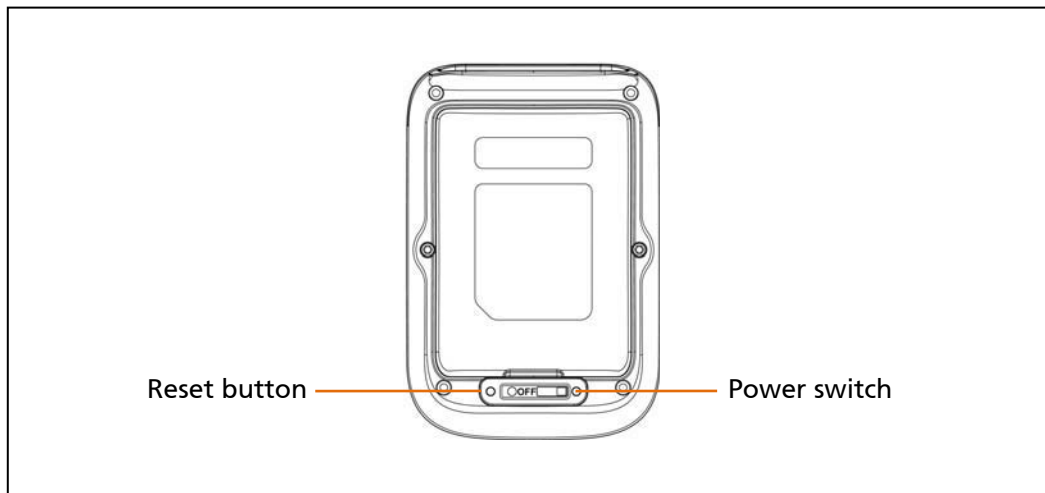


Figure 2.2 TDL 3G – back view

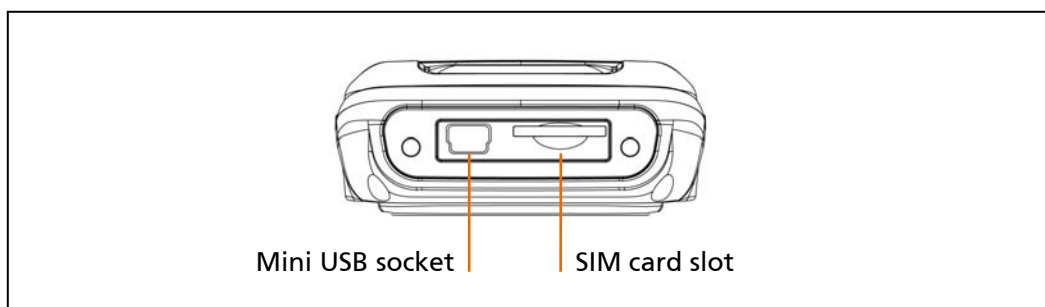
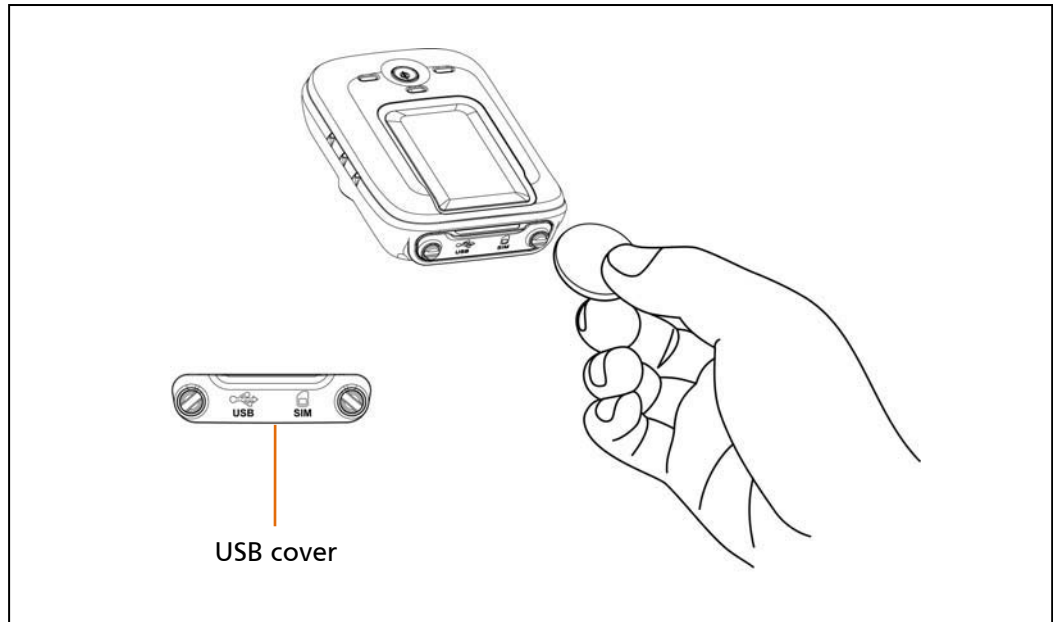


Figure 2.3 TDL 3G – bottom view



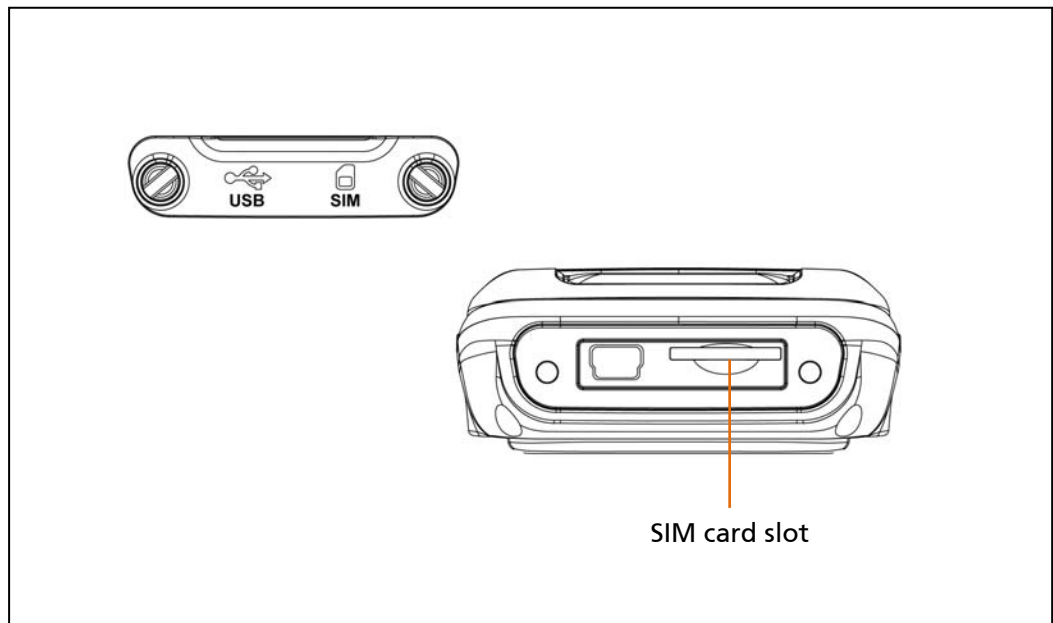
## How to operate TDL 3G

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

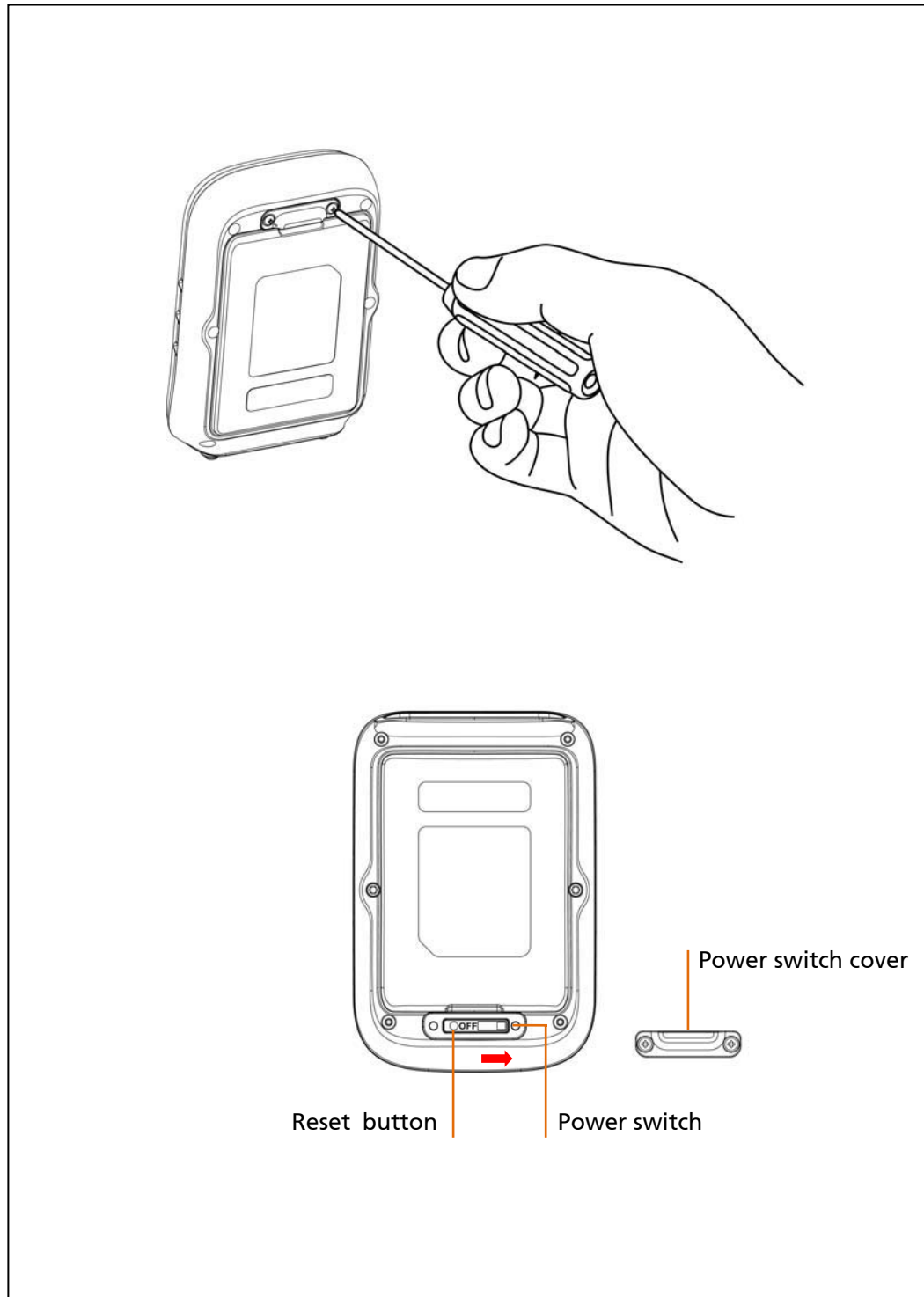


Screw off the "USB cover" by a coin

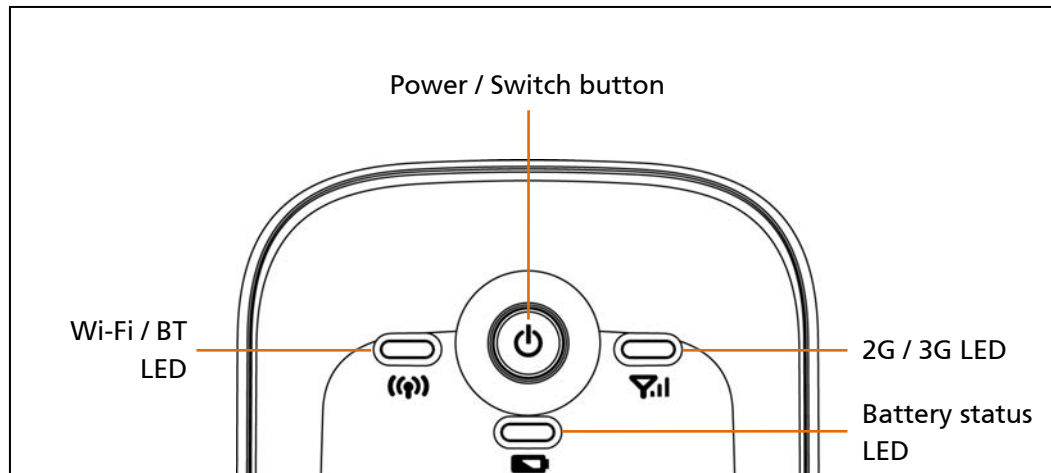
2. Insert SIM card into the "SIM card slot" (please make sure the SIM card doesn't require PIN code) and screw the "USB cover" back to the device completely and securely.



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 TDL 3G (Power switch need to set to "ON" and SIM card is inserted).

Press and hold "Power / Switch button" until "Wi-Fi / BT LED" and "2G/3G LED" are lighting → "Wi-Fi / BT LED" flashing in blue means BT 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 BT and Wi-Fi

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

After Wi-Fi and BT are disconnected for 15 minutes, the TDL 3G 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/ BT LED

Indicator for Wi-Fi and BT status

Amber flashing: Wi-Fi ON

Blue flashing: BT

# Using TDL 3G at the very beginning

## Charging the battery and check the battery status

Before using TDL 3G at the very beginning, set the Power Switch to "ON" and please fully charge the battery for 4 hours first.



### NOTE

- TDL 3G battery cannot be charged if the temperature is lower than 0°C(-32°F) or higher than 45°C(113°F).
- When TDL 3G 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 TDL 3G.

## How to charge TDL 3G

1. Please plug in the "AC power adaptor" into TDL 3G "Mini USB port" → "Battery status LED" flashing in green means charging → when completely charged, LED will light in green → remove the "AC power adaptor"
2. Connect TDL 3G with computer via USB Data Cable can also charge TDL 3G.

## 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 TDL 3G on a dust-free indoor surface.
- Static electricity can harm electronic components inside the TDL 3G. To prevent static damage, discharge static electricity from your body before you touch any of the electronic components inside the TDL 3G.
- Please "Power OFF" the TDL 3G first before removing SIM card.
- After installing SIM card, please make sure the "USB cover" is securely screwed back to the device.

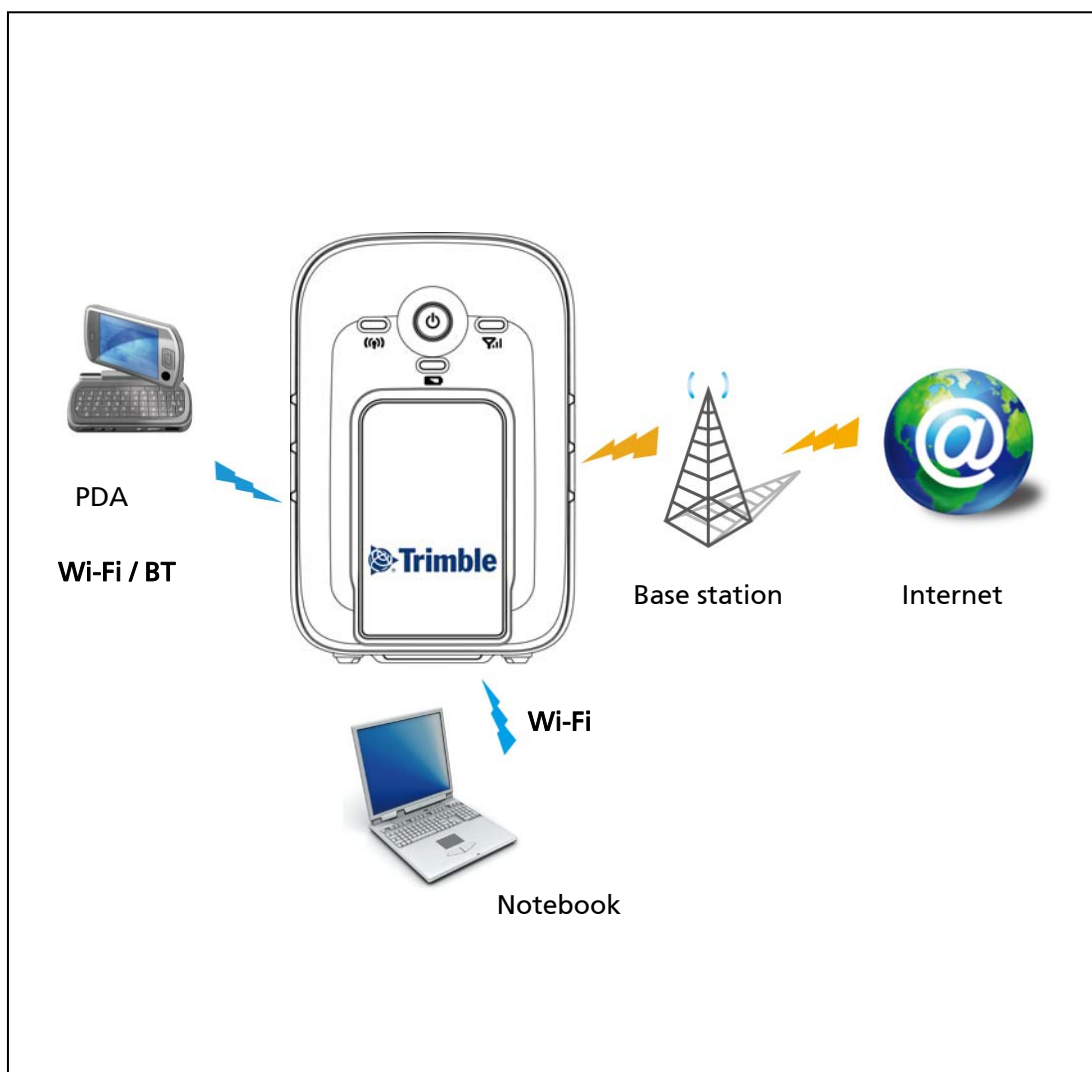
## What is TDL 3G

TDL 3G 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 BT function can connect with TDL 3G via Wi-Fi or BT and then access to the Internet by TDL 3G.



### NOTE

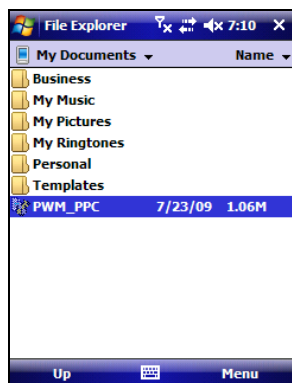
- Notebook can only connect with TDL 3G via Wi-Fi but not BT.
- Only one user can change TDL 3G setting at the same time.



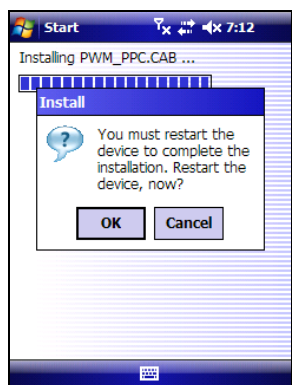
# Setting the devices

## Install PWM\_PPC.cab into PDA

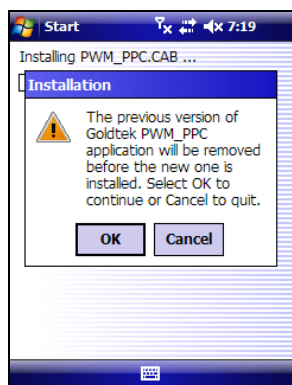
1. Copy "PWM\_PPC.cab" into the PDA (with Windows Mobile 5 and 6.1 OS) from "Getting Started Disc" through memory card or using ActiveSync
2. Click "PWM\_PPC" to install



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 TDL 3G via Wi-Fi, please execute the "PWM\_PC.exe"

## Pair BT between PDA and TDL 3G

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

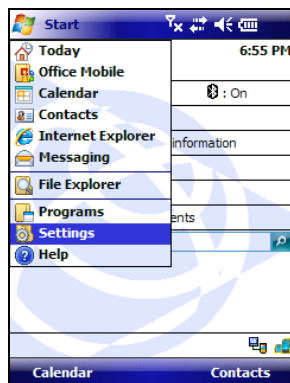


### NOTE

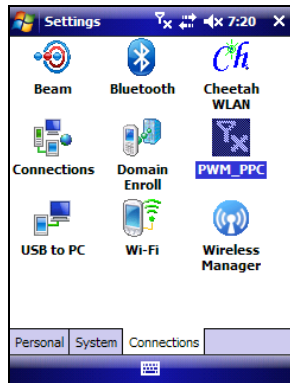
- 
- When pairing with TDL 3G, the Pass code is "0000".
- 

## Using BT to connect PDA with TDL 3G and access to the Internet

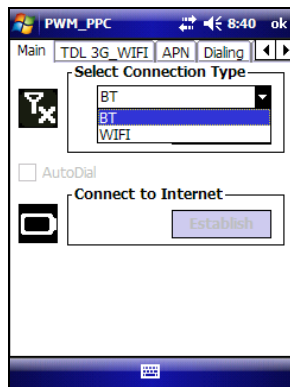
1. Turn on TDL 3G and make sure BT is "ON"
2. Turn on PDA BT function
3. Go to "Start" → "Setting"



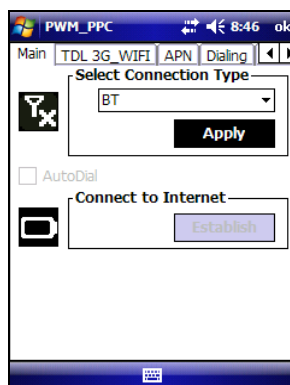
4. Click "PWM\_PPC"



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

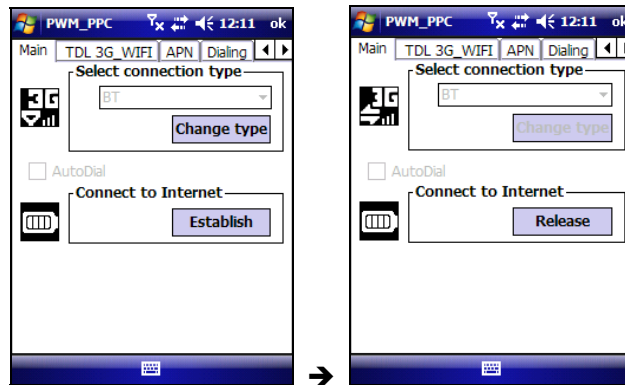


6. Select "Main" and the "Apply" turn to gray → click "Apply"





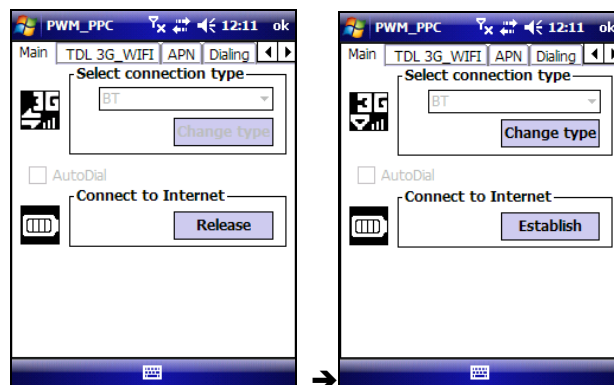
7. Click “Establish” button and then start to connect to Internet



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



9. Click “Release” to disconnect with Internet



## Using Wi-Fi to connect PDA with TDL 3G and access to the Internet

1. Turn on TDL 3G 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 "TDL 3G Adhoc"

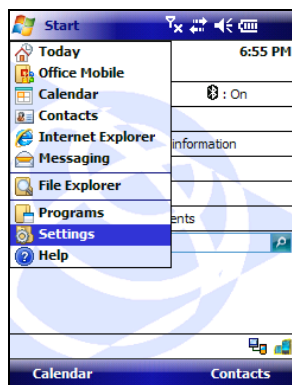


### NOTE

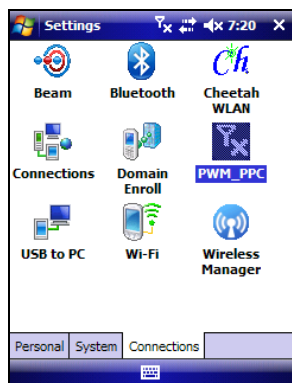
- Please select network "Only Computer - to - Computer" or "All Available".

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

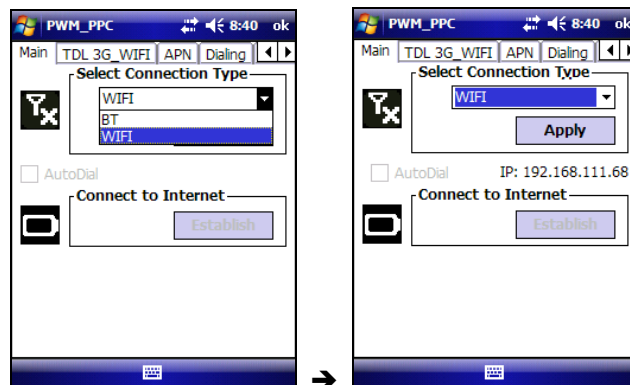
1. Go to "Start" → "Setting"



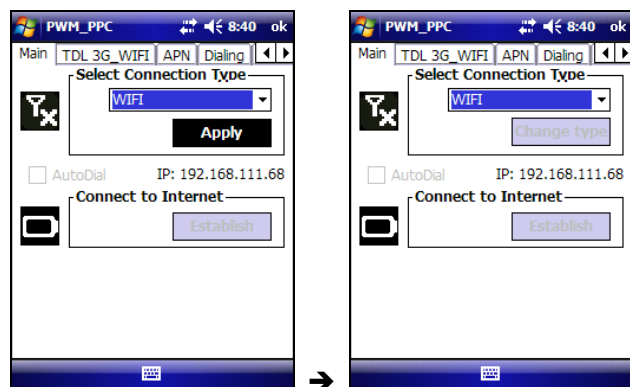
2. Click "PWM\_PPC"



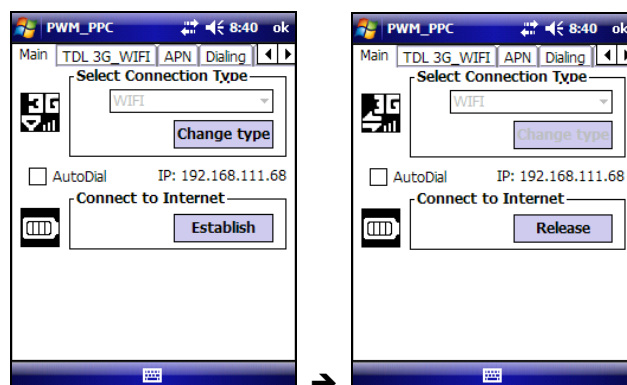
3. Select "Main" → set "Select connection type" to "Wi-Fi" and Wait for DHCP-assigned IP address



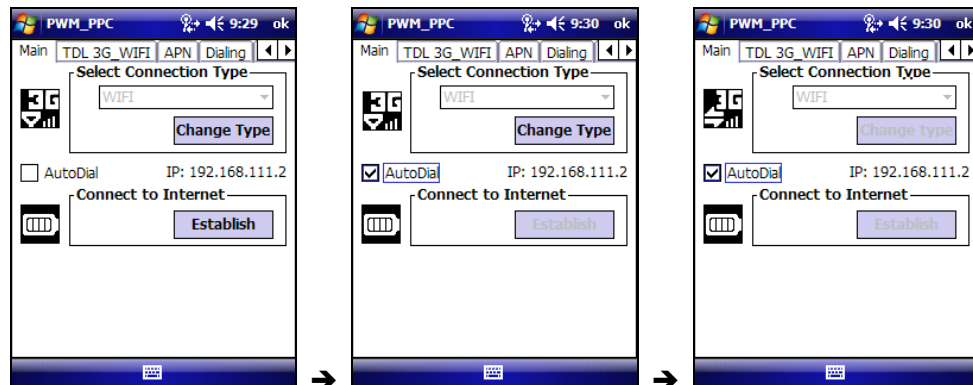
4. Click "Apply" and screen will stay for several seconds to check Internet connection status



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



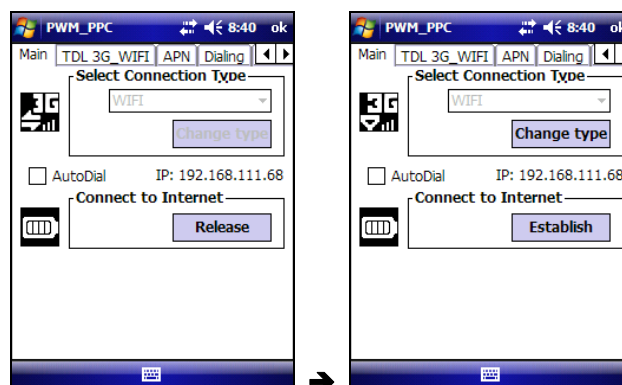
In Wi-Fi mode, user also can check “AutoDial” to make TDL 3G automatically connect to internet in seconds.



#### 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 TDL 3G when connect with TDL 3G.

## Using Wi-Fi to connect notebook with TDL 3G and access to the Internet

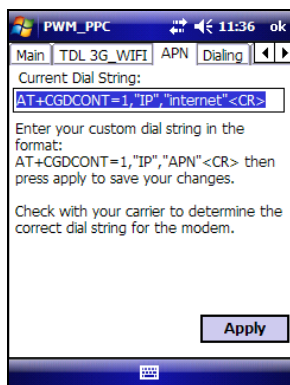
1. Turn on TDL 3G and make sure Wi-Fi is "ON"
2. Turn on notebook Wi-Fi function.
3. Notebook will search for the available Wi-Fi networks and please select and connect with "TDL 3G Adhoc"

## 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

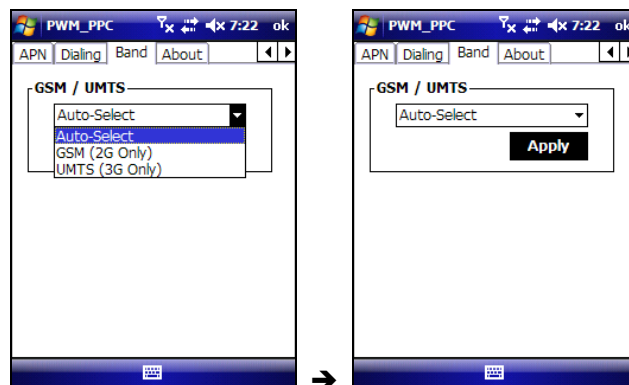
Start → Settings → PWM\_PPC → select "Band", after selection, please wait until the bank is changed successfully → click "Apply".

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.

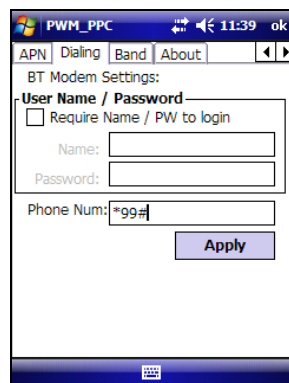
After changing the setting, the PDA will disconnect from TDL 3G first → "2G/3G LED lighting" (if change the setting to GSM network, amber LED ON, and if change to UMTS network, green LED ON) and process of changing to the selected band → when changing complete, "2G/3G LED" flashing (if change the setting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

When clean boot TDL 3G, the setting will back to "Auto-Select"



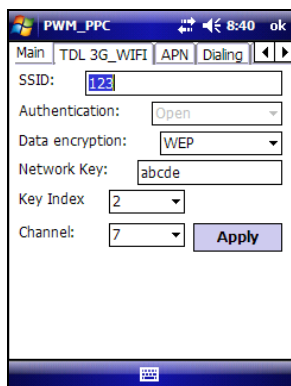
## Set Dialing

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



## TDL 3G Wi-Fi setting

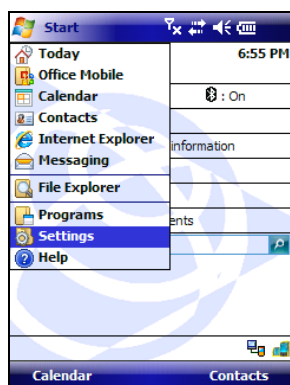
Start → Setting → PWM\_PPC → select "TDL 3G\_WI-FI" → after setting, click "Apply"



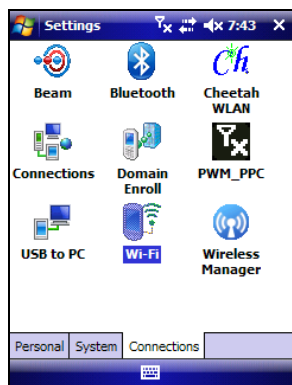
1. SSID default is "TDL 3G Adhoc"
2. If want to change "channel", please modify SSID first
3. If ever change the setting in "TDL 3G\_WI-FI", the PDA will disconnect from TDL 3G. User will also need to execute Wi-Fi Advance Setting.
4. Network Key format
  - A. 5 or 13 digits (any ASCII character)
  - 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

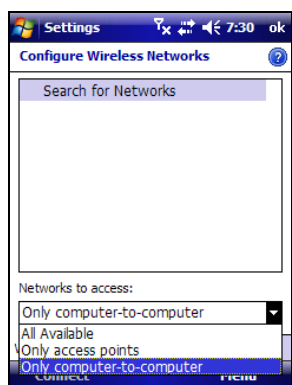
1. Go to "Start" → "Settings"



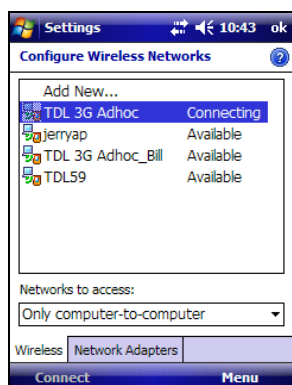
2. Select "Connections" → click "Wi-Fi" icon



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

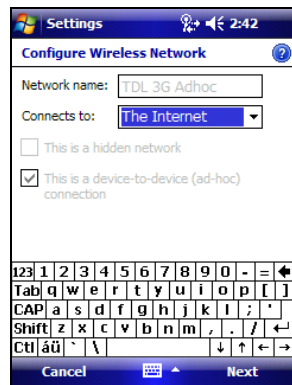


4. Searching and click "TDL 3G Adhoc"

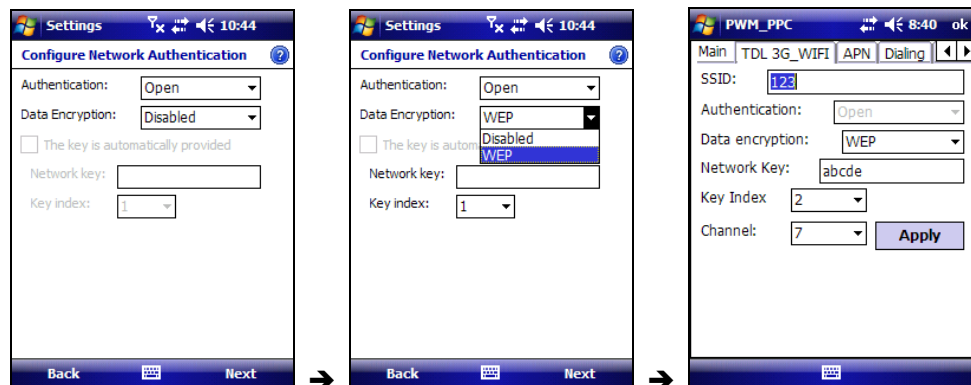




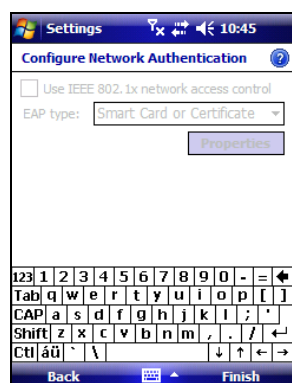
5. Click "Next"



6. Click "Next" → Set "Authentication" to "Open", "Data Encryption" setting need to be same as "TDL 3G\_WIFI"



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



## Update "TDL 3G OS"

If there is any new release for TDL 3G OS, please save the new OS to computer and update the OS in TDL 3G.

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
















5. Update success



If there is any new release for TDL 3G OS, please save the new OS to computer and update the OS in TDL 3G. However, this update could be only performed by the manufacturer or professional agency.

## Others

1. Clean boot: "Power OFF" TDL 3G 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/BT LED" stop flashing (both LEDs will remain "ON") → release "Power/Switch button" and "Reset button" → back to the default setting.
2. Reset: when TDL 3G is "Power ON" → press reset key to reset the device. All settings will remain the same.
3. Switch between Wi-Fi and BT  
Whenever want to change the connection way with TDL 3G, please disconnect PDA with TDL 3G first → press "Power/Switch button" to switch Wi-Fi (BT) to BT (Wi-Fi) on TDL 3G → execute "PWM\_PPC" connection again.
4. Battery status is to be presented as below:
  -  : Empty
  -  : Low
  -  : Medium
  -  : High
  -  : Full
  -  : charging
5. 2G/3G network status is to be presented as below:
  -  stands that stand by at GSM (2G) network and its signal strength.
  -  stands that stand by at UMTS (3G) network and its signal strength.
  -  stands that TDL 3G is connecting with GSM (2G) network and its signal strength.
  -  stands that TDL 3G is connecting with UMTS (3G) network and its signal strength.
  -  means TDL 3G is searching for 2G or 3G network service
6. SIM card related error is to be presented as below:
  -  no SIM card is inserted in TDL 3G.
  -  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 TDL 3G for 4 hours (please refer to page 11)
TDL 3G is not charging	The internal temperature has risen above the allowed maximum for charging the battery	<ul style="list-style-type: none"> <li>- "Power OFF" the TDL 3G</li> <li>- Remove TDL 3G from any external heat surface (for example sunlight)</li> </ul>
TDL 3G is power off automatically	The internal temperature has risen above the allowed maximum for charging the battery	<ul style="list-style-type: none"> <li>- Remove TDL 3G from any external heat surface (for example sunlight)</li> <li>- Wait for TDL 3G cool down</li> </ul>
	Battery low	Please charge TDL 3G
	WiFi or BT has disconnected for 15 minutes	Keep WIFI or BT connected with TDL 3G

### Connection issue

Problem	Cause	Solution
Cannot connect to the 2G/3G network	TDL 3G hangs Poor signal	Press "Reset button" or "Power OFF" and "ON" again
	Poor signal	Please move to the network service area
	Using 2G SIM card in 3G only network	<ul style="list-style-type: none"> <li>- Please use 3G SIM card</li> <li>- Set Band as AUTO or 2G only</li> </ul>
	Using 3G SIM card in 2G only network	<ul style="list-style-type: none"> <li>- Please use 2G SIM card</li> <li>- Set Band as AUTO or 3G only</li> </ul>
PDA/notebook cannot connect with TDL 3G via Wi-Fi	Ever changed the TDL 3G Wi-Fi setting but enter wrong Data encryption or Key Index	<ul style="list-style-type: none"> <li>- Enter the correct Data encryption and Key Index (please refer to page 21)</li> <li>- Clean boot TDL 3G and make all the setting back to default (please refer to page 25)</li> </ul>
	Connect to the wrong SSID	<ul style="list-style-type: none"> <li>- Make sure PDA/notebook connect to the correct SSID</li> <li>- Clean boot TDL 3G and make all the setting back to default</li> </ul>
	Poor Wi-Fi signal	Put PDA/notebook closer to the TDL 3G
PDA cannot connect with TDL 3G via BT	Poor BT Signal	Put PDA/notebook closer to the TDL 3G
	TDL 3G ever clean boot after PDA been paired with TDL 3G	Please pair PDA with TDL 3G again

## 2G/3G LED issue

Problem	Cause	Solution
LED is not ON	No SIM card	Please insert SIM card to TDL 3G (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 TDL 3G register to the network successfully, for example <ul style="list-style-type: none"> <li>- Poor signal so please move to the network service area</li> <li>- press "Reset button" to reset the TDL 3G (please refer to page 25)</li> <li>- User set TDL 3G band to UMTS but insert a 2G only SIM card, please change to 3G SIM card or clean boot TDL 3G and make the band setting back to "Auto-Select"</li> </ul>

## Error Message

Problem	Cause	Solution
(Auto-dial Fail...) The answering modem has disconnected. Check your connection settings and change them if needed.	TDL 3G failed to establish connection to internet due to incorrect settings or unavailable internet service.	<ul style="list-style-type: none"> <li>- Check the connection settings and change them as the suggestion in this message.</li> <li>- Contact your carrier to confirm the availability of the internet service.</li> </ul>
Failed in Setting Band (WIFI).	Poor connection quality between the PDA/Notebook and TDL 3G.	<ul style="list-style-type: none"> <li>- Make sure the WIFI connection is still valid.</li> <li>- Reconnect to TDL 3G</li> </ul>
Improper format of Network key.	Inputted network key contains some unacceptable format	- Check section "TDL 3G Wi-Fi setting" for the acceptable format of network key (please refer to page 23)
Improper characters included in Network Key.	Inputted network key contains some improper characters.	- Check section "TDL 3G Wi-Fi setting" for the acceptable format of network key (please refer to page 23)
Improper length of Network Key.	Inputted network key does not meet the requested length.	- Check section "TDL 3G Wi-Fi setting" for the acceptable format of network key (please refer to page 23)
Improper characters included in SSID.	Inputted SSID contains some improper characters.	- The SSID should be the combination of ASCII characters.
Enter Phone Number	The phone number is not inputted.	- The phone number is required when setting modem.