



GSM/GPRS/GPS Tracker **GA100**
User Manual

TRACGA100UM001

Revision: 1.01



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Document Title	GA100 User manual
Version	1.01
Date	2011-7-8
Status	Release
Document Control ID	TRACGA100UM001

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0. Revision history

Revision	Date	Author	Description of change
1.01	2011-7-12	Johnson Jiang	Initial

1. Introduction

GA100 is a powerful GPS locator which is designed for personal tracking. With superior receiving sensitivity, fast TTFF and GSM frequencies 850/900/1800/1900MHz. Its location can be real time or schedule tracked by backend server or specified terminals. Based on the embedded @Track protocol, GA100 can communicate with the backend server through GPRS/GSM network, and transfer reports of emergency, Geo-fencing, device status and scheduled GPS position etc... Service provider is easy to setup their tracking platform based on the functional @Track protocol.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference. and
- (2) this device must accept any interference, including interference that may cause undesired operation.

WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC RF Exposure Information and Statement:

The SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue.

Device types: GA100(FCC ID: YQD-GA100) has also been tested against this SAR limit. The highest SAR value reported under this standard during product certification for use on the body is 1.420W/kg.

This device was tested for typical body-worn operations with the back of the handset kept 1.5cm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain a 1.5cm separation distance between the user's body and the back of the handset. The use of belt clips, holsters and similar accessories should 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.

2. Product Overview

2.1. Appearance

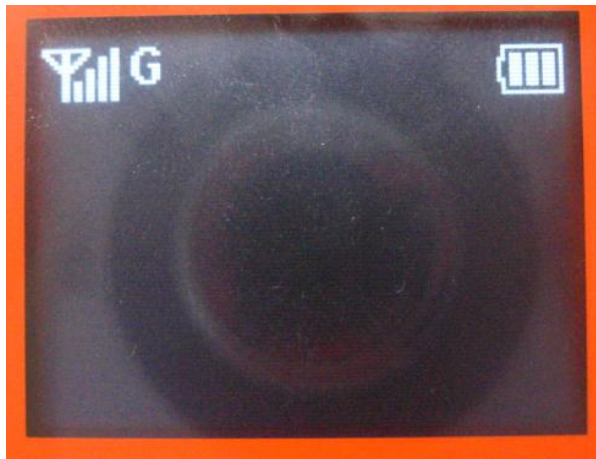


2.2. Buttons/Mini USB Interface Description

Button /Mini USB Interface Description	
Power Key	<ul style="list-style-type: none"> ● Turn on GA100 ● Turn off GA100. (If power key is enabled)
Volume Key	<ul style="list-style-type: none"> ● Adjust volume .
Care Key	<ul style="list-style-type: none"> ● Long press it can dial SOS number.
Cancel Key	<ul style="list-style-type: none"> ● Cancel or disconnect call .
Mini USB interface	<ul style="list-style-type: none"> ● Connect a 5V DC adapter can power GA100 and charge the internal battery ● Connect a 3.7V Li-ion or Li-Polymer battery can power GA100 ● Backend server developer or administrator can use the Data_Cable_M to configure GA100




2.3. LCD Description

There are one LCD for Display in GA100, All information will display in it.



3. Getting Started

3.1. Parts List

Name	Picture	Remark
GA100 Locator		The GSM/GPRS/GPS locator.
AC-DC Power Adapter (Standard accessory)		It is used to charge the internal battery of GA100.
GA100 Data Cable (Optional accessory)		It is the USB data cable which can be used for firmware upgrading and configuration. (Please note , it only for backend server developer or administrator ,It is not in delivery list of GA100)

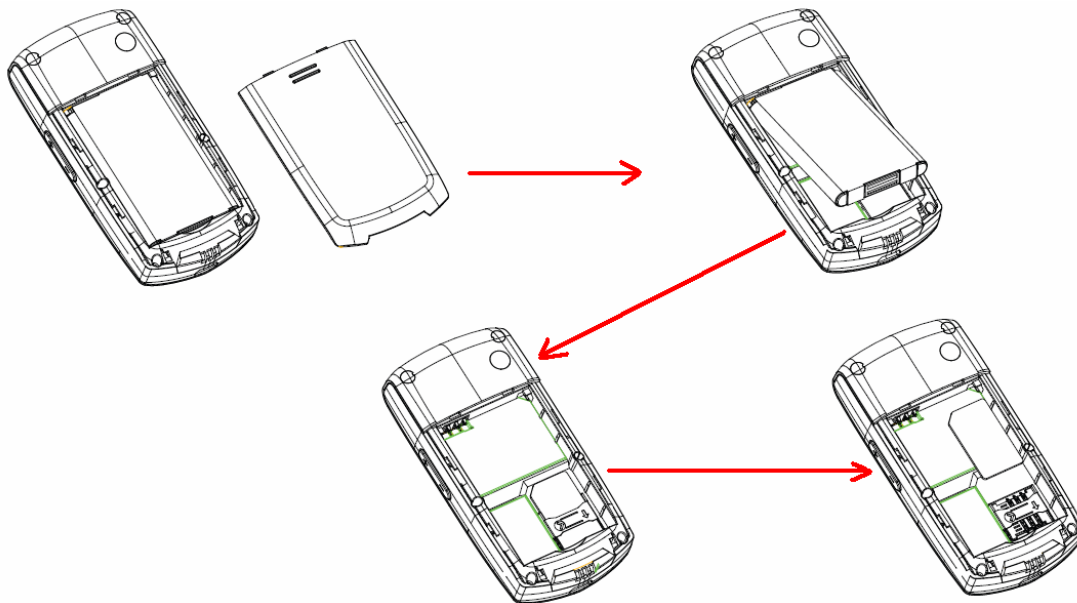
3.2. Battery Charging

- Please connect AC-DC power adapter with GA100.
- Insert the AC-DC power adapter into the power socket.
- During charging, the battery animation in LCD will run. When the battery is full charged, battery animation will stop .
- Charging time is about 5 hours.

Note: Before the first time using GA100, please full charge the battery.

3.3. Install SIM Card

- First, open the battery cover of device..
- Then put out battery .
- Then insert the SIM card into the slot of SIM card according to the direction shown.
- Then put in battery.
- Finally, push in battery cover of device .



3.4. Turn on/Turn off

- Turn on:
 - ◆ Method 1: Press the Power key at least 3 seconds and release it to turn on GA100. At the same time, LCD will display welcome picture.
- Turn off:
 - ◆ Method 1: Press the power key about 3 seconds; LCD will display close picture, it indicates that GA100 is turned off. Please note the end-user can not power off GA100 when the power key is disabled by protocol.

4. Troubleshooting and Safety info

4.1. Troubleshooting

Trouble	Possible Reason	Solution
After GA100 is turned on, LCD display some message.	The SIM card is not inserted.	Please insert the SIM card into GA100.
	The signal is too weak; GA100 can't register to the network.	Please move GA100 into place with good GSM coverage.
	PIN locked	Using SIM card without SIM-PIN, or unlock SIM-PIN.
Messages can't be reported to the backend server by GPRS.	The SIM card in GA100 doesn't support GPRS.	Try a GPRS supported SIM card.
	APN is wrong. Some APN can not visit the internet directly.	Ask the network operator for the right APN.
	The IP address or port of the backend server is wrong.	Make sure the IP address for the backend server is an identified address in the internet.
Unable to power off GA100.	The function of power key was disabled by AT+GTSFR.	Enable the function of power key by AT+GTFKS.
	Unable to power off GA100 if charger connected or using external battery.	Disconnect charger or external battery, and try again.
No response from UART when configure GA100 through UART	GA100 is in power saving mode.	Remove the Data_Cable_M, and plug it in again. After this operation, GA100 will exit from power saving mode for 10 seconds.
		Re-try GA100 manager tool again, it will try to wake up device.
GA100 can't get successful GPS fixing.	The GPS signal is weak.	Please move GA100 to a place with open sky.
		It is better to let the top surface face to sky.

4.2. Safety info

- Please do not disassemble the device by yourself.
- Please do not put the device on the overheating or too humid place, avoid exposure to direct sunlight. Too high temperature will damage the device or even cause the battery explosion.
- Please do not use GA100 on the airplane or near medical equipment.