BT-368i Bluetooth GPS Receiver

USER'S GUIDE

UG_BT368i_022108

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1. Product Information

1.1   Product Description

BT-368i is a high performance Bluetooth GPS receiver., which uses the SiRF Star III chipset to track up to 20-satellites simultaneously. With a built-in high-performance antenna, the BT-368i ensures excellent signal reception in most all conditions.

For ease of connectivity, the BT-368i utilizes Bluetooth technology, which also enables greater wireless connectivity to a wide variety of Bluetooth enabled devices such as a PDA, laptop, or Smartphone. BT-368i has a high-capacity, rechargeable Lithium-ion battery that provides more than 10 hours of operation for your navigation applications.

1.2   Product Features

- SiRF StarIII low-power GPS chipset

- Receives up to 20-parallel channels

- Extremely fast time-to-fix (TTF) even at low signal levels

- Wireless Bluetooth 2.0

- High capacity rechargeable battery

- NMEA-0183 compliant protocol (Default: GGA, GSA, GSV, RMC and can support: VTG, GLL, ZDA with factory modified firmware). The SiRF binary protocol mode is also accessible.

- Supports SBAS (WAAS, EGNOS, and MSAS)

- Three function LED indicators

- Can be used as a USB GPS receiver with laptops & Tables with the purchase of the optional USB Data Cable (#11-BT386-001A).

1.3 Product Specifications

GPS Receiver	
Chipset	SiRF StarIII
Frequency	L1, 1575.42 MHz
C/A Code	1.023 MHz chip rate
Protocol	NMEA 0183 v3.01 (Default: GGA, GSA, GSV, RMC and can support: VTG, GLL, ZDA with factory modified firmware) SiRF binary mode accessable.
Available Baud Rate	4800/9600/14400/19200/38400/57600/115200
Channels	20-channel all-in-view tracking
Antenna	Built-in patch antenna
Sensitivity	Acquisition:-146dBm, Tracking:-159dBm
Hot Start	1 seconds
Warm Start	38 seconds
Cold Start	42 second
Re-acquisition	0.1 second
Supported DGPS	WAAS, EGNOS, MSAS
Position Accuracy	Horizontal 10 meters, 2D RMS / 1-5 meters 2D RMS, WAAS corrected
Velocity Accuracy	0.1 meters/second
Time Accuracy	1 micro-second synchronized to GPS time
Altitude Limit	60,000 feet (18,000 meters)
Velocity Limit	1,000 knots (515 meters/second)
Acceleration Limit	4g
Jerk Limit	20m / sec3
Update Rate	1 Hz
Bluetooth	
Version	2.0
Range	10 Meter (Class 2)
Support Profile	SPP Profile
Physical Characteristics	
Dimensions	2.75" x 1.57" x 0.36" (70 x 40 x 9.2 mm)
Weight	0.06 lb (30g)
DC Characteristics	
Power Supply	5 VDC
Battery	Rechargeable Li-ion, 700mAH
Battery Life	10 Hours
Operating Current	70mA
Environmental Range	
Humidity Range	5% to 95% non-condensing
Operation Temperature	14°F ~ 140°F (-10°C ~ 60°C) *32°F ~ 113°F (0°C to 45°C) while charging*
Storage Temperature	-4°F ~ 158°F (-20°C to 70°C)

2. Hardware Description

2.1   Overview

Mini-USB Charging Port

Power LED

GPS LED

Bluetooth LED

Power Button
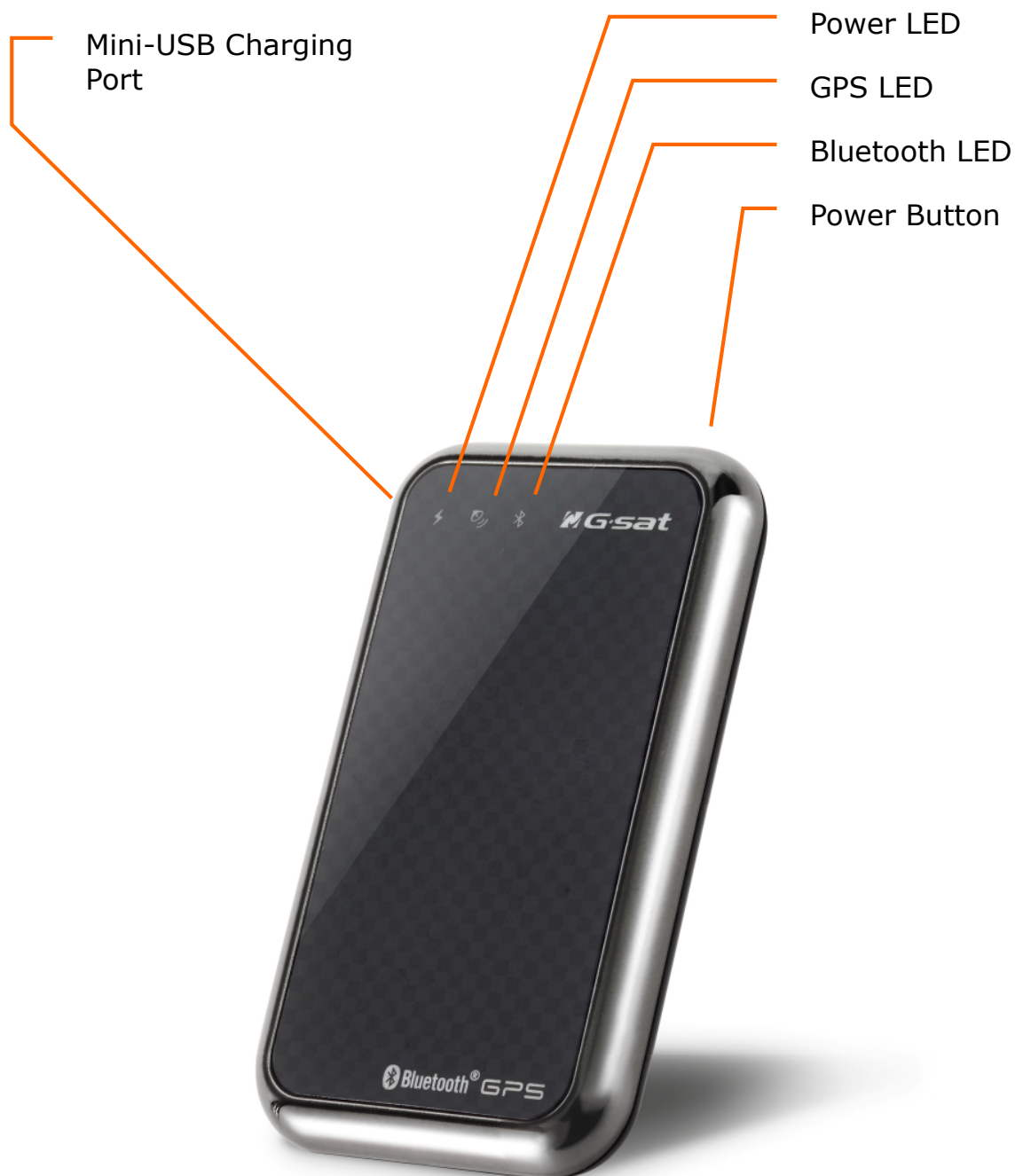
The high-polished, metallic style finish with added accessories in the retail box (AC charger + Euro plug adapter) sets the BT-368i apart from our standard BT-368 receiver, which has a silver painted trim and only the 12V car charger.   All internal specification for both models are otherwise identical.

2.2 LED Status Indicators

Bluetooth LED (Blue)

Status	Description
Flash once per three seconds	Not Connected
Flash once per second	Connected

GPS LED (Green)

Status	Description
Flash once per second	Position is Fixed
Steady on	Position Not Fixed

Power LED (Red/Orange)

Status	Description
Red light steady on	Battery Low
Red light off	Battery Good
Orange light steady on	Battery Charging

2.3 Power Button

Action	Function
Press and hold power button for 1 second (if off)	Power On
Press and hold power button for 1 second (if on)	Power Down

2.4 Mini-USB Port

The mini-USB port offers provides two functions:

A.) As a power input to recharge the BT-368i Li-ion battery. It will require 3~4 hours to complete a full charge to the battery. Connect the included USB charging cable to either an active USB port on a PC, or the included 12VDC car charger or 110VAC wall charger.
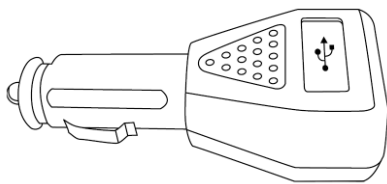
B.) As an interface when using the optional USB Data Cable (#11-BT368-001A) to connect the BT-386 as a USG GPS receiver.

3. Package Contents

- BT-368i GPS Receiver Unit
- 12VDC Car Charger
- 110VAC Wall Charger
- USB Charging Cable
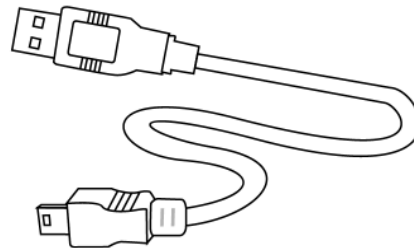- User Guide and Software Utility on CD-ROM

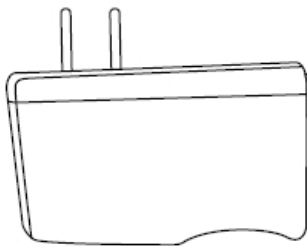**Optional Accessories Sold Separately**

- *USB Data Cable*

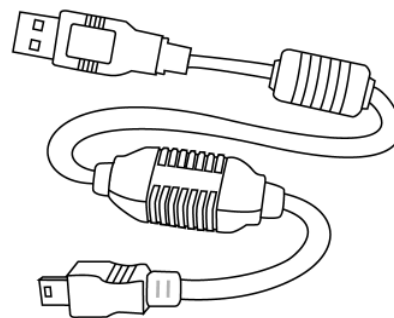|	
12VDC Car Charger #11-BT359-005A	**USB Charging Cable** #11-BT359-006A
110VAC Wall Charger #11-BT359-004A	**USB Data Cable (Optional)** #11-BT386-001A

4. Getting Start

Step 1:   Charging the Battery

First it's important to fully charge your BT-386 using the included charger cable, which can be connected to either the included 12VDC car charger or a computers USB port. You will know that the charging process has been completed when the orange "charge" LED is off.
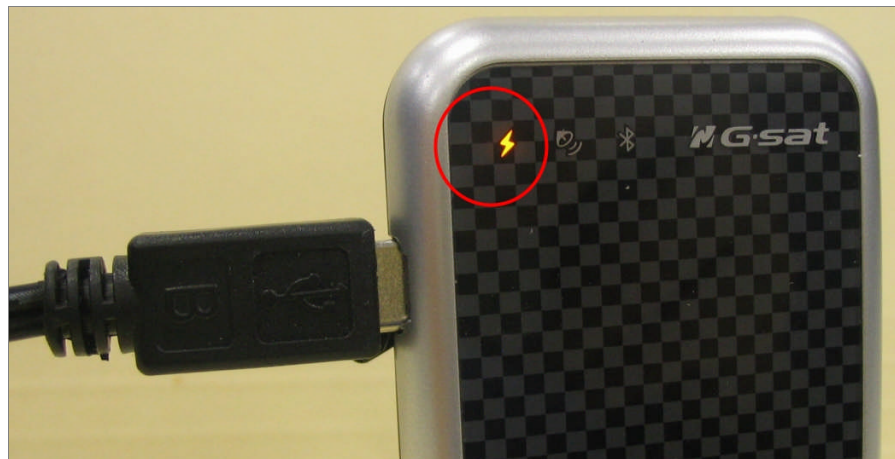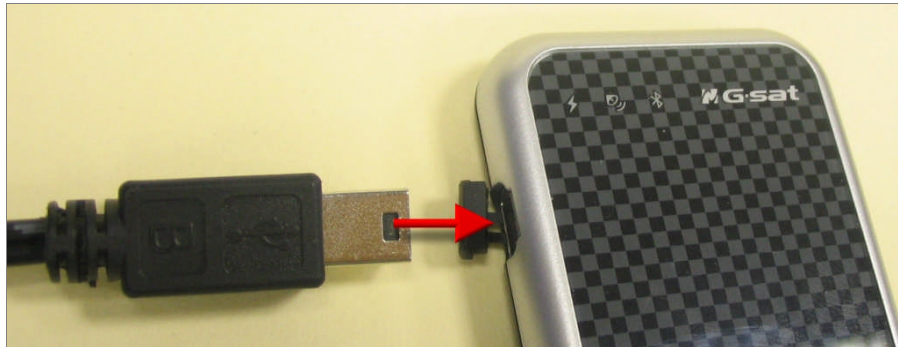
Step 2:   Turning On the Power

Press and hold the power button for one second to turn on your BT-368i.

Step 3:   Getting a GPS Fix Signal

Place your BT-368i in a place where it can have a clear view to the sky and monitor the green GPS LED until it begins to flash indicating is has fixed to satellite positions.   This may take up to 3-minutes for the first time your BT-386i is used.   Thereafter a shorter fix time should be experienced.

Step 4:   Connecting to a Bluetooth Enabled Device

Run the Bluetooth manager from your Bluetooth enabled device (Smartphone, PDA or Laptop), to search for transmitting Bluetooth devices.   Select the BT-386i device from the displayed list (it will appear as **BT-GPS-xxxxxx**) to connect or "pair" it with your BT-368I GPS Receiver.

NOTE: On some devices it is required that the device (Smartphone, PDA or Laptop) be re-booted before the Bluetooth Manager can complete the installation process of the GPS Receiver.
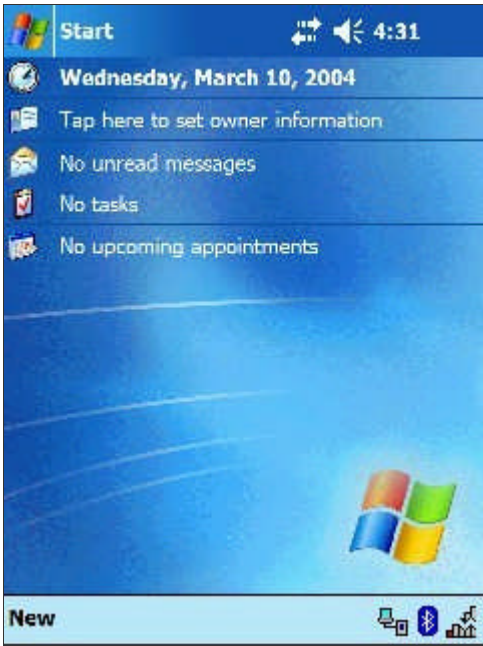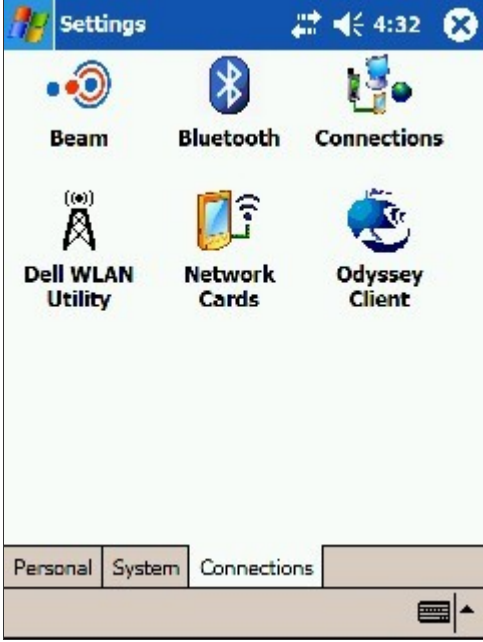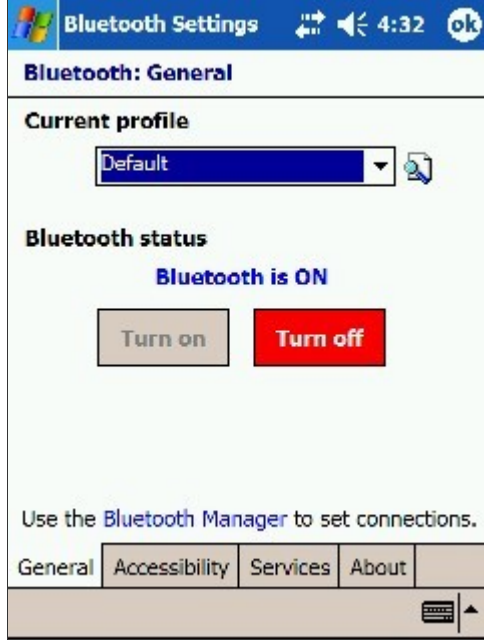
If a passkey is requested, enter "**0000**" (four zero's).

Step 5:   Interface with Your Navigation Software
Once the BT-368i is run with a navigation software, the Bluetooth LED will begin to blink once per second. Start your third party navigation software loaded on your Bluetooth enabled device and configure the correct so that the GPS data can be pulled from the proper location.Without this important step,you may often experience an error message in your software such as "GPS receiver not found".

5. Troubleshooting

5.1   Connecting BT-368i to a Pocket PC Device

1. Tap on [Start].	2. Tap on [Settings].
3. Tap on Bluetooth button.	4. Turn on Bluetooth function.

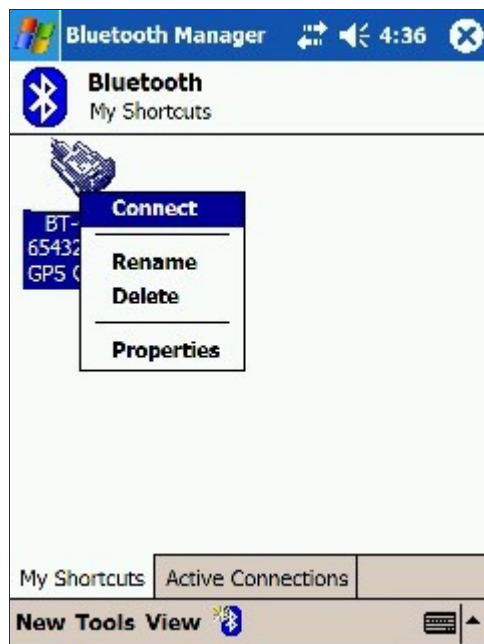|	
5. Tap on [New] button.	6. Select [Explore a Bluetooth device] item.
7. Tap on the [BT-GPS-xxxxxx] icon.	8. Select BT-GPS COM Port, and then tap [Next] button.

9. Tap on [Finish] button.

10. Tap and hold on BT-GPS button.

11. Select [Connect].

12. The connection between BT-368I and your Pocket PC is established.
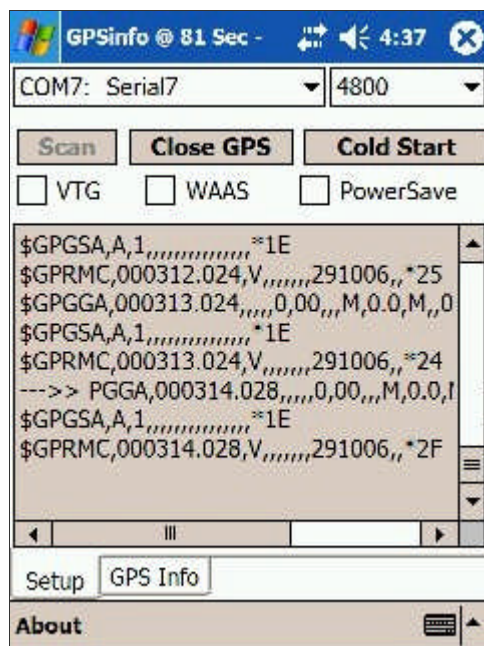
13. You can start the navigation software or GPSinfo program to check the GPS positioning status.
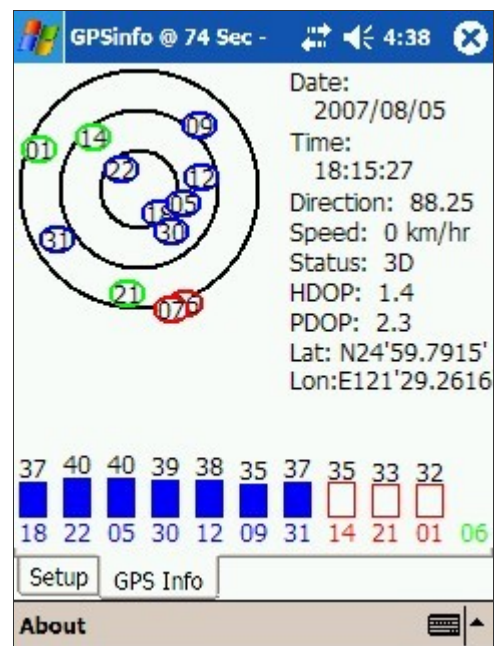
5.2   Unable to Connect to Bluetooth

(1) Check if the Bluetooth status LED is flashing normally.

(2) Check that there is adequate battery power. If not, please recharge.

(3) Check if your device's Bluetooth function is actually enabled.

5.3   Unable to Get a GPS Fix Signal

(1) Check if the green GPS status LED is flashing normally.

(2) Check that there is adequate battery power. If not, please recharge.

(3) If GPS cannot obtain a fix after 10-min, use the included (or downloadable) GPSinfo utility software to create a "Cold Start" function.   The GPS should be in an open view to the sky surrounding when performing this task.

6. Safety Notice

Please read this section carefully before using the GPS receiver

Globalsat Technology Corporation / USGlobalsat, Inc. will not accept any responsibility whatsoever for accidents resulting from failure to observe common sense precautions.   Your personal judgment, traffic regulations, and common sense must always take precedence over any directions produced by GPS receiver or the mapping software

WARNING: Make sure that the GPS receiver is secure and does not interfere with driving visibility and safety.

It is your responsibility as the vehicle operator to securely place the GPS unit and antenna so that they will not interfere with driving and prevent operations of any safety device (such as the Airbag) in your vehicle.   Do not mount the devices in a place where the driver or passengers may receive injury during vehicle operation or collision.   For your safety, take care to route all cables away from shifters, pedals, accessory controls and mechanisms.

WARNING: Drive safely and use common sense.

It is your responsibility as the vehicle operator to drive safely, observe all traffic rules and above all use your own personal judgment while driving.   If you feel that a route suggested by the navigation software instructs you to perform an unsafe or illegal maneuver, places you in an unsafe situation, or routes you into an area which you consider unsafe, do not follow the instructions.

WARNING: Keep your eyes on the road.

It is your responsibility as the vehicle operator to keep your eyes on the road and be an alert driver at all times, especially when the vehicle is moving.   The vehicle's operator should not be distracted by the navigation equipment or software.   Should there be a distraction with the ability to drive responsibly, please turn off the device.   Should you want to look at the display for a prolonged time, park the car safely, while following all traffic regulations before looking at the display.

WARNING: To reduce the risk of fire or shock hazard, do not expose this product to rain or moisture.   Do not remove covers or open housings, there are no user serviceable parts inside.   Refer servicing to qualified personnel only.

7. Limited Warranty

Globalsat/USGlobalsat warrants product hardware against manufacturing defects in material and workmanship under normal use for a period of one (1) year from the original date of purchase (unless the product states otherwise), and only when purchased from a recognized "authorized dealer".   Products purchased from any unauthorized source, such as unauthorized e-Bay resellers, will not qualify for free warranty service/support and may require the end-user to pre-pay fees associated with, but not limited to the support, repair, replacement and shipping of the product to and from the service center.
Except as provided herein, Globalsat/USGlobalsat makes no express warranties', including but not limited to any warranties of merchantability or fitness for particular use, or non-infringement. You acknowledge that your use of the product or service is at your sole risk and you agree that the information provided are without warranty of any kind by Globalsat/USGlobalsat.
Under no circumstances, including negligence, will Globalsat/USGlobalsat or any of its affiliates, directors, officers or employees, or any third party be liable for any direct, indirect, incidental, special or consequential damages that results from your use, or your inability to use, or the performance of the product(s) with respect to any liability, loss, or arising out of any breach of this warranty, including, but not limited to any damages resulting from inconvenience, loss of time, data, property, revenue, or profit or any indirect, special incidental or consequential damages.   You acknowledge that this limitation applies to all content information or other services available from Globalsat/USGlobalsat, and whether or not Globalsat/USGlobalsat has notice of the possibility of such damages, and whether or not to circumstances giving rise to such damages may have been within the control of Globalsat/USGlobalsat.
Some states do not allow the exclusion of certain warranties, so some of the above exclusions may not apply to you.   In those states, liability is limited to the fullest extent allowed by law   By using the product(s), you agree to indemnify Globalsat/USGlobalsat and its parents, subsidiaries, affiliates, officers and employees and hold them harmless from any and all claims and expenses, including reasonable attorney's fees, asserted third party due to, or arising out of your use of the service and the site.

In the event of a product defect during the first 30-days of the warranty period, return product and the sales receipt as proof of purchase date to place of original purchase. Defect discovered after 30-days from date of purchase, you must contact Globalsat/USGlobalsat's Technical support for a Return Merchandise Authorization (RMA) number for return to manufacturer.

Globalsat/USGlobalsat will, at its option, unless otherwise provided by law:
    a.) Correct the defect by product repair without charge for parts and labor;
    b.) Replace the product with one of the same or similar design; or
Refund the purchase price.   All replaced parts and products, and products on which a refund is made, become the property of Globalsat/USGlobalsat.   New or reconditioned parts may be used in the performance of warranty service.   Repaired or replaced parts and products are warranted for the remainder of the original warranty period.   You will be charged for repair or replacement of the product made after the expiration of the warranty period.
This warranty does not cover:
    a.) Damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow the instructions, improper installation or maintenance, alteration, lighting or other incidence of excess voltage or current;
    b.) Any repairs other than those provided by Globalsat/USGlobalsat;
    c.) Consumables such as fuses or batteries;
    d.) Cosmetic damage;
    e.) Transportation, shipping or insurance costs;
    f.) Costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights, which may vary from state to state.

Additional products bundled in this package not manufactured by Globalsat/USGlobalsat will hold separate warranties as expressed by the individual manufacturer of that product(s).   Product specifications, functions and features are subject to change without notice.

8. FCC Notice

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 received, including interference that may cause undesired operation. FCC RF Exposure requirements: This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter. NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.