[redacted] INU-75 GB
USER'S MANUAL

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VERSION 1.0

MERCURY CONFIDENTIAL

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Document compliant with procedure: ISO-P64-02

INU-75 GB User's Manual, 09/09/05

Please Read Before Proceeding

THIS DEVICE HAS A BATTERY WHICH MAY BE PARTIALLY CHARGED WHEN YOU TAKE IT OUT THE BOX.

YOUR WARRANTY IS INVALIDATED IF YOU OPEN OR TAMPER WITH THE DEVICE'S OUTER CASING.

Changes or modifications not expressly approved by Mercury Computer Systems Inc. could void the user's authority to operate the equipment.

Important Safety Precautions

When using this product, the safety precautions below must be taken to offset possible legal liabilities and damages.

ELECTRICAL SAFETY

This product is intended for use when supplied with power from the cigarette lighter power supply or the internal battery. Other usage may be dangerous and will invalidate any approval given to this product.

ENVIRONMENT RESTRICTIONS

Do no use this product at gas or refueling stations. The use of this product is also prohibited in fuel storehouse, chemical plants, and locations containing explosives.

NONIONIZING RADIATION

This product should be operated in the suggested normal condition only to ensure the radiative performance and safety of the interference.

TABLE OF CONTENTS

1. PLEASE READ BEFORE PROCEEDING

This section describes the major hardware features of your VistaNav™ INU-75GB system and provides information about the indicators on the system's front, back and side panels. It also provides information about other documents you may need when setting up your system and how to obtain technical assistance.

2. FRONT PANEL FEATURE AND INDICATORS

Figure 1 shows the controls, indicators, and connectors located behind the optional bezel on the system's front panel. Table 2 lists the font panel features

Figure 1: Front Panel Features and Indicators

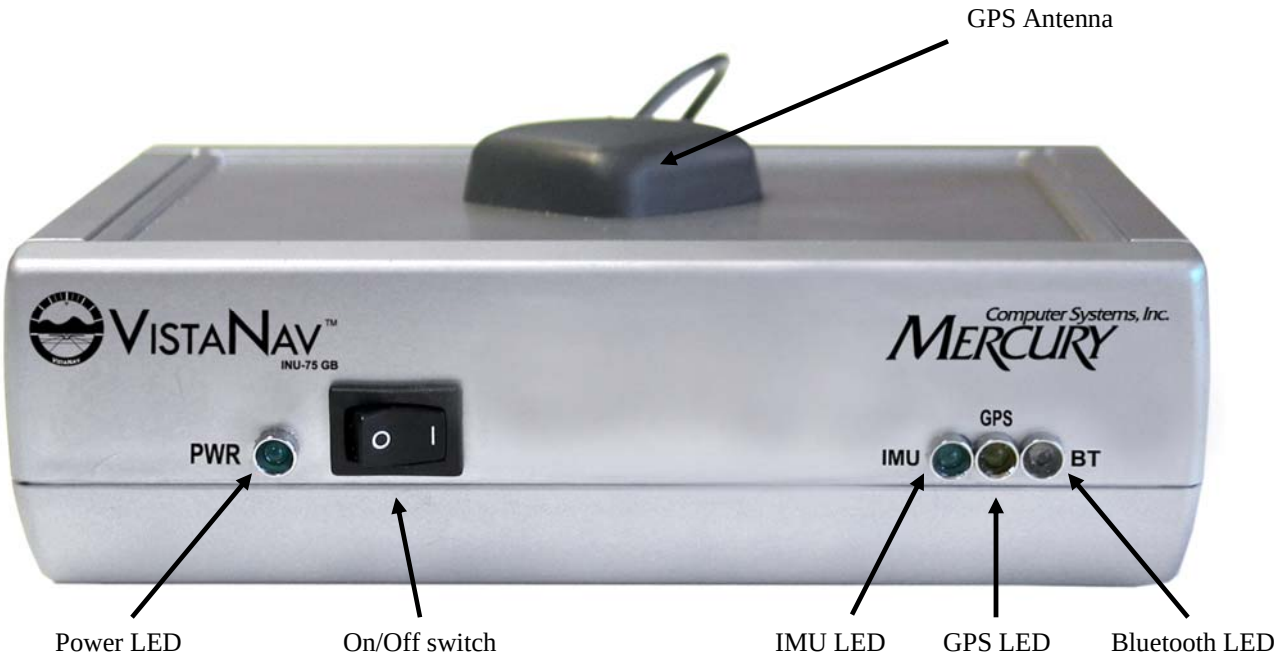


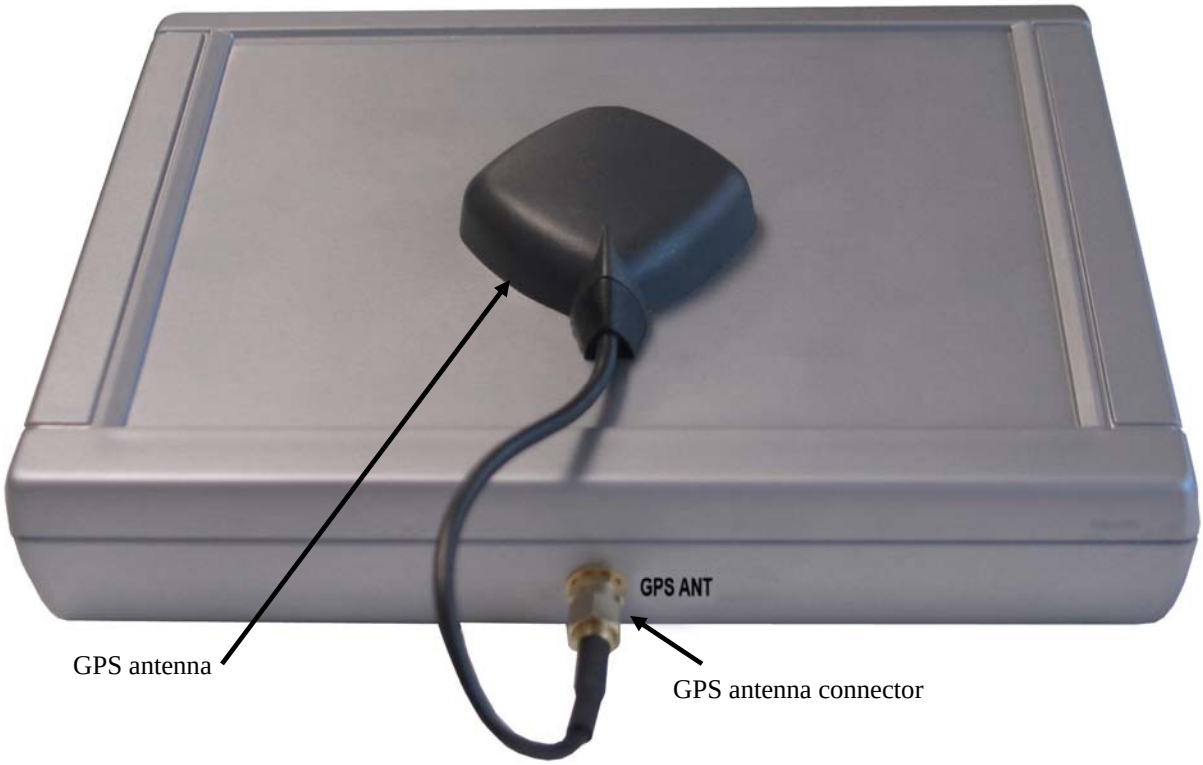
Table 1: Front Panel Features and Indicators

LED indicator	Color / Status	Description
Power LED	Green	Power coming from the external power supply
	Off	Power coming from the internal battery If switch is ON
IMU LED	Green steady	The IMU sensors are working fine
	Green blinking	Over buffering has occurred contact support
GPS LED	Orange steady	The GPS is working fine
	Orange blinking	Over buffering has occured contact support
Bluetooth LED	Blue steady	The Bluetooth connection is locked
	Blue blinking	The

3. BACK-PANEL GPS ANTENNA CONNECTOR

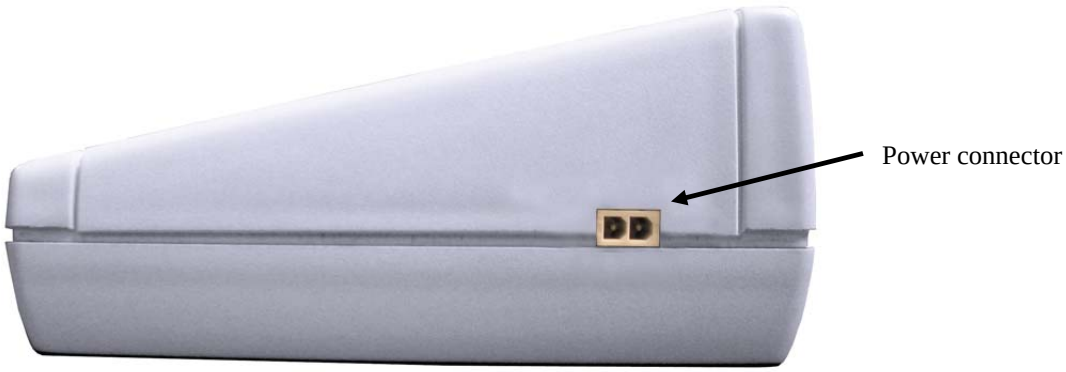
Figure 2 shows the controls, indicators, and connectors located on the system's back panel.

Figure 2: Back-Panel GPS antenna connectors



4. SIDE-PANEL POWER CONNECTOR

Figure 3: Side-Panel Power Connector



5. ACCESSORIES

5.1 Power Supply

5.2 Long GPS Antenna

6. INU-75 GB SPECIFICATIONS

- Internal Sensor Characteristics
  - Update rate 250Hz
  - Maximum range ±75º per sec
  - Drift rate (Roll – Pitch - Yaw) =1º per min

- GPS Features
  - Update rate 4Hz
  - Altitude Range From 0 to 24 000 feet
  - Altitude Accuracy = 10 ft CEP
  - Latitude/Longitude Position Range Worldwide
  - Latitude/Longitude Position Accuracy GPS C/A Code ; differential-ready, WAAS-enabled
  - Channels 16 Channel current tracking
  - Deviation range TBD

  Protocol Proprietary

- Environmental Limits

- Operation Temperature — 0ºC to +40ºC; 32ºF to 105ºF
- Non-Operating Temperature — -20ºC to +500ºC; -4ºF to 122ºF
- Humidity — 95% relative humidity, non-condensing

- Electrical
  - Input Power — DC 12V to 30V range
  - Power draw — <9W

- Battery
  - NiMh
  - Type — Sanyo HR-AAAU, 720maH, (5 cells, @ 1.2V each for a nominal 6V pack)
  - Operating Autonomy — 2 hours
  - Approximate charging time — 3 hours

- Bluetooth Performances
  - Emission Frequency — 2.4 GHz
  - Emission Range — 15 ft
  - Transmission Power — Class 2: 2mW (3 dBm)

- Physical Dimensions & Enclosure
  - Size — Max Width: 5.2 in.
Max Height: 2.2 in.
Max Deph: 7.4 in.
  - Weight — 2 lbs
  - Enclosure Material — ABS Plastic
  - Enclosure Color — Titanium
  - Shape — Wedge

- External Connectors, switch & LED indicators
  - GPS antenna connector — SMA
  - On/Off switch

- Status LED
  - Power Input connector LED — Green when powered from the external power
  - GPS status LED:
    - Color — Orange
    - Steady — GPS configured and connected
    - Flashing — Constantly GPS module configuration error
  - Bluetooth Status LED:
    - Color — Blue
    - Steady — Connected
    - Flashing — Ready to accept connection
  - INU status LED — Green when INU is on

- Regulatory Compliance
  - FCC class B
  - CUL safety approval

7. OTHER DOCUMENTS YOU MAY NEED

8. OBTAIN TECHNICAL ASSISTANCE