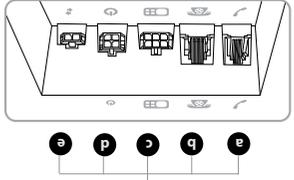




1. Terra 800 Equipment Overview

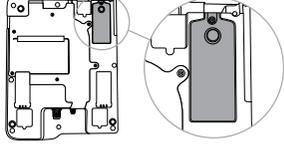
1. Interchangeable mounting cup (spring or springless)
  2. Privacy handset
  3. Speaker
  4. Microphone
  5. Status LED
  6. Screen display
  7. Dial keypad
  8. Side SIM card port (full size rapid user)
  9. Function keypad
  10. Mini USB port
  11. Back panel connectors
    - a. R19 privacy handset
    - b. R11/POTS interface
    - c. Auxiliary device port
    - d. DC power and accessory input
    - e. Ring alert / audio system mute
- 



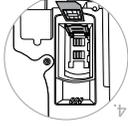
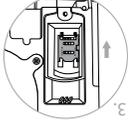
2. SIM Installation

REAR SIM CARD

- If your Service Provider has not installed the SIM card for you, follow these steps to install.
1. Turn the Terminal's source of power OFF. Failure to turn it OFF can result in corruption of your SIM card memory.
  2. The Rear SIM is accessed from the rear of the terminal. Undo the screw and remove the cover.

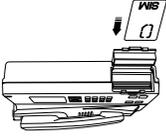


3. The SIM connector is shown highlighted below. Slide the tray guide into the open position with your finger or thumb.
4. Once opened, raise the SIM tray as shown below.
5. Gently insert the SIM card into the tray slots making sure that the golden contacts are facing downwards.
6. Lower the tray and slide the tray guide into the lock position.
7. Replace the SIM cover, and tighten the screw.



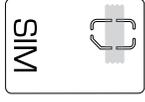
SIDE SIM CARD

- The Side SIM port can be used on its own, or in addition to the rear port.
1. Insert the SIM with gold contacts facing down
  2. Close the SIM door, and ensure that it "clicks" shut. This indicates the water resistant seal has been engaged.
  3. Power the terminal back ON.
  4. The SIM will automatically register on the SIM service of the Side SIM.



**NOTE**

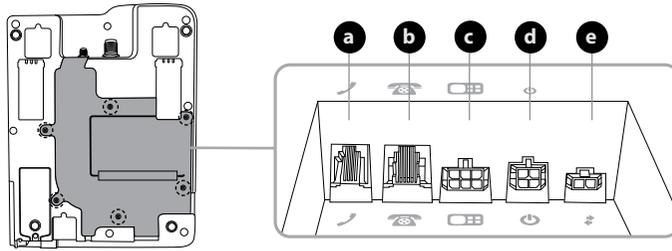
Gold contacts on SIM must be facing downwards.  
 The Side SIM Port only accepts full size SIM. If required, you can refit your SIM to the outer card using adhesive tape as illustrated below.



### 3. Access to rear connector bay

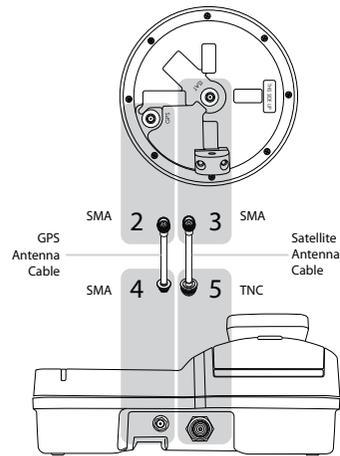
For the Terra 800, the external cable interfaces are at the rear of the terminal. The cover panel creates the IP54 rating for the electrical interface and retains the cables in their respective channels. The cover panel is fixed in place by 6 screws.

- a. RJ9 Privacy Handset
- b. RJ11/POTS Interface
- c. Auxiliary Port
- d. DC power and accessory input
- e. Ring alert / audio system mute



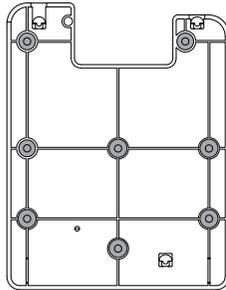
### 4. Antenna Connection

- Refer to the antennas installation guide for antenna mounting and location requirements.
- Connect the antenna cable labelled "GPS" to the SMA antenna connector labelled "GPS".
- Connect the antenna cable labelled "Inmarsat" to the SMA antenna connector labelled "SAT".
- Connect the GPS-SMA (F) cable end to the Terra 800 SMA connector
- Connect the TNC (F) antenna cable end to the Terra 800 satellite connector.

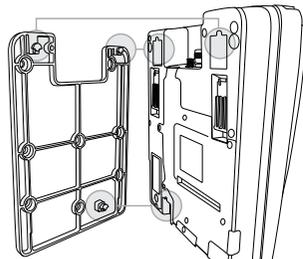


### 5. Wall Mounting & Locking Bolt

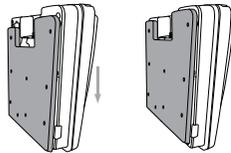
There are eight (8) fixing holes available for mounting the bracket to a wall. It is recommended that at least 3 screws be used to ensure the Terminal is mounted securely.



- Fit the three (3) hooks on the mount bracket into the three (3) large mounting holes on the back of the terminal



- Slide the terminal down to "lock"
- Final "lock" position



#### Locking Bolt Installation

- Remove the mounting cup (See MANUAL for details)
- Insert the bolt into the hole beneath the cup and screw into place
- Ensure the Terminal will not slide up off the mounting bracket
- Replace the mounting cup.

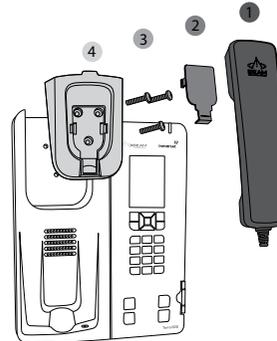
### 6. Changing Cups

#### Mounting cups

There are two unique mounting cups for the privacy handset. (1) springless cup for either a desk mounted position or a wall mounted position. (2) spring cup for rough environments.

#### Changing cups

- Unhook the privacy handset from cup.
- Use a flat screw driver in one of the two side slots to lever the cup cover out exposing the 3 screws.
- Unscrew 3 screws with a phillips screwdriver.
- Detach the cup and replace with the spring or springless cup.



#### NOTE

When the cup is removed this will expose the locking bolt screw hole.

#### (1) Springless cup

The 'springless' cup is used for normal to light-use desk mounted cradle position.

#### Wall mounted cradle position.

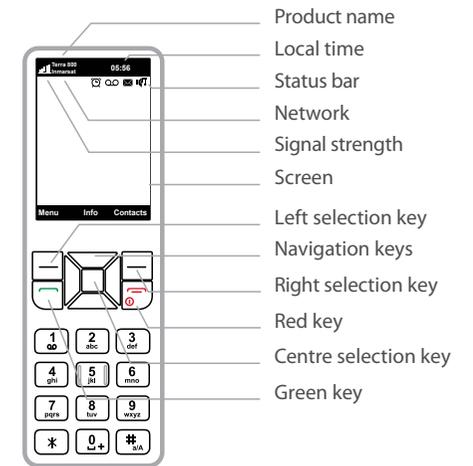
The mounting clip can be slid out and reversed, revealing a protruding edge that the privacy handset rests upon. For a wall mounted terminal this retains the privacy handset while allowing the handset to be easily removed when in a call.

#### (2) Spring cup - heavy duty use cup

In harsh environments, the privacy handset is actively retained in the mounting cup. This is achieved by using the 'spring' mounting cup. To remove the handset from the cup, the phone is lifted up against the pressure of the spring until it clears the lower protruding edge and can be removed from the terminal.

### 7. Terra 800 Dial Keypad

- Keypad locked
- Alarm set
- Call divert on
- Unread message
- GPS fix required
- USB connection
- New voicemail
- Missed call
- Bluetooth on



### 8. Status LED

The Status LED indicates the terminal registration state or any error conditions:

#### Special Modes of Operation

##### Firmware Upgrade Mode

- In firmware upgrade mode STATUS LED will turn solid YELLOW. All other LEDs will be off. Entering this mode will be accompanied by a long beep followed by three short beeps.

##### Transceiver (USB Bridge) Mode

- In this mode all LED's will flash GREEN.

	RED	YELLOW	GREEN
ILLUMINATED	<ul style="list-style-type: none"> <li>No signal</li> <li>Not registered</li> <li>No SIM card</li> </ul>	DTR present on data port	Unit registered and can place a call.
FLASHING	Firmware upgrade mode active	Data call in progress	Call in progress <b>OR</b> Transceiver Upgrade Mode
ALTERNATING	<b>Red/Yellow</b> - Short circuit on SAT antenna input <b>Red/Green</b> - Short circuit on GPS antenna input <b>Red/Yellow/Green</b> - Internal communications error <b>Yellow/Green</b> - Short on Ring Alert/audio system mute output*		

\* NOTE: The Red or Black wire of the "ring alert/audio system mute" wrongly connected to positive supply voltage input could cause over-current condition. The output will be automatically disabled when this condition is detected, and an error written to the log.

### 9. Terra 800 Function Keys

Location	Button Mode	Action	LED/Sound
	Mute Press on/off	<b>In a Call:</b> Mute the microphone (uplink) on the privacy handset.	LED turns RED - Muted LED turns OFF - Not muted LED flashing Yellow - RJ11/POTS in use
	Up/Down	<b>In a Call:</b> Increase/decrease volume on speakerphone or privacy handset. <b>Out of Call:</b> Increase/decrease volume of incoming ring tone on the speakerphone.	Audio will sound louder/quieter with each press. A beep will sound indicating the increased/decreased ring tone volume
	Brightness dual button simultaneous press (1 second)	<b>Out of Call:</b> Enter LED brightness change mode. Press UP and DOWN arrows to vary intensity. Mode will automatically exit after 5 seconds after the last button press.	All LED's will change to WHITE and a single beep will sound when entering brightness change mode. A short double beep will sound when exiting change mode.
	Speakerphone press ON/OFF	<b>In a Call:</b> Terminate call if speakerphone mode is active Activate speakerphone mode if Privacy Handset mode is active. <b>Out of Call:</b> Answer inbound call in speakerphone mode	LED turns GREEN - Speakerphone mode active LED turns OFF - Speakerphone mode not active



#### WARNING

DO NOT pull with force on the cables from the rear of the Terra 800. Please install strain relief clamping for the antenna cables where required. Correct installation of the antenna system is a vital part of the Terra 800 system, to ensure reliable functionality, and drop-free calls.

#### WARNING

Changes or modifications not expressly approved by Beam Communications could void the product warranty.

#### WARNING

To satisfy FCC RF exposure requirements for mobile transmitting devices, a separation distance of 55cm or more should be maintained between the antenna of this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended.