

Using SCOTTY™ Mobile over BGAN

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Overview

SCOTTY™ Mobile is a high quality video communications solution. It features an industrial PC with a high-speed data transfer system offering digital video recording, traditional H.320/H.323 videoconferencing, data conferencing, and other data services. The award-winning unit is rugged yet high tech, ideal for work in the field. It is waterproof and shock resistant (military-tested), with a high intensity, fifteen inch industrial display.

The unit can be easily connected to BGAN IP, ISDN and NATO standard encryption devices. SCOTTY is an all-in-one unit: DC power supply, multiple network interfacing (no extra adapters needed), high resolution camera, speaker, microphone, and echo cancellation are all built in. The SCOTTY switching matrix manages numerous inputs and outputs for external audio and video. Optional MPEG4 and H2.64 recording is available in two different recording resolutions: CIF or FDI.

SCOTTY Mobile has been tested over Inmarsat BGAN IP. Standard IP data offers high bandwidth in both directions, however bandwidth is not guaranteed. Streaming IP data provides guaranteed bandwidth at 32kbps, 64kbps, 128kbps or 256kbps, depending on the terminal.

This document describes the use of SCOTTY with the following two BGAN terminals:

- Hughes HNS 9201
- Thrane & Thrane EXPLORER 500



Hughes HNS 9201



Thrane & Thrane EXPLORER 500

Product range

The SCOTTY Mobile video communication unit, offering:

- 1.5 Mbit/s H.320/H.323 codec
- H.264 video
- ISDN interface
- H.320 recording
- Win OS
- Cherry keyboard
- VGA output
- DC 10-32 V internal power supply.

Typical Users

- First responders.
- Broadcasters.
- Emergency response.
- Police Forces.
- Homeland security.
- Fire services.
- Military.

Key Features

SCOTTY offers the following main features over the BGAN network:

- High quality videoconferencing. Use BGAN standard IP data or streaming IP data, both easily selectable from the SCOTTY software.
- Data transfer and document sharing in parallel to videoconferencing.
- Far-end camera control.
- File transfer to and from remote locations.
- FTP server functionality.
- VPN connectivity (if required).
- Internet and email access

Benefits to BGAN users

SCOTTY offers you the following main benefits:

- Ability to conduct high quality video communications over a BGAN network from remote and difficult environments.
- File transfer of information to and from remote locations.
- Document sharing.
- Dynamic video communications call rate.
- FTP server access.
- Camera control for surveillance applications.
- BGAN software can be loaded and configured directly from SCOTTY.
- VPN interconnectivity.

Setting up

The BGAN terminals are controlled by the BGAN LaunchPad software (available free from Inmarsat). This can be downloaded onto SCOTTY via floppy disk, USB port, or CD drive, or through the Ethernet port on Mobile unit. The software can then be run via the Windows software installed on SCOTTY.

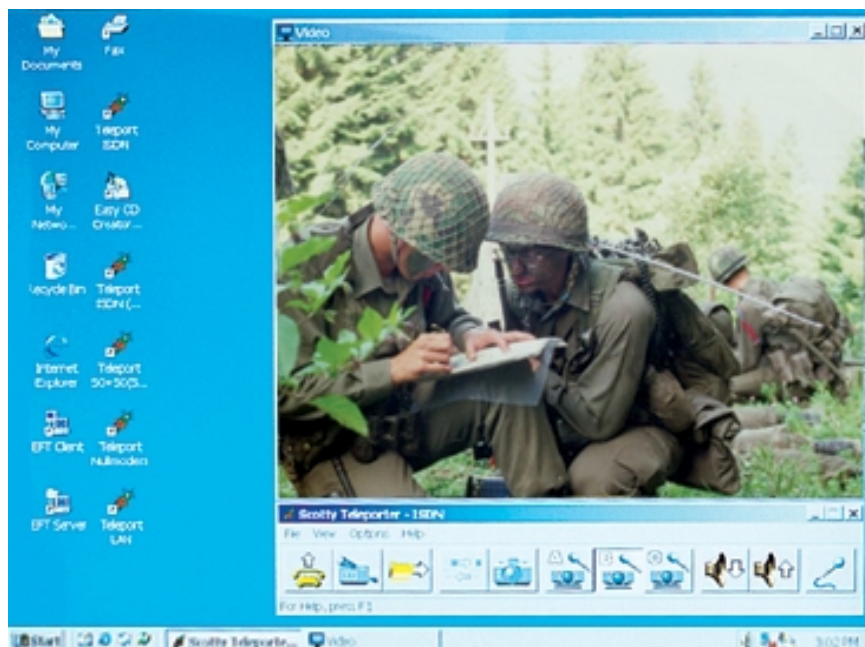
Hardware Installation

The BGAN terminal can be connected to the SCOTTY unit over either Ethernet or USB.

To use the Ethernet interface, connect a network cable to the Ethernet port on the SCOTTY unit and to the Ethernet port on the BGAN terminal. The HNS 9201 and EXPLORER 500 both have built-in DHCP servers; therefore, configure SCOTTY to obtain an IP address automatically.

SCOTTY Configuration

The SCOTTY Mobile requires minimal setup. After the system has booted up, Windows opens, you are presented with the SCOTTY Teleporter ICON.



Double click on the Teleporter Icon to start the application. Use the **Dial** button to enter the destination IP address, and click on **Call** to establish end to end video conferencing

Equipment Needed

For a basic configuration, you require the following equipment:

- SCOTTY Mobile unit.
- BGAN terminal.

BGAN Customization

No BGAN customisation is required.

Hints and tips

- Best results are achieved over a streaming IP connection, where the call bandwidth is one step lower than the selected streaming bandwidth. This leaves spare bandwidth for the overheads needed by the IP protocol.
- BGAN LaunchPad allows the configuration of error correction. Inmarsat recommends that you disable error correction for UDP applications. Refer to “BGAN LaunchPad Help” for details.

Technical Summary

The SCOTTY Mobile technical feature sets are summarized below:

Feature	Supported by Scotty Mobile
BGAN Launch Pad Installation	Yes
H.264, H.263, H.261 Video Codec	Yes
G.711, G.722, G.723.1, G.728 Audio Codec	Yes
Euro ISDN	Yes
Data: T.120	Yes
FTP/Store and Forward	Yes
Hardware solution	Yes
Windows Operating System	Yes
NTSC & PAL Support	Yes
Audio Video composite output	Yes
BGAN Standard IP and Streaming IP support	Yes
BGAN ISDN support	Yes
Far-end camera control	Yes
Ethernet, LAN, USB, RJ45 ports	Yes
Built-in CCD Camera	Yes

Further details and support

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