

BLUEBOX

The Maritime Communication Platform

TELE-MEDICINE

SCOTTY brings support to staff in the field to help make crucial decisions such as:

- Is the patient suffering from something exotic?
- What is the best way to stabilize the patient?
- Must the patient be evacuated?
- How long can the patient wait?

This help is available through the BlueBox's combination of live video, HD imagery transfer (like digitized x-ray images, microscopic and ultrasound images), biometric data sharing (ECG and clinical laboratory), vital signs transmission, and access to information on line.



Onboard the vessel



At the hospital

How it works:

Onboard the ship, the SCOTTY Blue Box connected to an HD (or SD) pan/tilt/zoom camera, a monitor, headset with mic, keyboard and mouse, endoscope with video output, ECG, document camera, electronic stethoscope (exact configuration can be defined with the customer), and the IP network connected to an Inmarsat, Thuraya, or VSat satellite network with minimum of 64 kbps throughput.

On shore, the SCOTTY device is connected to an HD (or SD) pan/tilt/zoom camera, monitors (one for live video, one for medical data/imagery), a microphone, speakers, keyboard and mouse, the IP network connected to public Internet or VPN.

One station calls the other by inputting the other party's IP address and the two stations establish a duplex audio/video conferencing call. Parallel to the videoconference, staff can use the SCOTTY file transfer system to send and receive medical files. The conference can be recorded and stills of the video can be taken and saved. Furthermore, by using a multi-conference unit (MCU), conferences with several medical experts in various locations are possible. All communication can be encrypted.

Applications include emergency medicine, tele-laboratory, tele-dentistry, tele-radiology, tele-microbiology, tele-dermatology, etc.

The SCOTTY BlueBox is a newest generation hardware coder/decoder and processing unit delivering superior audio, HD video, and data over satellite. The unit supports a wide range of interfaces for applications such as tele-medicine, remote maintenance & support, crew welfare, and surveillance.

Because the user can select resolution and frame rate to accommodate bandwidth available, live HD video over L-Band satellite units is easy. Furthermore, the BlueBox has a built-in recording function, a processor for PC applications, and can stream the incoming video to any personal devices connected to the network.

The SCOTTY BLUEBOX Package

- Optimized for live video at high or low bandwidths
- H.323 VTC from 64 kbps to 8 Mbps
- User-defined resolution versus frames per second settings
- "Snap & Send" HD Snapshots
- SCOTTY Fast File Exchange
- Integrated processor for data, Internet, scan etc.
- Designed for maritime conditions
- Compatible to PC and audio/video peripherals
- Customized equipment for SatCom



Note on satellite networks.

Because the BlueBox requires a minimum of 64 kbps transmission throughput for SD video, and fluid HD video transmission is available from 192 kbps to 5 Megabits per second (depending on the frames per second), SCOTTY recommends Inmarsat, Thuraya, or VSAT maritime (such as SeaTel, KVH) satellite systems. The compact Inmarsat Fleet BroadBand or Thuraya IP units are convenient for smaller vessels and offer up to 432 kbps; Ku/Ka band antennas are larger but offer more throughput (several Mbps). These antenna systems come with an airtime subscription which offers either per-MB pricing or flat monthly fees. The satellite service connects directly to terrestrial Internet or to another satellite antenna. Individualized networking solutions are also available.

If a vessel already has the appropriate satellite system onboard, the BlueBox is simply integrated into the communication network. If a ship has low-speed satellite communication (such as Iridium) or no satellite system, SCOTTY would be happy to provide advice, support, and the satellite hardware with airtime subscription.

Specifications subject to change without notice. V1.0