



Xenotran  
Test Systems

# IBS Test Terminal Devil Duck

What the  
"Devil Duck"  
can do for you:

## Shorten

your schedule & lower your development risks by using a fully integrated MIL-STD-188 compliant development & test environment.

## Validate

your terminal or application implementation by testing interfaces, timing, & protocols.

## Simplify

your documentation, testing & validation process by providing full status reporting and system statistics.

Xenotran proudly introduces the first and only Interactive Broadcast Service (IBS) Test Terminal, the Devil Duck. Included with the "Devil Duck" are Common Interactive Broadcast (CIB) reference layers for MIL-STD-181-C, MIL-STD-182B, MIL-STD-183B, and MIL-STD-186 to serve as a benchmark tool for the test and development of communications systems based on Integrated Waveform (IW) and Common Interactive Broadcast (CIB) systems. The "Devil Duck" will both shorten and simplify documentation, testing and validation processes by providing a functional GFE Library baseline for program development as it **acquires, monitors, schedules** and **decodes** IBS traffic reception.



## KEY FUNCTIONALITY

- IBS Waveform Analysis
  - **Configurable:** Filter on satellite radio & other data stream parameters
  - **Full Demand-Assigned Multiple-Access (-182B, -183B) Support:** SFOW, DFOW, DUFOW, PUFOW
  - **Monitor User-to-User Data Communications (-186):** Assigned & Announced
- CIB GFE Interface Decoding
  - 181C/183B
  - Timing
  - Scheduling
  - Alignment
  - Corruption
- UCOM Header Parsing
  - DCL Id
  - Report Id
  - Segment Id
  - Rs Code
  - # of packets in burst
- OTA Acquisition Verified
- Acquisition
  - Configurable Frequency Search List
  - Automated Downlink Adjustment
  - Forward Orderwire Reception Scheduling
  - Frequency and Timing Characterization
- SFOW Decode
  - Network Data Element
  - Preplanned Update Data
  - Ranging Data
  - Services Data
- DFOW Decode
  - Network Data Element
  - Preplanned Update Data
  - Ranging Data
  - Demand Assignment Update Data
  - Notification Data
  - Directed Messages



Interested in evaluating the “Devil Duck”? [eval@xenotran.com](mailto:eval@xenotran.com)

## WHAT'S INCLUDED

- Devil Duck 2U Rack mount
  - RF Input
  - RF Output
  - Clock Input
- Software
  - DSP/FPGA Hardware Programming
  - 181C Host Application
  - CIB Terminal Application
  - Waveform Analyzer
- Power Cable
- Carrying Case (Ruggedized Option)
- Documentation
  - User Manual
  - Quick Start

## IBS TEST TERMINAL TECHNICAL SPECIFICATIONS

<b>Input Signal Range (RF)</b>	240 – 268 MHz
<b>Receiver Gain</b>	~72 dB
<b>Optional</b>	10 MHz input clock
<b>Tuning Resolution</b>	100 Hz
<b>Size</b>	Compact 19" / 2 RU rack mount
<b>Ports</b>	3 SMA Connectors (I signal input, Q signal input, RF Rx input) TCP/IP Ethernet connection VGA monitor port LCD Panel for displaying terminal state, status, and error
<b>Memory</b>	2GB RAM, 160GB HDD
<b>Power</b>	110/120 VAC input power



513 Progress Drive, Suite M  
Linthicum, MD 21090  
Phone 410.636.3006 x110  
Fax 410.636.0177

For more information & sales,  
please contact [Dean DiMattia](mailto:Dean.DiMattia@xenotran.com).

Over a decade of cutting edge digital signal processing research has enabled Xenotran to expand across the military and transportation sectors with unique solutions in a diversified market. Xenotran combines a rich history of proven successes with sound program management techniques. For more information on any of our products or services, please visit us on the web at: [www.Xenotran.com](http://www.Xenotran.com).