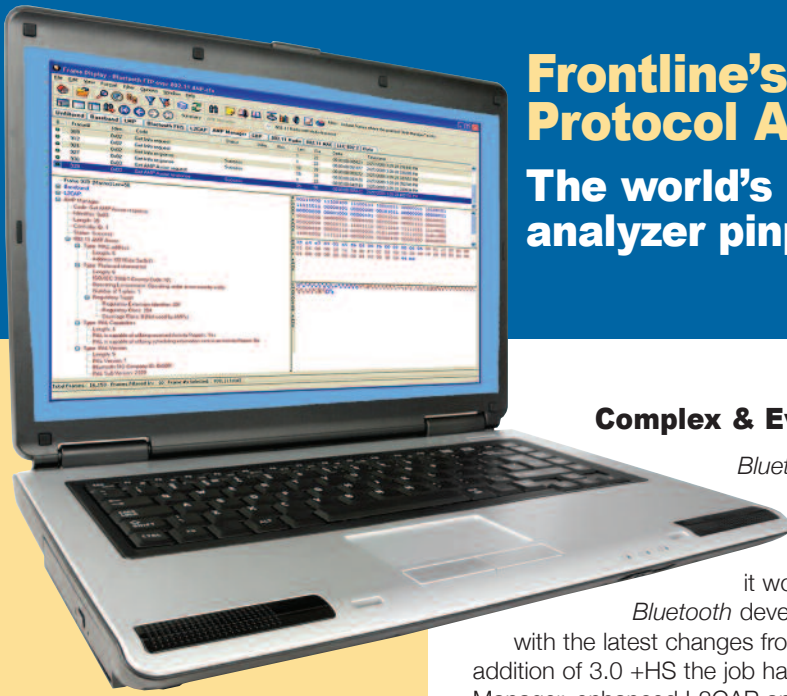


Frontline's Bluetooth® FTS4BT™ Protocol Analyzer.

The world's only *Bluetooth v3.0 + HS* analyzer pinpoints protocol issues *fast!*



Complex & Ever Changing

Bluetooth wireless technology is an extremely complex combination of software and hardware that is evolving fast. If you are new to wireless products featuring *Bluetooth* technology, just getting a thorough understanding of how it works is a formidable task. But even the most experienced

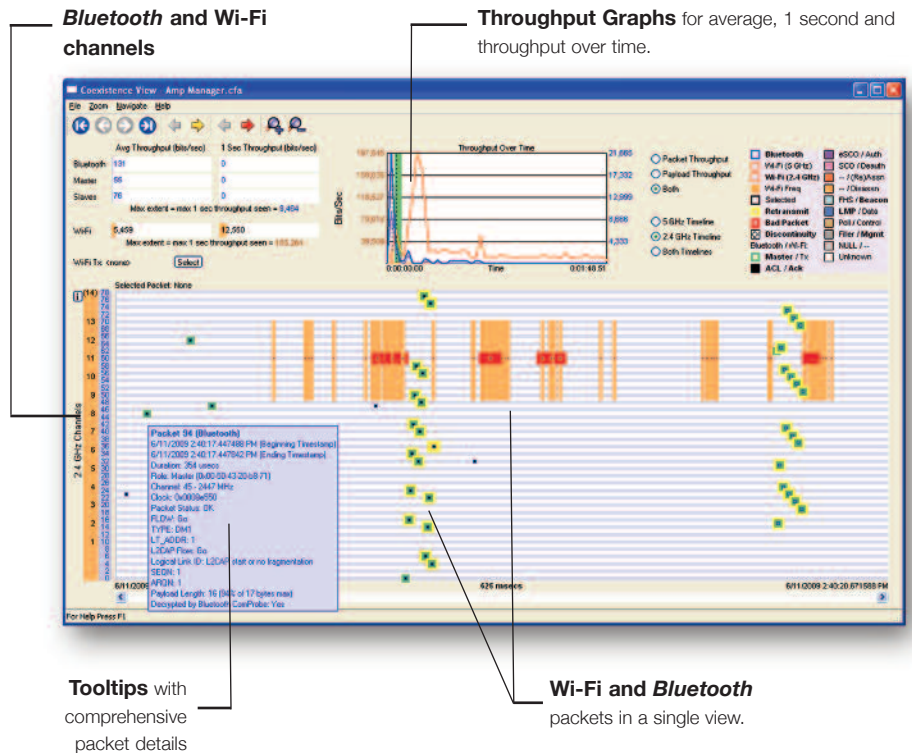
Bluetooth developers and test engineers are challenged by keeping up with the latest changes from the baseband all the way to the profile level. With the addition of 3.0 +HS the job has gotten even more difficult. FTS4BT can help navigate AMP Manager, enhanced L2CAP and right through to 802.11.

FTS4BT Meets the Challenge

FTS4BT is the tool that developers and test engineers rely on to get them through the design, debug, test, verification, and qualification cycle in the shortest time possible. Our users tell us their products would have never made it to market in a timely fashion without it. No matter where you are in the *Bluetooth* development chain, you will find FTS4BT invaluable.

Frontline Bluetooth v3.0 + HS Analyzer Features:

- **Works Live:** Captures, decodes, filters and displays data, and detects protocol errors (indicated in red), live. Live capture ensures you find and fix problems fast.
- **Capture 802.11 and AMP Manager Data:** With the optional Wi-Fi Add-on, FTS4BT captures and decodes Bluetooth and Wi-Fi data and displays both in a single, graphical display for analysis of coexistence issues. The Wi-Fi add-on sniffs 802.11a, b, g and n traffic and even decrypts encrypted data. Follow and decode the entire process including AMP Manager and enhanced L2CAP.
- **Decodes all Bluetooth protocols** and most profiles allowing for thorough interoperability testing. Profiles and protocols are added and updated regularly, so you're always up to date with the latest tools, as long as your Premium Maintenance is up to date.
- **Extract Audio into WAV files:** Supports A2DP, HSP & HF Profiles. Playback captured audio for rapid quality check or perform a more detailed analysis.
- **Air Sniffing:** Supports v2.1 + EDR and v3.0 +HS. Automatically handles decryption, pairing, master/slave role switches, and hold, and sniff low power modes. Excellent piconet synchronization.
- **Additional Features:**
 - Counts retransmitted packets.
 - Export into CSV and other formats.
 - Data extraction into original file formats, (e.g. PDF).
 - Graphic display of Packet Error Rate.
 - Reads BTSnoop files.
 - Extensive selective filtering



Included Hardware

FTS4BT ships with both a primary and secondary Frontline *Bluetooth* EDR ComProbe.



frontline FTE.COM™
Debug Communications Faster!™

Frontline's **Bluetooth® v3.0 + HS Protocol Analyzer.** Unequaled Protocol Analysis only from Frontline.

HARDWARE OPTIONS

● **Additional ComProbes:** may be added to capture Scatternet traffic, create a redundant sniffer or to sniff a multi-point connection or slaves using interlaced page scan.

● **Wi-Fi ComProbe®:** Captures Wi-Fi packets from *Bluetooth v3.0 +HS* for analysis and *Bluetooth/Wi-Fi* co-existence.

● **High Speed UART (HSU):** Capture UART data on embedded devices at speeds up to 8 Mb per second. Tap the interface between the host CPU and host controller, at TTL level to sniff H4, H5 and BCSP links.

● **Cabled ComProbe:** A *Bluetooth* ComProbe with an SMA connector allows you to perform conductive sniffing via a cable.

● **FTS4USB™:** Tap a USB circuit and decode the data live and live. Supports USB-HCI decoding and Low, Full and High Speed USB.

● **Transports:** HCI USB (H2), HCI UART (H4), HCI Three-Wire UART (H5), BCSP

● Protocols:

- Baseband - 3.0 +HS
- LMP - 2.1 +EDR
- HCI - 2.1 +EDR
- L2CAP eL2CAP
- SDP - 2.1 +EDR
- RFCOMM - 1.1
- TCS - 1.1
- OBEX - 1.0
- AVDTP Media - 1.0
- AVDTP Recover - 1.2
- AVDTP Report - 1.2
- BNEP - 1.1
- AT Commands
- AMP Manager - 1.0
- AVCTP - 1.0
- AVDTP Signaling - 1.2
- AVDTP - 1.2
- MCAP - 1.0

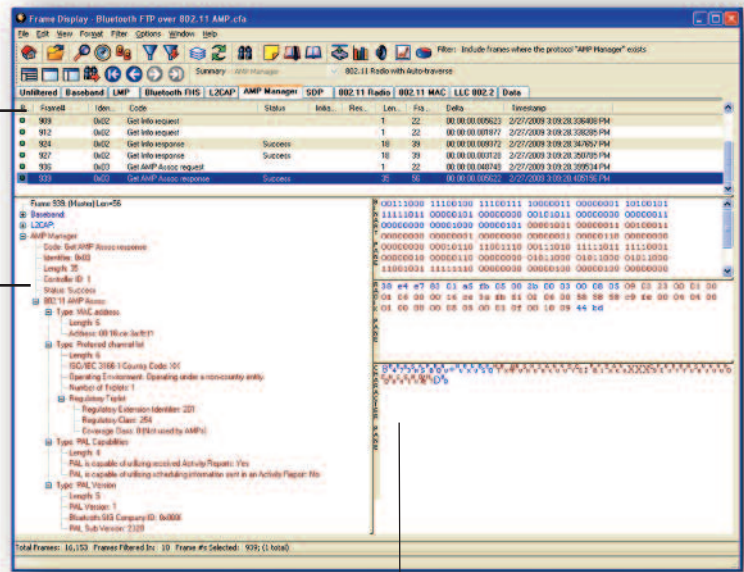
● Profiles:

- A2DP - 1.2
- AVRCP - 1.4
- AVRCP Browsing -1.4
- FAX - 1.1
- Hands Free - 1.5
- HCRP - .95
- HDP - 1.0
- Headset - 1.1
- HID - 1.0
- BIP - .95
- BPP - 1.2
- FTP - 1.1
- OPP - 1.1
- PBAP - 1.0
- SYNC - 1.0
- SAP - 1.0
- SPP - 1.1

● Wi-Fi:

- 802.11b
- 802.11g
- 802.11a
- 802.11n

Summary pane: Displays and decodes the most important fields in the selected low energy protocol layer, so that you can analyze them in a glance.



Decode Pane: All captured data is decoded and verified in English in accordance with the specification

Raw Bytes: Shown in Binary, Hex and ASCII.

Lifetime Technical Support

Whether you need help using a basic FTS4BT™ product feature, want Frontline's explanation of the protocol stack, or have a question on using FrameDecoder® to write a decode, you can be assured of a response that is friendly, thorough, and timely. Our global network of trained resellers provide first line support, backed by our experts in the US.

Trusted Bluetooth Expertise

The Bluetooth SIG (the governing body of Bluetooth technology) has selected Frontline to provide worldwide technical support for the SIG's Profile Tuning System (PTS) test tool. PTS is the cornerstone of the *Bluetooth* product qualification program.

Free Premium Maintenance

With FTS4BT not only will you receive free software, firmware, and protocol decoder upgrades for one year Premium maintenance renewal is available to purchase from Frontline or from Frontline resellers on request. *Bluetooth* technology moves fast—with Frontline products, so can you!

Minimum PC Requirements

- 1GHz Pentium PC or equivalent
- Windows XP or Vista
- 1 GB RAM Required, 2 GB Recommended
- 50 MB free disk space
- USB port for basic air sniffing
- One additional USB port for each additional *Bluetooth* ComProbe® or Wi-Fi ComProbe
- USB 2.0 port for optional USB ComProbe

Ordering Information

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