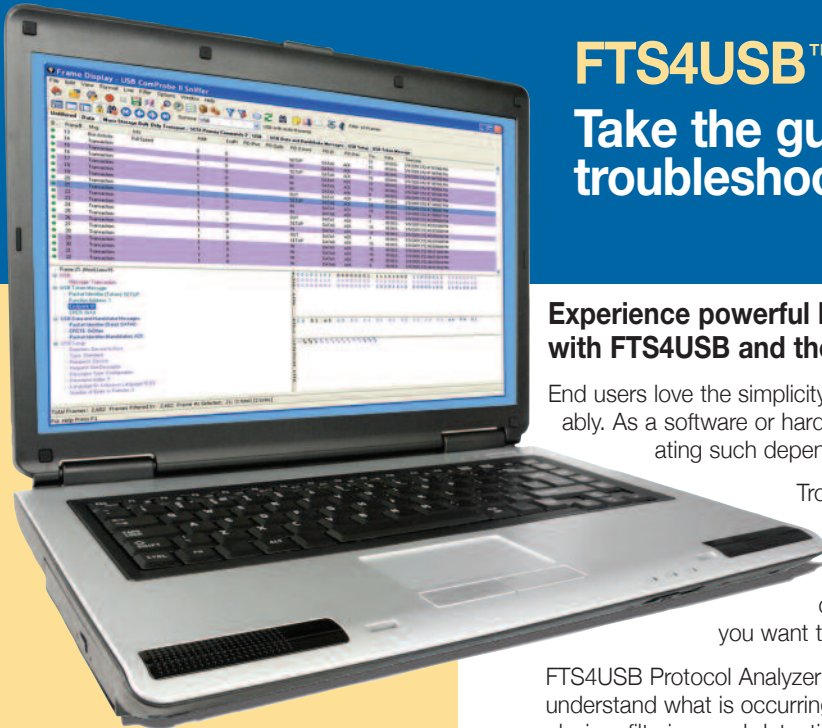


# FTS4USB™ Protocol Analyzer

## Take the guesswork out of USB troubleshooting. Debug Live!



Experience powerful live display for quick debugging and verification with FTS4USB and the portable USB ComProbe® II.

End users love the simplicity and ease of plugging in a USB device and having it work reliably. As a software or hardware developer or test engineer, you know the difficulty of creating such dependable and user-friendly products.

Troubleshooting USB devices is challenging. There is a lot of data on the wire, and it is moving quickly. Too much data and you are overwhelmed; too little data and you are left guessing. You need a tool that provides visibility so you can determine exactly what is going on, and analyze precisely what you want to see, when you want to see it.

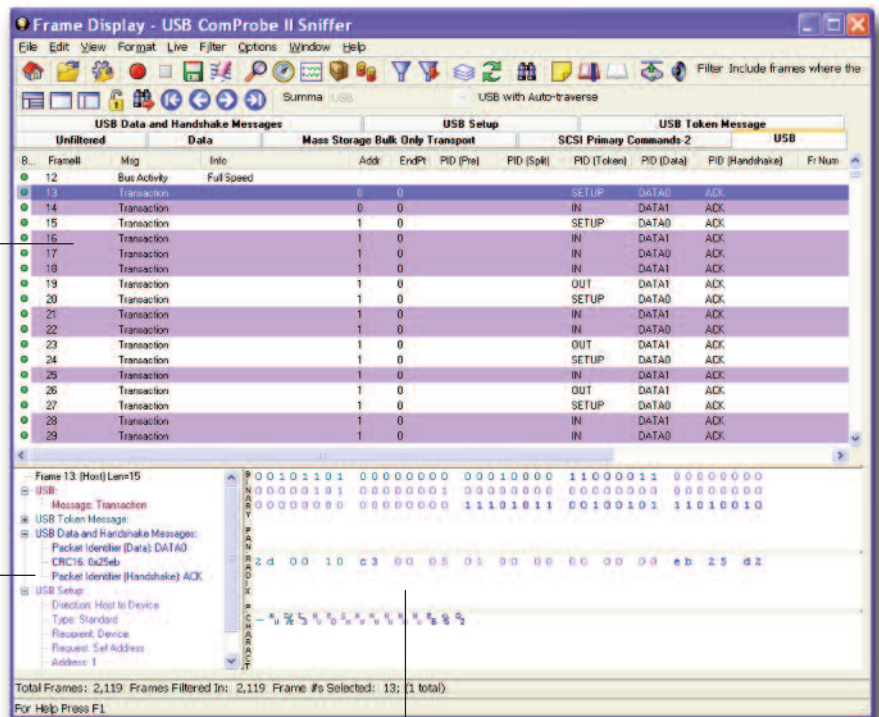
FTS4USB Protocol Analyzer along with the USB ComProbe II hardware makes it easy to understand what is occurring on a USB circuit by simultaneously capturing, decoding, displaying, filtering, and detecting errors live in real-time. For example, when debugging the communication between the USB mouse and the host PC, USB events and transactions are decoded according to USB specifications and displayed instantaneously in FTS4USB as the mouse moves. Other analyzers only capture the data, then review what was captured. FTS4USB eliminates the second step, making it an efficient, time-saving, and easy-to-use tool.

### Key Features and Benefits:

- Reduces debug time. Simultaneous live capture, decode, display, filtering and detection of protocol errors.
- Portable USB ComProbe II. Small, weighing less than 7 ounces (196 grams).
- Affordable. Everyone can have their own unit. All software and hardware included for one low price.
- Detailed decodes help simplify understanding complex protocols.
- Robust filtering with tabbed viewing reduces information overload.
- Extensive decoders support a wide variety of applications.
- Built-in support for the DecoderScript™ language enables quick creation of custom decodes.
- Synchronize with other instruments using hardware triggers.
- Records external events to help isolate problems.



**Summary Pane** displays a one line overview of each data frame/message. Click on any line to reveal detail in multiple panes below.



**Decode Pane** shows comprehensive layered decodes of each frame/message with clear, concise descriptions.

**Logical Data Pane** shows data in binary, hex and character format.

# Frontline's FTS4USB™ Protocol Analyzer. Unequaled Protocol Analysis only from Frontline.

## Features

- Non-intrusive monitoring and automatic speed detection of all three USB 2.0 speeds.
- Simultaneous live capture, decode, display, filtering, and detection of protocol errors.
- Hardware filters suppress packets, such as SOF, NAK, and dataless transactions.
- 4 Digital Input/Output lines for synchronization.
- Display bus activities, such as suspend/resume/reset and high-speed speed negotiation events.
- Show OTG HNP, SRP, and VBus pulses.
- Easily identify IN/OUT transactions using color-coding.
- Extensive decoding of standard and class-specific descriptors and requests.
- Single-click export.
- Use with products with embedded devices.
- Packets with protocol violation are flagged in red.
- Data captured to hard disk.
- Session notes and annotated bookmarks allow for quick identification of questionable packets.
- Free viewer. Share FTS4USB capture files with development partners and customers.
- Portable and affordable.

## Minimum PC Requirements

- Requires a Pentium PC 1GHz or faster, Windows XP (32-bit only), Windows 7 (32-bit & 64bit) with 1GB of RAM, 50MB free disk space, and a USB 2.0 port (for USB ComProbe II hardware).

## Typical FTS4USB Users

- Hardware and software developers and test engineers.
- Embedded technology developers.

## Partial Customer List

- Sony
- Apple
- Palm
- Broadcom
- Microsoft
- Johnson Controls
- Rockwell Automation

## FTS4USB - Debug Communications Faster!



## Supported Protocols and Classes

- Bluetooth HCI
- Wireless USB Protocol
- Async PPP, including IP, VJU, and VJC
- HID Mouse and Keyboard
- Health Device Profile (HDP)
- IEEE P11073-20601
- SCSI Primary Commands
- Picture Transfer Protocol (PTP)
- Media Transfer Protocol (MTP)
- On-The-Go
- URB
- Audio
- Communication & CDC Control
- Human Interface device (HID)
- Image
- Printer
- Mass Storage
- USB Hub
- CDC Data
- Chip/Smart Card
- Content-Security
- Video
- Personal Healthcare (PHDC)
- Diagnostic Device
- Wireless Controller
- Device Firmware Upgrade
- IRDA Bridge Device
- Test & Measurement Device
- Rockwell Automation USBCIP

## The Frontline Edge

Whether you need help using a basic FTS4USB product feature, want Frontline's explanation of the protocol stack, or have a question on the DecoderScript™ language to write a decoder, you can be assured of a friendly, thorough, and timely response.

## Includes DecoderScript™

Write custom decoders or modify existing decoders with the included DecoderScript language. Use your custom decoders just like any of the decoders supplied by Frontline. This can be useful to display items in a language other than English, or to extend decoders to work with non-standard protocols.

## Free Premium Maintenance

With FTS4USB, you will receive free software and protocol decoder upgrades for one year. After one year, it is inexpensive to keep your Premium Maintenance current.

## ORDERING INFORMATION:

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