



Quick Start Guide

Computer System Requirements

Supported Systems

- Operating System: Windows 7/8/10
- USB: USB 2.0 and later

Minimum Requirements

- Processor: Core i5 at 2.7 GHz
- RAM: 4 GB
- Free Hard Disk Space on C: drive: 20 GB

Install Software

- From Download: Download the latest ComProbe installer from FTE.com. Once downloaded, double-click the installer and follow the directions.

<http://www.fte.com/bpa600-soft>

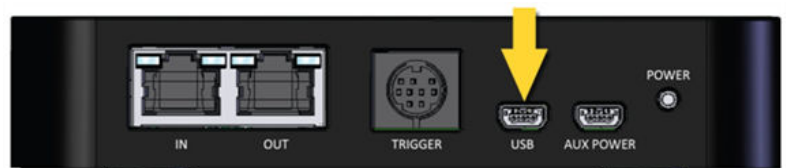
1. Attach Antennas

Remove the ComProbe BPA 600 hardware from the box and attach the antennas to the two SMA connectors as shown. To ensure all sniffing scenarios are covered, connect both antennas.



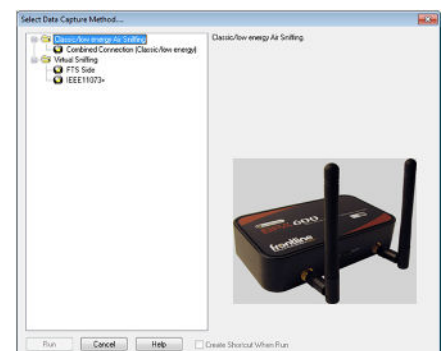
2. Apply Power

Insert the USB cable between the ComProbe BPA 600 rear-panel USB port and your computer USB 2.0 port. The computer USB port provides the only power needed by BPA 600 hardware. The rear-panel POWER LED will illuminate when the hardware is receiving adequate power.





3. Select Data Capture Method

- Open "Frontline ComProbe Protocol Analysis System [version#]" from your computer Start menu or from the Desktop folder.
 - If using the desktop folder ensure that it is pointing to the latest ComProbe software version.
- Select "Frontline ComProbe Analysis System".
- In the **Select Data Capture Method...** window click on **Bluetooth Classic/low energy (BPA 600)**, then click on the **RUN** button. The analyzer software will begin.



4. Configure the Datasource

Once the ComProbe BPA 600 software starts a **Control** window and the **BPA 600 datasource** window will open. Clicking the Discover Devices icon  will automatically detect any devices in Discovery Mode and store their addresses (BD_ADDR) in a database. You also have the option of manually entering a device's BD_ADDR that will also be saved in the device database.

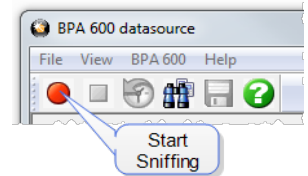
Roleless Connection: In Classic Bluetooth BPA 600 will automatically detect the master and slave devices in a link. This applies to BPA 600 Classic only Single Connection, Dual Mode, and Classic Only Multiple Connection modes. BPA 600 datasource window uses arrows  to show the master/slave relationship. The tail of the arrow is the master device and the point of the arrow is the slave device. A two-headed arrow indicates the relationship is not established or in transition.

There are several other datasource controls and indicators that are important for encrypted data sniffing.


- For Classic encryption: In the **Classic Encryption** section enter either the Pin Code in ASCII or HEX (this is for legacy pairing). The link key is necessary to decrypt Secure Simple Pairing (SSP). If one of the devices in a link is in Sniffer Debug Mode, the BPA 600 will automatically calculate the same link key as the devices used during device pairing.
- For low energy encryption: In the **LE Encryption** section enter the New Long Term Key to decrypt if the low energy link is using encryption.

5. Start Capturing Data

- Click the Start Sniffing icon on the BPA 600 datasource toolbar.
- As data is being captured, the **Capture Status** message in the **Control** window indicates the synchronization status of the ComProbe BPA 600 analyzer as well as the Master-Slave relationship. The colored arrows change depending on the synchronization state and the direction of the arrow points from Master (arrow tail) to Slave (arrow head).









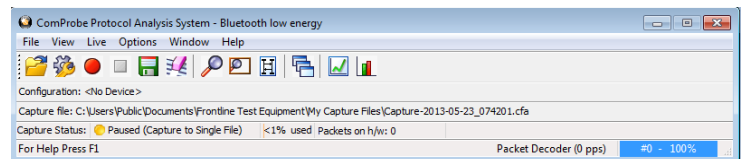
When you are capturing data, there are several important concepts to consider.



- Files are placed in **My Capture Files** by default and have a .cfa extension. Choose Directories from the Options menu on the **Control** window to change the default file location.
- Watch the status bar on the **Control** window to monitor how full the file is. When the file is full, it begins to wrap, which means the oldest data will be overwritten by new data.
- Click the **Stop** icon  to temporarily stop data capture. Click the **Start Capture** icon again to resume capture. Stopping capture means no data will be added to the capture file until capture is resumed, but the previously captured data remains in the file.

6. Analyze the Data

From the Control window toolbar select the following icons to view and analyze the captured data.

-  Event Display - for framed data, used to conduct byte-level analysis.
-  Frame Display - for framed data, used to conduct protocol-level analysis.
-  Message Sequence Chart (MSG) - Displays information about messages passed between protocol layers.
-  Bluetooth Timeline - Graphically displays Bluetooth packet information with emphasis on time and payload throughput.
-  Coexistence View - Graphically displays Classic Bluetooth, Bluetooth low energy, and 802.11 packet information with emphasis on time and payload throughput.
-  Bluetooth low energy Timeline - Graphically displays Bluetooth low energy packet information with emphasis on time and payload throughput.



-  *Bluetooth* low energy Packet Error Rate (PER) Stats - displays information about levels of retransmits used for isolating bad communications links.
-  Packet Error Rate (PER) Stats - displays information about levels of retransmits used for isolating bad communications links.

This quick start guide provides sufficient information to begin the data capture. Detailed hardware and software information is contained in the ComProbe BPA 600 User Manual. The manual is available on FTE.com.

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