ParaScope Plus
RS-232 Analyzer

Now with USB Interface to PC

Combine the ParaScope PLUS with our world proven WanXL Software and monitor, simulate, and run BERT on RS-232 interfaces with sheer ease and simplicity.

Product Features

- Convenient connection to PC via 6' USB Cable

- Operates up to 200 Kbps with Windows XP, Vista and Win 7.

- Protocol analyzer decodes Async, Sync, BiSync, Frame Relay, X.25, SNA, GR-303 TMC/CSC/EOC, ISDN PRI/BRI, encapsulated LAN and more

- Statistical analysis includes % utilization, frames/sec, throughput, frame size, errors, protocol specific, and more

- Bit Error Rate test set

- Easily create quick-launch icons for your custom created test/ analyzer configurations. Quick launch icons are stored in a file for easy distribution.

- "How do I..." instructional online help

- High input impedance receivers on all monitored lines

- Double testpoint and LED for each of the eleven major RS-232 signals

- LED's for TxD, RxD, TxC, and RxC are tricolor: RED indicates a "mark" (> 3 Volts), GREEN indicates a "space" (< 3 Volts), AMBER indicates clock or data signal toggling, and no illumination indicates when signal amplitude is between –3 and +3 Volts

- LED's for RTS, CTS, DSR, DCD, DTR, RI, EXT illuminate RED to indicate a "mark" or active state

- Four programmable RS-232C Output points

- Four RS-232C level Input monitor points

- Four testpoints each for Ground, +10 Volts, and –10 Volts

- Twelve testpoints for signals 9-25 of RS-232 line

- Four rechargeable AA NiMH batteries provide three hours of operation

- Accepts four AA Alkaline batteries

- AC adapter provides AC powered operation and simultaneous battery recharging

- Dimensions: 6.22" long, 3.75" wide, and 2.17" tall

ParaScope Plus RS-232

Comprehensive Bit Error Rate Testing

Simultaneously measure bit errors, block errors, errored seconds, percent errored seconds, and more on asynchronous and synchronous lines.

Detailed Protocol Decode and Analysis

Pinpoint problem sources quickly and accurately as you view the data in 4 unique display formats.

Summary View: Provides a summary decode of each frame on single display line. Scroll horizontally to view higher layers.

Detail View: Provides a complete 7 layer decode of each frame.

Protocol Summary View: Provides the protocol composition of each frame.

Line Data: View the actual line data in the chronological order that it is received. Displays start and end flags, lead states, triggers and CRC characters.

Raw Data Examination

Display characters, timestamps and lead status to quickly and easily resolve any Asynchronous, Bi-synchronous or character Synchronous problem. DTE and DCE data is neatly displayed along with user-selectable lead states in the chronological order received. Line problems such as Parity, CRC and framing errors are highlighted in red for quick identification.

Easily confirm correct poll select addresses and drop-sync characters on IBM 327x and Burroughs terminals and verify modem handshake timing and signals.

ParaScope Plus Specifications

Hardware Specifications

PC Requirements - Pentium with minimum 16 MB Ram and VGA or SVGA monitor. Connects via USB 2.0 port. Operates with WanXL Software using Windows XP, Vista and WIN 7.

Line Interfaces - Supports RS-232 only.

Full Breakout - Double testpoint and LED for each of the eleven major RS-232 signals. LED's for TxD, RxD, TxC, and RxC are tricolor:

> RED indicates a "mark"(> 3 Volts)
>
> GREEN indicates a "space" (< 3 Volts)
>
> AMBER indicates clock or data signal toggling.
>
> No illumination indicates when signal amplitude is between –3 and +3 Volts.

LED's for RTS, CTS, DSR, DCD, DTR, RI, EXT illuminate in the color RED to indicate a "mark" or active state.

Capture Buffer - Utilizes PC's extended memory. Size is user defined.

Data Rate (max.) - Up to 200 Kbps.

Data Clock - Selectable for internal and external.

Receiver - High input impedance receivers on all monitored lines.

Testpoints - Four testpoints each for Ground, +10 Volts, and –10 Volts. Twelve testpoints for signals 9-25 of RS-232 line.

Output Points - Four programmable RS-232C

Input Points - Four RS-232C level

Power - AC adapter provides AC powered operation and simultaneous battery recharging. Accepts four AA Alkaline batteries. (Four rechargeable AA NiMH batteries provide three hours of operation.)

Dimensions - 6.22" long, 3.74" wide, and 2.17" tall

Packaging - Custom carrying case, ParaScope hardware unit, FE WanXL software with all protocol decodes, RS-232 Y cable, 110 VAC wall charger.

General Specifications

Monitoring - Monitor DTE and DCE devices.

Simulation - Simulate DTE and DCE.

Data Line Analysis - Real time or post processing

Protocols - HDLC, SDLC, QLLC, LAPB, LAPD, Frame Relay, X.25, SNA, ISDN, SS7, Async PPP, Sync PPP, GR-303 TMC/CSC/EOC, V.5x, TCP/IP suite, AppleTalk, Novell Netware suite, Custom protocol stack, Customized protocols, Async, Sync, BSC, IPARS and inverted IPARS. More protocols under development.

Frame/String Simulator - Traffic generator with user-defined % utilization, transmit period and idle period. Supports user-defined frames, canned messages, and frame relay headers.

General Specifications - continued

Time Stamping - User may select to time stamp characters received, frames received, or lead transitions. Select absolute time of day or time relative for timestamp display format.

Search/Display Filter - User selectable search for timestamp, frame length, error, display text, capture data and protocol-specific information.

Character Suppression - Allows elimination of characters, such as idle, sync or user-definable characters from the display.

Send String - Up to 1,024 characters per string.

Display Screen - Windowing technology, includes: move, size, minimize, maximize, tile cascade, and arrange.

Line Data Display - Chronological order of DTE/DCE data, lead states, and triggers. Display can be synchronized to Decode Display windows. Supports both CHAR and HEX

Data Codes - ASCII, EBCDIC, Baudot, Six Bit Transcode, IPARS (Line and Sabre), Inverted IPARS, HEX and EBCD.

Bit Sense - Normal or inverted.

Bit Order - MSB or LSB first.

Lead Status - 8 fully user programmable leads: 4 as output and 4 as input. Any input lead may be connected to any interface signal. Names are user-definable.

Triggers - Programmable triggers consisting of character strings, errors, interface lead transitions, timers, time of day, and keyboard. Bit and character masking, and" not" and don't care characters are supported. Trigger events can be selectively displayed and stored with "pre" and "post" trigger data.

Timers - Ten timers with a maximum count of 65,535 and a resolution of 1 msec.

Counters - Ten counters may be incremented up to 65,535.

Error Checking - CRC-CCITT, CRC-16, CRC-12, CRC-6, LRC, and Parity.

Parity - Odd, Even, None, Ignore.

Decode Data Display - DTE/DCE single and encapsulated protocols. Summary I, II, and Detail windows offer increasing decode information. Protocol Summary decomposes each frame by protocol type. Windows can be duplicated and synchronized to each other and to the Line Data Display window. Protocol filtering.

Character Framing - 5, 6, 7 or 8 information bits, plus parity. For asynchronous systems: 1, 1.5, or 2 stop bits per character.

Alarm Logging - Timestamp and log alarms, errors and BERT results to disk.

Printer Support - Standard printer support for generating hardcopy of data status and timing information (all data, DTE only, DCE only, DCE and DTE), analysis, programs, and setups.

ParaScope Plus Specifications-Continued

BERT Specifications

Measurements - Simultaneously measures bit errors, block error, errored seconds and percent error free seconds for synchronous and asynchronous data lines.

Patterns - 63, 511, 2047, 4095, Alt 1/0, Mark, Space, ASCII FOX, Alt ASCII FOX, EBCDIC FOX, Alt EBCDIC FOX, 1 in 7, 3 in 24, (2**15) -1, (2**15) -1 inverted, (2**20) -1, (2**23) -1, O.151 QRSS, Loop Codes.

Presentation - Displays G.821 and bit/block errors.

Character Framing - Select Sync or Async 5, 6, 7 or 8 bits per character sequence.

Error Injection - Inject single or burst.

Flow Control - Select None, Leads or XON/XOFF.

Warranty and Maintenance

Ask about our optional extended Warranty and Maintenance plans.

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