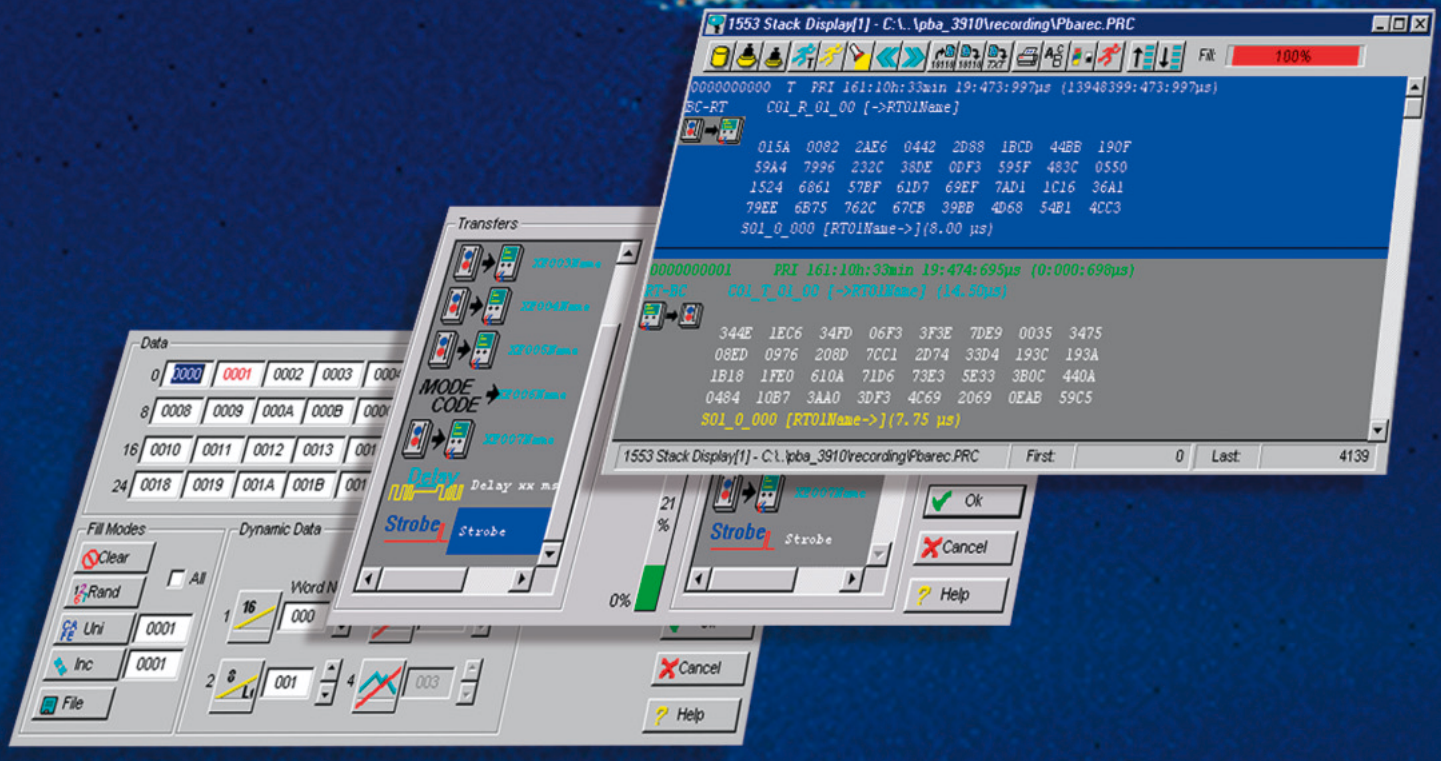
PBA-2000

PBA-2000-NET

MIL-STD-1553A/B Databus Analyser Software for Windows™



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PBA-2000 PBA-2000-NET

MIL-STD-1553A/B Databus Analyser Software for Windows™

The PBA-2000 is a powerful Windows based MIL-STD-1553A/B Databus Analyser and Systems Integration software package for use with AIM´s MIL-STD-1553A/B modules. An intuitive graphical user interface provides the ability to easily set-up complex Bus Controller, Multiple Remote Terminals, Bus Monitoring, Bus Recording and Physical Bus Replay functions. All operations can be performed concurrently using multiple Windows. External custom applications, including real time BC or RT simulations can be interfaced to the PBA-2000 Software using the 'Remote Control Interface'.

The PBA-2000 can support the test and integration of up to 16 dual redundant MIL-STD-1553A/B buses in single PC system. The PBA-2000-NET is optionally available to support the new Network Solutions family of Databus Analysers which allows multiple users connected via an network (Ethernet).

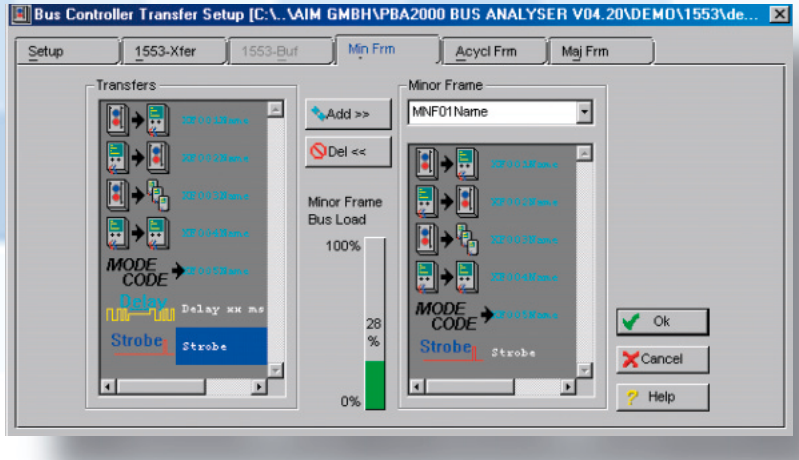
Extensive use of pop up menus, button bars, accelerator keys and on-line context sensitive help makes the PBA-2000 the most user friendly and easy to use Databus Analyser for MIL-STD-1553A/B testing.

General Features

- **Windows Multiple Document Interface**
- **System Status Display for Quick Look Analysis & Control**
- **Real Time Recording from Multiple Streams to PC hard disk**
- **Physical Bus Replay accurately Reconstructs your recordings**
- **Full Protocol Error Injection/ Detection in accordance with AS4112**
- **IRIG-B Time Correlation across Multiple Buses**
- **Save/Load Screen Layouts and Project Files**
- **Remote Set-Up using ASCII Files**
- **Optional Client/Server based PBA-2000-NET for remote control via a LAN**
- **Optional ParaView Software for Parameter Display, Control and Post Analysis**

Bus Controller Mode

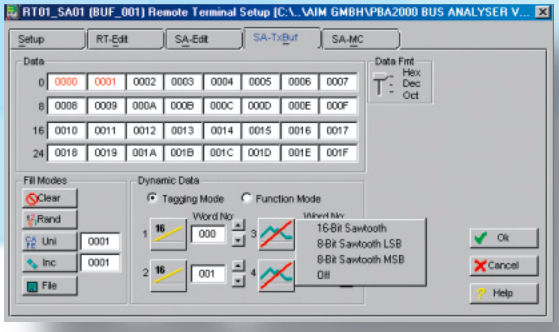
PBA-2000 BC mode supports all MIL-STD-1553A/B transfer types including Broadcast Commands, Mode Codes, Acyclic Transfers and Automatic Service Request handling. Users can easily add, edit or delete each BC transfer and build Major/ Minor Frames from the transaction lists. The use of multi buffering provides real time BC data simulations including static, dynamic and customer specific data functions.



- **Simulation of BC at full Bus Rates**
- **Programmable Minor/ Major Frames and Gap Times**
- **Enable/ Disable BC Transfer on the Fly**
- **Error Injection in accordance with AS4112 'RT Production Test Plan'**
- **Static/ Dynamic Data Functions: Random, Unique, Incremental and Customer Defined**
- **Real Time 'BC Activity Display' with Dynamic Data Editing**
- **Program External Strobe and Delays in Minor/ Major Frames**
- **Creation of BC set-up on-line or off-line**

Multiple Remote Terminal Simulation

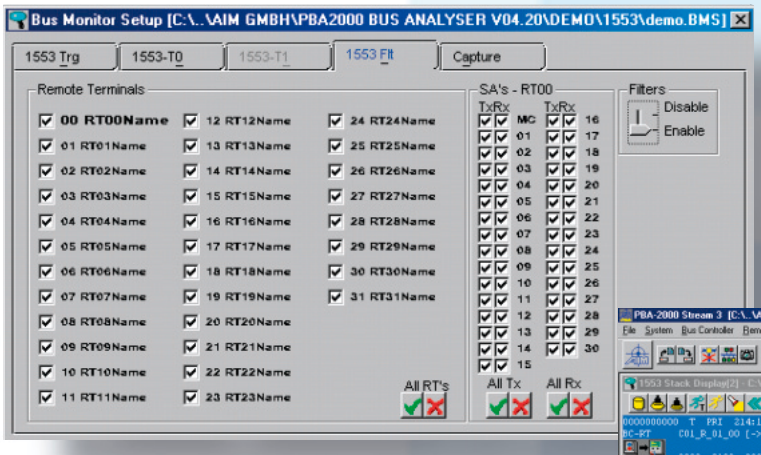
The PBA-2000 software simulates up to 31 Remote Terminals with all Sub-addresses. Each RT can be programmed for 'A' or 'B' Protocol for mixed bus applications. The use of multi buffering provides real time RT data simulations including static, dynamic and customer specific data functions. RT Mailbox Monitor Mode puts the RT into passive monitor mode to receive data to and from an external RT on the bus.



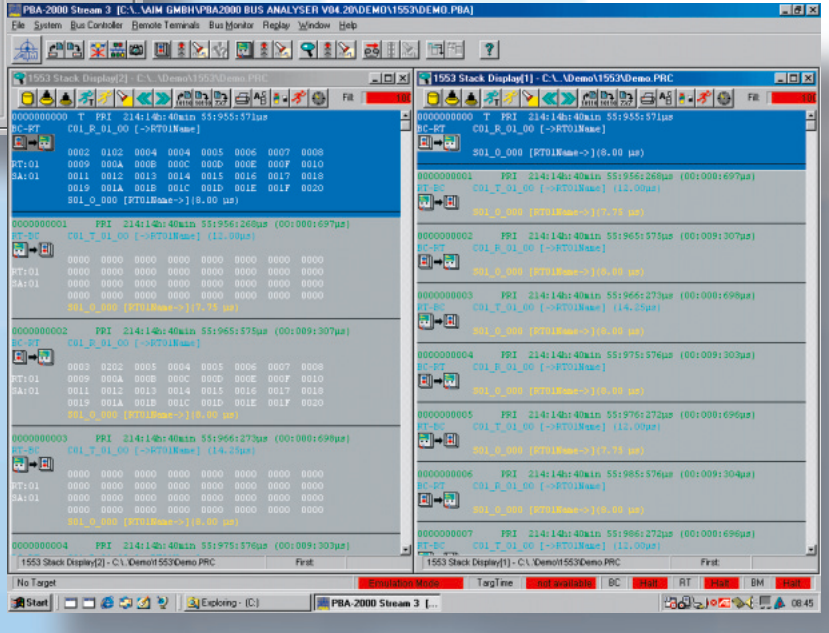
- Programmable Response Time for each simulated RT (4-32us)
- Error Injection in accordance with AS4112 'RT Production Test Plan'
- Static/ Dynamic Data Functions: Random, Unique, Incremental and Customer Defined
- Real Time 'RT Activity Display' with Dynamic Data Editing
- Fully Programmable Mode Codes
- Creation of RT set-up on-line or off-line

Databus Monitoring/Capture and Recording

The PBA-2000 provides powerful bus activity, bus monitoring and bus recording capabilities. Selective triggering, capture and filtering allows you to monitor all bus traffic or select only the MIL-STD-1553A/B words or messages of interest. Real time recording to the PC hard disk from multiple streams allows later retrieval and analysis of recorded data.



- Very accurately reconstructs Bus Traffic
- Turn ON/OFF selected or all RT's from Playback File
- RT's can be simulated or mailboxed during Replay
- Reconstruct MIL-STD-1553A/B bus recordings at remote sites
- Multiple buses can be played back simultaneously



- Quick Look 'RT Activity Display' counts Messages and Errors
- Multi Level Complex trigger
- Multiple Instances, Data Stack Displays: Chronological, Message and Compressed
- Absolute Time Measurement of MIL-STD-1553A/B Messages
- Time Tagging with internal or external IRIG-B
- Data Stack saved in ASCII Format for Post Analysis
- Real Time Recording to PC Hard Disk

RIGHT ON TARGET

PBA-2000-NET

The PBA-2000-NET option is the Client/Server based solution allows multiple users to have access to multiple MIL-STD-1553A/B streams and control all PBA-2000 functions remotely via an Ethernet LAN.

- **Test multiple MIL-STD-1553A/B buses Remotely over the Ethernet**
- **Network Application Interface for Unique Customer Applications**
- **Run instances of PBA-2000 as Local or Remote Clients**

- **Bus Coupling Modes: Isolated, Transformer, Direct and Terminated Bus Network**
- **Dynamic Output Voltage control for Primary and Secondary Bus**
- **1MHz continuous Test Signal Output**

MIL-STD-1553 Bus Coupling

The PBA-2000 provides a fully programmable MIL-STD-1553A/B bus interface. Isolated mode is used to create BC or RT simulations without affecting the MIL-STD-1553A/B data bus.

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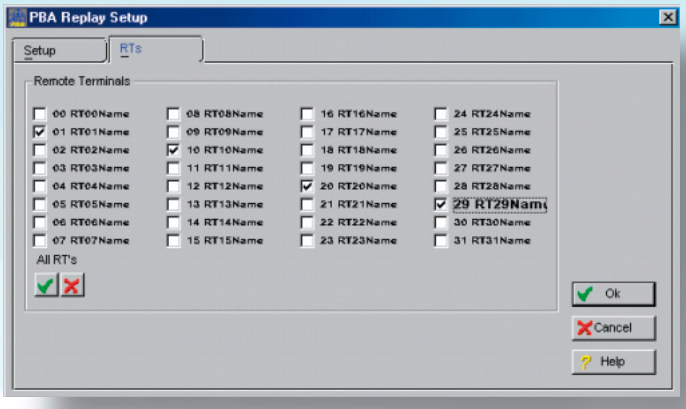

Physical Bus Replay

The PBA-2000 Physical Bus Replay Mode allows playback of the recording files to the dual redundant MIL-STD-1553A/B data bus. Bus Monitor functions can operate concurrently giving the ability to further monitor, filter and process the recording files. Any or all of the RT responses can be disabled from the recording file allowing real RT's to be connected and tested against real BC outputs.

Ordering Information

PBA-2000-PCI-SS
Single Stream MIL-STD-1553A/B Bus Analyser Software license
Executable Code for Windows 95/98/NT/2000

PBA-2000-PCI-DS
Dual Stream MIL-STD-1553A/B Bus Analyser Software license
Executable Code for Windows 95/98/NT/2000

PBA-2000-PCI-XS
Additional PBA licenses with access to one additional MIL-STD-1553A/B Stream

PBA-2000-NET-PCI-SS
Single Stream MIL-STD-1553A/B Bus Analyser Software via Network/Local, Executable Code for Windows 95/98/NT/2000

PBA-2000-NET-PCI-DS
Dual Stream MIL-STD-1553A/B Bus Analyser Software via Network/Local, Executable Code for Windows 95/98/NT/2000

PBA-2000-NET-PCI-XS
Additional PBA licenses via Network/Local with access to one additional MIL-STD-1553A/B Stream. Executable Code for Windows 95/98/NT/2000
Note: Third and additional stream each, up to a maximum of 16 MIL-STD-1553A/B streams

Minimum PC Computer Configuration
- 300 MHz Processor
- 64 Mbytes RAM
- 20 Mbytes free Disk Space
- Hard Disk determined by recording session requirements

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