

## GETTING STARTED

### 1.1 INTRODUCING THE INTERCEPTOR 132A

The INTERCEPTOR 132A 2.048 Mbit/s Analyzer is a hand-held, battery-operated digital communications test instrument. It can perform in-service and out-of-service analysis on 2048 kbit/s circuits, 64 (or 56) kbit/s timeslots (including individual, adjacent, or non-adjacent timeslots).

The front panel of the test instrument is arranged so that the test instrument is easy to use. To learn more about the functions of controls and indicators on the front panel, see Section 2, Instrument Description. To set up to test a digital communications circuit, see Section 3, Setup Categories.

As you conduct a test, the test instrument provides a number of test results that provide information about the circuit under test. For information about the test results, see Section 4, Test Results.

In addition to performing the tests and viewing the results, you can also connect a printer to the test instrument and print information regarding the test setup and test results. The information can be printed in a number of formats, including histogram format. For information regarding printing, see Section 5, Using a Printer.

Additionally, the test instrument can be controlled through a remote controller such as a personal computer. For information regarding remote control, see Section 6, Remote Control.

The INTERCEPTOR 132A includes the following key features:

- Operates at 2 Mbit/s, Nx64, Mx64, Nx56, and Mx56 kbit/s
- Measures 2 Mbit/s signal level
- Performs digital and VF channel analysis
- Displays 2 Mbit/s timeslot activity
- Automatically detects 2 Mbit/s framing and pattern
- Performs bit slip and frame slip analysis and stress testing of network timing (Option 132A-1)
- Detects REBE (Remote End Block Error) bits in 2Mbit/s mode
- Measures round trip delay
- Provides a 16K test mode
- Transmits NTPM, LEPM, and programmable ISDN (Sa6) loop codes
- Displays and prints Sa6 messages
- Generates frequencies from 50 bit/s to 2.048 Mbit/s
- Transmits and displays Transmic 2G (C-Bit) loop codes
- Performs M.2100 in-service performance analysis
- Provides remote control commands for remote operation
- Stores and recalls setup configuration
- Stores and prints Results with/without Histograms
- Squelches printing during excessive error rate periods

INTERCEPTOR 132A Applications include:

- Commissioning (pre-service testing) new 2048 kbit/s circuits
- In-service monitoring of 2048 kbit/s circuits
- Monitoring individual voice channels in 2048 kbit/s circuits
- Testing 64 (or 56) kbit/s, Nx64, or Mx64 kbit/s paths through digital cross-connect systems (DCS)
- Commissioning new fractional 2048 kbit/s services
- Out-of-service testing of 2 Mbit/s circuits by using NTPM and LEPM (Sa6) loop codes
- Out-of-service testing of 2 Mbit/s circuits by using Transmic 2G (C-Bit) loop codes
- Testing 2 Mbit/s, Nx64, and Mx64 circuits for timing-related problems (with Option 132A-1 installed)
- Stress testing equipment.

## 1.2 OPTIONS FOR THE INTERCEPTOR 132A

Options for the test instrument are available to provide additional functionality. Currently, the following option is available.

### Option 132A-1, Timing Analysis Option

The Timing Analysis option allows you to input an external clock source. With this option, the test instrument can provide Bit Slip and Frame Slip results. With this option, the test instrument can also transmit at a user-set variable frequency offset from -20,000 ppm to +20,000 ppm. A data synthesizer is included with this option.