

#### BENEFITS:

- **PINPOINT TROUBLES**, even intermittents, repeats and chronics
- **ISOLATE** problems systematically
- **SIMULTANEOUSLY** monitor different protocols
- **ELIMINATE FINGER-POINTING** between carriers and equipment vendors

#### FEATURES:

- Simultaneous monitoring and archiving of all call progress and signaling events on 96 DS-0s (4 T-1s)
- Expert systems analysis and problem diagnosis
- ABCD bit translation, T-1 monitoring, and alarm reporting
- Enhanced ISDN and GR-303 Call Processors analyzes complex call scenarios and network element interoperability
- Stand-alone operation and remote access via dial-up or WAN connection
- Point and click GUI Interface
- Multi-Session/Multi-User
- Fast, simple setup



Stop squandering time, money and customer goodwill on hit-and-miss troubleshooting methods. Go right to the problem – the first time – with Ellipsys Technologies' E2D Call Problem Analyzer.

The E2D Call Problem Analyzer is a revolutionary new tool for quickly and systematically isolating switched network troubles on digital facilities. While most test sets focus on the condition of one circuit facility at a specific point in time, the E2D monitors many circuits over periods of time. By continuously monitoring, capturing and analyzing the events that make up each call, the E2D expert software quickly isolates even the toughest problems. Call transfer difficulties, connection failures, station/network equipment incompatibilities, equipment provisioning problems and user errors can be identified as they happen. Let the E2D do the work. Technicians don't even need to be on site with the E2D's stand-alone operation and remote access through a dial-up or WAN connection.

Using Ellipsys Technologies' proprietary new technique, Call Problem Analysis™, the E2D simultaneously monitors and captures the ABCD signaling bits, digits, call progress tones, and ISDN/GR-303 signaling messages on up to 96 DS-0s (4 T-1s) and translates this data into corresponding call events such as dialed digits, on-hook, off-hook, flash, ring and channel connection. These events are stored to a relational database and compared to expected behavior (proper signaling protocols, call duration, features invoked disconnecting party, etc.). A Graphical User Interface (GUI) quickly guides the user through a series of plain English analysis screens and filters to view details of one specific call, call events on a particular circuit, on all circuits being tracked, or by shared characteristics such as call disposition, "busy" calls, etc. The E2D also provides a live display of signaling on all 24 channels and T-1 events such as signal loss, frame bit errors, detection of loop up/down codes, and alarms. Analysis can be performed in real time, and over 1,000,000 calls can be stored for subsequent analysis and report generation.

The Ellipsys family of Expert Call Analyzers also includes companion units. If you should add an analog companion to your ECA E2D, you can have the best of both worlds. You will have the ability to monitor and provide analysis on up to 96 DS-0s and 4 analog lines or trunks. Companion units can be used with either digital or analog master units for full application flexibility. These systems are also available in rack-mounted configurations for embedded test and monitor applications.

### Expert Call Analyzer System

The Expert Call Analyzer System impartially arbitrates network fault disputes in a multi-vendor or multi-carrier environment. It reduces the cost of maintaining Quality-of-Service, enables increased flexibility and productivity by placing years of problem-solving experience in the hands of a wide range of personnel.

#### T-1 Facility Testing

**Line codes:** AMI & B8ZS

**Framing:** D4 & ESF - Automatic alignment to framing, line codes and also manual selection

**Alarms & Errors**

**Transmitter Timing:** Recovered (Loop Timed)

#### Receiver

**Bridge:** >1000 ohms

**Terminate:** 100 ohms  $\pm$  5%

**Monitor:** 100 ohms  $\pm$  5%

**Receiver Level:** +3 to -30 dB dsx

**Transmitter Output:** 0 dB dsx

#### DS-0 Drop

**Simultaneously monitors 24 to 96 channels for:**

**Supervision:** A, B, C, & D bit transmissions

**Call Progress Tones:** Dial tone, audible ringing, busy, reorder & call waiting

**DTMF, MF, DP & digits**

#### Signaling Generation (simulation mode)

**DS-0 Drop & Insert**

**Signaling bit control:** AB, ABCD, DTMF, MF, DP & dialed digits

**DMW, 200 Hz to 3900 Hz & selectable levels**

**Call Progress Tones generation**

#### General

**Dimensions:**

8.1" H x 13.75" W x 17.9" D

20.6cm H x 34.9cm W x 45.5cm D

**AC Power Supply:**

90-264 VAC, 47-63 Hz

**Operating Temperature:**

0 C to + 50 C

**Storage Temperature:**

-40 C to 70 C

**Weight:**

20 lb. (9.0 kg)

#### Analysis Tools

**T-1 Channel Associated Signaling**

**Call Disposition Analysis Filters Calls By:**

Channel, date & time, dialed digits, call disposition(s), trouble types, unusual types and call duration

**ISDN/GR-303**

**Call Disposition Analysis Filters Calls By:**

CRV, CRV range, cause code message type, circuit ID, date & time, dialed digits, call disposition(s), trouble types, unusual types and call duration

**Real-Time Call Display**

**Call List Browser**

**Processed Events Browser**

**Raw Events Browser**

#### Administrative

**User-Defined Sessions**

**Automatic Session Re-creation on Reboot**

**Timed Session Re-Start**

**Remotely download "local" version of ECA application, reports and session data**

#### Circuit Types


Loop-Start, Ground-Start, 2 State (E&M) Trunks, DID and 911 Trunk

#### Circuit Test Modes (CAS Only)

Drop and Insert Simulation Option

#### Certifications

Meets or exceeds **Bellcore, ANSI & IEEE** technical requirements.

 US LISTED & FCC certified.

CPR Code: #774179

CLEI Code: #T1TSCKODAA

# Ellipsys

a Bell Services West product

Specifications are subject to change without notice.

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