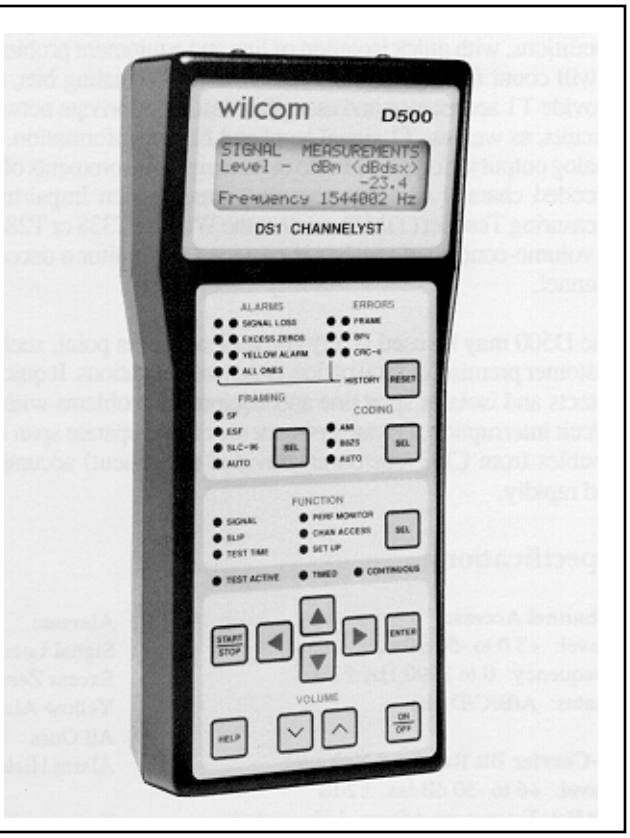
ds1 channelyst

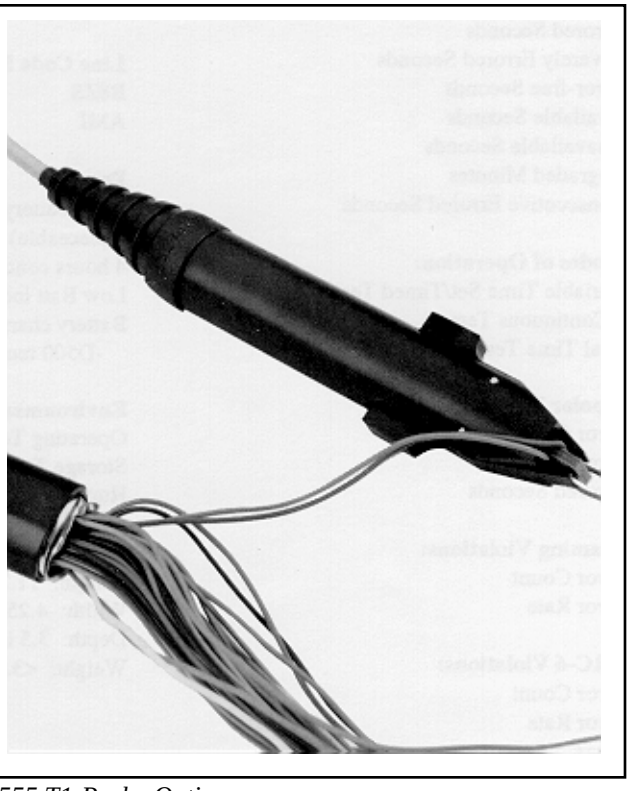
D500

Features

- Automatic Framing and Line Coding
- dBdsx Measurement
- T1 Frequency Measurement
- Slip Counting
- Full Performance Monitoring
- Programmable Test Times
- Continuous Test Time
- Channel Access
- Built-In Audio Monitor
- Signaling Bits Information
- Channel Frequency Measurement
- Channel Codes Display
- Automatic Line Build-Out Switch Selectable
- On-screen Help Menu
- Portable w/High-Impact Case
- Quick & Easy NiCd Battery Exchange
- 4-line, 20-character LCD
- Extremely Easy to Operate!



D500 DS1 Channelyst



D555 T1-Probe Option

Description

The D500 DS1 Channelyst is a battery-operated, hand-held T1 test set designed for field use. Because of its non-intrusive access to T1 circuits, there is no concern over service interruptions. Automatic framing is provided for SF, ESF, and SLC-96*. The D500 is used for performance monitoring, channel access, error analysis, alarm detection, and signal-quality measurements of T1 lines. It performs in-service synchronization tests and slip counting. The combination of performance monitoring and signal-quality monitoring in one hand-held unit makes the D500 a unique and convenient test set. Housed in a sturdy, high-impact case, it can be used in the central office or outside the plant to monitor line performance, confirm trouble reports, and isolate span problems.

The D500 DS1 Channelyst will perform a variety of measurements, performance monitoring, error rate counts, and calculations helpful in diagnosing T1 line problems. Sophisticated software provides the user with an advanced and extremely easy-to-use interface. Channel access provides the capability to monitor signaling bits, voice, channel level, channel frequency, or channel code data.

Wilcom

Applications

The D500 provides in-service monitoring of T1 circuit performance, and can be used at any central office or field site. It will provide immediate access to error, alarm, and signal quality conditions, with quick isolation of line and equipment problems. It will count frame slips, monitor A/B/C/D signaling bits, and provide T1 acceptance and assurance testing of private network circuits, as well as, T1 signal level and bit rate information. An analog output jack is provided to make noise measurements of the decoded channel using an external Transmission Impairment Measuring Test Set (TIMS), such as the Wilcom T338 or T286B. A volume-controlled speaker is provided to monitor a decoded channel.

The D500 may be used at any convenient access point, such as customer premise, central office, or repeater locations. It quickly detects and isolates span line and equipment problems without circuit interruption. Private network users can separate span line troubles from CPE (customer provided equipment) accurately and rapidly.

DS1 synchronization tests are quick and easy through the use of the dual T1 input jacks. Slip counts are then measured by comparing one span line against a reference line.

The proper signal levels at the DSX are important to the satisfactory operation of T1 span lines. The D500 measures dBdsx levels to insure compliance with published standards.

Switch-selectable ALBO (automatic line build-out) or DSX allows the D500 to be used in all applications from customer premises to central office and at any other conveniently accessible location. Automatic framing quickly identifies the type of T1 circuit framing under test from SF to ESF and includes SLC-96.

The D555 T1-Probe (a non-intrusive probe) provides a technician non-metallic access to a T1 signal on a twisted pair - without affecting the signal being monitored. When used with Wilcom's D500 DS1 Channelyst, the user can perform all tests as though tied directly to the copper wires.

Specifications

Channel Access:
Level: +3.0 to -50 dBm, ± 1dB
Frequency: 0 to 3990 Hz, ±2Hz
Status: A/B/C/D bits

T-Carrier Bit Rate and Voltage:
Level: +6 to -30 dBdsx, ±2dB
Bit Rate Frequency: ±5ppm, 1 Hz resolution
Slip Counting: Up to 999 Frame Slips

Performance Monitoring:
Errored Seconds
Severely Errored Seconds
Error-free Seconds
Available Seconds
Unavailable Seconds
Degraded Minutes
Consecutive Errored Seconds

Modes of Operation:
Variable Time Set/Timed Test/
Continuous Test
Real Time Test Results

Bipolar Violations:
Error Count
Error Rate
Errored Seconds

Framing Violations:
Error Count
Error Rate

CRC-6 Violations:
Error Count
Error Rate
Errored Seconds

Alarms:
Signal Loss
Excess Zeroes
Yellow Alarm
All Ones
Alarm History

Framing Formats:
SF (super frame)
ESF (extended super frame)
SLC-96*

Line Code Formats:
B8ZS
AMI

Power:
NiCd battery-operated (easily replaceable)
4 hours continuous operation
Low Batt indicated in LCD
Battery charger 115V AC 60Hz
-D500 recharges in one hour

Environmental:
Operating Temp.: 0° to 40°C
Storage Temp.: -20° to 60°C
Humidity: 0 to 90% non-condensing

Physical:
Length: 11.25 inches
Width: 4.25 inches
Depth: 3.5 inches
Weight: <3.0 lbs

Ordering Information

D500 DS1 Channelyst	30500010
Basic Package includes:	
D500 DS1 Channelyst	
Battery Pack	
Battery Charger	
D500R DS1 Channelyst w/D555 T1-Probe Kit	30500020
Kit includes:	
D500 DS1 Channelyst	
Carrying Case	
D555 T1-Probe	
2 patch Cords (specify)	
Battery Pack	
D555 T1-Probe Kit	30555010
Kit includes:	
Carrying Case	
D555 T1-Probe	
2 Patch Cords	

Options:
DC Battery Charger
AC to DC Power Adaptor
Patch Cords:
310 to Bantam, 48 in.
Bantam to Bantam, 72 in.
Bantam to E-Z-Hook™, 60 in.
Carrying Case

Wilcom

2/99
811-509-004

P.O. Box 508, Laconia, NH 03247
Tel: 603/524-2622 or 800/222-1898, Fax: 603/524-3735
www.wilcom.com