DScope Series III
The complete solution for audio test and measurement

Great performance
Great features
Great price

And it’s portable.
TWO-CALONAL ANALOGUE AND DIGITAL SIGNAL GENERATORS

- Wide choice of standard functions including Sine, Square, Ramp plus complex waveforms such as burst, pulse, MFSK and twin-tone.
- Independent generators for A and B channels, able to drive analogue and digital outputs concurrently.
- User-definable waveforms allowing, for example, user-defined multiframe or tone-burst generation.
- Adjustable alignment between analogue and digital domains.
- Digital generator can be synchronised to any standard AES/EBU or video reference (or internally) and generate a 'synchronous' output with +/-1 ppm variation in 1ppm steps.

TWO-CALONAL ANALOGUE AND DIGITAL SIGNAL ANALYZER

- The dScope Series III provides a Continuous-Time Analyzer (CTA) capable of registering the fastest peaks or performing Coherence weighted measurements and a sampling Fast Fourier Transform (FFT) Analyzer, useful for detailed spectral analysis.
- Both types of analysis may be performed concurrently. Amplitude, frequency and phase readings are always available in the signal analyzer, regardless of the functions selected in the Continuous-Time Analyzer (CTA) or the FFT analyzer measurement detectors.

TRACE WINDOW

- Single or dual channel trace display with 'scope; FFT and sweep capability; trace zooming, labelling, trace and result trace markers; print preview.
- CTA detector residual output (for example THD+N) can be viewed with FFT and signal waveforms; other traces include FFT of CTA residual, FFT of digital interface jitter and sweeps.

EASY TO USE: Offering so much, the dScope Series III could have been complicated to use, but the screen display can easily be tailored to suit the user and the application. Whether a simple generator and voltmeter are needed, or a sophisticated configuration with FFT, scope, eye-pattern and other displays, the dScope Series III is equally suitable.

EASE OF CALIBRATION:

dScope III requires no hardware adjustments: The entire calibration is performed in software, and calibration coefficients are stored in EEPROMs on their respective modules; modules can therefore be interchanged without re-calibration. To ensure traceability re-calibration must be performed using suitably-qualified external test references.

COMPATIBILITY WITH OTHER WINDOWS APPLICATIONS:

dScope Series III can exchange test data with other Windows applications such as spreadsheets, databases and word processors for report generation, record-keeping and analysis.

PORTABILITY:

With a briefcase-style flight-case containing the test system and your notebook PC, dScope Series III is instantly ready for use wherever you are.
**AUDIOTECHNICAL SYSTEM**

**TWO-CHANNEL CONTINUOUS-TIME ANALYZER (CTA)**
The CTA is a real-time instrument with various filters which may be used in combination to perform a range of measurements.
- Real-time readings for two channels (including amplitude, THD+V etc).
- High and low pass and weighting filters.
- Tracking or fixed band-pass/level reject filter.

**TWO-CHANNEL FFT ANALYZER**
The FFT analyzer operates on a sampling basis and acquisition is controlled by a trigger facility. Various meter readings can be derived from it and displayed on an FFT detector readout. Many FFT-derived readings can be displayed concurrently.
- Broad selection of FFT window functions incorporating industry standards and high-performance proprietary types.
- Real-time trace averaging "as you watch".
- Wide range of FFT-derived measurement results for THD, IMD etc.
- Scriptable FFT Window functions and measurement readings.

**MONITOR OUTPUTS**
Flexible monitor system provides assignable BNC connectors which can manipulate headphone output and built-in loudspeaker can be assigned.

**Customize the system with your own personalized toolbar**

**Sweep Analyzer**
Sweeps up to four variables and may simultaneously measure up to four results.

**DIGITAL INTERFACE TESTING**
- Simulation of live cables and/or filtered sources by the digital generator.
- Measurement and display of source and cable-induced jitter components, sample-rate, eye narrowing & carrier amplitude.
- Reading of demodulated jitter signal by FFT analyzer enables viewing of jitter spectrum.
- Full support for Channel Status generation and analysis.
- In-bin patching of Channel Status.
- Display of binary data by Channel Status fields.
- Control and display of "Valid" bits.
- Word length control and bit activity indicators.

**LEAD CHECKING**
- Graphical limits can be set and violations flagged.

**READINGS**
- Reading windows can be "dragged" out of analyzer windows and saved to customise your view of the instrument.
- Headings, colors and units can be adjusted.
- Display can include a bargraph.
- Upper and lower limits and alarms can be set.

**CONFIGURATION MANAGE**
Configuration snapshots and scripts (test procedures) can be stored on disk.
DScope Series III is a portable audio test system that is remotely controlled by a Windows98 or Windows2000 PC. The DScope Series III unit is complemented by an easy to use software application. Communication with the host PC is by means of a USB link, providing plug-and-play installation with no need to put anything inside the PC. DScope Series III supports the new OLE/COM standards, allowing data to be exchanged easily with other applications.

**ANALOGUE SIGNAL GENERATOR**
- Frequency range: 0.1Hz - 96kHz
- Resolution: 150kHz
- User waveforms: sin, cos, square, pulse, 0..5V, 0..20V, 0..1V
- Carrier amplitude: ±10dB or ±10dB
- Reference signal format: AES II, IEC, S/PDIF
- Termination: switchable
- Reference level: ±10dB or ±10dB

**DIGITAL SIGNAL GENERATOR (DATA)**
- Wordlength: 8bit - 24bit
- Resolution: 1bit - 32bit
- User waveforms: in analogue signal generator
- Channel Status:fully switchable for each channel
- Validity: displayed for each channel

**DIGITAL SIGNAL GENERATOR (SYNC)**
- Reference signal format: AES II, IEC, S/PDIF
- Termination: switchable
- Reference level: ±10dB or ±10dB
- Test input carrier phase test reference: ±10dB or ±10dB

**DIGITAL SIGNAL GENERATOR (CARRIER)**
- Format: AES II, IEC, S/PDIF
- Frequency range: 0..5kHz - 44.1kHz
- Reference signal format: AES II, IEC, S/PDIF
- Wordlength: 1bit - 32bit

**DIGITAL SIGNAL ANALYZER (DATA)**
- Wordlength: 8bit - 24bit
- Resolution: 1bit - 32bit
- User waveforms: in analogue signal generator
- Channel Status: fully switchable for each channel
- Validity: displayed for each channel

**DIGITAL SIGNAL ANALYZER (SYNC)**
- Reference signal format: AES II, IEC, S/PDIF
- Termination: switchable
- Reference level: ±10dB or ±10dB
- Test input carrier phase test reference: ±10dB or ±10dB

**FFT ANALYZER**
- Frequency range: 0..1kHz - 25kHz
- Resolution: 1bit - 32bit
- Processing: 1bit - 32bit
- Window function: industry standard window function plus proprietary Prism Sound windowing in 150Hz dynamic range

**DIGITAL SIGNAL ANALYZER (CARRIER)**
- Format: AES II, IEC, S/PDIF
- Frequency range: 0..5kHz - 44.1kHz
- Reference signal format: AES II, IEC, S/PDIF
- Wordlength: 1bit - 32bit
- User waveforms: sin, cos, square, pulse, 0..5V, 0..20V, 0..1V
- Carrier amplitude: ±10dB or ±10dB
- Reference signal format: AES II, IEC, S/PDIF
- Termination: switchable
- Reference level: ±10dB or ±10dB

**ANALOGUE SIGNAL ANALYZER**
- Frequency range: 0.1Hz - 96kHz
- Resolution: 150kHz
- User waveforms: sin, cos, square, pulse, 0..5V, 0..20V, 0..1V
- Carrier amplitude: ±10dB or ±10dB
- Reference signal format: AES II, IEC, S/PDIF
- Termination: switchable
- Reference level: ±10dB or ±10dB

**MONITOR FUNCTIONS**
- Monitor outputs: AES II, IEC, S/PDIF
- Digital or analogue output formats: digital or analogue output formats
- Channel Status: fully switchable for each channel
- Validity: displayed for each channel

**TYPICAL USES:**
- Research and development
- Production test
- Field service
- Maintenance

**APPLICATIONS:**
- Professional audio
- Broadcast
- Internet audio
- Multimedia
- Consumer products
- Sound reinforcement
- Telephony
- Communications

**LIGHTWEIGHT CASE:**
A custom-made case for the DScope Series III is available separately.

Completely self-contained in a custom carrying case, DScope Series III can be transported as carry-on luggage. No scope is needed to view signal or residual waveforms, or even digital carriers, and a monitor speaker is built-in.