

dScope Series III - No Ordinary Audio Instrument



The world's most comprehensive and powerful measurement instrument for analog and digital audio devices, including AES3 and I²S interfaces, Bluetooth® systems, acoustic transducers and Windows™ audio devices.

Beyond Traditional Measurements

Prism Sound, world-renowned leaders in digital audio engineering, bring you a truly unique audio measurement system, loaded with innovations and exclusive features to help you design and test faster.

Speed

- Over 100 concurrent measurements for faster analysis
- Real time interaction for instant measurement feedback
- Built in automation for rapid, repeatable tests
- Multi-tone testing for high volume manufacturing
- Windows™ Audio Device I/O for real-time soundcard analysis

Simplicity

- Auto Sequence; easily create test sequences and reports
- Simple USB connection to host PC
- Most compact audio bench instrument available
- Programmable shortcuts to frequently used tests
- ActiveX / COM control for QC integration, e.g. LabVIEW
- Field calibration utility to reduce downtime
- Turnkey packages for zero learning curve deployment

Power

- Unrivalled analysis power at an unbeatable price
- 'Smart FFT' Detectors for the most revealing analysis
- World's most advanced digital audio debug tools
- Twin generators for independent and arbitrary waveforms
- Advanced sweeps for unrivalled analysis detail
- Quasi-anechoic acoustic transducer measurements
- Event manager; your always-on Watchdog Monitor

Applications



AUTOMOTIVE



MANUFACTURE

BLUETOOTH
AUDIO

MOBILE AUDIO



BROADCAST

MUSIC
INDUSTRYCOMPUTER
AUDIO

PRO AUDIO



EDUCATION



R & D



ELECTROACOUSTICS



SEMICONDUCTOR



TELEPHONY



SERVICE

HOME
ENTERTAINMENT

CONVERTERS



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dScope Series III Innovations and Exclusive Features

The ONLY audio analyzer with 'Smart FFTs'

Beyond THD+N - determine how your device REALLY performs



Exclusive, user-configurable soft instruments for measuring and monitoring up to 40 different parameters at once: Amplitude, THD+N, THD, N, Nth harmonics, mains hum, crosstalk, gain, and much more. And all at the same time!

The ORIGINAL audio analyzer with live interaction

Test faster than ever with over 100 simultaneous live results



Scope traces, FFTs, residual distortion traces, sweeps, continuous time analysis, 'Smart FFT' Detectors, jitter measurements, digital metadata and more. Over 100 live measurements at once - no waiting for test sequences to complete!

EXCLUSIVE Event Manager toolbox

Always-on watchdog monitor that NEVER misses a glitch



Powerful tools to continually monitor and log status changes and limit breaches. Flexible error reporting including email alerts when an error is detected. Ensure you never miss a glitch with a software log file that can run indefinitely.

The world's FIRST complete Bluetooth audio test solution

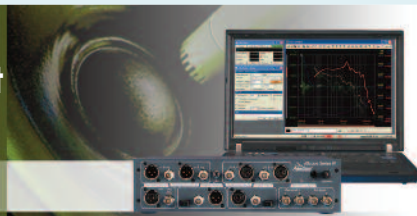
Bluetooth audio testing made faster and easier!



Unique tools to address Windows™ audio devices and Bluetooth® systems directly from the dScope Series III software. Avoid external editing software, and measure faster in a closed loop, in real time.

Electronic and electroacoustic test

Measure your ENTIRE loudspeaker with a single instrument



Perform all of your loudspeaker system measurements in one instrument: From digital inputs to I²S interfaces, through analog and class D amplification to acoustic transducers.

ActiveX/COM control interface

SIMPLIFY integration with your automation system



Standalone automation via in-built, easy-to-use VBScript development environment.

Automation also supported via 3rd party software, e.g. Teststand, LabVIEW, Python, C#, Visual Basic, Delphi, etc.

Test automation easier than ever

Auto Sequence: create sequences and reports without scripting



Create automated test sequences, with limit checking and reporting, faster than ever before. All the analysis power of the dScope Series III, the simplicity of a click-and-run interface, and no code writing.

dScope Series III Functions and Capabilities

Signal Analyzer

Amplitude



Frequency



Phase



Continuous-Time Detector

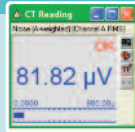
Amplitude



Gain



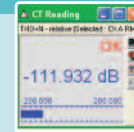
Noise



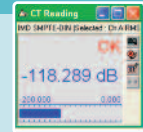
Cross-talk



THD+N



IMD



FFT Detectors

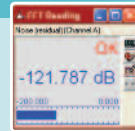
Amplitude



THD



Residual Noise



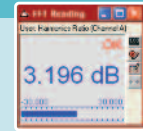
Nth Harmonic



IMD

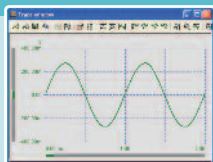


User-defined

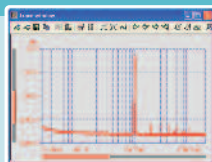


Graphical results

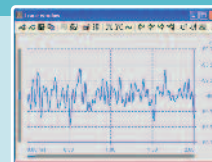
Live Scope



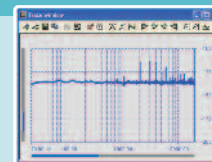
Live FFT



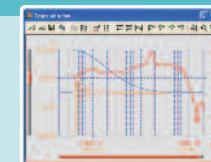
Live Residual



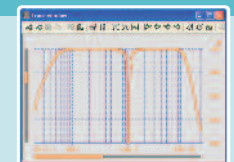
Live Residual FFT



Gated Impulse

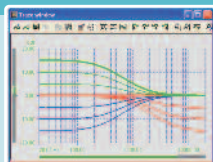


Analysis Filters

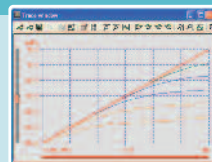


Swept results

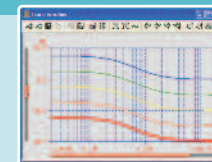
vs Frequency



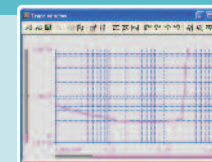
vs Amplitude



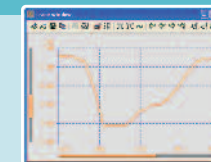
Nested



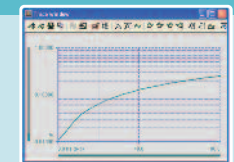
vs Power



vs Time

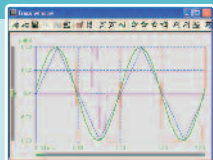


vs Jitter Amplitude

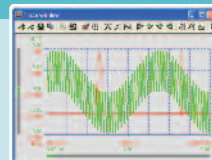


Generator Functions

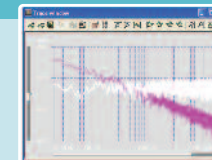
Periodic



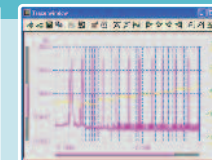
Twin-tone



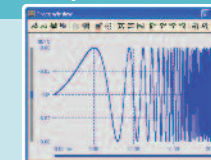
Noise



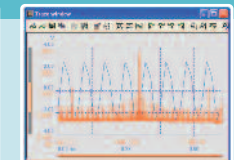
Multi-tone



Chirp

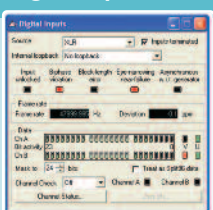


Prism Sound JTest

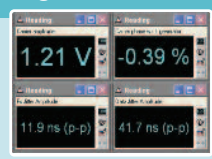


Digital Parameters

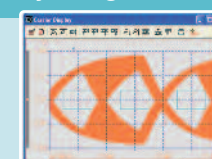
Digital Inputs



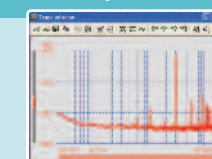
Digital Carrier



Eye Diagram



Jitter Spectrum



Channel Status 1

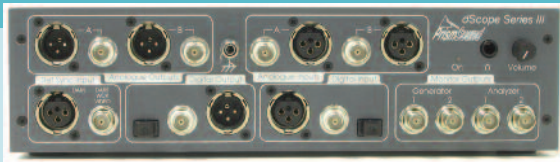


Channel Status 2



dScope Series III Instruments Available in Four Versions

- **dScope Series III** Analog and Digital Audio Test System. The ultimate instrument with extensive analog and digital capabilities.
- **dScope Series IIIE** Analog-and-Digital Essentials Audio Test System. All the essential tools, ideally suited to price sensitive analog and digital QC applications.
- **dScope Series IIIA+** Analog-Plus Audio Test System. All the power of the dScope Series III, but without digital I/O.
- **dScope Series IIIA** Analog Audio Test System. For those who don't need the full power of dScope Series III.



dScope Series III Analog and Digital version front panel



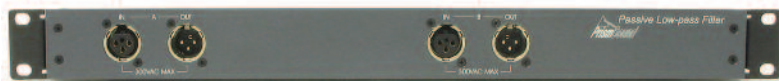
dScope Series IIIE Analog and Digital version front panel



dScope Series IIIA and A+ Analog versions front panel

dS-NET VSIO Adapter Digital Serial Interface Adapter (I²S, I²C, SPI)

dS-NET I/O Switcher Dual bus, 16 Channel Input / Output Switcher



dS-LPF Dual Channel Low Pass Filter for class D amplifiers and sigma-delta converters

Options	dScope Series III	dScope Series IIIE	dScope Series IIIA+	dScope Series IIIA
Analog I/O	✓	✓	✓	✓
Sound Card I/O	✓	✓	✓	✓
FFT Analysis	✓	✓	✓	✓
Impulse Response Testing	✓	✓	✓	✓
Scripting	✓	✓	✓	✓
Multi-tone Generation /Analysis	✓	✓	✓	✗
Advanced Multi-tone Analysis	✓	✗	✓	✗
FFT Detectors	40	2	40	2
Scripted FFT Detectors	✓	✗	✓	✗
Nested & Sensed Sweeps	✓	✗	✓	✗
Sweep Input on X axis	✓	✗	✓	✗
Regulation	✓	✓	✓	✗
dS-NET I/O Switcher Support	✓	✓	✓	✗
dS-NET VSIO Adapter Support	✓	✗	✗	✗
Port Access from Scripts	✓	✗	✓	✗
Event Manager	✓	✗	✓	✗
192kHz Sampling (Analog)	✓	✓	✓	✗
Digital I/O	✓	✓	✗	✗
Digital Carrier I/O	✓	✗	✗	✗
Channel Status I/O	✓	Simple CS only	✗	✗
Ref Sync I/O	✓	✗	✗	✗
Digital Carrier & Sync Pulse Monitor Outputs on BNC	✓	✓	✗	✗
Monitor Outputs On BNC, Headphones, and Inbuilt Loudspeaker	✓	✓	✓	✓
Signal Generator Functions	All functions	All functions	All functions	Sine Swept Sine, Twin Tone, White Noise & Pink Noise only