TEST EQUIPMENT & METERS

















COMPUTER AV































ITEM

AudioControl

AUDIO CONTROL SA3051/SA3052 1/3 OCTAVE ANALYZERS The SA3051 is a self contained profes-



sional grade 1/3-octave real-time audio analyzer. Features include 30 bands (25Hz-20kHz) plus broadband SPL analyzing, 6 non-volatile memory locations plus averaging, digital SPL display w/0.1dB resolution, digital pink-noise generator and includes a calibrated microphone. The SA3052 adds an internal battery pack w/ intelligent charger, parallel printer port for hard copy documentation, and a soft carrying case. Both units use fourth order ANSI class II filters.

ITEM	DESCRIPTION	PRICE
SA3051	1/3-octave analyzer	925.88
	1/3-octave analyzer with battery and port	



BEHRINGER CT100 CABLE TESTER Never get burned by bad cables again! The CT100 cable tester

behoingen is an intelligent CPU-controlled tester that accepts virtually any type of cable or connector. LED displays show which



input pin is connected to which output pin; Separate shield and phantom power LED's; installed cable test mode with continuity check and a test tone generator. Strong construction with a handy belt clip, the CT100 requires two AA batteries.

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ITEM	DESCRIPTION			PRICE
CT100	Cable tester			21.99



GALAXY AUDIO CM-130 CHECKMATE AUDIO TESTER Many of the same features as the CM-140 but at a lower price. It features a max function resolution of 0.5 dB with accuracy of \pm 2.0 dB, range of 40-130dB

with 30dB of dynam	nic range covering	125Hz-8kHz.	Battery life 110 hours.
ITEM CM130-CHECKMATE.	DESCRIPTION . Audio tester		PRICE59.99



GALAXY AUDIO CM-140 CHECKMATE SPL METER/TESTER

The Check Mate is a mini-size, low-cost, high-performance IEC 651 Type II sound pressure level meter with MAX/MIN function, level range display, AC signal output, and a resolution of 0.1dB. It features an electret condenser microphone, selectable level ranges, frequency weightings A & C, time weightings fast & slow, an auxiliary AC signal output, and a frequency range from 31.5Hz-8kHz. Comes with a windscreen and battery.

ITEM	DESCRIPTION	PRICE
CM140-CHECKMATE.	SPL meter/tester	. 129.99

GALAXY AUDIO CHECKMATE CM-150 SPL METER Extended range of measurement from 50-150dB with +/-1.5dB accuracy. Perfect for industrial measurements, factory worker safety, or any other loud environment. Freq. range 31.5Hz-8kHz, & can be software controlled and tripod mounted w/optional accessories (see below).

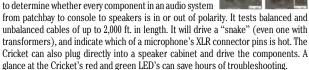
ITEM	DESCRIPTION	PRICE
CM150-CHECKMATE	SPL meter	249.99
CM-BS-6	Tripod & carrying case for CM-150.	29.99



TEST SET The battery-powered Cricket can test the absolute polarity of wireless microphones, mixers, effects devices, amps, cables, and speakers. Cricket makes it easy

DESCRIPTION

Cable tester



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ITEM	DESCRIPTION	PRICE
CRICKET	Polarity tester.	 99.99

GALAXY AUDIO JIB/CT CABLE TESTER The JIB/CT tests cable with 6 different types of connectors quickly and simply – XLR, 1/4", RCA, 1/8", Speakon, and DIN (MIDI). Features a specially designed microprocessor, which tests a cable 200x per second. Tests "Y" and adapter cables.



APT2B

GOLD LINE GL1K MICROPHONE INPUT TESTER Microphone input tester with tone generator & phantom power

detector built into a standard 3-pin XLR male connector. If a

voltage is present, a	a TkHz will be sent into the microphone input and the LED	lights.
	DESCRIPTION	PRICE
GL1K	Mic input tester	38.73

GOLD LINE APT2 ABSOLUTE PHASE/POLARITY

CHECKER The APT2/APT2B Polarity/Phase Analyzers accurately determine the absolute polarity of speakers and signal processing devices. Comes in 2 housings - the pulse generator which drives the level of the speaker directly and secondly, the detector with built in condenser





301.51

microphone. The APT2B offers the same features plus balanced outputs and inputs. ITEM DESCRIPTION PRICE Phase and Polarity checker ... APT2. 289.58

GOLD LINE PINK NOISE GENERATORS Pink-noise generators
supply a flat noise source as a test signal for sound systems. PN-2
provides professional quality pink-noise for equalization/analysis,
1/4" output in a durable 9V powered case. PN-3A provides profes-
sional quality pink-noise plus gated bursts for RT60 and speaker
time alignment. Controls allow time-off sequence between bursts.

. Same as APT2 plus balanced I/O ...

	PN-3A
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ITEM	DESCRIPTION	PRICE
PN2	Pink-noise generator	92.81
	Gated pink-noise generator with burst	

GOLD LINE LOFT MODEL TS-1B Use the TS-1B to locate feedback frequencies and troubleshoot & measure speaker systems & frequency response check power amps, align tape machines, and measure S/N

1/4" output in a durable 9V powered case.



ratios. It features a low distortion oscillator, frequency counter and dB meter. Inputs are TRS 1/4", and the unit has 7-segment LEDs.

ITEM	DESCRIPTION	PRICE
TS1B	. Audio test set with balanced 1/4" out	. 476.52

GOLD LINE IMPEDANCE METERS The ZM1 and ZM1P are unique test and measurement instruments useful to every sound contractor or installer. The ZM1 measures the impedance of loudspeakers and entire distributed loudspeaker systems as well as individual components (resistors, capacitors, inductors). It will also calculate the wattage that will be produced on an installed loudspeaker system. The ZM1P adds an overload protection circuit that prevents the meter from being damaged from amplifier output overloads up to 120VAC and a Tone Generator to improve system testing and performance.



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ITEM	DESCRIPTION						PRICE
ZM1	. Impedance me	ter					335.35
ZM1P	. Impedance me	ter wit	h overload	d pro	tectio	n	406.85

GOLD LINE SPL METERS The SPL120 is a hand-held sound pressure level meter good to 123dB SPL, with Class 2 filters per ANSI S1.4. Measures SPL in Flat, A, and C Weightings. Built-in omnidirectional condenser capsule will capture either SPL or highest SPL on a 7-segment, 3-digit display. The SPL162 works with levels up to 162 dB SPL. The SPL120RM3 has 3 switchable mic inputs. The SLC1 is a 1RU with warning triggering circuits that provide relay contact closure when sound pressure levels exceed a preset level.



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SPL	120

ITEM	DESCRIPTION	PRICE
SPL120	Handheld 120dB SPL meter	. 297.40
SPL120L	Handheld 120dB SPL meter w/ detachable 35-123 dB omni mic	. 366.80
SPL120RM3	SPL meter with 3-switchable mic inputs	. 557.26
SPL162	Handheld 162dB SPL meter	. 500.42
SPL162R	Handheld 162dB SPL meter w/ detachable mic	. 522.60
SLC-1	SPL meter with triggering circuits, 1RU	. 549.97
SPL-SIGN	1RU 123 dB SPL meter w/Beta Bright SPL readout sign	. 876.62



GOLD LINE

GOLD LINE PORTABLE DIGITAL SPEECH INTELLIGIBILITY

METERS Featuring a 600 ohm omni electret condenser mic, these models display results in CIS, and STI formats (PI formats displayable only on DSP2BP model), factoring in the effects of room acoustics & background noise. Both models also feature a



RS232 interface and come with OPT STICis[™] firmware, a carrying case, and an STI-PA Test Tone CD. The DSP2BP also includes OPT PI firmware.

ITEM	DESCRIPTION	PRICE
DSP2B	. Portable digital speech intelligibility meter	1934.23
DSP2BP	. Portable digital speech privacy meter	2182.83

GOLD LINE DSP30 PORTABLE DIGITAL 1/3-OCTAVE REAL-TIME ANALYZER This por-

table 30-channel digital 1/3-octave analyzer uses ANSI triple-tuned filters that maintain 1/4 dB accuracy over an 85dB range. Comes with 30 non-volatile memory files and features an RS232 serial port. Pro kits include a spectrum analyzer, instrument mic, pink noise generator, power source, carrying case and software. Minimum system requirements include a computer



running Windows 95 (or higher), with 32 MB memory and 2 MB disk space.

ITEM		PRICE
DSP30	30-channel digital real-time analyzer	1368.96
DSP30-10	DSP30 with TEF04 microphone	1417.74
PROKIT30	Audio spectrum analyzer kit w/DSP30	1718.75
PROKIT30H	Same as above, but w/ addtn'l software for home theaters	1600.50
Optional expansion	n packages	
OPT-RT60	. Reverb time analyzer	225.55
OPT-106	1/6-octave resolution	225.55
OPT-112	1/12-octave resolution	225.55
OPT-NC	SPL to noise criteria	118.15
OPT-STA	Loudspeaker timing	179.01
	Intelligibility option with STI-PA test CD	
OPT-DOSE	Dosimeter for OSHA & NIOSH rules	225.55

GOLD LINE TEFPRO AUDIO ANALYZER KIT

A professional, portable dual-channel USB/DC powered analyzer. Includes 2 major software modules (Soundlab RTA and Soundlab TDS), a training VD, TEF preamp and TEF04 microphone with 20ft. cable, all packed in a rugged carry case. The RTA module measures in 1-, 1/2-, 1/3-, 1/6-, and 1/12-octave resolutions. Data can be viewed with a choice of A, B, or C weighting and other



displays are peak hold, screen freeze, overlay and difference mode. The TDS module can identify and treat reflections, measure the frequency response of any given reflection, and perform equalizations. TDS simplifies aligning clusters, setting delay lines and measurements of speech intelligibility. TDS will output pink-noise, white-noise and sine wave signals and will perform auto polarity test.

ITEM	DESCRIPTION	PRICE
TEF25-PROKIT	Audio analyzer kit, Includes TEF25 preamp, TEF04 mic,	
	20' mic cable, 6' USB cable, carrying case,	
	SLRTA60 Sound Lab software, SLTDS Sound Lab software,	
	SLUPG1 Sound Lab upgrade, TEF training DVD	2119.79



GOLD LINE TEFNET ANALYZER SYSTEM This system includes a TEF25 USB preamp/dual-channel analyzer with 5 MUX inputs, evaluation software, and an independent input, for providing special measurements such as a Type 1 NLA measurement.

ITEM	DESCRIPTION	PRICE
TEF-EZ-TUNE-TH1	. Includes TEF25 preamp, TEF04 mic, 20' mic cable,	
	6' USB cable, carrying case, XLR to RCA adapter,	
	EZTH1 EZ Tune software, TK5.1 DVD test disk	
TEF-EZ-TUNE	. EZ Tune software only	895.29
TK5.1	. DVD Test Disk	107.68
TEFTONE-CD	. CD w/ useful test tones	29.14

GOLD LINE 30MP A 1/3-octave battery- or DC-operated audio spectrum analyzer with remote MK8A microphone. Microprocessor controlled with 6 non-volatile



memories. Accurate SPL readings in IEC A, C & flat weighting. Supplied w/ serial port for downloading memories. Optional USB adapter available.

ITEM	DESCRIPTION	PRICE
30MP	. 1/3-octave analyzer with mic	. 757.36
396-912-IDA	. USB adapter cable	35.10

Kaltman (reations

KALTMAN CREATIONS INVISIBLE **WAVES RF SPECTRUM ANALYZER SOFTWARE** This software program is a PC-based RF spectrum analyzer



that automatically charts open white space to aid those operating wireless mic systems, in-ear monitors, etc. Software features include split-screen displays, priority monitored frequencies, instant-save custom profiles, logging with date & time stamps, etc. All system packages include an electronics/receiver package, built-in rechargeable battery pack, AC adapter/charger, multiple antennas, USB-PC cable and a carrying case.

ITEM	DESCRIPTION	PRICE
IW1800	RF spectrum analyzer software for VHF/UHF analysis, 9kHz-1.8GHz	. 1554.80
IW3500	RF spectrum analyzer software, 9kHz-3.5GHz	. 1847.30

KALTMAN CREATIONS HANDHELD RF SPECTRUM ANALYZERS

Handheld, battery-operated, true spectrum analyzers ideally suited for helping avoid wireless microphone interference. Also measures RF exposure. The intra-day logging feature monitors RF activity so potential interference in the VHF, UHF, and WiFi bands can be spotted. 10 hot keys to address the more popular North America RF bands: Wi-Fi, industrial remotes, wireless microphone, business & emergency 2-way, assisted listening, Telco/cellular, intercom, and radio/TV broadcast. The LCD screen displays frequency and signal levels, and the internal audio demodulator allows for monitoring through the built-in speaker or external 2.5mm output jack. PC software allows for enhanced visual monitoring. The systems includes an SMA full-range rod antenna, log periodic antenna, batteries & charger/AC adapter, PC software, mini-



tripod stand, adminium carrying case and more.		
ITEM	DESCRIPTION	PRICE
HF4040	Handheld RF analyzer system 10MHz-4GHz	1587.60
HF4060	Handheld RF analyzer system 10MHz-6GHz	1884.60
HF6080-W10GHZ	Handheld RF analyzer system 1MHz-9.4GHz	CALL



LA AUDIO PC90 PHASE CHECKING SYSTEM This system's wide band pulse detects polarity inversions acoustically and electronically, regardless of distance or

time delay. The separate emitter and receiver units can be placed anywhere within an audio system either with its

internal speaker and microphone or its balanced XLR connection. ITEM DESCRIPTION PC



C90MKII	Phase checking	system w/sep	arate emitter &	& receiver	units	490.00

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NTI INSTRUMENTS MINIRATORS Powerful audio	E-MAN E NA
generators that offer a full-range of useful analog test	The same of
signals for calibration, maintenance, and repair of professional audio	
equipment. They generate sine waves, sweep signals, white-/pink-	
noise, and polarity/delay test signals. In addition the MR-PRO may	Mi
be loaded with proprietary user wave forms (via USB), and offers	NO.
integrated cable-testing capabilities (via XLR input).	

EM	DESCRIPTION	PRICE
R2	. Test signal generator	332.76
R-PRO	. Pro-test signal generator & cable tester	536.38



















































IT





















AL1...































NTI INSTRUMENTS ML1 MINILYZER® This is a handheld analog audio meter that has a comprehensive set of functions for analysis of pro audio systems. It continuously measures the audio signal and displays the desired results on its integrated LCD display. Measurement functions include: Level RMS, relative, sound pres-

sure level, VU & PPM meter, speaker polarity test, signal balance error, frequency-/ time sweep recording, 1/3-octave spectrum RMS & SPL, and distortion analyzer (THD+N), k2-k5 harmonics. The optional MiniLink allows you to interface the ML1 with a PC via software and is user installable.

ITEM	DESCRIPTION	PRICE
ML1	. Analog audio analyzer	. 630.75
MINILINK	. USB interface, user installable option	. 352.19
MINI-SPL	Battery-powered measurement mic, optional	. 374.33

NTI INSTRUMENTS AL1 ACOUSTILYZER COMPACT ACOUSTIC ANALYZER A compact handheld instrument that has a wide range of acoustical measurement functions. Includes sound pressure level, room acoustics, speech intelligibility, reverberation time, delay time testing and monitoring as well as zoom FFT and a real-time spectrum analyzer. Features a USB interface for computer connectivity and a battery good for over 16 hours per charge.

.. Compact acoustical analyzer

DESCRIPTION



PRICE	
1022 88	

NTI INSTRUMENTS DL1 DIGILYZER™ This device is a digital audio analyzer in a convenient palm-sized shape. It handles most digital audio formats including ADAT and sampling frequencies from 32Hz-96kHz. Features include AES3, S/PDIF, TOS-Link, ADAT input connections, carrier status analysis, carrier signal measurement, dual domain monitor speaker, and comprehensive event logger. Unit is powered by 3 AA batteries. The optional MiniLink allows you to interface the DL1 with a PC via software and is user installable.



ITEM	DESCRIPTION	PRICE
DL1	. Digital audio analyzer	1609.00
MINILINK	. USB interface, user installable option	352.19

PHONIC

PHONIC HANDHELD AUDIO ANALYZERS These accurate handheld audio analyzers provide sound engineers with a rich array of sound analysis tools. Features include 31-band real-time spectrum analysis, SPL and line meter, internal noise generator, EQ setting program, microphone calibration, XLR input and output, and speaker phase checking abilities. All functions and menus are accessible through the analyzers' central jog dial. Information



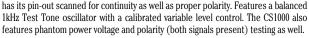
ITEM

DMX35T

and settings are easy to upload to your computer via the built-in interface (USB on the PAA3). The PAA6 features a 480x272 color LCD touch screen and two condenser mics. This model adds more tone generation functions (white-noise, sine wave, sweep, polarity, triangle, square), as well as LEQ, SLM, FFT, THD+N and scope functions. The built-in mics can be put in multiple remote positions for more accurate room measurements. Also features an SD card slot.

ITEM	DESCRIPTION	PRICE
PAA3	. Audio analyzer w/USB interface, RT60, backlit LCD screen	. 499.99
PAA6	. 2-channel audio analyzer w/LCD screen, 2 condenser mics	1199.99

ROLLS CS1000 CABLE SCANNER COMPLETE CABLE TESTER The CS1000 tests 10 different types of cable ends - banana, Speakon, RCA, 1/4", 1/8", XLR female, XLR male, MIDI, RJ11 and RJ45. Each cable being tested



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ITEM		DESCRIPT	ION					PRICE
CS1000		Cable test	er	 		 		135.00

whirlwind

WHIRLWIND

A tester of AES-3 and S/PDIF digital audio systems that generates AES-3 or S/PDIF output signals over a sample frequency range from 32kHz-192kHz. Audio sources available for the sig-



nal generator/transmitter function include a built-in microphone, a pair of tone generators, or an external line-level stereo audio source. It also functions as an AES-3 or S/PDIF receiver capable of receiving sample frequencies from 32kHz-192kHz, and can monitor audio content via a built-in speaker or line/headphone output jack.

ITEM	DESCRIPTION	PRICE
AES-QBOX	. S/PDIF & AES-3 I/O, 1/8" TRS line-level audio in, 1/8"	
	TRS line-level/headphone out, and 5.5mm x 2.1mm	
	co-axial external power jack	532.73

WHIRLWIND CAB DRIVER SPEAKER COMPONENT

CHECKER Test device for checking the operation of the speaker components within enclosures. Speaker connectors include Speakon NL8 and NL4, 1/4" TS and banana jacks. An XLR line output feeds the pink noise to self-powered speaker units. A DC



OHMS TEST button applies 5 VDC to the output terminals. Also performs a DC ohms test where 3 LEDs indicate approximate ranges of 4, 8, or 16ohms. It is powered by 4 AA batteries or by an external 6 VDC wall wart power supply (not included).

ITEM	DESCRIPTION	PRICE
CAB-DRIVER	Speaker and polarity tester	209.04

WHIRLWIND DCT-9 CABLE TESTER Fast and accurate, it tests a variety of cables. It offers a digital test program that checks for correct wiring and displays any faults on the numeric display. It indicates several fault types including shorts, opens & crosswired conductors. A built-in test tone oscillator generates 440Hz & 1kHz tones for basic signal path tracing. It tests XLR, RCA phono, RJ-45, 1/4" TS, 1/4" TRS, BNC, TT Patch, NL4, & 1/8" TRS.



ITEM	DESCRIPTION	PRICE
DCT9	Cable tester	89.04

WHIRLWIND DMX35 CABLE TESTER This cable tester checks 3- and 5-pin XLR DMX lighting cables and also indicates the presence of the DMX data signal when connected to a functioning control line. The 3-pin XLR jacks also test microphone cables for opens, shorts or reversed connections.

DESCRIPTION

.DMX cable tester...



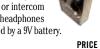
WHIRLWIND	MCT7	CABLE	TESTER	This	diagnostic	cable
tester has conn	ectors fo	r analyzin	ıg almost aı	ny type	e of cable co	onnec-
tion. The convenient rotary switch allows testing of each conductor						
within the cabl	o and on	n datarm	ing the int	ornal	wiring con	figure 1

within the cable and can determine the internal wiring configuration. Tests NL4, 5-pin DIN, BNC, XLR, TRS, RCA, and 3.5mm types.



ITEM	DESCRIPTION	PRICE
MCT7	. Cable tester	122.54

WHIRLWIND QBOX REVISION 2 This is an all-in-one audio line tester ideal for live sound or installation work. Unit includes a microphone, a speaker, a test tone generator, outputs for standard headphones, a 1/4" jack for line in, or a 2k ohm (telephone) earpiece out, plus voltage presence LEDs for confirming phantom or intercom power. For an instant hands-free intercom, simply plug in headphones and hook up a Qbox on each end of a line. Unit is powered by a 9V battery.



ITEM	DESCRIPTION	PRICE
Q-BOX	Line tester	195.02

WHIRLWIND SC SERIES NL/EP TESTERS The SC series testers provide rapid, positive testing for multiline speaker cables. Rotating the central switch applies voltage to the cable conductors one-at-a-time. A SEND LED indicates the pin to which the voltage is being applied, and a RECEIVE LED indicates where it returns. This system clearly reveals shorts, opens, and cross-wires allowing you to test common combinations of speaker cables. All three models test 3-pin XLR cables as well.



ITEM	DESCRIPTION	PRICE
SC48RJ	Tests 4- and 8-pin NL cables +RJ45 data cables	216.03
SC46EP	Tests 4- and 6-pin EP cables	221.87
	Tests 4- and 8-pin EP cables	

