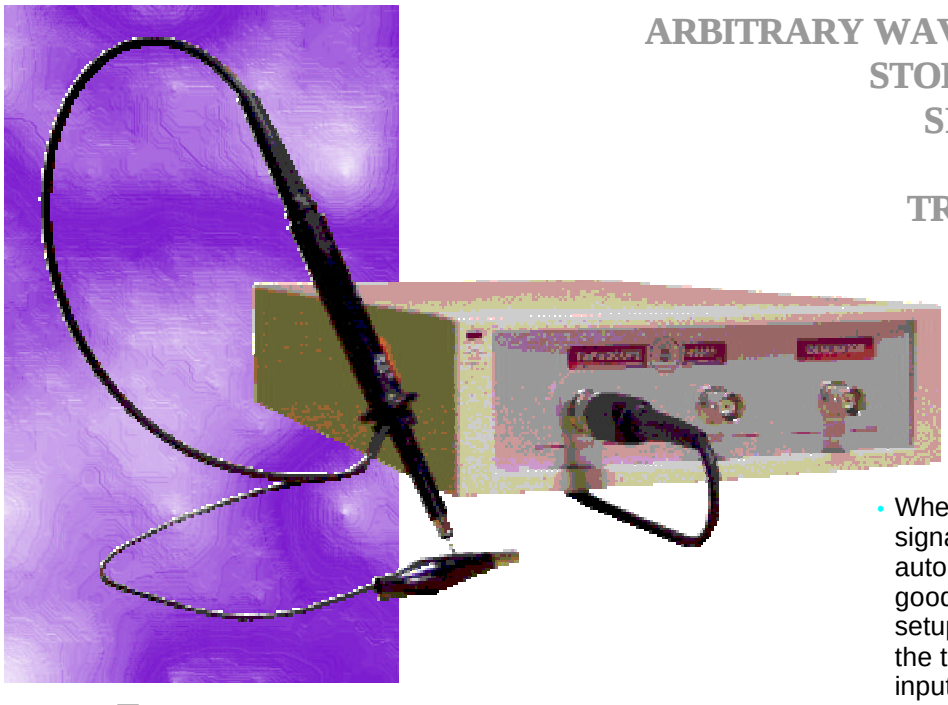
TiePieScope HS801 PORTABLE MOST



ARBITRARY WAVEFORM GENERATOR-
STORAGE OSCILLOSCOPE-
SPECTRUM ANALYZER-
MULTIMETER-
TRANSIENT RECORDER-

Reliability

- The HS801: the first 100 Mega samples per second measuring instrument that consists of a MOST (Multimeter, Oscilloscope, Spectrum analyzer and Transient recorder) and an AWG (Arbitrary Waveform Generator). This new MOST portableandcompact measuring instrument can solve almost every measurement problem. With the integrated AWG you can generate any signal you want.

- A user defined toolbar with which over 50 instrument settings quick and easy can be accessed is offered by the versatile software. An intelligent auto setup allows the inexperiencedusertoperform measurements immediately. Through the use of a setting file, the user has the possibility to save an instrument setup and recall it at a later moment. The setup time of the instrument is hereby reduced to a minimum.

- Besides a setting file that contains all instrument settings, also the measured dataandthereference signals canbe saved in an easy way, or recalled, for evaluation or reporting.

- When a quick indication of the input signal is required, a simple click on the auto setup button will immediately give a good overview of the signal. The auto setup function ensures a proper setup of the time base, the trigger levels and the input sensitivities.

- Two sophisticated cursor readouts have 21 possible readouts. Besides theusual read outs, like voltage and time, also quantities like rise time and frequency are also displayed.

- Measured signals and instrument settings canbesavedondisk.This enables the creation of a library of measured signals. Text balloons can be added to a signal, for special comments. The (colour) print outs can be supplied with three common text lines (e.g. company info) and three lines with measurement specific information.

- Analyzing signals is done with a n 8 bit resolutionandamaximumsampling speed of 100 MHz. The input range is 0.1 Volt full scale to 80 Volt full scale. The record length is 32K/64K samples. The AWG has a 10 bit resolution and a sample speed of 25MHz.

- Minimum system requirement is a PC with a 486 processor and 8 Mbyte RAM available. The software runs in Windows 3.xx / 95 / 98or Windows NTandDOS 3.3 or higher. The HS801 is connected to the parallel printer port of a computer.

Technical specification

HS801 Software

Oscilloscope

Bandwidth:	50 MHz
Sample rate maximum:	100 MHz
Sample rate minimum:	0.002 Hz
Time base:	1 usec/div to 600 sec/div
Time base magnification:	1 x to 50 x
Y-axis setting:	drop and drag
Pre samples:	0 to 32768
Post samples:	0 to 32768
Trigger time out:	0 to infinite sec.
Trigger input:	Ch1, CH2, EXT, keyboard
Measuring modes:	CH1, Ch2, CH1+CH2, CH1-CH2, CH2-CH1 and X-Y mode.
Referency:	CH1, CH2

Spectrum analyzer

Frequency range:	50 MHz to 0.001 Hz
Frequency accuracy:	>0.1%
Amplitude axis:	linear / dB
Frequency axis:	linear, logarithmic octave bands,1/3 octave bands
FFT Windows:	rectangle, Hanning, Hamming, Blackman, Bartlett
FFT points:	16 to 32768
Distortion calculations:	1 to 100 harmonics in dB or %
Averaging:	1 to 200 spectra
Measuring method:	normal, max mode

True RMS voltmeter

Accuracy:	2% +/- 1 LSB
Display methods:	11 math functions available
Frequency range:	10 Hz to 25 MHz
Number of displays:	1 to6userselectable

Transient recorder

Measure points:	1 to 32768
Measure time (between to points):	0.01 sec to 500 sec

Cursor read out

Read outs:	True RMS, Peak-Peak,Mean, Maximum, Minimum, dBm, Power, Crest factor, Frequency, Duty cycle, Rise time left and right, slew rate left and right, THD (in spectrum analyzer)
Fonts:	user selectable
Colours:	background user selectable

Comment

User text:	three text lines for every print out
Comment text:	three special text lines
Text balloons:	user selectable text, colours and arrows

Print out

Size:	full printer size (A4, A3)
Colours:	black / white and colour prints

HS801 Hardware

Aquisition system

Max Sample rate:	100 MHz
Memory:	32/64 kWord
Input sensitivity:	0.1 to 80 Volt full scale
Resolution:	8 bits, 0.39%
Accuracy:	1 % ± 1 LSB
Input impedance:	1 Mohm / 30 pF
Input coupling:	AC / DC
Analog bandwidth:	50 MHz
Maxium input voltage:	±200 volt (DC+AC peak <10KHz)

Triggering

Trigger modes:	free run, delayed run, auto, single, edge triggering, window, peak, TV triggering,external
Trigger system:	digital, two trigger levels
Trigger source:	Ch1, Ch2, External and Keyboard
Trigger level:	0 to 100% full scale
Trigger resolution:	0.39% (8 bits)
Pre triggering:	0 to 32768 samples
Post triggering:	0 to 32768 samples
Trigger delay:	0 to 32768 samples

Arbitrary waveform generator

Sample rate:	0-25 MHz
Resolution:	10 bit
Output impedance:	50 Ohm
Frequency range:	0-2 MHz
Frequency step:	0.01Hz
Output amplitude:	0-12 volt
Amplitude step:	0-0,1 Volt 1024 steps 0,1-0.9 Volt 1024 steps 0,9-12 Volt 1024 steps
DC level:	0-12 Volt in 1024 steps
Waveforms:	sine, triangle, square, noise and user defined (64 Kword)
Symmetry:	1-99%, 1% steps

General

Power supply:	90-260 VAC or 12-24 VDC
Power consumption:	10 Watt
Connection:	printer port
Cable length:	1.8 meter (70 inch)
Ambient temperature:	15 °C to 25 °C (59 °F to 77 °F)
Dimensions:	65x275x170mm (H x L x W)
Weight:	1250 gram (44 ounce)

Ordering information

The HS801 is direct connected to the printer port of a PC. Windows or DOS based software can be installed and the measuring can be started.

The HS801 is delivered with:
- A complete software package for Windows 3.x/95/98/NT
- Instruction manual
- A simple program for DOS.
- Two switschable (1:1 and 1:10) oscilloscope probes
- Powerline cord
- Interface cable between HS801 and PC-printer port

Ordering code: HS801-AWG (with AWG)
HS801 (without AWG)

FOR MORE INFORMATION, DEMO SOFTWARE, SOFTWARE, SOURCE CODE AND DLL'S SEE ON OUR INTERNET PAGE: HTTP://WWW.TIEPIE.NL

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