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Sound Card Oscilloscope, Spectrum Analyzer, Signal Generator

Perfect for audio frequency test & measurement

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ARTICLES

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Articles in English

.: Basic

- ▶ Gain the basic understanding of electronic principles
- ▶ Putting the theory to work. This includes sections on how to solder, multimeters
- ▶ Learn about various electronics components
- ▶ Resistor color code info, plenty of calculators, chart, data
- ▶ Why it doesn't work?
- ▶ XYZ's of Oscilloscopes (pdf)
- ▶ Circuit Analysis by Dave Sager
- ▶ Electronics for Beginners

- ▶ DC Circuits
- ▶ Digital Systems
- ▶ Soldering Techniques
- ▶ Electronics Reference Book

:: **Courses**

- ▶ DC circuits Lecture
- ▶ Capacitors and RC circuits
- ▶ BJT transistor review
- ▶ Semiconductor Courses
- ▶ Dc circuits Courses
- ▶ Ac circuits Courses
- ▶ Dc circuits
- ▶ Capacitors
- ▶ Diodes
- ▶ Transistors
- ▶ Fet circuits
- ▶ Op amps
- ▶ Voltage Regulators
- ▶ Combinatorial Logic
- ▶ Flip Flops

:: **Audio**

- ▶ Understanding Decibels
- ▶ Design and make your own Hi-Fi Speaker Crossovers
- ▶ Earth Loops and Hum
- ▶ Impedance Matching: A Primer
- ▶ 3-Pin XLR Connector Pinouts

:: **Components**

- ▶ Common Three Terminal Semiconductors - Data and Connections
- ▶ Resistor and Capacitor Data
- ▶ Magnetic materials and Ferrite Definitions
- ▶ Fuses: A short primer
- ▶ Leds and Laser Diodes
- ▶ Optocouplers - When and how to use them
- ▶ Polyswitches - Low cost Overcurrent Protection
- ▶ Varistors (MOVs) - Low cost Overvoltage Protection
- ▶ Variable Resistors or 'Pots'
- ▶ Relay Driving Basics

- ▶ [Choosing a replacement Transistor](#)

.: **PCB**

- ▶ [How to make Printed Circuit Boards \(PCBs\)](#)
- ▶ [PCB exposure, development and etching](#)
- ▶ [Methods of PCB fabrication](#)
- ▶ [Transformation of theoretical circuit in PCB](#)
- ▶ [Build your own UV exposure box with fluorescent like lamps](#)
- ▶ [Build your own UV exposure box with mercury lamp](#)
- ▶ [EMC and Printed Circuit Board Constraints \(pdf\)](#)
- ▶ [Step by Step SMT Design](#)
- ▶ [PCB Design Process](#)
- ▶ [Build your own Etching Unit](#)
- ▶ [The TupperTank® \(A Cheap and Easy to Make Hobby Etching Tank\)](#)
- ▶ [Etching Your Own PC Boards](#)
- ▶ [Make your own PCBs form A to Z **NEW**](#)

.: **Batteries**

- ▶ [NiCAD Battery Manual](#)
- ▶ [NiMH Battery Manual](#)
- ▶ [Lithium Ion \(pdf\)](#)
- ▶ [Lithium Ion Charging Requirements \(pdf\)](#)
- ▶ [Battery Chargers \(pdf\)](#)
- ▶ [All about NiCd batteries](#)
- ▶ [Battery Terms & what they mean](#)
- ▶ [Primary Cells and Batteries](#)
- ▶ [Using and charging Nicad batteries](#)
- ▶ [Using and charging SLA Batteries](#)
- ▶ [Choosing a rechargeable battery](#)
- ▶ [How to rebuild a Li-Ion battery pack **NEW**](#)

.: **Microprocessors**

- ▶ [A PIC16F87X Tutorial](#)
- ▶ [8051 Tutorial](#)
- ▶ [Microcontroller Selection \(pdf\)](#)

.: **Communication**

- ▶ [I²C Tutorial \(pdf\)](#)
- ▶ [How to Use a Smith Chart](#)

- ▶ [A Tutorial on Cell Phone Design](#)
- ▶ [Fundamentals of RS232 Communication \(pdf\)](#)
- ▶ [Sampling Theory \(pdf\)](#)
- ▶ [An Overview of IrDA \(pdf\)](#)
- ▶ [An Introduction to USB Development](#)
- ▶ [Inside the telephone](#)
- ▶ [IEEE 1394 \(AKA 'Firewire' & 'iLink'\)](#)
- ▶ [USB: The Universal Serial Bus](#)
- ▶ [The IP Equipment/Enclosure Rating System](#)

.: **General**

- ▶ [How to use intelligent L.C.Ds **Part 1** / **Part 2** \(pdf\)](#)
- ▶ [Introduction to Analog Television](#)
- ▶ [PIN Diodes \(pdf\)](#)
- ▶ [Schottky Diodes \(pdf\)](#)
- ▶ [Zener Diodes \(pdf\)](#)
- ▶ [TRIACs and Thyristors \(pdf\)](#)
- ▶ [Introduction to Vacuum Tubes](#)
- ▶ [Magnetrons](#)
- ▶ [Piezoelectricity](#)
- ▶ [Resistor Selection \(pdf\)](#)
- ▶ [Photovoltaic Cells](#)
- ▶ [A Guide to Lamps](#)
- ▶ [Digital Potentiometers](#)
- ▶ [TFT LCD's](#)
- ▶ [Electronic Compass Chips \(pdf\)](#)
- ▶ [Understanding CRTs \(pdf\)](#)
- ▶ [555 Timer Tutorial](#)
- ▶ [Isolation Techniques Using OptoCouplers \(pdf\)](#)
- ▶ [IEEE Symbols and Prefixes](#)
- ▶ [Pentium Processor Family Developers Manual](#)
- ▶ [Measuring G \(gravity's acceleration\) \(pdf\)](#)
- ▶ [Driving a character type LCD from a PC printer port \(pdf\)](#)
- ▶ [Build your own printer cable LCD display](#)
- ▶ [Transistor History \(pdf\)](#)
- ▶ [Sam's Laser FAQ](#)
- ▶ [Hydrogen Power](#)
- ▶ [Understanding Telephones](#)
- ▶ [How to build a fuel cell](#)
- ▶ [Insulation Displacement Connector](#)
- ▶ [Computer connector pinouts](#)

- ▶ SIMMs and other memory modules
- ▶ Understanding and using CCD cameras
- ▶ Meter Shunts & Multipliers
- ▶ Heatsink Basics
- ▶ Digital Logic pocket databook **NEW**

.: **Power**

- ▶ Why car amplifiers use DC - DC converters
- ▶ LM 317 Calculator
- ▶ Understanding and using DC - AC Inverters
- ▶ Wiring 240VAC Plugs and Sockets
- ▶ Power Adaptors or 'Plug Packs'
- ▶ Power Locking kits for cars
- ▶ Ohms Law and Power Measurements

.: **RF**

- ▶ Build an FM antenna
- ▶ Solving TV Reception Problems
- ▶ Antennas for Low Power Applications (pdf)
- ▶ Australian Analog (PAL) TV Broadcasting
- ▶ New Zealand TV/CB & Marine Frequencies
- ▶ Frequency, Wavelength and the EM Spectrum
- ▶ Video Signal formats explained

.: **Motors**

- ▶ DC Motors
- ▶ Stepper Motors
- ▶ H-Bridges

.: **Appendix**

- ▶ List of symbols
- ▶ Physical constants
- ▶ Electromagnetic Spectrum
- ▶ Units
- ▶ Prefixes
- ▶ Material Parameters
- ▶ Photometric Unit Conversion Table
- ▶ Units & Conversion Tables

🔗 Articles in Greek (Άρθρα στα Ελληνικά)

..: **Τυπωμένα Κυκλώματα**

- ▶ Μέθοδοι Κατασκευής τυπωμένων κυκλωμάτων
- ▶ Έκθεση, εμφάνιση και αποχάλκωση των πλακετών
- ▶ Μετατροπή θεωρητικού κυκλώματος σε τυπωμένο
- ▶ Οδηγός Κατασκευής θαλάμου έκθεσης τυπωμένων με λάμπα υδραργύρου
- ▶ Τυπωμένα κυκλώματα – Η διαδικασία από το A έως το Ω **HEH**

..: **Γενικά**

- ▶ Μα γιατί δεν δουλεύει ?
- ▶ Μαθήματα Βασικών Αναλύσεων με το TINA PRO
- ▶ Πληροφορίες για Filmnet crack
- ▶ Τι τάση δίνει η γραμμή του ΟΤΕ στο σπίτι μας;
- ▶ Αισθητήρας υγρασίας SHT11
- ▶ Σύνδεση ballast και starter σε λάμπα UV
- ▶ PC ως παλμογράφος
- ▶ 1-wire net
- ▶ I-Buttons
- ▶ Ανίχνευση κινητών τηλεφώνων
- ▶ Εκτυπωτής για film πλακετών?
- ▶ Τα βασικά των παλμογράφων
- ▶ Τα βασικά μιας γεννήτριας συχνοτήτων
- ▶ Ηλεκτροπληξία - Τι είναι και πως αντιμετωπίζεται
- ▶ Ανάλυση με την βοήθεια του MATLAB
- ▶ Οδηγίες χρήσης του SIMNOM
- ▶ Πως να συνδέσετε μια οθόνη LCD στον υπολογιστή σας

..: **Μικροελεγκτές**

- ▶ Pic in Greek (Ο μικροεπεξεργαστής PIC στα Ελληνικά)
- ▶ 16F84 programmer
- ▶ LCD(2X20) driving with microcontroller

..: **Ραδιοφωνικά**

- ▶ Πληροφορίες για κεραία ερασιτεχνικού πομπού FM

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