

W2AEW Videos (December 30, 2017)

Topics Listed Numerically

- [#1: QRP Check-in to NorCars net from RVRC Hamfest June 19, 2010](#)
- [#2: Tektronix delayed timebase operation](#)
- [#3: TenTec 1254 Receiver Signal Path walkthrough](#)
- [#4: Oscilloscope view of TenTec 1254 IF and detected output on Shortwave signal](#)
- [#5: My ESR Meter project from 2006](#)
- [#6: Infrequent Glitch capture on an Oscilloscope](#)
- [#7: Monitor your Ham Radio transmitter with an oscilloscope](#)
- [#8: Two-tone test of SSB transmitter output](#)
- [#9: Basic 1X and 10X Oscilloscope Probe tutorial](#)
- [#10: AC / DC Coupling on an Oscilloscope](#)
- [#11: Tektronix Oscilloscope Triggering controls and their usage](#)
- [#12: Use Real-Time Spectrum Analysis to Characterize a transmitter key-up](#)
- [#13: D-104 Microphone amplifier / Equalizer for Ham Radio](#)
- [#14: Tektronix MDO4000 Spectrum Analyzer quick comparison to entry level analyzer](#)
- [#15: Ham radio Band-scope pan-adaptor using Tek MDO4000 as a spectrum analyzer](#)
- [#16: How to use the Oscilloscope to accurately capture 2 signals of different frequencies](#)
- [#17: Using Analog scope to view two signals of wildly different frequencies](#)
- [#18: Use Oscilloscope with delayed time base to measure a RF Power detector](#)
- [#19: How to get a stable scope display with two signals very close in frequency](#)
- [#20: Quick 5 minute Tektronix Mixed Domain Oscilloscope MDO4000 Demo](#)
- [#21: Using MDO4000 to capture 802.11 traffic and export for analysis using RSAVu](#)
- [#22: Spectrum Analyzer Basics / Tutorial, and the Tektronix 1401A](#)
- [#23: Tektronix 1401A Spectrum Analyzer quick demo](#)
- [#24: Transient EMI Debug using Tektronix MDO4000 Mixed Domain Oscilloscope](#)
- [#25: Analog Oscilloscope bandwidth considerations](#)
- [#26: Answering viewer questions, and Digital Oscilloscope Considerations](#)
- [#27: Board level EMI Debug with a Real Time Spectrum Analyzer](#)
- [#28: My QRP "go kit" backpack with IC-703+ ham radio](#)
- [#29: Adding a S-meter to TenTec 1254 Shortwave Receiver](#)
- [#30: Part II: Finishing the S-Meter on the Ten Tec 1254 Shortwave Receiver](#)
- [#31: Analog oscilloscope ALT, CHOP, ADD, INVERT vertical controls](#)
- [#32: Quick test of completed DDS-60 from AMQRP/NJQRP](#)
- [#33: Oscilloscope AUTO Triggering explained](#)
- [#34: Installation of upgraded microcontroller in the TenTec 1254 Receiver](#)
- [#35: Using the ADD/INVERT mode on an analog scope to view differential voltages](#)
- [#36: Function Generator issues appearing as a triggering problem](#)
- [#37: Use a scope to measure the length and impedance of coax](#)
- [#38: Analyze Hot Wheel Radar gun with a Real Time Spectrum Analyzer](#)
- [#39: Function Generator debug and repair - Leader LG-1311](#)
- [#40: Analog Oscilloscope's rear panel auxiliary inputs and outputs](#)
- [#41: Use Oscilloscope Z-axis input to create "marker" on waveform](#)
- [#42: Composite Video on an Analog Oscilloscope using XYZ - Lab tour...](#)
- [#43: Analog Oscilloscope Basics: Making a Frequency Measurement](#)
- [#44: Frequency measurement using Delaying Timebase on Analog Oscilloscope](#)
- [#45: Sweep Generator Basics and Receiver Alignment](#)
- [#46: Basics of amplitude and distortion measurements on a scope and spectrum analyzer](#)
- [#47: Basics of Zero-Span operation of a Spectrum Analyzer](#)
- [#48: Basics of Lissajous Patterns on an Oscilloscope](#)
- [#49: Simple Component Tester using Oscilloscope - Octopus Curve Tracer](#)
- [#50: QRP SSB contact on 40m from Hamfest of RVRC, June 2012](#)
- [#51: Basic Spectrum Analyzer Do's and Dont's...](#)
- [#52: Tutorial / Basics of a Dip Meter](#)
- [#53: Real Time Spectrum Analysis of low frequency/audio signals](#)
- [#54: Back to Basics Tutorial: Voltage / Current in capacitors and inductors](#)
- [#55: Back to Basics: Tutorial on LC Resonant Circuits](#)
- [#56: Basics of Capacitor & Inductor self-resonance, parasitics, etc. – Tutorial](#)
- [#57: Setting up variable double-pulse using Tek AFG](#)
- [#58: How to zero-beat WWV to check or adjust a Frequency Counter's accuracy](#)

W2AEW Videos (December 30, 2017)

- [#59: Basics of a Square Wave signal's harmonic content](#)
- [#60: Basics of Phase Locked Loop Circuits and Frequency Synthesis](#)
- [#61: Basics of RF Samplers, Sampling-Tees, RF-taps, etc.](#)
- [#62: Basics of Tracking Generators and 1/4 wavelength coaxial stub filters](#)
- [#63: JOTA: Jamboree on the Air at OMARC/InfoAge October 2012](#)
- [#64: How to measure speed with a counter/timer](#)
- [#65: Basics of using FFT on an oscilloscope](#)
- [#66: How to make a rise-time measurement on an oscilloscope](#)
- [#67: Basics of Common Emitter Amplifier Gain and Frequency Response with Measurements](#)
- [#68: Oscilloscope Probe Ground lead length affects on signal quality](#)
- [#69: Basics of Analog Oscilloscope Bandwidth](#)
- [#70: Digital Oscilloscope Bandwidth Measurement - direct and using risetime](#)
- [#71: Proper PSK31 Audio Level setup with a scope, RF power meter, and ALC indicator](#)
- [#72: Simple Station Monitor for Ham Radio using an Oscilloscope](#)
- [#73: 70's Vintage Function / Sweep Generator review / teardown](#)
- [#74: Basics of Differential Probes for Oscilloscopes and their applications: a tutorial](#)
- [#75: Basics of Opamp circuits - a tutorial on how to understand most Opamp circuits](#)
- [#76: Debug Transient EMI signal with a Mixed Domain Oscilloscope MDO4000 Tektronix](#)
- [#77: Op Amp Peak Detector Tutorial, with peak detector basics](#)
- [#78: Use an Arduino to draw pictures on an oscilloscope using XY mode](#)
- [#79: Op Amp Power Supply Considerations: split, single, virtual ground, etc. - a tutorial](#)
- [#80: MFJ Cub 40m QRP CW Transceiver circuit walk-thru and review, plus bandsweep, ham radio MFJ-9340](#)
- [#81: Heathkit HW-9 QRP CW Transceiver Circuit Walk-Through - Ham Amateur Radio Schematic](#)
- [#82: How to use a Diode as a Switch / Diodes as Switches / Basics of Diode Switches](#)
- [#83: Basics of RF Mixers in Radio Receivers / Mixer Tutorial / Frequency Conversion](#)
- [#84: Basics of Ferrite Beads: Filters, EMI Suppression, Parasitic oscillation suppression / Tutorial](#)
- [#85: Basics of R2R Resistor Networks Digital Analog Conversion, Tutorial DAC Thevenin Superposition](#)
- [#86: Improved NTSC video to Oscilloscope converter circuit / scope video monitor hack](#)
- [#87: Schmitt Trigger Oscillator / Tutorial / 74AC14 Inverter / squarewave generator](#)
- [#88: Cheap and simple TDR using an oscilloscope and 74AC14 Schmitt Trigger Inverter](#)
- [#89: Video Tour of my Lab and Workbench - Oscilloscopes and meters and power supplies, oh my!](#)
- [#90: Measure Capacitors and Inductors with an Oscilloscope and some basic parts](#)
- [#91: Basic RF Attenuators - Design, Construction, Testing - PI and T style - A Tutorial](#)
- [#92: Cool Product: The Moteino - an Arduino clone + RFM12B wireless interface - low cost](#)
- [#93: RS232 and SPI bus waveforms, bus decodes and RF activity on the Moteino using Tek MDO4000](#)
- [#94: RMS Voltage for Sine and square waves, and why your DMM might not work right!](#)
- [#95: W2AEW Channel Trailer video](#)
- [#96: Tutorial on Digital Oscilloscope sample rate, record length and data processing](#)
- [#97: Low Power \(QRP\) Ham Radio contact at the 2013 RVRC Hamfest in NJ](#)
- [#98: Surface mount IC soldering demonstration with SO-8 packaged device](#)
- [#99: Drag Soldering of an SSOP IC Package demonstration](#)
- [#100: Capacitor self-resonance measured with an oscilloscope and signal generator - how to tutorial](#)
- [#101: How to measure FM Frequency Deviation without special equipment using Carrier / Bessel Null](#)
- [#102: How to desolder or unsolder components using solder wick and vacuum tools](#)
- [#103: Ham Radio on vacation - Long Beach Island with Icom IC-703+ NJ \(NA-111\), 10mo after Sandy](#)
- [#104: Circuit tutorial: sawtooth generator w/ current sources, diode switches, hysteresis comparator](#)
- [#105: More Circuit Fun: Simple 3 transistor sawtooth generator / oscillator](#)
- [#106: Measuring low-pass filters in a Ham Radio HF Packer Amp for Amateur HF Bands](#)
- [#107: Adjusting the MOSFET drain current in the HF Packer V4 Amplifier \(ham radio\)](#)
- [#108: Adding a CW-SSB Mode switch to the HF Packer V4 Amplifier \(ham radio\)](#)
- [#109: How to: Fluke 87 Multimeter fuse replacement, DMM True RMS](#)
- [#110: Circuit Fun: Flexible Ramp Generator to create frequency sweeps using 555 timer and op amps](#)
- [#111: How to make a high performance oscilloscope probe socket](#)
- [#112: Use an Oscilloscope and Signal Generator help tune an HF Antenna, measure complex impedance](#)
- [#113: Basics of Transistor bias point and the class of amplifier operation](#)
- [#114: Tutorial: Common Emitter, Common Collector, and Common Base Transistor amplifiers](#)
- [#115: How to replace the meter movement in a Simpson 260 multimeter VOM](#)
- [#116: Repair Log, Part 1: Yaesu FT-7800 Dual Band FM Transceiver, no VHF output](#)
- [#117: Repair Log, Part 2: Yaesu FT-7800 Dual Band FM Transceiver, fixed 2m tx problem](#)
- [#118: Basics of PIN diodes and their use in RF switch applications](#)

W2AEW Videos (December 30, 2017)

- [#119: Basics of Resolution Bandwidth and Video Bandwidth in a Spectrum Analyzer \(RBW VBW\)](#)
- [#120: How to Install Anderson Powerpole connectors](#)
- [#121: Basics of SCRs and some circuit fun - device and circuit tutorial](#)
- [#122: Electronic Circuit Construction Techniques: review of some prototype circuit building methods](#)
- [#123: Build a crystal oscillator from schematic thru prototype construction and testing – DIY](#)
- [#124: How to install an RJ45 connector on a CAT5 Ethernet network Patch Cable - DIY Repair](#)
- [#125: Tektronix MDO4000B Enhancements - RF specs, Signal Analysis and WLAN WiFi Example](#)
- [#126: Repair Log, Part 1: Icom IC-706MkIIIG Damage assessment and connector repair – DIY](#)
- [#127: Repair Log, Part 2: Icom IC-706MkIIIG flex circuit replacement - DIY repair](#)
- [#128: How to install optional filters in an Icom IC706MkIIIG and measure them with an FFT](#)
- [#129: How to cut circuit board PCB material - a couple of favorite methods I use...](#)
- [#130: PIN Diode 3rd order Intermodulation Distortion \(IMD\) vs. bias current - how to measure](#)
- [#131: How to test transistors - NPN and PNP bipolar junction transistors, BJTs](#)
- [#132: How to test MOSFETs with a DMM - a few methods...](#)
- [#133: Ham Radio call sign history, and my QSL card quest - W2AEW and 2AEW](#)
- [#134: Teardown of failed power supply - bad capacitor](#)
- [#135: Measure Capacitor ESR with an Oscilloscope and Function Generator](#)
- [#136: What is a dB, dBm, dBu, dBc, etc. on a Spectrum Analyzer?](#)
- [#137: Why your Function Generator's output voltage reading can be wrong](#)
- [#138: How to Measure Output Impedance](#)
- [#139: How to make a WLAN Channel Power Meas on a Tektronix MDO4000](#)
- [#140: Basics of an Op Amp Summing Amplifier](#)
- [#141: What is an Eye Pattern on an Oscilloscope - A Tutorial](#)
- [#142: Basics of High Voltage Probes and how to use them](#)
- [#143: Transmission Line Terminations for Digital and RF signals - Intro/Tutorial](#)
- [#144: Use Arduino Uno to create spinning XY graphic on an Oscilloscope](#)
- [#145: Unboxing the Tektronix MDO3000 Oscilloscope](#)
- [#146: 10X Probe Compensation on a Tektronix MDO3000 Oscilloscope](#)
- [#147: Basics of Varactor Diodes | Voltage Controlled Oscillator VCO Example](#)
- [#148: Software Defined Radio kit | Tutorial | Build | Test | Softrock Lite II](#)
- [#149: How to solder a leadless ceramic surface mount package | LCC | CLCC](#)
- [#150: How to measure an HF Bandpass filter response with the MDO3000](#)
- [#151: How to wind a toroid inductor | A quick tutorial](#)
- [#152: Completed Softrock Ensemble II SDR Receiver kit | On air checkout](#)
- [#153: How to tune up a Kenwood TS-830S hybrid rig / transceiver | TS-520 TS-530 TS-820](#)
- [#154: Softrock Ensemble II SDR Rx circuit review | description | test](#)
- [#155: Circuit Fun: Auto-ranging Analog Voltmeter for a variable power supply](#)
- [#156: Hamfest! Highlights of the 2014 RVRC Hamfest in Piscataway NJ](#)
- [#157: Circuit fun: Automatic audio leveling circuit | audio compressor | for scanning receiver](#)
- [#158: Directional Coupler Basics & how to sweep SWR of an antenna | Return Loss | VSWR](#)
- [#159: How to measure FM frequency deviation with a spectrum analyzer](#)
- [#160: Oscilloscope Basics, and how they can be used in the hamshack | tutorial](#)
- [#161: Circuit Fun: a simple RF detector / demodulator probe for DMM or scope](#)
- [#162: How to measure coax velocity factor VF and impedance Z](#)
- [#163: Automatic Volume Level Control circuit demonstration | scanner](#)
- [#164: More XY Oscilloscope graphics, VintageTEK and how projects evolve](#)
- [#165: Why RF circuits need shielding - or how NOT to build a Theremin! \(tnx 4 the title Ben!\)](#)
- [#166: How to wind a trifilar toroid transformer for a diode ring mixer](#)
- [#167: How a Diode Ring Mixer works | Mixer operation theory and measurement](#)
- [#168: How to coil coax, wire, rope, etc. to be free of kinks, twists and knots](#)
- [#169: Embedded WLAN module testing with the MDO4000B and SignalVu-PC](#)
- [#170: Basics of IQ Signals and IQ modulation & demodulation - A tutorial](#)
- [#171: IQ Signals Part II: AM and FM phasor diagrams, SSB phasing method](#)
- [#172: Basics of Op Amp Gain Bandwidth Product and Slew Rate Limit](#)
- [#173: Introduction to RTL-SDR low cost software defined radio receivers](#)
- [#174: Using a mixer to listen to HF, shortwave, ham, etc. on RTL-SDR dongle](#)
- [#175: Filter functions in an HF Upconverter used with RTL-SDR Dongle Receiver](#)
- [#176: Uniden / President HR2510 10m transceiver repair - won't transmit](#)
- [#177: Kenwood Dual-Band TM-D710 repair, bad filter, design issue](#)
- [#178: Build, test, use the RF Noise Source on the Ham-It-Up RTL-SDR Upconverter](#)

W2AEW Videos (December 30, 2017)

- [#179: How to make a peak to peak voltage measurement on a scope](#)
- [#180: How to assemble of the Elecraft PX3 Panadapter kit](#)
- [#181: Basics of an RF Comb Generator - a tutorial](#)
- [#182: VHF Transmitter key-up analysis with a Tektronix RSA306](#)
- [#183: Why diodes are used around relay coils: Back to Basics on flyback or snubber diodes](#)
- [#184: How to calibrate an analog oscilloscope](#)
- [#185: Back to Basics: Bipolar Transistor bias circuits and Beta dependence](#)
- [#186: Circuit Fun: Control an RC Servo with an adjustable DC voltage](#)
- [#187: Circuit Walkthrough: A single cell LED light supporting Ears to Our World](#)
- [#188: Mini review / demo: GP-5/SSB Shortwave, AM/FM and SSB portable receiver](#)
- [#189: Programming & using memories in the GP-5/SSB shortwave receiver](#)
- [#190: Back to Basics: Transistor Current Sources and Mirrors](#)
- [#191: Beware of test equipment loading effects!! Learn from my error!](#)
- [#192: Preview of next Back to Basics video on the diff-amp, long-tailed pair](#)
- [#193: Back to Basics: the differential amplifier, aka long-tailed pair, diff-pair](#)
- [#194: What is ammeter burden voltage, and why you should care](#)
- [#195: RF Diplexer Basics: Tutorial, construction and tuning](#)
- [#196: How a Directional Coupler in an SWR meter works](#)
- [#197: Simple V-I curve tracer using an oscilloscope and function generator](#)
- [#198: Basics of a Vbe Multiplier: what it is, how it works & where it is used](#)
- [#199: Measuring coil inductance and IF transformer resonant frequency](#)
- [#200: T/R Switch w/ PIN Diodes and Lumped Element Quarter-wavelength transmission line](#)
- [#201: Basics of Reverse Recovery Time in a Diode](#)
- [#202: Basics of using FFT on a Tektronix TDS2000 Oscilloscope](#)
- [#203: Schmitt Trigger Oscillator revisited | TDR | Measure Capacitors and Inductors](#)
- [#204: Basics of Tunnel Diodes and their applications](#)
- [#205: Amateur Radio Field Day 2015 at Guglielmo Marconi Memorial Park](#)
- [#206: Importance of 10X Probe Compensation with your Oscilloscope](#)
- [#207: Basics of a Cascode Amplifier and the Miller Effect](#)
- [#208: Visualizing RF Standing Waves on Transmission Lines](#)
- [#209: Basics of Phase Dots on Transformer Windings](#)
- [#210: Drake 2B Introduction and visual assessment](#)
- [#211: TSG4106A RF signal generator unboxing and mini feature review](#)
- [#212: Re-capping the Drake 2B Receiver](#)
- [#213: Drake 2B final repairs, bench test, on-air listening](#)
- [#214: Drake 2B Alignment](#)
- [#215: Basics of Crossover Distortion using LM358 op amp as an example](#)
- [#216: Back to Basics: 555 based monostable multivibrator | 555 tutorial](#)
- [#217: Hamfest Find: Homemade Pi-Network Antenna Tuner / Transmatch](#)
- [#218: Hamfest Find: Video Distribution Amplifier - 50 vs. 75 ohm BNC Connectors](#)
- [#219: Back to Basics: Introduction to Field Effect Transistors JFET MOSFET](#)
- [#220: Drake 2B Serendipity - with N2CQR - the reason I got the 2B](#)
- [#221: The Bird 43 Directional Wattmeter: Overview and how-to use](#)
- [#222: Installing a Peak Reading kit into a Bird 43 Wattmeter](#)
- [#223: Basics of the Gilbert Cell | Analog Multiplier | Mixer | Modulator](#)
- [#224: AM & DSB-SC Modulation with a Gilbert Cell](#)
- [#225: Introduction to the Project Diana 70th Anniversary Special Event](#)
- [#226: Project Diana 70th Anniversary Special Event | Moonbounce | EME](#)
- [#227: Vintage Tech: Fluke 881A Differential Voltmeter Introduction](#)
- [#228: Radio Fun: Michigan Mighty Mite CW transmitter and a low pass filter](#)
- [#229: American Morse Equipment KK1 morse code key assembly](#)
- [#230: How to install a BNC connector on RG-58 coax](#)
- [#231: Circuit Fun: Stairstep generator using 555 and op amps](#)
- [#232: More Circuit Fun: Simple transistor curve tracer using Stairstep generator circuit](#)
- [#233: Back to Basics: How to use the 3 terminals of a lab power supply | split supply | floating supplies](#)
- [#234: Basics of Near Field RF Probes | E-Field & H-Field | How-to use](#)
- [#235: Basics of Analog Panel Meters | Analog Meter Movements](#)
- [#236: Using a Current Shunt with a Panel Meter / Ammeter scale change](#)
- [#237: 4 Wire Resistance Measurement | Kelvin connection](#)
- [#238: Oscilloscope Vertical Position and Offset explained](#)

W2AEW Videos (December 30, 2017)

- [#239: Repair of Kenwood TH-F6A radio's Push to Talk switch](#)
- [#240: Repair of Yaesu FT-817 with SSB CW AM Transmit Problem](#)
- [#241: Field Day 2016 - Low Power operating from a historic Marconi site](#)
- [#242: How to use an oscilloscope on antique radios | NJARC](#)
- [#243: Mini-review & test of a variable audio bandpass filter from SOTABeams](#)
- [#244: Short vacation video: beach, bay, family, dog, ham radio](#)
- [#245: Old Tech: The Wadley Loop Superhet Receiver - Yaesu FRG-7 Example](#)
- [#246: How to operate / tune the Yaesu FRG-7 Frog-7 Receiver](#)
- [#247: Circuit Fun: 5 Transistor ESR Meter circuit by EEVBlog user Jay Diddy B](#)
- [#248: Tune Bandpass Cavity Filter using Return Loss w Directional Coupler](#)
- [#249: Using DeOxit to clean/restore dirty switch contacts in a Kenwood SM-220](#)
- [#250: Kenwood SM-220 Station Monitor Demo / Overview](#)
- [#251: Using RSA306 to capture & analyze frequency hopping signals | Bluetooth example](#)
- [#252: Acquisition & Analysis control in a Real-Time Spectrum Analyzer](#)
- [#253: How to capture & analyze WiFi WLAN signals off-the-air with an RSA | RSA306B 802.11](#)
- [#254: Review: Iso-Tip SolderPro 90 Butane Soldering Iron and hot-air rework / reflow tool](#)
- [#255: Vintage Tech: Book review "ABC of Electricity" from 1889 endorsed by Edison](#)
- [#256: Capacitor types, characteristics, and applications](#)
- [#257: Power Supply Decoupling & Filtering: why we use multiple caps in different locations](#)
- [#258: Repair Log: Yaesu FT-736R re-cap of internal power supply | replace electrolytic capacitors](#)
- [#259 Repair Log: Yaesu FT-736R S-meter backlight bulb replacement](#)
- [#260: RF Diode Mixer LO Drive Level & Conversion Loss | 1dB Compression | Distortion](#)
- [#261: Status Update | Frequently Asked Questions | Thanks!](#)
- [#262: IQ Modulator Basics: Operation, measurements, impairments](#)
- [#263: Using a VNA to sweep an RF Dummy Load | Tektronix TTR506A Vector Network Analyzer](#)
- [#264: RF Fun: Visualize antenna tuner operation on Smith Chart, SWR & more with VNA](#)
- [#265: Vintage Tech: Checking out an RF Millivoltmeter - Boonton 92C](#)
- [#266: Repair Log: Tektronix 465B Trigger control repair / replacement | oscilloscope repair](#)
- [#267: Quick Tip: Making IC & Transistor part numbers easy to read](#)
- [#268: How to operate a ZM-2 Z-Match Antenna Tuner kit by Emtech](#)
- [#269: Repair Log: Yaesu FT-1000D Receiver Repair | dead rx, loss of sensitivity](#)
- [#270: Tune a Duplexer with a Spectrum Analyzer + Tracking Gen or VNA](#)
- [#271: Ham Radio Quickie: Yaesu FT-817 PowerPole Adapter](#)
- [#272: Vintage Tech: Sencore TC162 Tube Tester: How to use, tips and peek inside](#)
- [#273: Common Emitter Amplifier Design Tips & Shortcuts](#)
- [#274: Smith Chart Basics: Impedance and Admittance curves and conversion](#)

W2AEW Videos (December 30, 2017)

Videos Listed by Topic

Oscilloscopes

- [#2: Tektronix delayed timebase operation](#)
- [#6: Infrequent Glitch capture on an Oscilloscope](#)
- [#9: Basic 1X and 10X Oscilloscope Probe tutorial](#)
- [#10: AC / DC Coupling on an Oscilloscope](#)
- [#11: Tektronix Oscilloscope Triggering controls and their usage](#)
- [#16: How to use the Oscilloscope to accurately capture 2 signals of different frequencies](#)
- [#17: Using Analog scope to view two signals of widely different frequencies](#)
- [#18: Use Oscilloscope with delayed time base to measure a RF Power detector](#)
- [#19: How to get a stable scope display with two signals very close in frequency](#)
- [#20: Quick 5 minute Tektronix Mixed Domain Oscilloscope MDO4000 Demo](#)
- [#25: Analog Oscilloscope bandwidth considerations](#)
- [#26: Answering viewer questions, and Digital Oscilloscope Considerations](#)
- [#31: Analog oscilloscope ALT, CHOP, ADD, INVERT vertical controls](#)
- [#33: Oscilloscope AUTO Triggering explained](#)
- [#35: Using the ADD/INVERT mode on an analog scope to view differential voltages](#)
- [#36: Function Generator issues appearing as a triggering problem](#)
- [#40: Analog Oscilloscope's rear panel auxiliary inputs and outputs](#)
- [#41: Use Oscilloscope Z-axis input to create "marker" on waveform](#)
- [#43: Analog Oscilloscope Basics: Making a Frequency Measurement](#)
- [#44: Frequency measurement using Delaying Timebase on Analog Oscilloscope](#)
- [#48: Basics of Lissajous Patterns on an Oscilloscope](#)
- [#65: Basics of using FFT on an oscilloscope](#)
- [#66: How to make a rise-time measurement on an oscilloscope](#)
- [#68: Oscilloscope Probe Ground lead length affects on signal quality](#)
- [#69: Basics of Analog Oscilloscope Bandwidth](#)
- [#70: Digital Oscilloscope Bandwidth Measurement - direct and using risetime](#)
- [#72: Simple Station Monitor for Ham Radio using an Oscilloscope](#)
- [#74: Basics of Differential Probes for Oscilloscopes and their applications: a tutorial](#)
- [#76: Debug Transient EMI signal with a Mixed Domain Oscilloscope MDO4000 Tektronix](#)
- [#90: Measure Capacitors and Inductors with an Oscilloscope and some basic parts](#)
- [#96: Tutorial on Digital Oscilloscope sample rate, record length and data processing](#)
- [#111: How to make a high performance oscilloscope probe socket](#)
- [#160: Oscilloscope Basics, and how they can be used in the hamshack | tutorial](#)
- [#179: How to make a peak to peak voltage measurement on a scope](#)
- [#184: How to calibrate an analog oscilloscope](#)
- [#202: Basics of using FFT on a Tektronix TDS2000 Oscilloscope](#)
- [#206: Importance of 10X Probe Compensation with your Oscilloscope](#)
- [#208: Visualizing RF Standing Waves on Transmission Lines](#)
- [#238: Oscilloscope Vertical Position and Offset explained](#)
- [#242: How to use an oscilloscope on antique radios | NJARC](#)

Composite Video on Analog Oscilloscopes

- [#42: Composite Video on an Analog Oscilloscope using XYZ - Lab tour...](#)
- [#86: Improved NTSC video to Oscilloscope converter circuit / scope video monitor hack](#)

MD3000/MD4000

- [#125: Tektronix MDO4000B Enhancements - RF specs, Signal Analysis and WLAN WiFi Example](#)
- [#145: Unboxing the Tektronix MDO3000 Oscilloscope](#)
- [#146: 10X Probe Compensation on a Tektronix MDO3000 Oscilloscope](#)
- [#169: Embedded WLAN module testing with the MDO4000B and SignalVu-PC](#)
- [#206: Importance of 10X Probe Compensation with your Oscilloscope](#)

Spectrum Analyzers

- [#12: Use Real-Time Spectrum Analysis to Characterize a transmitter key-up](#)
- [#14: Tektronix MDO4000 Spectrum Analyzer quick comparison to entry level analyzer](#)

W2AEW Videos (December 30, 2017)

[#15: Ham radio Band-scope pan-adapter using Tek MDO4000 as a spectrum analyzer](#)
[#21: Using MDO4000 to capture 802.11 traffic and export for analysis using RSAVu](#)
[#22: Spectrum Analyzer Basics / Tutorial, and the Tektronix 1401A](#)
[#23: Tektronix 1401A Spectrum Analyzer quick demo](#)
[#27: Board level EMI Debug with a Real Time Spectrum Analyzer](#)
[#38: Analyze Hot Wheel Radar gun with a Real Time Spectrum Analyzer](#)
[#47: Basics of Zero-Span operation of a Spectrum Analyzer](#)
[#51: Basic Spectrum Analyzer Do's and Dont's...](#)
[#62: Basics of Tracking Generators and 1/4 wavelength coaxial stub filters](#)
[#119: Basics of Resolution Bandwidth and Video Bandwidth in a Spectrum Analyzer \(RBW VBW\)](#)
[#181: Basics of an RF Comb Generator - a tutorial](#)
[#234: Basics of Near Field RF Probes | E-Field & H-Field | How-to use](#)
[#248: Tune Bandpass Cavity Filter using Return Loss w Directional Coupler](#)
[#251: Using RSA306 to capture & analyze frequency hopping signals | Bluetooth example](#)
[#252: Acquisition & Analysis control in a Real-Time Spectrum Analyzer](#)
[#253: How to capture & analyze WiFi WLAN signals off-the-air with an RSA | RSA306B 802.11](#)
[#270: Tune a Duplexer with a Spectrum Analyzer + Tracking Gen or VNA](#)

Other Test Equipment

[#5: My ESR Meter project from 2006](#)
[#45: Sweep Generator Basics and Receiver Alignment](#)
[#49: Simple Component Tester using Oscilloscope - Octopus Curve Tracer](#)
[#52: Tutorial / Basics of a Dip Meter](#)
[#61: Basics of RF Samplers, Sampling-Tees, RF-taps, etc.](#)
[#73: 70's Vintage Function / Sweep Generator review / teardown](#)
[#88: Cheap and simple TDR using an oscilloscope and 74AC14 Schmitt Trigger Inverter](#)
[#105: More Circuit Fun: Simple 3 transistor sawtooth generator / oscillator](#)
[#109: How to: Fluke 87 Multimeter fuse replacement, DMM True RMS](#)
[#115: How to replace the meter movement in a Simpson 260 multimeter VOM](#)
[#142: Basics of High Voltage Probes and how to use them](#)
[#161: Circuit Fun: a simple RF detector / demodulator probe for DMM or scope](#)
[#197: Simple V-I curve tracer using an oscilloscope and function generator](#)
[#203: Schmitt Trigger Oscillator revisited | TDR | Measure Capacitors and Inductors](#)
[#211: TSG4106A RF signal generator unboxing and mini feature review](#)
[#221: The Bird 43 Directional Wattmeter: Overview and how-to use](#)
[#222: Installing a Peak Reading kit into a Bird 43 Wattmeter](#)
[#227: Vintage Tech: Fluke 881A Differential Voltmeter Introduction](#)
[#233: Back to Basics: How to use the 3 terminals of a lab power supply | split supply | floating supplies](#)
[#235: Basics of Analog Panel Meters | Analog Meter Movements](#)
[#236: Using a Current Shunt with a Panel Meter / Ammeter scale change](#)
[#237: 4 Wire Resistance Measurement | Kelvin connection](#)
[#247: Circuit Fun: 5 Transistor ESR Meter circuit by EEVBlog user Jay Diddy B](#)
[#263: Using a VNA to sweep an RF Dummy Load | Tektronix TTR506A Vector Network Analyzer](#)
[#264: RF Fun: Visualize antenna tuner operation on Smith Chart, SWR & more with VNA](#)
[#265: Vintage Tech: Checking out an RF Millivoltmeter - Boonton 92C](#)
[#270: Tune a Duplexer with a Spectrum Analyzer + Tracking Gen or VNA](#)
[#272: Vintage Tech: Sencore TC162 Tube Tester: How to use, tips and peek inside](#)

Test Procedures

[#7: Monitor your Ham Radio transmitter with an oscilloscope](#)
[#8: Two-tone test of SSB transmitter output](#)
[#24: Transient EMI Debug using Tektronix MDO4000 Mixed Domain Oscilloscope](#)
[#37: Use a scope to measure the length and impedance of coax](#)
[#46: Basics of amplitude and distortion measurements on a scope and spectrum analyzer](#)
[#53: Real Time Spectrum Analysis of low frequency/audio signals](#)
[#57: Setting up variable double-pulse using Tek AFG](#)
[#58: How to zero-beat WWV to check or adjust a Frequency Counter's accuracy](#)
[#64: How to measure speed with a counter/timer](#)

W2AEW Videos (December 30, 2017)

- [#94: RMS Voltage for Sine and square waves, and why your DMM might not work right!](#)
- [#101: How to measure FM Frequency Deviation without special equipment using Carrier / Bessel Null](#)
- [#112: Use an Oscilloscope and Signal Generator help tune an HF Antenna, measure complex impedance](#)
- [#131: How to test transistors - NPN and PNP bipolar junction transistors, BJTs](#)
- [#132: How to test MOSFETs with a DMM - a few methods...](#)
- [#135: Measure Capacitor ESR with an Oscilloscope and Function Generator](#)
- [#137: Why your Function Generator's output voltage reading can be wrong](#)
- [#138: How to Measure Output Impedance](#)
- [#139: How to make a WLAN Channel Power Meas on a Tektronix MDO4000](#)
- [#141: What is an Eye Pattern on an Oscilloscope - A Tutorial](#)
- [#150: How to measure an HF Bandpass filter response with the MDO3000](#)
- [#159: How to measure FM frequency deviation with a spectrum analyzer](#)
- [#162: How to measure coax velocity factor VF and impedance Z](#)
- [#182: VHF Transmitter key-up analysis with a Tektronix RSA306](#)
- [#194: What is ammeter burden voltage, and why you should care](#)
- [#199: Measuring coil inductance and IF transformer resonant frequency](#)
- [#208: Visualizing RF Standing Waves on Transmission Lines](#)
- [#233: Back to Basics: How to use the 3 terminals of a lab power supply | split supply | floating supplies](#)
- [#234: Basics of Near Field RF Probes | E-Field & H-Field | How-to use](#)
- [#237: 4 Wire Resistance Measurement | Kelvin connection](#)
- [#242: How to use an oscilloscope on antique radios | NJARC](#)
- [#247: Circuit Fun: 5 Transistor ESR Meter circuit by EEVBlog user Jay Diddy B](#)
- [#248: Tune Bandpass Cavity Filter using Return Loss w Directional Coupler](#)
- [#251: Using RSA306 to capture & analyze frequency hopping signals | Bluetooth example](#)
- [#252: Acquisition & Analysis control in a Real-Time Spectrum Analyzer](#)
- [#253: How to capture & analyze WiFi WLAN signals off-the-air with an RSA | RSA306B 802.11](#)
- [#262: IQ Modulator Basics: Operation, measurements, impairments](#)
- [#263: Using a VNA to sweep an RF Dummy Load | Tektronix TTR506A Vector Network Analyzer](#)
- [#264: RF Fun: Visualize antenna tuner operation on Smith Chart, SWR & more with VNA](#)
- [#270: Tune a Duplexer with a Spectrum Analyzer + Tracking Gen or VNA](#)

Circuit Construction

- [#98: Surface mount IC soldering demonstration with SO-8 packaged device](#)
- [#99: Drag Soldering of an SSOP IC Package demonstration](#)
- [#102: How to desolder or unsolder components using solder wick and vacuum tools](#)
- [#120: How to Install Anderson Powerpole connectors](#)
- [#122: Electronic Circuit Construction Techniques: review of some prototype circuit building methods](#)
- [#123: Build a crystal oscillator from schematic thru prototype construction and testing – DIY](#)
- [#124: How to install an RJ45 connector on a CAT5 Ethernet network Patch Cable - DIY Repair](#)
- [#129: How to cut circuit board PCB material - a couple of favorite methods I use...](#)
- [#149: How to solder a leadless ceramic surface mount package | LCC | CLCC](#)
- [#151: How to wind a toroid inductor | A quick tutorial](#)
- [#165: Why RF circuits need shielding - or how NOT to build a Theremin! \(tnx 4 the title Ben!\)](#)
- [#254: Review: Iso-Tip SolderPro 90 Butane Soldering Iron and hot-air rework / reflow tool](#)
- [#257: Power Supply Decoupling & Filtering: why we use multiple caps in different locations](#)

Theory

Basics

- [#54: Back to Basics Tutorial: Voltage / Current in capacitors and inductors](#)
- [#55: Back to Basics: Tutorial on LC Resonant Circuits](#)
- [#56: Basics of Capacitor & Inductor self-resonance, parasitics, etc. – Tutorial](#)
- [#59: Basics of a Square Wave signal's harmonic content](#)
- [#60: Basics of Phase Locked Loop Circuits and Frequency Synthesis](#)
- [#83: Basics of RF Mixers in Radio Receivers / Mixer Tutorial / Frequency Conversion](#)
- [#84: Basics of Ferrite Beads: Filters, EMI Suppression, Parasitic oscillation suppression / Tutorial](#)
- [#85: Basics of R2R Resistor Networks Digital Analog Conversion, Tutorial DAC Thevenin Superposition](#)

W2AEW Videos (December 30, 2017)

[#87: Schmitt Trigger Oscillator / Tutorial / 74AC14 Inverter / squarewave generator](#)
[#91: Basic RF Attenuators - Design, Construction, Testing - PI and T style - A Tutorial](#)
[#100: Capacitor self-resonance measured with an oscilloscope and signal generator - how to tutorial](#)
[#104: Circuit tutorial: sawtooth generator w/ current sources, diode switches, hysteresis comparator](#)
[#110: Circuit Fun: Flexible Ramp Generator to create frequency sweeps using 555 timer and op amps](#)
[#121: Basics of SCRs and some circuit fun - device and circuit tutorial](#)
[#136: What is a dB, dBm, dBu, dBc, etc. on a Spectrum Analyzer?](#)
[#143: Transmission Line Terminations for Digital and RF signals - Intro/Tutorial](#)
[#183: Why diodes are used around relay coils: Back to Basics on flyback or snubber diodes](#)
[#195: RF Diplexer Basics: Tutorial, construction and tuning](#)
[#207: Basics of a Cascode Amplifier and the Miller Effect](#)
[#208: Visualizing RF Standing Waves on Transmission Lines](#)
[#209: Basics of Phase Dots on Transformer Windings](#)
[#215: Basics of Crossover Distortion using LM358 op amp as an example](#)
[#216: Back to Basics: 555 based monostable multivibrator | 555 tutorial](#)
[#219: Back to Basics: Introduction to Field Effect Transistors JFET MOSFET](#)
[#223: Basics of the Gilbert Cell | Analog Multiplier | Mixer | Modulator](#)
[#224: AM & DSB-SC Modulation with a Gilbert Cell](#)
[#256: Capacitor types, characteristics, and applications](#)
[#257: Power Supply Decoupling & Filtering: why we use multiple caps in different locations](#)
[#260: RF Diode Mixer LO Drive Level & Conversion Loss | 1dB Compression | Distortion](#)
[#262: IQ Modulator Basics: Operation, measurements, impairments](#)
[#273: Common Emitter Amplifier Design Tips & Shortcuts](#)

Differential Amplifiers

[#192: Preview of next Back to Basics video on the diff-amp, long-tailed pair](#)
[#193: Back to Basics: the differential amplifier, aka long-tailed pair, diff-pair](#)

Diodes

[#82: How to use a Diode as a Switch / Diodes as Switches / Basics of Diode Switches](#)
[#147: Basics of Varactor Diodes | Voltage Controlled Oscillator VCO Example](#)
[#166: How to wind a trifilar toroid transformer for a diode ring mixer](#)
[#167: How a Diode Ring Mixer works | Mixer operation theory and measurement](#)
[#201: Basics of Reverse Recovery Time in a Diode](#)
[#204: Basics of Tunnel Diodes and their applications](#)

PIN Diode RF Switching

[#118: Basics of PIN diodes and their use in RF switch applications](#)
[#130: PIN Diode 3rd order Intermodulation Distortion \(IMD\) vs. bias current - how to measure](#)
[#200: T/R Switch w/ PIN Diodes and Lumped Element Quarter-wavelength transmission line](#)

Directional Couplers

[#158: Directional Coupler Basics & how to sweep SWR of an antenna | Return Loss | VSWR](#)
[#196: How a Directional Coupler in an SWR meter works](#)
[#208: Visualizing RF Standing Waves on Transmission Lines](#)
[#248: Tune Bandpass Cavity Filter using Return Loss w Directional Coupler](#)

Op-Amps

[#75: Basics of Opamp circuits - a tutorial on how to understand most Opamp circuits](#)
[#77: Op Amp Peak Detector Tutorial, with peak detector basics](#)
[#79: Op Amp Power Supply Considerations: split, single, virtual ground, etc. - a tutorial](#)
[#140: Basics of an Op Amp Summing Amplifier](#)
[#172: Basics of Op Amp Gain Bandwidth Product and Slew Rate Limit](#)
[#215: Basics of Crossover Distortion using LM358 op amp as an example](#)

Transistors

[#67: Basics of Common Emitter Amplifier Gain and Frequency Response with Measurements](#)
[#113: Basics of Transistor bias point and the class of amplifier operation](#)

W2AEW Videos (December 30, 2017)

- [#114: Tutorial: Common Emitter, Common Collector, and Common Base Transistor amplifiers](#)
- [#185: Back to Basics: Bipolar Transistor bias circuits and Beta dependence](#)
- [#190: Back to Basics: Transistor Current Sources and Mirrors](#)
- [#191: Beware of test equipment loading effects!! Learn from my error!](#)
- [#198: Basics of a Vbe Multiplier: what it is, how it works & where it is used](#)
- [#207: Basics of a Cascode Amplifier and the Miller Effect](#)
- [#219: Back to Basics: Introduction to Field Effect Transistors JFET MOSFET](#)
- [#273: Common Emitter Amplifier Design Tips & Shortcuts](#)

Circuit Analysis

- [#155: Circuit Fun: Auto-ranging Analog Voltmeter for a variable power supply](#)
- [#157: Circuit fun: Automatic audio leveling circuit | audio compressor | for scanning receiver](#)
- [#163: Automatic Volume Level Control circuit demonstration | scanner](#)
- [#186: Circuit Fun: Control an RC Servo with an adjustable DC voltage](#)
- [#187: Circuit Walkthrough: A single cell LED light supporting Ears to Our World](#)
- [#216: Back to Basics: 555 based monostable multivibrator | 555 tutorial](#)
- [#223: Basics of the Gilbert Cell | Analog Multiplier | Mixer | Modulator](#)
- [#224: AM & DSB-SC Modulation with a Gilbert Cell](#)
- [#231: Circuit Fun: Stairstep generator using 555 and op amps](#)
- [#232: More Circuit Fun: Simple transistor curve tracer using Stairstep generator circuit](#)
- [#273: Common Emitter Amplifier Design Tips & Shortcuts](#)

Ham Radio operation, Equipment and Radio Repair

- [#39: Function Generator debug and repair - Leader LG-1311](#)
- [#116: Repair Log, Part 1: Yaesu FT-7800 Dual Band FM Transceiver, no VHF output](#)
- [#117: Repair Log, Part 2: Yaesu FT-7800 Dual Band FM Transceiver, fixed 2m tx problem](#)
- [#126: Repair Log, Part 1: Icom IC-706MkIIG Damage assessment and connector repair – DIY](#)
- [#127: Repair Log, Part 2: Icom IC-706MkIIG flex circuit replacement - DIY repair](#)
- [#134: Teardown of failed power supply - bad capacitor](#)
- [#177: Kenwood Dual-Band TM-D710 repair, bad filter, design issue](#)
- [#176: Uniden / President HR2510 10m transceiver repair - won't transmit](#)
- [#210: Drake 2B Introduction and visual assessment](#)
- [#212: Re-capping the Drake 2B Receiver](#)
- [#213: Drake 2B final repairs, bench test, on-air listening](#)
- [#214: Drake 2B Alignment](#)
- [#239: Repair of Kenwood TH-F6A radio's Push to Talk switch](#)
- [#240: Repair of Yaesu FT-817 with SSB CW AM Transmit Problem](#)
- [#242: How to use an oscilloscope on antique radios | NJARC](#)
- [#247: Circuit Fun: 5 Transistor ESR Meter circuit by EEVBlog user Jay Diddy B](#)
- [#249: Using DeOxit to clean/restore dirty switch contacts in a Kenwood SM-220](#)
- [#254: Review: Iso-Tip SolderPro 90 Butane Soldering Iron and hot-air rework / reflow tool](#)
- [#258: Repair Log: Yaesu FT-736R re-cap of internal power supply | replace electrolytic capacitors](#)
- [#259 Repair Log: Yaesu FT-736R S-meter backlight bulb replacement](#)
- [#266: Repair Log: Tektronix 465B Trigger control repair / replacement | oscilloscope repair](#)
- [#268: How to operate a ZM-2 Z-Match Antenna Tuner kit by Emtech](#)
- [#269: Repair Log: Yaesu FT-1000D Receiver Repair | dead rx, loss of sensitivity](#)
- [#270: Tune a Duplexer with a Spectrum Analyzer + Tracking Gen or VNA](#)
- [#271: Ham Radio Quickie: Yaesu FT-817 PowerPole Adapter](#)

Arduino

- [#78: Use an Arduino to draw pictures on an oscilloscope using XY mode](#)
- [#92: Cool Product: The Moteino - an Arduino clone + RFM12B wireless interface - low cost](#)
- [#93: RS232 and SPI bus waveforms, bus decodes and RF activity on the Moteino using Tek MDO4000](#)
- [#144: Use Arduino Uno to create spinning XY graphic on an Oscilloscope](#)
- [#164: More XY Oscilloscope graphics, VintageTEK and how projects evolve](#)

W2AEW Videos (December 30, 2017)

SDR: Software Define Radio Topics

I&Q Signals

- [#170: Basics of IQ Signals and IQ modulation & demodulation - A tutorial](#)
- [#171: IQ Signals Part II: AM and FM phasor diagrams, SSB phasing method](#)

RTL-SDR

- [#173: Introduction to RTL-SDR low cost software defined radio receivers](#)
- [#174: Using a mixer to listen to HF, shortwave, ham, etc. on RTL-SDR dongle](#)
- [#175: Filter functions in an HF Upconverter used with RTL-SDR Dongle Receiver](#)
- [#178: Build, test, use the RF Noise Source on the Ham-It-Up RTL-SDR Upconverter](#)

Softrock SDR

- [#148: Software Defined Radio kit | Tutorial | Build | Test | Softrock Lite II](#)
- [#152: Completed Softrock Ensemble II SDR Receiver kit | On air checkout](#)
- [#154: Softrock Ensemble II SDR Rx circuit review | description | test](#)

Radios

Drake 2B

- [#210: Drake 2B Introduction and visual assessment](#)
- [#212: Re-capping the Drake 2B Receiver](#)
- [#213: Drake 2B final repairs, bench test, on-air listening](#)
- [#214: Drake 2B Alignment](#)
- [#220: Drake 2B Serendipity - with N2CQR - the reason I got the 2B](#)

CountyComm GP-5/SSB

- [#188: Mini review / demo: GP-5/SSB Shortwave, AM/FM and SSB portable receiver](#)
- [#189: Programming & using memories in the GP-5/SSB shortwave receiver](#)

Elecraft PX-3

- [#180: How to assemble of the Elecraft PX3 Panadapter kit](#)

Heathkit HW-9

- [#81: Heathkit HW-9 QRP CW Transceiver Circuit Walk-Through - Ham Amateur Radio Schematic](#)

HF Packer V4 Amplifier

- [#106: Measuring low-pass filters in a Ham Radio HF Packer Amp for Amateur HF Bands](#)
- [#107: Adjusting the MOSFET drain current in the HF Packer V4 Amplifier \(ham radio\)](#)
- [#108: Adding a CW-SSB Mode switch to the HF Packer V4 Amplifier \(ham radio\)](#)

Icom IC-706MkIIG

- [#126: Repair Log, Part 1: Icom IC-706MkIIG Damage assessment and connector repair – DIY](#)
- [#127: Repair Log, Part 2: Icom IC-706MkIIG flex circuit replacement - DIY repair](#)
- [#128: How to install optional filters in an Icom IC706MkIIG and measure them with an FFT](#)

Kenwood TH-F6A

- [#239: Repair of Kenwood TH-F6A radio's Push to Talk switch](#)

Kenwood TM-D710

- [#177: Kenwood Dual-Band TM-D710 repair, bad filter, design issue](#)

MFJ9340

- [#80: MFJ Cub 40m QRP CW Transceiver circuit walk-thru and review, plus bandsweep, ham radio MFJ-9340](#)

Michigan Mighty Mite

- [#228: Radio Fun: Michigan Mighty Mite CW transmitter and a low pass filter](#)

TenTec 1254

- [#3: TenTec 1254 Receiver Signal Path walkthrough](#)

W2AEW Videos (December 30, 2017)

- [#4: Oscilloscope view of TenTec 1254 IF and detected output on Shortwave signal](#)
- [#29: Adding a S-meter to TenTec 1254 Shortwave Receiver](#)
- [#30: Part II: Finishing the S-Meter on the Ten Tec 1254 Shortwave Receiver](#)
- [#34: Installation of upgraded microcontroller in the TenTec 1254 Receiver](#)

Uniden

- [#176: Uniden / President HR2510 10m transceiver repair - won't transmit](#)

Yaesu FT-736R

- [#258: Repair Log: Yaesu FT-736R re-cap of internal power supply | replace electrolytic capacitors](#)
- [#259 Repair Log: Yaesu FT-736R S-meter backlight bulb replacement](#)

Yaesu FT-7800

- [#116: Repair Log, Part 1: Yaesu FT-7800 Dual Band FM Transceiver, no VHF output](#)
- [#117: Repair Log, Part 2: Yaesu FT-7800 Dual Band FM Transceiver, fixed 2m tx problem](#)

Yaesu FT-817

- [#240: Repair of Yaesu FT-817 with SSB CW AM Transmit Problem](#)
- [#271: Ham Radio Quickie: Yaesu FT-817 PowerPole Adapter](#)

Yaesu FRG-7

- [#245: Old Tech: The Wadley Loop Superhet Receiver - Yaesu FRG-7 Example](#)
- [#246: How to operate / tune the Yaesu FRG-7 Frog-7 Receiver](#)

Yaesu FT-1000D

- [#269: Repair Log: Yaesu FT-1000D Receiver Repair | dead rx, loss of sensitivity](#)

Miscellaneous

- [#1: QRP Check-in to NorCars net from RVRC Hamfest June 19, 2010](#)
- [#13: D-104 Microphone amplifier / Equalizer for Ham Radio](#)
- [#28: My QRP "go kit" backpack with IC-703+ ham radio](#)
- [#32: Quick test of completed DDS-60 from AMQRP/NJQRP](#)
- [#50: QRP SSB contact on 40m from Hamfest of RVRC, June 2012](#)
- [#63: JOTA: Jamboree on the Air at OMARC/InfoAge October 2012](#)
- [#71: Proper PSK31 Audio Level setup with a scope, RF power meter, and ALC indicator](#)
- [#89: Video Tour of my Lab and Workbench - Oscilloscopes and meters and power supplies, oh my!](#)
- [#95: W2AEW Channel Trailer video](#)
- [#97: Low Power \(QRP\) Ham Radio contact at the 2013 RVRC Hamfest in NJ](#)
- [#103: Ham Radio on vacation - Long Beach Island with Icom IC-703+ NJ \(NA-111\), 10mo after Sandy](#)
- [#133: Ham Radio call sign history, and my QSL card quest - W2AEW and 2AEW](#)
- [#153: How to tune up a Kenwood TS-830S hybrid rig / transceiver | TS-520 TS-530 TS-820](#)
- [#156: Hamfest! Highlights of the 2014 RVRC Hamfest in Piscataway NJ](#)
- [#168: How to coil coax, wire, rope, etc. to be free of kinks, twists and knots](#)
- [#205: Amateur Radio Field Day 2015 at Guglielmo Marconi Memorial Park](#)
- [#217: Hamfest Find: Homemade Pi-Network Antenna Tuner / Transmatch](#)
- [#218: Hamfest Find: Video Distribution Amplifier - 50 vs. 75 ohm BNC Connectors](#)
- [#225: Introduction to the Project Diana 70th Anniversary Special Event](#)
- [#226: Project Diana 70th Anniversary Special Event | Moonbounce | EME](#)
- [#229: American Morse Equipment KK1 morse code key assembly](#)
- [#230: How to install a BNC connector on RG-58 coax](#)
- [#241: Field Day 2016 - Low Power operating from a historic Marconi site](#)
- [#243: Mini-review & test of a variable audio bandpass filter from SOTABeams](#)
- [#244: Short vacation video: beach, bay, family, dog, ham radio](#)
- [#250: Kenwood SM-220 Station Monitor Demo / Overview](#)
- [#254: Review: Iso-Tip SolderPro 90 Butane Soldering Iron and hot-air rework / reflow tool](#)
- [#255: Vintage Tech: Book review "ABC of Electricity" from 1889 endorsed by Edison](#)
- [#261: Status Update | Frequently Asked Questions | Thanks!](#)
- [#267: Quick Tip: Making IC & Transistor part numbers easy to read](#)
- [#268: How to operate a ZM-2 Z-Match Antenna Tuner kit by Emtech](#)
- [#274: Smith Chart Basics: Impedance and Admittance curves and conversion](#)