Fun + Easy Homebrewing

Hands-On Ham Radio

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“Homebrewing” = Do It Yourself

What is “Fun & Easy?”

- Parts all available ... and not too expensive!
- Fun and useful when completed
- Learn something along the way
- Build it in one evening
- It works!
So where do all these “Fun & Easy Projects” come from?
• Bi-weekly live “radio program”
• TONS of great fun & educational topics
• Some pretty good projects too
• https://dl.dropbox.com/u/43021514/CWTD/TeamspeakChat.html
The Crystalizer

www.njqrp.org/atlanticon/Crystalizer.html
Rookey

http://www.midnightdesignsolutions.com/rookey/index.html
Rookey
Boy Scout Regen

http://www.njqrp.org/regen/index.html
Boy Scout Regen

http://www.njqrp.org/regen/index.html
REGEN SHORTWAVE RECEIVER
CONSTRUCTION LAYOUT

NOTE: Front panel components shown not to scale ... aligned for easy viewing
Badger

http://www.njqrp.org/badger/index.html
Badger

http://www.njqrp.org/badger/index.html
Badger

http://www.njqrp.org/badger/index.html
Signal Quality Meter

http://www.njqrp.org/sqm/index.html
Signal Quality Meter

http://www.njqrp.org/sqm/index.html
CWTD Arduino Clock

https://dl.dropbox.com/u/43021514/CWTD/Feb5.html
CWTD Arduino Clock
Arduino “Uno”

http://arduino.cc/en/Main/ArduinoBoardUno
Arduino References

Wikipedia ... http://en.wikipedia.org/wiki/Arduino
Arduino Home Page ... http://www.arduino.cc/
Arduino Software Download Page ... http://arduino.cc/en/Main/Software
Arduino Tutorial by ladyada.net ... http://www.ladyada.net/learn/arduino/
102 Projects from Make Magazine ... http://makeprojects.com/c/Arduino

Reference Books ...
The Definitive Guide to (All) Arduino Reference Books ... http://www.arduinobooks.com/
The Arduino Cookbook ... http://www.amazon.com/gp/product/0596802471/ref=as_li_ss_tl?ie=UTF8&tag=ab-checkprice-20&linkCode=as2&camp=217145&creative=399369&creativeASIN=0596802471
Programming Arduino - Getting Started With Sketches ... http://www.amazon.com/Programming-Arduino-Getting-Started-Sketches/dp/0071784225/ref=sr_1_4?ie=UTF8&qid=1358741928&sr=8-4&keywords=arduino
30 Arduino Projects for the Evile Genius ... http://www.arduinoevilgenius.com/

Purchase the Arduino at ...
Adafruit Arduino Starter Pack ... http://www.adafruit.com/products/68
Maker Shed ... http://www.makershed.com/Arduinos_Microcontrollers_s/43.htm
Mintduino ... http://blog.makezine.com/2013/01/18/mintduino-game-pack-learning-arduino-from-the-ground-up/
Atmega AT328P chip with programmed-bootloader ... http://www.adafruit.com/products/123
Islander Audio Amp

http://www.njqrp.org/islanderamp/index.html
Islander Audio Amp

K8IQY SW-30++ Auxiliary Audio Amplifier

Jim Kortge, K8IQY
June 17, 2001
Revised: 07092001b
Elsie Meter

http://www.amqrp.org/kits/elsie/index.html
Elsie Meter

http://www.amqrp.org/kits/elsie/index.html
Rainbow Tuner

http://www.njqrp.org/Rainbow/rb_home.html
BLT Tuner

http://www.norcalqrp.org/norcal_blt.htm
The SNAP

http://www.njqrp.org/atlanticon/atlanticon%202000/snap.html
The SNAP

http://www.njqrp.org/atlanticon/atlanticon%202000/snap.html
FireBall-40 QRPPp Transmitter

http://www.njqrp.org/fireball40/index.html
Retro SWR Meter

Retro SWR Bridge Schematic

Operation:
- S1 to SWR
- S2 to FWD
- Key xmr
- Set R1 to MTR F.S.
- S2 to REV
- Read MTR

Meter Readings:
- Full Scale Hi SWR
- ½ scale 3:1 SWR
- 1/3 scale 2:1 SWR
- 1/5 scale 1.5:1 SWR
Tuna Tin 2 Transmitter

http://www.njqrp.org/tuna/tuna.html

http://www.qrpme.com/

Tuna Tin 2 Transmitter

Designed by Doug Demaw, W1FB

Updated Parts by Dave Meacham, W6EMD

[Diagram of Tuna Tin 2 Transmitter]
PIC-EL

- PIC Training Platform for Hams
Growler SWR Meter
https://dl.dropbox.com/u/43021514/CWTD/Feb%2028.html
Growler SWR Meter

Square wave output with a pitch inversely proportional to SWR
PSK Audio Beacon

http://www.njqrp.org/psk31beacon/psk31beacon.html
PSK Audio Beacon

PSK31 Audio Beacon
G. Heron, N2APB
Rev 2.2 7/17/2001
Good Links

Chat With The Designers ... https://dl.dropbox.com/u/43021514/CWTD/TeamspeakChat.html
NJQRP Club ... http://www.njqrp.org
AmQRP Club ... http://www.amqrp.org
Atlanticon QRP Forums ... http://www.amqrp.org/atlanticon/index.htm
Midnight Design Solutions ... http://midnightdesignsolutions.com/
SDR Cube Transceiver ... http://www.sdr-cube.com/
NUE-PSK Digital Modem ... http://www.nue-psk.com
DDS-60 Daughtercard ... http://midnightdesignsolutions.com/dds60/index.html
HC908 VFO ... http://midnightdesignsolutions.com/HC908VFO/index.html

QRP Kits ... http://www.qrpkits.com/
Kits & Parts ... http://www.kitsandparts.com/
Four State QRP Group ... http://www.4sqrp.com/index.php
NorCal QRP Club ... http://www.norcalqrp.org/
G-QRP Club ... http://www.gqrp.com/
QRP ARCI ... http://www.qrparci.org/
Softrock SDR Kits ... http://fivedash.com/
Far Circuit Boards ... http://www.farcircuits.net/

Digi-Key ... http://www.digikey.com/
Mouser Electronics ... http://www.mouser.com/
Thanks, and have fun!

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