KITS - R.F. & POWER SUPPLY PROJECTS

R.F. Amplifier Kit

A small circuit, using the Mar-6 Amplifier IC, this kit will provide as much as 20 db gain. Connect at receiving antenna input; will boost signals from 1 Mhz to 1000MHz; two RF amplifier kits may be cascaded for even greater gain. Instructions tell how to substitute a couple of capacitors for use at low, broadcast-band frequencies. Use with Scanners, Ham receivers, SWL receiver etc.



You could add a metal case and RF connectors for permanent use. May be used to boost signal for 'scope or frequency counter as well.

No.80-045

Introduction to a Power Supply

(Practical hobbyist power supply)

A practical battery eliminator for circuit projects at the bench. This is a basic power supply using two IC's (7805) regulators. User needs to supply a transformer up to 20V AC for input (we suggest scrounging from old radio or surplus catalog). Outputs are



regulated, one variable and one constant 5V DC. A good introduction to power supplies.

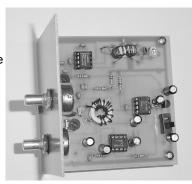
No. 80-040

Amateur Radio Receiver Kits (CW, SSB)

Compact and easy to build and receives the entire band, CW and SSB. Great for monitoring W1AW code practice, ease-dropping on Nets etc. Operates on a 9 Volt battery, and has audio output enough to drive a speaker; or, use with headset.

These circuits employ a unique three-pot varactor tuning system. You can set the ends of the band that you wish to receive; or, receive all of the band. The advantage to receiving just a portion (say just CW or just SSB) is that the tuning becomes much more precise and can eliminate adding an expensive ten turn potentiometer in order to achieve fine tuning. The PC board size is 3" by 3", which will fit nicely in a number of cases along with a battery. You will need to find your own (2)knobs, antenna connector, speaker (80hm) and case.

20-Meter Receiver	Kit	No.	80-1420
30-Meter Receiver	Kit	No.	80-1430
40-Meter Receiver	Kit	Nο	80-1440



VFO KITS, for Ham Radio.

Here are two kits that are a lot of fun to build and can be used in a number of Amateur Radio projects. Not sure what to do with a VFO? Well, included with the VFO kits are schematics for a transmitter and receiver. Or use the VFO for your own projects

The circuit is a Clapp Oscillator and our designer is proud of his "triple-pot" circuit design. Two of the pots are trimmers, used to select the segment of the band that you want to tune. Select just the CW portion of the band, SSB portion or the entire band. The narrower slice of the band that you select, the finer the main tuning will be. Which can eliminate a costly ten turn pot, vernier dials etc. These are ideal VFO circuits for QRP rigs.

40-METERS VFO Kit

Tunes to from below 7.00 MHz. and up to about 7.300 mHz.. Included is information for making the circuit into a 30 meter VFO with some additional parts that you supply. Provision has been made for RIT/XIT offset. Buffered output; board size 1.6" x 3.0", 12V DC operation.

40-Meter VFO Kit..... No. 80-1404

80-METERS VFO Kit

Tunes from below 3.5MHz up to about 7.300 MHz.. Provision has been made for RIT/XIT offset. Buffered output; board size 1.6" x 3.0", 12V DC operation.

80-Meter VFO Kit......No. 80-1408



Variable Power Supply

A very basic power supply that can be adjusted over a range of about 1.5 to 35 volts DC. If you add a heat sink (included), you can run it as "hot" as 2 amps output; otherwise about 60mA @ 12



(PHOTO SHOWS BOARD ONLY)

volts. This is a text book circuit using an LM317, which is a 3 terminal regulator in a TO-220 package. Input can be either AC or DC; DC input must be at least 2.5V above the required voltage output. You could use a surplus transformer from 12 volts up for input

No. 80-680

Variable Power Supply

The kit comes "complete", which means the transformer A.C. power cord and a fuse holder are included. Most power supply kits leave finding such things to the builder. Output via screw terminals, making this a good bench supply for kit builder.

Voltage may be varied from a volt up to about 24 volts DC and is well regulated and voltage is very stable. Using the LM317T I.C. and including the Philmore TR241 (24 volt, 1 amp) transformer

permits an output range from about a volt to 21 volts. Higher current is available at the higher voltages but lower voltage are at lower currents; for example, around 5 volts output maximum is around 350 mA. Maximum current is available in the 18 to 22 volt range

. Ripple (on line noise) is finite, making this a good kit for those audio and R.F. projects where you do not care to hear power line noise. Note: We do not recommend a beginner build this kit unless he has some experienced help. Any kit that connects to the A.C. power line is potentially dangerous to the inexperienced.

