

Kits Galore!

Summertime, and the living is easy. It's the perfect time to build a kit! You can do it all at once in a mad frenzy, or work on it piecemeal. Either way, you're guaranteed fun, education and true pride of ownership. Mike Gruber, WA1SVF, ARRL Laboratory Engineer, briefly discusses kit-building and provides a valuable list of kit suppliers.
—WB8IMY

Q: I'd sure like to try an electronics project, but I'm not quite sure where to begin. I'm considering kits, but is kit building really worth the trouble?

A: Well, when I was a youngster I would watch with fascination as my Dad assembled his latest Heathkit project in our basement. Smoke would often curl up from his soldering iron late into the night. Friends and family would gather for the grand unveiling of his latest triumph. A drawer full of those red plastic nut starters that came with each and every kit (remember those?) is still in our basement somewhere! I received quite an education when I was finally old enough to follow in Dad's kit-building footsteps. This early exposure to electronics inspired me to obtain an Amateur Radio license and even pursue a career in electronics.

Q: Are kits difficult to build? What ever happened to all those classic kit manufacturers, anyway? What about Heath? I've heard that they're out of the kit business. Does this mean that kit building is a thing of the past?

A: Whoa! Easy, big fella. Let me answer your questions one at a time.

First, the level of difficulty varies with the individual kit. A simple kit can require only minimal time, skill and experience to put together. Complex kits can, of course, be considerably more difficult. It is important to determine which kits match your abilities. When selecting a kit, be sure to consider any additional purchases that may be required, such as knobs and cabinets. You may also need test equipment to complete the project.

Second, it's true that many of the old kit manufacturers, such as Eico and Knight-Kit, are no longer in the kit business. Back in the days of point-to-point wiring and vacuum tubes, a kit manufacturer stood a decent chance of succeeding in the consumer electronics market. They offered better products at lower prices—including products not normally available. Today, the miniaturization of electronics, modern assembly techniques, and inexpensive labor have taken away much of the competitive edge that kit makers enjoyed. Heath, however, is still making kits, mostly of the educational variety. These may be excellent starter kits to get your feet wet.

Finally, it's not true that kit building is a thing of the past. True pride of ownership and the thrill of doing it yourself are things that

mass-produced products don't always offer. Many companies still make kits to fill this niche. Just about any skill level can be accommodated if you know where to look.

Q: Okay, you've sold me. I want to run home right now and warm up my soldering iron! I'll bet you've even compiled a list of kit manufacturers for me. How about it?

A: Yep, here's the list. Happy kit-building!

A & A Engineering

2521 W LaPalma, Unit #K
Anaheim, CA 92801
tel: 714-952-2114; fax: 714-952-3280

A & A offers a wide range of amateur related kits from QRP transceivers to a digital frequency synthesizer and a 450-MHz spectrum analyzer. Electronic components, enclosures, ICs and ham-related publications are also available. Catalog available.

Antique Electronic Supply

6221 S Maple Ave
Tempe, AZ 85283
tel: 602-820-5411; fax: 602-820-4643

Numerous kits for reproducing antique and vacuum tube radios are available. Antique Electronic Supply is also an excellent source for parts, components and documentation for antique radios. Catalog available.

C & A Electronic

PO Box 25070
Athens, 10026 Greece
tel: 52.42.867; fax: 52.42.537

Established in Athens in 1977, C & A Electronic has now grown to 15 employees. Their current 53-page catalog includes over 150 kits with, according to Simeon Krizias, SV1AYI, of C & A, more on the way. The projects range from the relatively simple to the complex. A special US price list is available.

CCI (Communications Concepts, Inc)

508 Millstone Dr
Beavercreek, OH 45434
tel: 513-426-8600; fax: 513-429-3811

CCI's catalog features many linear amplifiers and projects from Motorola Applications Notes. Amplifier boards and various components are offered separately as sets. Other kit projects include an ATV receive converter and an audio squelch control. Semiconductors and other components can also be purchased separately. VISA and MasterCard accepted.

Cirkit Distribution Ltd

Park Lane
Broxbourne
Herts EN10 7NQ, England
tel: 44-992-444111; fax: 44-992-464457

More than 100 kits for the radio amateur, including preamps, power amps, converters, speech processors and a dip meter. Catalog is £1.90 plus £3.60 for air mail postage.

Cirkit does not have a price list in US dollars, but does accept MasterCard, VISA and American Express.

Curry Communications

852 North Lima St
Burbank, CA 91505
tel: 818-846-0617

Two kits currently available:

The 80-AU converts the entire LF/VLF band to the 80-meter amateur band. Cost is \$59.95.

The SAM-1 is a transverter that enables operation on the license-free 1750 meter band with an 80-meter amateur transceiver. Cost is \$89.95.

Down East Microwave

RR 1, Box 2310
Troy, ME 04987
tel: 207-948-3741; fax: 207-948-5157

Down East Microwave (DEM) is owned and operated by Bill Olson, W3HQT. Numerous kits are offered for VHF, UHF and microwave projects. Down East Microwave also carries an extensive line of antennas. Office hours are 9 AM to 4:30 PM Eastern Time, Monday through Friday. Call anytime; Bill says to be sure to leave a message on the machine if no one is available. Business and personal checks as well as VISA and MasterCard are accepted. COD orders carry a \$4 service charge. Catalog available.

FAR Circuits

18N640 Field Court
Dundee, IL 60118

FAR Circuits provides PC boards for a number of QST projects.

Hamtronics, Inc

65 Moul Rd
Hilton, NY 14468-9535
tel: 716-392-9430; fax: 716-392-9420

A wide variety of amateur related kits are available. Kits include VHF and UHF exciters, linear amplifiers, receivers, repeaters, repeater accessories, preamps and receive converters. Some kits are FCC type accepted for commercial service. A 40-page catalog is available.

Heath Company

PO Box 1288
Benton Harbor, MI 49023-1288
tel: 800-253-0570

Although Heath's kit line is no longer as extensive as many old-timers may recall, it still carries a number of "build your own" electronic projects. The current kit line includes two weather computers and numerous educational kits, such as a portable radio, an electronic cricket and a power supply. VISA, MasterCard and American Express accepted.

John Langner, WB2OSZ

115 Stedman St
Chelmsford, MA 01824-1823

John provides the Pasokon SSTV project

kit featured in January 1993 *QST*. One empty expansion slot in a 286 or faster computer, 640K of memory, a color monitor and a VGA display adapter are all you need to send and receive all popular modes of SSTV. The complete kit is \$199.95, or \$229.95 for an assembled and tested unit.

Kanga US

Bill Kelsey, N8ET
3521 Spring Lake Dr
Findlay, OH 45840
tel: 419-423-5643 (7 PM to 11 PM Eastern Time only)

Bill, N8ET, operates Kanga US as an importer of QRP kits manufactured by Kanga Products in England:

Kanga Products
Dick Pascoe, GØBPS
Seaview
Crete Road East
Folkstone CT18 7EG, England

Dick is currently the only person at Kanga in England. Kanga offers more than 25 Amateur Radio kits with emphasis on QRP. Kanga's philosophy is to keep prices low by not supplying parts typically found in most junkboxes, such as the cabinet and knobs. Send one unit of First-Class postage when requesting a catalog from Kanga US. VISA and MasterCard accepted.

Lake Electronics

7, Middleton Close, Nuthall
Nottingham, NG16 1BX, England
tel: 0602 382509

Every Lake kit is complete, down to the last component, including knobs and screws. The catalog features QRP transceivers, a receiver, an SWR meter, a power meter/dummy load, an antenna tuning unit, an audio filter and a power supply. A special price list is included for overseas customers. VISA, MasterCard and Eurocard accepted.

Mark V Electronics, Inc

8019 E Slauson Ave
Montebello, CA 90640
tel: 213-888-8988 (Catalog and information); 800-423-FIVE orders only (outside California); 800-521-MARK orders only (California residents); fax: 213-888-6868

More than 70 kits available including high-fidelity audio products, laboratory equipment, power supplies, light controllers, games and numerous miscellaneous projects. Audio amplifiers range from 6 to 300 watts. Kit difficulty levels are individually specified as beginner, intermediate or advanced. VISA, MasterCard and American Express accepted.

M.A.S. Enterprises

UHF Technik
104 King St South
St Jacobs ON N0B 2N0
Canada
tel: 519-664-1273; fax: 519-664-3082

Four kits currently available: a 6-meter SSB transverter, 2-meter foxhunting receiver, 24-cm FM TV transmitter and a baseband processor for the TV transmitter. These kits are not intended for beginners. A catalog is forthcoming. Prices range from \$69 to \$198.

Owner: Manfred H. Zielinsky, VE3ZIE.

Oak Hills Research

20879 Madison St
Big Rapids, MI 49307
tel: 616-796-0920, 800-842-3748
fax: 616-796-6633

Founded by Doug DeMaw, W1FB, and sold three years ago to Dick Witzke, KE8KL. Oak Hills Research has long been a source of QRP kits and components. Several new products are now being added to the company's line. Hours are weekdays from 8 AM to 6 PM. VISA and MasterCard accepted.

Ocean State Electronics

PO Box 1458
6 Industrial Dr
Westerly, RI 02891
tel: 401-596-3080; 800-866-6626 (orders only); fax: 401-596-3590

Kits appear on pages 56-61, 64 and 85 of Ocean State's 1993 catalog. Included are a QRP transceiver, several receiver and robot kits, a keyer and code practice oscillator, educational and training kits and electronic test instruments. VISA, MasterCard and COD accepted; \$10 minimum order. Open weekdays 8 AM to 5 PM EST, Saturday 10 AM to noon. Frank Pellicano, WB1GTK, president.

Ramsey Electronics Inc.

793 Canning Parkway
Victor, NY 14564
tel: 716-924-4560; fax: 716-924-4555

A variety of kits ranging from complete amateur transceivers to mini-kit type projects for under \$10. Products include VHF/UHF FM transceivers, HF receivers, QRP transmitters, an active antenna, a CW keyer, 20-watt amplifier for a QRP transmitter, shortwave receiver, RDF kits and other projects. Ramsey charges a flat rate of \$3.95 for shipping, insurance and handling. Call or write for a free catalog.

Sequence Electronics

John Beech, G8SEQ
124 Belgrave Road
Coventry CV2 5BH, England

Monoband direct-conversion receiver and transmitter kits available from 80 through 6 meters. All parts, including a diecast box and printed circuit board, are included. A three-band version is also available. Other kits include a receive and transmit converter from 10 to 6 meters and an FM transceiver for 50, 70 or 144 MHz. All Sequence kits are specified as intermediate-level projects.

Townsend Electronics

PO 415
Pierceton, IN 46562
tel: 800-944-3661 (US Only)
219-594-3661; fax: 219-594-5580

Townsend Electronics carries kits by one of the largest kit manufacturers in England:

C. M. Howes Communications
Eydon, Davantray,
Northants NN11 6PT, England
tel: 0327 60178

Townsend's 26-page catalog features receivers, transmitters and transceivers. Also included are such projects as a speech proces-

sor, a VHF converter, a code-practice oscillator and a digital frequency display. All kits are engineered by Dave Howes, G4KQH, a former BBC engineer, who founded C. M. Howes in 1983. Townsend Electronics accepts VISA and Mastercard. Amateurs outside the United States may order kits from directly from C. M. Howes (Dave requests a couple of IRCs for overseas catalog requests.)

Tucson Amateur Packet Radio (TAPR)

PO Box 12925
Tucson, AZ 85732
tel: 602-749-9479; fax: 602-749-5636

TAPR is a nonprofit research and development corporation with more than 1000 members worldwide. It was founded in an attempt to develop a low-cost Terminal Node Controller (TNC) kit. This effort resulted in the now famous TNC-1. TAPR's second development, the basis for most TNC's currently in use, is known as the TAPR TNC-2. TAPR no longer provides complete TNC kits. Instead, it has licensed several commercial manufacturers to produce the TNC-2 design. TAPR still provides the TNC-2 circuit board and associated EPROMs, EPROM codes, schematics and manuals. Modems and related hardware are still available in kit form. TAPR also offers an extensive selection of associated software. Catalog is available.

Truscott's Electronic World

Division of Shredall Pty. Ltd
30 Lacey Street
Croydon, Victoria, 3136
Australia
tel: (03) 723 3344; fax: (03) 725 9443

Resells products and kits from Dick Smith, Altronics and Arista. Several other kits also available. Most kits are not for the beginner and were featured projects in *Amateur Radio* magazine, the monthly publication of the Wireless Institute of Australia. A catalog is now in the works and new kits are being added.

624 Kits

171 Springlake Dr
Spartanburg, SC 29302
tel: 803-579-6262 (days)
803-583-1304 (after 6 PM)

624 Kits was founded several years ago by Pat Bunn, N4LTA. The name 624 was originally chosen because the company made kits for the 6-, 2- and 420-MHz bands. Even though 624 no longer makes VHF/UHF kits, the name remains. Most of the products offered by 624 are QRP in nature and many appeared in *QST*. Included are numerous transmitters, receivers, W1FB projects, the Modified Cubic Incher, the Neophyte Receiver and the Gary Breed, K9AY, receiver kit. Any kit can be returned for a full refund before assembly. Repair service is also available. Please include two units of First-Class postage when requesting a catalog.

We welcome your suggestions for topics to be discussed in Lab Notes, but we are unable to answer individual questions. Please send your comments or suggestions to: Lab Notes, ARRL, 225 Main St, Newington, CT 06111.

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