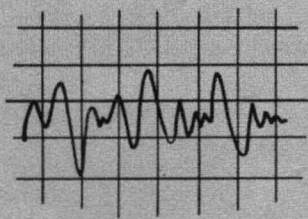


DAVCO DR 30

COMMUNICATIONS RECEIVER



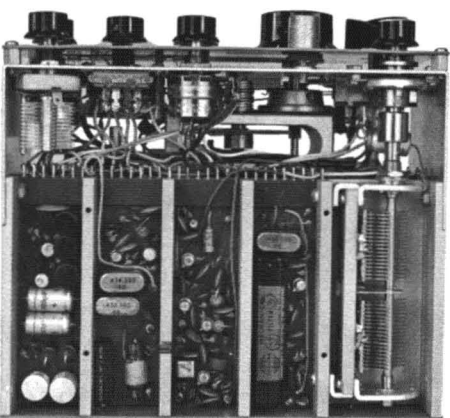
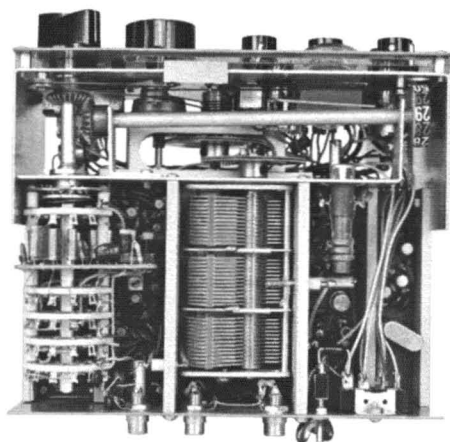
DAVCO ELECTRONICS, INC.

P. O. Box 2677
2024 South Monroe Street
Tallahassee, Florida 32304
Phone: 224-4322 (area code 904)

A high performance, dual-conversion, communications receiver for amateur applications utilizing solid-state components and featuring field-effect transistor RF stage for greater sensitivity, better image rejection and exceptional freedom from cross modulation or overloading on strong signals. The DR-30 provides the maximum in communication effectiveness under the most rigorous operating conditions. Full amateur band coverage on SSB, CW or AM, Collins mechanical filter, crystal stability and extra built-in QRM-cutting features make the DAVCO DR-30 the finest and most reliable receiver for use on today's crowded bands.

DAVCO DR-30

COMMUNICATIONS RECEIVER



NOW! The DR-30 receiver provides the extra performance and operating capabilities found only in the finest base-station receiver, combined with the rugged construction, tuning ease and compact size (4" H x 7 $\frac{1}{8}$ " W x 6" D) of a mobile unit. DAVCO's "Amateur Engineered" DR-30 meets the challenges put to it by the most demanding amateurs, no matter the preference in bands or modes of operation, and is an excellent choice for fixed, mobile or portable operation.

FIELD-EFFECT RF STAGE: Field-Effect transistors are the revolutionary new solid-state devices that make cross-modulation and overloading problems a thing of the past; they also allow superior image rejection and extreme sensitivity for weak-signal reception.

FULL COVERAGE: Complete ham-band coverage of 80 through 10 meters, the first half-megacycle of 6 meters, WWV and the 31 meter SWL band on 9.50-10.050 Mc, and optional coverage of any two additional 550 kc segments between 3.5 and 54 Mc (for CB, MARS, further 6-meter coverage, etc.)

VARIABLE SELECTIVITY: Front-panel selection of your choice of a wide IF for AM reception (6 selective elements giving a nominal 5 kc bandwidth), or a Collins 2.1 kc mechanical filter for superb SSB selectivity, or an ultra-sharp crystal filter for crowded-band CW use.

DETECTORS: Linear AM detector, separate product detector for SSB and CW utilizing a crystal-controlled BFO and carrier generator for USB and LSB.

NOISE LIMITER: True blanking action occurs before selectivity lengthens noise pulses; extremely effective on power-line and ignition-type interference.

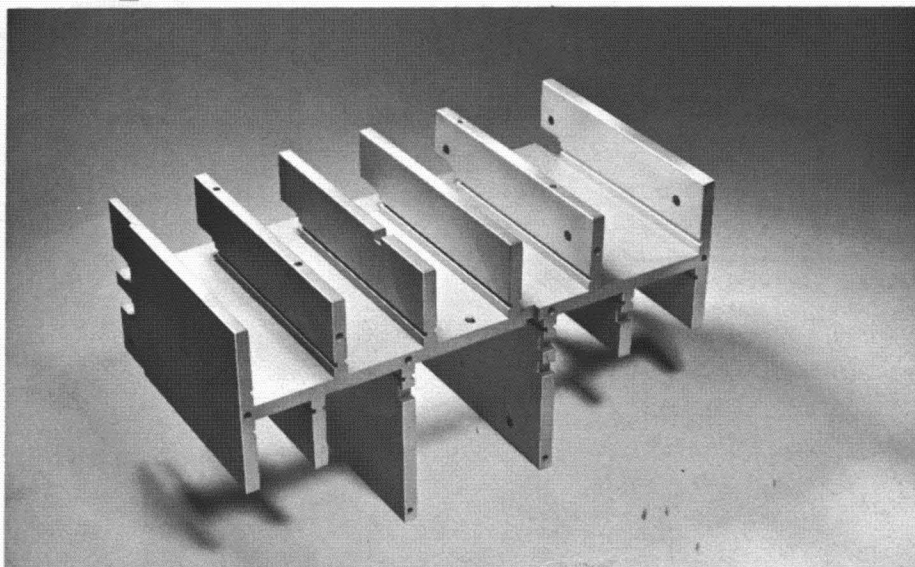
REJECTION NOTCH: Tunable notch provides more than 50 db rejection of undesired carrier. Pulls SSB and AM stations through under otherwise impossible conditions.

AGC: Full automatic gain control action on all modes, with selection of fast, medium or slow release time.

PLUS ALL THESE PERFORMANCE EXTRAS:

- Transmitter-type VFO • Crystal-controlled 1st oscillator • Separate RF and AF Gain controls
- Illuminated dial and S-meter • Built-in 100 kc. crystal calibrator
- Fully solid state—operates directly from 12-15 volts DC or accessory AC supply.

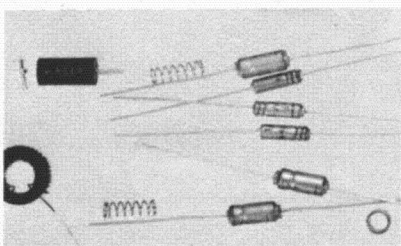
DAVCO ELECTRONICS, INC., TALLAHASSEE, FLORIDA



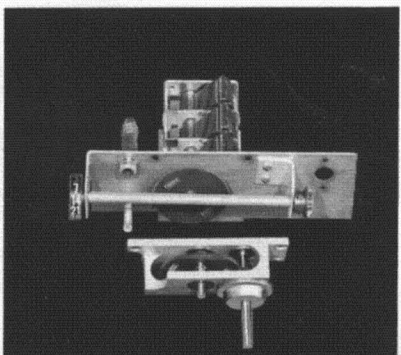
A rugged, solid 3/16" thick aluminum extrusion forms the backbone of the DR-30. This design technique (a DAVCO "first" in amateur radio design) is the basis for the extreme, rock-like stability of the DR-30.



Another DAVCO "first" for ham radio. The circuitry of the DR-30 is contained on nine plug-in modules for easy access. Circuit boards are glass epoxy to match the ruggedness of the extruded chassis. No more hours of tracing and searching for individual circuits.



Only highest quality components are used throughout the DR-30 to assure you of years of trouble-free performance. All wiring features heat-resistant Teflon covered wire in case you can't resist the urge to tinker.



High-ratio, spring-loaded, split gears give s-m-o-o-t-h tuning and the slide rule dial indicator provides direct readout after calibration. The result—zero in on that SSB signal with the greatest of ease and know that you're "right on frequency".

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DR-30

1. Significant megacycle figure appears in this window allowing direct reading of frequency. If significant figure is black, the black scale (.0-.550MC) is used; if red, the red dial scale (5-1.050MC) is used.

2. Main tuning dial is same for all bands, not reverse reading. Assures accurate calibration of all bands. Overlap at top of frequency ranges permits DX-ing on 10 meters, some MARS coverage on 4MC, etc.

3. Toggle switch provides high-frequency audio roll-off (tone control) in "A" position, especially effective with wide selectivity and for foreign broadcast reception. "B" position connects to station accessory through Jones plug on rear if desired; can be used for phone patch, coax relay, external power supply or converter, etc.

4. Notch rejection filter is tunable across IF passband; gives up to 60db. rejection of unwanted carriers or whistle for QRM-free reception.

5. Dial calibration trimmer compensates for long-term aging. Superb stability of receiver eliminates constant dial juggling.

PROFESSIONAL USERS:

You are invited to communicate with us regarding your special receiver requirements. The DAVCO Model CV-30 is based upon the proven design and capabilities of the DR-30, but it is available in rack-mounted, portable or cased versions, with or without power supplies, with variable tuning or up to 24 crystal-controlled channels. We can provide units especially suited for WWV reception, radio astronomy, bio-telemetry, geophysical experiments, monitoring of communications channels, etc.



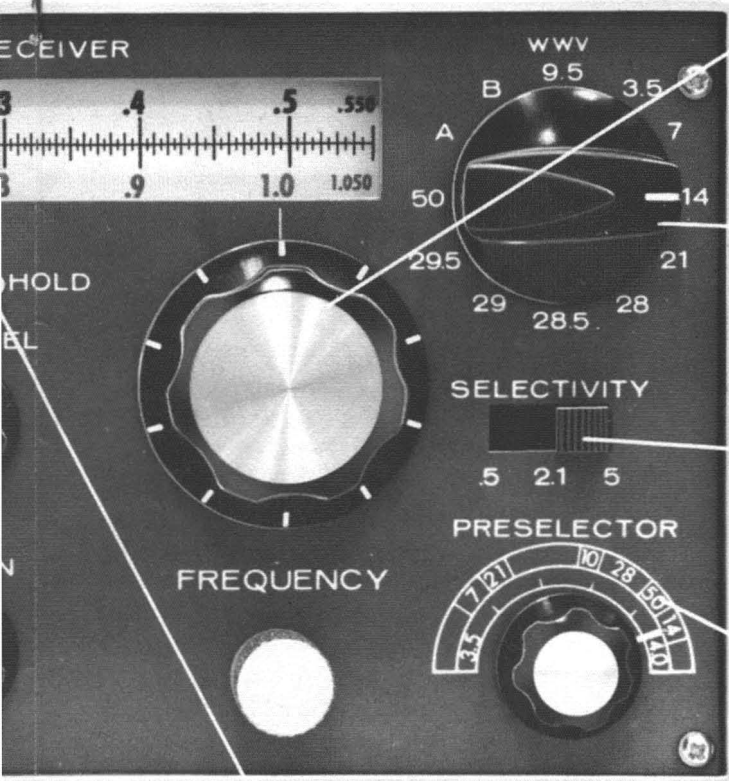
6. Noise limiter is blanking type, before main selectivity. Extremely effective on ignition-type noise and designed particularly for SSB and CW use.

NEW, COMPACT, H
SOLID-STATE
AMATEUR APPLIC
FIELD-EFFECT

THE ACTUAL SIZE

THE DAVCO

30



8. Main tuning knob is coupled to high precision dial mechanism. Incorporates ball bearings and spring-loaded split gears, for smooth, effortless tuning, zero backlash.

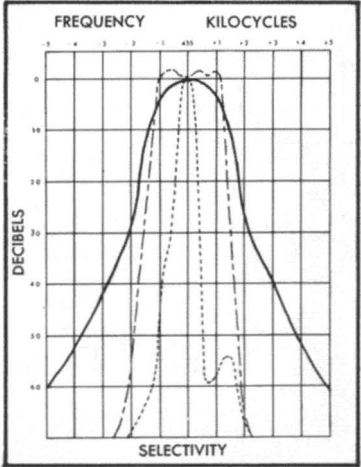
9. Receiver covers all of 80, 40, 20, 15, 10 meter bands first 550 kc. of 6 meter band, the 9.5-10.050 range for WWV and foreign broadcast, and two extra positions are available for installation of crystals for other ranges.

10. Your choice of selectivities: a wide one for AM, a Collins 2.1 kc mechanical filter for SSB and crowded band reception of AM, and a sharp crystal filter for CW.

11. Preselector tunes extremely high-Q circuits for maximum performance on each portion of each band. No compromise RF setting. Superb sensitivity on all bands.

7. Three-position switch selects hold time of AGC circuit; center no hold, left 200 msec., right 800 msec.

**ACT, HIGH PERFORMANCE
STATE RECEIVER FOR
APPLICATIONS FEATURING
EFFECT TRANSISTORS**



SPECIAL TECHNICAL FEATURES

The DAVCO DR-30 is a double-conversion superhet which employs 38 solid-state devices in circuitry designed to give the maximum in performance and versatility. There are no compromises.

The DR-30 incorporates field-effect transistors in both the RF stage and the first mixer. These devices operate at high impedances and permit better image rejection, and their inherent low noise provides outstanding sensitivity in weak-signal reception. Their greatest advantage, however, is that cross-modulation and overloading from strong stations just aren't problems any more: the DR-30 sounds quiet between stations and weak signals just pop out of the background. This also eliminates the necessity for attenuating strong signals before they reach the RF stage, since this practice is undesirable in its effects on weak signals.

Selectivity is accomplished by the use of 3 IF transformers, three ceramic Transfilters®, a 455 kc crystal filter, and a 2.1 kc Collins mechanical filter in various combinations. Switching from one to the other is done by means of switching diodes operated by DC from the front panel switch.

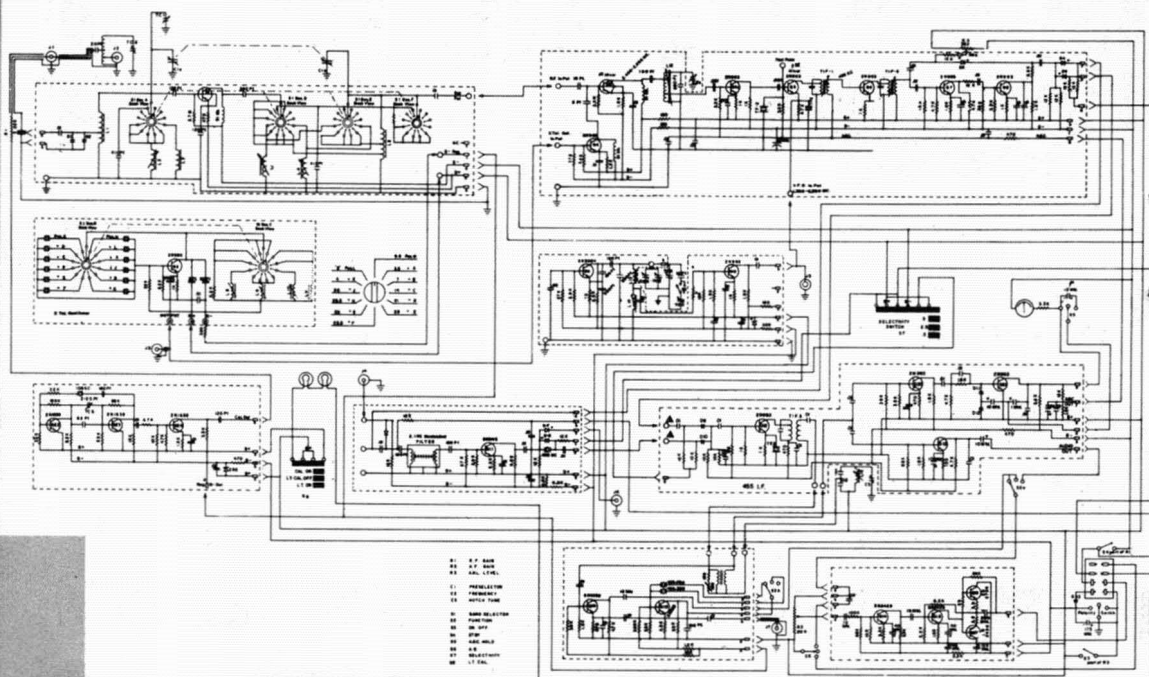
Special toroid coils, used in the VFO and RF sections account in part for the compactness of the unit. For a given Q, a toroid is much smaller, requires less shielding, and is more stable than its normal counterpart.

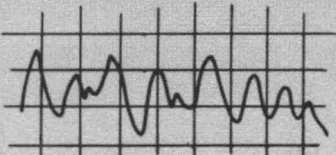
The noise limiter in this receiver is truly outstanding. It is designed for CW and SSB use, and signals truly indistinguishable without it are often made crystal-clear. Like the DR-30 T-notch filter, it is in the IF portion of the receiver and both of these circuits prevent interference from desensitizing the receiver by actuating the AGC system.

The DR-30 can be used with the chassis at either positive or negative ground; there's a diode for protection from incorrect power supply connection; there's muting provision and built-in RF protection to make it compatible with any existing equipment.

The panel lights can be switched off to reduce drain while operating from batteries, and varying input voltages have no effect on stability. The audio output matches a wide variety of speaker and earphone impedances. There's a dial drag knob which can virtually lock the receiver on a given frequency or allow free-wheeling of the ball-bearing drive unit. Output jacks on the rear of the receiver allow access to the crystal oscillators, the VFO, and the mechanical filter for use with companion transmitters or home-built equipment. There's even a front-panel switch wired to the rear connection plug to allow control of other accessories such as phone patch, antenna selection relay, etc.

The Davco DR-30 is truly a receiver "Amateur-Engineered" to meet the requirements of the most demanding amateur.





DAVCO

ELECTRONICS, INC.

DAVCO's Design Philosophy

Through a philosophy—both imaginative and conservative—which combines the newest, improved components with the most sophisticated circuit techniques, DAVCO has been able to conceive and produce some of the finest equipment available to the amateur today.

Our constant and continuing attention to the requirements of the amateur fraternity and our use of only the highest quality materials result in equipment which provides full performance capability . . . great pleasure and confidence in operation . . . and full flexibility for the amateur's every application.

The DR-30 is available direct from the factory. The price of \$389.50 includes shipping costs within the U.S.A. A time payment plan requiring 10% down payment is available. Export orders receive prompt attention, and there is no charge for export packaging. Extra crystals can be installed at the factory in the A and B bandswitch positions covering any 550 kc. ranges between 3.5 and 54 megacycles. The charge is \$6.00 per crystal. Crystals can also be user-installed.

Substitution of ranges other than those provided in the standard DR-30 can be made at extra charge. Please write stating your requirements. For calibration, it is desirable that any extra or substituted bands start on the megacycle or the half-megacycle. Coverage of the CB range can be accomplished by a single crystal providing 26.9 Mc-27-450 Mc. coverage, but a correction of exactly 100 kc. will have to be applied to the frequency reading.

The DR-30 is fully guaranteed for 6 months.

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