THE FINEST AMATEUR RADIO EQUIPMENT FOR MAXIMUM OPERATING PLEASURE

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CALLING ALL HAMS!

This is W60GM of Oceanside, California, and I want to let you in on something new at Swan Electronics!

It is the SWAN FINANCE PLAN. Set up with one purpose in mind. To make it easier for every ham shack from the North Pole to Antarctica, to have the best possible equipment at the lowest possible cost.

The Swan Finance Plan applications are for the exclusive convenience of our ham friends. You will find one intended for your use inside the back cover of this catalogue.

As soon as your account is opened, you'll find it easier than ever to purchase the equipment of your choice; from the Swan Factory or one of our participating dealers. ---No finance charges if you pay for your purchases within 25 days of billing, or you can choose to extend your payments in amounts adjusted to the size of your balance.

Remember, this plan is handled BY Swan, FOR Swan's selected friends. We'll be watching for that application from you.

73,

George W. McGinley
George W. McGinley, W60GM
EVERYTHING YOU WANT IN A TRANSMITTER YET DESIGNED FOR EASE OF OPERATION.

1. Microphone jack.
2. Function switch: in “spot” gives a true carrier for zero-beating the receiver... “VOX or “PTT” operation at a flip of the switch. Manual transmit/Tune.
3. Dial set control: selects 200 kc segments of the 80, 40, 20 and 15 meter bands. On 10 meters, selection is in 500 kc segments.
4. Tuning eye shows relative output and instantaneous modulation level.
5. The smoothest tuning system on any rig: this large knob and dial give unsurpassed feel. With 2 kc calibration on the lower bands, frequency readout to 500 cps is a breeze. On the 10 meter band, dial calibration is in 5 kc increments.
6. P.A. Load: matches the final to your antenna.
7. P.A. Plate tuning: for adjusting the powerhouse final to over 600 watts P.E.P. input.
9. High/Low power switch: With a flip of the switch, you can reduce power to 75-100 watts. Great for driving transmitters or amplifiers that require lower drive levels. Just right for the novice operator.
10. AC Power On/Off.
11. CW Key Jack: no hunting around back; out front where it belongs.
12. P.A. Grid tuning.
13. Carrier balance: not hidden inside; allows you to keep carrier level where you want it at finger’s touch.
14. Microphone Gain: in SSB or AM, controls modulation level; in CW, controls the sidetone level to the receiver speaker.
15. Sideband/CW switch: selects the sideband you wish to work, or inserts full carrier for CW transmission.

BLOCK DIAGRAM
600T TRANSMITTER

THE POWERHOUSE PAIR: 600T and Mark II Linear. Easily reaches the full legal limit of power in all modes.

All prices and specifications subject to change without notice.
THE ULTIMATE RECEIVER FOR YOUR HAM SHACK.

SWAN 600-R RECEIVER

The perfect receiver for your ham shack. Whether your interest is in phone or CW, DX or rag chewing, the versatile 600R will provide more operating pleasure than you ever dreamed possible. With its tremendous sensitivity, selectivity, stability, and rugged construction, it outperforms anything else on the market. The ultra-smooth tuning system is incomparable, something you'll have to feel to believe. Swan's exclusive single conversion design results in fewer image and spurious responses.

The 600R can be interconnected with its matching twin, the 600T transmitter, or with a Swan 500C, 500CX, 270, or 270B transceiver.* This provides you with a completely integrated station with transceive operation on either VFO, or split frequency operation with the flip of a switch. When used with the 600T transmitter, you have the choice of full break-in CW or semi-break-in.

Of course, the 600R will also operate with any other transmitter, requiring only antenna and muting connections.

Additional frequency coverage: (a) Many MARS frequencies are within the normal tuning range of the 600R. (b) For crystal controlled network operating, the model 510X oscillator plugs directly into the 600R, permitting selection of up to 10 crystal control channels between 3 and 24 mc. (c) The Model 330 general coverage tuner plugs into the 600R, making it an ideal communications receiver for the HF spectrum from 3 to 30 mc.

600R Less Speaker .......................................................... $395
600R Custom. Same as standard except with I.F. Noise Blanker and IC Audio Filter factory installed. Less Speaker .......................................................... $495
600R or 600R Custom with SS-16B Super Selective Filter, add $60.

Accessories:
- Matching speaker cabinet with high quality 5x7 inch speaker, tone control switch, and headphone jack, Model 600S Illus. above .................................................. $18
- Deluxe speaker includes FP-1 Phone Patch, Model 600SP ........................................... $59

* To interconnect the 600R with a 500CX, Cable Kit No. CK-1 is required. For interconnection with a 500C, 270, or 270B transceiver the same cable kit is required with minor modification to the transceiver ........................ $12

600R SPECIFICATIONS:

SSB, CW, AM and FSK superheterodyne receiver • Frequency range with built-in tuning system: 3.4 to 4.4 mc, 6.7 to 7.7 mc, 13.8 to 14.8 mc, 20.9 to 21.9 mc, 27.5 to 30 mc • With external tuner, Model 330: general coverage from 3 to 30 mc • With external oscillator, Model 510X: 3 to 24 mc, 10 crystal positions. These external oscillators plug directly into the 600R. • Ultra-smooth vernier tuning, with large knob and dial, gives you the incomparable feel of a Swan tuning system • Sensitivity: 1/4 microvolt at 50 ohms for 10 db signal plus noise-to-noise ratio • Selectivity: 2.7 kc bandwidth with 1.7 shape factor is standard • Options include 0.6 kc CW filter, 6 kc AM filter, and SS-16B super selective filter • Crystal calibrator with 25 and 100 kc selection • Hybrid design: 7 tubes, 8 transistors, 12 diodes. Transistors used where they provide definite advantage. Tubes used where they still provide superior performance • Features Swan's exclusive Single Conversion design, with fewer spurious responses than multi-conversion designs. • Fully compatible with 600T transmitter, providing for transceive operation as well as separate frequency control. Also, CW sidetone and genuine CW break-in operation. Also compatible with Swan 500C, 500CX, 270, and 270B transceivers. Cable kit is available for interconnection with transceivers. 600-T includes cable kit • Built-in AC power supply • Dimensions: 15 in. wide, 6 1/2 in. high, 12 in. deep. • Shipping Weight: 26 lbs.
PROVIDES REAL OPERATING PLEASURE WITH CONVENIENT, EASY TO READ PANEL CONTROLS.

1. Large illuminated "S" meter for easy reading.
2. Dial set control: selects 200 kc segments of the 80, 40, 20 and 15 meter bands. On 10 meters, selection is in 500 kc segments.
3. The smoothest tuning system on any rig: this large knob and dial give unsurpassed feel. With 2 kc calibration on the lower bands, frequency readout to 500 cps is a breeze. On the 10 meter band, dial calibration is in 5 kc increments.
4. Band selector: switches to the proper tuned circuits for operation on 5 frequency bands.
5. Preselector tuning: 6:1 vernier, continuous tuning from 3 to 30 mc, with calibrated dial scale.
6. AGC selector: fast release, slow release, or AGC off.
7. 600 SP Deluxe Speaker with FP-1 Phone Patch.
9. VFO selector: permits separate control of receiver and transmitter frequencies, transceive on the Receiver VFO, or transceive on the Transmitter VFO.
10. Noise Blanker
11. Selectivity: Swan's superior 2.7 kc crystal lattice filter with 1.7:1 shape factor and 100 db rejection makes the going easy on our crowded bands. Or, if you want super selectivity, the SS-16B filter with 1.28:1 shape factor and 140 db rejection is optional. Two extra switch positions provide for addition of a CW filter with 600 cycle bandwidth, and a 6 kc AM filter.
12. Mode selector: select the mode you desire: AM/NORMAL sideband/OPPOSITE sideband. (NORMAL sideband is LSB on 80 and 40 meters, USB on 20, 15 and 10).
13. RF gain: note separate controls... no hunting behind the AF gain for that RF gain control.
14. AF gain control and on/off switch: full three watts of the cleanest audio around.
15. I.C. Notcher Peaker

SELECTIVITY OPTIONS:
The following crystal lattice filters for 600R and 600R Custom may be ordered installed at the factory, or purchased separately for field installation.

(a) CW Filter with 600 cycle bandwidth ........... $22
(b) AM Filter with 6 kc bandwidth ................. $29
(c) Model SS-16B Super Selective Filter replaces standard 2.7 kc filter. Features shape factor of 1.28 and ultimate rejection of more than 140 db. Factory installed in place of standard filter (specify with order) additional cost is $80.
If ordered separately for field installation, price of the SS-16B is ........... $75

600R CUSTOM FEATURES
The 600R Custom retains all the basic features of the standard 600R, while adding the following deluxe features.

(a) The integrated circuit audio filter provides both the phone and CW operator with a truly effective aid for reducing QRM. For the phone man, its 50 db tuneable notch will practically eliminate annoying heterodynes. In the peak mode, it will accentuate a narrow band of audio and attenuate all others providing extremely narrow band operation for CW. See curves page 14. You'll find that this feature alone is easily worth the additional cost.

(b) The NB-600 I.F. noise blanker is extremely effective in eliminating impulse noise such as auto ignition and erratic power line noises. Compared to any other noise blanker on the market, you'll find the Swan NB-600 is the most effective by far. With two levels of blanking available, you can select the proper amount for the existing noise problem and band conditions.

600R Custom ............... $495
SWAN TWINS...everything you want in a complete home station!

When used with the Model 330 External Tuner, the 600R becomes a general coverage receiver with 3 to 30 mc coverage (except for an I.F. guard band from 5.4 to 5.6 mc). Amateur band coverage with the internal VFO is retained, with the 330 switchable in or out with a simple front panel control.

Model 330 General Coverage Tuner... $129

The Swan Twins are unsurpassed for operating pleasure. Everything you could possibly desire in a receiver/transmitter combination. Offering you features such as transceive operation on either VFO, split frequency operation, or break-in CW. Convenient, easy to read panel controls that are sensibly positioned make operation of the Swan Twins a real pleasure.

COMBINE THE 600R WITH A SWAN TRANSCEIVER FOR THE BEST OF BOTH WORLDS UNCOMPROMISING FIXED STATION... COMPLETE COMPACT MOBILE STATION

When operated with the 600R Receiver, the 270B Transceiver offers you a compact “take it with you” station, or an uncompromising fixed station set-up. When operated together, the 600R VFO can be used for extremely accurate frequency read-out. When on the road or out on vacation, the 270B makes the ideal self-contained amateur radio station.

Here is the 600R Receiver being used as a home station companion to the 500CX Transceiver. This combination gives true flexibility, while retaining the portability of the transceiver. The 600R provides separate frequency control, or you can transceive on either the 500CX VFO or the 600R VFO.
PERSONALIZED CALL LETTER PLAQUE

Yours FREE when your credit application is approved and you place an order with the factory. This handsome self-standing plaque is personalized with your Call Letters.

If you would like to purchase a personalized plaque with your Call Letters affixed, please send $2.00 to cover handling and shipping costs to: SWAN ELECTRONICS, Dept. PL 305 Airport Road Oceanside, CA 92054
THE MOST POPULAR AMATEUR TRANSCEIVER IN THE WORLD!

SWAN 500CX
550 WATTS—5 BANDS—SSB-CW-AM TRANSCEIVER

Standard of comparison... The Swan 500CX has become the most popular amateur transceiver because of its reputation for reliability and unsurpassed performance. With a 550 watt P.E.P. power rating, it makes an ideal rig for your ham shack, or gives you home station performance when you're driving down the highway. The 500CX features single conversion which results in greatly reduced image and spurious response. The successful application of this design is made possible by the unique combination of a high frequency I.F. system and a highly stable multi-range variable frequency oscillator.

The Velvet Tuning dual-ratio planetary dial drive in the 500CX is without question the smoothest system you'll find. It is virtually free of backlash! Sensitivity of the Swan receiver circuitry is second to none. Using the best vacuum tubes available for the R.F. amplifier, signal to noise ratios run as high as the state of the art permits, without the inherent overload problems found in solid state receivers. The automatic gain control circuit employed in the 500CX further reduces cross modulation and front-end overload to extremely low levels.

Selectivity... Swan's 5.5 mc 2.7 kc bandwidth design produces the optimum shape factor, steepest skirts, and greatest ultimate rejection available. The result is maximum readability of voice under conditions of noise and QRM, making operating a pleasure. Audio response is virtually flat from 300 to 3000 cycles, which is why Swan transceivers consistently sound better than others which pass 300 to 2400 cycles or less.

500CX, less power supply ........................................... $489
With SS-16B super selective filter: Add $60.

SPECIAL FEATURES:
- 550 Watts P.E.P.
- Amplified automatic gain control circuit. Fast attack results in exceptional receiver control with no "pumping" effect.
- Built-in 25/100 kc solid state crystal calibrator.
- Sidetone oscillator for CW, pleasant sounding sine wave.
- Amplified Automatic Level Control for maximum "talk power" and less critical Mic Gain adjustment.
- Shifted carrier CW—eliminates "leapfrogging" when operating CW.
- High stability solid state VFO.
- Single conversion design for fewer spurious responses.

Illustrated is the 600R Receiver being used as a home station companion to the 500CX Transceiver. This combination gives you a complete home station, while retaining the portability of the transceiver. The 600R provides separate frequency control, or you can transceive on either the 500CX VFO or the 600R VFO.

GENERAL SPECIFICATIONS:
Frequency range: 3.5-4.0 mc, 7.0-7.45 mc, 14.0-14.45 mc, 21.0-21.45 mc, 28.0-29.7 mc
- Extended frequency coverage for MARS operation with plug-in crystal oscillator accessory, Model 510X. 5.5 Hz quartz crystal filter. Finest in the industry, 2700 cycle bandwidth, 1.7 to 1 shape factor at 6 and 60 db, more than 100 db ultimate rejection.
- Selectable upper and lower sidebands.
- Solid state VFO, highest stability, temperature and voltage compensated.
- 13 vacuum tubes, 7 transistors, 11 diodes.
- Height 5 1/4", Depth 11", Width 13". Shipping Weight 21 lbs.

TRANSMITTER SPECIFICATIONS:
Power rating: 550 watts P.E.P. input, 360 watts CW input, 125 watts AM Input. Two 6LQ6 tubes. Suppression: unwanted sideband down more than 50 db, carrier down more than 60 db, third order distortion down approximately 30 db. Audio bandpass: 300 to 3000 cycles, < 3 db. Output circuit: wide range Pi, coarse and fine adjustment. Amplified ALC, increased voice power. Automatic voice controlled transmit with plug-in VX-2 accessory.
- CW keying, grid-block system, off-set transmit frequency.
- Semi-Break-in CW operation with plug-in VX-2 accessory.

RECEIVER SPECIFICATIONS:
Sensitivity: requires less than 1/2 microvolt at 50 ohms for 10 db S/N ratio
- Precision tuning: velvet-smooth dual ratio, zero backlash. The finest tuning system on the market.
- Audio fidelity: 300 to 3000 cycles,
- 3 db: Amplified AGC, fast attack, no pumping, controlled decay.
- S-Meter circuit functions automatically in receive mode.
- Automatic noise limiter, with panel on-off switch.
- CW sidetone circuit for monitoring CW keying.
ASK THE HAM WHO OWNS ONE.

The block diagram of the 500CX Transceiver illustrates the straightforward design practices employed in making this the most popular and reliable amateur transceiver, ever.

ACCESSORIES

- External crystal oscillator (see page 19) Model 510X ........................................... $49
- Universal mobile mounting kit (see page 19) Model MTK ....................................... $9
- VOX accessory (see page 19) Model VX-2 ............................................................... $35
- Phone patch accessory (see page 19) Model FP-1 ..................................................... $44
- Desk Microphone (see page 19) Model 444 ............................................................... $25
- Hand Microphone (see page 19) Model 404 ............................................................... $18
- Audio Notcher-Paraker Accessory (see page 18) Model ICAF ................................. $59
- I.F. noise blanker (see page 18) Model NB500 ......................................................... $89
- Cable kit: for connection of 600R with 500CX. Complete installation kit ................. $12

POWER SUPPLIES:

Complete supply for 117 volts 50-60 cps in a matching cabinet with speaker, phone jack, and indicator light. Complete with all cables and plugs pre-wired ready to connect to transceiver.
8" x 5 1/2" high x 11" deep. Model 117-XC ................................................................. $99
Same as 117-XC but for 117-230 VAC operation. Supplied with 230 volt line cord
Model 230-XC ................................................................................................................. $105
Complete 12-14 volt DC power supply for mobile installation, with all necessary plugs and cables. Model 14-117 ................................................................................................. $129
DC converter attaches to the back of the 117-XC or 230-XC power supply for 12-14 VDC operation. Complete with cables. Model 14-C .......................................................... $65

500CX illustrated with the MARK II Linear Amplifier. Turns the 500CX into a legal limit block buster. (see page 12) MARK II .......................................................................................................................... $599

The 508 external VFO provides for transmitting and receiving on separate frequencies. Plugs directly into the back of the 500CX. Panel control permits instant selection of: (a) transceive on 500CX, (b) transmit on 500CX and receive on 508, (c) or transceive on 508. Full coverage is provided on the 10, 15, 20, 40 and 80 meter bands. Tuning dial calibrated in 5 kc increments. Vernier dial calibrated 1 kc increments. The 508 VFO has the same soft-silver tone as the 500CX. Model 508 .................................................................................................................. $129
With the addition of the MARK II Amplifier to your station, you'll have one of the biggest signals on the air. Requiring 100 watts drive (supplied by the 270B, 500CX or the 600T), the MARK II Amplifier provides your SSB, CW, AM station with the full legal power limit.

All controls are easily accessible on the front panel, which allows you to tune the MARK II quickly and accurately. The use of planetary vernier drives on both plate and loading controls gives you precise and velvet-smooth tuning. The MARK II Amplifier provides full frequency coverage of the amateur bands 10-80 meters, and also MARS frequencies. Two Eimac 3-500Z Triodes easily operate at the full legal power limit in all modes.

The power supply is a separate matching unit which may be placed beside the MARK II or, with its 4 1/2 foot connecting cable, on the floor. Component quality is of the highest caliber. Silicon rectifiers deliver 2500 volts DC in excess of 1.2 amperes. Computer grade electrolytic filters provide 40 mfd capacity for excellent dynamic regulation.

Both the R.F. deck and the power supply are cooled with a low RPM, high volume blower for maximum cooling with minimum noise. Complete with tubes and power supply...........$599

**SPECIFICATIONS**

**MARK II LINEAR AMPLIFIER**
- Two Eimac 3-500Z zero bias triodes in grounded grid circuit
- Conservative power ratings: 2000 watts P.E.P. input, 1000 watts CW-AM and RTTY input
- Full frequency coverage of amateur bands 10-80 meters plus MARS frequencies
- Wide range pi network in output tank circuit
- Drive requirements: 100 watts
- Includes antenna changeover relay
- Ceramic insulation on all tuning capacitors and RF switches
- Planetary vernier drives on both plate and loading controls
- Low RPM, high volume fan operates almost silently

Dimensions: 13 in. wide, 8 in. high, 14 in. deep.
**Shipping Weight** 24 1/2 lbs.

**POWER SUPPLY SPECIFICATIONS**
- Input voltage may be either 117 or 230 volts AC, 50-60 Hz (230 VAC operation recommended)
- Silicon rectifiers deliver 2500 volts DC in excess of 1.2 amperes
- Computer grade electrolytic filter capacitors. 40 mfd net capacity
- Self-contained fan for cool, continuous operation
- Dimensions: 9 in. wide, 8 in. high, 14 in. deep.
- **Shipping Weight** 39 lbs.

The 600T/MARK II gives you the ultimate in operating convenience, while providing maximum allowable power in all modes of transmission. If you want reports that "you're the strongest signal on the band," then the MARK II is the perfect addition to your 600T Transmitter.

Use of the MARK II Amplifier with your 500CX Transceiver puts your signal in the "big gun" category, while retaining the convenience of a transceiver. Operation and installation are extremely simple, a matter of minutes from shipping to "on the air."
Are 144 channel combinations* possible in an FM 2 meter transceiver?

Yes! In the new Swan FM 1210-A.

*Swan adds another dimension to 2 meter FM operation. Now with Swan's new independent switching for transmit and receive tuning (shown at right), combined with capacity for 12 receive and 12 transmit crystals, the FM 1210-A provides the capability for 144 channel combinations. With this wide selection of channels, crowded frequencies and unwanted QRM are virtually eliminated.

Selectivity has been greatly improved with the addition of our 16.9 mc crystal lattice filter that provides substantially greater rejection of adjacent channel interference. Extensive testing has shown that the new Swan 1210-A has selectivity equal to any 2 meter transceiver on the market, at any price.

The power of the FM 1210-A is rated at 10 watts output which, with the proper antenna, provides you with reliable communications. The output transistor is protected against damage from an improper load by an automatic protection circuit.

Each crystal has its own trimmer capacitor for exact frequency adjustment. In addition, the FM-1210-A is the ONLY 2 meter transceiver to provide a crystal oven for superior stability on those cold mornings.

Receiver audio to internal speakers is rated at 2 watts, almost twice that of most other 2 meter units, for loud clear reception of the station you are working. Provision has been made for the addition of an external speaker, and there is external keying for an amplifier.

Another exclusive and practical feature is the heavy-duty pedestal type AC power supply that is included in the purchase price that is included in the purchase price. This new feature provides for compact base station efficiency and performance.

### FM 1210-A SPECIFICATIONS

**General**
- Frequency coverage: 144-148 mc.
- Number of channels: 144 (12 cv, 12 xmt, independent switching).
- 8 crystals are included as follows: TRANSMIT: 146.22, 146.34, 146.76, 146.94.
  RECEIVE: 146.28, 146.88, 146.76, 146.94.
- Modulation: frequency modulation (phase type).
- Transmitter control: push to talk on microphone.
- Power source: AC 117 volts 50-60 cycles, DC 13.5 volts ±10%.
- Dimensions: 8 1/4" x 7" x 3".
- Weight: 8 1/4 lbs.
- Furnished with unit: dynamic microphone, antenna connector plug, spare fuses and lamps, AC power supply, DC power cord, and mobile mounting bracket.

**Transmitter**
- Fully solid state, no tubes.
- RF output power: 10 watts nominal.
- Frequency deviation: phase type, factory adjusted to 5 kHz.
- Frequency stability: ±0.001%, −30°C to +50°C, oven controlled.
- Spurious & harmonic radiation: −60 db minimum.
- Frequency multiplication: 12.

**Receiver**
- Type: superheterodyne, dual conversion 16.9 MHz and 455 kHz IF.
- Input impedance: 50 to 75 ohms.
- Sensitivity: 0.5 uv for 20 db quieting, 0.25 mv for 12 db SINAD.
- Intermodulation: greater than −55 db.
- Audio output: 2 watts at less than 10% distortion.
- Image response: −55 db.
- Squelch threshold: less than 0.3 mv.
- Adjacent channel rejection: −55 db.

**SWAN’S PRICE
$329**
Swan introduces a complete 2-element beam antenna package direct from our factory, at tremendous savings! Now, ONLY SWAN HAS IT ALL! Pack includes:

- Swan TB-2 Beam Antenna .................. $79.00 list.
- 40' Rohn-Spaulding EP-5 Tower ............. $89.00 list.
- AR-22 Rotor .................................. $59.95 list.
- 100' Rotor Cable .......................... $6.00 list.
- 100'RG-8/U Cable ......................... $16.00 list.

Total list cost $250.00

SWAN'S GIANT KILLER PRICE FOR ALL $180

Use Swan's New Revolving Credit Service

While the price is a bargain, the two-element beam antenna package is the finest you could own at any price! The Swan TB-2 antenna traps are wound on pre-grooved Lexon coil forms, and precision tuned at the factory for consistent superior performance. These are the same traps that we use on all Swan trand antennas. And only Swan offers precision cast aluminum boom to mast and other element fittings. The driven elements are supported by lightweight precision machined aluminum casting, so that they won't work loose under heaviest storm conditions. All fittings are of the same heavy-duty construction as our multi-element beam antennas. The Rohn-Spaulding EP-5 40' tower is made of the same highest quality materials that have made Rohn-Spaulding towers the largest in the nation. The tower can be ground mounted with base plate and adjustable house bracket as furnished.

Now you have the convenience of having a complete antenna and tower assembly from one source, at a 30% savings, and you can charge it all to your Swan credit account.

MONEY BACK GUARANTEE
Since this low price is possible only by direct factory purchase, you can order your Swan Giant Killer Pack and if you are not completely satisfied, return the antenna to Swan and we will refund the full purchase price to you by return mail.
OUR NEW TRANSCEIVER FOR 160 METERS

SWAN 160-X
DESIGNED STRICTLY FOR THE 160 METER ENTHUSIAST

Designed strictly for the 160 meter enthusiast, the new Swan 160X Transceiver offers features and performance never before available to the top band operator. Panel switch provides power levels of 50, 100, 200 and 400 watts P.E.P. for every geographical area of operation. Dial calibration in 1 kc increments makes exact schedule keeping a breeze. The 160X features the same velvet-smooth dial system found on the 500CX, virtually free of backlash. Whether your interest is phone or CW, the 160X offers maximum operating pleasure and convenience, less power supply $429

GENERAL SPECIFICATIONS

Frequency range: 1.8 to 2.0 mc • 5.5 mc quartz crystal filter. Finest in the industry, 2700 cycle bandwidth, 1.7 shape factor, more than 100 db ultimate rejection • Selectable upper and lower sideband • Solid state high stability VFO, temperature and voltage compensated • 13 vacuum tubes, 7 transistors, 11 diodes.

TRANSMITTER

• Power rating: 50, 100, 200, 400 watts P.E.P. input • Two 6LQ6 final amplifier tubes • Suppression: unwanted sideband down more than 50 db, carrier down more than 60 db, third order distortion down approximately 30 db • Audio bandpass: 300 to 3000 cycles • Output circuit: wide range PI, coarse and fine adjustment • Amplified ALC • Automatic voice controlled transmit with plug-in VX-2 accessory • CW keying: grid block system • Offset transmit frequency • Semi-break-in CW operation with plug-in VX-2 accessory.

RECEIVER

• Sensitivity: requires less than ½ mirovolt at 50 ohms for 10 db S + N/N ratio • Precision tuning: velvetsmooth dual ratio, zero backlash • Frequency readout: 1 kc increments • Crystal calibrator: built-in 100 kc and 25 kc • Audio fidelity: 300 to 3000 cycles ± 3 db • Amplified AGC: fast attack, no pumping, controlled delay • S-meter: functions automatically in receive mode • Automatic noise limiter, with panel on-off switch • CW sidetone circuit for monitoring CW keying. 13"x5½" high, 11" deep. Shipping Weight 21 lbs.

ACCESSORIES

OPTIONAL SS-16B SUPER SELECTIVE FILTER
Increases carrier suppression and unwanted sideband suppression to more than 80 db $75
160-X Transceiver with SS-16B Installed $489
Plug-in crystal oscillator, 10 channels. Model 510X $49
Universal mobile mounting kit (see page 19).
Model MTK $9
VOX accessory (see page 19), Model VX-2 $35
Phone Patch accessory (see page 19), Model FP-1 $44
Desk microphone (see page 19), Model 444 $25
Hand microphone (see page 19), Model 404 $18

POWER SUPPLIES

Complete AC supply for 117 volts 50-60 cps in a matching cabinet with speaker, phone jack, and indicator light. Complete with all cables and plugs pre-wired ready to connect to transceiver. Size approximately 8" x 5 ½" high x 11" deep.
Model 117-XC $99
Complete 12-14 volt DC power supply for mobile application, with all necessary plugs and cables. Model 14-117 $129
DC converter, attaches to the back of the 117-XC or 230-XC power supply for 12-14 VDC operation. Complete with cables. Model 14-C $65
In every Swan transmitter, receiver, or transceiver you'll find a crystal lattice filter which provides a degree of selectivity unmatched in any competitive equipment. If you're looking at a rig with a 455 kc mechanical filter, it has neither the shape factor nor the ultimate rejection of the Swan filter. If you're looking at a rig with a 9 mc filter, it won't be quite as good as the Swan filter. And if you're talking about a 50 kc LC filter, the comparison is even further apart. The accompanying graph illustrates these differences clearly.

The "standard" Swan filter provides a passband from 5500.3 to 5503.0 kc; a 6 db bandwidth 2700 cycles wide. This bandwidth has been carefully selected for maximum readability under severe conditions of QRM and noise level, while still allowing adequate channel separation. The 6 to 60 db "shape factor" is a most respectable 1.7, but what is even more important is that the skirts continue their steep slope well beyond the 60 db level, and do not flare out until attenuation is greater than 100 db. This flare out level is referred to as "ultimate rejection." These are the factors which determine how effectively the filter suppresses adjacent channel interference, and this is where the Swan filter shows its real merit over other types. These are not hollow claims, but actual authenticated facts!!

THE SS-16B SUPER SELECTIVE FILTER

So far we've been discussing the standard Swan filter, comparing it with what you get in competitive gear. But on the Selectivity Graph you'll notice a rather tall, skinny profile bearing the label "SS-16B." This is the amazing 16 pole filter which establishes a new standard of comparison in selectivity. With a shape factor of 1.28 and ultimate rejection greater than 140 db, it rejects adjacent channel interference by an additional 20 to 40 db. Or when used in transmit mode, unwanted sideband and carrier are additionally suppressed by the same amount. For a new experience in exceptional selectivity, order your new Swan with the SS-16B installed, or if you already have a Swan, order the Kit and install it easily in just a few minutes.

Kit price: $75. When ordering your Swan transceiver or receiver with SS-16B, add $60.

I.F. NOISE BLANKER KIT For Swan Transceivers

The NB-500 is a highly effective noise suppressing adapter for your Swan Model 270, 270B, 350C, 500C, and 500CX transceivers. The same circuit as used in the Swan 600R Custom Receiver, it amplifies and clips the noise pulses ahead of the crystal lattice filter before the pulses are stretched out by the highly selective filter. Two levels of blanking are provided with the panel control, as well as an off position. Band and noise conditions determine whether "medium" or "maximum" blanking is required. Requires modification of transceiver for connection. Kit includes all necessary parts and complete instructions.

Model NB-500 ....................... $89

AUDIO NOTCHER-PEEKER KIT... FOR Swan Transceivers

Installs easily in all Swan transceivers. Same integrated circuit as used in Swan 600R Custom Receiver, the ICAF Notcher will suppress heterodynes or unwanted CW signals by 40 to 50 db. In peak mode it provides a narrow audio passband for greatly enhanced CW reception. Bandwidth may be varied with panel control. Accompanying graph illustrates both Notch and Peak performance. This package will be a tremendously valuable asset. Modification of the transceiver is required.

Kit includes all necessary parts and complete instructions. ....................... $59
Increase your operating enjoyment with Swan’s high quality

**ACCESSORIES**

**MODEL 510X 10 CHANNEL CRYSTAL CONTROLLED OSCILLATOR**... for your Swan Transceiver, Transmitter or Receiver.

MARS... Net... or Novice... Whenever crystal control of your transceiver or transmitter is desired, the 510X will do the job. Designed for use with Swan equipment on the 80, 40, 20 and 15 meter bands, it uses fundamental crystals up to 22 mc. A panel switch allows selection of up to ten crystal frequencies within or outside of the amateur bands. A front panel vernier control permits easy adjustment to exact frequency. Instant selection of VFO or crystal control. Plugs directly into the 270, 270B, 500C, 500CX, 600R or 600T. Dimensions: 6” wide x 2½” high x 4½” deep. **Shipping Weight: 3 lbs. $49**

**FP-1 HYBRID PHONE PATCH**... Designed to be easily and quickly connected between your receiver, transmitter and the telephone lines. The FP-1 will give you the highest quality phone patches. Low loss transformers, and exact voice reproduction make it easy for the party on the other end of the phone to hear and talk over your radio station. May be used with any transceiver or receiver/transmitter combination. Dimensions: 6” wide x 2½” high x 4½” deep. **Shipping Weight: 3 lbs.**

**MICROPHONES**... These high quality Shure microphones were carefully selected to provide you with the finest voice quality, and the most effective QRM penetrating signal. Both the desk model and the hand-held model are provided with a press-to-talk switch. **Swan 444 Desk Mike Shipping Weight 3 lbs. $25** **Swan 404 Hand Mike Shipping Weight 1 lb. $18**

**MODEL 508 EXTERNAL FREQUENCY CONTROL UNIT**... Provides for transmitting and receiving on separate frequencies. Full coverage is provided on the 10.15, 20, 40 and 80 meter bands, with 10 meters divided into 4 segments for improved vernier control and frequency readout. The tuning dial is calibrated in 5 kc increments while the vernier dial is calibrated in 1 kc increments. The 508 has the same velvet-smooth dual planetary tuning as the 500CX. Dimensions: 6½” wide x 5½” high x 11” deep. **Shipping Weight: 11½ lbs. $129**

**MODEL VX-2 AUTOMATIC VOICE CONTROL**... plug-in VOX Accessory.

Hands off operation... With extremely smooth and lightning fast relay circuitry, the VX-2 allows true "arm chair" operation. Simple "plug-in" installation makes it easy for you to add this Swan accessory to your station and increase your operating pleasure. For the CW enthusiast, it gives semi-break-in operation in the Swan Models 500CX and 600T without modification (requires modification on other Swan Models), eliminating the need to switch to transmit. Controls are provided for adjusting delay, gain, and anti-trip. Plugs directly in Swan Models 250, 250C, 270, 270B, 350, 350C, 500, 500C, 500CX, and 600T. **Shipping Weight 1 lb. $35**

**MOBILE MOUNTING BRACKET**... A complete kit for mobile installation of your Swan Transceiver. Contains all necessary parts and hardware for either under the dash or over the hump mounting. Constructed of black anodized aluminum alloy, it gives your mobile installation that "custom" look. **Model MTK Shipping Weight 1 lb. $9**
250C Transceiver for 6 Meters. SSB-CW-AM—240 WATTS P.E.P.

There is practically no limit to the operating pleasure you can find in the 6 meter VHF band when your transceiver is the Swan 250C. The same deluxe features that have made Swan HF equipment so popular have been designed into the 250C. Complete coverage from 50 to 54 mc with no crystals or extras to buy... SSB... AM... CW... 240 watts P.E.P. input... built-in 250 kc calibrator... receiver noise figure better than 3 db... 0.1 microvolt sensitivity... now you can really copy the weak ones. If 6 meters is your bag, then the 250C is for you! Price less power supply. $429

FOR SPLIT FREQUENCY CONTROL... Model 210 External VFO.

Designed for full coverage of the 50-54 mc band, the 210 matches the 250C in height, depth and styling. Band spread tuning covers a 500 kc segment of the band with 5 kc increments. Relay switching is built in, and a selector knob on the panel provides for selection of frequency control. Position 1 is for transceiver control with the 250C VFO. Position 2 provides for transmit with the 250 VFO, and receiving on the 210 dial. In position 3 the 210 VFO is transceive control... $99

POWER SUPPLIES:
- Complete supply for 117 volts 50-60 cps in a matching cabinet with speaker, phone jack, and indicator light. With all cables and plugs pre-wired ready to connect to transceiver. 8" x 5½" x 11" deep. Shipping Weight 21½ lbs.
  Model 117-VC $99
  Model 230-VC $105
- 12-14 volt DC power supply for mobile installation. 5" x 5½" x 12½" Weight 16½ lbs. Complete with all necessary plugs and cables. Model 14-117 $129
  DC Converter attaches to the back of the 117-VC or 230-VC power supply for 12-14 VDC operation. Complete with cables. Model 14-C $65

MARK 6B SPECIFICATIONS:
- Power rating: 2000 watts P.E.P. input in single sideband mode; 1000 watts DC input on CW, AM or RTTY • Frequency range: 50-54 mc • Uses two Eimac 3-500Z Grounded Grid Triodes • Drive requirements: 100 watts for maximum legal input • Meter selector: plate voltage, plate current, grid current, and relative output • Includes transmit/receive relay control for simple operation with a transceiver • Wide range Pi output circuit matches 52 or 75 ohm coax cable or variety of other load impedances • Dimensions: 13½" wide x 8½" high x 14" deep. Shipping Weight 24½ lbs.

POWER SUPPLY
- Matching unit may be operated next to amplifier as illustrated or, with its 4½-foot connecting cable, may be placed on the floor.
  - Computer grade electrolytic capacitors, 40 mfd. filtering at 2500 VDC • Silicon rectifiers • AC input: 117 or 230 volts, 50-60 Hz • Includes quiet running fan for cool operation of all components • Dimensions: 9½" wide x 8½" high x 14" deep • Shipping Weight 39 lbs.
Here is one package is a complete 150 watt 2 meter amplifier, requiring only 2 watts drive to provide full 150 watts input. This amplifier will operate in class “C” for FM or CW, or with a flip of a switch operates class “B” for SSB or other modes requiring linear operation. Its rugged self-contained power supply was designed for continuous operation, and with the addition of the 14C DC Converter, you have a powerful mobile combination. VHF-150 Amplifier with built-in 117 volt AC power supply. $279
14C Converter $ 65

**VHF-150 SPECIFICATIONS:**
- Power rating: 180 watts P.E.P. input SSB; 150 watts DC input on CW or FM
- Frequency range: 143-49 mc
- Uses 5894B twin tetrode
- Drive requirements: approximately 2 watts for full output
- Meter selector: reads plate current and relative output
- Includes transmit and receive relay control for simple operation with a transceiver
- Pi coupling at factory for 50 ohms
- Power supply: built-in 117 or 230 VAC input with proper line cord
- Also DC operation with addition of 14C DC Converter
- Dimensions: 13 in. wide x 5½ in. high x 11 in. deep
- Shipping Weight: 26 lbs.

**Swan TV-2C TRANSVERTER: $329**

240 Watt SSB receiving and transmitting converter for the 2 meter band.

Plenty of power for working tropospheric and meteor scatter DX on 2 meters. Designed to convert Swan transceivers for operation on the 2 meter band. Requires just one power supply for both units.

**TV-2C SPECIFICATIONS:**
- 14 mc intermediate frequency is standard. However, 21, 28, and 50 mc are also available.
- A 5894B Power Amplifier provides a PEP input rating of 240 watts with voice modulation. CW input rating is 180 watts, and AM input is 75 watts.
- Receiver noise figure is less than 3 db, provided by a pair of 40673 FET’s in cascade, followed by a third 40673 FET mixer.
- Only a Swan Transceiver and Swan AC power supply, Model 117-XC, are required. The power supply plugs into the Transverter, and the Transverter in turn plugs into the Transceiver. Internal connections automatically reduce the power input to the transceiver to the required level.
- **TUBE COMPLEMENT:** 5894B Power Amplifier, 6360 Driver, 12BY7 Transmit Mixer, 6J8 Injection Amplifier.
- The TV-2C features a front panel switch which controls all of the associated circuits to permit selecting either transceiver or transceiver operation. The TV-2C can be permanently installed with its transceiver-driver, since no change of the inter-cabling connections is required.
- Dimensions: 13 in. wide, 5½ in. high, by 11 in. deep
- Shipping Weight: 16 lbs.

**10 Watts, 12 Channels... Your Best Value**

Everything you need is included at one low price. Microphone, built-in speaker, AC and DC operation. All you have to do is connect a 2 meter antenna and you're ready to go! The FM-2X features automatic protection of the output transistors, and individual trimmers on each transmit and receive crystal. Its compact size makes it easy to install under the dash of your automobile, or use it with its detachable AC power supply in your ham shack. This is the only piece of Swan ham gear not manufactured directly by us. We believe it is the finest, best engineered Japanese import you'll find, and we carry a complete stock of all replacement parts. The Japanese design engineers, who are also hams, have spent several years training our famous service department. Compare the FM-2X with all the others, and we feel sure you'll agree with us it's the best.

FM-2X, complete $259

**FM-2X SPECIFICATIONS:**
- Frequency coverage 144-148 mc
- Number of channels: 12
- Crystals installed for 3 channels as follows: Channel 1: transmit and receive 146.94 mc, Channel 2: transmit 146.34, receive 146.94 mc, Channel 3: transmit 146.34, receive 146.76 mc
- Modulation: frequency modulation (phase type)
- Transmitter control: push to talk on microphone
- Power source: AC 117 volts 50-60 cycles, DC 13.5 volts ±10%
- Dimensions: 8¼” x 7” x 3”
- Shipping Weight: 11 lbs
- Fitted with unit: dynamic microphone, antenna connector plug, spare fuses and lamps, AC power cord, DC power cord with fuse holder.

**TRANSMITTER:**
- Fully solid state
- RF power output 10 watts nominal
- Frequency deviation adjustable to ±15 kc; factory adjusted to approximately 5 kc
- Frequency stability: ±0.01%
- Spurious radiation: -60 db below carrier
- Frequency multiplication: 12 times.

**RECEIVER:**
- Circuitry: crystal controlled double conversion superheterodyne
- Input impedance: 50 to 75 ohms
- Intermediate frequencies: 10.7 mc and 455 kc
- Sensitivity: 0.5 uv for 20 db quieting, 0.5 uv for 12 db S/n ratio
- Intermodulation: more than 60 db down
- Audio output: 1 watt to internal speaker.
MOBILE ANTENNAS
single band and multi-band models
HIGH Q — HIGH EFFICIENCY
will your mobile antenna pass the tape measure test?

Try measuring the wire size, coil diameter, and coil length of your loading coil. If the figures are not as large as the Swan loading coil, then radiation efficiency cannot and will not be as high. It's as simple as that.

A mobile antenna is, of necessity, a compromise. It takes a loading coil to make it look like a quarter wave vertical. Radiation efficiency is related directly to the Q of the loading coil. Q is a figure of merit which is the reciprocal of equivalent series resistance in the coil. It is this resistance which dissipates power. Obviously, the smaller this equivalent series resistance is, the smaller coil losses will be.

Theoretically, with infinite Q, the coil would have no loss and the antenna would be as efficient as a full size vertical. This isn't possible, so we have to settle for something less. But how much of your transceiver power are you willing to lose in heating up the coil? It takes a lot of amps from your battery to generate that 300 watts of RF power. We build transceivers, too (in case you haven't noticed), and we hate to see them warming up those inefficient loading coils. That power should be radiated instead, to help break through QRM. This is why you'll find the Swan mobile antenna line with really high Q coils.

The coils are so handsome we think you'll want to show them off, so the weather shield is transparent. Notice that other brands are covered up. Is this to make them prettier? Or is it to hide the small, close wound wire. Don't let anyone kid you. The smaller coils are not nearly as efficient. A laboratory Q meter will prove this quickly. But if you don't have access to a Q meter, try the tape measure test.

SINGLE BAND MODEL 35
For maximum radiation efficiency, our single band design is the best. If you're a one-band operator, or don't change bands very often, this is the model for you. Heavy duty construction is one of the highest possible quality. Stainless steel whip has Kwik-On connector, also for easy removal and storage. Power rating is 2000 watts P.E.P.! Heavy duty base sections of various lengths permit choice of deck or bumper mounting.

<table>
<thead>
<tr>
<th>Top section, 5 ft. Whip</th>
<th>1 lb.</th>
<th>$12.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 Meter Coil</td>
<td>1 lb.</td>
<td>$22.00</td>
</tr>
<tr>
<td>20 Meter Coil</td>
<td>1 lb.</td>
<td>$24.00</td>
</tr>
<tr>
<td>40 Meter Coil</td>
<td>2 lbs.</td>
<td>$26.00</td>
</tr>
<tr>
<td>75 Meter Coil 2 lbs.</td>
<td>$28.00</td>
<td></td>
</tr>
<tr>
<td>18 inch Base Section 2 lbs.</td>
<td>$8.50</td>
<td></td>
</tr>
<tr>
<td>36 inch Base Section 3 lbs.</td>
<td>$9.00</td>
<td></td>
</tr>
<tr>
<td>48 inch Base Section 3 lbs.</td>
<td>$9.00</td>
<td></td>
</tr>
</tbody>
</table>

*Shipping Weight

5 BAND MANUAL SWITCHING MODEL 45 Patent No. 2961657
No coil changing with this model. It covers 10, 15, 20, 40, and 75 meters. Gold plated contacts on the vertical switch provide 5 stops for full coverage of the 75 meter phone band. High radiation efficiency is provided by the high Q coil (same size as the single band coils). 1000 watts P.E.P. power rating. 6 foot adjustable whip comes with Kwik-On connector. Top quality throughout. Exclusive LEXAN® unbreakable center post.

Shipping Weight: 7 lbs. .................................................. PRICE: $69

5 BAND REMOTE CONTROL MODEL 55B Patent No.s 2961657 and 3614574
This is our most deluxe model for the band hopping operator. A control box under the dash permits instant band changing while driving. The new control unit in the 55B stops automatically at the selected switch position, and the indicator light lets you know that you're ready to go. Covers 10, 15, 20, 40, and 75 meters with the same electrical and mechanical design as the manual Model 45, but with motor drive and remote control. Finest quality construction, nothing has been spared to make this model the very best and most efficient you can buy. Power rating is 1000 watts P.E.P. 6 foot adjustable whip comes with Kwik-On connector. Exclusive LEXAN® unbreakable center post.

Shipping Weight: 11 lbs. .................................................. PRICE: $99

Extra KWIK-ON Connectors, for quick removal of any mobile antenna coil or whip assembly. All stainless steel construction.

Shipping Weight: 1 lb. .................................................. $6

Deluxe Bumper Mount. .................................................. $39

MODELS 55R \ MODELS 45
AUTOMATIC DIRECTION FINDER  
ADF-100  
3 band portable Automatic Direction Finder. Automatically indicates compass heading to the station you tune ... instantly ... accurately! Covers Low Frequency Beacon Band, standard Broadcast Band, and 2 to 3 mHz Marine Band. Operates on 8 self-contained D size batteries, or on ship's batteries.  
From your marine dealer .................. $595

VHF-FM MARINE TRANSCEIVER  
FM-1210  
Radiotelephone for the new VHF Marine Band, 12 channel, 10 watt, two way communications unit that features minimum battery drain, maximum reliability, finest voice quality.  
From your marine dealer .................. $359

SWAN COMMERCIAL TRANSCEIVERS

400H, MULTI-CHANNEL  
300 WATT SINGLE SIDEBAND  
A high powered Single Sideband Transceiver designed for voice communication in either fixed station, portable, or mobile applications. Up to 12 channels are available in 5 pre-tuned frequency ranges from 2 to 24 mc. Simplex or Half Duplex. Numerous options available.

HIGH POWER SINGLE SIDEBAND  
AT LOW COST ...310/320  
Complete two way radio systems for high quality voice communication in the 2 to 24 mc frequency range. Model 310 is essentially a single frequency range, while the 320 covers 2 frequency ranges. Numerous options available. 300 watts P.E.P. output.

FOR COMPLETE DETAILS ON THE SWAN COMMERCIAL AND MARINE LINES,  
CALL (714) 757-7525, SWAN ELECTRONICS
ALL SWAN PRODUCTS ARE COMPLETELY BACKED BY A SERVICE POLICY AND WELL STAFFED FACTORY SERVICE DEPARTMENT THAT ARE SECOND TO NONE!

SWAN’S SERVICE POLICY

One of the main factors in our success has been the famous efficient Swan service which we render to all owners of Swan equipment. Now more than ever before, the importance of this policy becomes clear. When you purchase any Swan equipment, either directly from the factory or from a Swan dealer you can depend on receiving the very best in prompt, experienced and skilled service.

WARRANTY POLICY

Swan Electronics Corporation warrants this equipment against defects in material or workmanship, except for tubes, transistors, and diodes, under normal service for a period of one year from date of original purchase. Tubes, transistors, and diodes are covered under the warranty policy for a period of 90 days. This warranty is valid only if the enclosed card is properly filled in and mailed to the factory within ten days of date of purchase. Do not ship to the factory without prior authorization. This warranty is limited to repairing or replacing only the defective parts, and is not valid if the equipment has been tampered with, misused or damaged.