

NCX-1000

5 BAND SOLID STATE KILOWATT TRANSCEIVER

FEATURES

NRCI's NCX-1000 amateur radio transceiver is the "no-nonsense" result of an engineering challenge to combine, in a single package, a solid state receiver of unparalleled performance, an exciter of exceptional capability, a linear amplifier, and a power supply. The NCX-1000 proves that the challenge has been successfully answered with a top performance, high reliability amateur radio station. Check these outstanding features:

- Solid state except for driver and linear amplifiers.
- Five bands - 80 through 10 meters.
- SSB-CW-AM, with FSK capability. Selectable sideband.
- Rugged 8122 final amplifier for ultimate in efficiency and reliability. 400 watt plate dissipation.
- Modular construction, plus transistor sockets.
- 1000 watts PEP input on SSB, 1000 watts CW (normal duty cycle), and 500 watts AM or FSK.
- RF speech clipper for effective 2 kW PEP talk power.
- Built-in 117/234 VAC power supply.

Thus, the NCX-1000 is the one transceiver that offers, in a single desk-top equipment, a high performance one kilowatt amateur station. Whether you are a DX-er, ragchewer, or net operator, you'll find that the NCX-1000 will fulfill your basic needs reliably.



NCX-1000 SPECIFICATIONS AND RATINGS

GENERAL:

FREQUENCY RANGE: 3.5 to 4.0 MHz, 7.0 to 7.5 MHz, 14.0 to 14.5 MHz, 21.0 to 21.5 MHz, 28.0 to 30.0 MHz. Crystal supplied for the 28.5 to 29.0 MHz segment; three optional crystals required for complete 10 meter coverage. **MODES OF OPERATION:** USB, LSB, AM, CW, with FSK capability with external converters. **DIAL CALIBRATION:** 5 kHz, identical on all bands. **STABILITY:** Nominal 100 Hz after 10 minute warm-up. **METERING:** PA plate current, PA screen current, PA plate voltage, receiver S units. **POWER SUPPLY:** Built-in, with internal jumpers to allow operation on either 117 or 234 VAC.

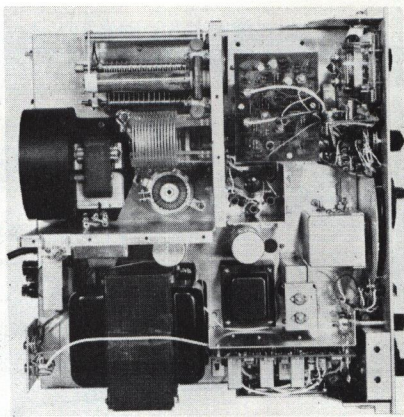
RECEIVER:

SENSITIVITY: Less than 0.5 uv for 10 db S + N/N ratio. **SELECTIVITY:** 2.7 kHz (crystal lattice filter). **RECEIVER DYNAMIC RANGE:** 105 db. **IMAGE AND IF REJECTION:** Better than 60 db. **IN-BAND INTERNALLY GENERATED SPURIOUS SIGNALS:** Less than equivalent 1 uv at antenna terminal. **AGC:** Fast attack, slow decay. **AGC RESPONSE:** Signal increase from 10 uv to 0.1v will produce no more than 6 db rise in audio output. **AUDIO OUTPUT:** 2 watts minimum into 3.2 ohms. Monitor speaker built-in.

TRANSMITTER:

POWER INPUT: 1000 watts PEP on SSB, 1000 watts CW (normal CW duty cycle, 500 watts AM or FSK). **KEYING:** Grid block on CW. **OUTPUT IMPEDANCE:** 25 to 100 ohms (minimum tuning range of pi network). **CARRIER AND OPPOSITE SIDEBAND SUPPRESSION:** Greater than 40 db. **INTERMODULATION DISTORTION PRODUCTS:** More than 25 db down (two-tone test). **AALC:** 15 db increase in audio input level will produce negligible increase in output level. **RF CLIPPER:** Front panel control enables RF speech clipper which may double average SSB power output. Crystal filtering before and after clipper at 2nd IF frequency. **FINAL AMPLIFIER:** Forced air cooled 8122 ceramic tetrode (400 watt dissipation rating). **AUDIO INPUT:** Crystal or dynamic microphone.

ACCESSORIES: 100 kHz calibrator and side-tone oscillator on plug-in circuit board module (CXO-100), crystal control adaptor module (CXO-1).



Rugged mechanical design, often forgotten as a prerequisite for stable, reliable transceiver operation, is a feature of the NCX-1000. NRCI engineering has coupled rigid construction with the use of modern circuit board modules to provide a high order of mechanical integrity. Most modules may be removed without unsoldering any connections. Sockets are provided for all transistors.

PHYSICAL DETAILS:

FRONT PANEL CONTROLS AND JACKS: VFO tuning, bandswitch, 10 meter segment switch, dial calibrator, exciter tune, PA tune, AF gain, RF gain, receive vernier on/off, receive vernier frequency control, microphone gain, carrier insertion, sideband selection, function switch, meter selection, PA plate voltage on/off, RF clipper on/off, transit-receive switch, calibrator (optional) on/off, headphone jack.

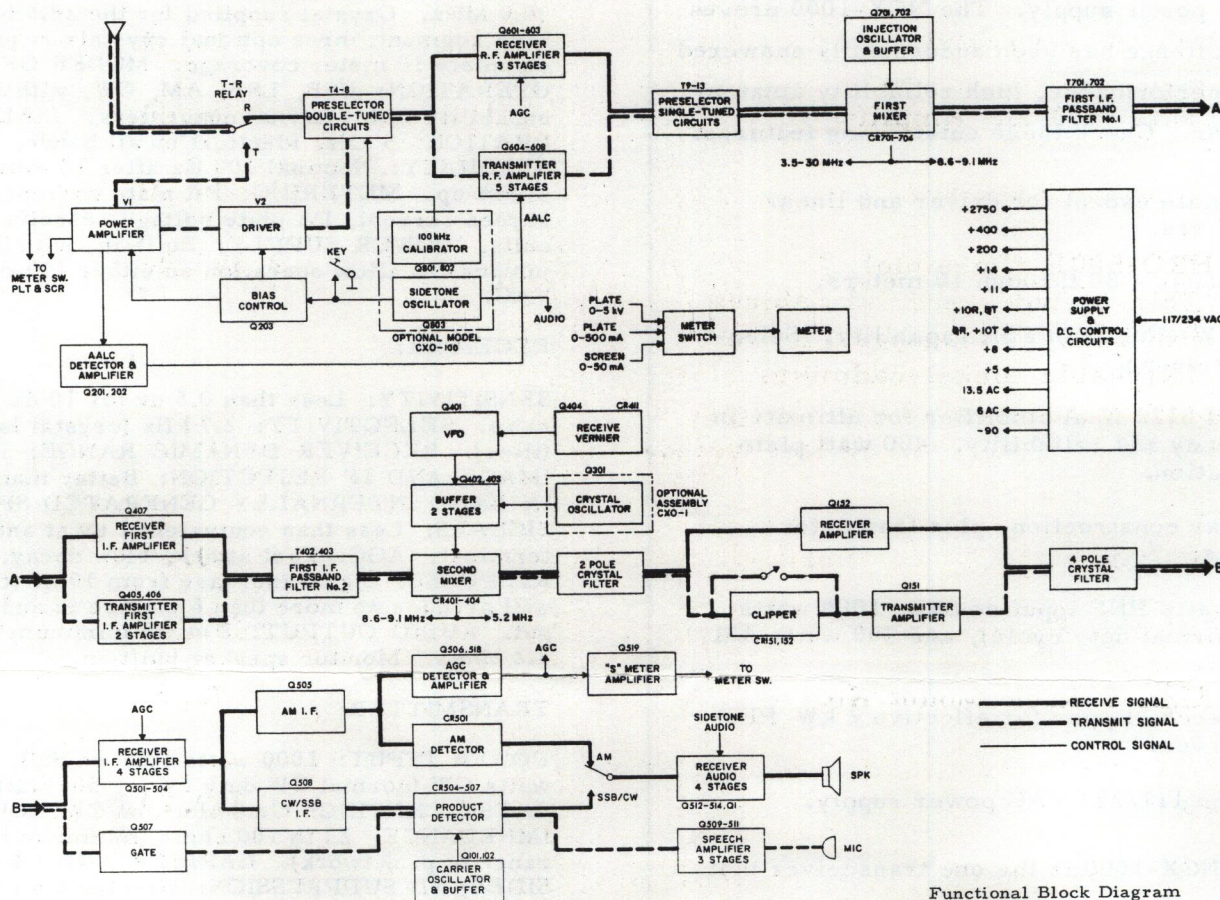
REAR PANEL CONTROLS AND CONNECTIONS: Bias adjust, microphone input, key jack, antenna, external speaker, AC line input, fuses, ground, crystal control on/off (optional), crystal socket (optional), crystal frequency trimmer (optional).

POWER REQUIREMENTS: 117 or 234 VAC 60 Hz. 12 amps at 117v and 6 amps at 234v.

TUBES AND SEMICONDUCTORS: 45 transistors, 50 diodes, 2 tubes.

DIMENSIONS: 16-1/8" w, 7-3/4" h, 13-1/4" d.

WEIGHT: Approximately 60 lbs.



NATIONAL RADIO COMPANY, INC.**CUSTOMER PRICE SCHEDULE**

Effective May 1, 1971

NATIONAL RADIO COMPANY, INC.**89 Washington Street
Melrose, Massachusetts 02176**

<u>ITEM</u>	<u>NET PRICE</u>
NCX-1000 Transceiver	\$ 899.00
CXO-1 Crystal Oscillator	35.00
CXO-100 Crystal Calibrator	35.00
10 Meter Crystal	15.00
NCL-2000 LP Amplifier	685.00
HRO-500 Receiver	1,995.00
HRO-500P (Portable) (This includes special cabinet with built-in loudspeaker, re- chargeable nickel-cadmium battery and removable charging unit and WPC-5 portable carrying case.)	2,395.00
HRO-500-TS (Table Speaker)	40.00
LF-10A Preselector	550.00
RMK-5 Rack Mount Kit	70.00
HRO-600/601 Receiver (Search VFO plug-in)	3,380.00
HRO-600/602 Receiver, Synthesizer plug-in	3,732.00
Model 601 Plug-in Unit (search) only	485.00
Model 602 Plug-in Unit (synthesizer) only	845.00

PRICES F.O.B. MELROSE, SUBJECT TO CHANGE