Noble Radio NR-6N4 Two Band VHF Transceiver

Preliminary Technical Specifications*

1. RECEIVER SPECIFICATIONS

Frequency Coverage: 4M: 69.9 MHz to 70.5 MHz
6M: 50.0 MHz to 52.0 MHz

Modes: SSB (USB & LSB) and CW

Circuit Type:
Downconverting Design
Dual Converesion: 1st IF: 10.7 MHz 2nd IF: 25 kHz
Sideband elimination using phasing techniques with digitally generated Quadrature carriers and Image Reject Mixers preceeded by 15 kHz crystal roofing filters
Ultimate receiver bandwidth set by adjustable SCAF filters (two 8th order filters used. One for High Cut and one for Low cut)

Sensitivity: MDS = -130 dbm

Dynamic Range Figures:
Blocking: 110 db
IMD (3rd Order) = 95 db

Selectivity:
500 Hz to 4 kHz adjustable with the SCAF filters
Ultimate attenuation of filters are 55db or better

2. TRANSMITTER SPECIFICATIONS

Frequency Coverage: 4M: 69.9 MHz to 70.5 MHz
6M: 50.0 MHz to 52.0 MHz

Modes: SSB (USB & LSB) and CW

OUTPUT POWER: 20 Watts CW or PEP SSB

SCAF Filters can be used to tailor SSB Transmit audio.

3. GENERAL SPECIFICATIONS

SYNTHESIZER: DDS/PLL synthesizer with 10 Hz minimum step size. Tuning rate is variable depending on the Tuning Knob speed (Variable Speed Tuning - VST)

MEMORIES: 10 Memories per band

ANTENNA IMPEDANCE: 50 ohms unbalanced

SUPPLY VOLTAGE: 11.5 to 14 Volts Regulated DC (Negative Ground) at approximately 3.6 Amps at full output power.

DIMENSIONS: 8 in (203 mm)W x 12 in (305 mm) D- including knob and heatsink x 3.75 in (95 mm) H - including feet

WEIGHT: Approximately 4 lbs (1.8 kg)

4. SPECIAL FEATURES

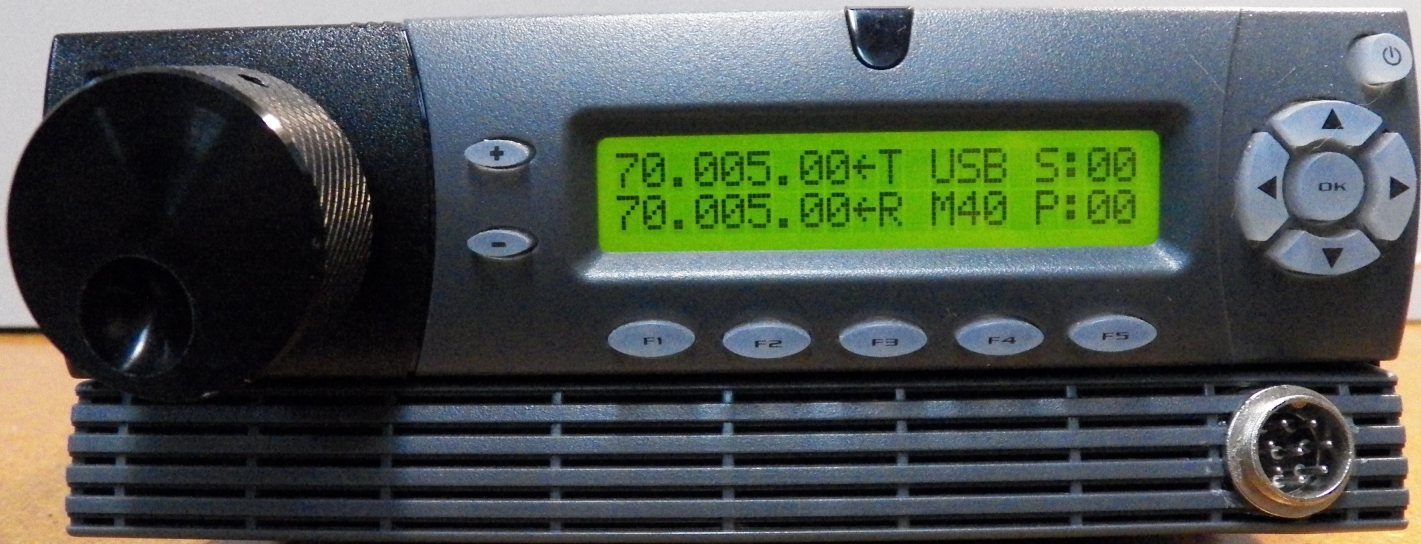
The NR-6N4 has the capability of being controlled by a standard PC type keyboard that plugs into a rear connector. Once a keyboard is interfaced to the radio, it can be used to directly enter a frequency, skip directly to various functions by a single press of a function key without having to navigate the menus from the front panel buttons as well as being used to send CW via the keyboard. There is also a built in keyer function that operates with a standard keyer paddle for CW operation with or without a keyboard connection.

The low level 10.7 MHz IF signal is also brought out to a rear connector so that it may be used for panadapter or SDR applications.

* All specifications in this document may be subject to change without notice or obligation


NOBLE RADIO
REV A (C)2012
OK
F1
F2
F3
F4
F5


50.078.00←T USB S:00
50.078.00←R M60 P:00
OK
F1
F2
F3
F4
F5


70.005.00←T USB S:00
70.005.00←R M40 P:00
OK
F1
F2
F3
F4
F5