



Instruction Book for X108

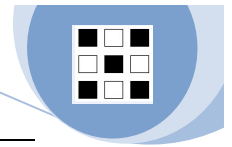


The brand new X108 from Chongqing Xiegu Technology is a compact single conversion HF transceiver covering 0.5 to 30 MHz. Boasting the latest in minimalist industrial design, it offers radio amateurs high quality HF capability at a very affordable price.

Attention to detail abounds in the X108 – the IF crystal filter stage, for instance, features customised military grade crystals for superb performance in both SSB (2.4 kHz) and CW (500 Hz) modes.

Other features include a switchable AGC circuit, preamplifier and signal attenuator, RIT control for SSB use, and RF output power variable from 1 to 20 Watts. The front panel meter can display incoming signal strength, RF output power and VSWR, and the transceiver includes high VSWR protection circuitry to guard against potential damage to the output stage caused by antenna mismatching.

The RF output stage features imported RF MOS tubes and APC circuitry for constant output across all bands. A noise blanker (NB) module is available as an option, as is a high stability 0.5 ppm TCXO module.



A multi-function digital microphone is supplied as standard, allowing direct operation of many transceiver functions without the need to touch the front panel.

Up to 32 frequencies can be stored in the X108's memory bank, while a dedicated USB port is provided on the rear of the unit, allowing PC control via appropriate software with the use of a standard USB A-B cable.

KEY FEATURES

Receiver:

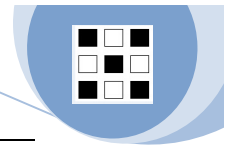
- Low noise, single conversion super heterodyne type
- Double balanced diode mixer for extended dynamic range
- 0.2 μ V receive sensitivity (preamp on)
- Narrow band double tuned bandpass filters covering all HF amateur frequencies including WARC bands
- Six element LPF
- IF channel AGC for constant gain
- Switchable preamplifier & signal attenuator
- High performance narrow band IF crystal filter with shape factor up to 1.7
- Twin VFO for split operation
- S-meter/RF Power/SWR via front panel display
- Optional NB module
- Optional front and rear handles

Transmitter:

- RF Output power adjustable between 1 & 20 Watts
- Dedicated MOS RF power tube for superior performance
- High VSWR protection circuitry for output stage
- Inbuilt CW keyer with adjustable rate

SPECIFICATIONS

Stray radiation rejection: ≥ 40 dBc



Receive frequency range: 0.5~30 MHz

Transmitting frequency range: All HF Amateur bands including WARC bands

Operating mode: SSB (J3E)

CW (A1A)

AM (A3E)

Frequency stability: 1.0 ppm @ -10°C~+60°C (Standard)

0.5 ppm @ -20°C~+75°C (with optional military grade TCXO)

Receive sensitivity: 0.2 uV

IF filter: SSB 2.4 kHz (-6dB)

CW 0.5 kHz (-6dB)

Dynamic range: 95dB

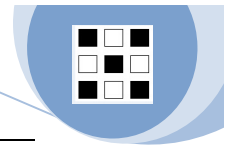
RF output power (max): 20 W

Spurious response rejection: ≥ 45 dBc

Carrier suppression: ≥ 45 dBc

Antenna impedance: 50 Ω

Antenna connector: SO239



Operating voltage: 12.5 V ~ 14.5 V DC

Current draw:

Receiving: 0.75 A (max)

Transmitting: 7 A (max)

Dimensions (mm): 120 x 45 x 180

After-sales service

- The proper of the X108 is backed by one-year guarantee (including amplifier tube, display screen, but excluding hand microphone, chassis and DDS). In case of failure during the warranty period, it will be repaired to the normal working condition for free. In case of man-made damage, only the maintenance cost is charged.
- If the product software upgrade is available, the software shall be upgraded for free.
- Out of the warranty period, lifelong maintenance services shall be provided at cost price.
- Roundtrip logistics costs incurred for maintenance shall be borne by the customer.