ACOM 1500

HF + 6 m Linear Amplifier



OUTSTANDING HF POWER PRODUCTS

www.acom-bg.com

MAIN FEATURES

EASY TO OPERATE

The TRI (True Resistance Indicator) is a powerful tuning aid which, together with the automatically controlled input attenuator, helps the operator to quickly and precisely match the antenna impedance to the optimum tube load impedance (5-10 seconds typically). The AUTO-OPERATE function (when enabled) maintains the amplifier in OPERATE mode for you, thus saving manual operations and time.

NO ANTENNA TUNER NEEDED

No heavy outboard antenna tuners required for antenna SWRs up to 3:1. Your amplifier will enable you to change antennas virtually instantaneously and allow you to use your antennas over wider frequency ranges.

BROADBAND INPUT MATCHING

Broadband input matching circuit design provides excellent transceiver loading over the entire spectrum, from 1.8 MHz up to 54 MHz.

TRANSCEIVER-INDEPENDENT

The amplifier operates without special signals from the transceiver - "Ground on TX" (PTT) and 85 W RF drive power are sufficient.



OLED COMMENT DISPLAY

All amplifier status indications are explained via detailed text displayed on the OLED display. The upper-line on the OLED display reads peak forward power. LED indicators are provided for: OPERATE mode, attenuation-on (ATT), transmit (TX), selected antenna output (1, 2, or 3), and ON/OFF conditions.

USER-FRIENDLY AND DURABLE

An amplifier that is both user-friendly, and that looks after itself. It is designed to safely withstand up to 300 W reflected power, up to 100 milliseconds duration of drive spikes, drive RF "tails" after a PTT or KEY release, operator's inadvertent tuning errors, etc. The amplifier also will not cease to function with a "soft" AC mains and will deliver more than half power at only 85% of nominal mains voltage. It can withstand voltage drops (down to zero Volts) for up to 10 milliseconds and can tolerate 15% mains voltage spikes, which is especially important on Field Day, during DXpeditions, and at portable operating events where emergency power is relied upon.

EASY ANTENNA SELECTION

Three antenna outputs are selectable using a push-button on the front panel.

LESS NOISE IN THE SHACK

The input bypassing and the vacuum antenna relays are virtually silent even in QSK CW mode due to their special mounting.

SINGLE TUBE OPERATION

Uses a single 4CX1000A/8168 ceramic and metal radial beam tetrode with plate dissipation of 1000 W (forced air cooling, grid-driven), which is specifically designed for class AB1 RF linear amplifier operation.

TUBE PROTECTION

Permanent monitoring includes protection of plate and grid voltages and currents, as well as exhaust air temperature. The Bias Optimizer decreases the heat dissipated from the tube, and there is automatic protection against overheating in accordance with specifications of the tube manufacturer.

OUTPUT RF ARC PROTECTION

An output RF Arc protection is employed. This important feature safeguards the amplifier, antenna, antenna selector, and tuner against severe damage in case of possible breakdown.

EASY MAINTENANCE

Signatures of the amplifier internal status are stored in a nonvolatile memory for 7 most recent auto protection trips. This information can be forwarded to your dealer for diagnostics.

SPECIFICATIONS

FREQUENCY COVERAGE
All amateur bands in the 1.8-54 MHz frequency range (extensions and/or changes on request)

POWER OUTPUT
1500 W PEP or 1200 W continuous carrier, no mode limit (at 200/240 VAC mains supply)

INTERMODULATION DISTORTION
Better than 35 dB below rated output

HUM AND NOISE
Better than 40 dB below rated output

MAINS POWER SUPPLY VOLTAGE
85-132 VAC / 170-264 VAC (100, 110, 120, 200, 210, 220, 230 & 240 V nominal taps, +10% -15% tolerance), 50-60 Hz, Single phase

MAINS POWER CONSUMPTION
- Up to 3500 VA at rated output from 200/240 VAC mains supply
- Up to 2400 VA at 1000 W output from 100/120 VAC mains supply



HARMONIC OUTPUT SUPPRESSION
- 1.8-21.5 MHz - better than 50 dB below rated output
- 24-54 MHz - better than 66 dB below rated output

INPUT AND OUTPUT IMPEDANCES
- Nominal value: 50 Ohm unbalanced, UHF (SO-239) type connectors
- Input circuit: broadband, SWR less than 1.3:1, 1.8-54 MHz continuously (no tuning, no switching)
- Bypass path SWR less than 1.1:1, 1.8-54 MHz continuously
- Output (antenna) impedance matching capability: SWR up to 3:1 or higher

RF GAIN
13 dB typically, frequency response less than 1 dB (60-85 W drive power for rated output)

SAFETY AND ELECTROMAGNETIC COMPATIBILITY
Complies with CE safety and electromagnetic compatibility requirements, as well as with the US Federal Communications Commission (FCC) regulations

SIZE & WEIGHT
- Operating (excluding connected cables), WxDxH: 422x355x195 mm, 26.5 kg (16.7x14.0x7.7 inches, 58.5 lbs.)
- Shipping, WxDxH: Approx. 590x490x380 mm, 30.0 kg (23.3x19.3x15.0 inches, 66.2 lbs.)

OPERATING ENVIRONMENTS
- Temperature range: 0...+50 °C (32 °F to 122 °F)
- Relative air humidity: up to 95% @ +35 °C (95 °F)
- Height above sea level: up to 3050 m (10000 ft) without output deterioration

Dealer/Partner's address:



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