

ACOM 1010

HF LINEAR AMPLIFIER



Quick tuning



FEATURES

Easy operation

The plate-load True Resistance Indicator (TRI) is an ACOM innovation that provides quick and precise tuning, typically in less than 10 seconds. The auto-operate function will return the amplifier to the OPERATE mode automatically after each protection trip, saving time and avoiding manual switching.

No tuner needed

No external antenna tuner is required as long as the antenna VSWR is 3:1 or lower. The amplifier will perform the functions of an antenna tuner, enabling you to change antennas faster and use them over wide frequency ranges.

A durable amplifier

This amplifier is both user-friendly and self-monitoring. It is designed to safely withstand up to 240 W of reflected power, up to 100 milliseconds of drive spikes (RF "tails" after a PTT or KEY release), and even operator tuning errors. It is also capable of operating at more than half of its designed output power at only 75% of nominal line (mains) voltage. Because it can tolerate deep voltage drops (down to zero for 10 milliseconds) and 15% line voltage spikes, it is particularly suited for use in portable environments, such as field days and DXpeditions.

LED bar-graph display

The upper LED bar-graph always reads peak forward power while, the lower LED bar-graph is for the reflected power. LED warning indicators are provided for abnormal conditions of grid 1, grid 2, and plate parameters.

Antenna selection

Two antenna outputs are selectable on the front panel of the amplifier.

Input matching

Broadband input matching circuitry offers excellent loading characteristics for the driving transceiver, from 1.8MHz to 30MHz.

Single tube operation

A single Svetlana 4CX800A (GU74B) high-performance ceramic-metal tetrode with plate dissipation of 800 W (forced air cooling, grid-driven) is used for maximum efficiency.

Permanent monitoring and protection of the plate and grids currents. The Bias Optimizer minimizes heat dissipated by the tube, assuring tube longevity.

SPECIFICATIONS

- Frequency Coverage: All amateur bands in the 1.8-29.7 MHz frequency range; extensions and/or changes on request.
- Power Output: 700 W PEP or 500 W continuous carrier.
- Intermodulation Distortion: Better than 35 dB below rated output.
- Harmonic Output Suppression: Better than 50 dB below rated output.
- Input and Output Impedance:
 - Nominal value: 50 Ohm unbalanced, UHF (SO-239) type connectors;
 - Input circuit: broadband, VSWR less than 1.3:1, 1.8-30 MHz continuously (no tuning, no switching);
 - Bypass path: VSWR less than 1.1:1, 1.8-30 MHz continuously, 200 W maximum;
 - Output (antenna) impedance matching capability: VSWR up to 3:1 or higher at reduced output.
- RF Gain: 11 dB typically, frequency response less than 1 dB (50 to 70 W drive power for rated output).

- Primary Power: 85-132 V/170-264 V ac (100, 110, 120, 200, 210, 220, 230 & 240 V nominal taps), +10% -15% tol.), 50-60 Hz, single phase, 1200 VA.
- Complies with CE safety and electromagnetic compatibility requirements as well as FCC-regulations.
- Size & Weight (operating): WxDxH: 402x314x166mm, 18kg (15.8x12.4x6.5 inches, 39.68Lbs).
- Operating environments:
 - Temperature range: 0 to +50 degrees Celsius;
 - Humidity: up to 95% @ +35 degrees Celsius;
 - Height: up to 3000 m above sea level without output deterioration.

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