

① IT KNOWS ALL YOU NEED  
AND DOES IT AUTOMATICALLY

① A MUST FOR THE DX'ER AND CONTESTER

ACOM 2000A



AUTOMATIC HF LIN

## Cool 1500W RF output

The ACOM2000A is a complete and self-contained linear amplifier. Covers all HF amateur bands. Employs two 4CX800A (GU74B) Svetlana high performance ceramic metal tetrodes. Compatible with all transceivers, excitors, and modes. Less than 60W drive and relay control are required.

## Automatic self-tune

Follows transceiver band and frequency automatically in less than a second. No special cables required. Just a dot on CW or 'Ah' on SSB are enough.

## Automatic antenna matching

Never think about an ATU for VSWR up to 3:1 (2:1 on 160 m). Higher VSWR is permissible at reduced power. Matching the actual antenna impedances to the optimum tubes load is automated. Typically 1 second and no skill is required.

## Automatic antenna change

User tunings of ten different antennas per each band segment are stored in a nonvolatile memory and then recalled automatically. ACOM2000S external automatic

AUTO ANTENNA CHANGE  
COND OFF

\* C<sub>mode</sub> STBY  
07.000-07.100 A9 USR

## QSK

Full break-in (QSK) based on a built-in vacuum relay. Transmit / receive switching sequence is secured by a dedicated microprocessor.

## Remote control unit

Only the Remote Control Unit needs place near the operator.

The main unit can be installed up to 3 meters (10 feet) aside. RCU features: amplifier status explained via detailed text on the LCD, control of all functions, measuring and/or monitoring of 20 most important parameters, on-board technical assistance, troubleshooting suggestions, power-

MEASURE [AUTO TUNE]  
SERVICE MAN. TUNE

[1-SCREEN] USWR  
67mA 1.3

## Easy maintenance

The protection system makes damaging the amplifier not an easy job. Information on the 12 recent protection trips is stored in an INFO BOX for remote diagnostics via phone line, PC, and Internet.

HELP [INFO] CLR  
CALL LOCK DEF



## Remote Control Unit

Size: 167 x 130 x 25mm (6-2/3" x 5-1/8" x 1")

## RS232 and network

All functions are accessible from a PC via RS232 serial port. Local network may include more than one amplifier / antenna unit set working in a system.

SELF ADDRESS:03  
Use Arrow Keys

## Protections

All tubes voltages and currents, supply voltages, overheating, overdrive, insufficient flow of cooling air, internal and external RF arcs (in the amplifier, antenna selector, tuner or antennas), T/R sequencing, antenna relay contacts 'hot switching', antenna matching quality, reflected power, stored data, inrush power-on current, and cover interlock for operator's safety.

## Clean signal

Grid-driven tetrodes, cathode negative feedback, excellent transceiver loading (typically below 1.2:1 input VSWR), and regulated SG voltage result in an extremely low distorted output. Measured typical IMD are -40dB (3-rd order) and -45dB (5-th order). Classical Pi-L network, all-air coils (no ferrite), and carefully designed layout of the output tank offer typical harmonic emissions as low as -55dBc (second) and below -70dBc (third and above). Thus probability of QRM, BCI or TVI is dramatically minimized.

## Shipment

Shipping Weight: 41kg (18.6 lbs) in 2 cartons, UPS

## Specifications

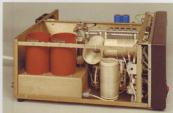
- Frequency Coverage: All amateur bands 1.8-29.7MHz; extensions and/or changes on request.
- Power Output: 1500W PEP or continuous carrier, no mode limit.
- Intermodulation Distortion: Better than 35dB below rated output.
- Hum and Noise: Better than 35dB below rated output.
- Harmonics Output Suppression: Better than 50dB below rated output.
- Input and Output Impedances:
  - nominal value: 50 Ohm unbalanced, UHF (SO239) type connectors;
  - input circuit: broadband, VSWR less than 1.3:1, 1.8-30MHz continuously (no tunings, no switching);
  - bypass path VSWR less than 1.1:1, 1.8-30MHz continuously;
  - output matching capability: better than VSWR 3:1 (2:1

- Automatic Tuning:
  - antenna impedance matching - less than 3 seconds;
  - band change - less than 1 second;
  - segment change - less than 0.2 seconds.
- RF Gain: 14.5dB, frequency response less than 0.5dB (50 to 60W drive power for rated output).
- ALC: grid-current derived, -11V max, rear panel adjustable.
- Primary Power: 90-132V (100 & 120V nominal taps, 10% tol.) and 180-264V (200, 220 & 240V nominal taps, 10% tol.), 50-60Hz, single phase, 3500VA consumption at rated output.
- Size (operating):
  - W440mm x D500mm x H180mm (17-1/3"W x 19-2/3"D x 7"H)
- Weight (operating):
  - 36kg.

## Construction

Only high quality RF ceramic and silver plated metals (no plastics, no ferrites) in the plate tank. True transmitter-type tubular and door-knob ceramic pad capacitors. All main parts and assemblies are ACOM produced: ceramic tubes sockets, plate and antenna ceramic chokes, ceramic supported and ball bearing variable air capacitors, ceramic band switch, LV and HV transformers, 100W swamping 50 Ohm RF resistor, quiet air blower, metal work, etc...

ACOM's own research, development, hardware, and software design and engineering have led to the dramatically low cost of the amplifier.



## Options

- Auxiliary external fan for continuous modes of operation (24V/119x119mmx38mm/4-2/3"x4-2/3"x1-1/2")
- ACOM2000S external automatic antenna switch (10 positions, 5kW rated power, 50 Ohm coaxial line).
- DOS application for tuning via personal computer. You can describe your antenna field. Then leave PC to control your transceiver, amplifier, and antenna switch. Requests will be automatically tuned and stored in amplifier's memory. User tunings can be archived and loaded into amplifier memory later as well.
- Technical Supplement to the Operating Manual.

ACOM 2000S - 1500W PEP / 1500W CONT. POWER AMPLIFIER											
REV	CLIM	HEAD	LOAD	COMP	MODE	OPTIONS	LINE	OUT	TIME	CURRENT	TIME
1.00	11000-11100	AD	10000-10100	1A	-	50 W	0000	03-22-2000			
FREQ	SWR	AL	A2	A3	A4	A5	A6	A7	A8	A9	AV
1.8M	14.000-14.100		OK								
1.9M	14.100-14.200		OK								
2.1M	14.200-14.300		OK								
2.2M	14.300-14.400		OK								
2.3M	14.400-14.500										
2.4M	14.500-14.600										
2.5M	14.600-14.700										
2.6M	14.700-14.800										
2.7M	14.800-14.900										
2.8M	14.900-15.000										
2.9M	15.000-15.100										
3.0M	15.100-15.200										
3.1M	15.200-15.300										
3.2M	15.300-15.400										
3.3M	15.400-15.500										
3.4M	15.500-15.600										
3.5M	15.600-15.700										
3.6M	15.700-15.800										
3.7M	15.800-15.900										
3.8M	15.900-16.000										
3.9M	16.000-16.100										
4.0M	16.100-16.200										
4.1M	16.200-16.300										
4.2M	16.300-16.400										
4.3M	16.400-16.500										
4.4M	16.500-16.600										
4.5M	16.600-16.700										
4.6M	16.700-16.800										
4.7M	16.800-16.900										
4.8M	16.900-17.000										
4.9M	17.000-17.100										
5.0M	17.100-17.200										
5.1M	17.200-17.300										
5.2M	17.300-17.400										
5.3M	17.400-17.500										
5.4M	17.500-17.600										
5.5M	17.600-17.700										
5.6M	17.700-17.800										
5.7M	17.800-17.900										
5.8M	17.900-18.000										
5.9M	18.000-18.100										
6.0M	18.100-18.200										
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6.4M	18.500-18.600										
6.5M	18.600-18.700										
6.6M	18.700-18.800										
6.7M	18.800-18.900										
6.8M	18.900-19.000										
6.9M	19.000-19.100										
7.0M	19.100-19.200										
7.1M	19.200-19.300										
7.2M	19.300-19.400										
7.3M	19.400-19.500										
7.4M	19.500-19.600										
7.5M	19.600-19.700										
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7.8M	19.900-20.000										
7.9M	20.000-20.100										
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8.7M	20.800-20.900										
8.8M	20.900-21.000										
8.9M	21.000-21.100										
9.0M	21.100-21.200										
9.1M	21.200-21.300										
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16.3M	28.400-28.500										
16.4M	28.500-28.600										

# ACOM 2000A

**AUTOMATIC HF LINEAR AMPLIFIER**



*The Intelligent Amplifier*