

# THE WIDER HORIZONS

100kHz

2036MHz



**PROFESSIONAL MONITOR RECEIVER**

# AR3000A

*Evolution*





# Authority On Radio Communications

The NEW AR3000A is an evolutionary step forward from the highly acclaimed AR3000, many major improvements have been implemented at the requests of enthusiastic listeners and commercial organisations. Search and scan speed has been increased to an unprecedented **50 increments per second**.

Your listening horizons are truly extended with receive coverage from 100kHz all the way up to 2036MHz without any gaps in the range. The AR3000A offers the widest coverage on the market today with a high level of performance and versatility from long wave through shortwave, VHF and onward to the upper limits of UHF and SHF.

The high level of performance is achieved by using 15 band pass filters before the GaAsFET RF amplifiers unlike other receivers which may rely largely on broad band amplifiers. This ensures high sensitivity through the entire coverage with outstanding dynamic range and freedom from intermodulation effects.

Not only will the AR3000A cover this extremely wide range, it will allow listening on any mode: **NFM, WFM, AM, USB, LSB and CW**.

Tuning rates are selectable from an ultra-fine 50Hz step for SSB and CW right the way up to 999.95kHz for the TV and VHF broadcast bands,  $\times 10$  increase and  $\times 5$  decrease tuning rate buttons have been provided on the front panel to increase versatility and operational pleasure. A free running rotary tuning control provides the best possible method of user interface especially when listening in the SSB modes.

An RS232 port is provided enabling full remote control via most computers, control facilities include: Frequency, Receiver mode, Frequency steps, Writing to/from memory, Signal strength, RF attenuator, Memory bank changeover etc... A rear panel switch changes control between the key-

pad and RS232 port.

The large comprehensive front panel Liquid Crystal Display (LCD) has an improved 12 o'clock viewing angle which provides a multitude of information such as Search, Scan, Frequency, Memory and additional functions such as Memory bank and Second function. Illumination is provided to increase visibility in areas of low level lighting. The display includes a real time clock for accurate log keeping, there is also a timer and tape output socket for unattended monitoring.

400 memory channels are provided in 4 banks  $\times$  100 channels. Each memory channel will retain mode, frequency, RF attenuator setting and lockout status. The first channel of each memory bank may be used as a priority channel providing four channels in total. All memory and search programmed information is retained by an internally fitted lithium battery.

The implementation of a more efficient microprocessor has not only lead to greater stability and additional facilities but also increased scanning and search speeds. Front panel memory clear and microprocessor reset facilities are now available.

No less than four search banks are provided, each bank can be programmed by the user to operate anywhere within the tuning range of the receiver. As an aid to searching, 100 individual frequencies can be locked out of each of the four search banks to prevent the receiver stopping on continuously occupied frequencies. Enhanced programmable hold and variable pause facilities have been added to the search, scan and priority, this ensures the very highest level of versatility.

The AR3000A is powered from 13.8V DC, a suitable mains power supply is provided with the receiver. Other accessories include a telescopic whip, DC lead and operating manual.

## Specifications

- Model..... AR3000A
- Receiver coverage..... 100kHz-2036MHz
- Receiver mode..... USB, LSB, CW, AM, NFM(narrow), WFM(wide)
- Receiver circuitry..... Triple(USB/LSB/CW/AM/NFM) & quadruple (WFM) conversion superheterodyne
- Number of memory channels..... 400 (4 banks of 100 channels)
- Scan rate..... 50 channels/second
- Search rate..... 50 steps/second
- Receiver sensitivity.....

RANGE	MODE	10dB S/N		12dB SINAD	
		SSB/CW	AM	NFM	WFM
100kHz-2.5MHz		1.0 $\mu$ V	3.2 $\mu$ V	—	—
2.5MHz-1.8GHz		0.25 $\mu$ V	1.0 $\mu$ V	0.35 $\mu$ V	1.0 $\mu$ V
1.8GHz-2.0GHz		0.75 $\mu$ V	3.0 $\mu$ V	1.25 $\mu$ V	3.0 $\mu$ V

- Receiver selectivity..... 2.4kHz/-6dB, 4.5kHz/-60dB(USB/LSB/CW)  
12kHz/-6dB, 25kHz/-70dB(AM/NFM)  
180kHz/-6dB, 800kHz/-50dB(WFM)
- Antenna connectors..... 50 ohm BNC
- Audio output..... 1.2 watts at 4 ohm load 10% distortion  
0.7 watts at 8 ohm load 10% distortion
- Power requirement..... 13.8 volts DC, approx. 500mA
- Display..... Liquid crystal
- Dimensions..... 138mm wide  $\times$  80mm high  $\times$  200mm long
- Weight..... 1.2kg

● Specifications subject to change without notice.

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