AR8600MK2 is also available with optional (internal) APCO25 decoder! (analog and non-trunking only)

Wide coverage all mode receiver 100 kHz - 3000 MHz with RS232 port

Any time, any place

The AR8600 Mark2 is an amazingly versatile receiver which can be used mobile, base or trans-portable... powered from an external 12V d.c. power supply, 12V vehicle or from an optional internally fitted NiCad battery pack. Due to continuous development of our products, the AR8600 Mark2 has been enhanced in several areas. The upper frequency range has been extended to 3000MHz (3.0GHz), lower band sensitivity has been increased (now officially covering to 100kHz) with an enhancement to short wave performance by the addition of further bandpass filters and selection of alternative I.F. filters.

Mini-Circuits RMS1 / RMS2 mixers have been employed with active SPM aerial switching devices (not diode-switching) abundantly employed throughout the signal path. The AR8600 Mark2 provides remarkable short wave performance, making other similar wide band competitors mediocre by comparison.

MARK2 ...
INNOVATION & EVOLUTION

- Frequency coverage 100 kHz ~ 3000 MHz no gaps
- All mode reception with Super narrow FM plus Wide and Narrow AM in addition to the standard modes
- True carrier re-insertion in SSB modes
- New front end with RF preselection of VHF-UHF bands
- Detachable MW bar aerial
- Tuning steps programmable in multiples of 50 Hz in all modes, 8.33 kHz airband step correctly supported
  l Step-adjust, frequency offset, AFC
- Noise limiter & attenuator
- Versatile band scope with save trace facility
- Twin frequency readout with bar signal meter
- Separate controls for volume & squelch
- Write protect & keypad lock, lamp dimmer
- Programmable scan & search including LINK, FREE, DELAY, AUDIO, LEVEL, MODE
- RS232 computer socket
- Flash-ROM memory (no battery required)
- Slot card sockets
- BNC socket for 10.7MHz i.f. output

A strong twin metal case with die cast front panel characterises the multi-purpose role. All mode receive capability is provided including Single Side Band with programmable tuning steps down to a resolution of 50Hz with the frequency established by a highly accurate Temperature Compensated Crystal Oscillator (TCXO).

Many microprocessor features have been adopted from the trendsetting AR8200 Series-2 hand portable receiver, with the addition of a lamp dimmer and squelch operated lamp. RF preselection is provided through the crowded areas of VHF and UHF to ensure the highest levels of adjacent channel rejection with software spurii cancellation. In addition to a hinged telescopic whip aerial, the AR8600 Mark2 is supplied with a detachable plug in medium wave bar aerial which locates on the rear chassis of the receiver for localised medium wave monitoring. An additional BNC socket is mounted on the rear chassis so that 10.7MHz i.f. output may be extracted for use with external spectrum display and vector analyser units such as the AOR SDU5500.

Centre stage is a custom multi-section back-lit LCD, numeric keypad, navigation keys, rotary tuning control and separate controls for volume and squelch control, the LCD can also display alpha-numeric text comments.

The all important 8.33 kHz airband channel step is correctly implemented (eight-and-one-third, 33, 66, 00). Channel steps are provided in a menu and may be programmed. Step may be programmed by the operator in any receive mode using

multiples of 50 Hz in any mode (i.e. 5 kHz, 12.5 kHz or even 1.25 kHz). Extensive step-adjust and frequency offset facilities are also provided (as per AR5000) to ensure tracking of the most obscure band plans, AFC (Automatic Frequency Control) is included for spot on tuning ensuring that nothing is missed.

A wide frequency coverage is provided from 100 kHz to 3000 MHz (no gaps). All mode receive: WFM, NFM, SFM (Super Narrow FM), WAM, AM, NAM (Wide, standard, Narrow AM), USB, LSB & CW. A 3.0 kHz SSB filter is employed with true carrier re-insertion resulting in non-offset frequency readout for easy tuning of SSB transmissions. Optional substitute SSB and AM Collins mechanical filters are also available. An attenuator and noise limiter are also featured.

<< OPTIONAL COLLINS FILTERS

In addition, 'optional internal SLOT CARDS' (which fit into the rear chassis of the AR8600 Mark2) extend the capabilities even further, five cards may be fitted with two operational simultaneously lMemory slot card (increase storage to 4,000 memories, 160 search banks). lCTCSS slot card squelch & search. lRecord chip slot

card (records up to 20 seconds of audio) with 'continuous loop' capability. lTone eliminator slot card. lVoice inverter card. The slot cards are common to the AR8600, AR8600 Mark2, AR8200 and AR8200 Series-2.

EM8200	**Memory slot card**	increase storage to 4,000 memories, 160 search banks
CT8200	***CTCSS slot card***	squelch & search
RU8200	***Record chip slot card***	(records up to 20 seconds of audio) with 'continuous loop' capability
TE8200	***Tone eliminator slot card***	useful for scanning past transmission pilot tones
VI8200	***Voice inverter card***	demodulate analogue scrambling

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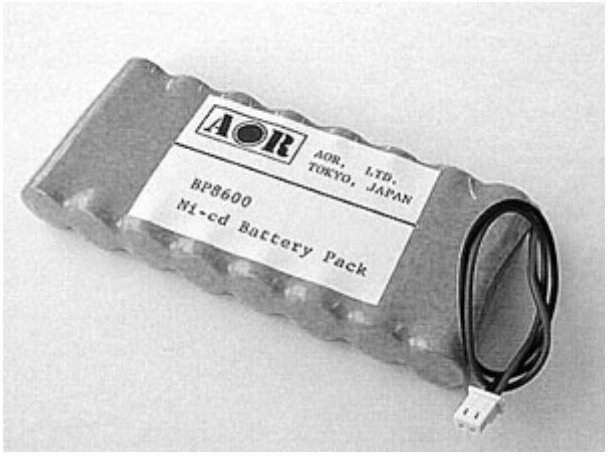

Portable operation is a reality, when the optional BP8600 battery is fitted, several hours operation is provided away from the base or vehicle power supplies.

<< Optional **BP8600** NiCad battery pack *(fits internally, workshop fitting required)*

(Note, considering the BP8600, a 15V regulated d.c. supply is recommended for charging purposes so that the battery obtains a full charge, full charging time 48 hours. This may also be used as a power supply).

AR8600MARK2 Specifications

Frequency 100 kHz to 3000 MHz * Cell blocked in the USA for FCC rules

Range:		
Receive Modes	WFM, NFM, SFM, WAM, AM, NAM, USB, LSB, CW	
Sensitivity:	100 kHz - 1.9 MHz	AM: 2.5 uV (10dB S/N)
	1.9 MHz - 30 MHz	AM: 2.0 uV (10dB S/N)
	30 MHz - 470 MHz	AM: 1.5 uV (10dB S/N) NFM: 0.7 uV (12dB SINAD) WFM: 1.0 uV (12dB SINAD)
	470 MHz - 1040 MHz	NFM: 0.6 uV (12dB SINAD)
	1040 MHz - 2040 MHz	NFM: 3.5 uV (12dB SINAD)
	2040 MHz - 3000 MHz	NFM: 10 uV (12dB SINAD)
Selectivity	□SB/NAM 3kHz (-6dB), 9kHz (-60dB) AM/SFM 9kHz (-6dB), 20kHz (-40dB) WAM/NFM 12kHz (-6dB), 25kHz (-40dB) WFM 150kHz (-3dB), 380kHz (-40dB)	
Aerial connection	50 OHM BNC	
Audio output:	800mW (8 OHMS) MAX @ 10% THD. Internal speaker, rear chassis 3.5mm socket, front panel 3.5mm socket	
Power Consumption:	400mA typical usage, 70mA on standby. 10.8 - 16V d.c. negative ground 9.6V from optional internal BP8600 NiCad	
Operating temperature range	-5 to +50 (deg.) C	
Dimensions	155(W) x 57(H) x 195(D) mm excluding projections	
Weight	2kg approx (MW bar aerial included)	
Memory channels	1,000 (20 banks)	
Select scan channels	50	
Priority	1	

channels	
Search banks	40
PASS channels	50 per search bank + 50 for VFO search
Scan/Search Rate	37 increments per second maximum

Specifications subject to change without notice due to continuous development of the receiver.
E&OE.