

AOR ARD9000 MK2 Digital Voice Modem

When you add digital capabilities to your existing HF rig with a new ARD9000 MK2, the advantages will come through LOUD and CLEAR.



AOR digital voice operators around the world are amazed at the audio quality delivered by the ARD9000 and ARD9800. Now AOR has improved the ARD9000 by adding a high quality speaker microphone with a traditional 8-pin round connector that lets you "go digital" with just a mike click. Its compact size makes the ARD9000 a favorite for backpackers who want to go HF digital while hiking or climbing. Of course, you don't have to leave home to enjoy the fun of clear DIGITAL contacts.

It's a real breakthrough in communications technology that uses the same audio frequencies (300 Hz ~ 2500 Hz) as microphone audio to transmit digital SSB voice signals. It's like adding a whole new mode to your HF radio without having to buy a new one!

- ARD9000 MK2 for "voice only" operations
- 12V DC only operation
- Use the provided speaker-mic or your own high-quality audio mic. (rewiring mic input may be required)
- NO transceiver modifications necessary
- Digital voice communications using existing analog transceivers
- Works on Single Side Band (SSB) mode
- Automatic digital receive
- Maintain full analog capabilities
- Optional interface cables for most popular transceivers
- Built-in high grade Vocoder (AMBE)
- Built-in FEC
- Compact unit. Easy to operate
- Utilizes a uniquely designed high performance DSP engine
- Uses the established G4GUO open protocol



With thousands of AOR digital units worldwide, digital HF is rapidly gaining a dedicated group of followers. Isn't it time you joined the fun?

AOR ARD9000 MK2 Digital Voice Modem

Enjoy digital voice communications while maintaining analog capabilities.

The ARD9000 MK2 makes digital voice communications FUN & affordable.

Now you can use your existing analog transceiver to work digital voice on Amateur Radio bands without making modifications to your transceiver.



No transceiver modifications needed.

The ARD9000 MK2 uses the same audio frequencies (300 Hz ~ 2500 Hz) as microphone audio to modulate the voice signal. This allows you to use an analog radio as a digital voice radio.

Works on Single Side Band (SSB) mode.

The Automatic frequency clarifier function adjusts frequency drift automatically in the SSB mode. (Approximately up to +/- 125 Hz). Utilizes the OFDM (Multi Carrier Modulation) circuit that is effective against Multi-path or Selective Fading.

Automatic digital receive

Automatic voice signal detector recognizes the received signal as analog or digital, automatically switching to the appropriate mode.

Built-in high grade Vocoder (AMBE)

High-grade digital voice compression delivers quality digital voice communications.

Built-in FEC

A powerful forward error correction circuit delivers stable and reliable communications.

Small and compact unit. Easy to operate.

Simply connect the ARD9000 MK2 between the microphone jack and microphone. No complicated modifications necessary. Optional interface cables for most popular transceivers are available or you can build your own connectors.

Wide range of operating voltages

Operates on 10 to 16 V DC from an external power source.

Utilizes a uniquely designed high performance DSP engine

Uses established G4GUO open protocol

The use of open digital protocol means use of the ARD9000 MK2 is permitted on US Amateur Radio bands (non-USA users should check applicable regulations).

Discover how much fun it is to work Amateur Radio in digital voice mode using the ARD9000 MK2 and your EXISTING analog transceiver!

SPECIFICATIONS

Modulation method	OFDM
Band width	300 Hz ~ 2500 Hz, 36 carriers
Symbol Rate	20 mS (50 baud)
Guard interval	4mS
Tone steps	62.5 Hz
Modulation method	36 carriers: DQPSK (3.6K)
AFC	+/- 125 Hz
Error correction	Voice: Golay + Hamming
Header	1 Sec. 3 tones + BPSK training pattern for synchronization
Digital voice	AMBE coder, decoder
Signal detection	Automatic Digital detect, Automatic switching between analog mode and digital mode
Power requirements	10 ~ 16 V DC, Approximately 100 mA (@ 12 V DC)
Dimensions	70 (w) x 33 (h) x 98 (d) (mm) (Projections excluded.) 2.8"(w) x 1.3" (h) x 3.9" (d) (inches) (Projections excluded.)
Connectors	Radio: Microphone output (level adjustable), Speaker input (200 mV ~ 5 V p-p), External Speaker Output, DC Input Connectors Speaker Microphone (with PTT)
Others	Force Synchronization Switch



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