



OPTIMOD XPN-AM

AM & HD Radio Audio Processor

OPTIMOD XPN-AM is the result of more than five years of research by processing pioneer Bob Orban. It exploits a psychoacoustic model to maximize the reach and intelligibility of AM/MW/SW transmissions while lowering distortion and reducing listening fatigue. The XPN-AM is based upon an AM-optimized version of Orban's MX limiter technology that was first introduced in the Optimod-FM 8600. This revolutionary limiter technology provides an unprecedented combination of loudness, cleanliness, crispness, speech intelligibility, and coverage. Additionally, XPN-AM's design incorporates everything Orban has learned in 42 years of AM processing experience, starting with the original Optimod-AM 9000 back in 1977.





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Key Features

- Orban's exclusive MX Limiter increases average modulation while reducing distortion and improving speech intelligibility, and increasing HF power handling capability.
- Compared to other AM processors, provides up to 20% power savings when using MDCL AMC 3 dB dynamic carrier power control.
- Suitable for long wave, medium wave, and shortwave (HF) AM broadcasts.
- Cuts through today's high RF noise environments, maximizing coverage.
- Mono/stereo analog AM processing and HD Radio/netcast processing with built-in diversity delay and delay ramping.
- Can create dense positive peaks to 125% modulation.
- Versatile transmitter equalizer can tune out tilt and ringing in transmission systems.
- Variable bandwidth from 2.5 KHz to 9.5 KHz (NRSC), with parametric input filter shapes to trade off brightness against ringing.
- Receiver equalizer shapes pre-emphasis can complement the high frequency roll-off of an "average" AM radio as determined by NRSC tests in 2006.

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