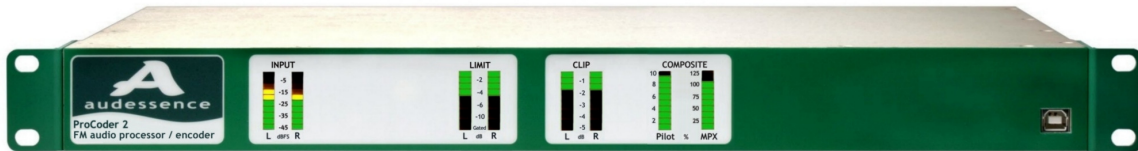




ProCoder-2



Audio processing plus stereo encoder for FM: ... DIGITAL, HIGH QUALITY, VERY COST-EFFECTIVE!

BENEFITS:

- No compromise on loudness or clarity, fully-digital throughout
- 'Transparent' mode enables main (multi-band) audio processor location at the studio
- Save an enormous amount of money if you have multiple transmission sites!
- Very effective in 'stand-alone' mode also: AGC, compression, & brightness enhancer
- Improve reliability and save money with automatic audio fail detect and switching
- Reliable, maintenance-free; low heat dissipation = *NO FAN NEEDED OR USED!*

APPLICATIONS:

- **FM networks:** *use at transmission site, locate preferred multiband processor at studio*
- Satellite 'drop-downs', telco-fed FM sites (analogue or digital) and RBFM repeaters
- **Stand-Alone FM processing:**
- All commercial & community radio
- RSLs (temporary broadcasting)

FEATURES:

- 'Transparent mode' offers brick-wall peak limiting without disturbing sonic signature
- Automatic silence detect and fall-back to secondary audio source (defeatable)
- Composite clipper for '*last ounce*' loudness with perfect pilot and subcarrier protection
- Overshoot-compensated 15.5kHz low-pass filters
- GPI tallies for: PSU OK, DSP watchdog, primary audio OK, All-OK
- Advanced AGC as used in our ALPS levellers offers unsurpassed, rapid control of levels
- Presence enhancer to brighten programme if used without multiband pre-processing
- No-tamper front panel (set-up by PC only: GUI software, USB and RS-232 ports provided)
- Bright, always-visible LED bar-graphs for instant confidence checks
- Very low audio latency (7 milliseconds), very fast boot-up (<1 second)
- TCP-IP connectivity option
- Factory presets deliver exactly the results you need for any application ...fast
- Integral FM stereo encoder
- Stereo enhancer option to follow as no-cost software update



www.audessence.com

sales@audessence.com

+44 (0) 330 6600 108

SPECIFICATIONS

Frequency Response:

ANALOGUE-ANALOGUE (L=R input, output de-emphasised): 20Hz-15kHz +/-0.2dB

Noise:

ANALOGUE-ANALOGUE: (rms 20Hz-20kHz, output d/e): <-75dB ref: 100% modulation (d/e on)

Distortion:

At 6dB limiting: <-70dB / 0.03% THD

Stereo Separation:

Better than 60dB at 1kHz

Inputs:

ANALOGUE: Active balanced, 10k (bridging), standard operating level -6dBu to +14dBu (clip +22dBu)

DIGITAL: AES-3 (XLR); 32, 44.1, 48, 88.2, 96kHz sample rate. 16, 20, or 24 bits.

Output:

MPX (Analogue): Unbalanced (on BNC), standard operating level -6dBu to +18dBu

Processing blocks:

High-Pass: 3dB frequencies 3Hz [DC block], 25Hz, 45Hz, 70Hz, 110Hz, 12dB/octave

Gated AGC: Capture range 40dB (+/-20dB); maximum positive gain can be set

+ Advanced AGC enables faster, programme-dependent operation

Compressor: Nominal 2:1 slope

Presence Enhancer: Boosts selected frequencies for presence and / or brightness

Limiters: look-ahead dual time-constant peak limiters plus NCDCS fully anti-aliased main clippers

Low-Pass Filter: Cut-off frequency 15.5kHz, overshoot compensated, stop-band better than -70dB

HF Limiter: 50us or 75us emphasis curve

Stereo Encoder: Zenith / GE Pilot tone system

Composite Clipper: -1.0 to +2dB, Anti-aliasing, filters protect 19kHz +/- 200Hz and above 54kHz

Tilt Corrector: Corrects low frequency overshoots in transmitters / exciters. Fully adjustable.

Control:

Setup is via PC GUI only. Select a factory preset, modify it, set levels etc, save to flash memory.

USB on front panel, plus RS-232 on rear panel. 10/100 LAN port is optional. All-text command format.

AC power input:

100 - 240V AC Nominal (acceptable range 88V to 264V AC) / 12.5 Watts / 17VA typical.

Dimensions & weight:

1-RU: 44 x 482 x 290mm deep / 1.75" x 19" x 11.25" deep. Weight: 1.8kg / 4lbs

Computer Control:

Every processing parameter, including all thresholds and time constants, can be accessed and modified under PC control (GUI software included, updates are free of charge).

Options:

10/100MHz Ethernet TCP/IP port available at time of ordering only, additional cost applies

Left and Right analogue processor outputs, available at time of ordering only, additional cost applies

Warranty:

3 year return-to-base warranty

Approvals:

CE (EMC & LVD), RoHS

N.B: A similar product with the addition of integral RDS encoder is also available ('ProCoder-3')

