

SILVER AUDIO PROCESSORS

SILVER AUDIO PROCESSOR 6B-FM

6-band audio processor with built-in award winning ARIANE Level



The Silver Audio Processor 6B-FM includes a digital stereo generator and a 6 band processor. It can be used for FM, Internet streaming as well as Digital Radio.

Input Selection and Conditioning

The Silver Audio Processor 6B-FM offers the user input selection, gain control and a selection from a range of stereo/mono options. The audio is then routed through defeatable high pass, phase rotating and pre-emphasis filters. A silence detector provides automatic primary to secondary input failure switch.

Ariane Intelligent RMS leveler

The 4-band RMS leveler corrects for input level variations and also improves consistency. It emulates human hearing better than a simple peak-based control system. Windowed gating prevents unnecessary volume changes and improves the processing quality. The block can also provide stereo enhancement with its matrix operating mode.



Bass Enhancement

2 forms of bass enhancement are offered: a 12dB/Octave shelving filter with up to 12dB of gain and a peaking filter that can be set to provide up to 6dB of gain on 1 of 4 frequencies with a choice of 4 Q's.

Xover

The Silver Audio Processor 6B-FM uses linear-phase time aligned digital FIR filtering to split the audio spectrum into 6 bands while maintaining sonic transparency.

Multi-Band Limiters

Each band has its own dynamic peak limiter. Multiple time constant based detectors with built in adjustable hold and delay functions significantly reduce distortion.

Mixer

The Silver Audio Processor 6B FM includes a 6 bands equalizer. It enables to slightly color your sound after the Multi Band

Limiter stage, and before the bands to be fed off into the 2 peak processing paths.

Distortion Controlled Clippers (Peak Control path 1)

The clipping algorithms peak limit (clip) and linear phase filter the audio in three bands for maximum distortion control before being fed to the final clipper stages. A Bass Clip Mode controls the action of the bass clipper by offering a hard and soft mode. Bass Clip Shape controls the shape of the bass clip transition and offers 3 modes (fat, med and slim)

Look-ahead limiter (Peak Control path 2)

Processing is performed in three bands for maximum transparency and clarity. A cut-shelving filter is provided to compensate for the effect of pre-emphasis when the Silver Audio Processor 6B-FM is used to process FM signals at the same time. It is also used for HD applications as well as for webstream.

Output selection, processing and routing

The user can select where each processing path is routed to and provides output level controls. A de-emphasis option is provided on both the analogue and digital outputs. The digital output sample rate can also be configured to a variety of settings.

The analogue output also has one extra path that can be routed to its outputs. This is a lower latency path that bypasses the final clipper stages and reduces delay by more than 4ms.

Stereo encoder

The stereo encoder is highly over-sampled and offers superb stereo performance. A composite clipping function is provided for those who wish to use it.



SILVER AUDIO PROCESSOR 6B-FM rear panel

