

# TECHNICAL SPECIFICATIONS 1401FM-M2

## GENERAL:

Total harmonic distortion (THD):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.09% (below processing threshold).
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.3% (all signal processors active).
Signal to noise:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	60 dB (70 dB typical).
Audio input:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20K Balanced XLR.
Input sensitivity:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-20 dBm or +10 dBm (jumper selectable).
Audio output:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30 ohms Balanced XLR.
Output level:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Adjustable up to >+18 dBm.
Size:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19" 2 rack units.
Weight:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8.5 kilograms.
AC Power:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	230 / 120 Volt AC.
AC Input Filter:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EMI-suppressed.
Safety Standards:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CE-marked.

**PHASE SYMMETRY:**      This all-pass network makes peaks more symmetrical to fully benefit the symmetrical peak  overload characteristics of the FM and TV medium (jumper selectable).

**SYNC SUSPENSION:**    Removes unwanted horizontal sync signals (1401TV only).

**AGC / LEVELER:**    Program-controlled time constants can provide upto 15 dB of leveling. Selectable.

**GATE:**      Slows down the release times of the Leveler when the signal falls under gate threshold   (Adjustable).

**PRE-EMPHASIS:**    25, 50 or 75  $\mu$ s.

## CROSSOVER:

Phase linear:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6 dB/Okt.
Crossover points:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	130, 850, 6000 Hz.

## FOUR BAND PROCESSOR:

General:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Program-controlled time constants can provide up to 25 dB of multiband processing. Time <input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	constants adjusted according to band frequency and user selectable with the 'Density switches'.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Employs delayed release for distortion reduction. Stereo Tracking can be selected per band.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The output level of Band 1 (low) and Band 4 (high) can be adjusted. <input type="checkbox"/>

## MULTIBAND CLIPPING:

Clipper threshold:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Adjustable over a range of 8 dB (can be bypassed).
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## LOUDNESS CLIPPING:

Clipper drive:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Adjustable over a range of 8 dB.
Clipper circuit:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Distortion controlled.
Peak modulation Control:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Within $\pm$ 1% typical.

**LOW PASS FILTER:**    7th order elliptical phase linear constant delay.

**PILOT PROTECTION:**    >60 dB.

**UPPER COMPOSITE PROTECTION:**  >65 dB.

**PHASE / OVERSHOOT FILTERS:**      Compensate the overshoots and phase difference created by crossover networks and low pass  filters.

**SAFETY CLIPPER:**    Only active to eliminate overshoots caused by unusual waveforms.

**JUMPER CONTROLS:**    Input -5 / +10 dBm or -20 / -5 dBm Phase Rotator, de-emphasis.

**SETUP CONTROLS:**      Drive Leveler, Drive Multiband, Drive Multiband Clipping, Drive Loudness Clipping, Density  switches per band, Stereo Tracking per band, Gate Threshold, Output level Band 1 and Band 4, Multiband Clipping-, Leveler- and System Bypass.

**SYSTEM BYPASS:**    Relay controlled / hard bypass. In case of a power failure the system will automatically be  switched in bypass mode.

**SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE**