



FT AMPLIFIERS

INTRODUCTION

The FT amplifiers are the ideal partners of the preamplifier MT CI. They have been developed according to the same principles which led the design and engineering of the preamplifier. From a technical point of view: the simplest circuit possible, great attention to the signal path, low feedback and the best components available in the market, carefully selected for their sound performance and reliability. From a sonic point of view: great dynamic capability, transparent but solid sound, optimum transient behaviour, no harshness and no listening fatigue.

THE DESIGN

Tubes or transistors? After a great pure tube preamplifier the answer could be tubes. Tube amplifiers have usually a good sound but their output transformers have a low damping factor, a limited bandwidth and phase shift. So they haven't the necessary speed and control to drive in the best way speakers with low impedance or with complicated crossovers. After many tests we have realized that the best solution today is a mixed use of tubes and Mosfets, to offer the best of both worlds. Two 6DJ8 tubes, in a cascode push-pull circuitry fed by a separate power supply, produce the right gain and the classic open sound and sweetness in the driver stage, while 10 Mosfets (FT200, FTA70, FT414) used only in the output stage (and not as pilots like most hybrid amplifiers), deliver the necessary damping and current to control any kind of load and impedance till 1 ohm. We have preferred Fets to transistors for their thermal stability (no protection has been used in the signal path), and for their better sonic matching to tubes. Wide bandwidth (and consequently high speed), high intrinsic linearity low distortion, a good damping factor and total stability has been reached with a very small amount of feedback (6 dB). The driver stage works in class A while the Mosfets have been polarized in PURE CLASS A (FTA70) or with a high bias, so the amplifier works in class A at normal listening volumes (FT200, FT414). To achieve absolute channel separation and for a better stage image, the amplifier is dual mono. like the Pre MT C1. The rocky power supply is formed by: two 30 VA toroidal transformers for the tubes, 2X600 KVA toroidal transformers (800W: FTA70), with two separate secondaries for the output stage, 8 computer grade storage capacitors for a total capacity of 120.000 μ F (176.000 μ F: FT414, FTA70). Dangerous and noisy switching on and off transients have been avoided using a muting circuit on the tube drivers.

Many hours of listening have been spent by a team of musicians and trained listeners to help the designers to reach a very natural sound. The result of all this efforts is a high quality product of timeless value, with excellent musical qualities, which provides the unmatched natural sound of a tube preamplifier with the authority speed and detail of a solid state one. Musical transients are sweet and at the same time reproduced with the realistic impact of a live performance. Furthermore MT FT Amplifiers are reliable and can drive any existent speakers at high volumes with no compression and hardness.

SPECIFICATIONS	FT 200	FT414	FTA70
Nominal Power RMS.	200+200 W into 8 Ω 350 W+350 into 4 Ω	140 W into 8 Ω , 220 W+220 into 4 Ω	70+70 W into 8 Ω , 130 W+130 into 4 Ω
Class A.	20 into 8 Ω	35 into 8 Ω	70 into 8 Ω
Bandwidth:	2 Hz - 150 KHz	\2 Hz - 150 KHz	2 Hz - 150 KHz
Input Sensibility and Impedance:	1,5V / 100 K Ω	1,5V / 100 K Ω	1,5V / 100 K Ω
Ratio S/N:	> 95 dB	> 95 dB	> 95 dB
Distortion (THD):	< 0.1 %	< 0.1 %	< 0.1 %
Damping Factor:	>45	>70	>90
Output:	10 Mosfets	10 Mosfets	10 Mosfets
Power Supply.	2 trasf. 600 VA, 120.000 μ F	2 trasf. 400 VA, 176.000 μ F	trasf.. 800 W, 176.000 μ F
Dimensions cm:	46(l) x22(h) x35(p)	46(l) x22(h) x35(p)	46(l) x22(h) x35(p)
Weight:	32 Kg	32 Kg	32 Kg

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