



## New **M2** Integrated Amplifier

**M2**  
SERIES

- New, modern, timeless aesthetics
- New stainless steel cover
- High quality Mains inlet filter
- Full functional Roksan LCD system remote control (*RMX-108*)
- 85 Watts/Channel into 8Ω, 125 W/Ch into 4Ω
- New on board output protection circuit with high current relays
- Five line inputs plus tape input and output
- First input switchable to balanced XLR
- Independent Preamplifier stage Power Supply
- Thermally controlled fan assisted heat-sink cooling
- Upgraded components and circuitry
- Motorised volume control with LED position indicator
- -20dB mute function
- 2 pre-amplifier outputs
- Power amplifier input (***requires internal work for activation***)
- 350VA ultra low noise, low leakage Toroidal transformer
- 60VA ultra low noise, low leakage Toroidal transformer for Preamplifier Power Supply
- Short circuit protection
- Power supply failure detection
- Pre power-up diagnostic check
- Gold plated input RCA & XLR connectors and speaker binding posts



## ADDITIONAL INFORMATION



The new **M2** Integrated Amplifier advances the performance of this class of amplifier to a new level. The ease with which the **M2** negotiates the loudspeaker load through even the most delicate yet demanding musical passages is almost unbelievable from such an elegant pure looking amplifier. Its control and authority appears to be backed by a state of the art power house! Resolution of detail is so harmonic and full of emotion that is reminiscent of our world acclaimed Roksan L1.5 reference preamplifier. Of course pedigree has played an important role but the relentless refinements, tests and never ending demands made this project come to life.

We are proud to present the **M2** CD player and Integrated amplifier; perhaps the most iconoclastic electronic components from Roksan yet.

## SPECIFICATIONS

### Caspian Integrated Amplifier

<b>Inputs</b>	5 Line & Tape <i>RCA Gold plated</i> CD Input also <i>switchable to XLR Balanced Gold plated</i>
<b>Input Impedance</b>	47 k $\Omega$
<b>Input Sensitivity (85W)</b>	Line 240mV
<b>Outputs</b>	<i>Gold plated RCA</i> Tape & 2 Preamplifier
<b>Output Voltage</b>	240mV (Tape Out) 700mV (Pre Out)
<b>Power Outputs</b>	Loudspeaker, L & R
<b>Output Power</b>	>85 Watts, into 8 $\Omega$ both channels driven >125 Watts, into 4 $\Omega$ both channels driven
<b>Power Supply</b>	350VA Ultra Low Noise Toroidal Transformer 60VA Ultra Low Noise Transformer <i>Preamp Section Toroidal</i> 5 Regulated Supply Rails
<b>Current Output</b>	60 Amps Peak to Peak
<b>Damping Factor</b>	>160 (8 $\Omega$ )
<b>Frequency response</b>	-3dB, <1Hz – 90kHz
<b>Gain</b>	40.2dB Overall (Pre & Power) 9.5dB Preamplifier 30.7dB Power Amplifier
<b>Harmonic Distortion</b>	0.002% 1kHz, 0.015% 20kHz 10W - 8 $\Omega$ 0.0025% 1kHz, 0.03% 20kHz 50W - 8 $\Omega$
<b>Signal to Noise Ratio</b>	Line 108dBa (ref. 500mV) 85dBa (ref. 1W, 8 $\Omega$ )
<b>Power Source</b>	100V – 120V 50Hz / 60Hz 220V – 240V 50Hz / 60Hz (via Mains inlet filter)
<b>Power Consumption</b>	< 230 W
<b>Dimension</b>	432 x 330 x 70 (W x D x H) mm 432 x 330 x 80 (including feet)
<b>Weight</b>	13 Kg



## Function of an Amplifier

- To utilise the power supply and copy the input signal much larger in amplitude
- To control the loudspeaker

Circuit design, choice of components, PCB lay-out, power supply, chassis etc. have profound influences on the amplifiers ability to copy the signal faithfully. In addition, to control the loudspeaker, the amplifier should be able to drive the load presented by the *cross-over/drive-unit* with ease. The load is generally reactive and thus it would present phase shifts in loudspeakers requirements for current and voltage. This means that at different frequencies and impedances the loudspeaker may require the current well in advance of the voltage and vice versa. Below shows the ability of the M2 integrated amplifier in providing power at different impedances and different phase angles:

Dynamic Power @	-60°	-30°	0°	+30°	+60°
8 Ohm	99	96	96	96	99
4 Ohm	155	150	148	149	155
2 Ohm	182	182	180	180	185
1 Ohm	92	93	95	92	93

The M2 integrated amplifier out put into +/- 60° phase angle is almost constant and stable down to 1 Ohm.



# M2 SERIES

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