



Superior Magnetics Since 1979



CMOQ-4

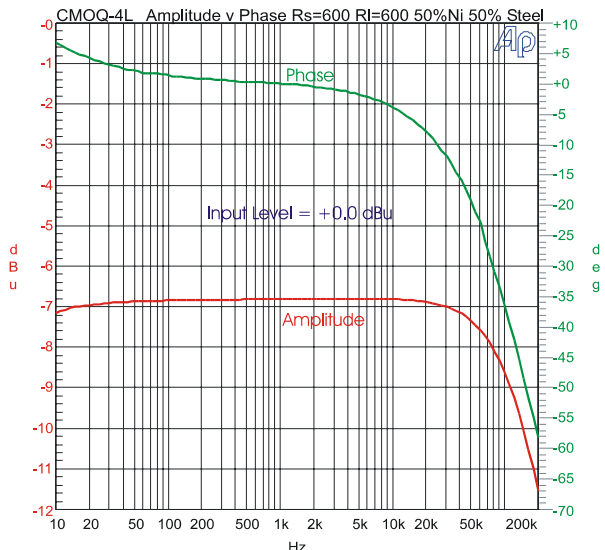
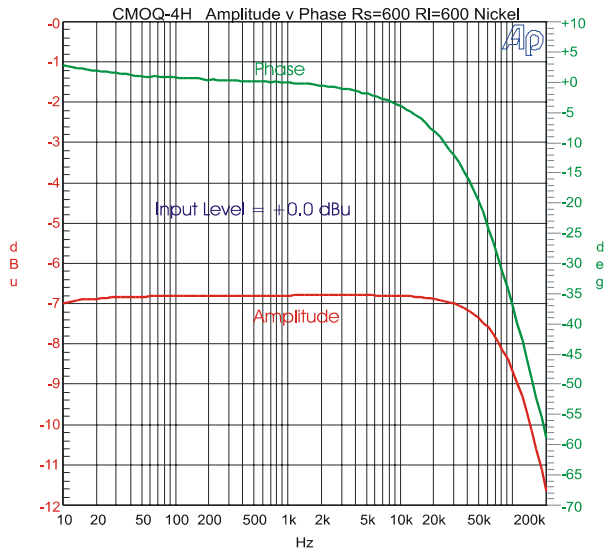
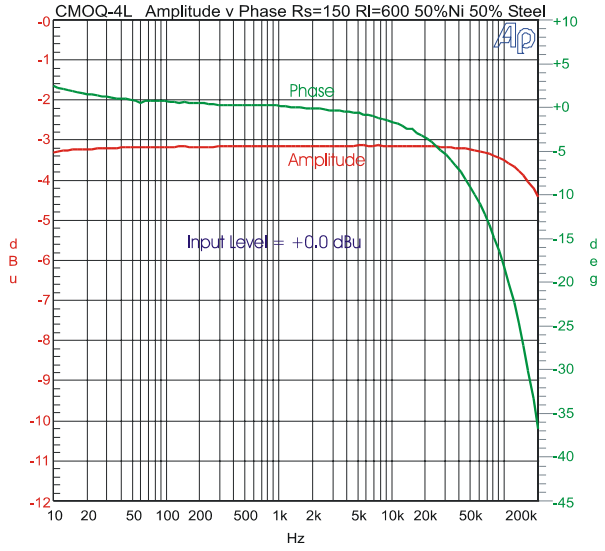
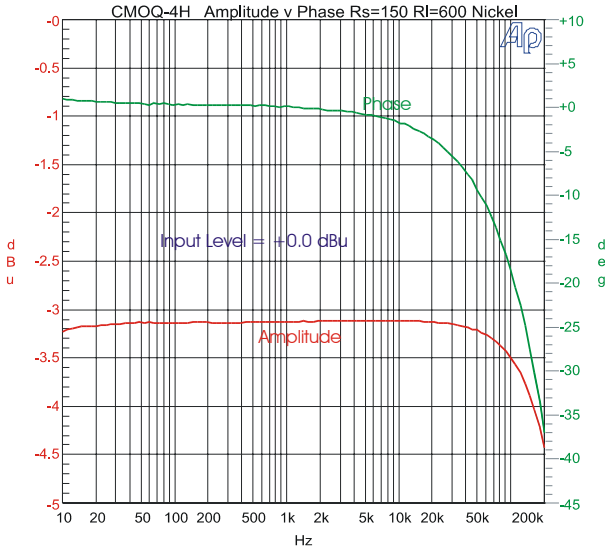
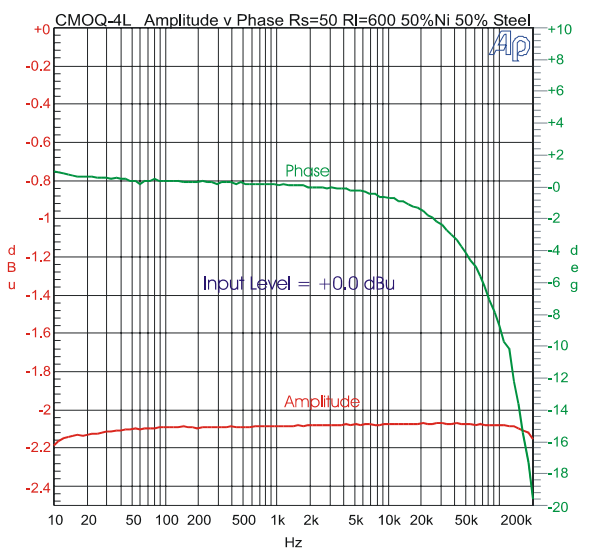
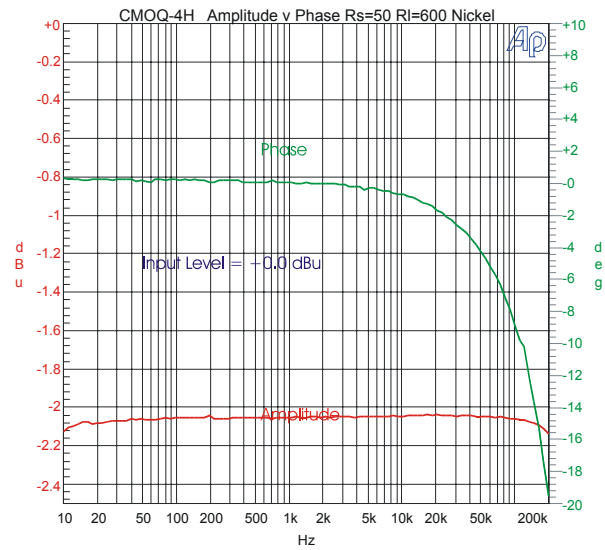
LINE OUTPUT TRANSFORMER Quadfilar Windings

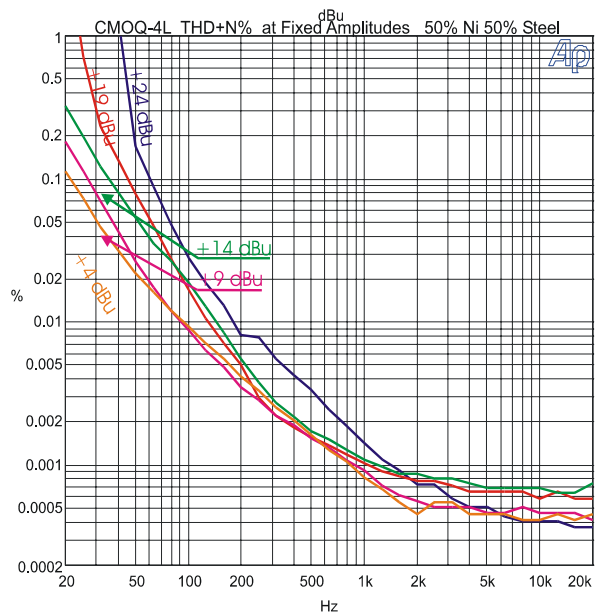
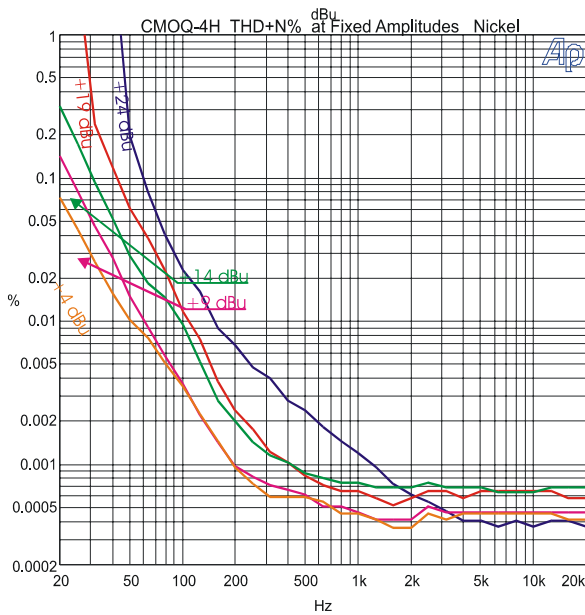
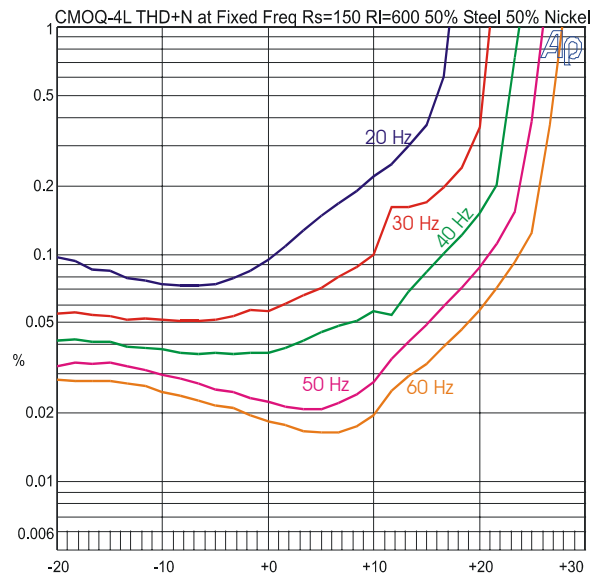
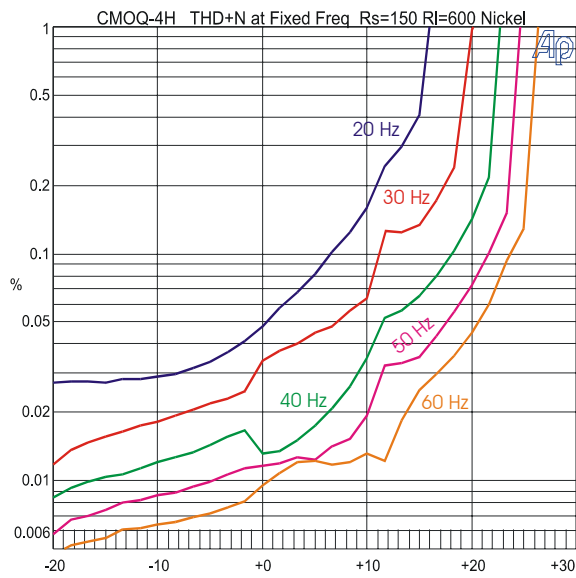
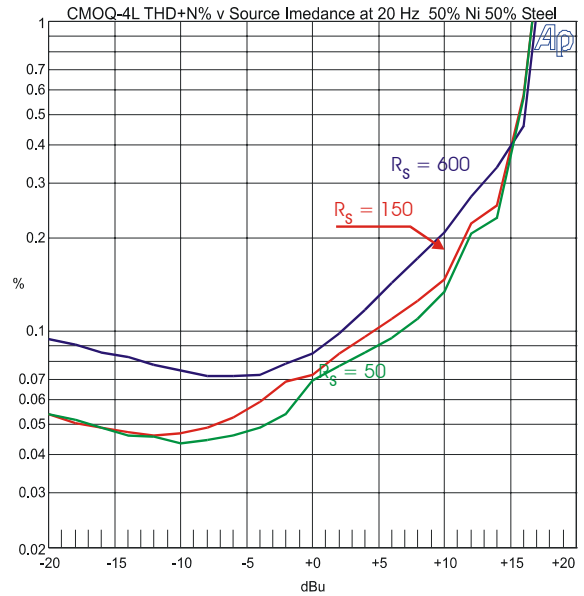
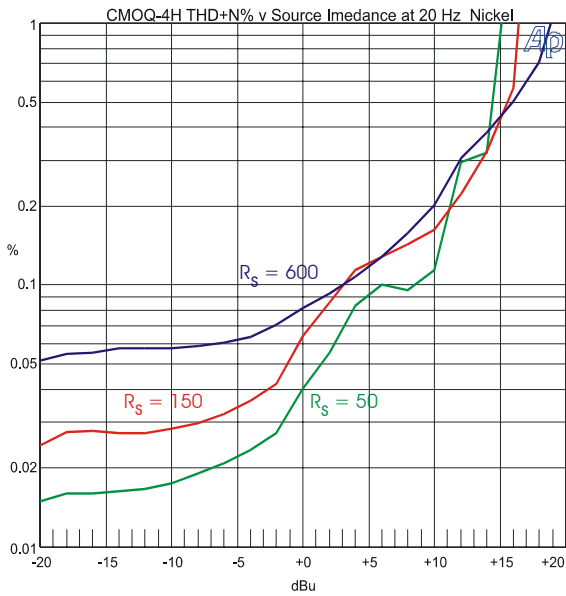
- Excellent bandwidth -0.1 dB at 200 kHz
- $R_s=50\Omega$ 80% Nickel ("HiNi") laminations
- Distortion <0.05% typ at 20 Hz, $R_s=150\Omega$ HiNi
- +15 dBm at 20 Hz, 1% THD+N $R_s\leq 150\Omega$
- Phase Shift -3.5° at 20 kHz, $R_s=150\Omega$
- Excellent coupling

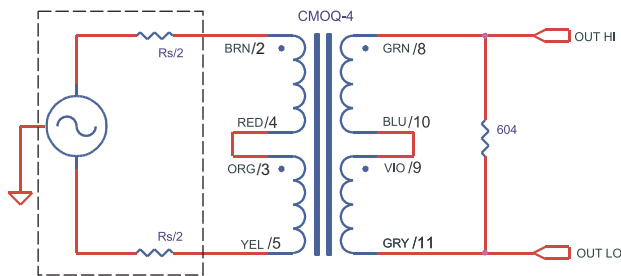
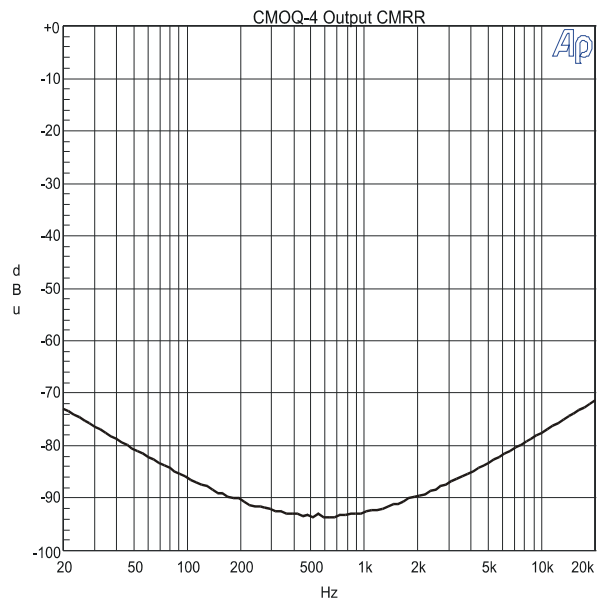
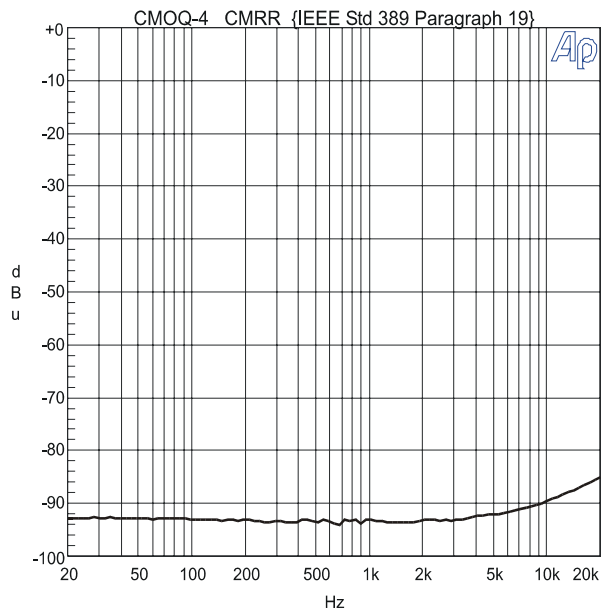
The CineMag CMOQ-4 output transformer uses quadfilar construction techniques. This four-winding transformer delivers good coupling between windings as well as excellent bandwidth. It is available both with 80% Nickel ("HiNi") and 50% Nickel/50% Steel laminations. It can be driven with source impedances of up to 600 Ω . As with all line driving devices, the amplifier feeding it should be capable of cleanly delivering the power required to reach maximum operating level. See AN-102. 100% steel laminations available.

CMOQ-4H / CMOQ-4L PC mounting available on request.

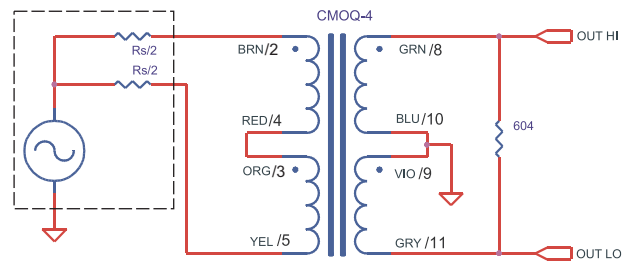
| Parameter | Conditions | Typ |
|-----------------------|--|--------------------|
| Turns Ratio | | 1 : 1.00 |
| Input Impedance, Zi | 20 Hz to 20 kHz, 0 dBu Test Circuit 3 | 657 Ω |
| Voltage Gain | 1 kHz HiNi Core, $R_s=150$ Test Circuit 1 | -3.13 dB |
| | 1 kHz 50% Nickel/50% Steel Core, $R_s=150$ | -3.15 dB |
| Distortion (THD+N%) | 1 kHz, +9 dBu, $R_s=150$ HiNi Test Circuit 1 | 0.0005% |
| | 1 kHz, +9 dBu, $R_s=150$ 50%Ni/50% Steel | 0.0009% |
| Max 20 Hz input level | 1.0% THD+N, $R_s\leq 150$ HiNi Test Circuit 1 | +16 dB |
| | 1.0% THD+N, $R_s\leq 150$ 50% Ni 50% Steel | +16 dB |
| Response, ref 1 kHz | 20 Hz $R_s=150\Omega$ HiNi Test Circuit 1 | -0.05 dB |
| | 20 kHz $R_s=150\Omega$ HiNi Test Circuit 1 | -0.02 dB |
| | 200 kHz $R_s=150\Omega$ HiNi Test Circuit 1 | -1.2 dB |
| Phase Shift at 20Hz | Referenced to source generator | +3° |
| Phase Shift at 20 kHz | Test Circuit 1 | -3.5° |
| CMRR | 60 Hz Test Circuit 4 per IEEE Std 389-1996 ¶19 | 92 dB |
| | 1 kHz Test Circuit 4 per IEEE Std 389-1996 ¶19 | 93 dB |
| Output CMRR | 60 Hz Test Circuit 2 | 82 dB |
| | 1 kHz Test Circuit 2 | 92 dB |
| Operating Temp Range | Operation and storage | 0° C Min 70° C Max |



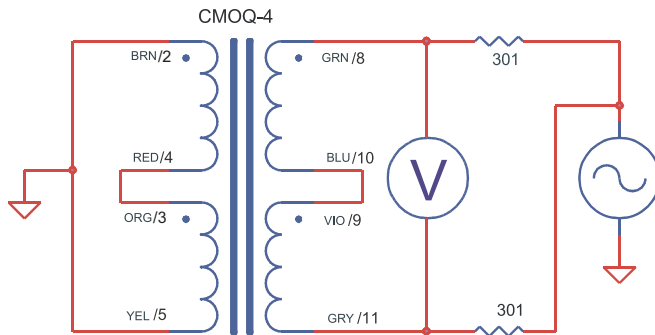




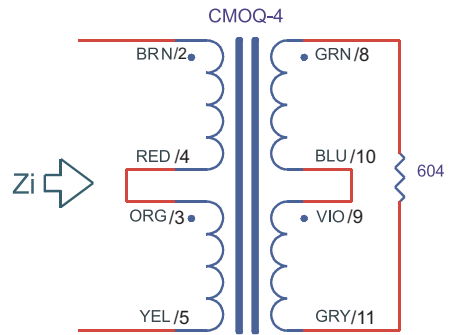
TEST CIRCUIT 1



TEST CIRCUIT 2



TEST CIRCUIT 3



TEST CIRCUIT 4

NOTES:

1. All graphs generated from one (1) randomly chosen device. No statistical averaging or weighting. Data from one sweep.
2. $R_L = 604$ unless otherwise noted.

