Vista Audio

Phono-2 MkII, User Guide

This venture is more than a business to us, and we remain committed to providing personal and personalized customer experience - your feedback is important and very welcome. We made many lasting friendships with the people who, like you, gave us an opportunity to demonstrate how decades of professional electronics design translate into a high quality audio product. Thank you for purchasing Phono-2 MkII and we wish you many years of listening pleasure.

POWER CORD

Phono-2 MkII ships worldwide to countries with different line voltages, wall outlet types and safety standards. The power cord is a safety-critical part and it needs to meet local safety regulations. For that reason, the preamplifier ships without the power cord. Phono-2 MkII accepts standard "PC Plug" connector (C13 connector, shown in Figure 1.). Power cords with this connector are readily available worldwide. There are no specific requirements for the wire cross section, although, for reliability reasons, we recommend use cables with 1.5mm² cross section (AWG 16 in North America).



Figure 1: C13 plug

CARTRIDGE LOADING

Eight discrete loads can be set by using individual switches. (47k, 22k, 10k, 1k, 500 ohm, 200 ohm, 100 ohm and 47 ohm). The cartridge load is set by engaging switches as indicated by the legend printed between the switches. Figure 2. illustrates load setting of 200 ohm. By combining loads,

many more different combinations are possible (for example - combining 22k and 10k switches, the resulting load will be 6.8k).

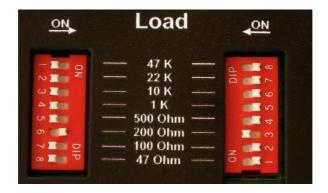


Figure 2: Switches for load settings (200 Ohm example)

For even greater range of load settings, Phono-2 MkII can have unlimited settings available by removing the top cover and accessing terminals for insertion of additional loading resistors and capacitors. Those terminals are marked R11 and R12 for loading resistors and C11 and C12 for loading capacitors (Figure 3.).

NOTE: in order to accurately load the cartridge with the additional resistors, all microswitches on the rear panel should be in the OFF position. When adding loading capacitance, the default capacitance is 50pF and it should be accounted for: if the total loading capacitance of 200pF is desired, additional capacitor needs to have value of 150pF. Capacitors and resistors with lead diameter in the range of 0.025-0.032" (0.6-0.8mm) can be safely inserted. Larger diameter may cause damage to the sockets.



Figure 3: Custom loading R and C

GAIN SETTINGS

There are six different gain setting possible: 40dB, 50dB, 55dB, 60dB, 65dB and 70dB. The preamplifier gain is set by engaging microswitches as indicated by the printed legend next to the switch. The Figure 4. illustrates gain setting of 65dB. White fields show the required switch position for a desired gain.

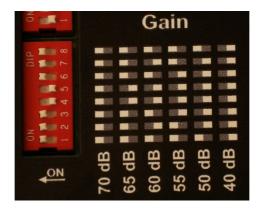


Figure 4: Gain setting switches (65dB example)

OUTPUT FILTER

The Phono-2 MkII features an active offset cancellation circuit to eliminate use of capacitors in the signal path. An innovative modification of the filter provides output filtration, also without adding capacitors into the signal path. There are three available settings:

- 1) No Filter: this setting leaves only the active offset cancellation engaged and preserves maximum bandwidth of the preamplifier. This is a recommended setting. However, if your system has electromechanical resonances, resulting in excessive woofer's cone excursion, one of the filters can be engaged.
- 2) 10Hz, Slow roll-off filter: with this setting engaged, Phono-2 MkII bandwidth is reduced to about 10Hz, and the roll-off starts at about 40Hz. In addition to being the most universal setting, suitable for majority of practical systems, this filter setting is useful for use with records equalized by IEC RIAA curve.

3) 10Hz, Fast roll-off filter: our version of subsonic (rumble) filter without capacitors in the signal path. Bandwidth goes down to 10Hz, but roll-off starts below 20Hz, thus having no effects on audio frequencies.

The Figure 5. illustrates low pass filter setting "10Hz, Slow roll-off". White fields show the required switch position for a desired gain.

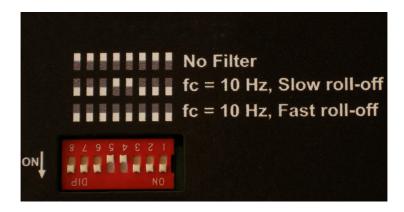


Figure 5: Output filter settings (slow roll-off example)

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