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Instructions for setting the Optional MM/MC Exposure phono pre-amp card

There are two optional phono cards that are available for purchase separately with the 3010s integrated amps, the Classic integrated amp, the Classic Pre-amp, and in a stand alone phono stage from the Classic range. The retail for the cards either MM or MC is $495. They are both adjustable for loading and gain.

To change the setting of the MC card you must change the configuration of the jumpers on the top side of the board. There are 4 different gain setting that are good for MC carts with an output voltage of 15mV, .25mV, .5mV and 1mV. There are also 9 different load settings, which can be changed from 100 ohms up to 1500 ohms by changing the loading jumpers located on the top of the board. Different combinations of jumpers, will give you different loading values.

For example to set the card for a cartridge with a .5 mV output you would use just jumper 2 of the two gain jumpers, and remove jumper 1. The gain adjustment jumpers are located just below the two square blue capacitors near the back of the card nearest to the back panel of the chassis. The gain jumpers are labeled gain1 and gain2. They come set from the factory with both jumper 1 and 2 installed, this would be ideal for a MC cartridge with an output of around .15mV.

To change the loading of the cartridge from the factory setting of 100 ohms to a load of 210 ohms, you would use jumper 2 and jumper 3 and remove jumper 1. The loading section of the phono card is located at the top edge of the card, closest to the back panel of the chassis. You may want to try a few different load settings when you first receive the phono card. Loading values can be a matter of personal taste, as well as to avoid ringing, overshoot and other negative effects of improper load setting. The loading also influences the preamplifier's noise level, and the frequency response, etc. I would suggest trying one loading value higher and one value lower then recommended to see if you prefer the sound with the different settings.

Step by step instructions for setting the Exposure phono cards:

1. Find out the output voltage of you cartridges, It should be listed in the literature that comes with your cartridge.
2. Set the gain jumpers to the voltage level of your cartridge. For example with a Benz Glider SL, with an output voltage of .4mV, you would remove jumper 1 leaving jumper 2 in place on the board.
3. Find the loading value recommended by the manufacturer of your cartridge. For example the Benz Glider SL recommends a value of greater then 100 ohms. To set the phono card for 100 ohms install jumpers 1,2 and 3 on the loading section of the board. You may want to try a few different loading values up to 210 ohms for the Benz Glider SL. Most MC cartridges like to be loaded 10-20 times higher then the internal impedance of the cartridge. The Benz has a impedance of 12 ohms, which makes loading setting of between 130-210 ohms ideal.
4. You should now be able to listen to your turntable. Put on a record, set the Exposure Pre-amp or Integrated amp to Phono, and drop the needle for some of the best sound you will hear from your system

There are many different setting which can be achieved using different jumper configurations. You can set the card to work ideally with almost any low output moving coil cartridge being made today, or made in the past. There are 3 levels of gain, and 8 different loading settings available. Some experimentation may be required to get the best results for in your system.

If requested when ordering the card from the dealer, they can set the jumpers in advance to the proper gain and loading setting that will work best with your cartridge.

On the next page you will find the specification of the two MC and MM phono cards. Listed are the different loading values along with the jumper configuration needed for the different load values. Also listed are the different jumper configurations needed to adjust the 4 levels of gain for MC and the two gain levels for MM. If you have any problems or question, please don't hesitate to contact your dealer, who will be able to suggest the optimum settings for your cartridge.

The specifications for the MC cards are:

Frequency Response :
± 0.25dB ref 1KHz (MM and MC) 30Hz to 20KHz. With IEC roll off thereafter
Sensitivity and Signal to Noise Ratio,
Jumper 1 fitted : 250uV, >64dB S/N for 250mV out
Jumper 2 fitted : 500uV, >69dB S/N for 250mV out
No jumper fitted : 1mV, >74dB S/N for 250mV out
Loading MC : 6n8 in parallel with 1K5 ohms or with jumpers fitted :
J1 + 2 + 3 100 ohms
J1 + 2 110 ohms
J1 + 3 130 ohms
J1 160 ohms
J2 + 3 210 ohms
J2 310 ohms
J3 470 ohms

The specifications for the MMcards are:

Sensitivity and Signal to Noise Ratio,
MM : J1 fitted : 5mV, >79dB S/N for 250mV out
No jumper fitted : 2.5mV, >76dB S/N for 250mV out
Loading MM : 47K ohms in parallel with capacitance selected by jumper J1
Mains Supply : 110/120V or 220/240V, 50/60Hz (Factory set)
Power Consumption : <25VA
Dimensions (H x W x D) : 90mm x 440mm x 300mm
Nett Weight (unpacked) : 8 kg
Gross Weight (packed) : 10 kg