

MusicPower Plug-In
Installation Manual
for Naim NAC 42 & 62 Preamps

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MusicPower Plug-In Installation Manual for Naim NAC 42 & 62

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1. Congratulations!

You have just received a special upgrade kit for your Naim NAC 42 or 62 series preamp. The changes you are about to make will provide a substantial improvement in the sound quality of your preamp. Your new “plug-in” printed circuit boards have been assembled by hand with care and tested before sending them to you. Installing them is easy, quick, and fun with a big reward at the end!

2. Warning

After making this upgrade, you will likely spend a lot more time listening to your hi-fi and less time doing other things like washing the car, mowing the lawn, or bidding on ebay. Anyway, there are no lethal voltages inside the preamp itself (24 volts dc max), so don’t be afraid to dig right in. However, it is strongly suggested that you turn off both your preamp and power amps before making changes to avoid pops and clicks that could damage things.

In addition to this manual, we also provide an on-line installation video for those who prefer watching to reading. Please go to www.ryansoundlab.com and look for installation videos in the Support section. Please see either the NAC 32/32.5 or the NAC 72 video for general information on how to install these plug-ins. If these still aren’t enough, send an email to jryan@ryansoundlab.com and we’ll try our best to help you.

Finally, even though this kit has been engineered to be as foolproof as possible, we suggest you read all the way through these instructions before proceeding with installation.

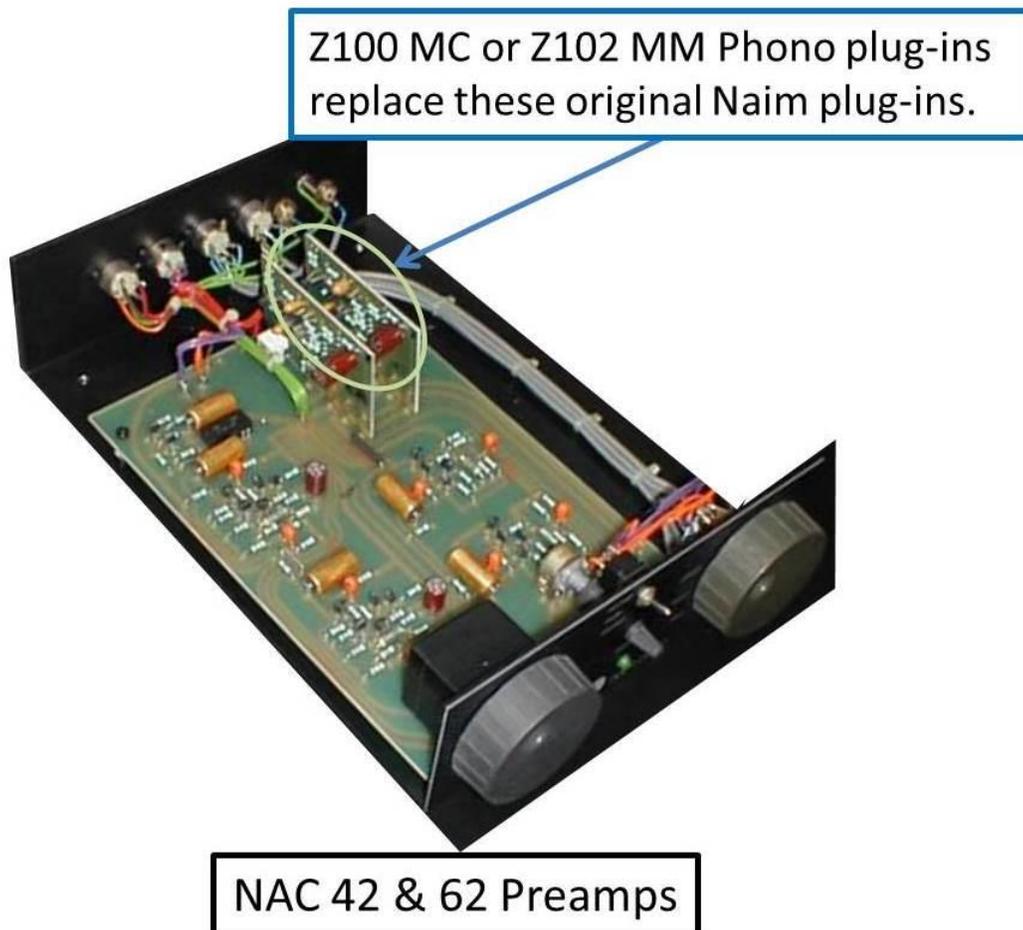
3. Installation Process Preparation

Before starting, we suggest listening to your system one last time in its original configuration. After this installation, you may never want to hear it that way again!

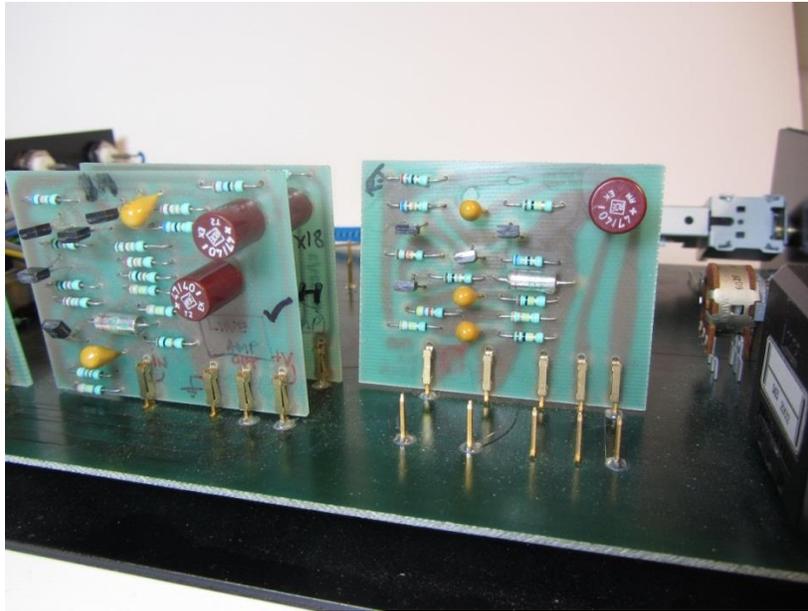
To get to the inside of your preamp, first, turn off your power amp(s), then turn off the preamp power supply (e.g. HiCap). It is easier to work on the preamp if the cables are removed from the rear of the unit, though not required.

Now, unscrew the four rubber feet from the bottom of the unit – they should come off with just your hand but use a #2 Phillips screwdriver if needed. Now the aluminum case can slide off the front or rear, your choice. Put it aside for a while – you won't need to replace it until you're all done. You have just exposed the insides of your unit. Some people might even think it's beautiful – Naim certainly did.

The NAC 42 and 62 preamps have a motherboard with 1 pair of replaceable phono or high level boards. The boards “plug-in” on posts in the motherboard and can be easily unplugged, as you will soon discover. The picture shows a typical unit and the board locations.



The plug-in boards use gold-plated sockets to connect with the vertical posts on the motherboard. We use the identical sockets for complete compatibility and long, trouble free operation. Below is a close-up of those special connectors that Naim uses in this preamp.



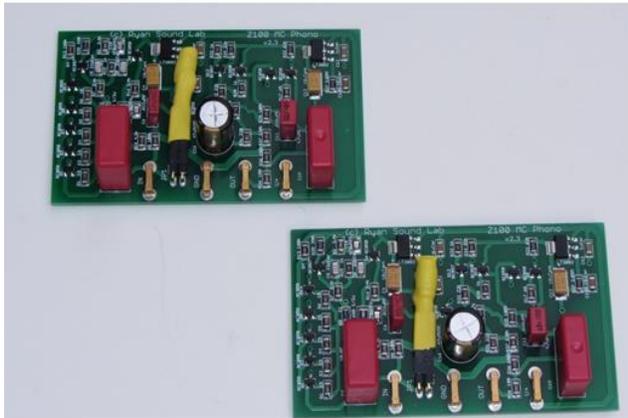
General guidance for changing plug-ins: To change the plug-ins, just pull the old ones straight up – they come right off the pins. Then carefully line up all the connectors before pushing the new plug-ins fully down. Naim’s design helps a lot by smartly designing each plug-in type so that it’s impossible to install them incorrectly! When you install the boards, the connectors will face to the left as seen from the front of the preamp, exactly the same way as the Naim original boards are currently installed. Having good lighting is very helpful when lining the connectors up. A flashlight is particularly useful and recommended.

One last suggestion, if you haven’t removed the rear connectors, with all the handling you will be doing to the preamp, please be sure that they are firmly seated in their sockets when powering back up. In fact, for good connector maintenance, it is helpful to remove and re-insert them occasionally. This would be a good time to do just that.

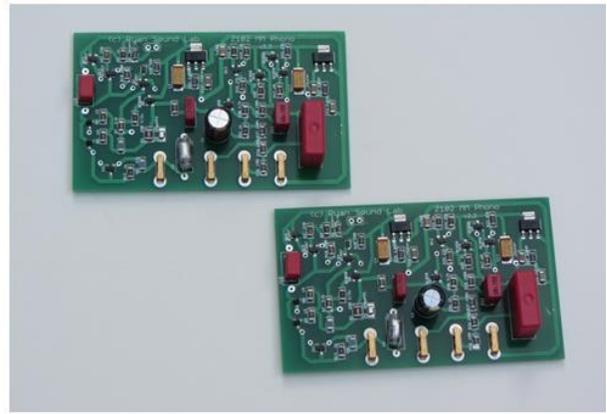
4. Installing MusicPower Phono Plug-Ins

Both moving coil (MC) and moving magnet (MM) type MusicPower Phono Plug-Ins are available as an option. They contain individual power regulators for each gain stage on each Plug-In (4 total per pair of Plug-Ins) which provide much tighter bass and more dynamics to all your LPs. Their film capacitors (big red boxes in the photos) bring a sense of depth not previously heard from the Naim plug-ins. The photo below shows them both for reference.

Z100 MC Phono boards



Z102 MM Phono boards



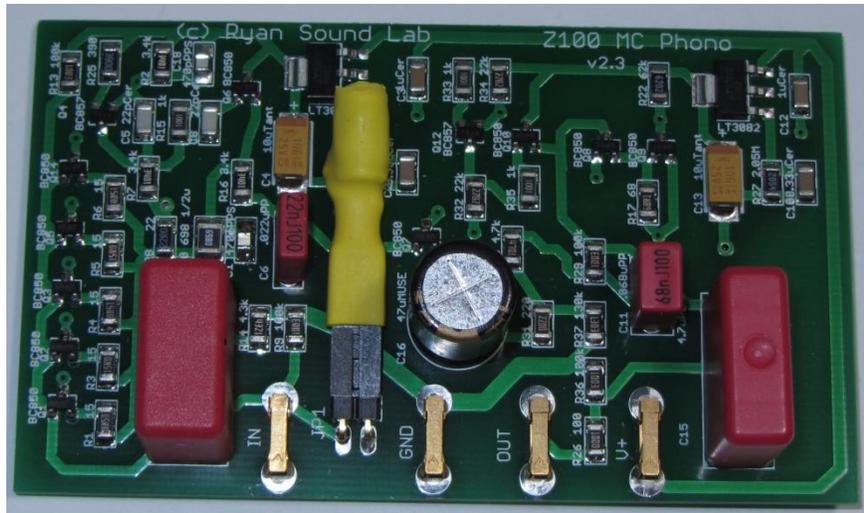
Follow the steps in Section 3 to prepare your preamp to accept these boards (turn off the power amps, turn off the preamp, disconnect the power, remove the feet and cover).

Please follow the guidance in the appropriate section below for installation.

4.1 Installing the Z100 Moving Coil (MC) Phono Plug-Ins

The MusicPower Z100 Moving Coil (MC) Phono Plug-Ins cartridges are a direct upgrade for the original Naim plug-ins but with an added flexibility feature: ours have a unique, removable compensation module which allows you to get exactly the right settings for your particular MC cartridge (see finger-like, small, yellow modules in left photo above). We normally supply “K” plug-in module values (560 ohms+1000pf) as standard for Linn cartridges. The values are marked on the module itself. If you need “S” compensation, that’s 470 ohms+6800pf. Just let us know when you order.

Be sure the compensation modules are fully seated into the Z100 MC Phono Plug-Ins before inserting them into the motherboard, as shown in the photo below.



Refer to the photo on page 3 for location information, remove the existing Phono plug-ins (if any) and replace them with the MusicPower Plug-Ins. You may have to reposition the coax cables slightly to allow room for the large film capacitors on the new Plug-Ins. Make sure you push both plug-ins all the way down on the motherboard pins. See the photos on pages 9 and 10 showing the finished positions for all the plug-ins.

4.2 Installing the Z102 Moving Magnet (MM) Phono Plug-Ins

The MusicPower Z102 MM Plug-Ins come with industry standard input impedance built-in, so no extra components or adjustment is needed. The original Naim MM plug-ins have no power supply regulation at all on them so these new plug-ins, with two excellent regulators on each plug-in, FET (field effect transistor) inputs, and a film capacitor output is an outstanding improvement.

Refer to the photo on page 4 for location information, remove the existing Phono plug-ins (if any) and replace them with the MusicPower Plug-Ins. You may have to reposition the coax cables slightly to allow room for the large film capacitors on the new Plug-Ins. Make sure you push both plug-ins all the way down on the motherboard pins.

5. Enjoy

Feel free to do comparative changes back and forth with the original and MusicPower plug-ins. The connectors are good for thousands of inserts so you'll be long gone before you wear them out. Just remember to turn off the power supplies first. When you've had enough A-B testing, don't forget to put the cover and feet back on. The cover just fits over the top of the boards intentionally to keep the boards in place.

After the upgrade, we found ourselves so immersed in the music that we forgot about tinkering with the hifi system! Hope you enjoy them as much as we do!