

NHB-18NS (2014-2026 version) instructions



Congratulations for purchasing a darTZeel instrument

We have condensed in these few pages the essential features that will allow you to use your NHB-18NS optimally, so that you can take full advantage of your favorite music.

⚠ Important information about batteries ⚠

The NHB-18NS is conditioned for transport so that its internal battery is disconnected from the microprocessor unit to avoid a deep discharge.

When you first turn it on, this factory-activated sleep mode is automatically turned off.

If you want to turn off the external power supply to save electricity, or during a prolonged absence, it is necessary to reactivate the sleep mode, otherwise the battery could be damaged due to a deep discharge.

Just do this:

- Switch the preamp on
- Switch the power supply off
- Switch the preamplifier off

The display will indicate SLEEP, then the preamp will shut off.

Ignoring this procedure may result in battery damage that will not be covered by the warranty.

In daily use, it is recommended to always let the external power supply live on. The overall consumption is optimized to not exceed a value of about 2 watts when the preamplifier is turned off and its battery is charged.

Note: when put in sleep mode, volume level is not stored into internal memory. Be careful at next power on since you may have a max volume setting (+11 dB) engaged. Reduce it accordingly to your preferences.

Use of NHB-18NS preamplifier

Most of the functions are explained in the user's previous manual, which is attached to these instructions, in the packaging box.

You have the latest version of the NHB-18NS, which now has a digital display to display the volume level, but also provides several other adjustment possibilities, using an internal menu. The latest version of our phono stages now allows fully microprocessor-driven adjustment, using the toggle switches located in the rear panel (read later).

To enter in the main menu, press the balance knob for 2 seconds, then you will see the display changing.

Now you are in the menu, and you can exit anytime by pressing again 2 seconds long.

When in that menu you can browse across it by rotating the Balance knob, and when you see the specific entry, press once onto the balance knob to enter in this sub-menu level, and choose the value you need, again by rotating the knob.

Then you can either press briefly to exit that level, browsing for another parameter to adjust, or simply hold 2 seconds the balance knob depressed to fully exit.

No need to validate, each parameter is saved as soon as changed.

Please note that Bypass function, while activated as soon as chosen, will only be actually engaged next time you will choose that source after having exited the menu, thus avoiding an abrupt, unexpected and unwanted level change.

Balance control itself is simply available by briefly pressing once the knob, and then you can adjust. To exit, either press once or just wait for about 5 seconds, the balance mode will exit back to "Pleasure Control" mode.

If you altered the balance quite a lot, instead of going back by rotating the knob, you can press it for 2 seconds when still in that adjustment mode, and balance will reset at middle position.

Almost all menus are easy and very intuitive to use.

Battery operating time is given for 8 hours in phono mode, with illumination set to 60%.

Higher illumination level may reduce this time; in normal "audiophile darkness", I find 40% is nice.

You can also activate auto DIM so you will extend further operating time.

Batteries used in this preamp can be qualified as "revolutionary": while the technology is well known (Lithium Iron Phosphate), very few brands in the industry use them at this moment. I personally tested these batteries and the technology for more than *three years* before choosing them. I think you will quickly forget all bad experiences with older battery technologies.

We also now installed a connector on the battery pack, so the day you will have to replace it, it will be possible without hassle.

Allow batteries to broken-in too, since they reach their best performances (lasting time AND lower output impedance) after about 50 to 100 cycles.

As you noticed, pressing both level keys on the remote control you will also enter balance mode.

In order activating balance without altering level because it is not easy to push both keys exactly at same time, this is the little trick to follow:

Take the remote control with 2 hands and point toward your chess; press both keys and while holding, gently point the remote toward the preamp again, and balance will display without having altered level value.

Phono stage settings (See the diagram in page 5):

The phono toggle switch located on rear panel for each phono module offers two menu levels: You must chose phono input from the Enjoyment Source before proceeding; maybe obvious to say anyway better to write it down... ☺

- Level ONE (EQ and Subsonic): toggle briefly to either left or right.
You will then see on both left and right "LED rows", either 2 or 4 illuminated LEDS.
 - Left row is for Neumann 4th pole EQ, right row is for the new "smart" Subsonic filter ("smart" because very efficient but barely audible, a unique darTZeel feature)
 - 2 upper LEDs illuminated mean "OFF", 4 lower LEDs mean "ON".

Usage: You have to perform the following while level ONE is still enabled.

When you want to change either Neumann 4th pole EQ (factory recommended default is ON) or Subsonic filter, you can enable / disable / enable (and so on) EQ by toggling on LEFT, or enable / disable / enable (and so on) Subsonic filter by toggling on RIGHT.

You can do that WHILE PLAYING, the internal microprocessor will handle this as smoothly as possible, most of time you cannot hear it when playing music (small soft pops audible when not playing music).

Once setting done, just wait until LEDs will go off, exiting the menu.

This first level setting menu is engraved as a reminder on the rear module plate with the word "short" and a L/R arrow; once the above explanation is understood, this engraved reminder is just "illuminating" the correct "LED" in your mind and you will remember how to proceed.

- Level TWO (Load and Gain): toggle briefly once to enter into level ONE, then toggle and hold 2-3 seconds then release.
You will know you are in level TWO since only one LED of each row will be illuminated.
 - Left row is for Load, as you can see by the engraved numbers 300, 150, 100, 75, 50, 43: this is the load in ohms.
 - Right row is for Gain, as you can see by the engraved numbers 72, 69, 66, 63, 60, 57: this is the gain in dB.

Usage: You have to perform the following while level TWO is still enabled.

By briefly toggling on the left, you will alter the load in decreasing value then start over: 300, 150, 100, 75, 50, 43 -> 300, etc. briefly toggling on the right will alter gain the very same manner.

You can do that WHILE PLAYING, the internal microprocessor will handle this as smoothly as possible, most of time you cannot hear it when playing music (small soft pops audible when not playing music).

Just be careful since you are at minimum gain, toggling once again will jump to 72 dB, then inducing a positive level jump of 18(!) dB, so do it at moderate volume.

Once setting done, just wait until LEDs will go off, exiting the menu.

This second level setting menu is engraved as a reminder on the rear module plate with the word "long" and a L/R arrow, just above load and gain rows; once the above explanation is understood, this engraved reminder is just "illuminating" the correct "LED" in your mind and you will remember how to proceed.

When in either menu level ONE or TWO, if you do not toggle at all for about 5 seconds, LEDs will go off and you will have to toggle again to enter into setting menu.

BONUS setting: in case you would absolutely need a specific load, there is a possibility to solder (yes, sorry) a discrete resistor on the card, and then activate the special mode with the appropriate jumper located on the card. In case of needing "no load" like a 47k input, you can also activate this special mode with the jumper but without soldering any specific resistor (or a 47k one if you want to be sure).

As you will see, standard load settings offered are with much lower values than for the previous phono stages.

This is because, after the past experience of almost a decade with the venerable original NHB-18NS, gain was most of the time set to 337 or 100 ohms.

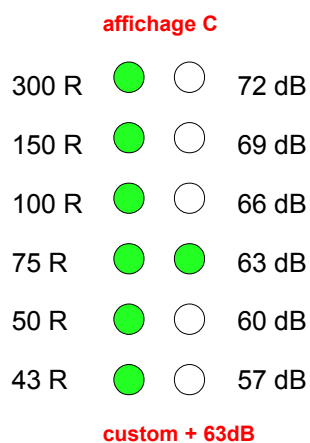
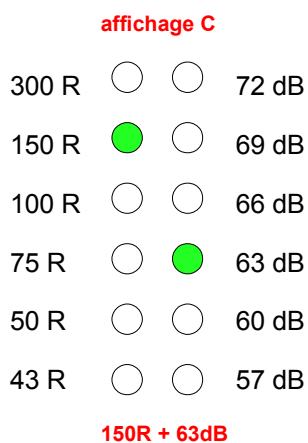
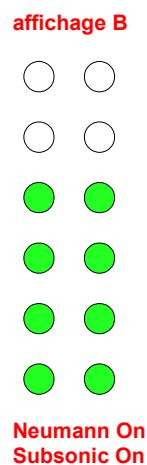
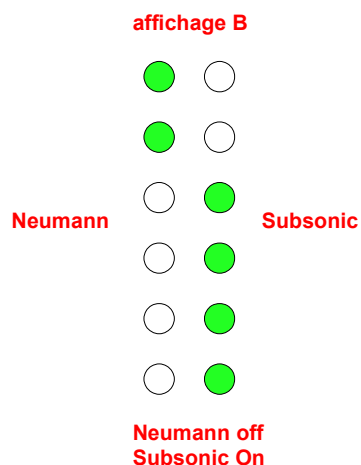
We also found that better sound is just with settings within the offered range. Personally I found that best sound with my Ortofon A90 is with 100 or 75 ohms; higher than 100 highs are a little bit "too brittle" and bass became to lack of punch; lower than 75 ohms bass were still very good but I found that it was some less "air". Of course your mileage may vary, it is just a starting point which may help you.

Playing with 47k or no load using the "bonus" setting gave more "air" at first glance, however it was artificial, and bass were too much (to me) soft.

This present updated instruction will still evolve, while at same time the final user manual is under construction.

If you have another question, please let us know by email at moreinfo@dartzeel.com

Your darTZeel team



pour activer le mode impédance d'entrée custom : placer le jumper sur la carte phono.
la sélection d'impédance d'entrée est alors désactivée, tous les relais sont bloqués ouverts.