



DETAILS

PRODUCT
Nagra HD Phono

ORIGIN
Switzerland

TYPE
MM/MC tube
phono preamplifier

WEIGHT
14.5kg

DIMENSIONS
(WxHxD)
438 x 130 x 439mm

FEATURES
• 4x EF806S,
2x E88CC
Class A tubes
• 2x moving-coil
inputs on RCA
• 1x moving-magnet
input on RCA

DISTRIBUTOR
Cadence
Distribution

WEBSITE
nagraaudio.com
cadencedistribution.
co.uk

Precision engineering

Joining Nagra's mono block power amps, preamp and DAC X separates in its High Definition line, the two-box HD Phono channels the brand's 70+ year audio heritage

With the HD Phono, Nagra has joined a rather select group. By our estimation, there are but a half-dozen manufacturers of phono stages costing above £50,000. At a heady £68,500, the all-valve Nagra HD Phono is about as expensive and exclusive as it gets, and for that amount of money you expect to get everything. Happily, you do.

This beautifully engineered two-chassis affair consists of the phono section and a separate power supply, the latter being a feature of

each component in the HD series. The pairing oozes Swiss artisanship and Nagra even states that: "the transformer itself is hand-wound in a very delicate process requiring watchmakers' type of skills".

Side by side

Both CNC-machined aluminium chassis are satisfyingly chunky. They are suspended via a damped, 'constrained-layer' platform with a height-adjustable isolation-damped pillar in each corner for vibration resistance. Despite how instinctive it

is to stack them, Nagra stresses that they're best positioned side-by-side to avoid noise. You have a bit of leeway when separating them, thanks to the 1m pair of umbilical cords, which come bundled and connect the two.

All of the activity is at the back for the power supply, the front being completely unadorned save for the company logo. The rear panel includes two LEMO sockets of differing sizes for the umbilical cords so you shouldn't be able to make a mistake connecting them. One feeds the HD Phono's tube

circuitry, the other the logic control section for the complex operational features. While the power supply is based on the HD Preamp and HD DAC X, it has been further developed (according to the maker) with “innovations which make it even more silent with improved performance”. They are not interchangeable, but are supercapacitor designs that offer the advantages of a battery supply without the limited lifespan, heat sensitivity, etc.

The phono stage’s rear panel is necessarily busier, hosting RCAs for MC1, MC2 and MM, thus telling you that the HD Phono has the capacity for three turntables/arms/cartridges

The Nagra HD Phono is easily the quietest phono stage that we’ve ever used

all at once. Aiding this are four earthing posts with earthing cables terminating in two spade connectors.

Above the phono section’s LEMO PSU sockets is a pair of single-ended RCA outputs. There’s no balanced XLR output despite the partnering HD Preamp accepting XLR sources.

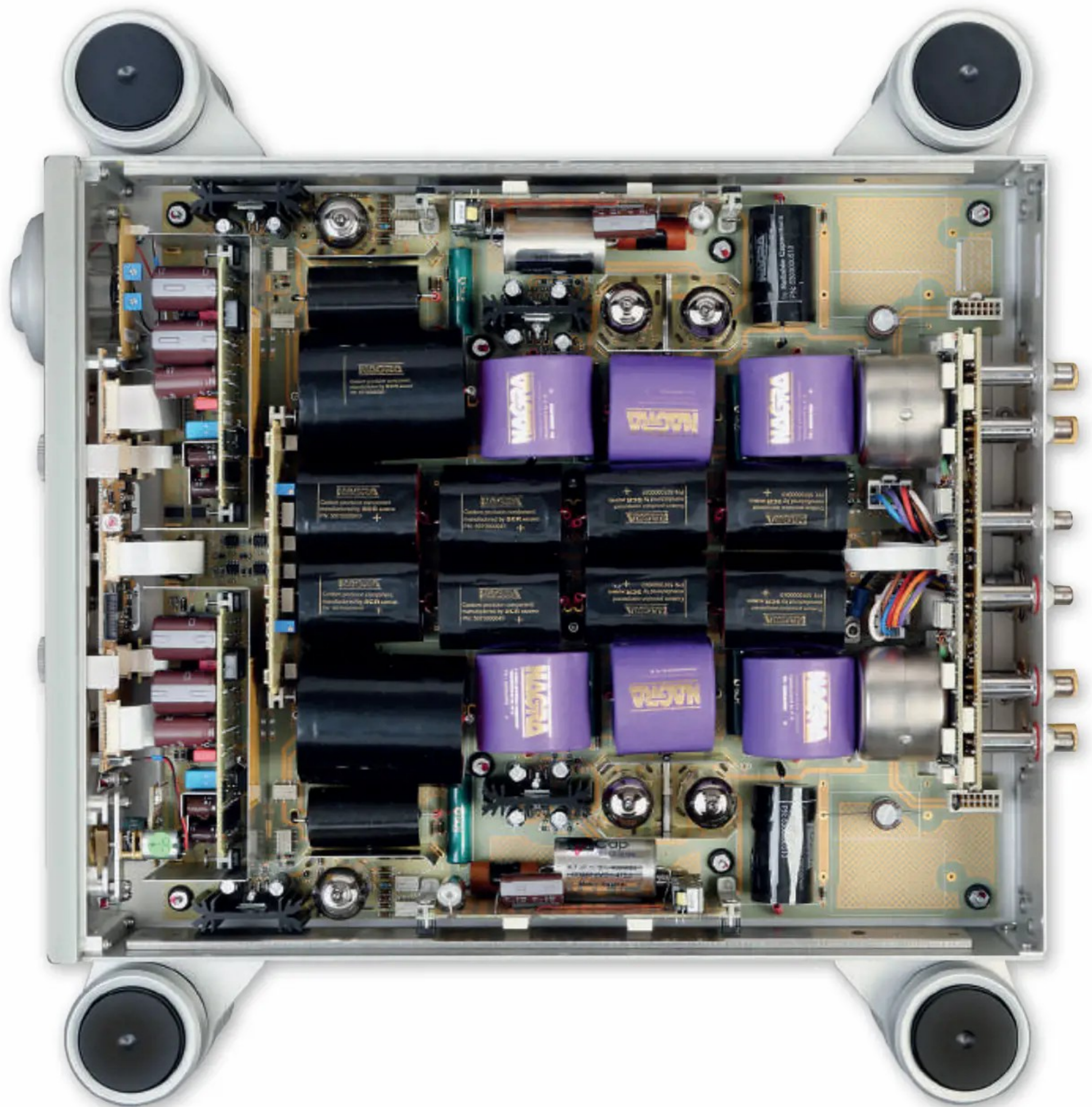
Also on the back are left and right sections with blanking plates; these will accept optional modules for custom MC transformers.

The fascia is effectively divided in two with the Modulometer indicating the output level in dB and with an adjacent toggle to adjust brightness in five steps, this is next to a mono

cartridge LED and rotary dial for setting the input loading. In the centre a $\pm 6\text{dB}$ gain toggle acts on both moving-magnet and coil inputs, and to the right is an EQ rotary, mute switch and the rotary dial that takes the unit from standby and selects the inputs of MC1, MC2, MM and optional custom input (if fitted). Inside are six valves – four EF806S-Gold pentodes in the EQ section alongside two E88CC/6922 triodes for the $\pm 6\text{dB}$

gain block. The circuitry is dual-mono and pure Class A. For MC duties, the HD Phono employs a new generation of custom-made input transformer from a lineage that includes the original VPS transformer, in turn based on the Nagra IV-S tape recorder’s microphone input transformers.

In Nagra lore, then, the HD Phono’s transformers are fourth-generation designs, offering 26dB of gain. The hand-wound transformer’s core is





made with cobalt and is: “cryogenically treated over the course of several weeks to improve performance” according to the manufacturer.

Using – appropriately – a fine Swiss chronograph from Breguet, we time warm up from when we switch the main rotary from ‘Off’ to ‘MC1’. It

It actually highlights the way valves can deliver superior three-dimensionality

takes a reassuring if agonising two minutes eight seconds to go from completely cold to up-and-playing, following a fascinating sequence monitored in the two display windows

with messages explaining each stage of the warm-up process, before settling on the load value in the left window and the chosen equalisation in the right, clearly being RIAA for most of the time.

Having said that, Nagra has opted to include pre-RIAA settings in the HD Phono that include Teldec, NAB 100µS, Victor EUR and Victor USA. If some are missing, their absence is largely academic: it should not matter to most owners.

Far more important is the fact the moving-coil cartridge load adjustability is from 10 to 390ohm, with steps as fine as 5ohm for smaller values. We count no fewer than 64! MM users can choose between one of five capacitance values from 0-220pF.

Sound quality

The Nagra HD Phono is quite simply the quietest phono stage we’ve ever used, valves or otherwise. It seems to embrace whatever cartridge you feed it, gracing conventional moving-magnets or coils with the silences that we thought were only available with DS Audio’s photo-optical cartridges (which require dedicated energiser/phono stages and are not compatible with MM or MC inputs). Among the cartridges we put through their paces are moving coils in the shape of the TechDAS TDC01 Ti, Koetsu Rosewood, EAT Jo No8 and Ortofon MC 90X, plus Decca Gold and Ortofon 2M Bronze moving-magnets.

It’s a simple matter to optimise each pick-up and at no point does the HD



TALE OF THE TAPE

Nagra's heritage dates back to 1951, when Polish-born Swiss engineer Stefan Kudelski invented the first Nagra I portable tape recorder (the Polish word 'nagra' translates as 'will record'). However, the now-iconic Nagra 'modulometer' was not present on either the Nagra I or II models, though the latter did include a level meter with a moving-coil 'needle'. In 1957 the Nagra III tape deck debuted a recognisable 'Modulation Level Meter' – mono, of course, with a single needle.

Here's a description from the original manual: "The upper scale on the meter is for measuring the input level (on Test or on Record), and the output

level for hi-fi playback. Normally the pointer will not reach the black segment between 0 and +2dB, which is the region of over modulation. The recorder has a safety factor of about 6dB, so that an occasional accidental incursion into this region is of no consequence. The level control should be adjusted so that the pointer only reaches the black zone on the loudest parts of the recording."

Fast-forward some 70 years and the HD Phono's modulometer, with black and red-tipped needles for left and right channels, respectively, displays the selected audio output level only, its 'Reference 0dB' point rated at 1V.

Phono run out of headroom from the higher output Decca. It even seems to reduce that cartridge's innate low-level hum, which might have something to do with the plethora of earthing solutions that are available.

From the start of The Beatles' *Day Tripper* (Past Masters, Apple), an unmarked backdrop is blatantly apparent. That classic riff starts the song with double-tracked guitars, joined first by Paul's bass, then Ringo's drums far left. Each instrument floats in its own space, no audible detritus, no grain, nothing intruding. If Nagra had named its phono stage 'Showcase' or 'Sonic Window', it wouldn't be a conceit. If ever there was a tool to drag people kicking and screaming back from the charms of digital sources, especially if they favour them because of their apparent background hygiene, they're in for a surprise with the HD Phono in that respect.

It is also a showcase for valves. The warmth that envelopes the vocals – as in the uncluttered passages of *Hey Jude*, with just Paul singing while he tinkles away on the piano – is as emblematic of tubes-versus-transistors as any previous comparisons we've ever experienced. Quietness and wide dynamic range characterise the entire session, from start to finish, album to album. The sound of the piano is rich and visceral throughout, the attack and decay, and the resonances, shining through.

The sheer power of Yes' *Close To The Edge* from the remastered LP of the same name (Atlantic/Rhino) reveals the impressive resolving powers of the HD Phono. At around six minutes into the suite, it effortlessly moves from hammering percussion and slithery guitar, with keyboard pyrotechnics sweeping behind, to the band's undeniably ethereal

harmonies, all layered against that wonderfully silent backdrop. At one point, you can clearly make out Rick Wakeman's faint keyboards so far back in the mix and almost off the stage that it is as if the wall behind the loudspeakers has completely disappeared. Nagra's phono preamp therefore not only exhibits but actually highlights the way valves can deliver superior three-dimensionality.

Abundant headroom and an ability to contain (or should that be liberate?) bombast is certainly required for the 'big band' rock of MAX's *Beyond Rodan* (Digital Cellars). This hitherto lost album, in the vein of US rock

Messages in the two display windows explain each stage of the warm-up process

band Blood, Sweat & Tears, offers a superb horn section worthy of testing attack, while the vast soundstage afforded by the HD Phono is of a scale that allows the listener to zoom in on specific instruments with little effort. The punch and crispness are on a par with the very best solid-state phono amplifiers, while the deep, rich bass is mercifully free of the often over-damped low frequencies some transistorised phono sections deliver.

To close we flick the HD Phono's mono button, dig out The Beatles' *The 1964 US Albums In Mono* (Apple) and proceed to wallow in the whole of *Meet The Beatles*.

Conclusion

Nagra's HD Phono extracts with equanimity everything from a divergent mix of cartridges and with such ease of fine-tuning that it's as much a reviewer's tool as it is a hi-fi component. Simply put, it is an absolute triumph, valves or otherwise ●

Hi-FiChoice

OUR VERDICT

SOUND QUALITY

★★★★★

LIKE: Supreme soundstage, depth and fine detail

VALUE FOR MONEY

★★★★★

DISLIKE: Price aside, you'll need the room to stand the two boxes side by side

BUILD QUALITY

★★★★★

WE SAY: In the highly rarified air of £50k phono stages, the HD Phono stands alone

FEATURES

★★★★★

OVERALL

★★★★★