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Nagra Jazz Preamplifier



ILOVENAGRA is an apt password that I happened to receive while working on two articles on Nagra's Hi-End audio equipment. The first was on the VPS phono amplifier, and while I was quite impressed with the VPS, Nagra's Jazz preamplifier has enchanted me like few products before. I've utilized the Jazz for over six months while writing two previous reviews, first on the VPS phono amplifier and later on Allnic Audio's H-1201 phono amplifier. If you haven't read the original VPS article you may want to give the first few sections a glance, as they contain information about Nagra's history as well as my own relationship with the Nagra brand. Otherwise, the time has come to put on some Jazz.

Launched at the Munich Hi-Fi Show in May 2012, the Jazz line-stage pre-amplifier is the successor to Nagra's first two consumer Hi-End model preamplifiers, the PL-P and PL-L, and is named in homage to the famous Montreux Jazz Festival in Switzerland, of which Nagra has been a sponsor and partner for many years. While those at Nagra feel they had success with both the PL-P full-function preamplifier (1997) and PL-L line-only preamplifier (2001), when the time came to develop a new model, the objective wasn't simply to improve upon the PL series. As Nagra suggests in a press report prepared for the Jazz, "new Nagra products are launched with parsimony: a new model only replaces an existing one when it can bring an appreciable benefit." With the Jazz, Nagra sought to develop a preamplifier that surpassed the performance and function of the PL series models in every way.

Nagra's development team achieved five major objectives set out for the new model:

- 1. Silence within the electronic circuit Nagra was able to improve the signal to noise ratio from 100 dB for the PL series to 105 dB for the Jazz.
- **2. Simplification** The improved S-N ratio allowed Nagra to eliminate the battery power supply found in the PL models, replaced by a new external ACPS II power supply module.



Circuit paths were also reduced, allowing for the addition of new features such as motorized volume and balance potentiometers, remote controlled input selectors, symmetrical balanced XLR outputs, optional symmetrical balanced XLR inputs and the repositioning of all connections to the rear of the unit rather than on the side.

- 3. Suitability for multiple sources To cope with the disparate signal levels a preamplifier may receive from various source components (such as C/D players, D/A converters, reel-to-reel recorders, and phono amplifiers) Nagra developed a two-position gain switch. Located on the front panel, the gain switch allows the user to select between 0 dB (where the Jazz performs almost as a passive preamplifier with little gain being added at input) and +12 dB, providing additional gain for low-level source signals.
- **4. Upgradability** There are two user-selectable upgrade options for the Jazz; a symmetrical balanced XLR input module and an outboard MPS multi-unit power-supply. Both options are designed to add flexibility and increased performance to the main Jazz model (neither have been tested in this report).
- **5. Fit within the Nagra range** the Jazz has the same size, fit and finish as the previous generation preamplifiers, including the finely brushed aluminum case, and is identical in scale to both the VPS phono amp and the MPS power supply.



What's Inside?

The Jazz is built around four layered groups of gold plated, epoxy glass, military-grade printed circuits: *motherboard; input/output connector circuits; user-controlled switch circuits; optional symmetrical balanced input circuit.* The four circuits are linked via short ribbon cables and the motherboard is mounted on elastomer silent blocks.

The motherboard houses the main amplification electronics, which contain two separate gain stages and a voltage multiplier that enables a high voltage (200 V) to be applied to the valve anodes from the initial 12 V supplied by the external ACPS II power supply.

The first amplification stage is built around two 12AX7 (ECC83) double triode valves, configured in differential topology and polarized by transistors. The second stage, which manages most of the gain, utilizes a single 12AT7 (ECC81) triode. (The 12AT7 is connected to the front panel 12 dB gain switch).

According to Nagra, the 12AX7 and 12AT7 valves are subjected to a rigorous testing process and sorted according to gain, hum, and sensitivity to microphonic noise. Nagra claims that over 60% of the valves tested are rejected; only the highest quality valves are selected for use.



The input and output circuits (mounted on the back panel) are directly soldered to the connectors, while the front panel switch circuit (mounted behind the front panel) includes a microprocessor which controls all the user management functions

including *input selection*, *remote control functions*, *muting*, and the *display* of the output signal via the Jazz's modulometer.

The main switch circuit also contains two additional sub-circuits that control the motorized volume and input selection. The switch circuit is also responsible for the Jazz's soft-start protection function, which delays the application of high-voltage current to the valves for 20 seconds at startup. The motorized Blue Velvet volume and balance potentiometers are manufactured by Alps, and are renowned for their precision.

Thoughts on Performance...

The Nagra Jazz is a first class valve preamplifier that successfully meets their design objective's five-point criteria. The main strengths of the Jazz are its low noise level (S-N ratio); the solidity of its function; the flexibility of its operation; its extremely low heat levels (especially for a valve-based preamplifier); and its overall exceptional sonic performance level. I am particularly impressed with how well the Jazz performs at quiet listening levels.

What attracts me most to the sound of the Jazz is its balance between analogue warmth and accuracy. As an audio professional I'm naturally attracted to hearing revealing, intricate detail within a piece of music. At the same time, when listening at home, I love pure analogue audio and the sound produced by vacuum tubes. Perhaps because I spend all day with digital audio, when at home I find pure analogue listening to be engaging, seductive and relaxing. The Jazz manages to satisfy both my professional desire for detail and my romantic love of the sound of pure analogue. Its sound is neither too lush nor too forward. The Jazz possesses a clean, accurate character that is simultaneously dynamic, warm, detailed and spacious – a most successful combination for engaging music playback.

Because I used the Jazz while working on a pair of previous reviews I experimented with various set up configurations, including switching between the 0 dB and +12 dB gain settings and utilizing both the balanced and single ended outputs.

With my Bryston 4Bsst2 amplifier I preferred the +12 dB setting. This setting allowed most of my musical selections to fall nicely between 8 and 10 o'clock on the Jazz's volume knob, and produced the most effortless sound. With the input setting at 0 dB the sonic character from the Jazz didn't change much. However, with some low-level music selections, such as Lyle Lovett's Joshua Judges Ruth or Water Lily Acoustics' A Meeting By The River, I found that I was pushing the volume on the Jazz higher than I wanted, reaching 2 or even 3 o'clock on the volume knob.

In terms of the two output options, I prefer using the singled ended RCA outputs to the balanced XLR, but this has more to do with my personal system set up than with the performance from the Jazz. I prefer to bi-amplifier my ATC SCM 40 loudspeakers, switching between a pair of Bryston power amplifiers or a combination of Bryston and Allnic power amps to add a touch of tubes to the midrange and top-end. In order to run the system in a bi-amp with the Jazz's single pair of XLR outputs, I had to use a custom made balanced Y-cable. When using the Jazz's dual RCA outputs, however, I was able to use better cables (either my own Kimber KS 1126 RCA's or a lovely new set of Nordost TYR II RCA's) to drive the amplifiers.

In order to verify this test I did employ a single amplifier configuration for a short time in both balanced and singled-ended mode, using matching Nordost TYR II's RCA and balanced XLR wire. With a single amplifier I detected little if any sonic difference between the RCA and balanced XLR outputs. But, as I mentioned, using dual RCA's in a bi-amp with the better Nordost TYR Ii wire produced significantly better overall sound.

I wish I had experienced either of the PL series of products so that I could offer readers a comparison to the earlier generation preamps from Nagra. Considered as a product unto itself, however, the Nagra Jazz is among the finest valve-based preamplifiers I have experienced, on par with Wyetech Lab's Opal (I've only briefly heard Roger Hebert's new Ruby), and Allnic Audio's L-3000 (the L-3000 is more full bodied and lush, the Nagra more detailed with a more neutral character).



The Jazz is superior in almost every way to my own Modwright LS 36.5 (which I do love), producing better dynamics, detail, warmth, bass control and overall musical texture. The Jazz replaced the 36.5 while I was working on the VPS phono amp review. In fact, the preamplifier switch created such a strong performance change in the overall system that I needed to revisit much of the early work I had done with the

VPS. Dan Wright's LS 36.5 DM might offer a fairer comparison to the Jazz in terms of price. Unfortunately the Modwright DM is a two-box design, which I am not able to accommodate in my listening space. The Jazz, by comparison is tiny; so small in scale that I am able to place both the VPS and Jazz beside each other on a single shelf of my 22" rack. The LS 36.5 is an excellent valve preamp, producing great sound in its own right; the comparison merely indicates the class in which the Jazz sits.

In 1993 I discovered Nagra, and in 2013 I discovered Nagra Hi-End. The VPS phono amplifier and Jazz preamplifier have informed and elevated the way I hear music within my home, and would be wonderful additions to anyone's audio system. I offer them my highest recommendation.

I finish my time with the VPS and Jazz with a sense of anticipation. Nagra has recently added two exciting new products to their Hi-End collection – the outboard MPS multi-unit power supply mentioned earlier in this report and the new HD DAC, a DXD and DSD x2 capable digital converter, announced just this past January at CES 2014.

The MPS is an exciting upgrade feature for both the VPS and Jazz, creating a vertically integrated system of audio and power. The HD DAC, developed by Nagra along with Adreas Koch of AKDesign (pioneering engineer of the DSD format) offers exceptional technical specifications in its digital engine and includes both a volume control and valve-based analogue outputs. The HD DAC completes a long-indevelopment overhaul of Nagra's front-end Hi-Fi equipment. Based on the early reports I've read, it looks to be a product worth exploring. The last twenty years have brought about great change for Nagra, and from what I've seen and heard, these are once again exciting times for one of Switzerland's most iconic audio brands.

Nagra Jazz Preamplifier: \$12,250

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