



MUSIC LESSON

In order to be able to finally be one of the top players in the pre-amplifier world, Nagra has created the „Jazz“. In the test, the vacuum tube Pre turns out to be not only highly musical, but also a work of solid engineering.

Without any doubt, these high-end devices which measure just under 28 centimeters in width, are something special. The Swiss brand Nagra, known for the highest standards, has used them since 1997 to complement its legendary studio electronics. These days, they are developed and produced at Audio Technology Switzerland in Romanel-sur-Lausanne - just like before on Lake Geneva and by the old team.

Whether the CDC CD player, the VPS Phono-Pre or the famous 300i vacuum tube amp – we mostly had to acknowledge the benchmark status of the Midi components, the design of which looks like a mixture of professional straightforwardness and a touch of retro.

Not so, however, with the PL-P pre-amplifier (with phono), which at one time was the Swiss company's first hi-fi product. It sounded very good, but not

exceptional, which is why Nagra is now taking it out of its range, as well as the PL-L high-level version launched in 2001. They are being replaced by two completely new developments, with the connections that previously were fitted to the side of the unit – which might have been practical for reconnecting but looked like the cables were an ugly growth from the side – moved to the rear.

And there was another change: instead of the three-letter abbreviation, the new Pres are now given proper names. In addition to “Jazz”, the larger high-level pre-amplifier fitted with vacuum tubes, there will soon be the cheaper, transistor-based “Melody” (from €6,500*), which can be fitted with an optional

*All prices listed are German retail prices incl. VAT valid at the time of evaluation.

phonostage which corresponds to the battery-operated BPS.

Beyond that, the new model remains true to the Nagra concept known for a certain purist approach, and despite the solid aluminum housing complete with a 14-millimeter-thick front plate milled from a solid block, it has an extremely lightweight build with clever details. Without its external power supply unit, the Jazz weighs as little as 3.3 kg and has just a few operating elements: on the right is the input selector in the typical Nagra style, which has also been applied to the level selector with a decibel scale. The input selector is used to switch the unit on or off. It can be used to select five inputs from "A" to "E" – one with XLR sockets and four with cinch contacts. In addition there is an XLR connection option to the symmetrical output should the pre-amplifier be used as part of an AV chain.

A precise "modulometer" ...

The total of three outputs – two cinch (which make bi-amping easier) and one XLR – are subdivided into two groups and can be selected via a small toggle switch, another feature that is common for the components from Switzerland. The rest is quickly explained; should the output voltage of a source device not be

The unit comes with a total of five. The XLR input internally has an asymmetrical layout and can optionally be made symmetrical using a transfer board (about €1,450*). The „bypass“ input(s) bypass(es) the volume control. There is an additional mass terminal for grounding. ▼

sufficient on occasions, it can be pushed by 12 decibels. In addition there is a mute switch and a mono function, which always comes in handy. Since the balance control only moves the levels of the two channels very gently, we will forgive the fact that it doesn't have a central arrestor.

And of course, we can't do without the famous "modulometer", with its pale yellow back-lighting and several stages dimming function through to full switch-off, which indicates the output voltage for the channels separately using two hands above each other. Obviously, you need a pretty loud setting to generate any significant reaction from the precisely calibrated needles. If you enter an identical, uniform sound level into both channels of the Jazz and turn the volume to -10 dB, the needles lie exactly above each other. If you now reduce the volume by 6 decibels on the scale, the value indicated by the hands reduces simultaneously by this amount. When turning the balance between the maximum values, they also shift by the same degree and when the mono button is operated they immediately return to the position above each other. This means that the modulometer is much more than a rough "estimating device" and can also be used for assessing the signal source.

The potentiometer for volume and balance, as well as the input selector, are motorized so that this function can also be controlled with the remote control unit, which comes as part of the package and works reliably from almost any angle and greater distances. In addition, the shaped

KEYWORD
Connecting through:
Then an AV pre-amplifier takes care of volume control. In this way, the hi-fi chain is used for both front channels in a simple way.

NAGRA'S "SMALL FAMILY"

These small units have it in them! The high-end series of the Swiss manufacturer includes the two CDP CD players (upper image) and the CDC equipped with headset output and complete pre-amp (about €12,500*/14,500*). A top-quality adaptable phono pre-amplifier for high-class record players is the VPS (middle image, from €5,750*), which amplifies using vacuum tubes amongst others. You can connect two cartridges. The MSA (lower image) power amp comes with a switchable power supply unit; price about €7,950*. Output: 2 x 60 watt sinus/eight Ohms. But they have it in them!



plastic device gives access to the mute function and direct selection of inputs. Furthermore it is possible to "sensitize" the Jazz for Nagra's large metal transducer by carrying out a small adjustment inside.

Precision and emotion combined

All well and good, but what can the Jazz really do considering that the standards set by the other Nagra Midis are very high? No fear, this Swiss unit works with the precision of a watch-maker, while nevertheless giving out the self-assured charm of a noble lord. You rarely hear music produced by a machine that is as permeable, cohesive and holistic.

One secret of the Jazz is its correct timing. Example – the piano. The sounds are so firm in themselves, the entire rendition



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▲ The vibration-free support (VFS), consisting of two aluminum plates individually damped via polymer buffers and special spikes, is available for €1,650* as an accessory for all Nagra Midi components.

is so conclusive that it nearly takes your breath away. The instrument does not sound soft, not hard, not like glass, pointed or even out of tune or whatever other attributes a listener might think of when the sound mix is even just a little bit distorted.

The bass is another indicator – this is not your average “hi-fi bass”. It expands

freely, is neither dry nor juicy, nor gnarly or cottony, but just as it should be. After I don’t know how many records and CDs, I can’t tell how the Nagra “sounds” in this range. Somehow it does not interfere, and allows the music to take its course.

We are rewarded by the fact that the qualities of other components have a stronger impact on the result than is the

norm. I have hardly ever been so clearly confronted with the distances between cartridges, players, even the NF cables, as with the Jazz. The reason for this is its enormous resolution capability, which subdues very little – if at all – and generates a radical openness in an uncontrived way and with the best possible tonal correctness.

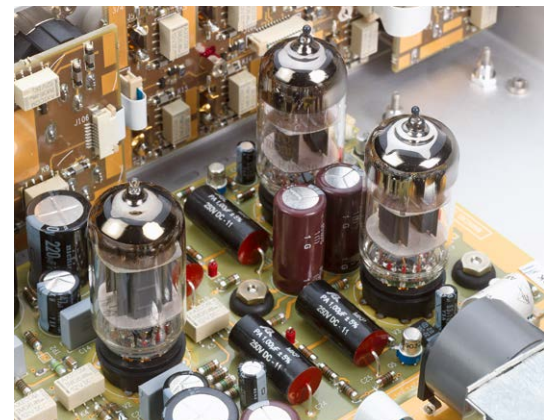
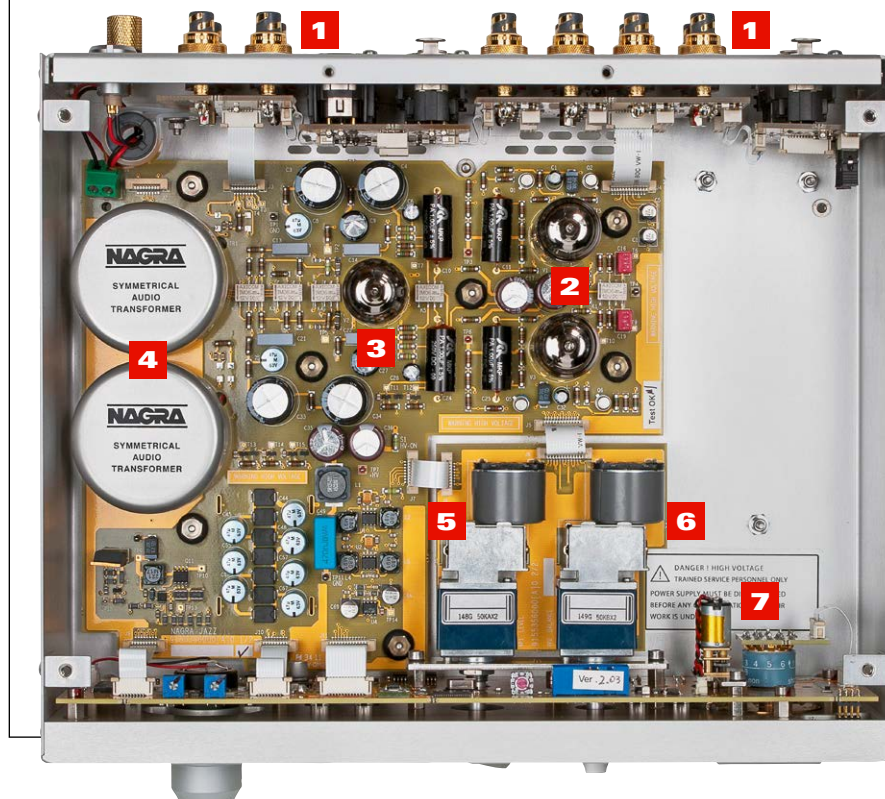
The magic of the Jazz is difficult to explain. As with a live performance, everything exists with equal right side-by-side. If, while listening, your attention jumps here and there, it is as if small information windows open like pop-ups on the PC screen touched by the cursor, and you find out what happens below the surface of the sounds.

This naturalness and almost dreamy grace emerges in full splendor via the symmetrical output – just like the stage rendition which recedes by just a small step and therefore appears all the more

Technical sophistication

The four-layer, gold-plated, epoxy resin motherboard of the Jazz meets military standards and is crammed full of high-class components such as polypropylene condensers and intelligent solutions. The design ensures the shortest possible signal routes. Elastomer

damping elements beneath the board cushion against unwanted vibrations. The result can be seen right at the connections: all cinch sockets (1) are of the „Next-gen” type by the supplier WBT and are resistant to eddy currents and support superior sound rendition.



▲ Three mercilessly selected vacuum tubes form the Nagra Jazz’s two amplifier stages.

They make a „floating” contact, which means that their grounding is not connected to the mass of the housing, thereby effectively preventing ground loops.

Generally, the high-quality input relays only make contact with the selected source, therefore disconnecting all other contacts from the hot pole and the mass. This is a rare but

◀ There is a short signal route from the input (r.) to the output sockets (l.). The motors for the volume (5) and balance potentials (6) as well as for the input selection (7) can be clearly seen.

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realistic. Via cinch, the Jazz is still top though not with quite the same perfection and crispness. For this reason, the XLR cable to the power amplifier is recommended.

This is how the stupendous, contagious musicality of the Jazz, which affects the transition chain as much as the listener, comes fully to bear. It reveals the emotional impetus of the piece, whether it is pop, blues, opera, symphony or even jazz. For example, when the Marcin Wasilewski Trio in its "Song for Swirek" (ECM) quite suddenly increases the tempo and tension from its loose bouncy play only to immediately fall back to innocent lightheartedness, then it feels as if the musical muscle of a large, quietly breathing animal,



contracts briefly and then pleasantly relaxes again. The music becomes something you can physically feel.

The Nagra performs the compulsory high-end exercises without breaking sweat. Its freestyle element is the "atmosphere" it conveys. It abducts the listener into the world of music, fully engaging him with the performance – that is the fascinating encore of the "Jazz" concert, while activating the rest of the chain, that is, accessing the potential of the source and driving downstream members to maximum performance. With this, Nagra now finally represents the benchmark for pre-amplifiers too!

Matthias Böde

important feature, since this is the only way to avoid interactions with the mass of other connected devices.

Is this why the Jazz emphasizes the character of different components, such as cables, so clearly?

The first amplifier stage is a double triode of the type 12AX7 (ECC83) for each channel (2), working in a symmetrical configuration, which in turn is formed by transistors and is intended to support extraordinarily stable operation and, at the same time, reduce background noise. In fact, the signal-to-noise ratio achieved by the Jazz is immense, and not only for a vacuum tube amplifier (see laboratory values). The manufacturer calls this "The Sound Of Silence", borrowing the title from a famous Simon & Garfunkel song.

However, the subsequent 12AT7 triode (3, ECC81) takes care of the larger part of the overall amplification, being affected by resistances that are controlled via the front 0/+12 dB switch.

According to Nagra, all components were selected for their sound quality. The vacuum tubes are subjected to a 48-hour burn-in procedure. Afterwards, they are assessed with respect to the criteria of amplification, noise and sensitivity to vibrations; according to the Swiss manufacturer, about 60 percent of tubes fail the test. Then the tubes are arranged in pairs in the matching process.

In order to secure their quality for as long a period as possible, the tubes are very gra-

dually „booted up“ for 20 seconds during the switch-on delay of the Jazz, which takes about two minutes in any case, thus significantly prolonging their service life.

The secret techno-stars of the Jazz ensemble are hidden in screening mu-metal sockets. These are the transformers (4) for the symmetrical outputs that are developed at the Nagra factory. These transformers are some of the most expensive components of the audio-electronics, because they are the most sophisticated and involved parts. Owing to its long experience in the studio sector and with tape machines, where transformers are needed in many places, the Swiss manufacturer has enormous know-how and yet only very few of its „chosen ones“ are allowed to produce them.



▲ The very high-value, encapsulated transformers are located directly in front of the symmetrical outputs.

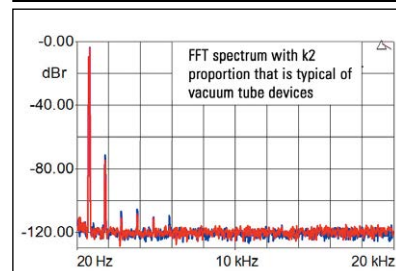
NAGRA JAZZ



Around € 10,750* (input transformer € 1,450*)
 Dimensions: 28 x 8 x 33 cm (WxHxD)
 Guaranty: 3 years
 Contact: NAGRAVISION SA
 Tel.: +41 21 7320311
 www.nagraaudio.com

With the Jazz, Nagra is extending its small but fine high-end series. What this pre-amplifier reveals in terms of natural aura, musicality and wealth of details is sensational. The loving finishes and top measured values make the high price of the vacuum tube Pre bearable.

MEASUREMENT RESULTS



Maximum output voltage (1 kHz, 1% THD)	7.2 V
Distortion factor at 0.03 0.3 1 Volt	0.01 0.003 0.008 %
Intermodulation at 0.03 0.3 1 Volt	0.003 0.002 0.008 %
Signal-to-noise ratio CD (500 mV, 1 kOhm) at 0.03 0.3 Volt	80 94 dB
Channel separation at 10 kHz	79 dB
Upper limit frequency (-3 dB)	>80 kHz
Connection values	to suit conditions
Output resistance at 1 kHz	135 Ohms
Cross-talk attenuation tuner/CD at 10 kHz	99 dB
Clocking error volume control up to -60 dB	controllable
Power uptake Off Standby Idling	0 - 18 Watts

LAB COMMENTARY: First-class values, not only for a vacuum tube pre-amplifier; the very low distortion and excellent signal-to-noise ratio are outstanding. The effective channel separation is also great. Is this the secret behind the large stage of the Jazz? Conclusion: a terrific performance in the laboratory.

FEATURES

Five inputs and three outputs, of which one each in XLR, connection option, dimmable output level display, balance control, mono switch, mute function, remote control.

STEREO-TEST

SOUND QUALITY 100%

PRICE/PERFORMANCE

★ ★ ★ ☆ ☆

VERY GOOD

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