

# Stereo

## PRESTIGE & IMAGE



**EXCLUSIF**

### Naim Muso & Magico S3

#### L'enceinte dans tous ses états

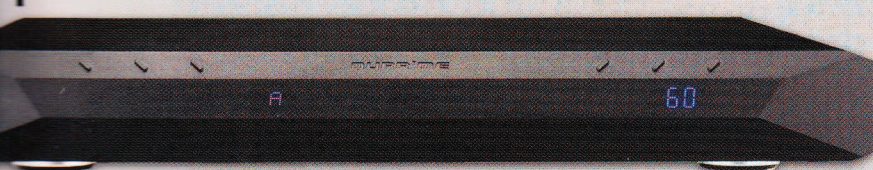
**Tests d'essai**

V CM6 S2  
Lab Nano  
basse Jersey  
is Cesar HD  
is PRE 1 & PA 100  
dio-Technica MSR7

### La Check-List de Jean Hiraga

Les techniques  
d'optimisation pour  
booster votre système

**Ampli NuPrime IDA-16**



0 watts, DAC DSD...  
i dit mieux ?



**Dossier câbles USB**



L 14379 - 95 - F: 5,50 € - RD





# JADIS PRÉ1 & PA100

Par Pierre Fontaine



Prix: 8350 € (PRÉ1), 10770 € (PA100)

Evoking « Jadis » is like feeling the sun, in every definition. First of all, because the company is located in Villedubert, few kilometers away from the fortified city of Carcassonne in Southern France. Secondly, people there, speak with a melodious accent typical from this part of the country. Jadis design and manufacture tube based electronics. Irreplaceable glowing and warming component.

The story starts in 1983 with people passionate by music and electronic. Mr. Calmettes designed and build several amplifiers during the 70s for himself and his close friends. Quickly after that and due to the really good performance of these units, he was encouraged to commercialize its creations on a bigger scale. Since then the recipe hasn't changed. Everything is designed and assembled in the factory of Villedubert. The same goes for the power and output transformers which are the master piece

of any amplifier. Fully handmade, these transformers use a unique design that can be found only on a Jadis unit. Moreover, they are always oversized, way ahead of the announced output power of the amplifier. Nowadays, Liliane Expert "CEO" and Jean-Christophe Calmettes "Technical Director" are running the company. The working style remains the same as it used to be when Jadis was created more than 30 years ago. The tube remains the main component of each unit; the chassis are still made of non-magnetic mirror polished stainless steel with

gilded with 24 carat gold front plate and knobs. The wiring is in the pure Jadis tradition, essentially point to point, only few PCB are used.

## Pré1 preamplifier:



The connectivity is composed of gilded copper Teflon isolated RCA connectors.

This preamplifier isn't totally new as it already existed in the Jadis' catalogue. Nevertheless the schema and the tubes are different. The formal balanced version used 3 X ECC83 double triodes of high gain and high plate impedance in this version of the Pré1 uses 3 X EF86H pentode in a kept secret configuration. The ECC83 are the European version of the famous 12AX7 developed in 1946 by the Radio Corporation of America, also known as RCA and were the replacement of the 6SL7. The EF86 is a pentode (5 electrodes). Created in during the late 50's and manufactured by famous companies such as Philips, Mullard or Telefunken. Developed especially of audio application this tube has the particularity of having a low level of noise and thus is capable to process low amplitude signals with a high definition. Moreover it is not very sensitive to vibrations. This explains why this tube had been used until the 60's before the emergence of the transistor. The Soviet version also known as 6Zh32P had been produced for a really long time. In 2012 the production of the EF86 restarted, Electro-Harmonix in Russia and JJ Electronics in Slovakia. The Jadis Pré1 uses the Electro-Harmonix version of the tube. Jadis had the idea of conserving the gain and low distortion which is really important for any preamplifier by replacing the triodes with pentode.

## PA100 amplifier:



Screwing speaker connectors are made especially for Jadis.

The PA100 is a massive stereo amplifier weighting about 55 Kg. It is capable of delivering 150W by channel out of the 12 power tubes polarized in ultra-linear class-AB. This structure reminded us the Defy-7 that used 6 X 6550 tetrode tubes by channel. The PA100 works with KT120 for a power increase of about 50W according to the manufacturer. The tube placement had been modified for a less geometrical and more pleasant look. It uses 3 double triode : 2 x ECC83 made in Russia by TungSol in the driver and phase shifter stages and 1 x ECC82EH for the input. The KT120 tetrode which are as well made in Russia by TungSol work in ultra-linear mode meaning that the screen grid is linked directly to an intermediary primary winding of the output transformer. This configuration lowers the dynamic plate impedance of each tube and brings better linearity and lower distortion rate. The loading impedance is as usual for a Jadis switchable from 1 to 16 Ohm by modifying the position of straps under the output transformers. Jadis output transformers have the particularity of using 100% of the winding whatever the impedance selection is.

## Listening condition:

We have made our listening with the combo PA100 and Pré1. Indeed, we didn't want to separate the two units, since their conception and esthetical aspect have been thought as to work together. Nevertheless, it is possible to use each of them separately with other units. They could even improve the final restitution. Our listening sessions have been made with our usual High Efficiency Loudspeakers which usually work pretty nicely with tube amplifiers. We also couldn't resist trying the PA100 and the Pré1 with the Davis César HD that we had for a review. The result was really musical. These speakers which are less efficient than the ones we usually listen to when making the reviews never made the PA100 to flicker. This is due to its large power output and high sensitivity. This amplifier will work just fine with any kind of load. As for our high efficiency loudspeaker, they permitted to notice that the Jadis are really well made units. Indeed, the first signs of hum appeared when the volume knobs of the Pré1 were close to their end. This is an excellent sign and we can expect a total silence with loudspeakers of normal efficiency. One last thing about the support of the units: It will have to be extremely solid and stable. Sable and no resonating as well in order to lower as much as possible external mechanical intermodulation with the tubes. Solid, in order to be able to handle the 55Kg of the PA100.

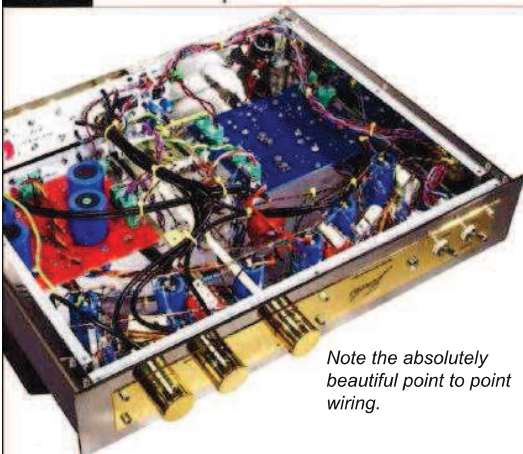
## Listening

Soundrama, the pulse :



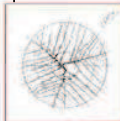
At the very moment when the bell rings, the attack is extremely reactive, followed by a really long fader with plenty of intermodulations. We can clearly hear the dynamic tangle of the several resonances giving to the sound the ripple effect. The timbres are as well very truthful; it is easily recognizable when we hear the hits on the big drum, the tension applied to the skin is respected and noticeable. The frank attack could even give the false feeling that the lower frequencies are a bit short. The output stage extremely rigorous and do not fall into this relentless test trap.





*Note the absolutely beautiful point to point wiring.*

The sound of the waves hitting the rocks and streaming is indeed convincing. The large dynamic of the gives the necessary energy when the waves reach the rocks. This is one of the advantages of these highly powerful push-pull configurations as this PA100. This Jadis is capable of maintaining delicacy and energy on complex tracks. Moreover, the Jadis scrutinize the multitude of noise generated by the perpetually moving water, thanks to its excellent analytical capabilities that only good schematics can offer. We are able to clearly perceive that the waves die following a diagonal with a variation of the modulation amplitude in three dimensions.



Cubenx - On Your Own Again:

Right after the beginning on "Locked", we understood the Jadis' capability in terms of resolution and intelligibility. Indeed, these electronics produce maximum details with a high accuracy on each note. The brass instruments were perfectly differentiable and shown no sign of metallic sonority that the compression drivers of our loudspeaker could have provoked. None of these happened, the height of each note were strictly respected without any overmodulation neither excess of shin effects of the transients. On the track "Adrift At Sea", the lower frequencies are remarkable on the 38cm speaker. It goes deep and firmly. Thanks to the triple push-pull associated with the Jadis output transformers which totally control the situation. The attacks are frank and the



level increase does not turn into a slowdown of the slow rate neither by a rounding of the notes at their top. It is the total other way around, we can feel almost physically feel the impact of the drum which literally cleaned the dust from the 38cm. The computer generated soundstage and all the reverberation effects become real dimensions. We can clearly "see" and "guess" an imaginary place materialized between the loudspeakers and beyond. This proves that the Jadis has high analytical and resolution capability. They are able to transcript all the little tonal inflexions of the music. This imaginary world created by Cubenx suddenly come to life and it is so easy to designate each instruments playing in front of us.



Daniel Mille - L'attente:

On the track "Sacha", the Jadis duo has shown all the extent of their analytic capabilities. As well in terms of micro-details and harmonics graduations. The superb quality of the rubbing brushes on the snare during the introduction is absolutely fantastic, we could clearly feel that they were sliding on taut skin, giving a real sensation of all the numerous wisps provoking multiple and slightly different modulations and tonalities. This is also true for the drum brasses, giving extremely precise and truthful until their end, plenty of color and dynamic repartition reminding live listening. These results are remarkable, especially when we take into account the relative complexity of the output stage of the PA100 compared to a single-ended configuration. Daniel Mille's accordion appeared really lively, the musician talent associated with the drummer's tempo gave a pleasurable rendering. The accordion seems to be just there, right in front of us. The Jadis are indeed really good at giving an impression of presence. The sound stage is clear large and there is no need of increasing the volume to enjoy it.



Bourgeois Gentilhomme - Mache pour la cérémonie:

In a completely different style, the track "Marche pour la cérémonie" reveal all the differentiation and layout staging capability of the Jadis. The rubbed strings instruments give the typical sound of the end of the XVII century. No confusion is possible. We noticed a slightly highlighted (but not exaggerated) high mid-range giving more vitality and intelligibility to the masterpiece. We also appreciated the faculty of the Jadis for rendering the space between each instrument, even during the more collegiate part of the track.

#### Sound synthesis:

The Pré1 preamplifier and the PA100 amplifier are both proud Jadis representative. They are produced in the pure tradition of the well done work applied by the brand since 1983. Even if Jadis used pentodes instead of the tetrodes usually found in their preamplifiers, it was in order to get more definition and musicality. The listening of these tubes electronics are to be remembered as one of the best that we were given to listen. Perhaps not the most refined when compared to direct heating triode single stage configuration but still really close to it. On the other hand, they take an uncontested advantage in terms of dynamic and power output. In the end, this duo is extremely musical and lively with an impressing tonal accuracy and punch. No need to focus to unscramble the message as it gets your attention by its communicative realism.

#### Technical specification:

##### Pré1:

Inputs: 5 lines  
(one switchable between 11 or 14 dB) RCA connectors  
Output: 1 pair of RCA  
Gain: 14dB  
Bandwidth: 10Hz - 30kHz  
Consumption: 60VA  
Dimension: 46x56.5x21cm  
Weight: 15Kg.

##### PA100:

Input: 1 pair of RCA  
Power output: 150W per channel @ 8 ohm  
Bandwidth: 20Hz - 50kHz  
Sensitivity: 700mV  
Load impedance: 1 - 16 ohm  
input impedance: > 100kohm  
Consumption: 500W  
Dimension: 49.5x56.5x21cm  
Weight: 55Kg

