

ANALOG AUDIO DESIGN TP-1000 GOLD EDITION

For the love of analog

Analog Audio Design is the crazy project of a passionate man, Christophe Martinez, who decided to design a tape recorder without concession, and to manufacture it entirely in Pleumeur-Bodou in Brittany, cradle of French telecommunications. It is necessary to have listened to this device once, to discover the superiority of a full analogical restitution, which sets things straight.

After 4 years of development, the TP-1000 GE is a piece of incomparable mechanical precision, combined with the designer's expertise in electronics. The TP (Tape Player) is a simple analogue tape player at 38.1 cm/s or 19.05 cm/s, but a recording model is in the making, reference TR-1000 (Tape Recorder). The tape market is booming, following a certain craze for Reel to Reel. This can be seen on the website recordingthemasters.com, which manufactures blank magnetic tapes, based on the original BASF and AGFA specifications. This site also lists the major tape labels, such as Analog Productions, Tone-Pearls,

UltraAnalogue, BallFingers, Foné, etc. A new analogue medium opens up with the TP-1000. It is certainly not the cheapest, but of very high quality.

MAGNETO SERGE!

This refined Gold finish was initiated by Serge Thomasian, the PeopleLikeYou distributor, but the TP-1000 is also available in a more classic presentation with wooden sides, which is much less expensive. Its use follows a real ritual, with its own jargon. Here is the path of the 1/4 inch (6.35 mm) tape: starting from the left-hand reel, the leader must be directed between the tension wheel and the guide wheel, passed under the pick-up block, and lodged between the pressure roller and the capstan. The tape is driven by the rotation of the capstan shaft against this pressure roller. It then wraps around the tachometric roller it drives, generating pulses for time calculation and direction recognition, then

passes under another tension wheel, to finally wind onto the second reel, with a standard NAB internal diameter of 114 mm (6 possible diameters). This tape player has some ingenious technical tricks, controlled from its large touch screen, which makes it very easy to use. The REW + Play function, for example, automatically rewinds the tape at the beginning and starts playback immediately afterwards; this is calculated according to the remaining tape diameter and the core diameter, which can be set on the screen. The automatic slowing down and stopping takes place at the end or the beginning of the tape, before it comes off the reel. The ALL REPEAT function activates repeat playback as many times as desired. LOC (Locator) memorises a marker to which the player can then easily return. LAST PLAY returns to the previous playback location, and LINK links the L + R channels, also allowing balance adjustment. Three default rewind speeds are available, to minimise tape stress. The NAB or IEC (with more treble) equalisation is chosen according to the one applied to the recorded tape, indicated on its box. The inputs and outputs are calibrated to 0 dBu, but the UNCAL function allows them to be adjusted separately.

The chassis is finished in anodised aluminium. On this Gold Edition, the tension wheels, guide wheels, NABs and metal sides are gold-plated. When the magneto is engaged, the display lights up more intensely



The 34 pages of the clear operating manual should be consulted in order to discover the immense possibilities of the TP-1000.

ELECTRONICS IN THE SERVICE OF MECHANICS

This tape player is designed entirely with modern components, benefiting from the latest technology. It uses "coreless" DC motors from the Swiss brand Maxon, which avoids "cogging torque", i.e. the jerks that are prohibitive for wow and flutter. Christophe Martinez keeps a box full of motors he has tried in order to find the best solution. For greater smoothness and consistency, the two Maxon motors drive the two reels by flat belt, while a servomotor takes care of the solid brass capstan with high inertia, providing a regular speed and excellent damping. The electronics are there to facilitate adjustments, such as the speed (38.1 or 19.05 cm/s) which can be adjusted over its entire reading range with a step of 0.01 ips (inch per second), with the meters adapting in real time. The TP-1000 also has an RJ45 input, allowing it to be controlled by a smartphone or tablet via Wi-Fi, giving the unique ability to update the firmware. A 48 V Phantom power supply is connected to the IN-2 input, to provide a phono for example. The analogue preamplifier is inspired by the Studer A810, using very low noise OP amps (TI OPA2228). The line inputs and outputs are all balanced, with the possibility to modify the gain via the interface; 2 gains are programmed: 4 dBu (Pro



standard) or -10 dBV (hi-fi). Analog Device 5293 potentiometers are of digitally controlled analog type.

LISTEN

Tones: Christophe Martinez had brought some high quality recorded tapes, and like any musical medium, there are significant differences between the recordings, due to the technical signature desired by the engineer, to the choice of equipment, to the mastering, etc. But the common factor is the TP-1000's faculty to restore a changing sound universe, rich in nuance, subtle, where one discovers details rarely so chiselled, and a natural on the presence of the midrange and the voices, so to speak, unique to a tape recorder of this calibre. One is immediately captivated by the materiality of the reproduction, and at no time does one have the idea of interrupting this indefinable charm, this privileged tie with the performer, undoubtedly more present than on other supports. Thus on Hans Theessink & Terry Evans Visions, published by

DATA SHEET

Origine: France
TP-1000 Gold Edition

Price: 34,000€.

(with Filght Case)

5 years warranty

Dimensions (W x H x D):

466 x 519 x 305 mm

Weight: 28 kg

Tape: 6.35 mm (1/4 inch)

Type: 2-track player Speeds:

15 and 7.5 ips Accuracy: \pm

0.05% Equalisation: NAB &

IEC W&F: <0.045% (DIN)

S/N ratio: 72 dB

Crosstalk: >60 dB

Inputs: 2 x XLR, 1 x RJ45

Outputs: 1 x XLR, 1 x headphones 6.35 (8 ohm)

The large touch screen is the control centre. When the tape is installed, the TAPE TENSION button tensions it slightly. The red lighting of the display and the LED indicates that the player is ready.

the Austrian Horch House, the presence of the bluesmen is confounding, by the tessitura of the warm low voice, and the harmonic accuracy of the guitars, with their sparkling metallic strings, simply natural.

Dynamic : The designer had brought us a jewel: one of the rare copies of a master tape of a well known album, recorded by a famous French artist, but which we unfortunately cannot quote because of

rights. The playback by the TP-1000 is simply extraordinary, especially in the low register which offers an extension, aplomb and a smoothness practically impossible to match on any other support, which will make you hear its limits. The dynamic gaps are incomparable, delivered with ease, without unnecessary artefact, simply as in reality. The attack arrives as if by surprise, uncompressed, and releases its energy with lightning speed. The precision of the details is phenomenal! You can hear absolutely everything that happens in the recording studio, as well as the balance desired by the sound engineer. As you listen to this kind of tape, you will discover what the AAD TP-1000 is really capable of, and it can do a lot. The desire to hear the same thing at home is very strong!

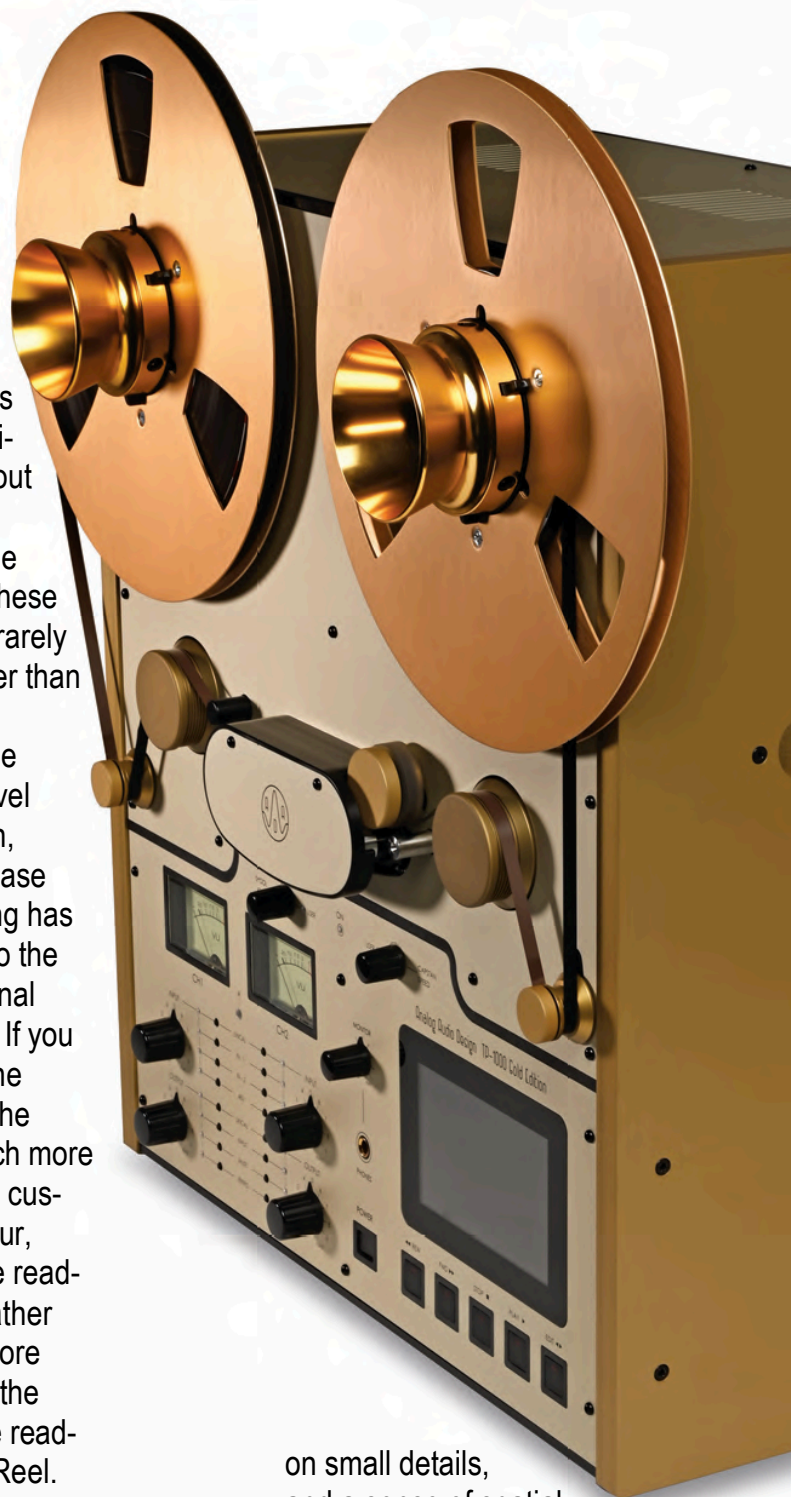
Sound Scene: Tone-Pearls publishes superb classical work tape recordings captured by a simple pair of microphones on a Nagra IV-S, which also demonstrate the possibilities of presenting the sound scene in a truly realistic way. To use an image, this is a forest with a variety of species that reveals details even in the background, whereas most of the time, only the foreground is well perceived, with much less emphasis and information as one moves away. A piano playing Debussy is magnificent, delivering a majestic volume surrounded by the air and room micro-information essential for tangible perception. On more complex pieces by composers

such as Bartok or Ligeti, one is fascinated by such an acuity of all the instruments and their interaction in space, the harmonic variety, the speed on small signals that brings to life the slightest musical inventiveness, without being distracted by the charismatic rendition the TP-1000 makes of it. These are listening moments rarely felt so intensely on other than analogue media.

Quality/price ratio: The AAD TP-1000 is a marvel of mechanical precision, intelligent design and ease of use, where everything has been thought through to the last detail for phenomenal playback performance. If you can afford it, either in the standard version or in the more luxurious but much more expensive one, even in customised finish and colour, then don't hesitate. The reading ceremony is thus rather constraining, but it is more than worth it to access the fascination of analogue reading through a Reel To Reel.

VERDICT

Christophe Martinez is one of those self-taught French geniuses whose passion has given birth to an uncompromising device, for his own pleasure and that of the growing number of analogue enthusiasts. The TP-1000 only reads magnetic tapes, but it extracts all the quintessence from them, revealing unsuspected sound qualities. Realistic dynamics, high definition



It's the only tape player in the world that can be upgraded in the future, such as incorporating a DSP sound analyzer.

on small details, and a sense of spatial presentation worthy of a master tape, the one used to make vinyl or other CDs for decades. A luxury toy certainly, but handcrafted with all the seriousness and modernity that befits this mechanical and musical jewel, whose orders are pouring in.

Bruno Castelluzzo

TONES	■ ■ ■ ■ ■ ■ ■ ■
DYNAMICS	■ ■ ■ ■ ■ ■ ■ ■
SOUND SCENE	■ ■ ■ ■ ■ ■ ■ ■
QUALITY/PRICE	■ ■ ■ ■ ■ ■ ■ ■