### **SELECTOR**

edited by the editorial staff

#### **INTEGRATED AMPLIFIER**

# **Mastersound Icon**

Get in touchformer plandem here de devis vith a tube amplifier le, in class A, single ended with a minimal design and above all

le, in class A, single ended with a minimal design and above all without the employment go of the feedback, it is always a strong, interesting and surprising experience lay the cards on the table, as if we had the con- continuous need for certainties and confirmations, while constantly looking for the isolated case that deviates from the usual canons.

n attitude at times contradictory but what highlights the limit that conventions, often too synthetic and hasty, tend to establish in a criterion effective evaluation system for the most cases and absolutely inapplicable in others. Therefore, faced with such a marked sense of uncertainty, an enthusiast who is looking for certainties certainly finds himself in the worst condition, that is, in which the feeble certainties without anything else replace them with more robust and reassuring ones, if not for the fact that

usualtudini past the PRI phase of luto sg

we realize that they are the things important in their place and, at least in cases like this one we have come across, satisfaction, pleasure and enjoyability have nothing to do with a series of postulates, evidently poorly placed!

Obviously we must not make the usual error of evaluation whereby the technical data are not important: they are and indeed they are fundamental.

tions which result in them no longer being congruent with the real aspects of operation... This is the typical and recurring case in which the distortion increases to levels that are scary just to pronounce them and in which the overall power readings are slightly higher to those of a portable device; then, when listening, everything is pleasant and with absolutely sound pressures

comparable to the data expressed in the product information sheet.
Such strong and deep-rooted ideas have often given rise to deviant thoughts such as: these valves are more than transistors!" Phrases that are horrifying but that show the passion's nuity

honestly, try
such contrasting sensations i
in front of an amplifier
solid state and faced with
a tube one that brings it
I tend to formulate such
excessive thoughts, because
those are the Watts! But, in
effects, the music played
follows other criteria and
ando an amplifier is
ected far outside the



#### **Price:**!" 6,490.00

www.mastersoundsas.it

**Dimensions:**49 x 33 x 24 cm (wxxd) **Weight:**22kg **Distributor:**Mastersound

#### INTEGRATED AMPLIFIER MASTERSOUND ICON

**Guy:**stereo**Technology:**with valves**Power:**2 x 24 W into 8 Ohms in class A**Answer in freq. (Hz):**20 - 37-000**Phono:**MM ( mV/ KOhm) **Analog inputs:**3 RCAs**Analogue outputs:**2 RCA Notes: 2 x ECC802 - 2 x KT150, 2x 12 W triode power, automatic bias

standard parameters, it is obvious that the performances must be reparameterized. And this is precisely the starting point on which Mastersound's more than fifty-year experience has been based in the design and construction of output transformers combined with the choice of the most suitable parameters in which to place the amplification circuit, premainly valves, preferring the single ended Class A solution.

It is not just a matter of building a transformer based on the electromechanical parameters established in the mists of time, but also of thinking of it as part of a single whole with the circuit that precedes it and not just on some "convenient" characteristics of the valves him connected. Having said this, the completion process consists of a first phase in which the maximum dimensions are established in order to move on to the next phase in which, having prepared a prototype, it is possible to carry out all the sure suitable to reach the hypothesized instrumental performances and move on to the listening phase since, by now it seems like a recurring fairy tale, without this it is truly complex to establish the validity of a technical choice. However, this is not a narrative license, but a concrete fact that has marked the life of every designer who has found himself working in the audio field, so much so that in Mastersound we continue to bring our own experience forward

The signal inputs are concentrated on one side with the very robust connectors fixed directly on the metal panel and soldered inside on the PCB. Four line inputs and two outputs, one for an amplified stereo subwoofer. In the center the power connectors are separate for the 4 Ohm and 8 Ohm transformer output.

listening to two prototypes, one counter-reacted and the other not. Obviously the first one enjoyed better operating and performance parameters but the other, although less clean, sounded more correct and pleasant. Nothing new, nothing that we haven't already heard, but in the case of Mastersound perhaps we find ourselves at the moment in which this narrative line came to life as the company is among the oldest and most fervent supporters of this trend and was involved in development of a good part of Made in Italy in the valve sector...

The Icona is the most recent amplifier er proposed by Mastersound and, if the name is to be believed, it represents a turning point: the project is based on the KT150 power valves, the most recent enhanced and vitaminized versions of the KT88, even if, despite many operating parameters making them interchangeable, according to Mastersound they have little to share with the founders of the series. Also in this case the circuit, and above all the output transformer, is built around the characteristics of the valve and exploits some peculiarities of the KT150 such as a lower impedance than the KT88 and other characteristics that allow optimization

more push in the creation of the output transformer and the possibility of being configured for pentode or trio output- do. The KT150s also benefit probably new production methods, as the operating parameters fall within a much narrower range and boast a level of reliability ity unknown to the products of the past.

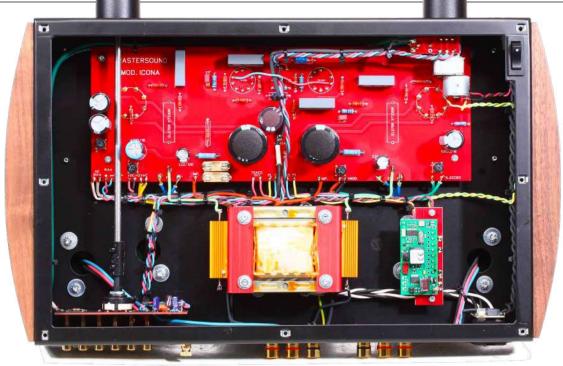
There is always a tendency in the company to match the devices that equip the same product but the deviations are much lower than in the past, with even greater robustness and solidity. Many of the output characteristics of the KT150 have therefore allowed the output impedance to be further reduced, improving the characteristics of the transformer with a very high level of interface, b so much so that it suggests the best combination with n

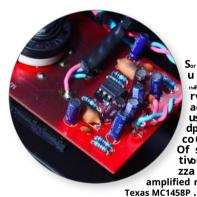
also very different speakers get along with each other.

From this point of view, even separate releases, if they offer an opportunity ity for the enthusiast, often risk creating even more confusion as they force the user to make a selection

license plate data: for some it becomes a great opportunity for the end tuning, for others however, reconnecting to the initial thought in which conventions are harmful, it becomes a torment and a source of discomfort, as some widespread sori are passed off as being 6 Ohm and it is clear that the output at 8 Ohm and the other at 4 Ohm do not help in the choice, if you are too tied to conventions. Therefore, once again we feel the need to reiterate that the imp-nominal dence of a speaker it is a very rough figure, given that the value varies depending on the frequency of even many units and that, above all, given how the Icon is made, there is no contraindication to col- tie a speaker to one or the other between exit; you just have to take into consideration what you're asking yourself



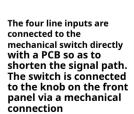




The chassis is made of self-supporting ferromagnetic sheet metal on which the massive output transformers, the power transformer and the power inductor are fixed. The valves are installed on sockets integral with the PCB which is in turn fixed to the chassis. The circuit is minimalistic with the signal path reduced and optimized.



The volume is radjust via the potentiometer ALPS motorized driven by a circuit control by radio frequency remote control





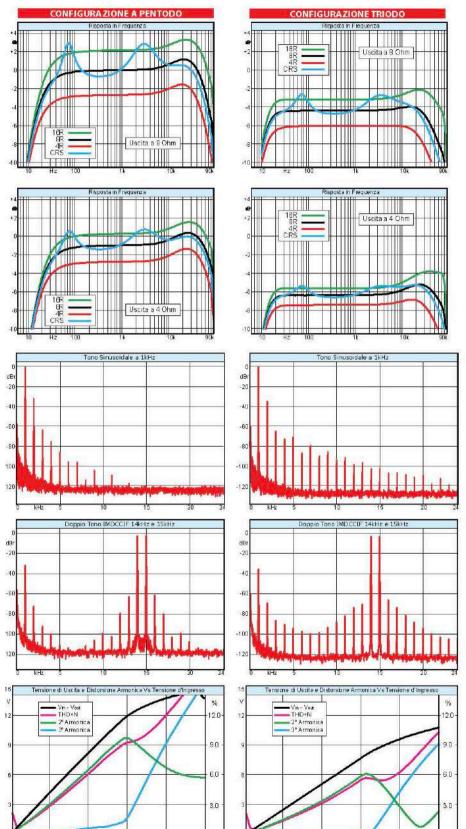


wait but, even better, listen and evaluate the most pleasant and satisfying pairing cent between amplifier and speaker, with the peace of mind of not risking break anything and not to put the amp is suffering.

As can also be seen from the graphs of the frequency response, we note that the parameters vary

are related to the extension, damping and level variation as a function of the module, and which also have a relative impact, while others related to the control of the low range and speed are less easy to represent and for this reason they must be evaluated by listening. So when you approach it

## to the measuring bench



The evaluation of the operating parameters that distinguish a valve power amplifier, especially those that show very advanced technical and design choices, forces each time to reinterpret the data collected according to the choices made, which cannot be placed within an absolute scale that takes only a few factors into consideration. In other words, the maximum power, the frequency response and the total harmonic distortion take on a value that must also be contextualized in the context in which the device will be inserted and, above all, it is not only necessary to take into consideration the numerical data detected but also how some parameters vary or decrease depending on the operating range of the device. This is one of the most frequent examples in which conventions and excessive standardizations no longer reflect reality, also considering the fact that sound performances have no apparent correlation with instrumental ones. In a project based on a minimal circuit and without any feedback, the frequency response depends a lot on the configuration of the device, since, both in triode and pentode mode and above all in the 4 Ohm or 8 Ohm transformer outputs, the response changes according to the impedance module of the speaker, both by virtue of a not very low internal impedance and due to the absence of the feedback correction circuit. However, we particularly appreciate the care taken in the construction of the output transformers which show a wide bandwidth and good efficiency also considering the fact that the 4 Ohm output still has a good level with an internal impedance which is however much higher lower than the 8 Ohm one. The total harmonic distortion also shows the typical trend with a dominant second harmonic with the subsequent ones decreasing rapidly, even if the level is very important even when measured at low power, given that the contribution of the second harmonic still prevails. In this regard, the data relating to the maximum power also needs some evaluations, not so much in establishing the distortion rate at which to set the limit for determining the power delivered before clipping, but in evaluating when the power supply begins to fail and when the contributions of the harmonics following the second increase. With these premises it is clear that the performances, unrelated to a conventional treatment, show a power of over 20 Wrms on 8R for a THD+N at 10% for the pentode configuration and of approximately 14 Wrms for a THD+N at 10% for the triode one, although by increasing the limit by 10% you get something more before the supply voltage drops.

to a device of this type, one must cloak oneself with Olympic calm and give oneself the necessary time to evaluate it speaker is connected to the terminals gives you 4 Ohm rather than 8 Ohm ones and, in this case, also switching from triode to pentode mode, always passing through the two outputs, in order to perceive and understand which of the parameters linked to the extension and performance in range low and deep (and as far as articulation is concerned) are the most congenial and satisfying. At a certain point these are just personal choices and therefore independent of any technical and genre evaluation. We are aware that this could disturb less confident users but ultimately, to enjoy something good, you also need to do a bit of training. So don't have any hesitations about connecting the Icon at high and low speakers impedance and price classes even very far from the target: if it is a question of moving on the margins of the fees, then on the margins! (And even beyond.)

We obviously did it: the listening test was conducted by comparing the operation of the amplifier er in both triode and pentode mode, with results that favored, albeit with simple nuances, the selected triode circuit. We remind you that the Icon exhibits a power of 2x24 Watts in pentode configuration and 2x12 Watts in triode. By connecting the speakers to the outputs at 4 or 8 Ohm, it was possible to pick up some here too differences, in favor of the imposition 4 Ohm station, at least with the evergreens and still difficult to beat Triangle Magellan Cello.

However, the ProAcs prove to be an ideal pairing partner

to a single ended amplifier of low power and return a rich, warm and very welcoming sound, with less evident differences between the two outputs of the transformers, while with systems with lower and more lively impedance, things change substantially and it is advisable to evaluate the performance also in operation of the overall output level, given that there isn't much power both in the pendulum configuration todo than in the triode one and that in any case, the more the impedance drops the more the transformer is asked to supply current, something it is capable of but is not happy to do! It should be remembered that speakers like the ProAc Response D One and also the Tablette Anniversary have a very friendly impedance even if not combined with high sensitivity. However, Response has a gear more in terms of fine grain and amalgam of the voice which make them an excellent partner, especially in the triode mode albeit the one with less output power. The small dimensions and the limited extension at the bottom make the combination even less critical, even if you give up a large part of the reproduction that tower systems instead exhibit even with the few Watts available to the Icona. Overall, the device displays a pleasant and rigorous performance in delivering the musical message. The sound and singing qualities are there, the sound is coherent and dynamic, despite the certainly not exuberant power rating. The "good" Watts are there and can be felt, so much so that there is no discernible dynamic constraints or distortions in the management of voices or

musical instruments.

The sound signature is classic, very natural and immediate, with the components well blended. Reproduction reveals itself well balanced and never tiring you, even in a context of high consideration of details. The low range is wide-ranging, the mid range is convincing and the high range combines the pleasantness that only the best tube circuits can interpret. The timbre is healthy and the width of the soundstage is not changes with the variation of listening volume. The bass has a valid extension, but along the entire range of frequencies the individual notes are perceived clearly, effortlessly and are endowed with a rare musicality. The balance between the various frequency portions is evident and the dynamic contrast, despite the power delivered, is broad and sudden, both in pentode configuration what a trio.

The attacks and releases foreseen in the orchestral score are rendered at their best, with natural vehemence where necessary and refined measure in the piano- simo. The grand piano is beautiful, an acoustic instrument par excellence, rather correct in proportions and, even if not as large as it should be, it still remains energetic and lively as expected, immanent in the pace. You can follow the evolutions of the performer on the keyboard without seeing any notes retreat. The instrument is realistic and clear, the chords, arpeggios and scales follow one another with adequate timbral

The space rendered is of great breadth and the three dimensions, where correctly present in the recording of the musical piece, reveal themselves easily, with the granite firmness of a scene well dilated. Even the sound levels develop with an excellent scanning of the sense of depth in the stage where the performers can be glimpsed as set up in the so-called mystical gulf (the space where the orchestra is placed). In the instrumental ensemble it is easy to identify the various performers and accompany them on their journey from the first to the last bars of the scores.

Overall, the Icona offers a musical revival to be taken as an example: tonally healthy, it offers a clear and deep low range, equipped with an articulation that is uncommon especially among valve systems, a mid range that is well cohesive with the lower one and capable of giving the voices the most natural harmonics possible: voices that are recognizable and pleasant, rich in nuances and never annoying.

The general performance is very satisfactory and the treatment of the reproduced musical signal is flawless. The Icon, as an icon of the Mastersound approach to music, is therefore a very welcome surprise, especially for the Italian consumer, perhaps due to the fact that like many others (nemo prophet at home?) in the past and before the new marketing management the company has looked mainly at foreign markets, perhaps due to the fact that in a world in which everything is now distilled with little grace, the DNA of the Vicenza company (as readers have recently discovered -SUONO 576) is completely different, no less solid and valid for this reason! In short, Made in Italy is best represented by this integrated amplifier, which also boasts a remarkable quality/price

ratio....