

TB 400

INTEGRATED TUBE HYBRID AMPLIFIER

DATA SHEET



Like the entire Kora amplifier range, the TB 400 is powered by the Square Tube® operational amplifier. Equipped with 4 triodes per channel, this innovative circuitry provides very unique musical qualities to the amplifier.

The Square Tube® provides all functions of amplification and control of the audio signal. Its output voltage is that which will be applied to the speaker outputs. Complementary power transistors, audio and hyper-linear will give the current required by the speakers, but without interfering in the amplification of the signal. Technicians call it "Impedance matching". The power transistors can be seen as the output transformer.

But the Square Tube® / Transistors combination does not face the limitation usually associated with the usual output transformers:

- *There are no phase shifts in the low frequencies,*
- *There are no phase shifts in the high frequencies,*
- *There is no bad coupling in the low frequencies and above all: no current limitation!*

The combination of the high voltage capacitance of the Square Tube® and the high current of the output transistors gives you a very high definition power amplifier.

→ *The tubes give the smoothness, the transistors give the unrestrained energy.*

→ *Square Tube® brings phase accuracy and will extract a wealth of unsuspected detail from your sources with natural dynamics.*

→ *At last but not least, the amplifier is very stable, even with complex loads.*

General characteristics

Overall dimension	148 x 420 x 450 mm	Materials	Aluminium and steel
Chassis size only	130 x 420 x 420 mm	Finish	Mineral grey
Unit weight	27 kg	Accessories	Metal remote control, power chord, instructions
Manufacturer's warranty	5 years	Construction & design	Toulouse, Occitania region, France

Electronic features

Power supply	IEC 230 V AC socket +7% ~ -10% (117V AC on request)	Maximum power input (2 x 360 W / 4Ω): 1010 VA Maximum power consumption (2 x 200 W / 8Ω): 610 W
Internal power supply	2 x (± 65 V DC)	Dual power supply
Power supply transformer	2 x 500 VA	Auxiliary supply: 5 DC/DC converters 2 linear regulators
Main filtering	2 x 100 000 μF	
High voltage	+ 300 V stabilised - 200 V stabilised	
Input tube heater	2 x 12 V DC	Regulated and grounded voltages
Output tube heating	2 x 12 V DC	Isolated regulated voltages
Output power	2 x 200 W / 8Ω 2 x 360 W / 4Ω	
Output power distribution	20 complementary highly linear power transistors "ON SEMI®" (225 W / 15 A each)	
Inputs	<ul style="list-style-type: none"> - 4 line inputs, input impedance: 15 kΩ - RCA connectors - Inputs sensitivity: 1V - Pre-out, output impedance: 2 kΩ <p>Input 4 can be configured as a bypass input, turning the integrated amplifier into a power amplifier. The same input 4 can also be configured as a «pre-out» after the volume control to drive an external active subwoofer for instance.</p>	
Bandwidth	20 Hz ~ 20 000 Hz	± 1 dB
Internal impedance	Output: < 0.08 Ω	

