



## G 10-2 VINYL DISC PLAYER

As you would expect, we intend the G 10 2 to set new standards once again. Turntables are mechanical playback systems, and it is therefore vitally important to eliminate all external mechanical influences and interference, or at least to damp and suppress them as effectively as possible. That is why T+A has approached the development of this product from two directions: the first aim was to develop a motor system which ran completely smoothly and evenly; the second was to eliminate structural sound, resonance and vibration in the entire system.

The motor we use is a high-quality synchronous unit fitted with a machined belt pulley which drives the disc platter by means of a special rubber belt. This is an excellent solution which is employed in many high-end turntables. However, T+A does not stop there. Instead we tackle the problem of uneven motor running by going straight to the root of the problem. We now have many years of experience in using DSPs to control complex processes, and this led the T+A developers to come up with the brilliant idea of accurately optimising the motor coil voltage curve using a DSP, as this would ensure that the motor would run with a complete absence of chatter and vibration, i.e. absolutely evenly and smoothly. Even the start-up of the heavy turntable is a gentle, gradual process using torque control. The wow and flutter of the motor are immeasurably low, and this completely eliminates the usual interference caused by unregulated motors, as well as removing otherwise inevitable fluctuations caused by variations in mains frequency and voltage. And DSP motor control has yet another major advantage to offer: the platter's rotational speed is controlled directly, eliminating the need to move the belt by hand when selecting either of the two available rotational speeds (33 and 45 rpm).

### ***Mechanical construction***

The mechanical design and cabinet construction are no less important than the electrical requirements, for they also have the most exacting requirements to fulfil. Every hint of shock and vibration has a serious adverse effect on sound quality, and that is why the G 10 2 features a very heavy cabinet which houses all the sub-assemblies. The rigid steel cradle of the main body is supported on four shock absorbers. The external aluminium parts are of sandwich construction for effective damping of structural sound; the thick acrylic plate is bonded to the steel main cover in order to suppress and absorb vibration and resonance. Of particular importance is a resonance absorber within the main body; this is filled with sand and lead to absorb any structural sound inherent in the metal components.

### ***Disc-platter***

The disc platter is a laminated construction consisting of solid aluminium, five brass weights and a 10 mm thick acrylic platter. This is an extremely

accurate extrusion, rolled and finally laser-cut. Aluminium is a very stiff, strong material, while acrylic has extremely good damping characteristics. The combination of the two materials in a laminate results in an extremely strong, torsionally stiff composite, suppressing and eliminating every trace of resonance and the most minute structural sounds. The platter is acoustically completely inert, thereby providing the perfect basis for trouble-free disc tracking by the pick-up cartridge. The production process of the aluminium platter is extremely complex, and would be impossible without the latest automatic CNC machinery, since the component is precision-machined – including the boring of the bearing hole – in a single process, without re-chucking (removal from the machine)! This method of production ensures that the bearing is located in the platter with 100% precision, with zero tolerance, and this in turn provides absolutely perfect accuracy of the whole mechanical system. The manufacturing tolerance of the inverted sintered bronze / polished steel plain bearing is extremely tight at 5 µm.

### ***G 10 2 S***

The standard version is fitted with a tone arm made for us by SME. The tubular arm is made of chrome-plated stainless steel with internal damping, while the support system and tube carrier are made of pressure-cast aluminium. The balance weight is made of non-magnetic tungsten; the high specific density of this material makes it possible to produce a very heavy weight of minimum size, reducing the leverage acting upon the arm. The entire tone arm base and pivot bearing housing are made of chrome-plated brass. The cartridge employed in this version is the System C10 high-end MC unit, made for us by the Swiss company Benz.

### ***Phono pre amplifier***

As an option we can supply this superb phono pre-amplifier module based on our proven PH 2000. The module is installed exactly where it belongs, namely immediately adjacent to the tone arm output. This arrangement avoids from the outset the problem of stray fields in the highly sensitive cartridge output signals. The mains power supply features a refined stabilisation circuit, and individual circuit topology specifically for MM or MC cartridges is provided. Comprehensive shielding ensures extremely low levels of noise and interference. The PH-G10 MM / MC is fitted with DIL switches for matching the unit to the pick-up cartridge in use.



### ***Specifications***

#### ***Principle***

High-End belt-driven turntable mounted in special heavy chassis with structural sound absorber and resonance de-coupling system.

#### ***Motor***

Quartz-controlled synchronous motor with precision DSP-controlled optimisation of

	motor coil voltage curve. Wow and flutter of motor not measurable
<i>Rotational speed</i>	33 1/3 and 45 U/min, electronically switched
<i>Speed fluctuation</i>	< 0,1 %
<i>Rumble</i>	82 dB
<i>Disc platter</i>	Laminated acrylic-aluminium, weighing 4.4 kg. Solid aluminium base platter, precision-machined including centre bore in one process, without re-chucking. Overall depth 32 mm.
<i>Bearing technology</i>	Inverted, hardened, polished steel; close-tolerance plain sintered bronze bush.
	Silver aluminium and blue acrylic, Titan and grey acrylic
<i>Control interface</i>	RLink, Automatic power-on via V10
<i>Mains power supply</i>	220 / 240 V / 50 Hz
<i>Pickupsystems</i>	C 10
<i>Type</i>	MC
<i>Output voltage</i>	0,8 mV
<i>Frequency response</i>	20 Hz – 25 kHz
<i>Terminal impedance</i>	500 Ohm – 1 kOhm
<i>Channel separation</i>	35 dB
<i>Stylus compliance</i>	15 µm / mN
<i>Stylus form</i>	line contact 6 x 40 µm
<i>Vertical tracking force</i>	18 – 22 mN
<i>Recommended phono pre-amplifier</i>	PG-G10 MC
<i>Control interface</i>	R-Link, automatic power-on via V 10 2
<i>Dimensions (H x W x D)</i>	16 x 44,2 x 38 cm
<i>Overall weight</i>	15 kg
<i>Finishes</i>	Silver aluminium, Titanium, acrylic glass alternatively in grey or blue
<i>Optional accessories</i>	Disc stabiliser weight, disc brush, acrylic cover
	<i>We reserve the right to alter technical specifications.</i>