

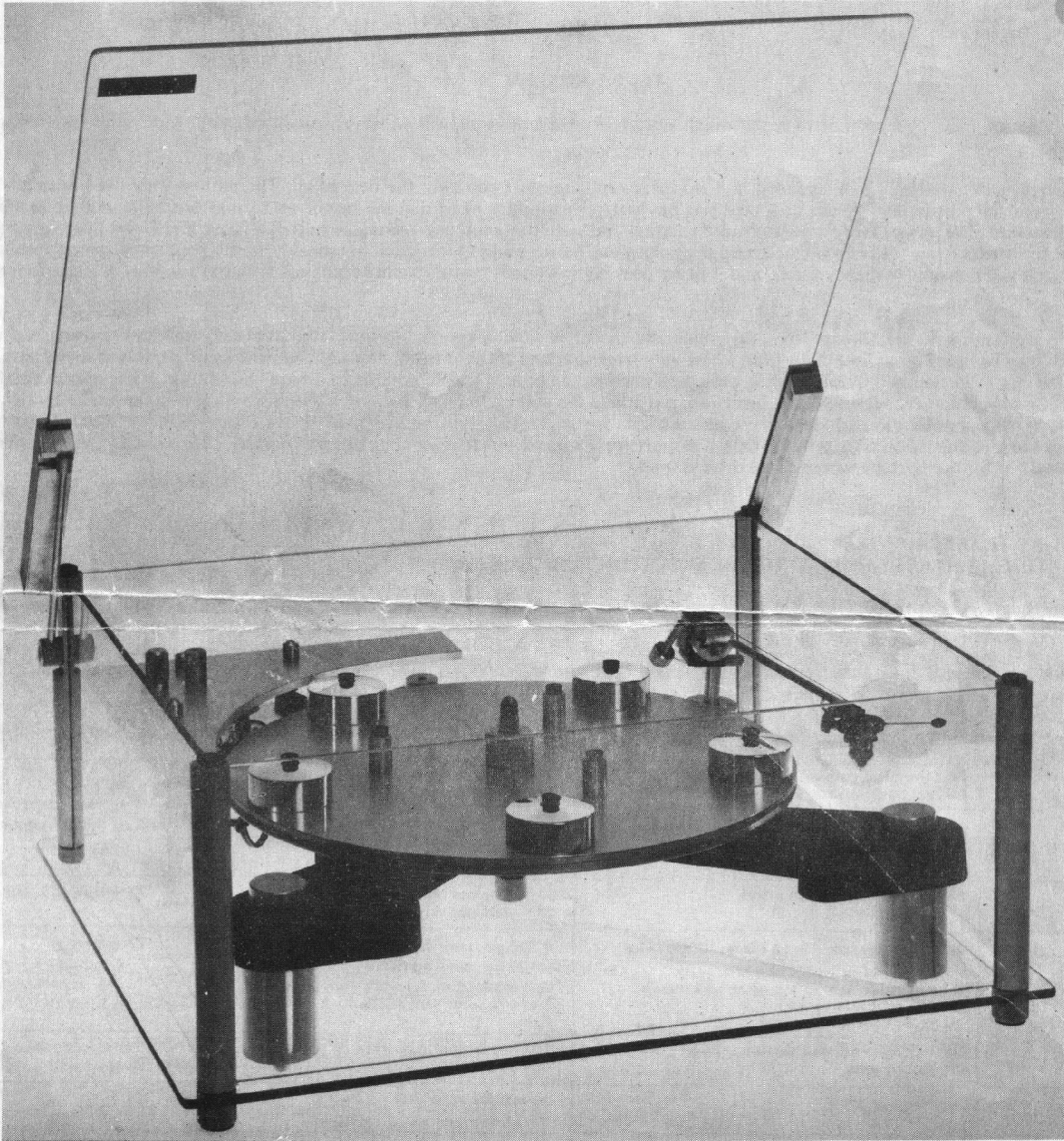
# TRANSCRIPTORS

<http://www.transcriptors.net/>

Commencing operations in two rooms at the top of an old house in London's Holloway Road in 1966; Transcriptors is now one of the World's leading manufacturers of manual turntables, tonearms and accessories, with a Factory in England, and one of the most modern Hi Fi manufacturing plants in Europe, based at Carlow in Ireland.

This remarkable growth has been achieved on the smallest advertising budget in the Industry; our international market has been gained through our original and fundamental research and development, and the consequential advanced designs we are able to offer. Our products may be seen as permanent exhibits in the Museum of Modern Art in New York, in all British Design Centres, and in similar design centres throughout Europe, even in Japan; all places where the designs of our competitors are notably absent!

Many readers will be familiar with our turntables, which have been widely used in numerous television commercials, and in many films, e.g. 'The Clockwork Orange'. Our products have been widely copied, the Concept 2000 turntable was one plagiarism, many variants have appeared in Europe, and one Spanish enterprise is selling a unit called 'Saturn' which is unashamedly identical in every respect to our own Original Saturn turntable, perhaps no better compliment could be paid to our design than that.



The Skeleton Turntable

The Skeleton Turntable is the latest Transcriptor product, based on the very successful Saturn design. It was born of necessity due to the impossibility of obtaining the acrylic plastics on which our previous designs were dependent. This lack of plastics is one of the better things ever to have happened to Transcriptors, as the use of GLASS for the main construction, has proven well that manufacturers using plastics are indeed using a very poor substitute.

As will be seen in the illustration, the whole Skeleton construction is fully open to view, and therefore every single component is of necessity, beautifully made. The traditional Transcriptor platter has been retained, the whole arm platter assembly floats on three long springs housed within the three polished aluminum legs, for the minimising of mechanical shock.

A synchronous motor is employed to drive the heavy platter via a thin neoprene belt; the platter rotates on the finest main bearing in the business, a thin section ball ended ground and polished spindle running in P.T.F.E. bushes, the downward force being catered for by the use of tungsten thrust plate and ball.

The motor is isolated through a primary set of springs, and further isolated by the long leg springs (twice the isolation found on any other turntable). The resultant rumble is neither measurable, nor audible even through the most gigantic speaker systems, and the speed stability is not bettered by any other commercial turntable.

The Skeleton is a gratifying sight, entirely different as are all Transcriptor products!. The Glass shines with a brilliance never obtained with plastics, and it remains clean, unlike the 'ever static' plastic substitutes. No photo can do justice to the appearance of the unit, with its sheer glass, with natural green polished edges, the black spyder, topped by the beautiful aluminium platter with its gold plated platter weights, the whole unit makes a staggering display.

## SPECIFICATIONS. SKELETON TURNTABLE

WOW FLUTTER MOTOR SPEEDS SWITCHING PLATTER  SHIPPING	Better than 0.05% Nil 12 pole synchronous 33.3 & 45 R.P.M. Magnetically actuated vacuum tube switching fully quenched 12" diameter aluminium fitted with five gold plated platter weights  Box size approx. 23" x 20" x 12"    WEIGHT 33 lbs. packed.	CONSTRUCTION METAL COMPONENTS SPYDER WIDTH DEPTH HEIGHT (lid closed) HEIGHT (lid open)	Case of toughened clear glass, all edges ground. All aluminium machined and anodised Black fibreglass 18" 1 5/8" 7" 20"
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### TURNTABLE FACTS

Turntables fall into three categories. Firstly the idler drive types, which though of excellent value, will ALWAYS rumble through wide range speakers, and are not suitable for High Fidelity installations.

Secondly comes the Belt Drive units, which if well designed and manufactured are most certainly the best of all. The motors they use however all vibrate and these vibrations must be isolated from the platter, by the use of a very flexible belt drive, and by mounting the motor on springs or similar so that no vibration transmission occurs. The use of a synchronous motor ensures very accurate speed rotation and stability (good engineering accepted) as your electricity Company has spent millions, to ensure a frequency stability from which you can run a clock, and a synchronous motor always locks itself irrevocably to this frequency, giving absolutely stable rotation which will never vary at all unless the mains frequency varies, and it never does. Synchronous motors cannot recognise voltage variations, which often occur, but are of no consequence.

The third type of turntable mechanism is the Direct Drive, on which the motor is directly coupled to the platter above it, thus transmitting bad vibration rumble at subsonics frequencies, which may be heard as audible distortion, where very large speakers are employed. Astonishingly the incomparably stable mains frequency has been dispensed with altogether and has been replaced by a complex, though of necessity, a cheap electronic circuit to drive a D.C. motor. If the platter rotation is too slow, the voltage is raised, if too fast it is lowered, constant error and correction, and whilst the voltage may be changed in a millisecond, mass cannot be accelerated or decelerated nearly so fast, so lag occurs, as it must as long as such devices use platters with any mass at all. For the first time in turntable history the word flutter has been introduced in the specifications of these devices, flutter belongs only to tape transport mechanisms, not to mass controlled turntables, such as belt drives. Service, simplicity in itself with a belt drive, is firmly a matter for the Factory where direct drive is used.

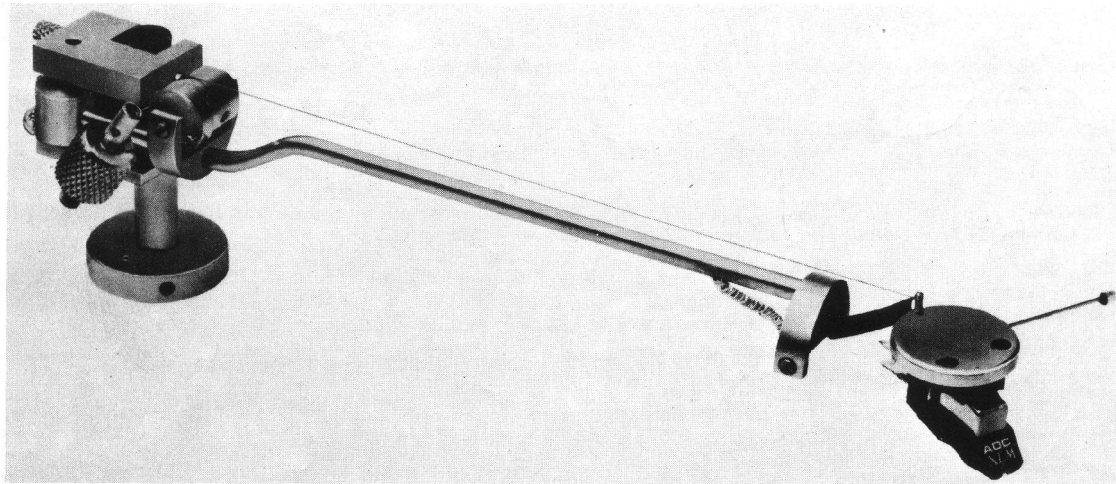
### THE NEW VESTIGAL ARM, BY TRANSCRIPTORS AVAILABLE AS A SEPARATE. FITTED AS STANDARD TO THE SKELETON TURNTABLE

It tracks any cartridge, at one quarter of the pressure, and with only one fortieth of the wear on discs and styli, than is within the capability of any other tonearm of any type, ever made anywhere in the world.

A radically new device, which has emerged from nine years of intensive and original research; it has demolished absolutely all current tonearm theory, and put discs back firmly twenty years ahead as a programme source for domestic Hi-Fi. It is strongly patent protected in every technological country!

In the world of self respecting Hi-Fi, all other disc playing systems, are hopelessly outdated, all other arms hopelessly massive, destructive and wasteful.

SPECIFICATION	Best low mass conventional arm or parallel tracking arm, with best cartridge	Vestigal arm, with best cartridge	Perfect arm
Vertical in balance oscillation frequency (Seesaw Frequency)	Approx. 30 Cycles per minute (High tracking pressures required to overcome this low frequency)	Approx. 170 Cycles per minute. (Follows any warp naturally at vestigal pressures, cannot recognise warps.)	Over 5,000 C. per min.
Actual moving mass	Best 180 grammes in all planes	37.5 grammes horizontal 25 grammes vertical	Zero Mass
Inertia (effective mass) with cartridge. This is the weight your stylus has to constantly overcome every time it moves the arm, and is the main wear factor.	Best 8,780 gm. cm. <sup>2</sup> in all planes (often twice this figure). Nine tenths of all the work your stylus does, is to overcome arm inertia.	4,500 gm. cm. <sup>2</sup> horizontal 120 gm. cm. <sup>2</sup> vertical One tenth of all the work your stylus does is to overcome arm inertia.	Zero inertia
Tracking pressure	Best 1 1/4 grammes on selection of highly modulated discs	Best one fifth of a gramme on selection of highly modulated discs	One thirtieth of a gramme (speculation)
Pressure at points of contact of stylus and disc	at least three tons	approx. 6 cwt	Zero
System resonance	2-30 C.P.S. System resonance corresponds exactly with speaker's large air moving frequencies which excites the arm, causing distortion and severe feedback problems	over 180 C.P.S. System resonance well outside speaker's large air moving frequencies no distortion, feedback impossible	over 30,000 C.P.S.
Stylus movement induced by tonearm when traversing warps	Considerable, resulting in unwanted signals into amplifier and large sonic, and subsonic bass speaker movements. Doppler distortions, and unwanted sounds are inevitable	negligable movements	no movements
Wear characteristics on stylus	Considerable wear on stylus, rapid deterioration of rubber or plastic compliant component. Stylus prone to early collapse. Extremely damage prone stylus assembly	probably no wear on stylus, cannot cause deterioration of compliant component, arm can be dropped, or dragged across a disc without damage or even protest from the speakers. Vestigal arm actually takes over as vertical complaint component	as with vestigal arm
Disc wear	Severe degeneration of discs after 15 playings, no longer Hi-Fi after 35 playings	Degeneration of discs at least forty times less, due to low inertia and tracking force.	no wear
Type of cartridge	Conventional magnetic or induced magnet. Compliance not over 40 x 106 cm/dyne as stylus too damage prone	Excellent with same cartridges but capable of accepting stylus assemblies of undreamed of delicacy, incapable of withstanding the onslaught of conventional arms	Zero mass cartridge zero tip mass. infinite compliance stylus assembly



#### OTHER INFORMATION

Dimension: Stylus to main pivot	8¾"
Dimension: Stylus to vertical pivot	1-3/8"
Tracking error	Zero at centre grooves, max 2.5°.
Antiskating	This adjustment, whilst obtainable by simply adjusting the neutral swing screw, is neither required, nor advised. Transcriptors have proven beyond doubt that conventional arms vary their tracing pressure by up to 2,000% whilst playing some discs. NO ARM whatever benefits from any form of antiskating mechanism.
Pivots	Six Swiss jewelled Vee pivots.
String	Pure flax, will not stretch, capable of withstanding ten pounds weight. Never requires attention.
Materials	All aluminum construction, machined and anodised.
Height adjustment	Over 2½". Suitable for most turntables.
Leads	Supplied 3 ft. long. Capacitance 34 pf per foot.

#### Construction

The main horizontal pivots, carry a main horizontally swinging arm with no facility for vertical movement. At the front end of this main arm, is attached a very short subsidiary arm (the Vestigal arm) pivotally mounted to provide vertical movement, and to which is attached the cartridge. As inertia increases as the square of the distance, the counterweight for this subsidiary arm cannot be mounted directly behind this arm, as this would increase the inertia in the horizontal disastrously; it has therefore been remotely mounted on the Main horizontal arm, near to the main pivots, where it controls the action of the Vestigal arm by means of a string and roller mechanism. Advantage is also taken to gear down the assembly, to choose a counter weight only one third the weight, which would otherwise be required.

The arm is not a balanced device, as it does not employ a massive counterweight at the rear of the arm. The device has therefore to be set to swing neutrally in relation to the Earth's Gravity during the setting up of the arm. This is easily facilitated by the provision of two levelling screws and a neutral swing screw, which allow adjustment of the arm in all planes.

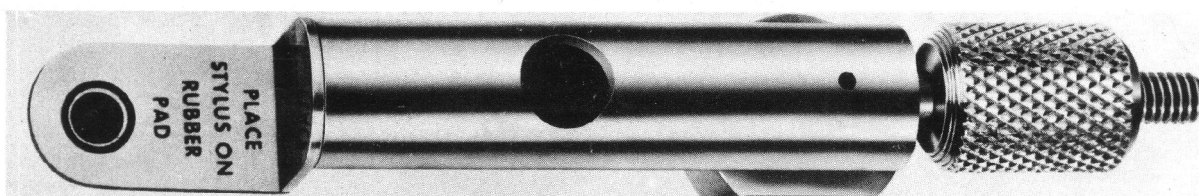
#### Inertia

More confusion exists over this one word, than any other single word in the Hi-Fi vocabulary, reviewers in particular often get inertia mixed up with tracking pressure. Inertia is a resistance to movement all objects have, it takes a force to overcome inertia.

Take a one gramme weight (half a paper clip), place it on the tip of you middle finger, and with palm upwards, move that one gramme weight from side to side, and up and down. You probably can't feel that one gramme weight at all, most people can't. Now set your tonearm to track at one gramme, place the stylus on the same finger, and move your arm around, up and down, and from side to side, and now we have a different story altogether, it is now a very very heavy one gramme indeed, for it is not one gramme you are shoving around at all, your finger is doing what your stylus is constantly called upon to do, to overcome the inertia of the arm. Even with the lowest mass conventional arm, the weight you are now shoving around is more than ten times the tracking pressure. Inertia, not tracking pressure is the destroyer.

With a beam device such as the conventional counterweighted tonearm, inertia increases as the SQUARE of the distance, making the conventional arm incapable of further development by virtue of this inescapable law of physics. Due to the extremely short arm used on the vestigal arm, it is not therefore surprising that it takes only half the force in the horizontal plane, and one sevetythird (yes 1/73rd) of the force in the vertical, to overcome inertia with the Vestigal arm, than even with the lightest alternative tonearms.

#### THE TRANSCRIPTOR STYLUS SCALES



## THE TRANSCRIPTOR STYLUS SCALES

Whilst the Transcriptor Stylus Scales are far more expensive than competitive devices marketed for this purpose; we would point out that there is no other such device available which is capable of measurement to an acceptable accuracy. We justifiably claim, that the Transcriptor stylus scales are ten times as accurate at one gramme, ten times as accurate at  $\frac{1}{2}$  gramme, and 100 times as accurate at  $\frac{1}{100}$ th of a gramme than any competitive device.

This precision instrument, supplied in a beautiful presentation case, incorporates a Swiss jewelled Vee pivot, an adjustable balance cursor, and a bubble balance indicator. It is sensitive to  $\frac{1}{100}$ th of a gramme, and capable of measuring one tenth of a gramme to within ten percent which is outside the tolerance of laboratory balances. It retains its accuracy indefinitely.

Weights and tweezers are supplied, each weight is manufactured against British Board of Trade Reference weights, and are supplied as a set of eight to measure  $\frac{1}{20}$ th of a gramme up to 5 grammes in  $\frac{1}{20}$ th gramme increments. The instrument measures 4" in length x 1" in height.

### Recommended Retail Prices

Skeleton Turntable including Vestigial Arm \$350.00  
Vestigial Arm Separate \$100.00

Scales \$ 17.00  
Spare Belt for Skeleton Turntable \$ 2.50

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