SONY TURNTABLES

Exceptional Performance, Unparalleled Convenience

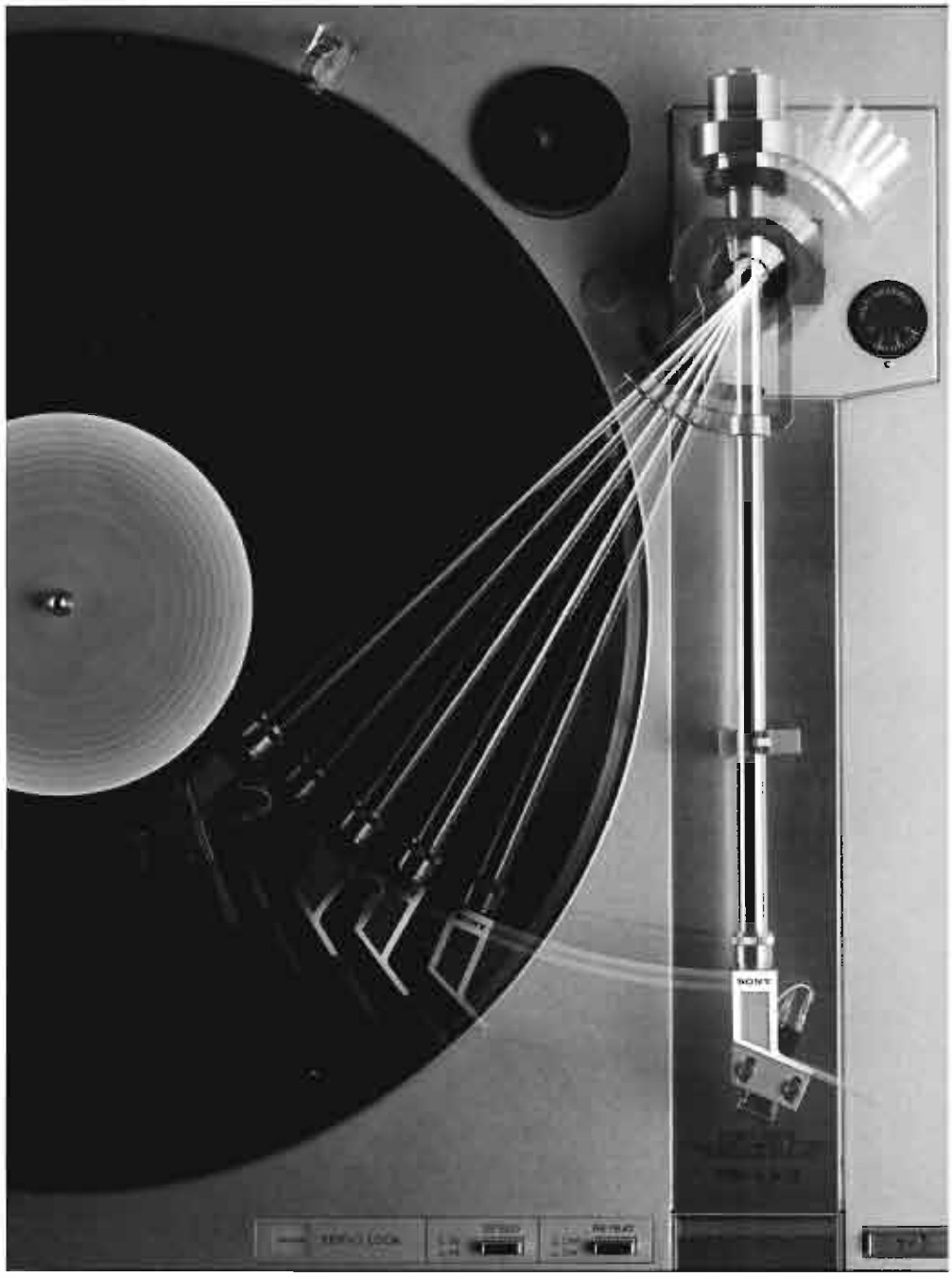
SONY

Unhesitating Response to Command

Performance, Convenience, and Value

Sony leadership in every aspect of audio reproduction is legendary. The turntables described in this brochure are outstanding expressions of this leadership. As you would expect, every model is direct drive. Every model has Sony's Linear Torque BSL motor for smooth platter rotation. Every model takes advantage of the precise speed control of the Magnedisc servo system. And every model features the superior isolation of the Sony Bulk Molding Compound (SBMC) cabinet. But Sony designers and engineers have provided more.

Recent improvements in cartridge performance, and such recent advances as digitally-mastered and direct-to-disc recordings, have placed new demands on the tonearm. In response to these demands, Sony has developed a superb, low-mass tonearm found on the LX-Series and X55S turntables. In addition, the more expensive models offer the unparalleled performance of the Biotracer tonearm. Whichever Sony turntable you select, you will be assured of outstanding performance, convenience, and value.



Biotracer: The World's Most Advanced Tonearm

The tonearm problem
Every tonearm functions to hold the cartridge, enabling the cartridge to trace the record groove. While this task is simple to describe, doing the job well is anything but simple. To prevent sonic coloration, the tonearm must be strong, a requirement that suggests heavy-duty construction. Yet some cartridges require low tonearm mass. At some frequencies the tonearm must be inert and immune to vibration — while at others it must move without resistance. And the tonearm must handle the imperfections of real-world records: warp and inaccurate centering.

All of the traditional methods of coping with these problems have dealt in pure mechanics. Sony has now taken a bold step beyond mechanics to find a solution to the troubles that have puzzled designers since the first turntables were presented to the world.

The Biotracer solution
Conventional tonearms are passive objects moved only as a result of external force. In contrast, Sony's new Biotracer tonearm is radically different. The Biotracer moves under the constant control of two separate motors that are guided by a "brain" — a sophisticated, multi-function micro-computer. As a result the Biotracer tonearm is an active contributor to exquisite performance. In fact, it is the solution to a number of problems that have plagued turntable designers and music lovers.

The Biotracer damps resonance
It is an unfortunate fact that many cartridge/tonearm combinations produce unwanted resonances which distort the music. The Biotracer tonearm damps these unwanted resonances consistently. Music reproduction is crystal clear and undistorted.

The Biotracer accepts the widest variety of cartridges
The problem of resonance limits even the finest conventional tonearms to a relatively small number of compatible cartridges. The Biotracer's ability to damp the unwanted vibrations of tonearm resonance means that you are free to choose from the widest variety of cartridges — moving-magnet or moving-coil — including the latest high-compliance models.

The Biotracer reduces modulation noise
In conventional tonearms, unwanted stylus motion results in modulation noise — a blurring of proper musical pitches. The Biotracer tonearm dramatically reduces such noise, for clear, crisp sound.

The Biotracer provides added precision
As music lovers are aware, the anti-skating and tracking force systems of conventional tonearms cannot be completely accurate. This is because record warps and eccentricities tend to alter the effective forces. You get mistracking and premature record wear. The Biotracer tonearm senses and immediately corrects for such external influences, automatically. You get perfect tracking. As an added benefit, you can even vary the tracking force *while the record is playing*, for the clearest possible sound.

The Biotracer tonearm does more than incorporate the latest in magnetic, microprocessing and electro-mechanical technology. It ends the long-standing compromises embodied in conventional tonearms. Its precise operation, response to command and its extraordinary contribution to musical sound represent a significant advance in the state of the art.

Improved Convenience with Fully-Automatic Operation

Advanced, fully-automatic operation
Many of the Sony turntables described in this brochure offer advanced, fully-automatic operation. These models go beyond the usual automatic functions. For example, place a record on the platter and press start. A system automatically senses and adjusts for the size of the record. A special relay circuit automatically mutes the output during the lead-in and return phases.

With the optional RM-65 these turntables are capable of synchronized operation with selected Sony cassette decks. At the touch of a single button, you can commence operation of both machines. Finally, many of these turntables incorporate feather-touch function selectors which respond to the lightest finger contact.

PS-X600

Extraordinary Performance with the Biotracer Tonearm

All of the performance and convenience features of the fully-automatic PS-X600 and automatic-lift PS-X500 complement the Biotracer tonearm incorporated in both of these remarkable components.

OUTSTANDING FEATURES
- Biotracer tonearm elicits the best performance from the widest variety of cartridges
- Biotracer actively damps tonearm/cartridge resonance and achieves wide stereo separation
- Biotracer controls tracking force, anti-skating and tonearm automatic functions

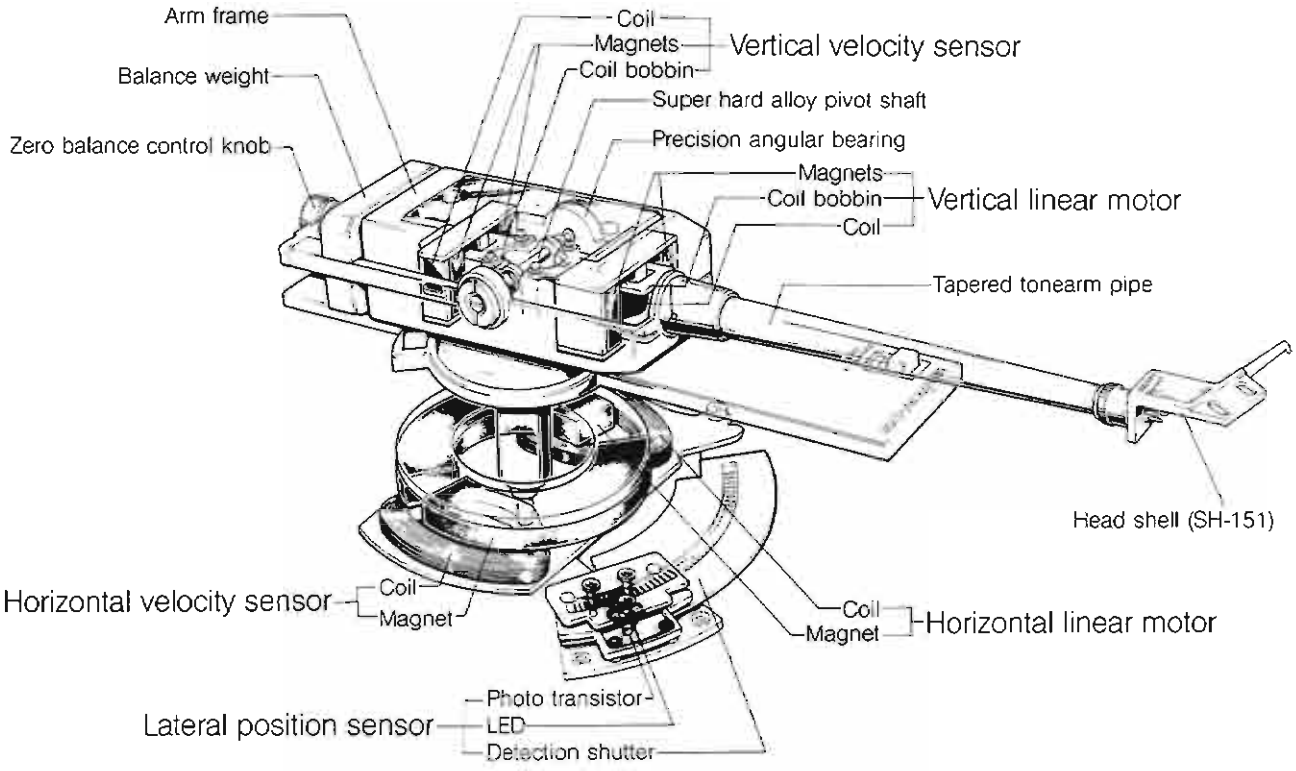
TONEARM and FUNCTIONS
- Advanced fully-automatic operation is silent and responsive for total convenience (PS-X600 only)
- Manual operation with automatic tonearm lift and motor-shut-off at end of play (PS-X500 only)
- Feather-touch controls respond to the slightest finger contact for fast, effortless function selection
- Audio muting circuit provides silence during start, return, and cueing phases
- Luminous end-of-disc sensor frees the tonearm from mechanical linkages for improved sensitivity

TURNTABLE and CONSTRUCTION
- Quartz lock with Magnedisc servo control prevents even minute speed variations caused by external factors
- The Sony Linear Torque BSL (brushless, slotless) motor designed for uniform and smooth delivery of torque
- Electromagnetic braking provides rapid and smooth halt of platter rotation
- Sony Bulk Molding Compound (SBMC) base is both rigid and acoustically inert to reduce feedback
- Adjustable, gel-filled feet isolate turntable from external vibration

FEATURES for PS-X600 ONLY
- Tonearm may be "indexed" left and right at high or low speed without lifting dust cover
- Automatic record-size selector permits precise and safe indexing
- "Repeat" mode for continuous music
- Capable of operation in synchronization with selected Sony cassette decks using the optional Sony RM-65

PS-X600/X500

Cartridge shown is optional.



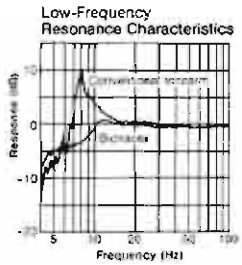
The conception of the Biotracer tonearm represents a sharp departure from conventional wisdom. The common approach to tonearm design involves elaborate, separate mechanisms that deal individually with stylus force, skating force and tonearm/cartridge resonance. In contrast, the Biotracer tonearm in the PS-X600 and PS-X500 deals with *all* of these functions in an integrated, unified fashion. There is no manually adjustable anti-skating control, no mechanical linkages for cueing, automatic indexing or automatic shut-off.

How the Biotracer tonearm works

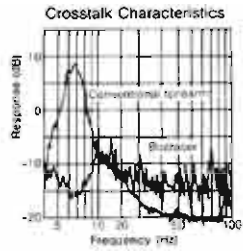
All of these controls and functions are undertaken by two linear motors: one for vertical motion, one for motion in the horizontal plane. Because these motors operate without making physical contact, the movement of the Biotracer tonearm is utterly silent.

Each of the linear motors of the Biotracer tonearm is complemented by a velocity sensor. These sensors monitor the movement of the tonearm, reporting on the activity of their respective motors. This information is relayed to an ingenious, multi-function microprocessor IC which in turn controls the motors. The entire cycle, from motor to sensor to microprocessor IC and back to motor, is called Motional Feedback (MFB). MFB accounts for the uncommon smoothness of the automatic functions that the Biotracer performs. It is the basis for the Biotracer's unprecedented accuracy and sensitivity as well as its ability to suppress the unwanted vibrations of tonearm resonance.

Cartridge shown is optional.



Low-frequency resonance characteristics, with and without Motional Feedback.



Crosstalk between stereo channels, with and without Motional Feedback.

The performance of the Sony PS-X600 and PS-X500 turntables, with the Biotracer tonearm, actually surpasses that of most professional turntables.

The Biotracer Tonearm and Tangential Tracking: A Perfect Match

The PS-X800 is designed for audiophiles and music lovers who will settle for nothing but the very best reproduction of music from their record collection. Careful attention was given to each detail of the PS-X800 to make it the new standard against which every other turntable will have to be measured.

OUTSTANDING FEATURES

- Tangential Biotracer tonearm for minimum distortion, excellent sonic performance
- Biotracer tonearm elicits the best performance from the widest variety of cartridges
- Biotracer actively damps tonearm/cartridge resonance and achieves wide stereo separation
- Biotracer controls tracking force, anti-skating and tonearm automatic functions

TONEARM and FUNCTIONS

- Advanced fully-automatic operation is silent and responsive for total convenience
- Automatic zero-balance for fast interchange of cartridges
- Tonearm may be "indexed" left and right at high or low speed without lifting dust cover
- Feather-touch controls respond to the slightest finger contact for fast, effortless function selection
- Automatic record-size selector permits precise and safe indexing
- Audio muting circuit provides silence during start, return, and cueing phases
- Luminous end-of-disc sensor frees the tonearm from mechanical linkages for improved reliability
- Capable of operation in synchronization with selected Sony cassette decks using the optional Sony RM-65
- "Repeat" mode for continuous music
- Accepts universal headshells and cartridge/headshell combinations

TURNTABLE and CONSTRUCTION

- Quartz lock with Magnedisc servo control prevents even minute speed variations caused by external factors
- The Sony Linear Torque BSL (brushless, slotless) motor designed for uniform and smooth delivery of torque
- Electromagnetic braking provides rapid and smooth halt of platter rotation
- Sony Bulk Molding Compound (SBMC) base is both rigid and acoustically inert to reduce feedback
- Adjustable, gel-filled feet isolate turntable from external vibrations

PS-X800

Available summer, 1981

Cartridge shown is optional.

Towards ideal tonearm performance
In the recording studio, when the original master disc is cut, the recording cutterhead is driven in a straight line from the outer edge toward the center of the disc. The cutting stylus remains at a 90° tangent to the groove throughout the process. Engineers have long understood that ideal performance in the home could only be achieved if the turntable's playback stylus duplicated this groove tangency. For it is only with perfect tangency that the turntable can achieve optimum stereo separation and minimum distortion, especially on the record's inner grooves.

A second requirement for ideal performance is an absolutely solid, vibration-free tonearm foundation. Without a solid foundation, the tonearm tends to vibrate in response to the record groove, degrading low-frequency sound. It is only with a rigid tonearm foundation that low-frequency notes can be reproduced distinctly, and with full impact.

Unfortunately, these two requirements, groove tangency and a solid foundation, tend to contradict each other. Until now, the only tonearms with a solid foundation have been pivoted models. But pivoted tonearms, in their arc across the record, can achieve tangency at only one or two points. By their very design they cannot maintain tangency from beginning to end.

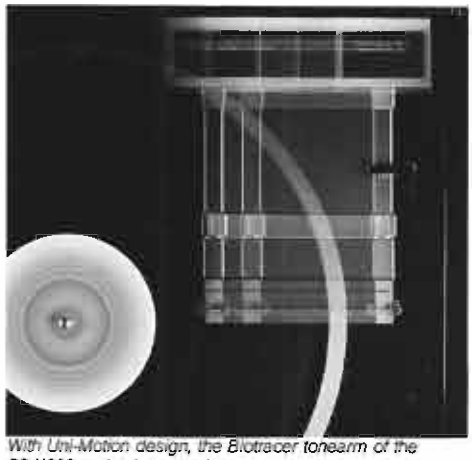
In contrast, there are straight-line tracking turntables that achieve groove tangency, but they sacrifice a solid tonearm foundation. By *their* very design, tangential tonearms are mounted on *moving* platforms which permit side-play and vibration.

The tangential Biotracer tonearm
The Sony PS-X800 is the first turntable to combine the advantages of tangential tracking with the low-frequency performance of a stable tonearm foundation. Like other straight-line tracking turntables, the X800 uses a tonearm mounted on a moving platform. However, unlike any other tangential arm in the world, the tonearm of the X800 incorporates Sony's innovative Biotracer design.

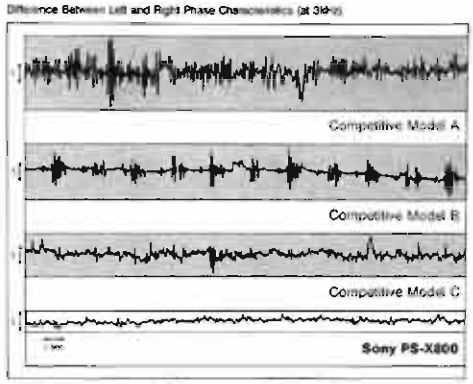
The Biotracer's automated Motional Feedback (MFB) system constantly senses and corrects for tonearm vibration. For this reason, the arm provides all the advantages of a solid foundation: full-bodied, detailed low frequencies. *And* you get the reduced distortion, and improved stereo separation associated with tangential tonearms.

The Biotracer tonearm of the PS-X800 is the first design to fulfill the promise of straight-line tracking. Quite clearly, the combination of the Biotracer tonearm and the tangential configuration results in a joyful musical experience.

Uni-Motion design for superior precision
The tangential Biotracer arm provides still more benefits. Other straight-line tracking arms require some slight tracking error to keep the arm moving forward. These tonearms are in a constant state of correcting tracking error. In contrast, the PS-X800 incorporates Uni-Motion design. Uni-Motion brings the tonearm slowly towards the center of the record, even when no tracking error is detected. As a result, the tangential Biotracer maintains superior groove tangency. Phase differences between the stereo channels are dramatically reduced. This results in a stable stereo image, with outstanding spatial characteristics.



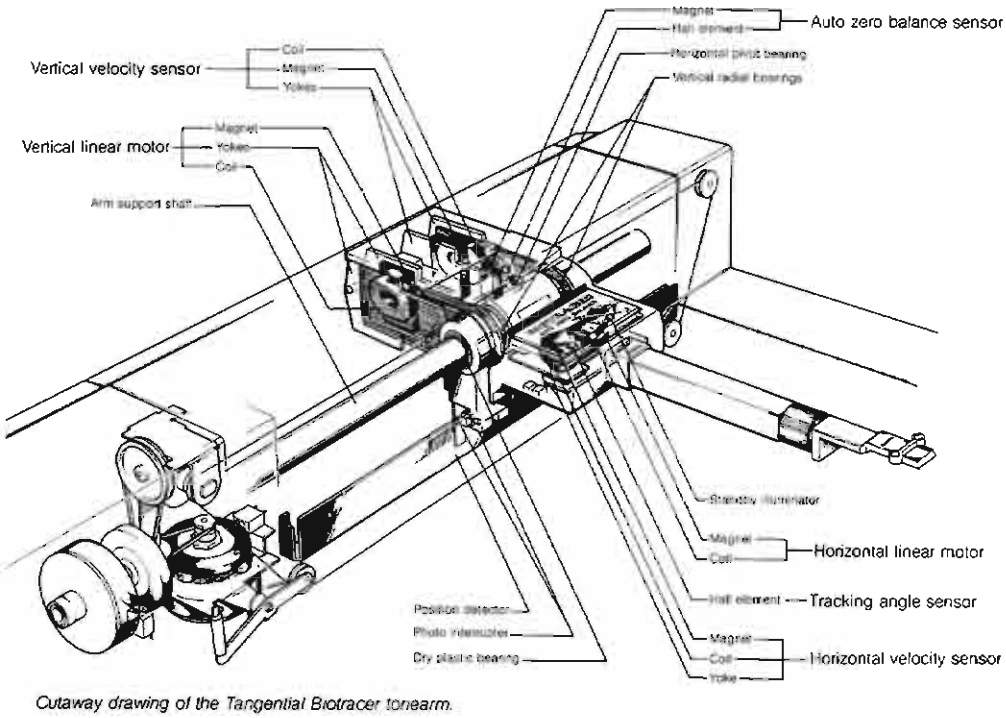
With Uni-Motion design, the Biotracer tonearm of the PS-X800 maintains superior groove tangency.



The Sony tangential Biotracer maintains groove tangency better than these other tangential tonearms.

As a final measure of precision, the vertical tonearm bearings, so important to tonearm function, are made to extremely close dimensional tolerances. Situated in Sony's long-span pivot, they provide the final assurance of exquisite performance.

The PS-X800, with its Biotracer tonearm and straight-line-tracking displays exceptionally lower distortion, extraordinary stereo separation and greatly improved reproduction of the inner grooves of all records. Most important, the Biotracer tonearm is unique in providing the solid, vibration-free tonearm base necessary for superior music reproduction.



Cutaway drawing of the Tangential Biotracer tonearm.

PS-LX5

Impeccable Performance and Advanced Fully-Automatic Operation

The quartz-locked PS-LX5 and the PS-LX3 are direct-drive turntables that express Sony's commitment to absolute precision and superior reproduction of music. In every way—appearance, performance and price—they are outstanding examples of Sony leadership in turntable technology.

OUTSTANDING FEATURES
- Advanced fully-automatic operation for total convenience
- Automatic record-size selector permits precise and safe indexing
- Straight Duralumin tonearm for low mass and excellent tracking

TONEARM and FUNCTIONS
- Two-point tonearm support for high rigidity and low modulation noise
- Front controls provide convenient operation — even with the dust cover closed
- Audio muting circuit provides silence during start and return phases
- Record-setting guides make it easy to place the record precisely on the spindle
- Capable of operation in synchronization with selected Sony cassette decks using the optional Sony RM-65
- "Repeat" mode for continuous music

TURNTABLE and CONSTRUCTION
- Quartz lock prevents even minute variations caused by external factors (PS-LX5 only)
- Servo-lock indicator (PS-LX3 only)
- The Sony Linear Torque BSL (brushless, slotless) motor designed for uniform and smooth delivery of torque
- Magnedisc servo control monitors speed at the outer rim of platter for exceptional accuracy
- Electromagnetic braking provides rapid and smooth halt of platter rotation (PS-LX5 only)
- Sony Bulk Molding Compound (SBMC) base is both rigid and acoustically inert to reduce feedback

PS-LX5
PS-LX3

Cartridge shown is optional.

PS-LX3

There are no better examples of Sony attention to the comfort and convenience of the listener than the PS-LX5 and PS-LX3 fully-automatic turntables. These models feature a high degree of automation. As you would expect, there's automatic start and automatic return at the end of play. If you want to hear the record more than once, you merely touch "repeat" and it will obey your command until you change it.

A feature important for both convenience and safety is Sony's automatic record-size selector. A series of "windows" in the platter mat permit light to travel from a point toward the back of the turntable to two photo-sensors beneath the platter. The sensors cause the arm to index for a 12" or 7" record automatically. When no record is on the platter, the sensors prevent any indexing at all. In this way, the tonearm, cartridge and stylus are protected from damage even if the start button is accidentally pressed with no record on the platter.

There is also a circuit which silences all audio during the start and return phases of the turntable. In particular, this muting circuit eliminates the unpleasant "pop" which invariably takes place when the stylus descends into the groove. Both turntables can, with the optional Sony RM-65, work in synchronization with selected Sony cassette deck models, for significantly enhanced convenience.

Cartridge shown is optional.

Exceptional Accuracy and Extraordinary Value

The PS-LX4 and PS-LX2 are automatic return turntables with a full array of features and flawlessly smooth performance at modest cost. The LX2 features Magnedisc servo control for speed accuracy within a fraction of a percent, while the more expensive LX4 boasts the absolute accuracy of quartz lock.

OUTSTANDING FEATURES
- Straight Duralumin tonearm for low mass and excellent tracking
- Two-point tonearm support for high rigidity and low modulation noise

TONEARM and FUNCTIONS
- Semi-automatic system returns tonearm at end of play and shuts off motor
- Front controls provide convenient operation — even with the dust cover closed
- Record-setting guides make it easy to place the record precisely on the spindle

TURNTABLE and CONSTRUCTION
- Quartz lock prevents even minute speed variations caused by external factors (PS-LX4 only)
- Servo-lock indicator (PS-LX2 only)
- The Sony Linear Torque BSL (brushless, slotless) motor designed for uniform and smooth delivery of torque
- Magnedisc servo control monitors speed at the outer rim of platter for exceptional accuracy
- Electromagnetic braking provides rapid and smooth halt of platter rotation (PS-LX4 only)
- Sony Bulk Molding Compound (SBMC) base is both rigid and acoustically inert to reduce feedback

PS-LX4
PS-LX2

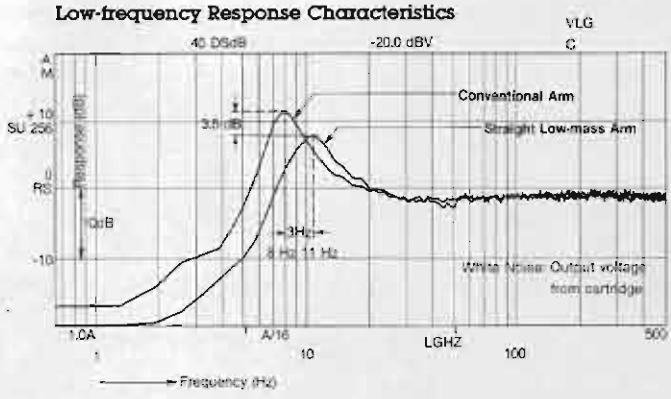
Cartridge shown is optional.

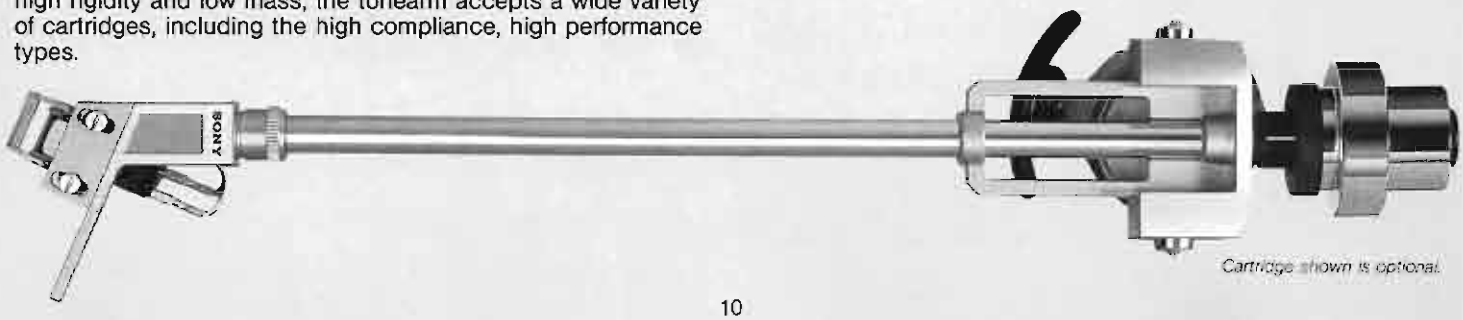
PS-LX2

The PS-LX4 and PS-LX2 direct-drive turntables deliver exceptional performance. Both models incorporate Sony's straight, low-mass tonearm, also found on several other Sony models. It is obvious that a turntable's tonearm is critical to performance.

A tonearm must be rigid. Yet some cartridges only function properly with a low-mass tonearm. These seemingly contradictory requirements — high rigidity and low mass — have been met by the design and materials of the straight, low-mass tonearm. The shaft of this tonearm is supported in *two* places: behind and in front of the vertical bearings. This two-point suspension reduces resonance and makes the shaft 35% more rigid. Sony engineers have chosen an alloy called Duralumin which, when fabricated into a thin-walled, hollow tube, nevertheless retains exceptional strength. Finally, because of its high rigidity and low mass, the tonearm accepts a wide variety of cartridges, including the high compliance, high performance types.

Low-frequency Response Characteristics





Cartridge shown is optional.

Computerized Convenience and Performance

The PS-X55S is a deluxe turntable in every way. Full automation, microcomputer control, and the ability to operate in synchronization with selected Sony cassette decks make the X55S a logical choice for the discerning music lover.

OUTSTANDING FEATURES

- Advanced fully-automatic operation for total convenience
- Automatic record-size selector permits precise and safe indexing
- Feather-touch controls respond to the slightest finger contact for fast, effortless function selection
- Straight Duralumin tonearm for low mass and excellent tracking

TONEARM and FUNCTIONS

- Two-point tonearm support for high rigidity and low modulation noise
- Discrete tonearm servo motor for continuous, smooth, and uniform action independent of platter rotation
- Luminous end-of-disc sensor frees the tonearm from mechanical linkages for improved sensitivity
- Front controls provide convenient operation — even with the dust cover closed
- Audio muting circuit provides silence during start, return, and cueing phases
- Capable of operation in synchronization with selected Sony cassette decks using the optional Sony RM-65
- "Repeat" mode for continuous music

TURNTABLE and CONSTRUCTION

- Quartz lock with Magnedisc servo control prevents even minute speed variations caused by external factors
- The Sony Linear Torque BSL (brushless, slotless) motor designed for uniform and smooth delivery of torque
- Electromagnetic braking provides rapid and smooth halt of platter rotation
- Sony Bulk Molding Compound (SBMC) base is both rigid and acoustically inert to reduce feedback
- Adjustable, gel-filled feet isolate turntable from external vibrations

PS-X55S

Cartridge shown is optional.

The Biotracer Tonearm in a Popular Format

The exquisite performance of the Biotracer tonearm plus the ability to use universal-mount headshells and integrated cartridge/headshell combinations make the PS-X700 a popular choice for a large number of music lovers.

OUTSTANDING FEATURES

- Biotracer tonearm elicits the best performance from widest variety of cartridges
- Biotracer actively damps tonearm resonance and achieves wide stereo separation
- Biotracer controls tracking force, anti-skating and tonearm automatic functions
- Automatic zero-balance for fast interchange of cartridges
- Digital readout of stylus force

TONEARM and FUNCTIONS

- Tonearm accepts universal headshells as well as cartridge/headshell combinations
- Adjustable tonearm height for optimum tracking without added mass of cartridge shims
- Advanced fully-automatic operation is silent and responsive for total convenience
- Tonearm may be "indexed" left and right at high or low speed without lifting dust cover
- Feather-touch controls respond to the slightest finger contact for fast, effortless function selection
- Automatic record-size selector permits precise and safe indexing
- Audio muting circuit provides silence during start, return, and cueing phases
- Luminous end-of-disc sensor frees the tonearm from mechanical linkages for improved sensitivity
- Capable of operation in synchronization with selected Sony cassette decks using the optional Sony RM-65
- "Repeat" mode for continuous music

TURNTABLE and CONSTRUCTION

- Quartz lock with Magnedisc servo control prevents even minute speed variations caused by external factors
- The Sony Linear Torque BSL (brushless, slotless) motor designed for uniform and smooth delivery of torque
- Electromagnetic braking provides rapid and smooth halt of platter rotation
- Sony Bulk Molding Compound (SBMC) base is both rigid and acoustically inert to reduce feedback
- Adjustable, gel-filled feet isolate turntable from external vibrations

PS-X700

Available late fall, 1981

Cartridge shown is optional.

Sony Technology in the Service of Performance

Drive System Technology

The Sony Linear Torque BSL motor for smooth, precise rotation

Most direct-drive motors generate their power with an array of electromagnets mounted in a circle within a rotor ring. As the rotor turns, the torque increases and decreases as a result of the spaces — "slots" — between the electromagnets. This wavering-force effect is called "cogging."

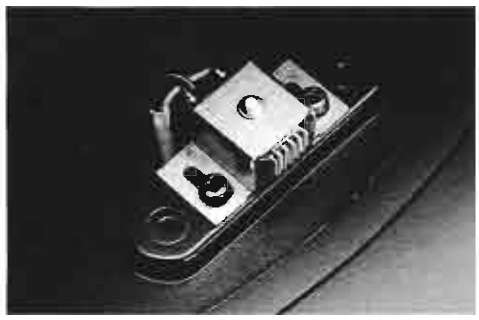
Sony has eliminated cogging with the remarkable BSL motor. There are no brushes, no slots, and the magnetic force is constant. Cogging is impossible, and the torque delivered to the platter is uniform, smooth, and even.

As a further benefit, the Sony brushless design makes the BSL motor unusually quiet, durable and trouble-free.

Magnedisc servo control for superior accuracy

Because household voltage itself is not without fluctuations, no direct-drive motor can be depended on — by itself — to maintain absolutely constant speed. Most good direct-drive turntables, therefore, have introduced servo electronics, which monitor the speed at which the motor turns and adjust the electrical input to correct for deviations.

Most servo systems depend on a generator, mounted within or below the motor, to monitor motor speed and feed that information back to the control circuits. High-quality turntables use pulse frequency generators for improved accuracy. These Sony turntables are better still. They offer markedly increased accuracy with the Magnedisc system, which monitors the turning speed, not at the motor, but at the outer rim of the platter where there is room for many more pulses. Based on Sony-developed technology for computer-controlled precision machinery, this system uses a magnetic pickup head to read the 512 pulses imprinted on the platter's outer rim. The information is relayed to the servo control so rapidly and precisely that any speed variation is corrected before it can affect the musical signal.



With Magnedisc, the Sony PS-LX2 and LX3 achieve such high speed accuracy that the platter stroboscope and variable speed controls are no longer necessary.

Quartz lock for absolute precision

To further ensure the consistency of the platter's speed, many Sony turntables compare the readings from the magnetic pickup head with a totally stable reference: quartz crystal oscillating at a precise frequency. The servo system is locked into this stable reference signal. This prevents even minute speed variations that might be caused by temperature, drift in the servo loop, changes in voltage, or even the load placed on the platter by the record, the stylus, or a record-cleaning device. Dynamic wow and flutter is dramatically reduced. Musical pitches are clear and distinct.

Unhesitating Response to Command

While these Sony turntables offer state-of-the art technology and performance, they also provide comfortable, convenient access to this high performance. For example, most of these models feature logic control. When you touch a function button, your command is relayed to the logic system, checked for sequencing, and obeyed. Moreover, every operation is done without hesitation, and with utter silence.

The controls on every turntable are mounted in the front, making them completely accessible — even when the dust cover is closed. On the PS-X600, X700, and X800, you can even "index" the arm left and right — at high or low speed — without lifting the dust cover.

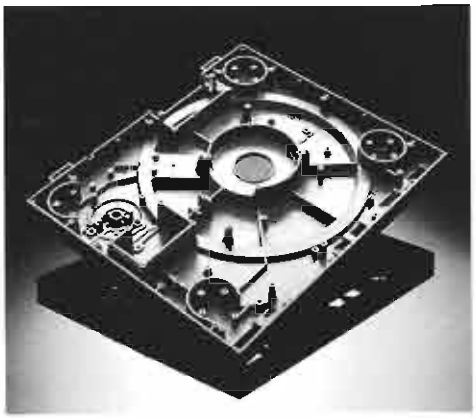
Using the optional RM-65, Sony's advanced fully automatic turntables can be operated in synchronization with selected Sony cassette decks. With this facility you can start and stop operation of both machines with the touch of a single button.

The following Sony models function in synchronization when used with the RM-65. Turntables: PS-LX3, LX5, X55S, X600, X700, and X800. Tape decks: TC-FX4, FX5C, FX6, FX6C, FX7, K55II, K61, K65, K71, K75, K81, K777, K88B, and K77R.

And Sony's attention to detail extends to the simple action of placing the record on the spindle. On the PS-LX2, LX3, LX4, and LX5, a record setting guide facilitates easy, accurate placement of the record, even in dark and dimly-lit rooms.

Anti-Resonant Construction

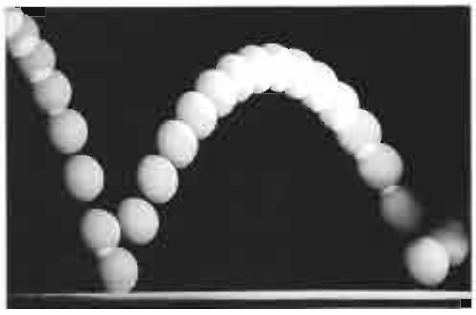
Sony Bulk Molding Compound (SBMC) cabinet

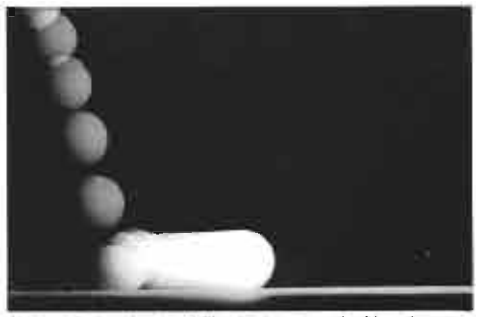


The cabinet of each and every Sony turntable is molded of a specially developed inorganic material known as Sony Bulk Molding Compound (SBMC). Acoustically inert, rigid, and exceptionally resistant to chipping or scratching, SBMC absorbs the high-level, low-frequency sounds that normally generate acoustic feedback. As a result, the integrity of the sound quality is preserved.

Gel-filled, height-adjustable feet

To eliminate the additional problem of resonance or feedback directly between turntable and speakers, selected Sony turntables are mounted on specially-designed, gel-filled feet. Adjustable for easy leveling, these insulators effectively absorb acoustic energy. You can play music even at high volume levels without acoustic feedback.



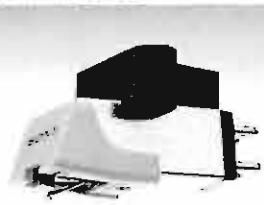


Rubber ball without gel filling (above) and with gel filling (below) clearly demonstrates "dead" response and shock-absorbing properties.

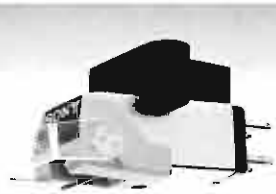
RM-65 unit automatically synchronizes tape deck recording with turntable operation.

Disc centering guides allow you to place records on the spindle quickly and easily.

Accessories



VL-5
High-quality Sony MM (Moving Magnet) cartridge exhibits excellent tracking and frequency response.



VL-7
Superb Sony MM (Moving Magnet) cartridge exhibits superior tracking, frequency response and channel separation.

XL-33L
MC (Moving Coil) cartridge with patented figure-8 coil and well-balanced, round air-core armature delivers exceptional sound definition.

XL-44L
MC (Moving Coil) cartridge features Sony-invented figure-8 coil, round-type air-core armature and highly efficient magnetic circuitry for wide-range frequency response.

XL-33
MC (Moving Coil) cartridge with patented figure-8 coil and well-balanced, round air-core armature delivers exceptional sound definition. Comes with integrated die-cast aluminum headshell.

SH-151
Specially-designed headshell for Sony Straight, Low-Mass tonearms.

SH-156
Specially-designed, super light-weight, slim headshell for Biotracer tonearm.

Features & Specifications

		LX2	LX3	LX4	LX5	X55S	X500	X600	X700	X800
Operation type		Semi-automatic	Fully-automatic	Semi-automatic	Fully-automatic	Fully-automatic	Manual/auto lift	Fully-automatic	Fully-automatic	Fully-automatic
Tonearm section										
Type		Static-balance straight	Static-balance straight	Static-balance straight	Static-balance straight	Static-balance straight	Biotracer, Taper straight	Biotracer, Taper straight	Biotracer, J-shaped	Tangential Biotracer
Effective length	mm (inch)	216.5 (8 1/2)	216.5 (8 1/2)	216.5 (8 1/2)	216.5 (8 1/2)	216.5 (8 1/2)	216.5 (8 1/2)	216.5 (8 1/2)	235 (9 1/4)	180 (7 1/8)
Overhang	mm (inch)	16.5 (5/8)	16.5 (5/8)	16.5 (5/8)	16.5 (5/8)	16.5 (5/8)	16.5 (5/8)	16.5 (5/8)	13 (1/2)	0
Tracking error		+3°00', −1°00'	+3°00', −1°00'	+3°00', −1°00'	+3°00', −1°00'	+3°00', −1°00'	+3°00', −1°00'	+3°00', −1°00'	+2°40', −1°40'	±0.05°
Usable cartridge weight (including headshell)	g	7.5-12	7.4-11.7	7.4-11.7	7.4-11.7	7.5-11.5 11-15.0	7.5-12.5 12.0-17.0	7.5-12.5 12.0-17.0	9.7-16.7 21.7-28.7 15.7-22.7	10.0-17.0 16.0-23.0 22.0-29.0
Supplied headshell	g	SH-94 (4.2)	SH-151 (5.2)	SH-151 (5.2)	SH-151 (5.2)	SH-151 (5.2)	SH-151 (5.2)	SH-151 (5.2)	SH-156 (7.2)	SH-156 (7.2)
Effective mass (without cartridge)	g	8.36*	8.36*	8.98*	8.98*	8**	***	***	***	***
Turntable section										
Drive system & motor	Direct, BSL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Magnedisc servo control		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Quartz lock, with indicator		—	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wow and flutter										
WRMS	%	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025
DIN-45507	%	±0.04	±0.04	±0.04	±0.04	±0.04	±0.03	±0.03	±0.03	±0.03
FG direct measurement	%	0.02	0.02	0.02	0.02	0.02	0.015	0.015	0.015	0.015
Signal-to-noise ratio (DIN-B)	dB	75	75	78	78	78	78	78	78	78
Speed accuracy	%	>0.05	>0.05	>0.003	>0.003	>0.003	>0.003	>0.003	>0.003	>0.003
Start-up time at 33⅓/RPM	Rotation	½	½	½	½	½	½	½	⅔	½
Platter diameter	cm (inch)	31 (12 1/4)	31 (12 1/4)	31 (12 1/4)	31 (12 1/4)	31 (12 1/4)	32 (12 5/8)	32 (12 5/8)	32 (12 5/8)	32 (12 5/8)
Platter weight (with rubber mat)	kg (lb/oz)	0.85 (1/14)	0.85 (1/14)	1.1 (2/7)	1.1 (2/7)	1.5 (3/5)	1.65 (3/10)	1.65 (3/10)	2.0 (4/7)	1.75 (3/14)
Speeds		33⅓ & 45	33⅓ & 45	33⅓ & 45	33⅓ & 45	33⅓ & 45	33⅓ & 45	33⅓ & 45	33⅓ & 45	33⅓ & 45
Electromagnetic braking		—	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Others										
Electromagnetic braking		—	—	—	—	Yes	Yes	Yes	Yes	Yes
Auto disc selector		—	Yes	—	Yes	Yes	—	Yes	Yes	Yes
Audio muting circuit		—	Yes	—	Yes	Yes	Yes	Yes	Yes	Yes
General										
Power supply	V	AC-120	AC-120	AC-120	AC-120	AC-120	AC-120	AC-120	AC-120	AC-120
Power consumption	W	8	9	8	9	12	13	16	23	45
Dimensions										
Width	mm (inch)	430 (17)	430 (17)	430 (17)	430 (17)	430 (17)	430 (17)	430 (17)	480 (18 7/8)	440 (17 5/16)
Height	mm (inch)	105 (4 1/4)	105 (4 1/4)	105 (4 1/4)	105 (4 1/4)	135 (5 5/16)	120 (4 3/4)	120 (4 3/4)	165 (6 1/2)	120 (4 3/4)
Depth	mm (inch)	355 (14)	355 (14)	355 (14)	355 (14)	375 (14 3/4)	365 (15 1/16)	385 (15 1/16)	420 (16 1/2)	440 (17 5/16)
Weight	kg (lb/oz)	5.8 (12/13)	6.1 (13/7)	6.3 (13/14)	6.3 (13/14)	8.0 (17/10)	8.3 (18/5)	8.5 (18/12)	13.0 (28/11)	11.6 (25/10)

- *Features and specifications subject to change without notice.*
- *Cartridge not included.*

* XL-200 ** XL-20, SH-151 *** Unmeasurable

SONY
High Fidelity Components

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