

## RS-M85

**Quartz-Controlled Direct-Drive Cassette Deck**  
 "Flat-chassis" design with vertical tape hold and quartz-locked direct-drive capstan motor. Wow and flutter 0.035% WRMS. Separate coreless reel motor. Full IC-logic control of all tape transport functions. FL meters with peak and VU indication. Laminated "SX" (Sendust Extra) head combines excellent durability, low distortion, wide frequency response: 30 ~ 16,000 Hz  $\pm$ 3 dB with CrO<sub>2</sub>/FeCr tape. Dolby\* noise reduction.  $\pm$ 15% bias adjustment.



## RS-M65

**FG Servo Controlled Direct-Drive Cassette Deck**  
 "Flat-chassis" design with vertical-hold and FG servo controlled direct-drive capstan motor. Wow and flutter 0.035% WRMS. IC logic control of all tape transport functions. Two-color FL (fluorescent) bar-graph peak meters. "SX" (Sendust Extra) head for outstanding frequency response: 30 ~ 16,000 Hz  $\pm$ 3 dB with CrO<sub>2</sub>/FeCr tape. Dolby\* noise reduction.



## ACCESSORIES



### TAPE DECK ACCESSORIES

Available as options for use with Technics open-reel and cassette decks:

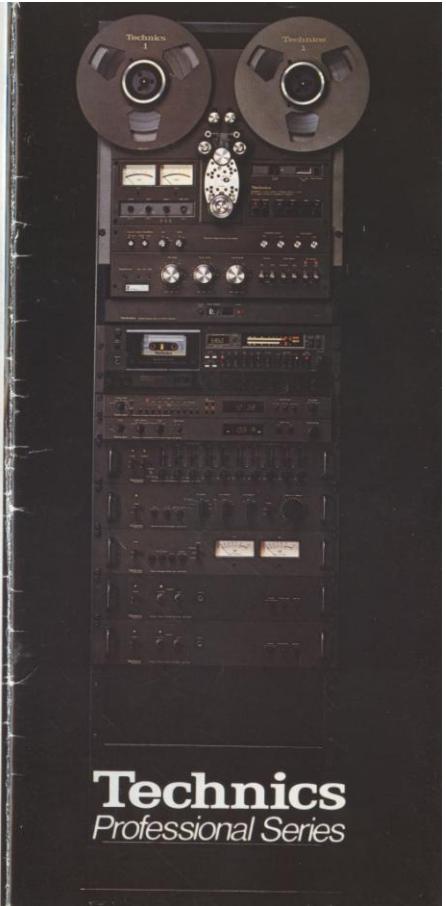
- **RP-2422** 4-track conversion head block for RS-1500US.
- **RP-9100** Carrying case for RS-1500US, 1506US, 1700.
- **RP-9102** Carrying case for RS-1520.
- **RP-9110** Dust cover for Isolated Loop decks, covers reels and tape transport.
- **RP-9130** Rack-mounting brackets for Isolated Loop decks.
- **RP-9690** Remote control unit for RS-M85, RS-M95, RS-9900US, RS-1500US, RS-1506US, RS-1520. 5 meter connecting cord.
- **RP-070** Infrared, wireless remote control unit for decks listed above plus RS-1700. Operates within 7 meters of receiver unit.
- **RP-10A** Empty reel for Isolated Loop decks.
- **RP-086** 24 V DC battery adaptor for RS-1500US, 1506US, 1700. For field recording when AC is not available.

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Specifications subject to change without notice.

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**Technics**  
 Professional Series

## RS-1500US RS-1506US

### Isolated Loop, Quartz Controlled Open Reel Tape Decks

Isolated Loop maintains low tape tension and extremely stable transport over heads. Benefits of design include 0.018% wow and flutter (WRMS at 15 ips), very low modulation noise, low head wear, stable high-frequency level. Quartz-controlled direct-drive capstan motor. Direct-drive reel motors with electronic tension sensing. Full IC-logic transport controls. Separate, 3-position bias and equalization selectors. RS-1500US record/playback format is 2-track, 2-channel with extra 4-track playback head. RS-1506US record/playback format is 4-track, 2-channel with extra 2-track playback head. Transport speeds: 15, 7½ and 3¼ ips. Pitch control up to ±6% of each speed. Other 15 ips specifications - frequency response: 30 ~ 30,000 Hz ±3 dB (at -10 VU); S/N ratio (DIN weighted): 68 dB (RS-1500US), 66 dB (RS-1506US); distortion at 0 VU: 0.8%. Head assembly of RS-1506US available separately as option (RP-2422) for conversion of RS-1500US. Removable simulated wood side panels. Can be mounted in 19" rack.



## RS-1520

### Isolated Loop Tape Deck with Professional Interface Features

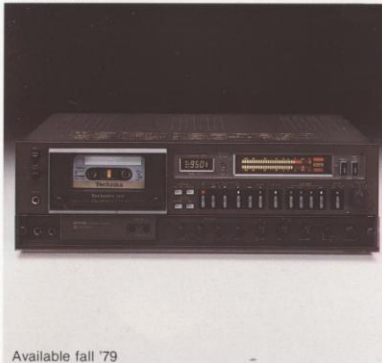
2-track, 2-channel recording with extra 4-track playback head. Isolated Loop design results in 0.018% wow and flutter (WRMS, 15 ips), low tape tension, highly stable tape transport. Quartz-controlled direct-drive capstan motor. Direct-drive, tension-controlling reel motors. Full IC-logic transport controls. Separate, 3-position bias and equalization selectors plus continuous adjustments for bias and EQ. Oscillator provided to help set bias/EQ for each tape. VU meters conform to ASA standards for attack time, frequency response and scale precision. Meter sensitivity selector. Playback EQ selector for NAB or IEC standard recordings (15 ips only). Cue/Edit switch stops take-up reel while capstan pulls tape through transport permitting spill editing. Includes both balanced (XLR-type) and unbalanced connectors for interface with studio equipment. Performance specifications same as RS-1500US. Can be mounted in 19" rack.



## RS-M95

### Quartz-Controlled Cassette Deck with "Metal Particle" Recording

Employs specially-developed 3-head configuration with HPF record and playback heads, sendust/ferrite erase head. Heads designed to work with high currents needed for "metal particle" recording and erasure. Bias fine adjustment controls for four tape types (normal, CrO<sub>2</sub>, FeCr and metal). Frequency response: 20 ~ 20,000 Hz ±3 dB with metal tape, 20 ~ 19,000 Hz ±3 dB with CrO<sub>2</sub> and FeCr tape. Quartz-locked direct-drive capstan motor and microprocessor-controlled tape tension result in 0.03% wow and flutter (WRMS). Peak/VU FL meters with peak-hold capacity. FL meters feature very fast response potential while avoiding ballistics problems associated with mechanical meters. Microprocessor-controlled tape counter and memory modes. High-linearity recording, playback and microphone amplifiers. Double Dolby® NR system with calibration controls. Test-tone helps calibrate Dolby and bias. Record muting switch allows you to temporarily cut out input signal while recording. Unattended recording and playback possible with addition of optional timer device.



Available fall '79



## SB-7070

### Linear Phase Speaker System

4-way system with linear phase driver and crossover configuration. Combines acoustically aligned drivers, wide response in each driver and phase-compensating crossover. 13-3/4" woofer handles low frequencies up to 350 Hz, resulting in very low IM distortion and Doppler effect. Soft dome tweeter extends response to 32 kHz with wide, uniform dispersion. One watt input drives speaker to 92 dB sound pressure level measured at one meter. Handles 180 watts music power, although higher-powered amps may be used if not driven to excessive clipping. Includes thermal relay protection which shuts off input in the event of excessive heat build-up in voice coils (as from amplifier clipping). Relays are resettable by pushbutton. Overall response: 30 — 32,000 Hz (-10 dB from average level). Simulated wood cabinet.



## SB-6060

### Linear Phase Speaker System

3-way linear phase system with acoustically aligned, wide response drivers and phase-compensating crossover. 12" woofer in vented enclosure; 4" midrange unit with "free edge" design; 1" soft dome tweeter. 92 dB SPL, one watt input at one meter. Handles 150 watts music power. Resettable thermal relay protection. Overall response: 32 — 32,000 Hz (-10 dB from average level). Simulated wood cabinet.



## SPEAKERS

Technics Linear Phase Speakers are the result of a research project which took several years. We began the project at a time when little attention was being paid to the phase properties of speakers, so we actually had to devise test methods and equipment of our own. With these, we found that driver placement, the frequency response of the drivers, and the characteristics of the crossover network must all be balanced with each other in a linear phase speaker system. Putting our findings to practice, we designed speakers capable of a mirroring very closely the oscilloscope sound waveforms of live musical instruments, or as we call it "waveform fidelity." Moreover, the theoretical benefits of linear phase design, such as precise localization of sound and stable stereo imaging, seem very well realized in the speakers. There is an exciting impression of "being there," especially with very high quality recordings.

## SB-4500A

### Linear Phase Speaker System

2-way linear phase system with acoustically aligned drivers, wide response in each driver and phase-compensating crossover. 10" woofer in vented enclosure. 2-3/8" cone tweeter. 90.5 dB SPL, one watt input at one meter. Handles 75 watts music power. Thermal relay protection included. Overall response: 40 — 20,000 Hz (-10 dB from average level). Simulated wood cabinet.





## OPEN REEL and CASSETTE

Reputations are built on performance. Not just in one isolated case, but on a series of products that consistently do everything well, and are designed to hold up through years of use. Knowing this, and maintaining very high standards, has made Technics an established leader in the competitive turntable industry. We intend to build the same kind of reputation for tape equipment. Ingenious transport designs, like the Isolated Loop in our open-reel decks and the direct-drive capstan motors in our cassette decks, have dramatically demonstrated how important stable transport is when you're aiming for the best sound quality. Likewise, our research in tape head materials and design has resulted in our HPF and SX heads, both of which have helped us push cassette performance to the extremes of its potential. Needless to say, all our tape decks are ruggedly built and carefully tested for reliability, or they wouldn't be part of the Technics line.

## RS-1700

**Isolated Loop Tape Deck with Auto-Reverse**  
4-track, 2-channel auto-reverse recording and playback. Identical performance in forward and reverse modes due to outstanding transport stability. Performance specifications same as RS-1506US. Quartz-locked, direct-drive capstan motor. Direct-drive, tension controlling reel motors. Full IC-logic transport controls. 6-head configuration with separate erase, record and playback heads for each direction. Can be set for continuous, non-stop playback. Infrared sensing of leader tape, effects reverse action in record and playback, auto-stop in fast-forward and rewind. Separate, 3-position bias and equalization selectors. Variable pitch control up to  $\pm 6\%$ . Real time tape counter. Removable simulated wood side panels. Can be mounted in 19" rack.



## RS-9900US

**Closed-Loop, Double Capstan Cassette System**  
Double-capstan system maintains precise tape tension for low wow and flutter (0.04% WRMS) and low modulation noise. Direct-drive motor employed for capstan drive. Separate coreless motors for supply and take-up reels. Genuine 3-head configuration with separate record and playback heads, playback head azimuth adjustment. Frequency response: 25—20,000 Hz  $\pm 3$  dB (with CrO<sub>2</sub>/FeCr tape). Full IC-logic controlled transport. Memory rewind and auto-play.  $\pm 5\%$  pitch control. 3-position bias/EQ selector switch plus continuous, separate adjustments for bias/EQ for each tape used. DIN-standard peak meters. Double Dolby\* NR system for record and playback with calibration controls for each. Tape time meter. 19" rack mountable.



\*Dolby is a trademark of Dolby Laboratories.

## SU-9070

### SU-9070 DC Preamplifier

DC design minimizes low-frequency phase shift. Moving-coil pre-preamp built in. Connections for three tape decks, with multi-way dubbing. Subsonic filter in phono EQ (-18 dB/oct, 20 Hz). Rated THD: 0.003%. Frequency response (aux, tuner): DC ~ 100 kHz, -1 dB; (phono, RIAA): 20 Hz ~ 20 kHz,  $\pm 0.2$  dB.



## SE-9060

### Stereo/Mono DC Power Amplifier

70 watts per channel (stereo), 180 watts (mono, BTL) continuous power into 8 ohms, from 20 ~ 20,000 Hz, with no more than 0.02% total harmonic distortion.

DC design minimizes phase shift. Separate L/R channel power supplies, total filter capacitance 72,000  $\mu$ F. Linear-cascade, 3-stage Darlington output results in very low switching distortion. Main/remote speaker connections. BTL switch converts amp to single-channel operation.



## SH-9010

### 2-Channel Parametric/Graphic Equalizer

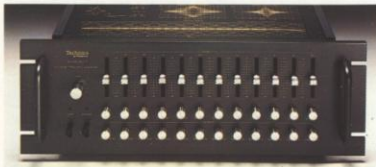
5 slide controls per stereo channel, providing up to 12 dB boost or cut. Adjustable center frequencies for each control within range of  $\pm 1.6$  octaves. Center frequencies (nominal/adjustable range): 60 Hz (20 ~ 180 Hz), 240 Hz (80 ~ 720 Hz), 1 kHz (333 Hz ~ 3 kHz), 4 kHz (1.3 kHz ~ 12 kHz), 16 kHz (5.3 ~ 48 kHz). Bandwidth of each control adjustable within range of  $Q = 0.7$  (very broad) ~ 7.0 (very narrow).



## SH-9090P

### Single-Channel Parametric/Graphic Equalizer

12 slide controls, single channel, providing up to 12 dB boost or cut. Adjustable center frequencies over range of  $\pm 1$  octave. Nominal center frequencies: 10 Hz, 30 Hz, 60 Hz, 125 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz, 16 kHz, 32 kHz. Total coverage including center frequency adjustment: 5 Hz ~ 64 kHz. Variable Q for each control as described under SH-9010. Has balanced (XLR-type) connectors.



## AUDIO RACKS

### SH-905ST

Large, heavy-duty rack, will hold a large number of audio components including open-reel and cassette decks, amplifiers, equalizers, metering units, etc. Size and construction make it ideal for professional use. Standard 19" rack width. Casters and mounting hardware are included.



### SH-999

Designed for "Flat Series" components, will hold up to 5 components of their dimensions. Several dozen LP's may be stored in the bottom. Back of rack is open for easy access to connections. Simulated wood side panels, smoked glass top and compartment door. Casters and mounting hardware included.





## ELECTRONICS

The rigorously-pursued goal behind the design of every Technics component is "waveform fidelity." This means the capacity to process and transmit sound waveforms that are as close as possible to the original musical event. In amplifiers, for example, we seek to do this by opening up the frequency response far beyond the standard audible range of 20—20,000 Hz, while keeping noise and various kinds of distortion as low as our latest component parts will permit. In tuner design, we also open up frequency response beyond the normal FM audio limits in order to closely preserve waveform fidelity in musical transients. And in our equalizers, we combine the flexibility of parametric control with the sonic neutrality of dual-integration circuitry. These and numerous other engineering steps are taken to go beyond merely "good sound" into a musical experience that approaches a live event.

## ST-9030

### Dual-IF FM Tuner

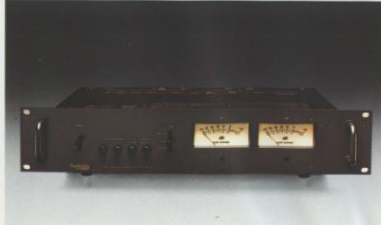
Separate wide/narrow IF stages, with automatic selection of appropriate stage based on reception conditions. Wide band gives very low distortion (0.08% stereo) and excellent capture ratio (0.8 dB). Narrow band gives very high selectivity (90 dB). 8-gang tuning capacitor provides ultra-high interference rejection. Pilot-cancel circuitry gives low distortion, low phase shift in high audio frequencies. Servo tuning locks onto station.



## SH-9020

### Three-Mode Meter System

Provides "average" and "peak" readings with "peak hold" mode retaining highest peak in program material for easy reference. Attack time (peak): 100 micro-seconds. Switchable to read line-level at two points, power output to 1000 watts. Indication accuracy  $\pm 1.5$  dB. Switchable sensitivity.



## ST-9038

### Quartz Synthesizer FM Tuner

Quartz synthesizer tuning eliminates drift by locking in broadcast and local oscillator frequencies. Automatic scan tuning with 3-step muting selector. Manual tuning also provided. "SAW" filter in IF stage provides high selectivity with uniform group delay. 19 kHz pilot-cancel circuit provides excellent high-frequency audio fidelity. Digital broadcast frequency read-out. Hi-blend reduces FM stereo noise on weaker stations.



## SH-9038

### "Micom" Programming Unit (for use with ST-9038)

Permits pushbutton selection of up to 8 broadcast stations on tuner. Can be programmed to turn on and turn off the tuner, plus three other audio components (amplifier, tape decks, etc.) at selected times of the day, selected days of the week. Ideal for "absentee" recordings of FM programs. Digital clock also can be switched to act as minute/second stop watch.





## TURNTABLES

To many broadcasters and discotheque people around the world, there's only one kind of turntable — Technics direct-drive. It began with the first direct-drive turntable, the Technics SP-10. And it has continued for nearly a decade, evolving into the reference-standard SP-10MKII and other quartz-controlled designs. But beyond their outstanding accuracy and quietness of performance, professionals have chosen Technics turntables because of their legendary ruggedness, their capacity to take the punishment of all-day, every-day use.

## SL-1000MK II

### SP-10MKII Turntable with EPA-100 Tonearm and Obsidian-Stone Base

SP-10MKII turntable system (see preceding description). EPA-100 tonearm design maintains extremely stable stylus-to-groove contact. Tonearm shaft made from nitrogen-hardened titanium nitride, which was selected for its light weight, high torsional strength, excellent resistance to vibration. Four-point gimbal tonearm pivot. Ruby ball bearings provide ultra-low arm friction — 5 mg bearing friction for lateral and vertical movement. Unique dynamic damping system drastically reduces tonearm/cartridge resonances. Damping system can be "tuned" to match virtually any existing cartridge compliance. Damping system enhances stylus' capacity to extract groove information, contributing to astonishing detail and clarity. Heavy obsidian-stone base provides ample protection against feedback. 3-layer construction includes obsidian stone, dense plywood and rubber. Thick dense plywood tonearm base. Acrylic dust cover also helps to shut out airborne vibration at high volume levels.



## SL-1200MK2

### Disco-Type Quartz Synthesizer Direct Drive Turntable

Designed especially for discotheque installations. Large slider control provides up to  $\pm 8\%$  increase or decrease from standard  $33\frac{1}{3}$  and 45 rpm speeds. Speed under highly accurate quartz control at all times. High torque motor stabilizes platter speed quickly with virtually no "hunting." Platter strobe indicates  $+6\%$ ,  $+3.3\%$ ,  $0\%$  and  $-3.3\%$  speed deviation for easy visual reference. Pop-up light illuminates surface of disc in low-light environment, can be pushed down into base when not needed. Tonearm height is adjustable within range of 6 mm to accommodate varying cartridge dimensions. Extensive anti-feedback measures: (1) turntable base features heavy, acoustically-inert rubber material for outstanding insulation against vibration, (2) platter is rubber-damped on both top and underside, (3) four individual spring-loaded feet, tonearm base and acrylic dust cover are coupled to heavy rubber material to further suppress transmission of vibrations. Start/stop and speed selection switches recessed slightly into base to help avoid accidental activation. Wow and flutter 0.025% WRMS. Rumble  $-78$  dB DIN B.



## SP-10MK II

### Broadcast Turntable with Quartz Phase-Locked Direct Drive Motor

Quartz control provides virtually perfect speed accuracy (no more than  $\pm 0.002\%$  deviation). Direct drive system uses no belts, idlers or other speed reduction mechanisms, resulting in very low rumble, very low wow and flutter, outstanding reliability of the motor. Elaborate servo system provides enormous torque: start-up time is 0.25 second ( $25^\circ$  rotation) from standstill to  $33\frac{1}{3}$  rpm. Electromechanical braking system brings platter to dead stop in 0.3 second from  $33\frac{1}{3}$  rpm. Heavy (6.4 lb.) platter, rubber-damped both on top and underside to resist vibration. High moment of inertia (130 lb-in<sup>2</sup>) plus enormous torque result in high immunity to load-caused fluctuation — 0% speed change with up to 4.3 lb-inch load drag. Separately-housed power supply. Quartz-controlled stroboscope for 3 speeds:  $33\frac{1}{3}$ , 45 and 78.26 rpm. Includes remote control for start/stop.



## SP-15

### Quartz-Synthesizer Controlled Direct Drive Turntable

Quartz control provides virtually perfect speed accuracy, within  $\pm 0.002\%$  of perfect speed. Quartz synthesizer pitch adjustment permits up to  $\pm 9.9\%$  deviation from standard  $33\frac{1}{3}$ , 45 and 78.26 rpm speeds, completely under quartz control. Speeds indicated by digital read-out, in 0.1% increments. High torque provides fast start up—0.4 second from standstill to  $33\frac{1}{3}$  rpm. 5.9 lb. platter sustains high 130 lb-in<sup>2</sup> moment of inertia for superb immunity to transient load changes. Will withstand up to 2.2 lb-in load drag without slow-down. Electromechanical braking system stops platter in 0.4 second. Diecast aluminum base with "TNRC" (Technics Non-Resonant Compound) on underside to resist vibration. Platter is rubber-damped on top, underside, and under rim for insulation against vibrations. Pulsed power supply avoids hum induction. Pitch-lock mechanism. Wow and flutter 0.025% WRMS. Rumble -78 dB DIN B.



## SP-25

### Quartz Synthesizer Controlled Direct Drive Turntable

Quartz synthesizer control governs platter speed in  $33\frac{1}{3}$  and 45 rpm, and in pitch-altered modes within  $\pm 6\%$  of standard speeds. High torque, tolerates up to 1.3 lb · in load drag without slow-down. Electronic braking system stops platter quickly. Platter is rubber-damped on both top and underside to resist vibration. Wow and flutter 0.025% WRMS. Rumble -78 dB DIN B.



## SH-15B2/15B3

### Bases for Models SP-15/SP-25

Specially developed bases for use with SP-15/25 turntables. Each features heavy, acoustically-inert rubber material for outstanding insulation against vibration. Four individual spring-loaded feet, tonearm base and acrylic dust cover are coupled to heavy rubber material to further suppress transmission of vibrations. "B2" base finished in simulated rosewood veneer. "B3" finished in black.

