

Technics

by Panasonic

4 CHANNEL



CD-4

2 CHANNEL



TAPE 2

L SEPARATION R

L CAR

Technics
by Panasonic

CD-4 FM/AM 4CHANNEL/2CHANNEL RECEIVER



LEFT — FRONT — RIGHT

LEFT — REAR — RIGHT

STEREO



METER 10dB

TAPE

POWER
PUSH ON

FRONT
PHONES
REAR

BASS



TREBLE



MUTING LOUDNESS

OFF

ON

OFF

ON

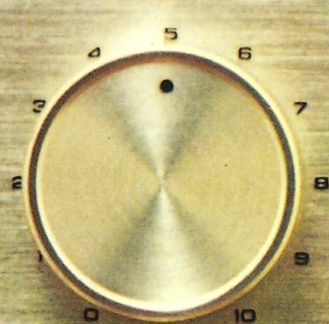
L-FRONT



L-REAR



VOLUME



R-FRONT



R-REAR



0 1 2 3

0 1 2 3

MT

CD-4



TUNING METER



MODE

STEREO 4CH MATRIX PHASE 90° PHASE 0° 4CH DISCRETE

MONO

SELECTOR

FM AUTO AM PHONO CD-4 AUX MIC

TUNING

SA-8000X

Since their introduction, Technics components have earned a reputation for superior sound reproduction. A reputation well deserved. The name Technics stands for the finest performance that the state of high fidelity art permits. And the relentless advancement of that art.

Advancement by innovation and new product design. Like direct drive turntables. 4-Channel receivers with built-in CD-4 demodulators. A front loading cassette deck. And a direct drive cassette deck with a monitor head.

The innovative design and craftsmanship of Technics components have been made possible by a totally independent group of Panasonic engineers and technicians. Dedicated to serving the cause of high fidelity with an uncompromising devotion to the art and science of audio reproduction. And backed by enormous worldwide resources of research, development, production capability and reliability.

The concept is simple. The execution is precise. The performance is outstanding. The name is Technics.

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4-Channel Sound

Technics and 4-Channel Sound

The Technics name represents a line of some of the finest high fidelity components available today. Today, the finest sound in high fidelity is 4-channel sound. And Technics components represent the forefront of this exciting new technology. With a full line of 4-channel receivers that offer everything from a built-in discrete demodulator to a special demodulator jack for decoding future FM discrete broadcasts. With ultra-high fidelity turntables and a demodulator that are ideal for tracking and decoding CD-4 records from RCA, Warner, Elektra, Atlantic, Nonesuch and Project 3. With open reel and 8-track decks that record and play in discrete 4-channel. And with a remarkable Audio Scope for the ultimate in 4-channel precision.

Discrete or Matrix

With the exception of our 2-channel receiver, the SA-5200A, every Technics 4-channel component is engineered to play discrete 4-channel sound. At the same time, they are equipped to handle all matrix software presently available. Although Technics 4-channel components can handle discrete, matrix, stereo and even the old monaural records, our audio engineers believe discrete will become the accepted approach to future 4-channel listening. Why?

The Discrete System

The discrete system could be called the 4-4-4 system. The program source starts out with 4 independent signals just as in the matrix system. But that's where the similarity ends. In matrix the 4 signals are mixed down into two in such a way that they cannot be completely separated again into four. In discrete the signals are modulated so that they can be fully separated before playback. Cross-talk is virtually eliminated. And none of the separation and purity of the original is lost.

The Results

For the musician, this means the freedom to decide exactly what he wants you to hear on each channel. He knows that these 4 channels will be kept separate when the discrete CD-4 record is cut. For the listener it means that he is at long last truly surrounded by his music. Music that produces the excitement of audio realism, presence, and depth never before possible.



Technics

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Receivers and Amplifiers

Exciting 4-Channel Sound

All our Technics high fidelity receivers, with the exception of the 2-channel SA-5200A, are equipped for discrete 4-channel operation. A whole new world of audio involvement opens up as you listen to 4 speakers, each projecting its own distinct sounds. Gives music a greater sense of separation and dimension.

Built-in CD-4 Demodulator

Technics receiver models SA-8500X, SA-8000X and SA-7300X have a built-in discrete CD-4 demodulator. Models SA-8500X and SA-7300X have fully automatic CD-4 controls and incorporate a large-scale IC chip in their demodulator that replaces hundreds of transistors for greater reliability, longer life, more compact design. An accessory CD-4 demodulator, SH-400, is available for Technics receivers without a built-in demodulator.

AFD Control

Our built-in AFD (Acoustic Field Dimension) control can accommodate any matrix record now on the market. The AFD control lets you balance all four speakers to create a dimensional sound field matched to the acoustics of your room and the content of the recorded material. Will also enhance rear channel sound from any 2-channel source to give you 4-channel sound presence.

Balanced Transformer-Less (BTL) Circuitry

This circuitry is designed to give full power operation from all 4 amplifiers for use with only 2 speakers. You'll never have unused power output due to 2 idle amplifiers.

It doubles the wattage put into each speaker assuring you of full 2-channel speaker response. Lets you get the most out of your 2 speakers until you purchase 2 additional speakers.

Direct Coupled Amplifier

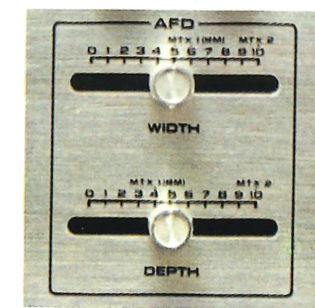
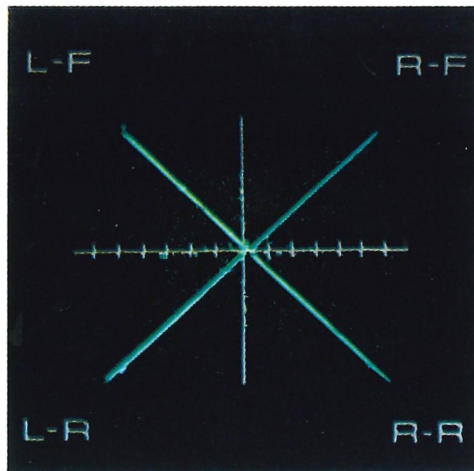
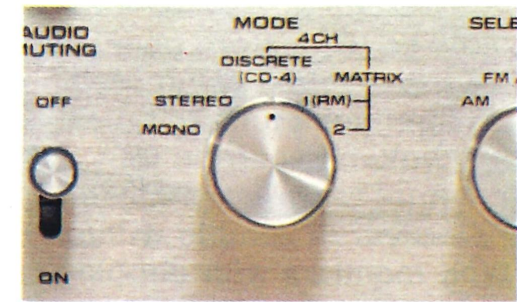
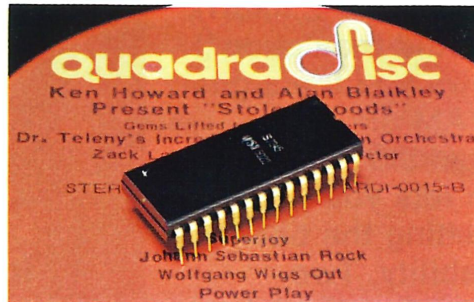
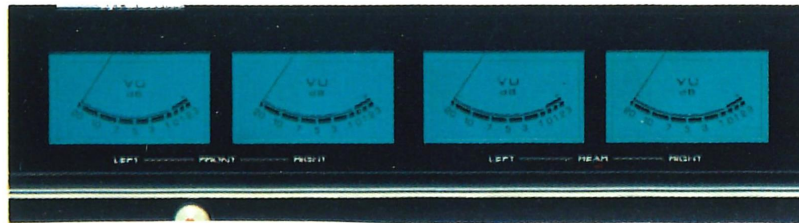
Technics receivers feature input transformerless (ITL), output transformerless (OTL), and output capacitorless (OCL) circuitry. This approach reduces sound distortion to a minimum with wider frequency response.

Built-in Multi-Function AFD Scope

Model SA-6700X features a built-in AFD scope that offers the following wide range of uses: Checks simultaneously the signal distribution, balance and separation in all 4 channels. Provides a positive, error-free way to wire and adjust the 4-channel system. Functions as an FM center-of-channel indicator for ultra-precise FM tuning. And you can use it as an FM multi-path indicator so you can make adjustments to get rid of or minimize FM multi-path audible "ghosts."

Four Signal Level Meters

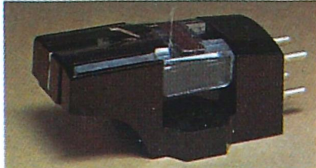
On models SA-8500X, SA-7300X and SA-8000X. Let you check the receiver output level for each of the 4 speakers individually. In addition, these units and our other Technics receivers feature 4 individual volume level controls. This means greater precision to achieve the kind of delicate sound balance so necessary for a full appreciation of 4-channel sound.



4-Channel/2-Channel Receiver

SA-8500X CD-4

34W x 4 (continuous power at 8 ohms, all channels driven) FM/AM 4-Channel/2-Channel Receiver. Built-in large-scale IC's in the CD-4 demodulator. Automatic separation and carrier level controls. CD-4 Hi-blend switch. 2 matrix circuits. 4 large VU meters give you a visual indication of your source levels. Tuning meter shows you the signal strength for pin-point tuning. Linear FM/AM dial scale. 4 individual volume controls let you adjust the volume of each channel separately. Master gain lets you increase the overall volume without resetting the balance. 3 tape monitors with dubbing capability. Two 4-channel speaker outputs let you hook up 2 sets of 4 speakers. FM MPX output for future discrete 4-channel FM broadcasts. BTL circuit with front panel selector for 2-channel operation. Automatic speaker protection circuits prevent speaker damage due to possible amplifier malfunction. Low-noise phono equalizer. FM muting. Walnut wood cabinet. Optional 4-channel semi-conductor cartridge (EPC-450C-II) available.



Optional 4-channel Semi-conductor Cartridge: EPC-450C-II



SA-8000X CD-4

16W × 4 (continuous power at 8 ohms, all channels driven) FM/AM 4-Channel/2-Channel Receiver. Built-in CD-4 demodulator. Matrix Circuitry. Multi-function AFD control. Phase shift control. 4 individual volume controls with a separate master gain. 4 VU meters. Mic input jack. BTL circuitry with 4-channel/2-channel amplifier mode selection. 4-pole MOS FET. Tuning meter. Muting switch. Walnut wood cabinet. Optional 4-channel semi-conductor cartridge (EPC-450C-II) available.



SA-7300X CD-4

10W × 4 (continuous power at 8 ohms, all channels driven) FM/AM 4-Channel/2-Channel Receiver. Built-in large-scale IC's in the CD-4 demodulator. Automatic separation and carrier level controls. Linear FM/AM dial scales. Automatic speaker protection circuitry. CD-4 Hi-blend switch. 2 matrix circuits. 4 VU meters. 4 individual volume controls. Master gain control. BTL circuitry. 2 tape monitors. Speaker output jacks for two 4-channel systems. FM MPX output. Optional 4-channel semi-conductor cartridge (EPC-450C-II) available.



4-Channel/2-Channel Receiver

SA-6700X

23W × 4 (continuous power at 8 ohms, all channels driven) FM/AM Visual 4-Channel Receiver. Discrete 4-channel direct coupled amplifier. Matrix circuitry. Multi-function AFD Scope displays total sound field, serves as center-channel tuning indicator and displays multipath distortion. Tuning meter. AFD control accommodates any matrix records. Phase shift control. 4 individual volume controls and master gain. Two 4-channel speaker outputs. 3 tape monitors. 4-pole MOS FET. Mic mixing.



SA-6000X

14W × 4 (continuous power at 8 ohms, all channels driven) FM/AM 4-Channel/2-Channel Receiver. Discrete 4-channel amplifier. Matrix circuitry. Multi-function AFD control. Phase shift control. 4 individual volume controls. Master gain control. Direct coupling. 4-pole MOS FET. BTL circuitry. Linear FM/AM dial. FM muting. Loudness control. Mic jack. 2 tape monitors. Tuning meter. Walnut wood cabinet.



SA-5400X

8W × 4 (continuous power at 8 ohms, all channels driven) FM/AM 4-Channel/2-Channel Receiver. Discrete 4-channel amplifier. Matrix circuitry can accommodate any matrix records. 4 individual volume controls. 2 tape monitors. Mic input jack. Loudness control. 4-channel/2-channel headphone jack. Tuning meter. MOS FET. BTL circuitry for full 4-channel/2-channel power. Linear FM scale. Walnut wood cabinet.



2-Channel Receiver SA-5200A

13W × 2 (continuous power at 8 ohms, both channels driven) FM/AM 2-Channel Stereo Receiver. Matrix circuitry at amplifier output. Accommodates matrix records with 2 optional speakers and enhances stereo records. Can serve as front-channel amplifier for discrete 4-channel operation with an optional stereo amplifier, 2 additional speakers and CD-4 demodulator. (SH-400) 2 tape monitors. 2 mic input jacks. 2 speaker outputs. MOS FET. Linear FM scale.



Stereo Control Center

SU-9600

Solid-State Stereo Control Center. Features wide dynamic range equalizer. 4-stage direct coupling with 3-stage differential amplifier assures low noise, low distortion and high input level. Phono maximum input voltage: 1350mV/RMS. Pushbutton controls accommodate Tuner, 2 Turntables and 2 Auxiliary units. Separate right and left channel stepped bass and treble controls with 2-stage differential amplifier. Bass and treble defeat and turnover controls. Switchable phono input impedance controls for Phono 1 and 2. Two tape monitor controls let you dub from Tape 1 to 2 and Tape 2 to 1. Switchable high and low filters (-18dB/oct.) with two individual cut settings. Attenuator type master volume control with precise settings. Gain control for Phono 2. Muting switch gives you 20 dB of attenuation. Single balancing control for easy right and left channel balancing. Mode selector switch. Diagrams of tone control characteristics and terminal locations are printed on top of cabinet for easy reference.



Stereo Power Amplifier SE-9600

110W × 2 (continuous power, both channels driven at 8 ohms) Solid-State Stereo Amplifier. Direct-coupled OCL circuitry with differential amplifiers assures ultra-low distortion, wider power bandwidth and stable operation. Regulated power supply. Variable output impedance lets you select 4 damping factors for optimum speaker matching. Pushbutton meter range controls for accurate output level monitoring at low output levels. Two peak level meters with dB and power (watts) calibrations. Separate right and left output level controls. Pushbutton controls for changeover to main or remote speakers. Input on/off switch. Front panel headphone jack. Speaker protection circuits prevent damage to speakers due to amplifier malfunction. Current limiter prevents damage to transistors caused by short circuits at speaker terminals. Heat detection circuits shut-down unit to prevent overheating. Heat sensitive mark turns red to warn you of possible overheating. Heat sinks for improved cooling.



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Turntables

Ultra Low Speed Direct Drive Motor

All Technics turntables feature a direct drive brushless DC motor. The motor turns at the same speed as the platter— $33\frac{1}{3}$ or 45 rpm. This direct drive system eliminates idler wheels, belts, and pulleys used on conventional turntables to transfer rotation motion to the platter. Almost totally eliminates “rumble” “wow” and “flutter” rendering them completely inaudible to your ear.

Automatic Set-Down and Lift-Off

The SL-1300 with automatic single play gives you completely automatic tonearm movement from set-down to lift-off and return. Tonearm carrier mechanism will automatically disengage after tonearm set-down.

Repeat Selector Switch (MEMO-REPEAT)

This feature on the SL-1300 has seven positions for repeated record play. By changing the position selected, a record can be played once, up to five times, or repeated indefinitely.

Analog Speed Control

This system automatically varies the amount of voltage fed to the motor when electrical outlet voltage varies. The rotation of the motor and platter are always maintained at a constant speed.

Dynamically Balanced Aluminum Die-Cast Platter

The platters on all Technics turntables are diecast of a non-magnetic aluminum. They have been dynamically balanced to provide a speed-smoothing fly wheel effect.

Direct-Drive Turntable

SP-10

Ultra-High Fidelity Turntable. Ultra-low speed brushless DC motor. Featuring 33-1/3 and 45 rpm operation. Revolutionary direct-drive system eliminates belts, idlers, or other speed reduction mechanisms. 2 individual variable pitch controls and built-in stroboscope and markings for speed indication. Electronic speed control. Fast build-up time. Low wow and flutter with minimum rumble. Optional walnut base (SH-10B1) and plexiglass dust cover (SH-10B2).



SL-1100A

Turntable and Matching Tonearm. Ultra-low speed DC brushless motor. Revolutionary direct-drive system. Eliminates belts, idlers, or other reduction mechanisms. Feather-touch damped cueing. Anti-skating. 2 individual variable pitch controls. Strobe light and stroboscope markings for speed indication. Pin-jack terminals. 2 AC outlets. 45 rpm adaptor. Plexiglass dust cover.



Model SL-110A. Same features as SL-1100A, but no tonearm



Direct-Drive Turntable

SL-1200

Turntable and Matching Tonearm. Ultra-low speed DC brushless motor rotates at exactly the same speed as the platter. Revolutionary direct-drive system eliminates belts, idlers, or other reduction mechanisms. Feather-touch damped cueing for smooth tonearm descent and lift-off. Electronic speed control maintains constant speed even during fluctuations in the line voltage or changes in the mechanical load. Anti-skating for improved tracking and stability. Built-in strobe light and strobe markings for exact speed indication. Removable tonearm headshell for convenient cartridge replacement. 2 individual variable pitch controls. Low-capacitance phono cable is ideal for CD-4 records. Combined on/off switch and speed selector. Direct reading stylus pressure adjustment. Sound-absorbing adjustable legs. Removable hinged dust cover stays open at any angle.



SL-1300

Turntable and Matching Tonearm. Advanced ultra-low speed brushless DC motor. Instead of resting on rotor as in other Technics DD models, platter is rotor itself and turntable housing is stator. Result is maximum accuracy and stability with minimum height. Automatic tonearm mechanism gives you automatic set-down and lift-off for smooth, trouble-free operation. Unique repeat selector switch lets you repeat a record once, or up to a total of five times, in addition to continuous play. Revolutionary direct-drive system eliminates belts, idlers, or other reduction mechanisms. Feather-touch damped cueing for smooth tonearm descent and lift-off. Anti-skating for improved tracking and stability. 2 individual variable pitch controls. Record size selector. Low capacitance phono cable is ideal for CD-4 records. Removable tonearm headshell for convenient cartridge replacement. Built-in strobe light and strobe markings for exact speed indication. Hinged plexiglass dust cover.



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Cassette, Cartridge, and Open Reel Decks

Specification Guarantee

On two cassette decks, RS-676US and RS-610US, wow/ flutter, overall frequency response, signal-to-noise ratio, harmonic distortion and speed stability are guaranteed, subject to the terms and conditions of the "Specification Guarantee," to equal or exceed the published specification. See back cover for additional details.

Discrete 4-Channel Sound

The RS-858US 8-track deck offers the excitement of recording and playing back in discrete 4-channel and 2-channel stereo. Opens up an almost infinite variety of recording possibilities. And lets you enjoy almost total involvement with your music.

Dolby* Noise Reduction System

All Technics cassette decks have built-in Dolby Noise Reduction circuits to eliminate most of the disturbing tape noise called hiss.

HPF™ Head

Technics hot pressed ferrite is one of the world's hardest materials. The result is a tape head with more than ten times longer life than conventional heads, while achieving one of the widest frequency response figures in the world.

* Trademark of Dolby Laboratories Inc.

2-Motor Drive System

The RS-676US and RS-279US incorporate the use of a two motor drive system. One motor provides the drive for record/playback and the other fast forward/rewind. This allows for more efficient operation and greater speed stability for more professional recording.

3-Head Construction

Technics is proud to offer a cassette deck, model RS-279US, that features 3-head construction. The third head actually allows you to monitor your tape while you're recording it. 3-head design is also offered on the RS-1030US, an open reel deck with record, playback/monitor and erase functions.

CrO₂ Tape Selector

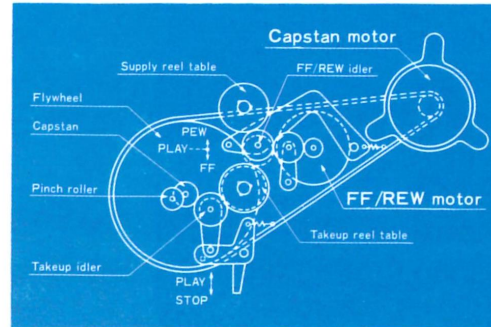
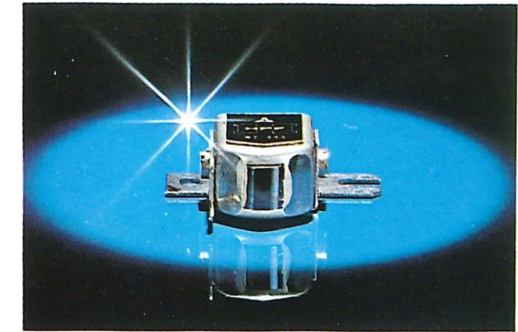
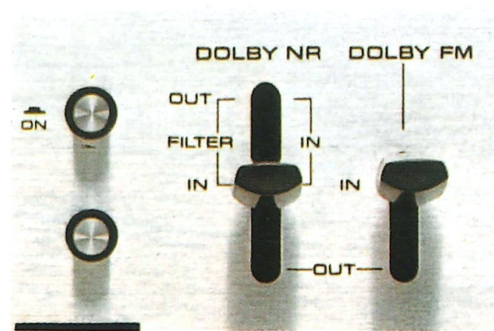
CrO₂ tape lets you record with improved high-range frequency response and signal-to-noise ratio. A simple flip of the selector switch on Technics cassette decks allows you to utilize the remarkable properties of CrO₂ tape.

Front-Loading

The RS-676US with up-right styling features front panel loading. Makes cassette loading and unloading a snap and with minimum handling.

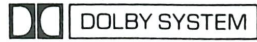
Memory Play

The RS-676US with memory play lets you automatically return to and repeat any predetermined selection.



Cassette Tape Deck

RS-676US



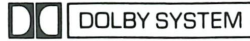
2-Motor, 2-Head High Fidelity Stereo Cassette Tape Deck with "Specification Guarantee.*" HPF™ head for reduced head wear and greater fidelity. Feather-touch solenoid operation eliminates going to stop mode to change tape direction or function. Front-loading door with eject mechanism for easy cassette handling. Memory-play automatically returns to and replays preselected program. Dolby noise reduction record/playback with calibrator for recording Dolbyized FM broadcasts. Mic mixing with separate volume control with optional microphones. Peak check switch lets you adjust for peak meter readings while recording live or unfamiliar material. Dolby noise reduction cut-out circuits for recording Dolbyized material. Master input level control. Right/left channel balance control. 2-position locking pause control for easy cueing. 2 VU meters give you visual indication of source levels. Unit can be stacked. Manual or automatic CrO₂ (70 μs)/Normal adjustment for CrO₂ tape. Electronically controlled tape speed. Memory-rewind. 3-digit tape counter. Removable head cover. Optional remote control unit: (RP-9275).

*See page 32 and back cover for further details.

Optional remote control unit RP-9275



RS-610US



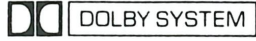
High Fidelity Stereo Cassette Tape Deck with "Specification Guarantee*," full Dolby Noise Reduction System. HPF™ head for reduced head wear. Full Dolby eliminates tape hiss and extraneous noise during playback and record. Electronic governor DC motor for more exact tape speed. Upright operation and top-loading design for trouble-free cassette handling. Master input level control. Left/right channel balance control. Auto-stop in both record and playback modes for automatic end of tape shut-off. CrO₂ (70 μs)/Normal tape selector switch lets you make full use of the new super high fidelity CrO₂ tape. Dolby noise reduction in/out selector switch. Mechanical pause control for easy cueing. 3-digit tape counter. 2 large illuminated VU meters give you a visual indication of source levels. Record indicator light lets you know when unit is in "Record" mode. Removable head cover. Isolated bias oscillator circuitry. Transistorized ripple filter in power supply. Sealed power transformer. Front panel jacks accommodate headphones and 2 microphones. Ground terminal.

*See page 32 and back cover for further details.

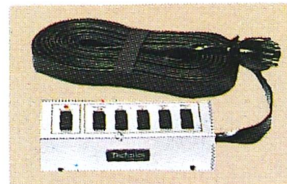


Cassette Tape Deck

RS-279US



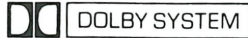
3-Head, 2 Motor High Fidelity Stereo Cassette Tape Deck. 3-head construction lets you actually hear what you're recording for more professional results. Separate HPF™ heads for record /playback and monitoring. Double gap ferrite head for erase. DC motor and direct capstan drive gives you greatly reduced wow and flutter. Dolby noise reduction system with calibrator lets you adjust Dolby NR circuits to eliminate tape hiss and extraneous noise. Electronic-eye auto-stop senses end of tape for automatic shut-off. CrO₂/Normal-tape selector lets you make full use of the new CrO₂ tape. Separate record and playback level controls. Pause control for easy cueing. Memory rewind lets you automatically rewind to any pre-determined point on the tape. Line-in/microphone selector switch. Feather-touch solenoid operation. Tape/source monitor. Lighted function indicator panel for Record, Play, Dolby NR-in and CrO₂ tape. 3-digit tape counter. 2 large professional VU meters. Optional remote control unit: (RP-9275).



Optional remote control unit RP-9275



RS-263US



Stereo Cassette Tape Deck with Dolby Noise Reduction System. Gives you 2-channel stereo recordings with superb fidelity. Built-in Dolby noise reduction circuits eliminate tape hiss and extraneous noise for more professional sounding results. CrO₂/Normal tape selector lets you make full use of the new super high-fidelity CrO₂ tape. Super alloy head for highly resistant against wear and abrasion and gives the longer service life. Memory rewind lets you automatically rewind tape to any pre-determined point for immediate playback. Mechanical pause for easy editing. 3-digit tape counter. 2 large professional VU meters give you a visual indication of signal levels. 2 slide input/output level controls. Auto-stop for automatic end of tape shut-off. Lighted function indicators for CrO₂ tape, Dolby NR-in and Record. Headphones jack. Comes with two connection cords.



4-Channel 8-Track Cartridge Deck **RS-858US**

4-Channel/2-Channel Record/Playback Cartridge Deck. Gives you 4-channel or 2-channel stereo recording with superb fidelity. 4 VU meters give you a visual indication of your signal levels. Pana-Ject/Continuous play lets you select cartridge automatically pops out at the tape end or continuous playback. 4-channel/2-channel selector and indicators. Pushbutton program selector. Direct read-out program indicator. Digital minute/second program timer tells you the recording time or playback time of each program. Locking fast forward quickly get to the program you want. 4 microphone inputs for live 4-channel recordings and 4 separate input/output volume controls. Pause control for easy cueing. Noise suppressor. 2-headphone jacks. 2 record indicators for 4-channel/2-channel recording. Eject button. Comes with connection cords and head cleaning bar.

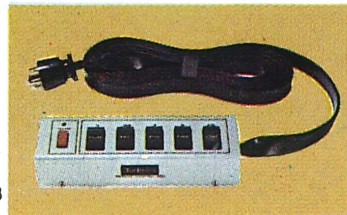


Open Reel Tape Deck

RS-1030US



3-Motor Professional Stereo Tape Deck with 4 Head System. 4-Head construction gives you 2-track record/play plus 4-track playback. Will accommodate large professional 10'' reels. 3 HPF™ heads for 2-track record, 2-track play and 4-track 2-channel play. 3 motor tape transport: one hysteresis synchronous motor for capstan drive and two motors for take up and supply reels. Feather-touch solenoid operation. Low-Noise/Normal tape selector adjusts for tape bias. Tape tension control regulates tension for large or small tape reels. 15 and 7½ ips tape speeds. Tape/Source monitor lets you hear what you're actually recording from either or both channels. Microphone mixing. Separate record channel selectors. Full editing capability. Microphone impedance switch for high or low impedance microphones. 4-digit tape counter. 2 large VU meters for source level monitoring. Editing scales. Separate input/output level controls. Walnut wood cabinet. Optional remote control unit: (RP-9103).



Optional remote control unit RP-9103



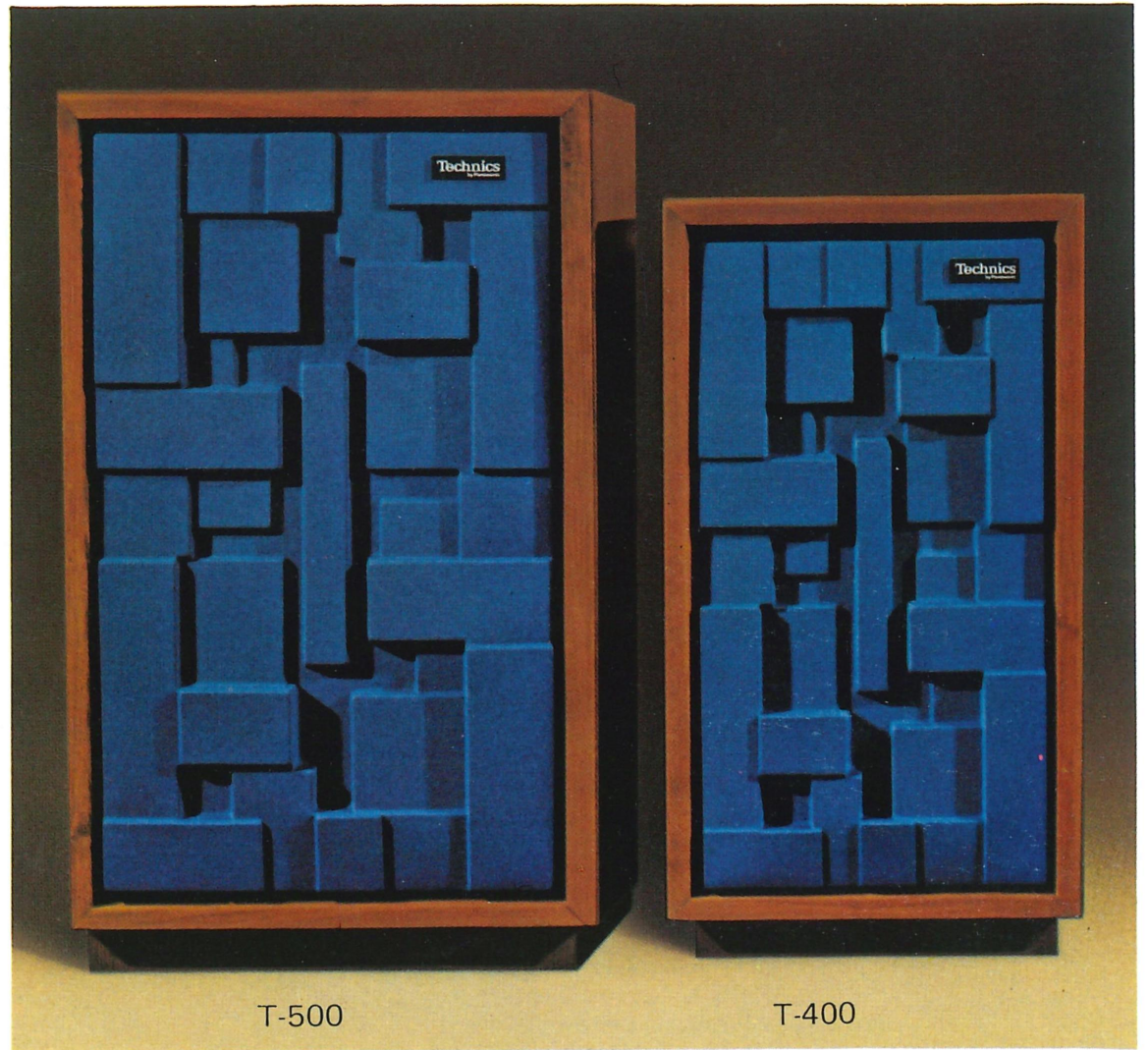
Speaker Systems

T-500

4-way air-suspension speaker system. Frequency response: 35–20,000 Hz. 100 watt handling capacity. Attractive removable molded grille available in brown or blue. Sound Pressure Level: 92 dB at 10 watts. Crossover: 600 Hz, 2 kHz, 8 kHz, Speakers: Two 10" high compliance woofers. One 5" mid-range. Two 1-3/4" tweeters. Two 2" super tweeters. 8 ohm impedance. Tweeter/Midrange high and low switches. Speaker platform included. Oiled walnut enclosure.

T-400

4-way air-suspension speaker system. Frequency response: 38–20,000 Hz. 100 watt handling capacity. Attractive removable molded grille available in brown or blue. Sound Pressure Level: 92 dB at 10 watts. Crossover: 500 Hz, 2 kHz, 7.5 kHz. Speakers: one 12" high compliance woofer. One 5" mid-range. One 3-1/2" tweeter. Two 2" super tweeters. 8 ohm impedance. Tweeter/Midrange high and low switches. Speaker platform included. Oiled walnut enclosure.



T-500

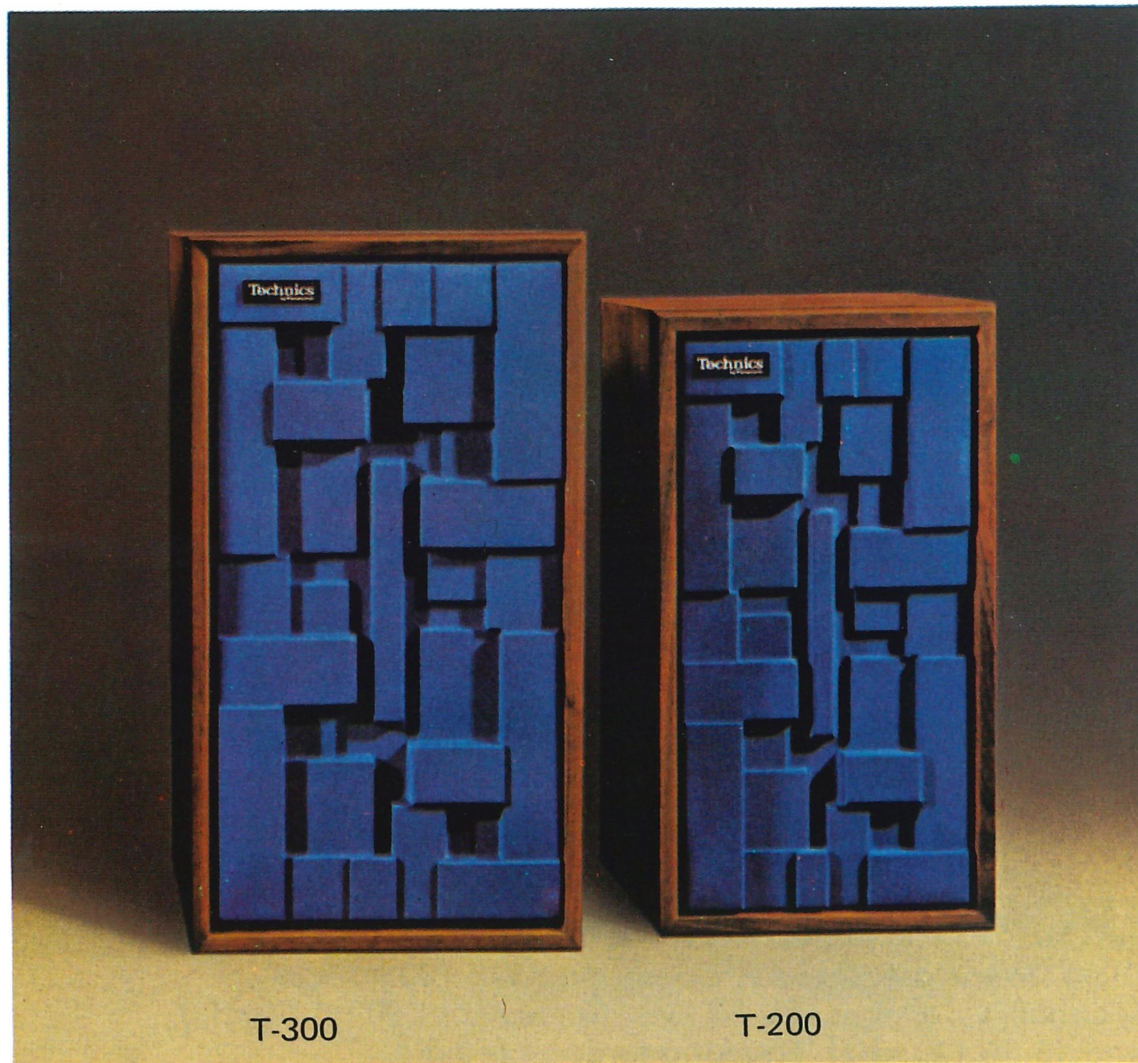
T-400

T-300

3-way air-suspension speaker system. Frequency response: 40–20,000 Hz. 100 watt handling capacity. Attractive removable molded grille available in brown or blue. Sound Pressure Level: 90 dB at 10 watts. Crossover: 1.5 kHz, 7.5 kHz. Speakers: One 10" high compliance woofer. One 3" mid-range/low tweeter. One 2" super tweeter. 8 ohm impedance. Tweeter/Midrange high and low switches. Oiled walnut enclosure.

T-200

Air-suspension speaker system. Frequency response: 44–18,000 Hz. 100 watt handling capacity. Attractive removable molded grille available in brown or blue. Sound Pressure Level: 90 dB at 10 watts. Crossover: 1.8 kHz. Speakers: one 10" high compliance woofer. One 1-3/4" tweeter. 8 ohm impedance. Tweeter high and low switch. Oiled walnut enclosure.



T-300

T-200

4-Channel Audio Scope

SH-3433

4-Channel Audio Scope. Perfect visual observation of 4-channel signals. Most positive, error-free method of properly wiring and adjusting any 4-channel discrete or matrix system. 3" screen. Waveform selector. Scope mode selector. High and low inputs. FM tuner input for observing multipath distortion.



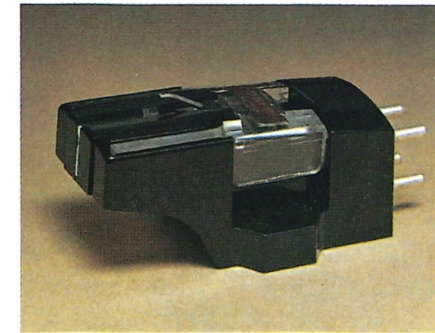
CD-4 Demodulator and Cartridge

SH-400 CD-4

CD-4 Discrete 4-Channel Disc Demodulator. New large-scale IC's. High-speed noise muting circuit. Large meter. Separation and carrier level controls. Carrier crosstalk canceller. CD-4 indicator. Direct output terminals. Mode selector. Cartridge selector. Hi-blend switch.

EPC-450C-II CD-4

CD-4 Discrete 4-Channel Semi-Conductor Cartridge. Frequency response: 0-50 kHz. Separation: 20 dB (1 kHz) and 15 dB (30 kHz). Tracking force: 1.5-2.5 g.



Microphones

RP-3850E/RP-3830E/RP-3550E

Unidirectional electret condenser microphones.

RP-3550E with fixed wind screen and detachable 3 pin Switchcraft connector. RP-3830E with detachable wind screen, tone select switch and detachable 3 pin Switchcraft connector. RP-3850E with detachable wind screen, PAD switch, tone select switch and 3 pin Cannon connector. All models operate on 1.5 volt power source, (one "AA" size battery). Operating impedance of 600 ohms unbalanced. Mic cord length 52 feet with mic plug included.



RP-3850E

RP-3830E

RP-3550E

EAH-80A Headphones

EAH-80A Electret Stereo Headphones with Headphone Adaptor. Wide frequency range with low distortion. Light-weight design. No separate power supply required. Adaptor features volume control, speaker terminals and headphone jack.

EAH-420

4-channel Dynamic Headphones. Reproduce wide-range frequency response for 4-channel stereo sound with excellent front and rear separation. Light-weight design. 8 ohm impedance. 2-channel/4-channel selector switch. Volume and tone controls.



EAH-80A

EAH-420

Specifications

RECEIVERS

	RMS Power (all ch., 8Ω)		Music Power 4Ω, 8Ω	THD	Power Bandwidth (-3dB, all ch., 8Ω)	S/N (IHF, A)		Input Sensitivity & Impedance		
	1kHz	20Hz~20kHz				PHONO	AUX	PHONO	AUX	TAPE
SA-8500X	34Wx4, 85Wx2	26Wx4, 80Wx2	260W, 250W	0.5%	5Hz~40kHz	70dB	90dB	2mV/50kΩ	180mV/30kΩ	180mV/30kΩ
SA-8000X	16Wx4, 42Wx2	13Wx4, 36Wx2	160W, 160W	0.5%	5Hz~40kHz	70dB	90dB	1.5mV/50kΩ	150mV/60kΩ	150mV/60kΩ
SA-7300X	10Wx4, 24Wx2	8Wx4, 20Wx2	72W, 72W	0.5%	5Hz~25kHz	70dB	90dB	2mV/50kΩ	180mV/30kΩ	180mV/30kΩ
SA-6700X	23Wx4	16Wx4	240W(4Ω)	0.5%	7Hz~40kHz	70dB	90dB	2.5mV/50kΩ	150mV/60kΩ	150mV/60kΩ
SA-6000X	14Wx4, 35Wx2	10Wx4, 30Wx2	140W, 140W	0.5%	7Hz~35kHz	70dB	90dB	1.5mV/50kΩ	150mV/60kΩ	150mV/60kΩ
SA-5400X	8Wx4, 20Wx2	7Wx4, 15Wx2	68W, 68W	0.8%	7Hz~28kHz	70dB	90dB	2.5mV/50kΩ	180mV/40kΩ	180mV/40kΩ
SA-5200A	13Wx2	11Wx2	46W, 37W	0.8%	5Hz~30kHz	70dB	90dB (TAPE)	3mV/47kΩ	—	200mV/30kΩ

STEREO CONTROL CENTER

	Output Voltage		Input Sensitivity & Impedance				Phono Max. Input Voltage		THD	Intermodulation Distortion	S/N (IHF, A)	
	Rated	Max.	PHONO 1	PHONO 2	TUNER	AUX 1,2	PHONO 1	PHONO 2			PHONO	AUX
SU-9600	1V	12V	2mV	1mV~3mV	100mV	100mV	900mV	450mV~1350mV	0.02%	0.02%	73dB (1)	95dB
	600Ω	600Ω	25kΩ, 50kΩ, 100kΩ		50kΩ	50kΩ	1kHz RMS	1kHz RMS			69~76dB (2)	(1, 2)

STEREO POWER AMPLIFIER

	RMS Power (both ch.)		THD	Intermodulation Distortion	Power Bandwidth	Frequency Response	Damping Factor		Input Sensitivity & Impedance
	1kHz	20Hz~20kHz					8Ω	4Ω	
SE-9600	165Wx2 (4Ω) 110Wx2 (8Ω)	165Wx2 (4Ω) 110Wx2 (8Ω)	0.08% (5Hz~60kHz)	0.08% 60Hz:7kHz=4:1, SMPTE	5Hz~60kHz, -3dB (both ch, 8Ω)	5Hz~150kHz, +0, -3dB	100, 10, 3, 1	50, 5, 1.5, 0.5	1V/40kΩ

FM Sensitivity	FM THD Stereo, Mono	FM S/N	Frequency Response	Selectivity	Capture Ratio	Stereo Separation	AM Sensitivity	Dimensions (H x W x D)	
1.9 μ V	0.4%, 0.3%	65dB	20Hz~13kHz, \pm 1dB	65dB	1.5dB	40dB	20 μ V	6 $\frac{3}{32}$ " x 21 $\frac{11}{32}$ " x 15 $\frac{9}{16}$ "	SA-8500X
1.9 μ V	0.4%, 0.3%	65dB	20Hz~13kHz, \pm 1dB	65dB	1.8dB	40dB	20 μ V	6 $\frac{5}{16}$ " x 19 $\frac{1}{2}$ " x 15 $\frac{3}{4}$ "	SA-8000X
1.9 μ V	0.4%, 0.3%	65dB	20Hz~13kHz, \pm 1dB	65dB	1.5dB	40dB	20 μ V	6 $\frac{3}{32}$ " x 19 $\frac{3}{4}$ " x 15 $\frac{9}{16}$ "	SA-7300X
1.8 μ V	0.4%, 0.3%	65dB	20Hz~13kHz, \pm 1dB	65dB	1.8dB	40dB	20 μ V	6 $\frac{3}{16}$ " x 17 $\frac{27}{32}$ " x 16 $\frac{17}{32}$ "	SA-6700X
1.9 μ V	0.4%, 0.3%	65dB	20Hz~13kHz, \pm 1dB	65dB	1.8dB	40dB	20 μ V	5 $\frac{3}{4}$ " x 16 $\frac{15}{16}$ " x 15 $\frac{5}{32}$ "	SA-6000X
2.0 μ V	0.7%, 0.4%	65dB	20Hz~13kHz, \pm $\frac{1}{2}$ dB	65dB	2.0dB	37dB	30 μ V	5 $\frac{11}{32}$ " x 16 $\frac{3}{32}$ " x 13 $\frac{9}{32}$ "	SA-5400X
1.9 μ V	0.7%, 0.4%	65dB	30Hz~12kHz, \pm 1dB	60dB	2.0dB	35dB	20 μ V	5 $\frac{5}{16}$ " x 16 $\frac{1}{8}$ " x 14 $\frac{3}{32}$ "	SA-5200A

Frequency Response		Tape Monitor 1, 2		Tone Control		Turnover Frequency		High/Low Filter		Muting	Dimensions (H x W x D)	
PHONO 1, 2	AUX 1, 2	PLAYBACK	REC OUT	BASS	TREBLE	BASS	TREBLE	HIGH	LOW			
RIAA \pm 0.3dB	2Hz~100kHz +0, -3dB	100mV 50k Ω	100mV 600 Ω	\pm 12.5dB 50Hz	\pm 12.5dB 20kHz	125Hz 500Hz	2kHz 8kHz	10k, 15kHz -18dB/OCT	15, 30Hz -18dB/OCT	-20dB	6 $\frac{13}{16}$ " x 17 $\frac{23}{32}$ " x 14 $\frac{3}{4}$ "	SU-9600

MICROPHONES

Dimensions (H x W x D)
7 $\frac{19}{32}$ " x 17 $\frac{23}{32}$ " x 16 $\frac{25}{32}$ "

	Frequency Response	Sensitivity (0dB=1V/ μ bar)	Output Impedance (at 1kHz)	S/N Ratio (1,000Hz, 1 μ bar)	Wind Noise	Max. Input Sound Pressure	Microphone Cable
RP-3850E	20~16,000Hz	-72dB \pm 3dB (at 1kHz)	600 Ω \pm 20%, balanced	46dB or more	50dB, SPL or less	128dB, SPL	Cannon XLR-3-11C 5mm ϕ , 5m in length
RP-3830E	50~15,000Hz	-74dB \pm 3dB (at 1kHz)	600 Ω \pm 20%, balanced	46dB or more	50dB, SPL or less	128dB, SPL	Switchcraft A3F 5mm ϕ , 5m in length
RP-3550E	50~15,000Hz	-74dB \pm 3dB (at 1kHz)	600 Ω \pm 20%, balanced	46dB or more	50dB, SPL or less	128dB, SPL	Switchcraft A3F 5mm ϕ , 5m in length

TAPE DECKS

	Track System	Recording System	Wow & Flutter	Tape Speed	Frequency Response	S/N Ratio (dB, or better)
RS-676US *	4-track 2-channel	AC bias (90kHz) AC erase	0.08% or better (WRMS)*	1 $\frac{7}{8}$ ips (Speed accuracy; within $\pm 1.5\%$)*	40Hz $_{-4}^{+2}$ dB~13,000Hz $_{-3}^{+2}$ dB (at CrO ₂ tape position) 40Hz $_{-4}^{+2}$ dB~12,000Hz $_{-3}^{+2}$ dB (at normal tape position)*	50 (W/O Dolby NR, weighted) 58 (W/ Dolby NR above 5kHz, weighted)*
RS-610US *	4-track 2-channel	AC bias (85kHz) AC erase	0.15% or better (WRMS)*	1 $\frac{7}{8}$ ips (Speed accuracy; within $\pm 2.0\%$)*	50 ~ 12,000Hz ± 3 dB (at CrO ₂ tape position) 50 ~ 10,000Hz ± 3 dB (at normal tape position)*	49 (W/O Dolby NR, weighted) 57 (W/ Dolby NR, above 5kHz, weighted)*
RS-279US	4-track 2-channel	AC bias (100kHz) AC erase	Less than 0.10%	1 $\frac{7}{8}$ ips	20 ~ 15,000Hz (at normal tape position) 20 ~ 16,000Hz (at CrO ₂ tape position)	50 (normal operation) 59 (Dolby operation)
RS-263US	4-track 2-channel	AC bias (80kHz) AC erase	Less than 0.20%	1 $\frac{7}{8}$ ips	30 ~ 13,000Hz (at normal tape position) 30 ~ 14,000Hz (at CrO ₂ tape position)	45 (normal operation) 54 (Dolby operation)
RS-858US	8-track 4-channel	AC bias (35kHz) AC erase	Less than 0.15% (JIS)	3 $\frac{3}{4}$ ips	30 ~ 12,000Hz (3 $\frac{3}{4}$ ips)	45
RS-1030US	2-track 2-channel, 4-track 2-channel	AC bias (180kHz) AC erase	Less than 0.08% (15 ips) Less than 0.12% (7 $\frac{1}{2}$ ips)	15 & 7 $\frac{1}{2}$ ips	25 ~ 26,000Hz (15 ips) 25 ~ 22,000Hz (7 $\frac{1}{2}$ ips)	58 (at 15 ips) 55 (at 7 $\frac{1}{2}$ ips)

CD-4 DEMODULATOR

	Frequency Response	Input Sensitivity & Impedance	Output Level	Output Impedance	S/N	Channel Separation	Dimensions (H x W x D)
SH-400	20Hz~16kHz	3mV/2.2k Ω (semi-conductor) 2mV/100k Ω (magnetic)	200mV	300 Ω	60dB	30dB Front-Rear 55dB Left-Right	5 $\frac{1}{2}$ " x 8 $\frac{1}{16}$ " x 13"

Overall Distortion (or better)	Head	Motor	FF/REW Time (with C-60 tape)	Dolby NR System	Input (sensitivity)	Output (level)	Weight	Dimensions (H x W x D)	
2.0% (at normal tape position, 0 VU at 1,000Hz)*	1-HPF 1-Ferrite	2-Motor	Approx. 80 second	Yes	MIC 0.3mV LINE 60mV/67kΩ	LINE 0.42V HEADPHONES 65mV/8Ω	23 $\frac{1}{8}$ lbs	5 $\frac{1}{2}$ " x 16 $\frac{3}{8}$ " x 14 $\frac{3}{8}$ "	RS-676US
2.3% (at normal tape position, 0 VU at 1,000Hz)*	1-HPF 1-Ferrite	1-Motor	Approx. 90 second	Yes	MIC 0.3mV LINE 60mV/470kΩ	LINE 0.42V HEADPHONES 60mV/8Ω	13 $\frac{1}{4}$ lbs	4 $\frac{5}{8}$ " x 13 $\frac{1}{4}$ " x 11 $\frac{1}{2}$ "	RS-610US
1.5% (0 VU at 1,000Hz)	2-HPF 1-Ferrite	2-Motor (1-DD Motor)	Approx. 100 second	Yes	MIC 0.3mV LINE 30mV/70kΩ	LINE 0.5V HEADPHONES 18Ω	19 $\frac{7}{8}$ lbs	5 $\frac{3}{8}$ " x 16 $\frac{5}{8}$ " x 13 $\frac{1}{2}$ "	RS-279US
2.0% (0 VU at 1,000Hz)	1-Ferrite	1-Motor	Approx. 100 second	Yes	MIC 0.3mV LINE 30mV/150kΩ	LINE 0.5V HEADPHONES 18Ω	10 lbs	5" x 14" x 9 $\frac{5}{8}$ "	RS-263US
2.0% (0 VU at 1,000Hz)	1-4-channel 3-function	1-Motor	Approx. 450 second* (with 300 feet tape)	—	MIC 0.15mV LINE 60mV/100kΩ	LINE 0.8V HEADPHONES 60mV/8Ω	20 $\frac{3}{4}$ lbs	4 $\frac{3}{4}$ " x 21 $\frac{1}{8}$ " x 11 $\frac{1}{4}$ "	RS-858US
1.2% (0 VU at 1,000Hz)	3-HPF 1-Ferrite	3-Motor	Approx. 120 second (with 2,500 feet tape)	—	MIC 0.22mV/0.4mV LINE 70mV/180kΩ	LINE 0.5V HEADPHONES 50mV/8Ω	70 $\frac{3}{8}$ lbs	23 $\frac{1}{4}$ " x 16 $\frac{5}{8}$ " x 11"	RS-1030US

*Performance of the units up to these 5 specifications is guaranteed subject to the terms and conditions of the "Specification Guarantee." See back cover for additional details.

※Fast forward only

CD-4 CARTRIDGE

	Frequency Response	Output Level	Channel Separation	Compliance	Impedance	Stylus	Tracking Force
EPC-450C-II	0Hz~50kHz	5mV 1kHz, 50mm/sec. lateral 4mA	20dB (1kHz) 15dB (30kHz)	10x10 ⁻⁶ cm/dyne (dynamic)	1kΩ (pure resistance)	EPS-450QD	1.5~2.5g

TURNTABLES

	Type	Turntable Platter	Speed	Motor	Pitch Control Range	Wow & Flutter	Rumble	Build-up Time
SP-10	Manual Direct-Drive	Aluminum Diecast, 12" dia. 6 lb. weight	33 $\frac{1}{3}$ rpm 45 rpm	Ultra-Low Speed DC Brushless	4%	0.03% WRMS	-50dB (DIN A) -70dB (DIN B)	$\frac{1}{2}$ rotation (33 $\frac{1}{3}$ rpm)
SL-1100A	Manual Direct-Drive	Aluminum Diecast 13 $\frac{25}{32}$ " dia. 4.4 lb. weight	33 $\frac{1}{3}$ rpm 45 rpm	Ultra-Low Speed DC Brushless	10%	0.03% WRMS	-50dB (DIN A) -70dB (DIN B)	$\frac{1}{2}$ rotation (33 $\frac{1}{3}$ rpm)
SL-1200	Manual Direct-Drive	Aluminum Diecast 13" dia. 3.86 lb. weight	33 $\frac{1}{3}$ rpm 45 rpm	Ultra-Low Speed DC Brushless	10%	0.03% WRMS	-50dB (DIN A) -70dB (DIN B)	$\frac{1}{2}$ rotation (33 $\frac{1}{3}$ rpm)
SL-1300	Automatic Direct-Drive	Aluminum Diecast 13" dia. 3.86 lb. weight	33 $\frac{1}{3}$ rpm 45 rpm	Ultra-Low Speed DC Brushless	10%	0.03% WRMS	-50dB (DIN A) -70dB (DIN B)	

SPEAKER SYSTEMS

	Type	Frequency Response (Free Field)	Dispersion (on axis -1m)	Power Requirement			Sensitivity (3,000 cu. ft.)	Crossover Frequency
				Minimum	Max. Music	Max. 400Hz		
T-500	4-Way Air-Suspension	35Hz~20kHz, ± 3 dB -10dB at 25Hz	180° at 10,000Hz	10W	100W	100W - 5 min.	10W = 92dB SPL	600Hz, 2kHz, 8kHz
T-400	4-Way Air-Suspension	38Hz~20kHz, ± 3 dB -10dB at 28Hz	180° at 10,000Hz	10W	100W	90W - 5 min.	10W = 92dB SPL	700Hz, 3kHz, 7.5kHz
T-300	3-Way Air-Suspension	40Hz~20kHz, ± 3 dB -10dB at 30Hz	160° at 10,000Hz	10W	100W	50W - 5 min.	10W = 90dB SPL	1.5kHz, 7.5kHz
T-200	2-Way Air-Suspension	44Hz~18kHz, ± 3 dB -10dB at 35Hz	120° at 10,000Hz	10W	100W	40W - 5 min.	10W = 90dB SPL	1.8kHz

4-CHANNEL AUDIO SCOPE

	4-Channel Acoustic Field Dimension			Waveform		Dimensions (H x W x D)
	Position Adjustment	Input Sensitivity & Impedance	Max. Input Voltage	Input Sensitivity & Impedance	Max. Input Voltage	
SH-3433	± 10 mm	15mV/cm, 25k Ω (Low) 200mV/cm, 47k Ω (High)	2V (Low) 35V (High)	15mV/cm, 100k Ω (Low) 200mV/cm, 47k Ω (High)	2V (Low) 35V (High)	5 $\frac{1}{2}$ " x 16 $\frac{1}{8}$ " x 13 $\frac{3}{8}$ "

Tonearm	Stylus Pressure Control	Cartridge Head Shell	Effective Length	Overhang	Offset Angle	Power Consumption	Dimensions (H x W x D)	
—	—	—	—	—	—	5W	4" x 14" x 14"	SP-10
Static Balanced Tubular	0~5g Direct Reading	Universal 4-Pin Connector	9 $\frac{1}{4}$ "	$\frac{9}{16}$ "	21°	4W	7 $\frac{11}{16}$ " x 20 $\frac{1}{16}$ " x 15 $\frac{3}{8}$ "	SL-1100A
Static Balanced Tubular	0~4g Direct Reading	Universal 4-Pin Connector	8 $\frac{11}{32}$ "	$\frac{9}{16}$ "	22°	4W	7 $\frac{3}{32}$ " x 17 $\frac{13}{16}$ " x 14 $\frac{13}{32}$ "	SL-1200
Static Balanced Tubular	0~3g Direct Reading	Universal 4-Pin Connector	9 $\frac{1}{16}$ "	$\frac{19}{32}$ "	21.5°	4W	5 $\frac{1}{2}$ " x 17 $\frac{13}{16}$ " x 14 $\frac{13}{32}$ "	SL-1300

Driver				Control (Normal, -3dB)	Impedance	Enclosure	Dimensions (H x W x D)	
Woofer	Midrange	Tweeter	Super Tweeter					
Two 10"	5"	Two 1 $\frac{3}{4}$ "	Two 2"	Tweeter Midrange	8Ω	Oiled Walnut	29" x 18 $\frac{3}{4}$ " x 14 $\frac{1}{2}$ " (incl. removable base)	T-500
12"	5"	3 $\frac{1}{2}$ "	Two 2"	Tweeter Midrange	8Ω	Oiled Walnut	27" x 15" x 13 $\frac{1}{4}$ " (incl. removable base)	T-400
10"	3"		2"	Tweeter Midrange	8Ω	Oiled Walnut	24 $\frac{3}{8}$ " x 13 $\frac{3}{4}$ " x 12 $\frac{1}{2}$ "	T-300
10"	—	1 $\frac{3}{4}$ "	—	Tweeter	8Ω	Oiled Walnut	21 $\frac{3}{4}$ " x 12" x 10 $\frac{1}{2}$ "	T-200

HEADPHONES

	Transducer Type	Max. Input Voltage/Power	Input Impedance	Sensitivity	Frequency Response	Max. Sound Pressure Level	Speaker	Distortion
EAH-80A	Electret Static	5V	4~16Ω	101dB (1V, 500Hz)	20Hz~20kHz	115dB (500Hz)		0.8% (500Hz, 101dB)
EAH-420	Dynamic	1,000mW	4~16Ω	104dB (1mW, 200Hz)	20Hz~20kHz		Two 3", Four 1 $\frac{3}{4}$ "	

Specifications are subject to change without notice.

Technics

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Specification Guarantee

The RS-676US and RS-610US cassette decks are guaranteed by Matsushita Electric Corporation of America and Matsushita Electric of Hawaii, to operate for a period of 90 days from the date of original purchase at no less than each of the five (5) operating specification criteria noted by an asterisk on page 32 and 33. MECA and MEH agree, subject to the terms and conditions of the warranty of workmanship and materials which will also cover

and be packed with this product, to correct any deck to the said specifications if delivered freight pre-paid to a Panasonic Factory Servicer. The conditions, standards and procedures for conducting tests to verify whether the product operates at no less than each of the specifications are available in detailed description on request from Technics by Panasonic, 200 Park Avenue, New York, N.Y. 10017.