PIONEER

RT-1011L

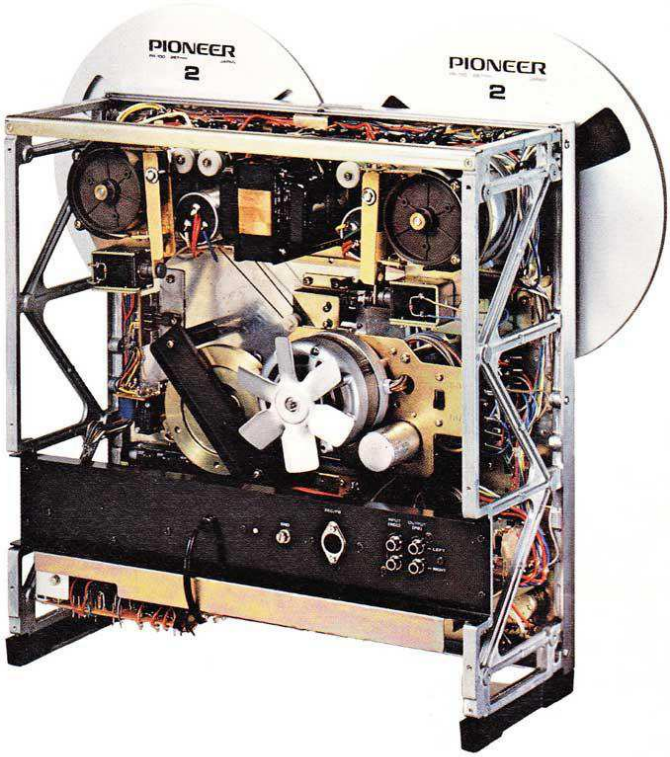
10-½-inch reel load, 3-motor 3-head stereo tape deck featuring dependable construction, high-precision tape transport and versatile tape selector.

Pioneer's engineering policy assures reliable operation and quality performance from the new RT-1011L 4-track stereo tape deck. A thick 5mm front suspension panel and solid, die-cast framework provide extra strength margin for the 10-1/2-inch reel load and stable tape transport system. Wow and flutter is reduced by the precision 4/8-pole hysteresis synchronous capstan drive motor, coupled with a "tuned" 100mm ϕ flywheel and high-precision 0.2μ-error capstan. A high-torque 6-pole induction motor ensures optimum tape tension. The 2-channel 4-track recording and playback heads are hyperbolic for superb tonal quality, ideal head-to-tape contact, and exhibit excellent electromagnetic characteristics. All three heads are arranged in a short tape path to enhance stability. And Pioneer's long experience in tape deck design means top versatility. The RT-1011L includes switched circuits for 2-step bias and 2-step equalization for balanced recordings with any tape. Advanced design and electronics also means wide dynamic range from the mic/line recording amplifier and offers easy mic/line mixing, solenoid-operated direct-changeable function buttons, auto record facility for use with pre-set timer, large level meters, lockable pause, and more.

*Walnut grained vinyl side panels are used in the construction of this cabinet.

RT-1011L

Unparalleled Stability from Professionally-Finished Solid Construction



RUGGED, STABLE CONSTRUCTION

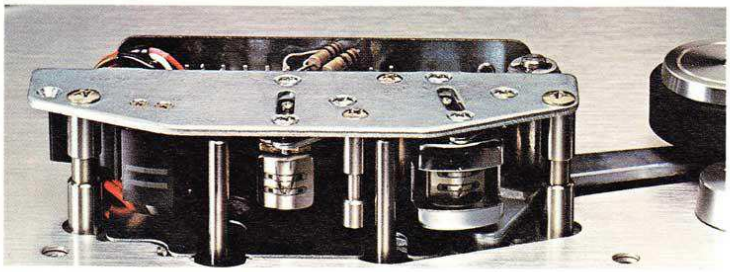
The RT-1011L handles the oversized professional 10-1/2-inch reel to provide you with up to two times longer recording and playback time. This means that the deck must be solidly constructed, with a suspension mechanism second to none in terms of durability. To provide surface precision, and to ensure mechanical stability and reliability, Pioneer has used an extra-thick 5mm front chassis panel and a die-cast framework. This solid construction contributes to stable tape transport as well as long-life professional performance, and the prospective tape deck owner would do well to compare the RT-1011L's construction with any other deck in this class.

RELIABLE 3-MOTOR TAPE TRANSPORT

A 4/8-pole two speed hysteresis synchronous motor is employed for capstan drive, distinguished by constant, stable rotation regardless of line voltage fluctuations. Additionally, this ultra-stable motor is coupled with a large 100mm ϕ flywheel via a belt and 0.2μ error high-precision capstan, both mechanisms contributing to stable tape transport. Reel drive is powered by a pair of 6-pole inner-rotor special induction motors that provide optimum tape tension characteristics for ideal tape-to-head touch. These motors are distinguished by their lack of heat radiation and, when compared to the widely-used eddy-current type reel motors, provide a much longer period of trouble-free operation.

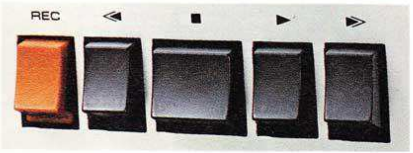
HYPERBOLIC PERMALLOY HEADS AND SHORT TAPE PATH

Hyperbolic heads are noted by their high magnetic saturation level over a wide frequency range as well as by excellent shield characteristics against induced noise. They provide a stable, smooth head-to-tape touch. The RT-1011L uses hyperbolic permalloy heads for the independent recording head and playback head, a bonus of distinguished proportions for the audiophile as the same type head is widely utilized in professional studio tape decks. Of additional significance, the basic three heads are compactly arranged to form a short tape path, so that stability of the tape transport is further enhanced.



EASY-TO-OPERATE CONTROLS

The function buttons (PLAY, REC, FF, REW, STOP) are solenoid-operated for overall operating convenience. This means a finger operating touch neither too heavy or too light. With the RT-1011L's operation controls, you can also change directly from one mode to another while bypassing the STOP button, and this mode change is accomplished with an optimum time lag for tape protection. If you choose to cancel this time lag, it is done with ease, thanks to a built-in timing canceller circuit (with PAUSE lever ON-OFF action). For further convenience, the function buttons are of the push-lock pre-set type, so that timer recording or playback is possible.



WIDE DYNAMIC RANGE AMPLIFIERS

The electronics in the RT-1011L are highly sophisticated and advanced. Both microphone amplifier and recording amplifier are designed to achieve a wide dynamic range, and both incorporate the use of low-noise silicon transistors. In the playback amplifiers, the coupling capacitors are totally eliminated between each of the amplification stages for wide frequency response. Use of a semiconductor switch, instead of the more conventional electric switch, helps to eliminate irritating click-noises when the switches are altered. In the bias oscillating section, an automatic stabilizing circuit is employed to compensate temperature fluctuations and to ensure a stable 125KHz bias frequency.

10-1/2 INCH REEL RECORDING AND PLAYBACK

Use of a 10-1/2 inch reel means up to two times longer recording and playback time than with ordinary 7-inch reels.

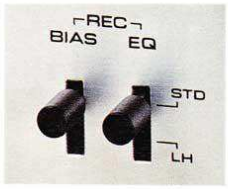
Example: One-way recording and playback time (at 19cm/sec or 7-1/2 ips)

Reel \ Tape	Standard	Long-Play	Double-Play
7-inch reel	30 min.	45 min.	60 min.
10-1/2 inch reel	1 hr.	1.5 hr.	2 hr.

Optimum tape tension can be obtained either from the 7-inch or 10-1/2 inch reel tapes with the use of the reel size selector.

OTHER VERSATILE FEATURES

1. Tape Selector



To obtain totally-balanced sound reproduction a 3-step recording bias selector and 2-step recording equalizer selector are provided. The bias selector eliminates distortion caused by under-biasing, and prevents high-frequency response loss from over-biasing. The equalizer selector compensates the response into totally-balanced response according to the tape in use. By combining these selectors during recording optimum recording results will be obtained with any tapes.

2. LINE-MIC Mixing

Independent MIC level controls, LINE level controls, and a built-in mixing amplifier facilitate MIC/LINE mixing to expand your recording horizons.

3. Lockable Pause Lever

Lockable pause lever can be used in both recording and playback modes.

4. Easy-to-Read Highly-Reliable Large Level Meters

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RT-1011L SPECIFICATIONS

Drive System:	3-motor drive system
Operation System:	Solenoid-operated direct-changeable function buttons, Push-lock, pre-set function buttons for timer recording and playback
Tape Heads:	1 x 4-track, 2-channel erasing head 1 x 4-track, 2-channel recording head 1 x 4-track, 2-channel playback head
Motors:	1 x 4/8-pole two-speed hysteresis synchronous motor (capstan drive) 2 x 6-pole inner-rotor special induction motor (reel drive)
Maximum Reel Size:	10-1/2 inch
Tape Speeds:	19cm/sec. (7-1/2 ips) and 9.5cm/sec. (3-3/4 ips) Speed tolerance; ±1%
Fast Winding time:	Approximately 110 seconds (10-1/2 inch reel, 740m) Approximately 90 seconds (7 inch reel, 370m)
Wow and Flutter:	Less than 0.08%, WRMS (0.10%, RMS at 19cm/sec., 7-1/2 ips) Less than 0.10%, WRMS (0.13%, RMS at 9.5cm/sec., 3-3/4 ips)
Signal-to-Noise Ratio:	More than 55dB
Total Harmonic Distortion:	Less than 1%
Frequency Response:	40 – 20,000Hz, ±3dB (at 19cm/sec., 7-1/2 ips) 40 – 12,000Hz, ±3dB (at 9.5cm/sec., 3-3/4 ips)
Crosstalk:	More than 60dB
Stereo Channel Separation:	More than 50dB
Erasing Coefficient:	More than 60dB
Bias Frequency:	125KHz
Equalizer:	NAB standard
Inputs (Input sensitivity/Maximum input level/Input impedance):	2 x LINE; 50mV/25V/100 Kohms (pin jack) 2 x MIC; 0.25mV/80mV/20 Kohms (6mmφ jack) 1 x REC & PB; 15mV/1.5V/1.5 Kohms (DIN standard jack)
Outputs (Reference level/Load impedance):	2 x LINE; 316mV/50 Kohms (pin jack) 1 x HEADPHONE; 40mV/4 – 16 ohms (6mmφ stereo jack)
Semiconductors:	Transistors; 32 (including 2 FETS and 2 ICs) Diodes; 46 (including 1 light emitting diode and 3 zenner diodes)
Additional Features:	1. Tape Selectors (switchable 2-step recording bias selector, switchable 2-step recording equalizer selector) 2. Lockable Pause Lever 3. Recording Mode Switches (L, R) 4. One-touch Reel Crampers 5. LINE/MIC (DIN) Mixing 6. Output Level Controls
Power Requirements:	120V 60Hz only (U.S.A. and Canada model) or 110, 120, 130, 220, 240V (switchable) 50-60Hz
Power Consumption:	100 watts
Dimensions (overall):	Without package; 428(W) x 431(H) x 227(D) mm 16-7/8(W) x 16-7/8(H) x 9(D) inches With package; 573(W) x 540(H) x 355(D) mm 22-5/8(W) x 22-1/4(H) x 14(D) inches
Weight:	Without package; 18.6kg/41 lb. With package; 22.4kg/49 lb. 6 oz.
Accessories:	1. 10-1/2 inch metal reel x 1 2. 10-1/2 inch reel adaptor x 2 3. Reel adjusting sheet x 2 4. Connecting cable (stereo) x 2 5. Head cleaning kit x 1
NOTES:	1. Reference tape speed; 19cm/sec. (7-1/2 ips) 2. Reference signal; 1KHz 3. Reference recording level; meter 0dB level (=210 pwb/mm) 4. S/N ratio is measured at +6dB level from reference level. (THD; less than 3.0%) 5. Frequency response is measured at −20dB level from reference level. 6. Input sensitivity; Required input signal level to produce reference output level. 7. Reference output level; Reproduced output signal level at meter 0dB level.

NOTE: Specifications and design subject to possible modification without notice.

PIONEER®

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