

PIONEER

CT-F2121

Front-access stereo cassette deck with Dolby-B, independent BIAS/EQ selection and fully automatic stop.



Like the name Pioneer itself, our CT-“F” (Front-Access) decks have come to stand for the maximum in high fidelity performance, convenience and reliability for audiophiles the world over. Now for the first time in this popular price range, we are offering a CT-“F” Series stereo cassette deck with excellent performance of our top-of-the-line models CT-F9191, 7171 and so on: built-in Dolby-B noise reduction and a special Dolby-compatible circuit format to match; built-in MPX filter for ideal recording of FM stereo broadcasts; independent BIAS and EQ switches for maximum frequency response and lowest distortion from virtually any kind of tape; long-life permalloy-solid recording/playback head for dependable and clean musical performance; a fully automatic stop mechanism which functions faultlessly in all modes, plus direct-change operation levers, large level meters and more. And just to remind you again of the advantages of our front-load, front-control design, remember that it lets you “stack or rack” the CT-F2121 over, under or between other components in your system to save space and simplify actual use. Pioneer performance, convenience and reliability – qualities that are easy to imitate but difficult to match, especially at such an attractive price.

(*Dolby is a trademark of Dolby Laboratories, Inc.)

NOTE: (1) A walnut case is optional.

(2) Walnut veneered top and side panels are used in the construction of this cabinet.

CT-F2121

FRONT-LOAD, FRONT-CONTROL CONVENIENCE AND MAXIMUM HIGH FIDELITY PERFORMANCE



NEW FRONT-ACCESS CONVENIENCE

The neat, eye-appealing front panel of this outstanding Pioneer cassette deck has much more than just good looks. All controls are situated in positions corresponding to the order and frequency of use so that it can be controlled just as you would a receiver, amplifier or tuner. The front-panel tape compartment also increases convenience, since it permits tape loading and unloading, tape movement verification and even tape-label reading while the deck is stacked or racked over, under or between other components in your hi-fi system. The ingenious, jamproof tape compartment itself is slanted at an angle of 30° to facilitate use, aided by a switched compartment illuminator.



BUILT-IN DOLBY-B NOISE REDUCTION SYSTEM

As you may know, signal-to-noise ratios (S/N) of cassette tapes have been improved significantly recently, making tape "hiss" less of a problem than ever. But with the built-in Dolby-B* automatic noise reduction system in the Pioneer CT-F2121 you are



assured that any cassette tape you use will deliver noise-free musical sound with a 10dB improvement in S/N in the high-frequency range over 5,000Hz. Unlike some conventional decks in which the Dolby is included much as an afterthought, the Pioneer CT-F2121 has been designed from the bench up to function in perfect harmony with this popular noise-reduction system. We call it "Dolby-compatible." For one thing this provides plenty of dynamic margin – "headroom" – so that the saturation level at which distortion can occur is higher. This means that you may set the level of incoming signals a little lower when recording a source which contains a wide dynamic range – an important thing to remember when full-fidelity Dolbyized recording of music is your goal. Also for better Dolbyized recording, the deck features a built-in MPX (multiplex) filter to assure ideal recording of FM stereo broadcasts. And finally, there is a special blue-tinted lamp on the front panel to indicate that the Dolby system is at work in recording or playback modes.

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INDEPENDENT BIAS AND EQUALIZATION SWITCHING

The CT-F2121 is equipped with two independent switches which, when used properly, guarantee optimum results from virtually any kind of tape you use. One (BIAS) is a two-position switch to select the bias current supplied to the recording head. The other (EQ) is also a two-position switch, used to select the value of the equalizer amplifier for recording and playback. For lowest distortion and widest frequency response results, follow these simple steps:



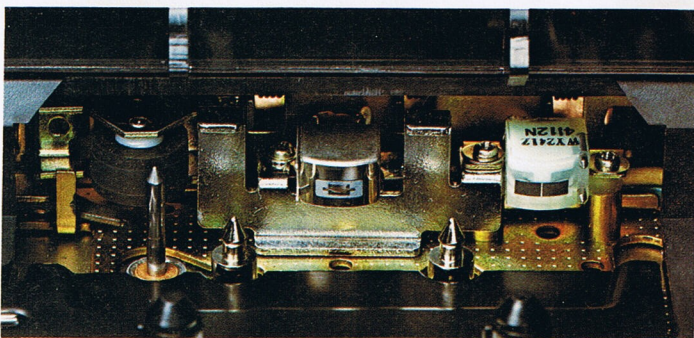
- (1) When using standard (low-noise) ferric oxide tapes, set both the BIAS and EQ switches to the STD (standard) positions.
- (2) When using high-performance Chrome (chromium dioxide – CrO₂) tapes, set them both to the CrO₂ positions.
- (3) When using the newly-available Ferri-Chrome type tapes (tapes which are coated with one layer of ferric

dioxide and one layer of chromium dioxide), set the BIAS switch to STD and the EQ switch to CrO₂.

(4) Finally, when playing tapes of various types, you might wish to experiment by switching the EQ from one position to the other to determine the equalization curve which sounds best to you for that particular recording. (NOTE: The instruction manual which accompanies the CT-F2121 discusses the use of the BIAS and EQ switches in detail, giving concrete examples of their effects on the various major brands of tape available today.)

LONG-LIFE PERMALLOY-SOLID REC/PLAY HEAD FOR HIGH PERFORMANCE

Pioneer has selected a unique permalloy-solid head material for use in the recording/playback head in our best cassette tape decks. It features a permalloy core for ideal electromagnetic performance in all circumstances, and has a layer of superhard ferrite proven to be the best for resisting abrasion. Both are particularly important features when playing Chrome tapes. What's more, the combination results in excellent S/N and other performance characteristics for high dependability and clean musical recording and reproduction.



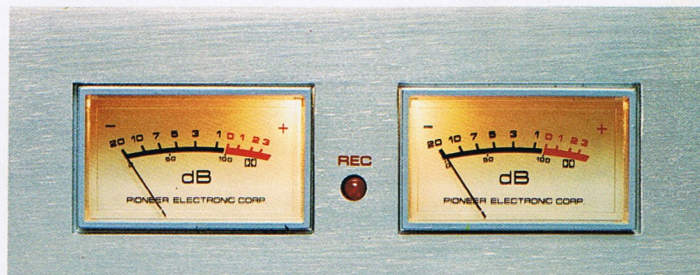
FULLY-AUTOMATIC STOP MECHANISM FOR ALL MODES

A separate electronic servosystem with non-contact point detection mechanism and a solenoid in the CT-F2121 provides the sort of fully automatic stop operation you should always insist on in today's modern stereo cassette decks. With it in operation you never

need to worry about straining the tape-movement motor or the tape-transport mechanism. And it saves you time and trouble, too. Here's how: When a tape reaches either end in any mode (playback, recording, fast-forward or rewind), or when tape travel halts unexpectedly for any other reason (such as jamming in the case of a faulty tape), the auto-stop reacts within seconds to release the motor tension, stop the motor and return all operating levers to their neutral (STOP) positions.

DIRECT-CHANGE OPERATION LEVERS

Operation levers are designed to change from one mode (such as fast-forward, etc.) to any other mode (such as play, etc.) without first operating the STOP lever. Though other decks may appear also to offer this feature, you are assured that operating the CT-F2121 in this way will cause no damage whatsoever.



 **PIONEER**

CT-F2121 SPECIFICATIONS

Type:	Compact cassette tapedeck, 2-channel stereo/mono	Semiconductors:	Amplifier section: Transistors; 41 (including FETs...2), Diodes; 28 (including Zenner Diodes...3, LEDs...1)
Recording:	AC bias system (bias frequency; 85KHz)		Motor control section; Transistors; 2, Diode; 1
Erasing:	AC push-pull system	Other Features:	1. Dolby system (ON-OFF) with indicator lamp
Heads:	"Permalloy Solid" recording/playback head x 1 Ferrite erasing head x 1		2. Tape selector (STD/CrO ₂) Independently switchable bias and equalizer
Motor:	Electronically-controlled DC motor		3. Full-auto stop mechanism (in all modes of PLAY/REC/FF/REW)
Fast Winding Time:	Approximately 80 seconds (C-60 tape)	Power Requirements:	120V 50-60Hz only
Wow and Flutter:	No more than 0.12% (WRMS)	Power Consumption:	13 watts (max.)
Frequency Response:	Standard, LH tapes; 30 to 13,000Hz (40 to 11,000Hz \pm 3dB) Chromium dioxide tape; 30 to 16,000Hz (40 to 12,000Hz \pm 3dB)	Dimensions:	Without package; 13-3/4(W) x 5-5/8(H) x 11-1/8(D) inches
Signal-to-Noise Ratio:	Dolby OFF; 48dB (standard and LH tapes) Dolby ON; 58dB (over 5KHz, standard and LH tapes) When chromium dioxide tape is used, signal-to-noise ratio is further improved by 4.5dB over 5KHz 62.5dB	Weight:	Without package; 14 lb. 9 oz.

Inputs

(Sensitivity/Maximum allowable input/Impedance):

MIC x 2; 0.3mV/63mV/20 Kohms,
6mm ϕ jacks

(Reference Mic impedance;
600 ohms to 20 Kohms)

LINE x 2; 63mV/12V/50 Kohms, Pin jack
REC/PLAY x 1; 10mV/2V/10 Kohms,
5P jack (DIN standard)

Outputs (Reference level/Load impedance):

LINE x 2; 450mV/50 Kohms, Pin jacks
HEADPHONE x 1; 80mV/8 ohms,
6mm ϕ , stereo jack
REC/PLAY x 1; 450mV/50 Kohms,
5P jack (DIN standard)

NOTES:

1. Reference tape: standard, LH tapes are DIN no. 45513.
: chrome tape is DIN no. 45513 (CrO₂)
2. Reference recording level is meter 0dB level
(equivalent to 160 pwb/mm).
3. Reference signal is 333Hz.
4. Wow & Flutter: at 3KHz weighted rms.
5. Frequency response is measured at -20dB level, DOLBY OFF.
Level deviation is \pm 6dB without indication.
6. Signal-to-noise ratio is measured at 4dB level
(equivalent to 250 pwb/mm), with IEC A curve when weighted.
7. Sensitivity: Input level (mV) for reference recording level measured,
with input (recording) level control set at maximum position.
8. Maximum allowable input level is measured at the point where the
output signal wave is clipped while gradually turning the input
level control.
9. Output (Playback) level: Output level to reference recording level.

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



PIONEER ELECTRONIC CORPORATION / 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153, Japan

U.S. PIONEER ELECTRONICS CORPORATION / 75 Oxford Drive, Moonachie, New Jersey 07074, U.S.A.

PIONEER ELECTRONIC (EUROPE) N.V. / Luithagensteenweg No. 9, 2030 Antwerp, Belgium

PIONEER ELECTRONICS AUSTRALIA PTY. LTD. / 178-184 Boundary Road, Braeside, Victoria 3195, Australia