

SONY CASSETTE DECKS

Exquisite Reproduction of Music in the Home



SONY®



Introducing Dolby C Noise Reduction: Music Against a Background of Silence

The Sony TC-FX6C is a striking example of Sony's ability to bring the latest electronic and mechanical understandings into total harmony in a tape deck that can only be described as superb.

OUTSTANDING FEATURES

- Introducing Dolby C: effectively doubles the noise reduction and extends the frequencies at which noise is reduced
- Digital Linear Counter of playing time, for the most precise index of tape location available. Count remains accurate even in fast-forward and rewind
- Automatic Music Sensor locates, and plays a selection at your command

CONVENIENCE

- Feather-touch controls respond to the slightest finger contact for fast, effortless function selection
- Memory counter brings tape to stop, play, and repeat at any preselected spot
- Auto play offers automatic transfer from rewind into play
- Auto Space/Rec Mute for an interval of silence between recorded selections

- Optional remote control (RM-50) and wireless remote control (RM-80) permit operation from your easy chair
- Synchronized operation possible with selected Sony turntables, using the optional RM-65
- Fast, 16-segment LED peak program meters, with Double Indication peak hold, for precise readings of recording levels
- Unattended recording and timed wake-up possible with an accessory timer

TECHNOLOGY

- Sendust and Ferrite (S&F) record and playback head for long life and metal tape capability
- Two-motor tape drive with frequency servo control for accuracy and reliability
- Linear Torque BSL (brushless, slotless) capstan motor to eliminate "cogging" and assure smooth travel
- Anti-resonant flywheel to minimize modulation noise for clear sound
- Dolby B is included to play tapes previously recorded in this mode

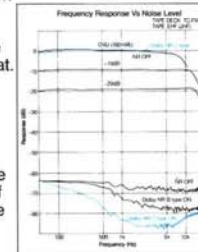
Sony technology in the service of music reproduction is legendary. Each feature of the TC-FX6C is there for one reason: to give the listener easy access to great performance.

Dolby C: The latest in noise reduction
In the early 1970's the cassette format was transformed into a high-fidelity recording medium, largely because of a new system to reduce noise: B-type Dolby noise reduction, or "Dolby B" for short. Now, with advances in disc and recording technology such as digital and direct-to-disc mastering, the dynamic range of today's music sources is greater than ever. Additional improvements in cassette deck performance have become necessary. In response to these demands comes a new noise reduction system, the latest product of Dolby Laboratories. It is called Dolby C.

The immediate and most obvious effect of Dolby C is a startling reduction in noise. Not only will it make your recordings quieter in the middle frequencies, but an astonishing 20dB quieter at frequencies higher than 2kHz, where inherent tape hiss is at its most disturbing. Sound is impeccably clean. Music is heard against a background of silence.

But Dolby C does even more. It reduces noise in a significantly expanded frequency range. It incorporates anti-saturation circuitry to dramatically improve high-frequency dynamic range — by 4dB at 10kHz. As a result, setting of the record levels is less critical. Finally, the dynamic action of Dolby C has been adjusted to dramatically reduce the unwanted side-effects of "pumping" or "breathing."

In this way, Dolby C is a balanced noise reduction system especially tailored to the cassette format. Its unique combination of increased noise reduction, wider dynamic range and its lack of unwanted side effects convinced Sony engineers to select Dolby C for the TC-FX6C.



The graphs demonstrate the performance of Dolby C Noise Reduction. Note that Dolby C provides 12dB noise reduction at 500Hz and 20dB at 2kHz and above.

Sony's Sendust and Ferrite (S&F) head brings you maximum performance from every tape, including metal particle tape

The finest tape formulation available today is metal particle tape. Metal demands extremely high recording flux density. Because sendust is capable of the highest flux density of any head material, Sony engineers have selected the Sendust and Ferrite (S&F) head for

the TC-FX6C. The head combines sendust with the outstanding properties of ferrite to get the best performance from metal tape, and from all other tape formulations as well.

A new Digital Linear Counter indicates elapsed time on tape



Unlike conventional tape counters, the TC-FX6C's Digital Linear Counter measures the actual time elapsed on the tape and reveals it in a fluorescent display. Now, you no longer need to guess how much time remains on the tape. Nor will you be surprised by running out of tape in the middle of a selection. The Digital Linear Counter is also an indispensable aid in programming and indexing your cassette collection. And the Counter makes it easier than ever to locate selections during playback.

Because the Digital Linear Counter is controlled by a sophisticated micro-processor, the tape time indication remains accurate even when you place the deck into fast-forward or rewind.



Sliding record level controls run parallel to the LED meters, making it simple to set proper record levels.

Enhanced convenience with the Automatic Music Sensor (AMS)

The Sony TC-FX6C incorporates an array of features that make it easier than ever before to find, play, and replay the music you want to hear. For example, Sony's AMS allows you to skip forward or backward to find the selection of your choice. You can even pre-set the deck to go from fast winding directly into play at the start of your selection.

Memory Cue and Memory Play cause the deck to rewind to "00:00" on the Digital Linear Counter, and automatically stop or play. Auto Play enables you to transfer automatically from rewind into play at the beginning of a tape. And the versatile Repeat function enables you to replay a portion of the tape up to nine times!

Remote capability

TC-FX6C may be used with either the optional RM-50 remote control or the optional wireless remote (RM-80). It may also be used with the optional RM-65 for synchronized operation with selected Sony turntables.

TC-FX6C

RM-80 Remote Control Unit shown is optional.



Dolby C Noise Reduction for Superb Sonic Clarity

The performance of the TC-FX5C is superlative. It reflects the latest in tape technology aimed solely at reproducing music with consummate ease and utter faithfulness.

OUTSTANDING FEATURES

- Introducing Dolby C: effectively doubles the noise reduction and extends the frequencies at which noise is reduced
- Feather-touch controls respond to the slightest finger contact for fast, effortless function selection

CONVENIENCE

- Memory counter brings tape to stop and play at any pre-selected spot
- Auto play offers automatic transfer from rewind into play
- Auto Space/Rec Mute for an interval of silence between selections
- Optional remote control (RM-50) and wireless remote control (RM-80) permit operation from your easy chair
- Synchronized operation possible with selected Sony turn-

- tables, using the optional RM-65
- Fast, 16-segment LED peak program meters, with Double Indication peak hold, for precise readings of recording levels
- Unattended recording and timed wake-up possible with an accessory timer

TECHNOLOGY

- Sendust and Ferrite (S&F) record and playback head for long life and metal tape capability
- Two-motor tape drive with DC servo control for accuracy and reliability
- Anti-resonant flywheel to minimize modulation noise
- Dolby B is included to play tapes previously recorded in this mode

TC-FX5C

RM-80 Remote Control Unit shown is optional.



Exceptional Convenience, Exquisite Performance

The Sony TC-FX6 achieves new levels of versatility and convenience. Its superior performance makes it ideal for a broad spectrum of music systems.

OUTSTANDING FEATURES

- Digital Linear Counter of playing time, for the most precise index of tape location available. Count remains accurate even in fast-forward and rewind
- Automatic Music Sensor (AMS) locates, and plays a selection at your command

CONVENIENCE

- Feather-touch controls respond to the slightest finger contact for fast, effortless function selection
- Memory counter brings tape to stop, play, and repeat at any preselected spot
- Auto play offers automatic transfer from rewind into play
- Auto Space/Rec Mute for an interval of silence between selections
- Optional remote control (RM-50) and wireless remote control (RM-80) permit operation from your easy chair

- Synchronized operation possible with selected Sony turntables, using the optional RM-65
- Fast, 16-segment LED peak program meters, with Double Indication peak hold, for precise readings of recording levels
- Unattended recording and timed wake-up possible with an accessory timer

TECHNOLOGY

- Sendust and Ferrite (S&F) record and playback head for long life and metal tape capability
- Dolby B noise reduction with Sony's exclusive Dolby IC
- Two-motor tape drive with frequency servo control for accuracy and reliability
- Linear Torque BSL (brushless, slotless) capstan motor eliminates "cogging" and assures smooth travel
- Anti-resonant flywheel to minimize modulation noise

TC-FX6

RM-80 Remote Control Unit shown is optional



Precision, Performance, and Value

The TC-FX4 features the exceptional convenience of feather-touch controls and the option of remote control. With the high performance of two-motor drive, this is an excellent component for the majority of home music systems.

OUTSTANDING FEATURES

- Feather-touch controls respond to the slightest finger contact for fast, effortless function selection
- Two-motor tape drive with DC servo control for accuracy and reliability
- Optional remote control (RM-50) and wireless remote control (RM-80) permits operation from your easy-chair

CONVENIENCE

- Auto play offers automatic transfer from rewind into play
- Auto Space/Rec Mute for an interval of silence between recorded selections



- Synchronized operation possible with selected Sony turntables, using the optional RM-65
- Fast, 16-segment LED peak program meters, for precise readings of recording levels
- Unattended recording and timed wake-up possible with an accessory timer

TECHNOLOGY

- SD record/playback head for metal tape capability
- Dolby B noise reduction with Sony's exclusive Dolby IC
- Anti-resonant flywheel to minimize modulation noise
- DC amplifier for accurate reproduction of signal being recorded
- Direct-coupled playback head amp for improved sound quality
- FET buffer power supply for excellent voltage stability
- Four-gap erase head for thorough erasure, even with metal tape

TC-FX4

RM-80 Remote Control Unit shown is optional.



The Reliability of Two-Motor Drive at a Modest Cost

The TC-FX2 performs beautifully. It combines Sony's advanced magnetic and mechanical technology with the convenience and reliability normally associated with tape decks costing much more.

OUTSTANDING FEATURES

- Soft-touch controls for fast, easy function selection
- Two-motor tape drive with DC servo control for accuracy and reliability

CONVENIENCE

- Unattended recording possible with an accessory timer
- Three-digit tape counter
- Soft eject
- Large, illuminated VU meters
- Peak indicator LED

TECHNOLOGY

- Dolby B noise reduction with Sony's exclusive Dolby IC
- SD record/playback head for metal tape capability

- DC amplifier for accurate reproduction of signal being recorded
- Direct-coupled playback head amp for improved sound quality
- FET buffer power supply for excellent voltage stability
- Four-gap erase head for thorough erasure, even with metal tape

TC-FX2

Available late summer, 1981

Sony Introduces a New Look in Cassette Recording: The Ultra-Slim FX7

The Sony TC-FX7 offers solid reliability, outstanding convenience and unadulterated reproduction of musical sound. Yet it is only slightly taller than the cassette itself.

OUTSTANDING FEATURES

- Direct-drive system with Linear Torque BSL (brushless, slotless) motor for efficient and precise capstan drive
- Quartz lock prevents even minute speed variations caused by external factors
- Digital Linear Counter of playing time, for the most precise index of tape location available. Count remains accurate even in fast-forward and rewind

CONVENIENCE

- Feather-touch controls respond to the slightest finger contact for fast, effortless function selection
- Memory counter brings tape to stop and play at any pre-selected spot
- Auto play offers automatic transfer from rewind into play
- Auto Space/Rec Mute for an interval of silence between selections



- Optional remote control (RM-50) and wireless remote control (RM-80) permit operation from your easy-chair
- Synchronized operation possible with selected Sony turntables, using the optional RM-65
- Fast, 16-segment LED peak program meters, with Double Indication peak hold, for precise readings of recording levels
- Soft-touch selectors with indicator lamps for all four types of tape
- Unattended recording and timed wake-up possible with an accessory timer

TECHNOLOGY

- Sendust and Ferrite (S&F) record and playback miniature head for long life and metal tape capability
- Dolby B noise reduction with Sony's exclusive Dolby IC
- Two-motor tape drive with frequency servo control for accuracy and reliability



Soft-touch tape selector controls with indicator lamps.

TC-FX7

RM-80 Remote Control Unit shown is optional.

Quartz-locked Brushless, Slotless (BSL) direct-drive motor
The TC-FX7 features Sony's Linear Torque BSL (brushless, slotless) motor. Now equipped with a powerful yet compact samarium cobalt magnet, it delivers exceptionally smooth, even torque. The motor is mounted directly on the drive capstan to form a simpler, more reliable mechanism. The addition of quartz lock assures absolutely constant tape speed, from the beginning to the end of each cassette. Musical pitches remain precise and true.

Miniature Sendust and Ferrite (S&F) Head
The reduced size of the Sendust and Ferrite (S&F) record/playback head is directly responsible for the slender, graceful profile of the FX7. The head, which is half the size of conventional types, is mounted directly onto a miniature printed circuit board — thereby reducing the clearance necessary for interconnections.

Digital Linear Counter
Conventional tape counters give only an indication of the number of revolutions made by one of the spools. They give no real indication of time used. Now, thanks to a new micro-processor, Sony has developed the Digital Linear Counter. A digital display of actual elapsed time, it takes much of the guesswork out of recording from any medium. And the Digital Linear Counter remains accurate, even during fast-forward and rewind.



NR-500 Dolby C Noise Reduction System. NR-500 lets you add Dolby C NR to any Sony cassette deck.



The New Reference Standard for Cassette Deck Performance

The sound quality of Sony's TC-K777 fully realizes the expectations of its designers. As such, it fulfills the needs of the most demanding audiophiles and studio professionals.

OUTSTANDING FEATURES

- Sony's exclusive Independent Suspension three-head design for superior performance and off-the-tape monitoring while you record
- Anti-resonant transport design to minimize modulation noise for clear sound
- Direct-drive system with Linear Torque BSL (brushless, slotless) motor for efficient and precise capstan drive
- Quartz lock prevents even minute speed variations caused by external factors
- Closed-loop dual-capstan system for superior control of tape tension and reduced modulation noise
- Digital Linear Counter of playing time, for the most precise index of tape location available. Count remains accurate even in fast-forward and rewind.

CONVENIENCE

- Concentrated Display with 30-segment fluorescent peak program meters offer professional-grade display of recording levels, automatic or manual peak reset; and maximum recording level indication for each type of tape
- Feather-touch controls respond to the slightest finger contact for fast, effortless function selection

- Memory counter brings tape to stop and play at any pre-selected spot
- Auto play offers automatic transfer from rewind into play
- Auto Space/Rec Mute for an interval of silence between selections
- Optional remote control (RM-50) and wireless remote control (RM-80) permit operation from your easy chair
- Synchronized operation possible with selected Sony turntables, using the optional RM-65
- Unattended recording and timed wake-up possible with an accessory timer

TECHNOLOGY

- Sendust and Ferrite (S&F) record and playback heads for long life and metal tape capability
- Adjustable bias to achieve flat high-frequency response and low distortion for any tape
- Record level calibration for accurate high-frequency sound in Dolby-encoded record and playback
- Two-motor tape drive with frequency servo control for accuracy and reliability
- Dolby B noise reduction with Sony's exclusive Dolby IC

TC-K777

Available summer, 1981

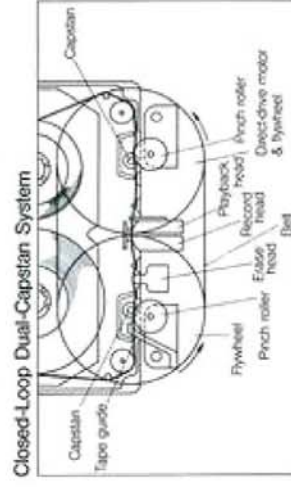
MX-1000 Microphone amplifier and RM-80 Remote Control Unit shown are optional.

Independent Suspension three-head design

The Sony K777 incorporates the principal feature of professional cassette decks: three-head design. With separate erase, record and playback heads these decks enable you to monitor the tape as it's being recorded. Thus, you can compare the quality of the recorded music with the original source. And three heads can yield significant performance advantages, too.

For wide recording dynamic range, the head gap should be wide. Yet, for good playback high-frequency response, the gap should be narrow. Thus, a combined record/playback head must compromise between these two requirements. Three-head design circumvents this compromise. The result is outstanding dynamic range, along with superlative high-frequency response.

Sony's unique approach to the three-head format is called Independent Suspension. This design overcomes the azimuth, flux leakage and tape contact problems of conventional three-head cassette decks. The results are more extended high-frequency response, better tape-to-head contact, and more consistent performance.

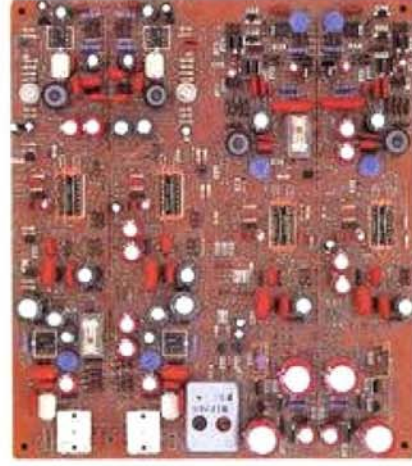
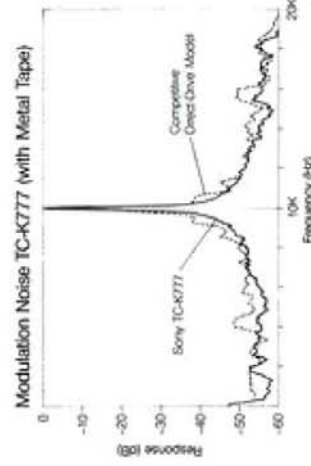


The direct-drive/closed-loop transport provides uncommonly smooth tape motion

The K777 boasts the advantages of closed-loop dual-capstan design. The second capstan maintains superior tape-to-head contact for improved consistency. To this, the K777 adds one important advance: quartz-lock direct drive. As a result, the K777 maintains smooth tape travel under the widest variety of operating conditions, and achieves an impressive wow and flutter of only 0.025% (WRMS).



The tape transport of the K777 is mounted on heavy-gauge aluminum plates a full three times as thick as conventional designs. Such rugged construction resists the vibrations and resonances that cause modulation noise. The audible result is sound that is remarkably clean and clear.



The electronics contribute to sonic accuracy

The selection, configuration, and layout of a tape deck's electronics make a major contribution to sound quality. In the design of the TC-K777, Sony has paid particular attention to critical parts and circuit layout.

The record and playback electronics of the K777 are arranged in a "twin monaural" format, with left and right channels placed in separate, symmetrical areas of the same circuit board, assuring reduced inter-channel cross-talk. All amplifier stages are direct-coupled (DC). And the playback head amplifier is direct-coupled for the purest possible sound.

Stable power supply for steady performance

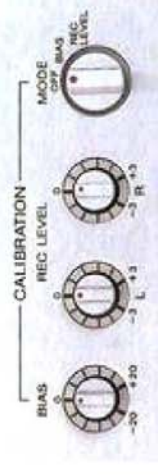
The power supply of the TC-K777 is carefully designed to minimize interference and noise. The transformer has a new, continuous-ribbon core design, for low hum radiation. To reduce radiation further still, the transformer is encapsulated and mounted outside the back panel.

The power supply circuit itself incorporates an FET buffer to assure a constant supply of current under varying load conditions.



Bias and record level controls:

Calibration for every type of tape
Slight variations in bias requirements from one brand of tape to another can result in overly "bright" or "dull" high-frequency response, and excess distortion. In addition, improper record level calibration can interfere with the proper Dolby encoding. The Sony TC-K777 provides manual calibration controls that allow you to hand-tailor the machines for each tape you use.



Concentrated display

The TC-K777 provides an invaluable aid to listeners who want to make the finest possible recordings. Sony engineers have incorporated a Concentrated Display with 30-segment fluorescent Peak Program Meters. Appropriate words light up to indicate proper bias and record calibration levels — automatically. The display also includes an index of proper record levels for each type of tape. Equally important, the calibration and index markings are "on" only when you need them and "disappear" when not in use. The Concentrated Display is Sony's way of providing necessary information, clearly, simply and elegantly





TC-K81

RM-80 Remote Control Unit shown is optional.

Advanced Three-Head Technology for Exceptional Sound

The Sony TC-K81 and TC-K71 offer superb performance and extraordinary convenience in the three-head format.

OUTSTANDING FEATURES

- Sony's exclusive Independent Suspension three-head design for superior performance and off-the-tape monitoring while you record
- Closed-loop dual-capstan system for superior control of tape tension and reduced modulation noise

CONVENIENCE

- Feather-touch controls respond to the slightest finger contact for fast, effortless function selection
- Memory counter brings tape to stop and play at any pre-selected spot
- Auto play offers automatic transfer from rewind into play
- Auto Space/Rec Mute for an interval of silence between selections
- Optional remote control (RM-50) and wireless remote control

- (RM-80) permit operation from your easy chair
- Synchronized operation possible with selected Sony turntables, using the optional RM-65
- Fast, 16-segment LED peak program meters, with Double Indication peak hold, for precise readings of recording levels
- Unattended recording and timed wake-up possible with an accessory timer

TECHNOLOGY

- Sendust and Ferrite (S&F) record and playback heads for long life and metal tape capability
- Dolby B noise reduction with Sony's exclusive Dolby IC
- Adjustable bias to achieve flat high-frequency response and low distortion for Type I tapes (K71), or any type of tape (K81)
- Record level calibration for accurate high-frequency sound in Dolby-encoded record and playback (K81 only)
- Two-motor tape drive with frequency servo control for accuracy and reliability
- Anti-resonant flywheel to minimize modulation noise.



TC-K71

RM-80 Remote Control Unit shown is optional.

Take Sony performance, convenience and features, add automatic reverse for uninterrupted music and you have the Sony TC-K77R.

FEATURES

- Auto-reverse with Roto-Bilateral head and infra red sensor; takes only 1.2 seconds to detect the leader tape and change directions
- Sendust and Ferrite (S&F) record and playback head for long life and metal tape capability
- Two-motor tape drive with Linear Torque BSL (brushless, slotless) motors for accuracy and reliability
- Feather-touch controls respond to the slightest finger contact for fast, effortless function selection
- Memory counter brings tape to stop and play at any pre-selected spot
- Auto play offers automatic transfer from rewind into play
- Auto Space/Rec Mute for an interval of silence between selections
- Supplied remote control (RM-70) permits operation from your easy chair
- Synchronized operation possible with selected Sony turntables, using the optional RM-65
- Unattended recording and timed wake-up possible with an accessory timer



TC-K77R



TC-D5M

The TC-D5M is a portable stereo cassette recorder comparable to the finest home decks. Yet it provides steady, stable performance even in rigorous field use.

FEATURES

- Compact, portable, battery-powered stereo cassette deck
- Dolby B noise reduction with Sony's exclusive Dolby IC
- Sendust and Ferrite (S&F) record and playback head for long life and metal tape capability
- Large, illuminated VU meters with LED peak indicator
- Switchable record-level limiter
- Direct-coupled playback head amp for improved sound quality
- Anti-roll mechanism maintains tape speed even when you move the machine
- Coreless servo motor for smooth tape travel

The TC-PB5 is Sony's response to the special needs of many music lovers for a high quality playback deck. As a second deck, it permits professional grade tape-to-tape dubbing at a surprisingly modest price.

FEATURES

- Random Music Sensor and optional RM-65 let you re-program the sequence of up to 15 selections, as you copy or playback a cassette.
- Feather-touch controls respond to the slightest finger contact for fast, effortless function selection
- Dolby B noise reduction with Sony's exclusive Dolby IC
- Hand-selected narrow-gap Sendust and Ferrite (S&F) record and playback head for high performance and long life
- Two-motor tape drive with frequency servo control for accuracy and reliability
- Direct-coupled playback head amp, MIC Mixing, Headphone Level control



TC-PB5

Limited availability, summer, 1981