

SONY®

Portable Stereo Tape Recorder

TC-510-2

Sony's Ultimate Portable Stereo Tape Recorder
Ideal for Field/Interview/Movie Applications



A new Sony for quality outdoor recording that's almost like having a portable professional studio. The compact TC-510-2 is especially designed for "on-the-go" recording, interviews and natural stereo recording. With DC operation, it works like a professional open-reel stereo tape deck featuring half-track 2-channel REC/PB, 3-head Tape/Source monitoring and other attractive features. Functionally designed to be controlled easily, quickly and accurately, the TC-510-2 is ideal for all outdoor audio applications.

A DC servo-controlled direct capstan drive motor for greater accuracy
Precise speed regulation, smooth motor rotation, low wow & flutter regardless of battery voltage variation. Excellent servo is obtained with the adoption of IC.

Direct coupling of Sony's precisely engineered F & F head with FETs in the preamplification
Low distortion of 0.8%, frequency response of 30 - 27,000Hz (± 3 dB), S/N ratio of 64dB (All with Sony's Ferri-chrome tape).

Microphone amplifier adopting FETs is directly coupled with microphone input
for superior S/N ratio and better frequency response especially in low ranges.

DC voltage converter for wide dynamic range
(DC-DC step-up converter) For out-of-door use, battery operation is indispensable. But 8 "D" size batteries offer only 12V. This converter increases the saturation level of the recording amplifier (from 12V to ± 24 V). Better linearity is assured.

4-way operation
8 "D" size batteries, Sony's rechargeable battery pack BP-55 (optional), AC household current (with optional power adaptor AC-26) and car/boat battery with car battery cord DCC-129. (optional).

Functionally designed body
with diecast center panel. After setting basic controls, you can control the rest with the rigid lid closed.

Screw type reel holder

Servo-controlled tape back-tension regulator
reduces wow and flutter and assures extremely smooth and steady tape travel with optimum tape back tension.

Scrape filter for less modulation noise

Speed tuning ($\pm 10\%$)
The playback speed may be tuned $\pm 10\%$ at 19cm/s.

Extended dynamic range and excellent signal-to-noise ratio with the tape selector for Ferri-chrome tape

Ferri-chrome tape has 2-layers of magnetic substances one layer specially suited for low frequencies, and the other for high frequencies. High output, wide dynamic range, rich bass and smooth high treble result. The independent 3-step Bias and Equalization selectors allow optimum response with any kind of tape such as FeCr tape, SLH tape and standard tape.

Microphone attenuator
with 2-step selector (0, 20dB) for wider dynamic range. The -20dB position is particularly useful for field recording when sudden peaks are likely to occur. Sound of up to 140 phons can be recorded.

Microphone/Line input selector

Sony's limiter On/Off switch
to control the wide dynamic range.

Tape/Source monitor selector

Battery check button

2-track 3-head system, 5" reel

In spite of the TC-510-2's portability, you can record and playback 2-tracks (stereo or monaural). Three-head system allows tape/source monitoring while recording.

Rigid dust cover

Level control for speaker and headphone

Built-in amplifier and speaker

Recording can be monaurally played back on the spot. Mode selector for L/L + R/R channel. Monitoring while recording is also possible. By connecting a microphone, you have a mini P.A. (public address) system with speaker On/Off switch.

Sunken headphone and microphone jacks

of a new design that prevent the input plugs from working themselves loose during active field recording.

Pause button
with lock facility

Microphone low filter switch
to prevent wind noise. (cut off frequency: 120Hz).

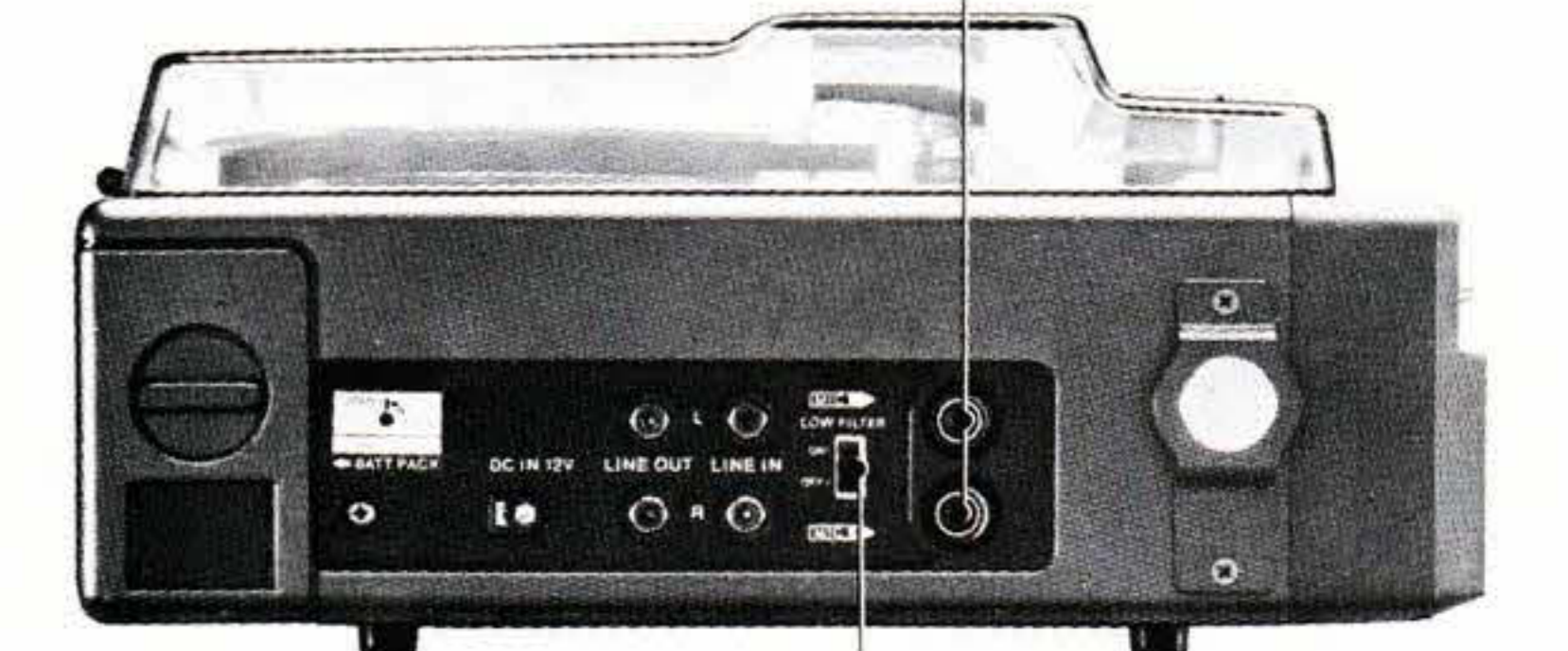
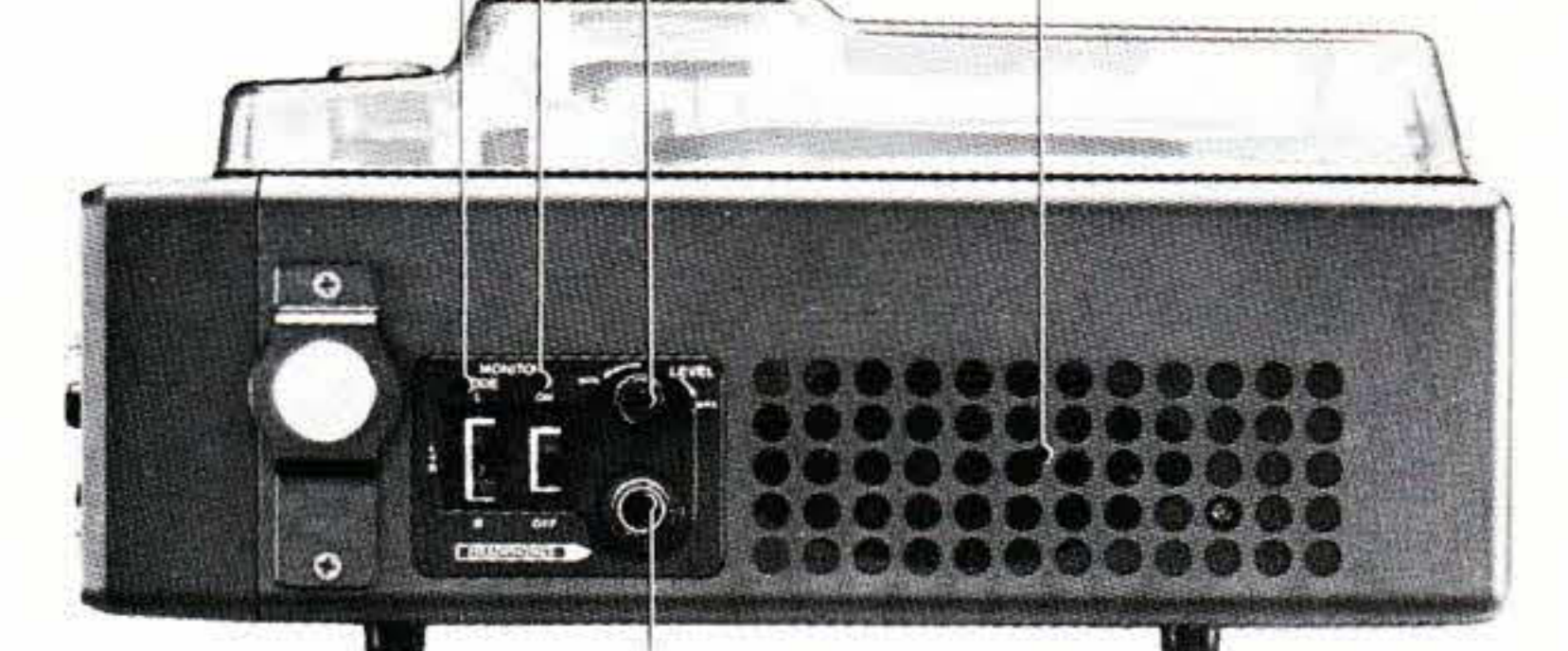
Easy-to-operate fast forward and rewind lever

Newly developed recording system
with easy and accurate control.

2 VU meters
with On/Off illumination to conserve battery.

3-digit tape counter
with zero reset button

Shoulder strap



DC 12V: 8 "D" size batteries, (2-hour continuous recording)



AC 220V with power adaptor AC-26 (optional)

Specifications

<p>Power requirements : DC 12V: 8 "D" size batteries, (2-hour continuous recording) Rechargeable battery pack BP-55 (optional) (12-hour recharging time with optional AC-26, 3-hour continuous recording) Car/boat battery with car battery cord DCC-129 (optional) AC 220V with power adaptor AC-26 (optional)</p> <p>Recording system : 2-track 2-channel stereo recording and playback 2-track monaural recording and playback</p> <p>Tape speeds : 19cm/s (7½ ips), 9.5cm/s (3¾ ips)</p> <p>Maximum recording time : With 275m (900 ft) tape 22 minutes 30 seconds stereo at 19cm/s 45 minutes monaural at 19cm/s 45 minutes stereo at 9.5cm/s 90 minutes monaural at 9.5cm/s</p> <p>Fast forward and rewind time : 120 seconds with 275m tape</p> <p>Reel capacity : 5" reel (13cm)</p> <p>Speaker : 44 × 94mm φ</p> <p>Output power : 500mW</p> <p>Semiconductors : 4 ICs, 4 FETs, 56 transistors, 19 diodes</p> <p>Heads : Recording head.....1 Ferrite & Ferrite head Playback head1 Ferrite & Ferrite head Erase head1 Ferrite head</p> <p>Motor : DC servo-controlled motor</p> <p>Recording bias frequency : 160kHz</p> <p>Signal-to-noise ratio : With Ferri-chrome tape 64dB, 60dB (DIN) With SLH tape 61dB With standard tape 58dB</p> <p>Total harmonic distortion : 0.8% (with Ferri-chrome tape)</p> <p>Frequency response : With Ferri-chrome tape 19cm/s 20 – 32,000Hz 30 – 27,000Hz (±3dB) 30 – 27,000Hz (DIN) 9.5cm/s 20 – 23,000Hz 30 – 18,000Hz (DIN) With SLH tape 19cm/s 20 – 30,000Hz 30 – 25,000Hz (DIN)</p>	<p>With standard tape 19cm/s 20 – 25,000Hz 30 – 20,000Hz (DIN)</p> <p>Wow and flutter : 19cm/s 0.05% ±0.08% (DIN) 9.5cm/s 0.08% ±0.12% (DIN)</p> <p>Input jacks :</p> <table border="0"> <tr> <td style="padding-right: 20px;">Sensitivity</td> <td>Impedance</td> </tr> <tr> <td>Microphone (phone jack × 2)</td> <td>0.2mV (–72dB)</td> <td>Accepts low impedance microphone</td> </tr> <tr> <td>Line (phono jack × 2)</td> <td>0.06V (–22dB)</td> <td>100k ohms</td> </tr> </table> <p>Output jacks :</p> <table border="0"> <tr> <td style="padding-right: 20px;">Output level</td> <td>Load impedance</td> </tr> <tr> <td>Line (phono jack × 2)</td> <td>0.435V (–5dB)</td> <td>more than 10k ohms</td> </tr> <tr> <td>Headphone (binaural jack)</td> <td></td> <td>Accepts 8-ohm headphone</td> </tr> </table> <p>Dimensions : 333(W) × 136(H) × 296mm(D) (13¼ × 5¾ × 11¾")</p> <p>Weight : 6.8kg (15 lb)</p> <p>Supplied accessories : Battery case1 5" reel1 Shoulder strap1 Connecting cord RK-742 Head cleaning tips1 set</p> <p>Recommended optional accessories : 5" Ferri-chrome tape FeCr-5-275-BL 5" SLH tape SLH-5-275-BL Carrying case LC-30 AC power adaptor AC-26 Car battery cord DCC-129 Rechargeable battery pack BP-55 Parabolic reflector PBR-400 Stereo headphone DR-5A, DR-7, DR-9, DR-11 Plug adaptor PC-2 Electret Condenser Microphone ECM-23, ECM-270 Microphone mixer MX-510, MX-650 Head demagnetizer HE-2</p>	Sensitivity	Impedance	Microphone (phone jack × 2)	0.2mV (–72dB)	Accepts low impedance microphone	Line (phono jack × 2)	0.06V (–22dB)	100k ohms	Output level	Load impedance	Line (phono jack × 2)	0.435V (–5dB)	more than 10k ohms	Headphone (binaural jack)		Accepts 8-ohm headphone
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Design and specifications subject to change without notice.

Wide variety of accessories



Ferri-chrome tape FeCr-5-275-BL



Carrying case LC-30



Car battery cord DCC-129



Parabolic reflector PBR-400



Stereo headphone DR-7



Electret Condenser Microphone ECM-23



Electret Condenser Microphone ECM-270



Microphone mixer MX-650

Sony Corporation

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