Stereo cassette deck with automatic reverse and continuous playback/two way recording/Dolby noise reduction system with built-in calibration.
The famous Continuous-Pole/synchronous motor.

The motor of the Dual 901 is the same motor that drives Dual's finest automatic turntables. It was selected for the 901 because of its proven reliability, its unusually quiet, vibration-free operation, and its exceptional accuracy and speed constancy. This precision motor is the reason the Dual 901's wow and flutter figures are significantly lower than most other quality cassette decks.

The Continuous-Pole design, exclusive with Dual, minimizes drive shaft surges between magnetic poles. Its high starting torque brings the capstan and takeup drives up to full stable speed virtually instantly. The synchronous element then maintains absolutely constant speed, locked into line frequency. Speed is unaffected by variations in temperature, line voltage, or load.

Separate drives for capstan and takeup.

The motor provides power to the unusually large flywheel and capstans via a precision-ground square belt which filters out any momentary change in motor speed. One capstan is centered exactly on the flywheel. The other is driven via a pulley and belt. It is this design which results in the exceptionally low wow and flutter of the Dual 901.

Tape takeup receives power from a second drive belt running directly from the motor shaft so that variations in tape tension have no effect on tape speed.

Inside the Dual 901. The Dual Continuous-Pole/synchronous motor features extremely accurate, constant speed, vibration-free operation and extremely small stray magnetic field. It provides power to the flywheel and capstan through a precision-ground drive belt. Tape takeup is driven separately by a second drive belt running directly from the motor so that variations in tape tension have no effect on tape speed.