

sync box **SBX-80**

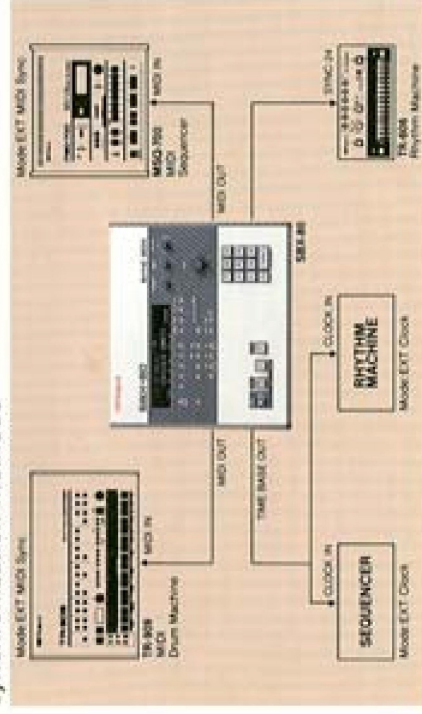


The SBX-80, an epoch-making programmable tempo controller, can even synchronize electronic instruments that employ different synchronization methods. It can read and generate SMPTE time code, the most popular time code used worldwide in professional broadcasts, recordings, and film work. The SBX-80 also generates MIDI, Sync-24, and Time Base signals. The Time Base can be selected from 1, 2, 3, 4, 12, 24, 48, 96, or 120 clock pulses per quarter note. The SBX-80 will prove essential not only in musical productions, but also in video and film productions.

For instance, if SMPTE time code is recorded on an empty track of taped music and tempo data is programmed into the SBX-80, all slave instruments will be automatically synchronized with the taped music as it is played back. The SBX-80 is also indispensable in synchronizing taped music with video pictures that must be played within a certain time, such as TV commercials.

The tempo can be controlled by the Tempo knob, numerical pads, by tapping the Tap switch, or by the click signals from an audio source. It is also possible to program the tempo data for a whole production. A large display shows all the data required, including tempo value and time. The Edit function allows the programmed data to be edited and modified at will. A Tape Interface allows programmed data to be stored on a cassette tape.

Synchronization of instruments using different synchronization methods



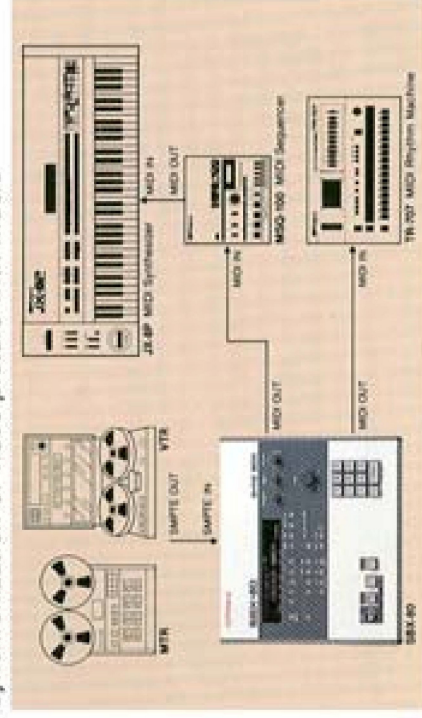
All connected instruments are controlled by the tempo data stored in the SBX-80 or by the MIDI data transmitted through the MIDI In jack of the SBX-80. The Time Base can be selected from 1, 2, 3, 4, 12, 24, 48, 96, or 120 clock pulses per quarter note.



SPECIFICATIONS

- Memory capacity: up to 3967 beats (Number of maximum memorizable measures: 991 in 4/4, 998 in 3/4; Playing time at the tempo of 120 beats per minute: Approx. 33 minutes in 4/4, Approx. 25 minutes in 3/4) • Touch response switch: Quick/Medium/Slow • Buttons: Start/Tap, Sub $\frac{1}{4}$, Stop/Cont
- Numerous pads: 0 to 9, Enter • Switches: Display Select, Set $\times$ 5, SMPTE Offset, Total Time, Beat Backward, Beat Forward, Manual, Play, Record, Count In, Time Sign, Tape, Edit, Copy/Song End, Delete, Insert/Bar Line, Repeat, SMPTE Source (EXT/INT) • Controls: Tempo (J = 20 to 250), Metronome Level, Audio In Level • Time Base select switch: 1, 2, 3, 4, 12, 24, 48, 96, or 120 clock pulses per quarter note • Remote jacks: Start, Stop/Continue • Input jacks: Audio In (Level: -20dBm, Impedance: 33k Ω), SMPTE/Load (Transfer rate: 2,400 bauds at 30 Firm, 2,000 bauds at 25 Firm; Level: 1.0 to 1.5 Vp-p) • Output jacks (Level): SMPTE/Save (1.5 Vp-p), Time Base (0 to 5V), Metronome (1 Vp-p max) • MIDI jacks: In, Out $\times$ 2 • Sync-24 jacks: Out $\times$ 2
- Dimensions: 325(W) $\times$ 107(H) $\times$ 303(D)mm (12.8" $\times$ 4.2" $\times$ 11.9") • Weight: 3.5 kg (7.7 lb) • Accessories: 2.5m MIDI cable, Connection cord

Synchronization of video picture with music



First record the SMPTE time code generated by the SBX-80 on both the VTR and MTR. Then reload into the SBX-80 the SMPTE time code stored in either the VTR or MTR. This programs the tempo. The MSQ-100 stores the performance data that in turn controls the JX-8P. When the VTR or the MTR is started, all instruments connected to the SBX-80 will be synchronized.