A scheduled language, RTSKED, has been written for executing real-time sound synthesis programs on the Crumar General Development System. The language is closely related to the 4CED language written by Abbott for the 4C sound synthesizer. The scheduled language allows for precise control of the times at which events (commands) are executed and close synchronization between information written in a score (schedule) and information generated by either the performer's gestures or by commands in the schedules which make up the score. Timing of the execution of commands in the schedules is entirely controlled by WAITF functions which terminate each line of commands and which specify when the next line will be executed. Thus, timing control is cleanly separated from command specifications. WAITF functions can be terminated by timers built into the sound synthesizer or by triggers.

The program is written in Fortran and in assembly language. It runs on a Z-80 microcomputer which is part of the Crumar system. RTSKED is sufficiently powerful to operate the Crumar either (1) as a reproduction machine which plays a score without modification by the performer, (2) as a digital organ where each note requires a separate gesture by the performer, or (3) as a sequential drum previously described by Mathews. The language has proven to be powerful and easy to use.