

## 9.1 CONSOL

CONSOL is a 1024 byte program designed to allow the Sol TERMINAL/COMPUTER to operate as a standard CRT terminal and to provide access to the essential computer capabilities of the Sol. Using CONSOL, self test and small diagnostic programs can be entered to system memory and executed. This in addition to providing verification of correct system operation helps in finding errors in case of a malfunction.

In addition, CONSOL contains standardized entry points for all normal I/O operations. These routines are common with all Sol System Software allowing each personality module in the Sol line to interface with external programs in an almost identical manner.

A cassette read routine is also resident in the CONSOL module allowing Sol Software to be loaded and run in a system with additional memory. Sol System Software as of November 1976 includes BASIC, FOCAL, a Scientific Calculator and numerous "game" packages including a 8K assembly language version of STARTREK called TREK80.

When power is applied to the Sol unit, CONSOL initializes the system RAM area, clears the screen, and enters the terminal mode.

In this mode the Sol System acts as a standard CRT terminal sending keyboard data to an output port and displaying received data on the screen. The COMMAND KEYS of the keyboard are not transmitted to the output port but are interpreted as direct internal operation keys. CURSOR MOVEMENT, HOME and CLEAR SCREEN all operate in this manner, while MODE SELECT causes an immediate change in the operation of the unit.

When the MODE key is depressed CONSOL issues a prompt character (>) and waits for a command line to be input. The Sol is now operating as a computer and is ready to accept one of the following commands:

DUMP	Dump memory locations to screen
ENTER	Enter data to memory
EXECUTE	Execute a program in external memory
BASIC	Execute a program located at address zero
TERMINAL	Return to terminal mode
TLOAD	Load program or data from cassette tape
MODE	Press MODE SELECT key to start new command line