

Using "AstroBASIC's" Built-In 2000-Baud Interface

THE AUDIO CASSETTE INTERFACE

The audio socket on the lower-right corner of your Bally BASIC cartridge is your connection port to the interface between your computer and any cassette tape recorder. This will allow you to save any program in the computer's memory on cassette tape and to input the program from tape to memory in less than 20 seconds. The following commands relate to tape storage and retrieval of Bally BASIC programs.

:PRINT

The :PRINT command causes the stored program, the screen image, the values stored in the @ () and ★ () arrays, and the values of all variables to be output to tape. This process will take between 10 and 20 seconds. As only one jack is provided on the BASIC cartridge, it is necessary for the user to manually connect the audio cable to the MIC jack of the cassette recorder. Have your recorder running in the RECORD mode, type in :PRINT and press GO. When the cursor reappears, the computer is done writing your program to tape.

The recording will consist of a 3 second leader tone, then the data block, followed by a 1/2 second trailer tone.

:INPUT

To load programs, use :INPUT. This will retrieve the program, the screen image, the arrays and variables from audio tape. It is necessary to "cue up" the audio tape on the three second leader tone and switch the cable over to the EARPHONE jack on your tape recorder before loading. A light emitting diode (LED) is provided on the lower left corner of your Bally BASIC cartridge to aid in checking the playback level of your cassette recorder. The volume should be set above the level that causes the LED to glow steadily. When the tape is cued, type :INPUT GO and press PLAY on your tape recorder. When the cursor reappears your program is loaded.

:LIST

The :LIST command has been designed to perform a verify function. It scans a digital recording and checks the sum of the bits in the recorded program against the sum of the bits in the program currently in memory. The :LIST function is to be performed just after writing your program to tape with the :PRINT command, while your program is still in the computer. This allows you to check the integrity of your recording without damaging the program. If :LIST finds an error, a question mark is printed just before the cursor when it returns. If problems arise, check the playback level of your recorder, or rewrite the program to tape if necessary.