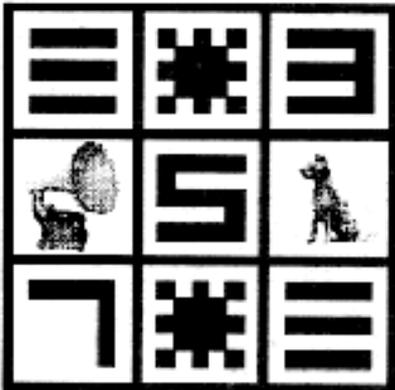


TIC-TAC-TALKER



featuring
**SPECTRUM
ANALYSIS**

by **Bill Depew**

- *Conversational Tic-Tac-Toe for your Apple II (24K)*
- *Software Speech Recognition and Voice Response*

TIC-TAC-TALKER

CASSETTE 
TTT-978

**SIDE 1
TIC-TAC
TALKER**

SOFTAPE 

**SIDE 2
SPECTRUM
ANALYSIS**

10766 Vanowen, North Hollywood, Ca. 91605

TIC-TAC-TALKER/SPECTRUM ANALYSIS

TIC-TAC.TALKER IS A CONVERSATIONAL SOFTWARE PACKAGE WHICH PITS YOU AGAINST THE COMPUTER IN A "VERBAL" GAME OF TIC-TAC-TOE. AUDIO INFORMATION IS ENTERED INTO THE APPLE II * THROUGH THE CASSETTE INPUT PORT USING YOUR CASSETTE TAPE RECORDER OR OTHER SUITABLE AMPLIFIER. YOUR CASSETTE RECORDER SHOULD BE PLACED IN THE RECORD MODE WITHOUT A CASSETTE TAPE IN PLACE. THE USE OF AN EXTERNAL MICROPHONE IS RECOMMENDED. YOU BEGIN BY TRAINING THE PROGRAM TO UNDERSTAND YOUR VOICE. JUST FOLLOW THE COMPUTER'S "VERBAL" PROMPTS AND REPEAT THE WORDS CLEARLY AND CONSISTANTLY. SOON THE COMPUTER WILL DRAW THE FULL COLOR GAME BOARD AND YOU ARE READY TO PLAY. BUT DON'T TOUCH THE KEYBOARD!! JUST "TELL" THE COMPUTER WHICH NUMBERED SQUARE YOU WISH TO OCCUPY, IT WILL LISTEN TO YOU CONFIRM YOUR MOVE IN ITS OWN VOICE AND THEN MAKE A MOVE OF ITS OWN. DON'T BE DISTRACTED BY THE COMPUTERS VOICE OR IT JUST MIGHT BEAT YOU!! THE SPECTRUM ANALYSIS PROGRAM GRAPHICALLY REPRESENTS THE PRINCIPLES INVOLVED IN SPEECH RECOGNITION. AFTER THE COMPUTER PROMPTS YOU TO SPEAK IT WILL ACCEPT AUDIO INFORMATION THROUGH THE CASSETTE PORT. IT THEN DISPLAYS ITS FREQUENCY AND DURATION IN COLOR ON THE LOW-RES SCREEN.

*APPLE II IS A REGISTERED TRADEMARK
OF APPLE COMPUTER, INC.

SOFTAPE

CONVERSATIONAL SOFTWARE

All of SOFTAPE'S Conversational Software uses the cassette input port of your Apple II Computer to enable it to recognize your voice and respond to it with a voice of its own!! Some amplification of the input signal is required. This is generally accomplished by using the amplifier contained in your cassette tape recorder. The recorder is connected to the Apple in the normal manner. Make Sure the cable connects between the cassette input jack of the Apple and either the earphone or output jack on your recorder.

In order to enter the amplifying mode on your recorder you must press both the "PLAY" button and the "RECORD" button down at the same time. (NOTE: Some machines may require only pressing a single "RECORD" button down). This can only be done if there is no cassette in the recorder, and if the "WRITE PROTECT FEELER" is pressed in at the same time. This "FEELER" is located directly opposite and to the left of the recording heads as you look down on the machine. Set your volume control at a fairly low level and the tone at about mid-range.

You are now ready to run the program. In order for the program to understand you it must be "trained" to your voice. This is done by saying each word to be recognized into the external microphone during the "training period". The program may be set up to train on each word or phrase one time Or many times. Redundancy gives you a greater probability of recognition. The Apple-lis'ner routines allow for up to 31 words.

When you train the program as prompted, it is desirable to be in as Quiet an environment as possible. Any extraneous noise will confuse the program and cause false input. This makes consistant recognition impossible. For this reason, the use of built-in condenser microphones found on most cassette players is not recommended. Optimum results can be obtained by using an external, noise-cancelling microphone (SOFTAPE #NCM-179). Using this type of microphone you can be sure that only those sounds you desire will reach the computer.

If you find that the program is prompting you for input for the next word too soon, it is possible that the spinning cassette motor is causing excessive noise. You will

notice this during the training portion of the program. Some tape recorders have a pause control which will stop the motor from turning. Turning your volume control down all the way may also help. The auto.leveling feature on some recorders may also prove to be a problem. It will amplify background noise when you are not speaking into the microphone. If these problems exist it may be necessary for you to use a compatible preamplifier instead of a tape recorder to amplify your input. When you are not talking to the computer, it should just sit there and be Quiet!

When you train and run the program, try to use a normal speaking voice and consistent vocal inflections. Each word or phrase should be entered with the same duration for best recognition. The program responds to the beginning and ending sounds of a phrase when placing it into a table. Therefore, you must "blend together" multi-syllable words so they are placed together in the same table. When the program asks for words to be trained more than once it is possible to have more than one person train the program and achieve recognition. If the words used in the program are unique in sound, recognition may be possible even if the person speaking them did not train originally. Avoid training with words which sound similar but are different in meaning. Remember, also, the Apple is multi-lingual and will understand foreign languages !!

When the program prompts you for voice input, use only those words you trained it with. These are the only words it understands. Using other words may produce inaccurate, but humorous, results!! Also, wait until the computer has stopped talking before you speak and don't get excited if it doesn't understand you the first time. It will have even more trouble understanding your excited voice which it has never heard before! If you get consistently wrong responses try training the program again.

The machine language subroutines found in all Conversational Software are copyrighted by the author and SOFTAPE. Any use of these routines for any commercial use is strictly prohibited. It is intended strictly for the private use and entertainment of the purchaser. However, if you wish to have a Conversational Software product of your own creation distributed, please contact us.