SOFTAPE

SIDE 1
APPLETALKER™

10756 Vanowen, North Hollywood, Ca. 91605

SIDE 2
DEMO

APPLETALKER™

AB-778
CASSETTE

Your Apple's Voice

by Bob Bishop

APPLETALKER™

INSTRUCTIONS

THE APPLETALKER is a program which accepts voice or audio information through the cassette input port of your Apple II+ or IIc computer, digitizes the information, and stores it in a numbered table in your computer's memory (RAM). The recorded information may then be played back to you using the Apple's on-board speaker (or external speaker for louder sound reproduction) or it may be saved to an audio cassette for later use. Audio tables or "talker tables" are created by amplifying your voice using your cassette tape recorder. Most tape recorders have built-in microphones which you may use. The use of an external microphone is recommended for improved sound quality. Before any recording can be made, put your recorder in the record mode. This is usually done without a cassette in the machine by pushing the record/play buttons down while holding the write protect "feeler" in at the same time. The "feeler" normally touches the top of a cassette when it is in the machine and senses for a punch-out. If it senses one, as it will with no cassette in place, it will try and prevent you from entering the record mode. Once you have your recorder in the record mode, connect the recorder to your computer via the earphone or monitor jack and the cassette in jack located on the back of your Apple.

By using the Appletalker subroutine package (written in assembly language) and a few lines of BASIC, you may use the "talker tables" you create to give any Apple program the power of speech without hardware costs!
APPLETALKER INSTRUCTIONS

THE APPLETALKER IS A PROGRAM WHICH ACCEPTS VOICE OR AUDIO INFORMATION THROUGH THE CASSETTE INPUT PORT OF YOUR APPLE II COMPUTER. IT DIGITALIZES THE INFORMATION AND STORES IT IN A NUMBERED TABLE IN YOUR COMPUTER’S MEMORY (RAM). THE RECORDED INFORMATION MAY THEN BE PLAYED BACK TO YOU USING THE APPLE'S ON BOARD SPEAKER (OR EXTERNAL SPEAKER FOR LOUDER SOUND REPRODUCTION) OR IT MAY BE SAVED TO AN AUDIO CASSETTE FOR LATER USE. AUDIO TABLES OR “TALKER TABLES” ARE CREATED BY AMPLIFYING YOUR VOICE USING YOUR CASSETTE TAPE RECORDER. MOST TAPE RECORDERS HAVE BUILT IN MIKES WHICH YOU MAY USE. THE USE OF AN EXTERNAL MIKE IS RECOMMENDED FOR IMPROVED SOUND QUALITY. BEFORE ANY RECORDING CAN BE MADE, PUT YOUR RECORDER IN THE RECORD MODE. THIS IS USUALLY DONE WITHOUT A CASSETTE IN THE MACHINE BY PUSHING THE RECORD/PLAY BUTTONS DOWN WHILE HOLDING THE WRITE PROTECT “FEELER” IN AT THE SAME TIME. (THE “FEELER” NORMALLY TOUCHES THE TOP OF A CASSETTE WHEN IT IS IN THE MACHINE, AND SENSES FOR A PUNCH OUT. IF IT SENSES ONE, AS IT WILL WITH NO CASSETTE IN PLACE, IT WILL TRY AND PREVENT YOU FROM ENTERING THE RECORD MODE). YOUR RECORDER SHOULD BE CONNECTED TO YOUR COMPUTER VIA THE EARPHONE OR MONITOR JACK AND THE CASSETTE IN JACK LOCATED ON THE BACK OF YOUR APPLE.

BY USING THE APPLETALKER SUBROUTINE PACKAGE (WRITTEN IN ASSEMBLY LANGUAGE) AND A FEW LINES OF BASIC, YOU MAY USE THE “TALKER TABLES” YOU CREATE TO GIVE ANY APPLE PROGRAM THE POWER OF SPEECH WITHOUT HARDWARE COSTS!
APPLETALKER SUMMARY OF COMMANDS

C - CLEAR
This clears the memory and resets the C-command. This must be the first command executed before any tables can be made.

R - RECORD
This command allows you to record one voice entry. This entry can be a word or sentence. It is numbered and stored in a "table". To start recording, hit the return key; to stop recording, hit the space bar. If a "memory full err" occurs, more entries will be accepted. A maximum of 255 table entries are allowed but you will run out of memory space before you reach this limit.

P - PLAY
Tells you how many table entries are currently in memory and allows you to play one or all of them.

L - LOAD
Loads a previously recorded "talker tape" from cassette into memory. Hit the play button on your recorder and then the "L" key on the computer. The tape will load in replacing any table currently in memory. If a "memory full err" occurs, it means the "talker table" is larger than the storage ceiling of your computer. If more memory exists, clear the table using the "c" command, reset the ceiling to maximum and reload the tape.

S - SAVE
The command creates a "talker table" on tape using your audio input. Be sure that your recorder is in the record mode and running before executing the save command.

ALL APPLETALKER COMMANDS ARE INITIATED WITHOUT THE NEED FOR A RETURN.

USING "TALKERTABLES" IN YOUR OWN PROGRAMS

1. Load the appletalker subroutine package. (Note: this package is loaded in each time you use the appletalker. You may save it separately by saving memory in hex locations 800 to 8FF from monitor. These routines are copyrighted and may not be used in programs for sale without permission of the authors and softape.

2. Set LOMEM to 200 to protect the subroutine (see example line number 9).

3. Initialize program using these values:
   0 POKE 74,0: POKE 75,9: POKE 204,0: POKE 205,9
   1 INIT-204: PLAY-205: READ-259
   2 POKE 4,0: POKE 5,PEEK(203)-1

4. Load voice table routine
   1000 POKE 60,10: POKE 61,0: POKE 62,11: POKE 63,0:
   CALL READ
   1010 IF PEEK(5)<PEEK(10)THEN 1040: IF PEEK(5)>PEEK(10)THEN 1040
   1020 POKE 60,0: POKE 61,16: POKE 62,PEEK(10): POKE 63,PEEK(12): CALL READ
   1030 RETURN
   1040 PRINT "MEM FULL ERR": RETURN

5. Play table entry routine
   2000 REM: E-TABLE ENTRY NUMBER FROM 1 TO 255
   2001 POKE 6,0: CALL PLAY

HINTS ON USING YOUR APPLETALKER

Best results are obtained when you input voice through a good microphone and a good preamplifier in a quiet room. Keep your words short and clear. Words which sound similar are not all always distinguishable. Avoid stressing "ssss" sounds as they use up more memory space.

Softape will periodically release professionally recorded "talker tapes" with a wide variety of words and sound effects for use in your basic programs.

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