

The CRICKET is a unique IIc compatible product that features natural and robotic voice, sound effects, and music capabilities combined with an on-board clock. The CRICKET reflects the appealing design and style of the IIc. Included are a built in speaker, volume control, ministereo headphone jack, and cable for easy interfacing through either of the IIc's serial ports. The CRICKET also includes four software programs designed to give the user full advantage of the CRICKET'S speech, music, clock, and sound effects features. These programs can be accessed by either a mouse or the APPLE keyboard. Hardware and software highlights include the following:

## VOICE OUTPUT

The CRICKET incorporates the TEXAS INSTRUMENTS' 5220 speech chip that STREET ELECTRONICS has used for over 3 years in its line of ECHO speech products.

The CRICKETALK software program, which comes with the CRICKET, includes 2 separate voice modes that utilize the popular ECHO speech technology. One program includes a dictionary of commonly used words in a natural female voice. The other program provides an unlimited vocabulary in a very intelligible robotic-type voice.

### Sound Effects And Music Generation

The CRICKET features 6 channels of music and sound effects, allowing numerous notes or various sound effects to be generated simultaneously. The CRICKET can create stereo music and a wide variety of sound effects.

The CRICKETSOUNDS program has a number of built-in sound effects which can be added to programs. It also provides the capability to create original sounds for unique applications. CRICKETMUSIC is a simple music generation utility, allowing music to be added to the users' programs. The CRICKET is also compatible with the MUSIC CONSTRUCTION SET<sup>™</sup> from ELECTRIC ARTS.<sup>™</sup>

## CLOCK UTILITY

The CLOCK designed into the CRICKET provides automatic dating of the user's ProDOS files. An L.E.D. warns the user of a previous power interruption. The clock also features music, sound, and voice alarm capabilities and programming tools.

CRICKETCLOCK software allows precise setting of time and date in a variety of formats, along with control of the Cricket's alarm features.

The CRICKET will be bundled with a number of other demonstration, utility, and minieducational programs. In addition, many popular educational and recreational software programs are already compatible with the CRICKET. These programs take advantage of the CRICKET'S voice, sound effects, and music, to add a new dimension to software.

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Apple is a registered trademark of Apple Computer, Inc.

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ALPHABITS Serial Interface



# ALPHABITS SERIAL INTERFACE

STREET ELECTRONICS, The original designer of the popular GRAPPLER<sup>TM</sup> parallel interface for Orange Micro, Inc., is now establishing a new direction in serial interfaces. The new ALPHABITS<sup>TM</sup> serial interface for the Apple<sup>®</sup> II, II + and IIe computers, is the first interface product to emulate the new Apple IIc's serial ports. Included in the unique package is the ZOOM GRAFIX<sup>TM</sup> hi-res graphics screen printing program with support for a wide range of printers including Apple's Imagewriter<sup>TM</sup> The ALPHABITS includes a IIc-compatible connector for use with these printers as well as other IIc serial peripherals.

ALPHABITS serial interface highlights include:

- Emulates IIc serial ports
- Compatible with IIc software
- Includes IIc-compatible connector
- Easy interfacing with IIc peripherals
- Bundled with ZOOM GRAFIX program
- Interfaces with all other serial devices (modem, STREET ELECTRONIC's CRICKET, etc.)
- Plug compatible with APPLE II, II + , and IIe
- Low cost
- Includes full tutorial-style documentation
- Mouse-Compatible screen dump capability
- Available through a world-wide network of micro computer dealers and distributors
- Street Electronics Corporation 1140 Mark Avenue Carpinteria, California 93013 (805) 684-4593

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All ECHOs contain a text-to-speech program. With the ECHO GP and PC it runs automatically, with the ECHOI[ it is on diskette. This text-to-speech program gives your computer an unlimited vocabulary. The program contains an algorithm with over 400 language and pronunciation rules. These rules analyze the text and convert it to basic word sounds (phonemes). Adjustments are made for the many irregularities in the English language. These sounds are converted to the linear predictive coding (LPC) parameters needed to control the Texas Instrument's speech chip.

The speech chip generates sounds which are similar to the human voice and passes them through a digital filter. This filter mathematically models the human vocal tract. By changing the LPC parameters for this filter, different words are produced. (This process is similar to changing the shape of the mouth and tongue to make different sounds.) The final sounds are converted from digital to analog signals, then are amplified and sent out through the speaker. The result is remarkably intelligible computer synthesized speech.



Using simple control character commands, you control the rate of speech, (regular or fast), output mode (spoken, printed to the screen, or both), how your text is read to you (word by word; letter by letter; or with all, most, or some punctuation spoken), the pitch (rising, falling, or at any of 63 selectable levels), and volume (15 levels available in software or the volume knob). In addition to the modes mentioned above, the ECHOs also have a mode which will speak a word consisting of only capital letters as letters, not as a word. This is especially useful with groups of letters such as IBM.

The ECHOs are very simple, easy-to-use peripherals that will give your computer a whole new personality. Their overall quality and pricing cannot be found elsewhere.

The ECHO] retails for \$129.95 the ECHO GP and the ECHO-PC sell for \$249.95.

#### ECHO ][

The ECHO<sup>II</sup> package consists of a small circuit board which can be plugged into any of slots 1 through 7 in the Apple, and an 8 ohm speaker that can be secured to the inside of the Apple or used externally. Also included in the package is a diskette with demonstration and utility programs, plus a comprehensive, tutorial-style manual. Besides this package, all the user needs is a 48K Apple II (or //e) and disk drive. In seconds your Apple is ready to start talking.

Street Electronics recently added a very unique capability to its ECHOJI. In addition to the unlimited vocabulary textto-speech system, over 700 more natural-sounding words are now available for all ECHOJIs. These natural-sounding words have been encoded in a female voice on Street's in-house speech development system and are supplied on a diskette. This additional program is optional and sells for \$29.95.

The ECHOII uses only 8K of the Apple's memory while in the text-to-speech mode. This software can also be loaded into a RAM card. The fixed vocabulary requires approximately 125 bytes per word, with each program using only the words it needs. Like the text-to-speech software, the fixed vocabulary can be loaded into a RAM card.

Two features are available with the ECHOII to aid blind or sight-impaired users. The Screen Review mode allows the user to set an "audio cursor" any place on the screen and then review any portion of the screen through simple commands. The actual cursor remains at its previous location. Another enhancement for blind users is our Talking Terminal program. With this program, your ECHO II, a serial interface card, and your Apple computer system, you can simulate a Televideo 910 terminal. This gives the user the benefit of the blind features while working with a larger computer system.

There are also new language support diskettes available for using the ECHOII with Pascal and graForth programming languages.

### ECHO GP & PC

The ECHO General Purpose (GP) and the ECHO-PC units are complete stand-alone speech systhesizers, each with an on-board 6511 microprocessor, their own built-in speaker, text-to-speech firmware including phoneme system, a wallmount power supply, serial interface, and tutorial manual. They will interface with virtually any computer; all you need is a serial port. An interface cable is provided.

Our text-to-speech firmware (includes phoneme system) uses none of your computer's memory. Also, the ECHOs' on-board 6511 microprocessor controls the speech process, freeing your computer for other simultaneous activity.

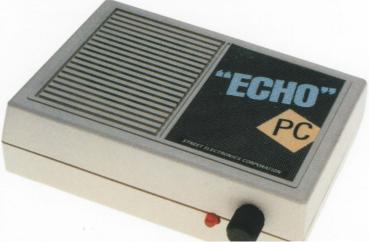
Another useful feature of this unit is the 1,700+ character buffer which allows your computer to store speech that is coming in faster than it can speak.

No accessories are necessary to run these ECHOs in different programming languages.

When you choose to encode your own words using phonemes (word sounds), you can access 24 vowels (with three inflection levels each) and 24 consonants. We also include a reference card with the phoneme codes and a clear example of the sound.

The ECHO-PC comes with a diskette including a few demonstration programs and a sample of the natural sounding fixed word capability. (A dictionary of 700 natural sounding words in a female voice is available as an option for \$29.95.)





Street Electronics was among the very first companies involved in designing and manufacturing voice-output devices for microcomputers. The ECHO speech products have gained a solid reputation for their intelligibility, versatility, and affordable price. All of the ECHO products employ state-of-the-art technology combined with the ultimate in user friendliness. There are three ECHO speech synthesizers available: the ECHO][ for the Apple, the ECHO GP for virtually any microcomputer, and the ECHO-PC for the IBM-PC. All ECHOs are capable of speaking in four different voice modes which range from a robotic machine voice in the text-tospeech and phoneme modes to a natural voice in the fixed word dictionary and custom encoded mode. (The fixed word dictionary is presently available for the ECHO][ for the Apple and the ECHO-PC for the IBM-PC.) The custom voice is provided through a variety of popular software programs. Check with your dealer or call us for details.