



# Letters

## STATUS OF PAY TV

Shel Kagan's "Pay TV Status Report" (December 1974) was well researched and well written. It represents a most impressive summary of the state of the art.

Incidentally, your readers might be interested to know that the Federal Communications Commission has adopted new regulations that will continue to hold back the full potential of pay TV. The FCC has not listened to the CATV industry's arguments for more than two years. Apparently, the only step remaining is for the public to express its opinions about marketplace development of pay TV to the FCC Commissioners and to the members of Congress.

GARY H. ARLEN

Public Information Manager  
National Cable Television Association  
Washington, D.C.

## NOD OF APPROVAL

Congratulations on the content of "Blazing Speakers" ("Stereo Scene," November 1974). The article is a clear, no-nonsense treatment of a subject that has been poorly handled in the past and about which serious misunderstandings have existed for a long time.

JIM LONG

Marketing Manager  
Electro-Voice, Inc.  
Buchanan, Mich.

## MINICOMPUTER MAKES MAXISPLASH

As a result of the Altair 8800 minicomputer article in the January issue, I have decided to subscribe to PE. Now, I'm looking forward to an article on building a CRT terminal and would like to see another article about using a cassette deck with the mini for additional memory.

DAVID WILSON

Highland Park, Mich.

The world's largest-selling electronics magazine has outdone even itself this time with simultaneously publishing construction plans for both the Altair 8800 minicomputer and "An Under-\$90 Scientific Calculator" (January 1975).

LOUIS H. LENERT

Educational Technologies  
Reynoldsburg, Ohio

Congratulations on being the first magazine to present a truly advanced minicomputer construction project. However, I must point out that the text contains several errors:

First, the price of the complete Altair 8800 will be about \$760 when one adds the needed Intel 8080 IC to the basic \$400 price. Secondly, the number of sub-routines available could not possibly be 65,000 when there are only 65k words of memory. Third, a minicomputer cannot handle more than one program at a time. If a second program is to be executed, the current program must be interrupted. Fourth, the Intel 8008 chip is not "designed for use as a buffer." Finally, for anything more than very simple programs, an assembler is required for programming the computer.

In spite of the errors cited, I am very pleased that POPULAR ELECTRONICS has chosen a truly state-of-the-art minicomputer for a construction article.

ROBERT BROWN  
Livonia, Mich.

*The cost of the entire kit (with 256 words) included the Intel 8080 IC. When the article was published, this price was \$397. It is now \$495 (as of March 1, 1975). (The supplier informs us that the increase was necessitated by production-model improvements such as increased power supply, synchronization, and edge-connection*

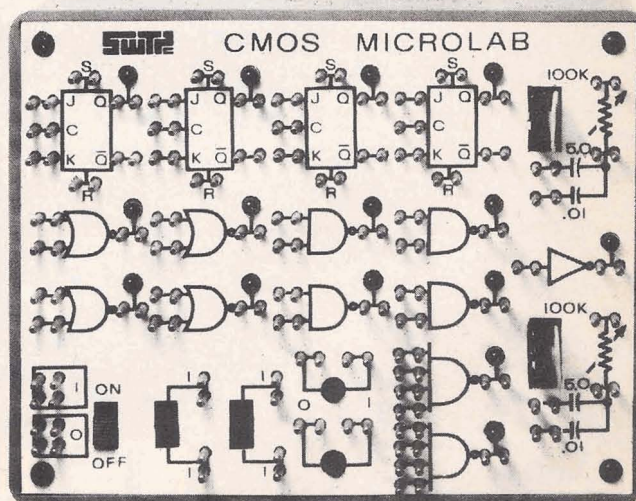
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boards. These improvements were included at the old price until March 1.) A basic processor without memory is also available for \$439.

The maximum number of two-word sub-routines is 32k. But subroutine nesting is almost unlimited; and is certainly more than sufficient, since how many times are you going to want to do more than a 10-level program? Although the computer cannot work two programs simultaneously (as you said), it works so fast that it appears to be doing so. The 8008 is described as a "communication processor," which is a fancy name for "buffer." It has, of course, been used as a CPU; but it is not a powerful one, exhibiting slow speed and interrupt handling problems, among other shortcomings. Finally, part two of the article (in the February 1975 issue) explained the need for an assembler during programming.

The Altair 8800 computer project has really pleased me. It certainly beats some of the competition. But a minicomputer with only 256 steps is only a toy with lots of potential. How much will each memory block of 4k words cost?

EDWARD LORING TOTTLE  
Baltimore, Md.

Each kit of 4k memory costs \$264. Before March 1, the price was \$198.

#### THE CALCULATOR EXPLOSION

The "Under-\$90 Scientific Calculator" in the January 1975 issue is outdated before anyone can even build it. Right now, assembled calculators with identical capability are being sold for \$90. Your construction articles should be ahead of the pack if they are to be of any use to your readers. The timeliness of the Altair 8800 minicomputer is more like what I mean.

S. LIEBERMAN  
Los Angeles, Calif.

The material that appears in POPULAR ELECTRONICS must be planned several months in advance of its publication date. Ordinarily, the timeliness of our articles goes unaffected as a result of our keeping on top of the latest developments in electronics. On rare occasions, events occur so quickly (as they have in the calculator field in the last few months) that we are caught unawares. This is what happened with our calculator article. However, even when compared to competitively priced assembled calculators, ours is still a good buy, especially for those people who like to build their own electronic devices.

#### DIRECT CONVERSION

Many thanks for publishing construction plans for "A Direct-Conversion AM/SSB Project" (November 1974). I should have had a receiver like this a number of years ago when teaching amateur radio novices.

DAVID WELTY  
Monterey, Calif.

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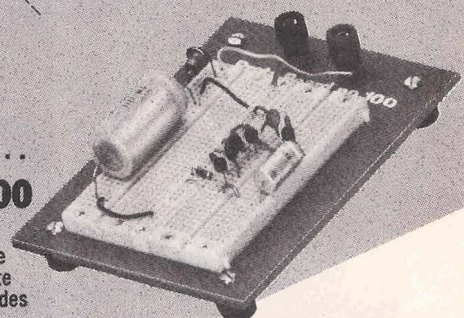
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