

"YOUR LIFE WILL NEVER BE THE SAME COMPUTER CLUB"

Vol. 1. No. 2.

You are out there! We know. We know from the response we have received from our invitation to you to write to us.

Write you have (Right on readers. Write on!)

You've offered suggestions and asked questions.

Your suggestions will all receive consideration. (After all, we consider this Newsletter your Newsletter.) And we are going to try to answer all your questions individually.

Some questions, however, may be of general interest. So, we will answer them in the Newsletter, as well as individually.

When we do, we would like to use the name of the individual from whom the question came. (Same thing goes for suggestions or other material you might send along.) Therefore, your editors are going to make it a policy to use names of individuals in the Newsletter, unless you tell us in your correspondence, you'd prefer not to have your name used.

We've made a discovery!

Through your responses to The Newsletter, we have found a good many of you are quite sophisticated in the way you are using your Imagination Machines. And that's great! (The Imagination Machine is a sophisticated personal computer.) We are, therefore, going to include more technical information in The Newsletter from now on.

In addition we will also spotlight one or two of our software programs in each issue. We also hope to have a new Newsletter in the mail to you every six to eight weeks.

YOU ASKED FOR IT.

Your editors have had a number of requests for more information about routines in the BASIC Interpreter ROMS. We are making the source listings of the BASIC ROMS available to you.

Included are the source code, with comments, and the assembled listings.

They are not for the non-technical person, however. To understand them you should have good experience with machine language programming, as well as a familiarity with MC6800 codes.

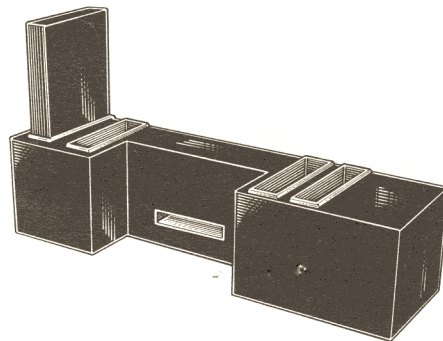
The routines are available in two sections.

1. LBL-1. I/O Routines — all keyboard, RS 232, and tape routines.

2. LBL-2. Basic Interpreter, Math Package, etc.

You may order either or both. LBL-1 is \$14.95; LBL-2 is \$19.95, when ordered separately. If you order both, the cost is \$29.95. You save \$4.95. For convenience, use the order form on the back of this Newsletter.

Now, here's exciting news.



The Expansion Box is available.

In the last Newsletter, we announced design studies had been completed on The Expansion Box, (we called it The Building Block then). The Expansion Box is the device that will enable you to expand your Imagination Machine. Add memory, a floppy disk drive, a printer or modem.

It is available now from your Imagination Machine dealer.

The Imagination Machine

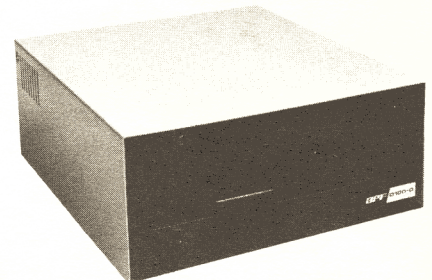
APF electronics inc.
444 Madison Avenue New York, NY 10022

The Expansion Box (Model BB-1) has four ports for peripheral drive cartridges. It comes with an SI232 serial interface cartridge for connection to most RS 232 serial devices. (Eight selectable baud rates, 110 to 9600.) You may also have the expansion box equipped with a floppy disk interface (Model BB-2)

With the Expansion Box and the RS-232 cartridge you can also add the newly available R8-K memory cartridge to give your system a total of 17K RAM.

That ought to set you up to do just about anything you'd want to on your Imagination Machine.

Our Mini-Floppy Disk Drive is available, too.



You can now add the APF Mini-Floppy drive to your Imagination Machine. The APF Mini-Floppy Drive (Item D-100) provides 72,000 bytes of additional storage capacity. And of course, greatly increased speed for loading and accessing data. Specifications include:

- * 72,000 bytes per single-sided diskette.
- * Standard SA 400 BUS compatible.
- * Standard IBM formatting of 256 bytes per-sector.
- * Built-in power supply.
- * Handles direct or sequential access data files.
- * Save and load programs.
- * Program chaining capabilities.
- * Disk commands and functions built into basic interpreter cartridges of IM 1.
- * Cable supplied.

If you do not find the Expansion Box or our Mini-Floppy disk drive, at

your Imagination Machine dealer, you may order either of them by using the form on the last page of this Newsletter.

The Expansion Box (#BB-1) with RS 232 cartridge is \$199.95.

The Expansion Box (#BB-2) with floppy disk interface is \$199.95.

Our Mini-Floppy Disk Drive (D-100) is priced at \$399.95.

IT'S COMING ALONG

We have started to implement an MC6800 Assembler/Editor. It will be a disk-based program. Our plans are to have the MC6800 Assembler/Editor to you toward the end of August. In the meantime, if you have any suggestions to make about such a program, please send us your thoughts.

Bugs and Glitches.

This glitch is a good one. All our manuals and information on the minimum dimension of arrays has been wrong. (O-o-p-s 'n sorry!)

We have stated 99 is the maximum. It is really 999 for single or dual dimension variables (strings still remain as a maximum length of 100 characters).

DIM A(200), B(150, 50), C(1,800) are legitimate

DIM C\$(99) is still maximum but DIM C\$(320, 10) is OK

There are bugs with the TAB Function when dealing with strings. In order to use the TAB Function with strings, all character positions of the string must contain a *printable* character. If not, the position for a TAB will not be interpreted correctly.

EX:
10 DIM A \$(3, 4)
20 For I = 0 TO 3:
A \$(I, 0) = " _____":
Rem set all places of A\$ to have a printable value such as space.
30 INPUT A\$(I,0): NEXT I
40 FOR J = 0 TO 3
50 PRINT TAB (0*8); A\$(J,0);: NEXT J

X ↑ Y Function — It has been found that there is a bug in the X ↑ Y Function. Erroneous answers occur for a number of problems (particularly if there are numbers to the right of the decimal point in X). An arithmetic overflow can occur. We are working on several types of fixes and will publish them when found. Presently, the easiest thing to do is not use X ↑ Y, but use a FOR-NEXT Loop to multiply out (i.e.: $2 \uparrow 3 = (2 * 2 * 2)$).

10 A = 1

20 FOR J = 1 TO Y: A = A * X: NEXT J
30 PRINT A

What's available in software.

Cartridges for both the MP 1000 and The Imagination Machine, which are available now. \$19.95 each.

MG1001 Catena

MG1003 Hangman/Tic Tac Toe/Doodle

MG1004 Bowling/Micromatch

MG1005 Brickdown/Shooting Gallery

MG1006 Baseball

MG1007 Blackjack

MG1008 Backgammon

MG1009 Casino 1

MG1010 UFO/Sea Monster/Break-it-down Rebuild/Shoot

MG1011 Pinball/Dungeon Hunt/Blockout

MG1012 Boxing

The following cassette programs are available for use with The Imagination Machine only.

Entertainment:

MA-450 Adventure Castles

This thinking game of action and suspense challenges you to elude creatures and demons. Floor by floor, Blinking Bats and Ork Monsters plot your demise. Watch out — as you get smarter, so do they. \$29.95

MA-475 Billboards/Message Center

Put your name in lights. Design a clever sign that flashes. Leave a musical message. Have fun expressing your creative thoughts with color, sound and letters. \$19.95

Education

MA-125 Music Composer/Player Piano

Record. Compose. Just listen. It's a new dimension in sound played by you and the computer. Start now. Make your own kind of music. \$19.95

MA-150 Typing Tutor

Learn typing at your own speed from a totally unique program the computer designs and changes to suit your ability. Your challenge becomes fun to master. \$29.95

MA-200 Math Tutor

Reach your limits in arithmetic. At any age or level, each user's program is unique — based on his ability. Better than a private tutor and a lot more fun! \$29.95

MA-225 Perception I

Two players at any level compete equally in a learning game that

helps them recognize shapes, numbers and letters while having a great time. \$19.95

MA-325 Artist and Easel

The computer is your paint brush. Your palette. Your pen. Draw. Doodle. Create. Store your favorites to admire or improve later. Let your imagination run wild. \$19.95

MA-375 The Word Factory

A spelling game that keeps interest up. You might recognize the picture on the screen. But, can you catch the flying letters to spell out what you see? \$19.95

MA-400 Spelling Duel

Challenging and educational, this combination spelling and crossword game helps reinforce player's English skills while it entertains. \$19.95

MA-525 Computer Lab

Takes you inside the "black box." Shows you how a computer does what it does. And will teach you the basics of assembly language, the language computers understand. \$29.95

MA-550 Jumbled Up Things

Create words from jumbled letters, against the clock! Try your memory, really try it, recalling numbers. Then just try to recreate a picture that's right in front of you. \$29.95

Personal and Home Management

MA-175 Checkbook/Budget Manager

Need a faster, easier way to balance your checkbook? Budget money? Keep tax records? You've just found what you need. \$29.95

MA-250 Space, Size and Surface Guide

Whether it's gallons of paint or pounds of grass seed, now you can accurately estimate amounts needed, do money-saving cost comparisons of products too. \$29.95

MA-275 Personal Business Machine

Calculate your financial status easily for up-to-the-minute accuracy. Compute loan amortization, interest and principal payments, interest rates, etc. \$29.95

MA-300 Budget Manager II

Break out detailed expenditures (by day, by week, by purchase, etc.) in thirteen different categories. Food,

medical, automotive, travel, plus nine more. Call up summary reports, too \$19.95

MA-350 Bar Charts

One colorful bar chart is good. But, compared to what? Here's the way to have bar charts displayed side-by-side. Year-to-year, category-by-category comparisons are easy. \$19.95

MA-425 Electronic Files

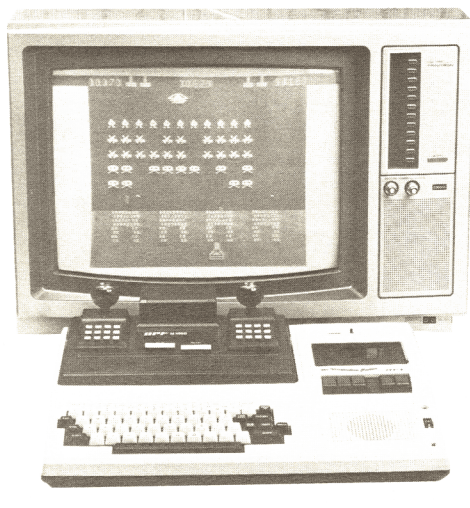
Unpack your drawers! The ones that are crowded with address lists and lists of other lists. Start keeping orderly, electronic track of things. All that stuff that's alphabet soup now. \$29.95

MA-500 BASIC Tutor

Learn to talk to your Imagination Machine in BASIC, the language computers understand. It's so much easier to do it this way, so much easier than poring over weighty manuals. BASIC Tutor will teach you at your own speed. And while you're learning BASIC you will be getting valuable "hands-on" learning experience at the same time. In no time you will be writing your own computer programs and discovering just how smart your Imagination Machine is . . . just how smart you are, too \$49.95

The cartridges and cassette programs listed above should be available at your Imagination Machine dealer. If he should be out of stock, and doesn't have the item you wish on order, you may obtain it by using the Order Form in this Newsletter. To order our Documentation materials, use the Newsletter Order Form.

Coming August 1.
SPACE DESTROYERS™
An inter-galactic battle that will knock your stars out!



SPOTLIGHT ON SOFTWARE



Space, Size and Surface Guide. (Item MA-250) This Imagination Machine cassette is for everyone who has ever had to estimate the number of gallons of paint needed to paint a room, the amount of wall paper needed to do a hallway with doors in it, OR tried to figure out how many pounds of seed to buy to seed an 87' x 63' lawn.

The program asks you pertinent questions relating to the space/size problem you're trying to solve. And it solves the problem in seconds!

Using the Space, Size and Surface Guide program you can estimate insulation requirements, carpeting needs, the amount of varnish for a floor, the number of tiles for a ceiling, the amount of paneling for walls, etc. The program also figures costs involved in your project, so you can make comparisons between ways of doing the job. Wallpaper vs. paneling, for instance.

Pinball/Dungeon Hunt/Blockout. (Item MG-1011) Pinball, Pinball Parlor style, seems to go on and on. From one generation to another. But, no game has been quite like the Pinball game in this program. Actually it's three games in one. Progressively harder games. In each game you get five balls. Score 20,000 points and get another ball. But, 20,000 is not easy to come by. Most players start around 2,000. Let us know how fast you break the barrier. (And, better not start a game before dinner. Dinner tends to get cold when you're hot.)

The Dungeon Hunt is a search for "Dungeons" hidden below numbered squares. And it's not easy.

The third program, Blockout, has three increasingly harder versions. You try to block out as much of the screen as you can, without bumping into your opponent ("Watch it fatso!") or recrossing your own steps. (Ever tried running on tiptoes?)

We'll "Spotlight" other programs in up-coming issues of The Newsletter. But, for practicality or fun these two are hard to beat.

The following Documentation is now available for Imagination Machine Programs.
L-TRM Technical Reference Manual. No charge.

L-LRM Languages Reference Manual. No charge.
LBL-1 Listings, I/O Routines. \$14.95
LBL-2 Listings, BASIC Routines. \$14.95
LBL-A LBL-1 & LBL-2 together. \$29.95

ORDER BLANK

APFelectronics inc. 444 Madison Avenue New York, NY 10022

Call Toll Free 1-800-223-1264

Please send me the following for my Imagination Machine:

Item #	Name of Item	Price
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

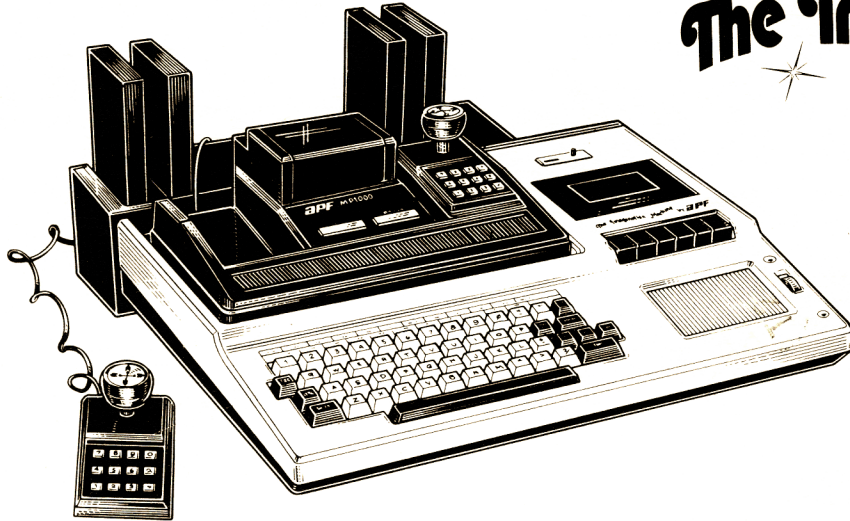
I have enclosed a Check, Money Order for \$ _____ Please charge my VISA, Total

Account # _____ Expiration Date _____

Master Charge

Name _____ Address _____

City _____ State _____ Zip _____ Signature _____



The Imagination Machine

**"YOUR
LIFE WILL
NEVER
BE THE
SAME."**



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