APPLE - BUG

The Newsletter of APPLE Q: the Brisbane Users' Group

Post Office Box 721 - South Brisbane - Qld. 4101

[AUGUST 1987]

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&
(Membership Renewal Form)

NEXT MEETING: 16th August 1987

<<< CREDITS >>>

Tony Truscott > He typed it all in
Graham Black > He typed some too
The Members -> For their contributions
ZARDAX II -> Word Processing
EPSON LQ-1500 -> Typesetting
The Hooper Centre > Printing & Distribution
The APPLE Computer -> The reason for it all

[Executive Committee]

Terry Sweetser	President	Ph.(07) 203 4210
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Eric Conolly	- Treasurer	Ph.(07) 261-1860
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Richard Egglesfield	- Hardcopy Librarian	Ph.(07) 349 8888
Bob Godbehere	- Software Librarian	Ph.(07) 808-3892

[Bulletin Board System (BBS)]

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    Apple-Q BBS : online 24 hrs
      Telephone : (07) 284-6145  (DATA)
                : (07) 883 1525  (VOICE)
     Baud Rates : 300, 1200/75, 1200 and 2400 (CCITT and BELL)
     Data Specs : 7 or 8 Data bits  1 Stop bit  No Parity (Full Duplex)
         Sysops : Graham Black   - ph.883 1525
                & Vince Crosdale - ph.351 3090

  BBS equipment : Apple //e 128k
                : 1 x 800k 3.5" drive
                : 2 x 1 meg. Ram Cards
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Calls to the system : 5387
Registered Users   : 284 (as of midnight 2nd August)

SYSOP stands for: SYStem OPerator
  BBS stands for: Bulletin Board System

[What's When]

at the Hooper Education Centre - Kuran Street -- Wavell Heights

Sunday 16th August 1987	Monday 17th August 1987
Open Day	Committee Meeting
Hours: 9.00.am. till 4.30.pm.	Starts: 6.30.pm.
Sunday 20 September 1987	Monday 21st September 1987
Open Day	Committee Meeting
Hours: 9.00.am. till 4.30.pm.	Starts: 6.30.pm.

[Membership Fees]

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        Joining Fee: $10          Adults/Family: $20
  Students/Pensioners: $12   Corporate Membership: $50
Associate Membership: $10 Pro-rata till MAY 88 (BBS users only)
(Students under 21 years  Pensioners on production of Pensioner Card)
         ( at the discretion of the Executive Committee )
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[Editor's Notes]

by Tony Truscott

Please keep those contributions coming in as the committee have run out of
things to say, as you will notice if you keep reading. Actually we have had a
good response from our members in this regard which makes my life a lot
easier. We have an interesting article on copying software this month and we
have finally dreamt up a price list for the trading table.

[Secretary's Notes]

by Vince Crosdale

Cancelled due to lack of correspondence.

   So until next month, Good Computing.

[SOFTWARE COPYING]

**Permission was given by the Australian Information Industry Association
(AIIA) to reproduce this article.**

STOP COPYING. Either Way It's Wrong
People who would never walk into a store and shoplift a software product
think nothing of making several copies of the same software. The results are
the same. The act is just as wrong.
When it comes to unauthorized duplication of software, many people do not
realize the costly impact on the software developer and the customer
community. The relationship between customer and developer in a software
transaction is one of mutual trust. The customer trusts that the developer
has produced a product that will deliver the desired result, performs
according to specifications, and is properly documented and supported. The
developer trusts that the customer will make use of only those copies for
which he has purchased a licence, even though making additional, unauthorized
copies is relatively easy. Unauthorized duplication and use of software
violates Australia's copyright law, and unfairly deprives software developers
of revenue they are entitled to receive for their work.
Software developers find that hundreds of illegal copies have been made by
customers who either innocently believe they are doing nothing wrong, or
simply choose to ignore the law. This cannot continue if the customer is to
expect better documentation, customer support, upgraded software and new
products.

The Problem is Growing
Australia is increasingly dependent on software. Major organizations are
discovering that the right software can mean increased productivity and
higher profits. Many dollars are invested annually in software produced by
independent companies, and these software developers, in turn, reinvest in
new product development and user support. Unauthorized users place a
substantial burden on the customer support system to the detriment of
legitimate users.
As more software is reproduced unlawfully, software developers are compelled

to take action to protect their rights. Most of these unauthorized users who have been caught have settled out of court to avoid embarrassment and unfavorable publicity.
Unfortunately, the developer cannot hope to recapture lost revenues.

The Law is Clear
Copying computer software without authorization is a breach of Australia's copyright law.
The money paid for a software product represents a licence fee for the use of one copy. It does not represent an authorization to copy.
You could face severe penalties if you make illegal copies of software:
* $500 for each illegal copy as a first offence;
* 6 months in prison for subsequent offences;
* total penalties as high as $50,000 for individuals;
* total penalties of up to $250,000 for bodies corporate.

Myths and Facts of Software
Let's start by dispelling some myths with a few facts.
First, software developers do not condone unauthorized copying in order to gain market penetration.
Second, the price of software does not make unauthorized copying justifiable. The cost of a software product to a consumer represents only a small fraction of the publisher's development and marketing costs.
Third, although the cost of illegal copying is borne initially by the software developer, it is paid for ultimately by legitimate users.
Fourth, rationalization for the software copying does not make it right or legal. Some people say,"the product is too expensive". The price set by the developer and retailer does not give someone a licence for the theft. Also, software pricing is value based. Most software customers find that they pay only cents per hour for the use of a valuable information processing tool.

STOP COPYING
Research and development for a single software product costs thousands of man-hours and millions of dollars. The price you pay for software includes only a fraction of the development, marketing and support costs, plus a reasonable return on the investment.
When illegal copies are produced, cheating the developer of revenues, the software company is faced with having to charge legitimate users higher prices. This is simply not acceptable to honest customers or the industry.

What it Means to You
It's obvious that legitimate software users are paying for theft along with software developers.
It's obvious, too, that no one is going to put up with it for long.
New and better software is important to the growth, productivity and profitability of your organization. The wide variety of software applications available allows you to explore more options, have more complete and timely information for decision-making, and help to ensure an improvement in the quality of the industry's products and services. New software won't be financed unless its investors feel secure in receiving a reasonable return on investment. As a software user, you have the responsibility to live up to your agreement with the developer.

What We're Doing About It
Coordinated by a Software Taskforce, the Australian Information Industry Association (AIIA) has established a public information program on the issue

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of software copying.

The industry simply cannot allow anyone to take its assets with impunity. The software industry believes that most software users will recognize the problem when faced with the facts, and act responsibly and ethically. Those individuals and organizations that choose to ignore the law and their obligations by reproducing and using unauthorized software copies will be prosecuted.

This brochure is part of an extensive awareness campaign designed to bring the issue to the public's attention.

AIIA is working with the Government to strengthen copyright protection of software, and encourage serious law enforcement.

Is Someone Exposing Your Organization?

We are aware that most people do not encourage software copying. We also believe that most people confronted with the consequences of this crime would stop. AIIA is encouraging all organizations that have an investment in software to conduct an internal organization audit to ensure that softlifting and piracy are not occurring. No one wants costly or embarrassing legal action.

We recommend and ask for your support in informing people in your organization that receiving or being a party in copying software, in violation of the licence agreement, is illegal.

In addition, we are asking organizations to establish a written policy statement on software use, and provide it to all employees with access to computer software. Each employee should be asked to sign the policy statement to indicate he or she is aware of the policy.

Where to Get More Information

AIIA represents over 100 suppliers of computer hardware, software and telecommunications equipment and services.

For further information or questions on software protection, contact AIIA, PO Box E434, Queen Victoria Terrace, ACT 2600. Or Phone (062) 82 4700.

[Software Library]

by Bob Godbehere

During the Open-Day, members took advantage of the software library, and over 200 Public Domain disks were copied for members. Unfortunately I gave the original disk #91 (Business 1 & 2) to one of the members, instead of the copy. My own boot disk was also taken by mistake and a blank one left in its place. During the last three Open-days, disk #57 (Utilities for easier programing 3 & 4) has gone missing. I would very much like to get them back, so please check your disks.

As most members are aware, we also obtained recently, 20 public domain disks. These are modern disks, 85,86,87 vintage and are worth looking at. Copies can be obtained at the next open day. Total programs now exceeds 9896 which includes a few duplicates.

Freeware, Home is where the Apple is, Apple //e business applications, and Appleworks Demo (2 disks), are five recently obtained public domain disks.

I.A.C.Volumes:

The files are divided into sections, and the files in each section are required for the particular applications. The Prefix before each file name represents the file type. i.e. B=Binary T=Text A=Applesoft I=Integer. Each

section is seperated by a string of 's and each volume is seperated by a string of 's.

Volume # 001   Disk 1 : FREE SECTORS   182 (45.5K)

I HELLO   I IAC 3.2 DISK
B NIFFUM 3.3 TO 3.2   I DISC SPEED INFO
I DISC SPEED TEST   B DSPEED.OBJ
I APPLETEST   I CONVENTIONS
I TARGET SHOOT   A HGR DEMO!
A GRANDAPPLE   I FLAG
A LITTLE SPIDER   A SHUFFLE
I AIR FORCE BOMBER   I NEW FLY KILLER
I DEATH STAR   A AM SCH FOR PRINTER
A APPLESOFT LINE WRITER   T TEXT & HOME COMMANDS.
T DOS COMMAND STRINGS.   T WINDOW PARAMETER LOCATIONS.
T CLEAR SCREEN CALL LOCATIONS.   T READ & SET KBD. LOCATIONS.
T CURSOR POSITION LOCATIONS.   T SCREEN SELECT LOCATIONS.
T SPEAKER & PADDLE LOCATIONS.   T ERROR HANDLE RTN./CALL768.
T ERROR HANDLE RTN./CALL945.   T APPLESOFT POINTER FUNCTIONS
T DELETE REM

Volume # 002 - Disk 1 : FREE SECTORS   191 (47.75K)

A IAC 3.3 DISK   B INTBASIC
B FPBASIC   I APPLESOFT
B LHS RECST VTOC   B LHS DISK MAP
B LHS CATALOG   B LHS COPY
B FRE(X)   A DISK SORT VER 3.3
B FIX SECTORS   A GEN LEDGER
T G/L DATA   A GEN LEDGER ACCOUNT#
A PRINT G/L   A LIBRARY LIST
I LIBRARY UPDATE   I F

Volume # 009   Disk 1 : FREE SECTORS   94 (23.5K)

A IAC   I HELLO1
A CALCULATOR   A REACTANCE CALCULATIONS
A TRANSISTOR PARAMETERS   A SIN PLOT
A METRICS AREA   A METRICS LENGTH
A METRIC VOLUME   A METRICS KITCHEN
A METRICS TEMPERATURE WEIGHT   A PERMUTATIONS COMBINATION
A BINOMIAL DISTRIBUTION   A PRIME FACTORS OF INTEGERS
A PLOT   A FAST FOURIER TRANSFORM
A TOTAL   A LOOP ANTENNA
A XLINE IMPEDANCE   I NUMBER BASE CONVERTER
I HEX-DEC CONVERTER   I CALC PI TO 1000 DIGITS
I LONG DIVISION   I DIVISION
I MULTIPLY   I MATH PRACTICE
A EXTERIOR BALLISTICS   A HARMONIC ANALYSIS
A QUADRATIC SURFACE   A HEX CONV
A NOTCH FILTER   A GREAT CIRCLE

Volume # 010   Disk 1 : FREE SECTORS   279 (69.75K)

A IAC	A DA BIN ICH ...
B N.BIN	A VASARELY
A RANDOM	A ORNATO 2
A GABY	A KRISTALLE
A NEON	A STAR
A SHAKALIN	A QUARRY
A ALIEN HEART	A PULSATOR
A COLLISIONS	A ONE LINE
A QQQQQ	A LACE
B BILD1	I SOFTWARE NOTE

Volume # 011   Disk 1 : FREE SECTORS   91 (22.75K)

A APPLE TUTORIAL	A MENUMENU
A STRTSTRT	A HELPHELP
A PT.1PT.1	A PT.2PT.2
A QREFQREF	

Volume # 012 - Disk 1 : FREE SECTORS = 190 (47.5K)

A HELLO	A APPLESOFT LISTER INSTRUCTIONS
B APPLESOFT LISTPRINTER	I AUTHORSHIP
A CALENDAR	I CONCENTRATION
I CONNECTION	I CRIBBAGE
A HEXCON	I HOOVER DAM
B PAGE DUMP	B SOFSYMREF
B SOFSYMREF.S	A STOCK TRADER
B TEDISSEMBLER.S	I VIDEO TEST

Volume # 013 - Disk 1 : FREE SECTORS = 319 (79.75K)

A HELLO	B BIN.HELLO
A DM II	B DOUBLE DOS
A REMINDER GENERATOR	A JOHANNES
I DISK ZAP	A ROWTSER
A SCREEN DUMP.NO NUM.CENTER	A SCREEN DUMP.NUMBERED
A SCREEN DUMP.PLAIN	
A PERPETUAL CALENDAR	
B TXFILER	
A TXFILER INFO	

Volume # 014 - Disk 1 : FREE SECTORS = 416 (104K)

A HAYES MENU	A SELFTEST II
A STORE & FORWARD	A PICKUP
A AUTO DIAL	I DUMBO
A TRANSFER	A BASIC EXTRACTOR
A ALARM	A DIAL A HUMAN
A ANSWER ON NTH RING MODIFIED	A SOURCEON
A DJ CONVERTER	A MICROMODEM FLAGS

This month we will have a look at a number of ways of setting up a text screen layout from within your programs.

Most if not all non-games programs require some input from the user, and if we are to have a friendly program we want to display as much information as possible about the input required so as the user is not continually referring to a manual or guessing what should be entered.

The screen can be set up with a number of program INPUT and or PRINT commands which are included in your program and whilst this may seem the easiest solution it is a slow, tedious, prone to error and full of frustration. If you don't believe me try setting up a card file layout like Appleworks.

An alternative method is to prepare the screen layout you want using a word processor, Appleworks is my choice. If you are using Appleworks instead of saving the file after it is complete, pretend you want to print the file, and when you are asked where you want to print it, select 'A text (ASCII) file on disk."

After saving your screen layout as a standard text file you are able to use it when ever and to make changes it is just a matter of loading it back into the word processor and making the necessary alterations before again saving the layout.

The text file is now able to be read by your program into string variables and with the use of a For-Next loop printed to the screen whenever required.

This approach reduces the number of program lines and it is much easier and quicker to make alterations at any time . However we now have to come up with a method of reading the text file from the disk into the string variables so as the program is able to display your screen.

We can use a Get-loop to read one character at a time from our text file with an error trap to catch the end of the file so as we don't have to keep a record of exactly how many characters are in the file. This works quite well but it is a little on the slow side.

A machine language routine can be used to read the file considerably faster. The one I use is a PD program that was published in Open-Apple. A listing of this routine is included below. To read a text file with Input Anything use &SC$ (or whatever$) instead of INPUT SC$.

The final method we will look at is to take advantage of a ProDOS commands already available to us ie. Store and Restore. To use this method first Clear the memory and then run 'Input Almost Anything' to load your screen or screens into a variable (Screen$(1)) and then -
PRINT CHR$(4); "STORE SCREEN.LAYOUT"

You now have a variable file on disk (File type VAR) that you load at the start of your program -
PRINT CHR$(4);"RESTORE SCREEN.LAYOUT"
and all your screens are now loaded into string variables and are available to print.

Listing: Input Anything

```
0300- 76 84 85 33 20 E3 DF A2
0308- 00 20 0C FD A8 29 7F C9
0310- 0D 08 48 F0 07 C9 20 B0
0318- 03 69 40 A8 98 20 ED FD
0320- 68 28 F0 0D 9D 00 02 E8
0328- E0 FF D0 DD A9 0D 20 ED
0330- FD 86 FD 8A A0 00 D1 83
0338- F0 02 B0 1F 91 83 C8 B1
0340- 83 85 71 48 C8 B1 83 85
0348- 72 C5 70 68 90 0D C5 6F
0350- 90 09 8A A2 00 A0 02 20
0358- E2 E5 60 8A 20 52 E4 A2
0360- 00 A0 02 20 E2 E5 A0 00
0368- A5 FD 91 83 C8 A5 6F 91
0370- 83 C8 A5 70 91 83 60
```

If you couldn't make head nor tail out of the printer routine last month that is because you haven't got an Apple D.M.P. and Apple parallel card.

[Letters to the Editor]

To the editor, Apple-Bug.
  Dear Sir,
          With RESPECT, and no malice or insinuations intended.

As you have asked for comments, I assume that you require feedback from the members who read the Apple-Bug newsletter. I have to put pen to paper (so to speak) instead of putting it on disk for you. My reason being that I know longer own an Apple computer.
I regret to inform you that I do not like the new LOGO for the Apple Bug newsletter. This in itself is not important as I didn't like the old LOGO either, so here is something in common.
May I make it known that I have not received a newsletter in the mail since the new committee took over, until I received this one on the 24/7/87.
The July meeting was on the 19/7/87.
The NEW LOOK newsletter is a vast improvement over the old style newsletter that we used to get. (last one I received in the mail before christmas).
The improvements and added reports that never used to be there are a welcome sight, and a credit to the new committee.

I like the "THE TREASURER'S NOTES." and the newly created "PAGE 8" by Power Spike. I tend to think these the best articles in the newsletter.

I would however like some explanations if possible.
Please Note: No Disrespect meant when I ask.

1. Has the sysop been given absolute "catre blanche" as to what is or isn't "poor taste"?
It seems to me that what may be "poor taste" to one person, may not be "poor taste" to another, and I therefore respectfully suggest that "poor taste" should be a committee decision, not just one persons responsibility.

2. On page 5 first paragraph. This seems to me to be some sort of double standard. "PAGE 8" is allowed to use a pseudonym and users of the BBS are not, as a lot of the material for the newsletter comes from the BBS one would be inclined to think that pseudonyms should be allowed on the BBS, or stopped in/on both.

Question.
Has a suggestion of a competition or vote been put forward on a LOGO for the newsletter? If not may I put it forward now? If a competition is held members could send in their efforts, the committee could then ask the members to vote on which of a choice that they would like.
Due to my thoughts on what I consider to be a double standard, and also being unable to get onto the BBS, and pseudonyms being allowed in the newsletter, I will sign this off with a pseudonym and a promise that if this letter is printed along with satisfactory answers I will reveal who I am.
It could start a chain of letters to the editor with any luck.

                        p.c. pussy cat

Reply

Dear Pussy Cat,

Thankyou for your feedback. Like wise, no disrespect intended.

I am sorry to hear that you have not been receiving our newsletter on a regular basis. This could be for several reasons:
1. your membership may have expired.
2. you may have changed address without informing us of the change.
The reason the July newsletter did not get out in time, was that the Hooper Centre was closed over the holidays. The Hooper Centre does our printing, and also mails out the newsletters for us. We need to get the final copy of the newsletter to them, at least two weeks before the meeting, if it is to be printed, collated, stapled, folded, inserted, sorted and taken to the Post Office, in time to get it delivered to your address before the weekend of the meeting. Last month they only had time to do the printing and stapling, as they resumed business only one week before the meeting. This is a situation we have no control over, and it will no doubt occur again. The newsletter was available to the members at the meeting, and those that were left afterwards, were posted out the following week. You should not need the newsletter to remind you that the meeting is on, as the meetings are ALWAYS held on the third Sunday of the month, except in December. If there is to be a meeting in December, it will be announced in the November newsletter, along with the address where it will be held, as we do not have access to the Hooper Centre over the christmas break.

With regards to pseudonyms not being allowed on the BBS. As the group is seeking incorporation, there is a legal requirement for the use of *Real Names*. A BBS user must register with the club to gain access to the system, and this access is Legally regarded as a form of *Associate Membership* to the group. This is dictated by Corporate Affairs and the Justice Department.

1. The Sysops control the running of the BBS, and they have the final interpretation of the rules for what will be allowed to be placed in messages on the various Bulletin Boards. This *'Right'* is reserved by all Sysops, all over the world, and we can see no reason to change it here. The Executive Committee governs the actions of the BBS Sub-committee, which governs the actions of the Sysops. Our BBS has two Sysops, whereas most BBS's have only one.
If you wish to contest the rules, then please contact the BBS Sub-Committee.

2. On pages 4 & 5 of the last newsletter, we published the 'System Rules'. These rules apply to the BBS, and not the newsletter. We get very little, if any, articles from the BBS to place in the newsletter.

'PAGE 8' was started by a member who wishes to remain anonymous for his writtings. He professes to have SOME knowledge of his subject, but says he is not an authority, and simply wants to start the ball rolling, with a column that gives every member the oportunity to espouse some knowledge, no matter how trivial, without having to put his/her name to it. Some may wish to take credit for their work, and we will be only too happy to publish their name if they so request it. We have published many articles where the author's name accompanies the article. We like to give credit where credit is due, as this helps the members to become involved with the running of their club.

To your question:

It has been requested many times over the years, that members contribute articles and logos for inclussion in the newsletter. Unfortunately, not many have been received. As usual, everything is left upto the same old few, to do just about everything. Tony Truscott, our new editor, submitted the last LOGO, and prepared and published it in the July newsletter. I think it was Mark Ritchie who supplied the current Title Page for the BBS, which has been on-line for the past 8-9 months. There have been several submissions, we tried them all, and selected the best. If a better one comes along we will use it. Would you like to submit something?

Regards

       Graham Black (Registrar/Sysop/Editing Assistant)

[TIPS AND TECHNIQUES]

RAPID FIRE FOR YOUR JOYSTICK *by David Connors.*

Have you ever wanted to enjoy a rapid fire joystick but did not wish to outlay for a new one? Well here's a handy little circuit that you can build for under ten dollars that will, with a minimum of fuss, fit inside your joystick and produce a rapid fire effect.

The circuit is based around the LM3909 flasher IC. It draws its power from the joystick's input on button 0 (I recommend that you modify only button 0 as it is the button commonly used for firing, etc.). VR1, R4, R5 and R6 all work together to control the timing and storage of C1. The firing rate may be varied between 1Hz and 18Hz. R3 keeps the current down for the indicator LED, LD1 and IC, IC1. I think that you will find a 2mm LED is more appropriate for the application than a 5mm LED as the 2mm LED has a lower current drain.

On my joystick (a USA MACH III) I have two button 0's (one mounted on the stick and the other on the base) and one button 1, on the base. I ran the circuit through the button 0 on the stick with an on/off switch so that it will serve as a single shot or rapid fire button. I also had a 5k potentiometer (VR1) hooked up with the indicator LED on the top of the chassis to show the speed at which it is currently set.

The only major problem that I encountered was that some pieces of software couldn't keep up with the joystick when running at high speed. The problem is that most programs cannot loop fast enough to register a shot therefore producing a rather 'messy' line of fire. However this may be overcome by setting the joystick just under its maximum speed.

The entire project cost me $6.30 and I recommend that you mount it on varo board so that you get it small enough to fit inside the joystick. One thing that I am sure of is that it will add an extra dimension to most of your games. It is pretty helpful in a game like Minit Man where a robot must be hit three times before it is dead, all you do is press the button, which expels a continuous stream of bullets killing the robot almost instantly. It doesn't work with games that automatically use rapid fire, like Rescue Raiders.

I hope that you will find this circuit useful and the plans for it are as

follow. Any enquires about this should be sent to David Connors, c The Editor, Apple-Bug, P.O. Box 721, South Brisbane 4101.

PARTS LIST:

Semiconductors :
    IC1 - LM3909
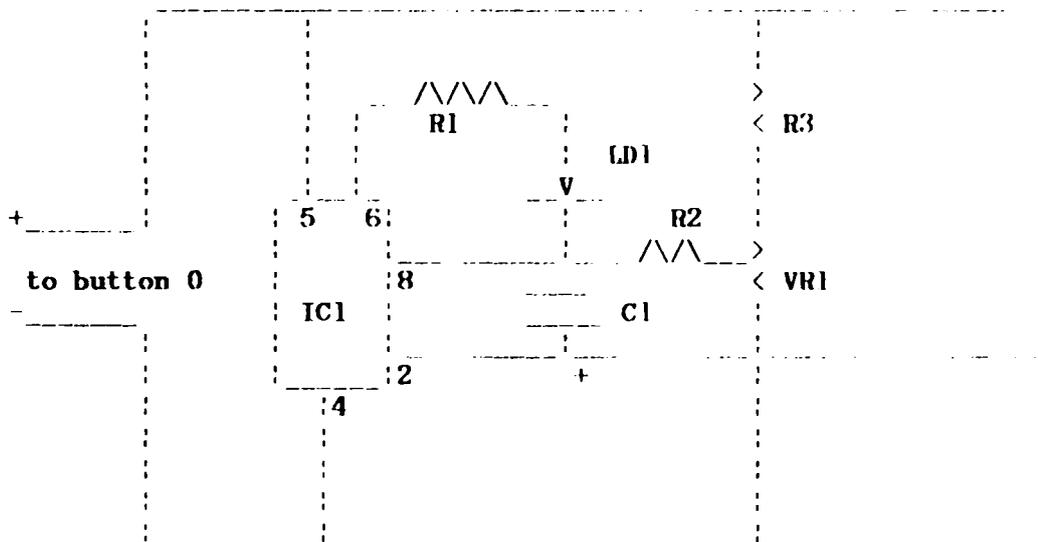   LD1 - 2mm LED (colour of your own choice)

Capacitors :
    C1 - 470 micro f RB Vertical Electrolytic

Resistors :
    R1   68 ohm 5% tolerance
    R2 -- 220 ohm 5% tolerance
    R3 - 220 ohm 5% tolerance
    R4 - 220 ohm 5% tolerance
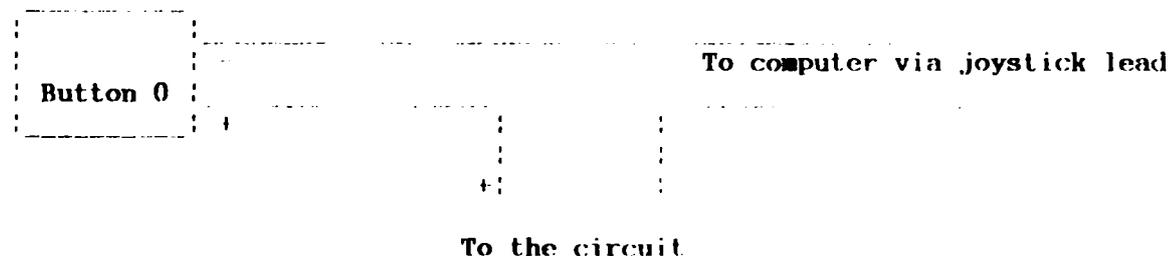   VR1 - 5k linear potentiometer

Miscellaneous :
    About 20cm of hook up wire
    1 single pole, single throw switch
    1 knob to fit the end of the potentiometer

RAPID FIRE CIRCUIT DIAGRAM

How to hook it up:

To computer via joystick lead

To the circuit

If you are unsure as to the polarity of your joystick, a quick test with a
multimeter or placing an LED on the circuit should tell you. It isn't
critical that you have the circuit hooked up to the joystick with correct
polarity, but it will help if you decide to further modify the circuit in the
future.
You won't find this a very hard circuit to build and you require only a
minimal knowledge of electronics to assemble this.

STRING MANIPULATION *by Graham Black*

String manipulation is a very useful tool to have at your finger-tips. If you
can master string manipulation, then you have gone a long way towards
mastering the BASIC language. Using the scale below, you can count the number
of characters in the string, and their relative positions within the
string:--

```
        0000000000111111111222              000000111
        1234567890123456789012              456789012
        !!!!!!!!!!!!!!!!!!!!!!              !!!!!!!!!
  A$ = "COMPUTER.OF.THE.FUTURE" :   Z$ = MID$(A$,4,9) = "PUTER.OF."
```

The 'C' is in position 1, 'M' is in position 3, 'F' is in position 11 and
position 17, 'H' is in position 14, etc. To get the first 5 characters of A$
and assign them to L$, your formula will be:-

```
  L$ = LEFT$(A$,5)
```

To pull out the word '.OF.' and assign it to the string M$, you count from
the left side of the string to the first letter required, which in this case
is the period at the 9th position. Next you must count the number of
characters you require. In this case four characters are required. Your
formula will be :-

```
  M$ = MID$(A$,9,4)
```

You must seperate the components of the formula with a comma, or you will be
presented with SYNTAX ERROR when you try to run the program. Enter the
following program and try it for yourself.

```
10    REM - STRING MANIPULATION
20    REM
30    REM - WITH THE USE OF
40    REM   LEFT$(
50    REM - MID$(
60    REM - RIGHT$(
100 HOME
110 A$ = "COMPUTER.OF.THE.FUTURE"
120    REM - TAKE THE FIRST EIGHT
130    REM - LETTERS FROM THE LEFT
140    REM - HAND SIDE OF A$ AND
150    REM - ASSIGN THEM TO L$
170 L$ = LEFT$(A$,8)
190    REM - TAKE THE MIDDLE EIGHT
200    REM - LETTERS STARTING FROM
```

```
210      REM - THE 9TH POSITION AND
220      REM - ASSIGN THEM TO M$
240 M$ = MID$(A$,9,8)
260      REM - TAKE THE FIRST SIX
270      REM - LETTERS FROM THE
280      REM - RIGHT HAND SIDE OF A$
290      REM   AND ASSIGN THEM TO R$
300 R$ = RIGHT$(A$,6)
330      REM - PRINT THE STRING A$
340      REM - FOLLOWED BY THE NEW
350      REM - STRINGS  L$ M$ R$
370 PRINT A$
380 PRINT L$
390 PRINT M$
400 PRINT R$
420      REM - NOW PRINT A BLANK LINE
430 PRINT
450      REM - NOW TAKE THE STRINGS
460      REM - AND PRINT THEM IN THE
470      REM - REVERSE ORDER
490 PRINT R$
500 PRINT M$
510 PRINT L$
520 PRINT A$
540      REM - NOW RE-ASSEMBLE THE
550      REM - STRING IN THE REVERSE
560      REM - ORDER SO THAT WE HAVE
570      REM   A NEW STRING CALLED B$
590 B$ = R$ + M$ + L$
610      REM   NOW PRINT THE NEW STRING
620      REM - PRECEEDED BY A BLANK LINE
640 PRINT
650 PRINT B$
```

[Advertisements]

FOR SALE -> Contact: Vince Crosdale at the Trading Table or ph.(07) 351-3090

Enhanced Apple //e 128k, two disk drives, monitor, parallel card, RGB card, manuals many disks included. $2200 ph.(07) 351-3090

[TRADING TABLE]

PRICE LIST — as at: 2nd AUGUST 1987

Ref	Code	Description Details	Price	Qty
0	STOCK	CONTROL DATA (single)	2.50	7
1	TTGCB	5.25 DS/DD DISKS (PKT.10)	15.00	10
2	1CBT	CDATA SS/DD DISK (lib.cs)	23.00	5
3	HMCB	5.25 SS/DD DISKS (PKT.10)	12.00	10
6	CBTTG	3.5inch SS/DD DISKS (per)	4.00	50
9	105C	BASIC PROGRAMMING (bk)	15.00	1
10	106C	WORKSHOPS VOL.1 (bk)	16.50	1
11	107C	WORKSHOPS VOL.2 (bk)	16.50	1
12	108C	COMPUTER CONNECTION (bk)	10.00	2
13	109C	WP WITH ZARDAX (bk)	15.00	1
15	A-QCB	EPSON LX/GX-80 RIBBON	9.25	7
17	418C	EPSON MX80 RIB.CARTRIDGE	11.00	10
19	AQ	MF-50 MEDIA DRAWER 3.5 in	28.00	1
22	222C	FD30 MINI DISK TRAY (30)	9.90	4
30	352C	DISK LABELS.F/FOLD (1000)	25.00	1
31	CBITS	6-RING BINDER.HARD COPY	7.50	2
32	AQBUG	MAILING LABELS (96)	2.00	48
95	AQ.CB	ZERO-FORCE SOCKETS I/O	27.00	2
97	*****	MISC.SOFT/HARDWARE	.50	22
98	*****	ASSORTED BOOKS	.50	24

The above prices are correct at the time of printing and are subject change without notice.

It is good to see that members are taking advantage of the low prices that we are able to offer each month. It is not always possible to have every single item in the price list available at each meeting, so if there is anything in particular that you would like to see, then phone me on (07) 883-1525 after mid-day, at least two working days before the meeting and I will attempt to get it for you. Also you can place an order for any of the above items along with your deposit of at least 25%, at the meeting.

***** This Month's Special -> EPSON LX-800 PRINTER $510.00 *****

We are now able to purchase the new Epson LX-800 dot matrix printers at a reduced price, and we will have one on display at the August meeting. (Recommended Retail $696.00) We can purchase any of the Epson range of printers.

We hope to have CREDIT CARD facilities available in the very near future.

Bankcard · Mastercard · Visa.

Rec:.......... Exp:.......... Membership Number ....

Apple-Q: the Brisbane Users' Group

MEMBERSHIP RENEWAL

Membership to Apple Q is on an annual basis from the month that
you join. All members on our books are required to note any
changes to their personal details and forward to the Registrar
upon renewal of their membership.

MEMBERSHIP FEES

[ ] $20.00 Adult and Family memberships
[ ] $12.00 bona fide students under the age of 21
[ ] $12.00 pensioners upon production of pension card
         (at the discretion of the Executive Committee)

****

Membership Renewal Form

Surname:..

Other names:..

Private Address:..

....

Private telephone: (...)..................................

Postal Address:...

....

Business telephone: (...).................................

I hereby declare that the above details are true and correct, and
agree to abide by the Rules and Regulations of the group.

Signed: ....

*Please complete these details to allow our records to be checked.
DO NOT use this form for an initial membership application. Forms
for that purpose may be obtained from the Registrar or the
Secretary.*

THIS FORM SHOULD BE COMPLETED AND RETURNED   WITH FEE   EITHER:

at the next Open Day -or-

post to: The Registrar
            Apple Q   (PLEASE DO NOT)
            P.O.Box 698   (MUTILATE THIS)
            Redcliffe. QLD 4020   (FORM ....)