

MATTEL ELECTRONICS®

AQUARIUS<sup>TM</sup> HOME COMPUTER SYSTEM

AQUARIUS<sup>TM</sup>  
HOME COMPUTER SYSTEM

## SIMPLIFIED INSTRUCTION CARDS

Follow these easy steps and you'll  
be programming before you know it.



MATTTEL ELECTRONICS®

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## KEYBOARD AND OVERLAY

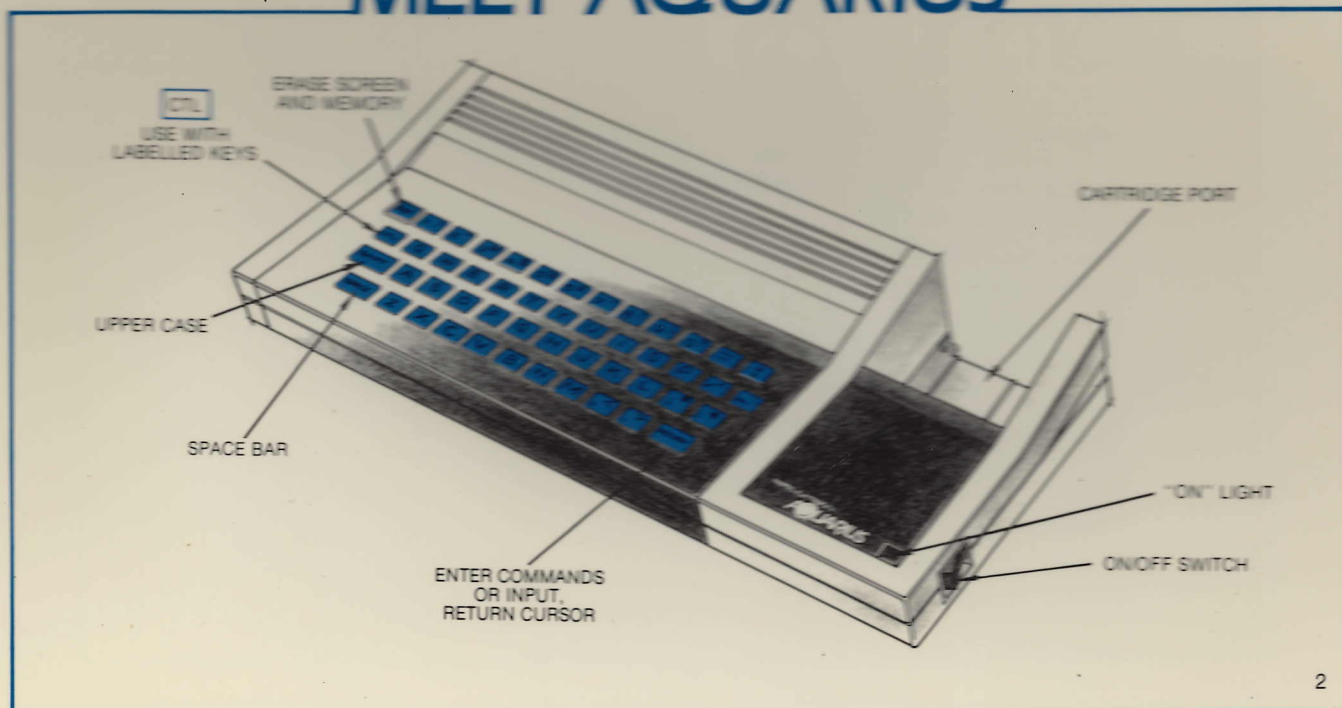
Your Aquarius computer comes with a plastic overlay that fits over the keyboard. This overlay is your guide to keys that will print entire BASIC words when pressed TOGETHER WITH the **CTL** key.

HOLD DOWN the **CTL** key while pressing one of the keys marked on the overlay. Aquarius will print the BASIC word marked above that key.



1

# MEET AQUARIUS



GRAPHIC MAN

SPECIAL KEYS

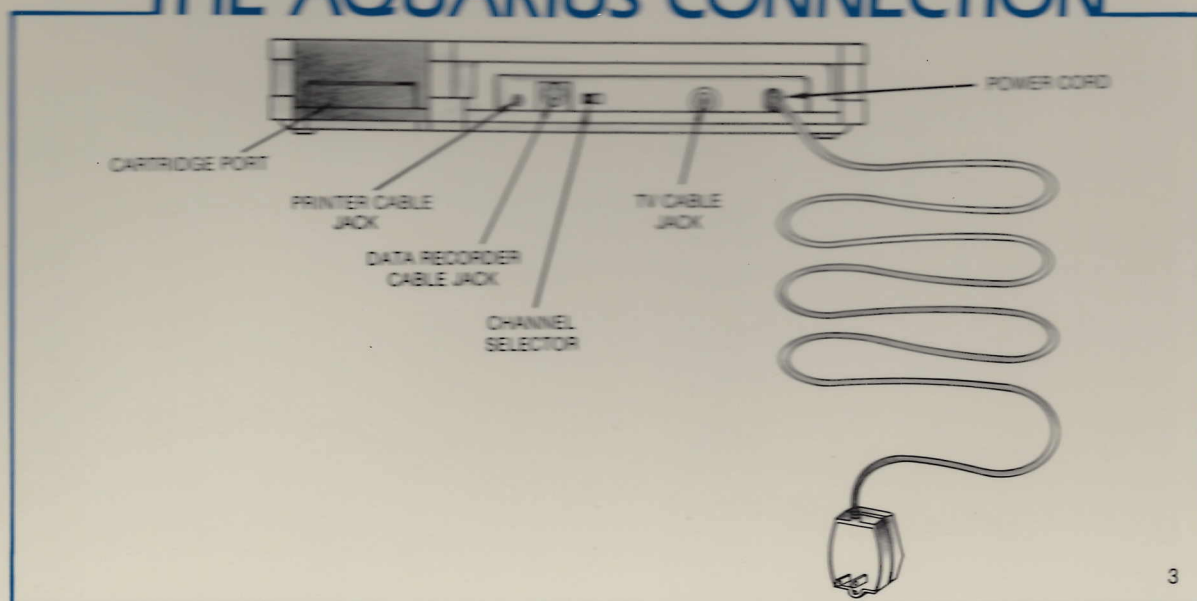
BACK PANEL

SET UP

YOUR FIRST PROGRAM



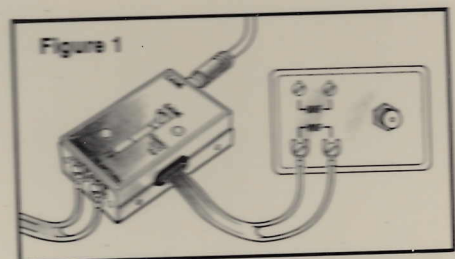
## THE AQUARIUS CONNECTION



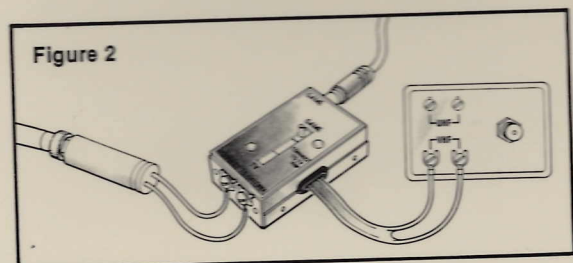
## SET UP

### (1) CONNECT ANTENNA SWITCH BOX TO TV SET

- **For installations with flat, "twin lead" antenna wire,** disconnect VHF antenna leads from your TV VHF terminals. Connect 2 leads from Switch Box to TV VHF antenna terminals (screws). Connect 2 VHF antenna leads to Switch Box screws. (See Figure 1.)



- **For cable installations,** plug round "coax" antenna wire into Coax-to-twin lead Balun converter (available at most electronics parts stores). Connect 2 leads from Balun converter to Switch Box screws. (See Figure 2.)



(Continued on next card.)

## SET UP

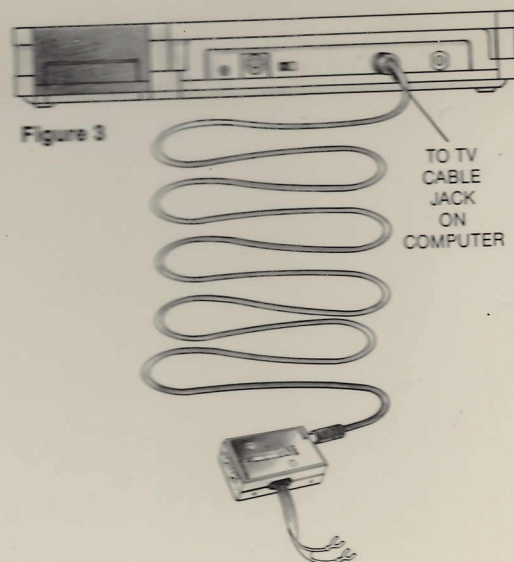
(Continued from SET UP card.)

(2) PLUG TV CONNECTOR CABLE FROM AQUARIUS COMPUTER INTO ANTENNA SWITCH BOX. (See Figure 3.)

(3) SET TV TUNER ON CHANNEL 3 OR 4 (whichever has the weaker broadcast signal). Set channel selector switch on computer to same channel. (Use a small screwdriver or ball point pen tip.)

(4) Set Switch Box to COMPUTER.

(5) Plug in AQUARIUS™ computer. Turn on TV set and computer.





# WRITE A PROGRAM

A program tells your computer exactly what you want it to do. Here is a simple program to help you get familiar with your system. Step by step instructions appear below.

```
10 print "my program is running"  
20 goto 10  
run
```

**Note:** Instructions for making corrections appear at the bottom of the next page.

## PROGRAMMING STEPS

1. Turn unit on
2. Press **RTN** Key
3. Type in the first line: (hold down shift key and press the number 2 for quotation marks)  

```
10 print "my program is running"
```
4. Press **RTN** Key

**Continued on next page.**

## WHAT YOU SHOULD SEE ON THE TV SCREEN

1. BASIC  
Press RETURN key to start
2. Copyright ©1982 by Microsoft Inc.  
Ok  
■
3. Copyright ©1982 by Microsoft Inc.  
Ok  
10 print "my program is running" ■
4. Copyright ©1982 by Microsoft Inc.  
Ok  
10 print "my program is running"  
■

5. Type in second line:

20 goto 10

6. Press **RTN** Key

7. Type in:

run

(to run the program)

8. Press **RTN** Key  
(Press **RST** Key to stop program)


5. Copyright © 1982 by Microsoft Inc.  
Ok  
10 print "My program is running"  
20 goto 10 ■

6. Copyright © 1982 by Microsoft Inc.  
Ok  
10 print "my program is running"  
20 goto 10  
■

7. Copyright © 1982 by Microsoft Inc.  
Ok  
10 print "My program is running"  
20 goto 10  
run ■

8. My program is running  
My program is running

#### TO MAKE CORRECTIONS:

- If cursor (■) is on the same line as the error, press the  key to back up and erase your mistake, then continue typing from that point.
- If cursor is not on the same line, simply press **RTN** and type in the entire line again, including the line number (10 or 20). Don't forget to press **RTN** when you've completed all corrections.
- Don't forget to type RUN and press **RTN** whenever you want to run the program.



## CREATE A GRAPHIC FIGURE

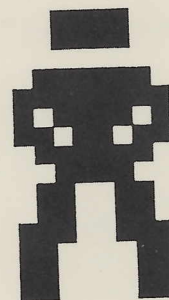
Write a program to "draw" a picture of a man, using 2 Aquarius characters.

Press **RST** and **RTN** , then type in this program, exactly as it appears (including line numbers). PRESS **RTN** AT THE END OF EVERY LINE.

```
10 PRINT CHR$(11)
20 H=12328
30 A=H+19+11*40
40 POKE A, 19
50 POKE A+40,20
```

Now press **CTL** and **1** at the same time, then press **RTN** . The graphic figure of a man will appear on your TV screen.

See Chapter 6 in your Aquarius Guide To Home Computing for more information on the commands you use to "draw".



## CREATE A "RUNNING MAN"

Write a program to display a running figure, using 4 AQUARIUS characters.

Press **RST** and **RTN**, then type in this program, exactly as it appears (including spacing and line number). PRESS **RTN** AT THE END OF EACH LINE.

```
10 PRINT CHR$(11)
20 FOR X=0 TO 38 STEP 2
30 A=12328+X+11*40: B=A+40
40 C=A+1: D=C+40
50 POKE A,21: POKE B,22: GOSUB 110
60 POKE A,32: POKE B,32
70 POKE C,23: POKE D,24: GOSUB 110
```

```
80 POKE C,32: POKE D,32
90 NEXT X
100 GOTO 20
110 FOR P=1 TO 30: NEXT P: RETURN
```

Now press **CTL** and **1** at the same time, then press **RTN**. You will see a graphic figure "running" across your TV screen.

**NOTE:** THIS PROGRAM WILL CONTINUE TO RUN INDEFINITELY. TO STOP IT, PRESS **CTL** AND **C** AT THE SAME TIME.

See Chapter 6 in your Aquarius Guide To Home Computing for more information on the commands you use in this program.



## SHOW THE COLORS

Write a program to show each of the 16 colors in the AQUARIUS spectrum.

Press **RST** and **RTN** , then type in this program, exactly as it appears (including spacing and line number). PRESS **RTN** AT THE END OF EACH LINE.

```
10 PRINT CHR$(11)
60 FOR N=0 TO 15
70 FOR M=0 to 959
80 POKE 13352+M,N
90 NEXT M
100 NEXT N
```

Now press **CTL** and **1** at the same time, then press **RTN** . You will see all 16 colors on your TV screen.

Once this program has shown you all the 16 colors it will stop. You can then add your name

to the center of the screen. RUN the program again and stop it with **CTL** and **C** when the screen is not black. Press **CTL** and **2** at the same time, then **RTN** . Then type in these additional four lines. Press **RTN** at the end of each line.

```
20 PRINT "What is your name"
30 INPUT N$
40 PRINT CHR$(11)
50 PRINT TAB(245)N$
```

Now press **CTL** and **1** at the same time, then press **RTN** . Type in your name when AQUARIUS asks and then press **RTN** .

See Chapters 5 and 6 in your Aquarius Guide to Home Computing for more information on the commands used in this program.

## COLOR CODES

COLOR	NUMBER
BLACK .....	0
RED .....	1
GREEN .....	2
YELLOW .....	3
BLUE .....	4
VIOLET .....	5
LIGHT BLUE-GREEN .....	6
WHITE .....	7
LIGHT GRAY .....	8
BLUE-GREEN .....	9
MAGENTA .....	10
DARK BLUE .....	11

COLOR	NUMBER
LIGHT YELLOW .....	12
LIGHT GREEN .....	13
ORANGE .....	14
DARK GRAY .....	15

Type these statements, exactly as they appear below (including line numbers). PRESS **RTN** AT THE END OF EACH LINE.

NEW  
10 PRINT CHR\$(11)  
20 POKE 13569, 1

Now press **CTL** and **1** at the same time, then **RTN**. You will see a single RED square. To change the color of this square, RE-TYPE LINE 20, changing the number AFTER THE COMMA to one of the color codes in the chart above. Notice that 1 is the color code for Red.



# BALANCE YOUR CHECKBOOK

This program helps you balance your checkbook, easily and accurately. If you have an Aquarius Data Recorder, you will want to save this program for later use.

Press **RST** and **RTN**, then type in this program, exactly as it appears (including spacing and line numbers). PRESS **RTN** AT THE END OF EACH LINE.

```
10 DATA CHECKBOOK, NAME, MONTH, YEAR
20 DATA STARTING BALANCE $, DEPOSITS, +
  SUBTOTAL†
30 DATA CHECKS, CHARGES, - SUBTOTAL
40 DATA NET FOR MONTH, ENDING BALANCE
50 DIM H$(11), D(7)
60 FOR X=0 TO 11: READ H$(X): NEXT X
```

```
70 PRINT CHR$(11): PRINT H$(0): PRINT
80 FOR X=1 TO 3: PRINT H$(X): INPUT H$(X):
  NEXT X
90 PRINT H$(4): INPUT D(0)
100 D(2)=D(0)
110 PRINT "ENTER DEPOSITS"
120 INPUT D: IF D=0 THEN 140
130 D(1)=D(1)+D: D(2)=D(2)+D: GOTO 120
140 PRINT "ENTER CHECKS"
150 INPUT D: IF D=0 THEN 170
```

†Type entire line before you press **RTN**.

(Program continued on next card.)

(Program continued from  
BALANCE YOUR CHECKBOOK card.)

```
160 D(3)=D(3)+D: GOTO 150
```

```
170 PRINT "ENTER BANK CHARGES"
```

```
180 INPUT D: IF D=0 THEN 200
```

```
190 D(4)=D(4)+D: GOTO 180
```

```
200 D(5)=D(3)+D(4): D(6)=D(1)-D(5):  
    D(7)=D(2)-D(5)†
```

```
210 PRINT CHR$(11)
```

```
220 FOR X=0 TO 3: PRINT H$(X): NEXT X: PRINT†
```

```
230 FOR X=4 TO 11: PRINT H$(X): TAB(18):  
    D(X-4): PRINT: NEXT X: END†
```

Now press **CTL** and **1** at the same time, then press **RTN**. When AQUARIUS asks about deposits, checks, and bank charges, enter the amount for each item, then press **RTN** before entering the next item. Do not use dollar signs or commas. Enter a zero (0) when you have completed all deposits, checks or bank charges.

See Chapters 8 and 9 in your Aquarius Guide to Home Computing for more information on commands used in this program.

<sup>†</sup>Type entire line before you press **RTN**.



## EDITING FEATURES

LIST YOUR PROGRAM FROM THE START: Type LIST and press **RTN** . (Or use **CTL** key with key **2** . Then press **RTN** .) Your program is displayed, one screenful at a time. To see next screenful (for long programs), press any key except RST, SHIFT or CTL.

LIST PROGRAM FROM A CERTAIN LINE: Type LIST and the LINE NUMBER, then press **RTN** .

DELETE CHARACTERS: Press **←** .

DELETE A PROGRAM LINE: Type the line number for that line. Then press **RTN** .

CHANGE A PROGRAM LINE: Re-type the entire line, including line number. Then press **RTN** .

ADD A PROGRAM LINE: Type the line with a new line number. Choose a line number that falls BETWEEN two existing line numbers. Then press **RTN** . When you list the program, the new line will be automatically inserted in place.

CLEAR THE SCREEN: Type PRINT CHR\$(11). Then press **RTN** .

See Chapter 1 of your Aquarius Guide To Home Computing for more information.

## TROUBLESHOOTING TIPS

### PROBLEM

### POSSIBLE SOLUTION

Screen stays blank when you turn on AQUARIUS

- Make sure TV set is plugged in and turned on.
- Check to see if AQUARIUS green light is ON. If it isn't, make sure that AQUARIUS power adaptor is plugged in.

Bad TV picture

- Check channel setting (3 or 4). Use the channel with the weaker broadcast signal in your area.
- Be sure Switch Box is set on "COMPUTER".
- Check fine tuning adjustment.

Error message when you try to run a program.

- First press **CTL** and **2** at the same time, then **RTN** to LIST your program. Check the spelling and punctuation of each line. If you find a mistake, re-type that line.
- Common error messages you may see are: /0, ID, MO, NF, RG, SN, TM, UL followed by a line number. (The mistake is in this line.) See the Appendix in your Aquarius Guide To Home Computing for more information on all error messages.



## SERVICE FOR YOUR AQUARIUS HOME COMPUTER

**FOR SERVICE OR PRODUCT INFORMATION,  
CALL**

**IN THE EASTERN UNITED STATES:**  
(800) 257-5185

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