

Bally BASIC

audio program cassette

SOFTWARE

NO. 1

FOR YOUR
Bally
PROFESSIONAL
arcade



APC-7001

USE WITH A Bally BASIC computer programming cassette & audio cassette interface

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OPERATING INSTRUCTIONS

Bally BASIC software is designed to run on your Bally Professional Arcade™, using the Bally BASIC computer programming cassette and audio cassette interface.

Before you use this software, make sure your Bally BASIC computer programming cassette is inserted in your arcade, and your audio cassette tape recorder is connected to the arcade through the audio cassette interface.

1. Press **RESET**. Your TV will show "BALLY BASIC."
2. Put the Bally BASIC audio program cassette into your tape recorder and rewind fully. Set the recorder volume control in the middle of its range and the tone control (if present) on high.
3. Place the Bally BASIC keypad overlay in position.
4. Enter **INPUT** and press **GO**.
5. Press **PLAY** on your tape recorder. Your TV will show the program as it loads from the audio tape recorder into your arcade.
6. A program menu will appear on your TV when the tape is through loading (about four minutes).
7. Select a program by entering its number on the keypad. To return to the menu just enter zero.

If the words "BALLY BASIC" appear, the program has stopped. Press **WORDS**, **RUN** and **GO** to start again.

For other problems, see reverse side.

SIDE A

1. ELECTRIC DOILY

This program places a random square on the screen and reflects it eight times to create a symmetrical pattern.

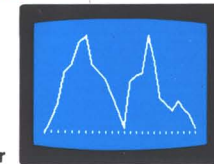


- Select program 1
- A continuous pattern is generated with musical notes.

Zero returns to menu.

2. LINE GRAPH

This program draws a line graph to match the numbers you input.

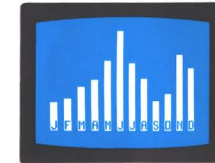


- Select program 2
- Input the number of items you wish to graph.
- Press **GO**
- For each item, input a number between one and 87. Press **GO** after each number.
- The graph is drawn after the last item is entered.

Zero returns to menu.

3. MONTHLY RECORDS

A bar graph shows month-to-month levels or amounts which you input.



- Select program 3
- For each month, input a number between one and 87. Press **GO** after each number.
- The graph is drawn after the last item is entered.

Zero returns to menu.

4. ELECTRONIC MUSIC

This program uses the musical tones in your arcade to create electronic music.



- Select program 4
- Music plays and program returns to menu.

SIDE B

Guessing games are a favorite among programmers because they are short and easy to understand. See your programming course for details.



- Select program 5
- The computer lists the program and then picks a number from one to ten.
- Input your guess and press **GO**
- If **MORE** or **LESS** appears, guess again.
- After you guess the right number, the computer picks another number for you to match.

Guess zero and press **GO** to return to menu.

1. LUNAR LANDER

Land on the moon with this computer simulation.



- Select program 1
- When the lunar lander appears, use the trigger on hand control number one to fire rockets.
- The numbers on the screen show fuel left, altitude, and speed.
- Try to land at low speed or land in an open area or use as little fuel as possible.

Zero returns to menu.
One starts a new landing.

2. GRAVITY GAME

As your skill improves with practice, this game gets more difficult.



- Select program 2
- Use the trigger on hand control number one to keep the dot on the screen.
- If you let the dot fall, your **SKILL LEVEL** goes down. If you carry the dot across the screen to the right edge, **SKILL LEVEL** is added to **SCORE** and the dot gets heavier.
- **SCORE** is displayed at end.

Zero returns to menu.
One starts new game.

3. NEWTONA '500'

Fly a space ship where there's no gravity or friction and see how Sir Isaac Newton's laws operate.



- Select program 3
- Move joystick number one left, right, up, and down to fire control rockets.
- Pull the trigger if you want to leave a trail.

Zero returns to menu.
One clears the screen and centers the space-ship.

AUTOMATIC TV PROTECTION

Bally software is designed to protect your TV screen. After about five minutes the menu will go dim. To restore the image, just press zero.

Bally Consumer Products Division
Bally Manufacturing Corporation
10750 West Grand Ave., Franklin Park, Ill. 60131

FORM NO. 0664-00300-0100

TROUBLE SHOOTING

The program listings for side A and side B (shown at right) should appear on your TV as the tape loads into your arcade.

If your tape doesn't load properly, the menu may not appear or some of the programs may not run. If this happens, inspect all cable connections, make sure the Bally BASIC cassette is secure in the arcade and adjust the volume control (see volume control adjustment).

VOLUME CONTROL ADJUSTMENT

Setting your volume control in the middle of its range works best for most recorders. To adjust the volume precisely, follow this procedure.

- FORWARD the tape to the end.
- REWIND several feet.
- ENTER **:LIST** **GO** and press PLAY on your recorder.

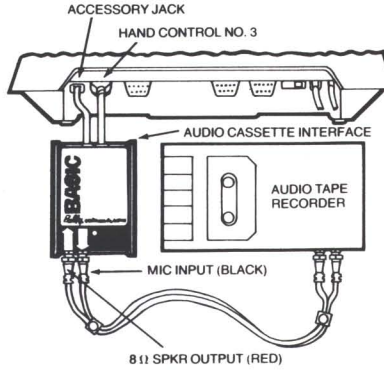
Your computer will now list the alphabet on your TV in a continuous stream. Adjust the volume and tone controls so the alphabet is solid with no blanks or question marks. Now, repeat steps 1 through 5 in the Operating Instructions.

PROGRAM MODIFICATION

You can easily change, correct, or modify a program after it has been loaded. To see a complete listing on your TV just enter **:LIST**. For a partial listing or to see a particular instruction, enter **:LIST** and the line number.

To change an instruction, enter the line number and the new instruction. When you press **GO** the old instruction will be replaced automatically.

AUDIO CASSETTE INTERFACE HOOK-UP



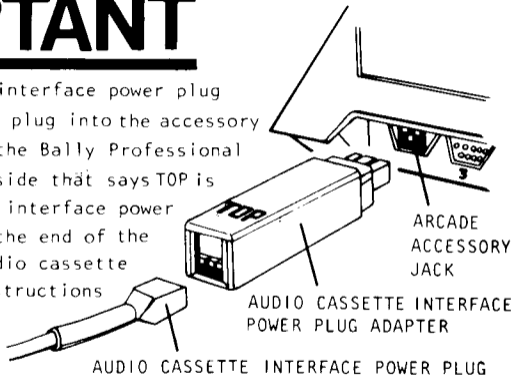
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:LIST
1.
2.
3.
4.
10 .APC#7001(A)
20 :RETURN
30 CLEAR
35 NT=0
37 FC=7:BC=8
40 PRINT
50 PRINT " → BALLY BASIC ←"
55 PRINT " PROGRAM SAMPLER (A)"
60 PRINT
70 PRINT " 1 ELECTRIC DOILY"
80 PRINT " 2 LINE GRAPH"
90 PRINT " 3 MONTHLY RECORDS"
100 PRINT " 4 ELECTRONIC MUSIC"
110 PRINT " 5 NUMBER MATCH"
130 PRINT
150 PRINT " (C) 1978 BALLY MFG."
152 NT=3
155 FOR A=170-2400
157 IF &(22)=16 GOTO 10
160 IF &(23)=8 GOTO 1000
170 IF &(22)=8 GOTO 2000
180 IF &(21)=8 GOTO 3000
190 IF &(23)=4 GOTO 4000
200 IF &(22)=4 GOTO 5000
210 NEXT A
220 FC=9:GOTO 155
1000 .ED
1010 CLEAR
1020 X=0:Y=0
1030 FC=RND (32)*8+4
1031 X=X+RND (13)-5
1032 BC=FC+4
1040 Y=Y+RND (13)-6
1050 A=5
1060 B=5
1070 C=3
1080 M=X
1090 N=Y
1100 GOSUB 1500
1110 M=-X
1120 GOSUB 1500
1130 N=-Y
1140 GOSUB 1500
1144 GOSUB 1500
1150 M=Y
1160 N=X
1170 GOSUB 1500
1180 M=-Y
1190 GOSUB 1500
1200 N=-X
1210 GOSUB 1500
1220 M=Y
1230 GOSUB 1500
1240 IF X>50 GOTO 1020
1250 IF Y>50 GOTO 1020
1260 GOTO 1030
1500 BOX M,N,A,B,C
1502 IF &(22)=16 GOTO 10
1510 MU=M
1520 RETURN
2000 .LG
2010 FC=255:BC=232
2020 CLEAR :PRINT
2030 INPUT " HOW MANY ITEMS?"A
2033 IF A=0 GOTO 10
2034 IF A>1 IF A<51 GOTO 2040
2036 GOTO 2030
2040 B=150÷(A-1)
2050 FOR N=1TO A
2060 PRINT N
2070 INPUT "?":@(<N)
2080 IF @(<N)>87 PRINT "TOO BIG":GOTO
2060
2090 NEXT N
2100 X=-80
2110 CLEAR
2120 LINE X,@(<1)-44,0
2130 FOR N=1TO A
2140 LINE X,@(<N)-44,1
2150 BOX X,-42,1,2,3
2160 X=X+B
2170 NEXT N
2180 IF &(22)=16 GOTO 10
2190 GOTO 2180
3000 .MR
3010 CLEAR
3015 FC=7:BC=128
3020 INPUT "JAN →" @(<1)
3030 INPUT "FEB →" @(<2)
3040 INPUT "MAR →" @(<3)
3050 INPUT "APR →" @(<4)
3060 INPUT "MAY →" @(<5)
3070 INPUT "JUN →" @(<6)
3080 INPUT "JUL →" @(<7)
3090 INPUT "AUG →" @(<8)
3100 INPUT "SEP →" @(<9)
3110 INPUT "OCT →" @(<10)
3120 INPUT "NOV →" @(<11)
3130 INPUT "DEC →" @(<12)
3140 PRINT "THANK YOU"
3150 CLEAR
3155 CY=-39
3160 PRINT " J F M A M J J A S O N D"
3170 X=-66
3180 FOR A=1TO 12
3188 IF @(<A)>86 @(<A)=86
3190 BOX X,-43+(@(<A)+1)÷2,7,@(<A)+1,3
3200 X=X+12
3210 NEXT A
3222 IF &(22)=16 GOTO 10
3230 GOTO 3222
4000 .EM
4010 NT=5
4020 CLEAR
4025 PRINT "50500000506050+40503000
500"
4027 PRINT "5500000050",
4030 PRINT "500000506050+4050200050
0550",
4032 PRINT "40302010003000",
4040 PRINT "5000×1000×20×1078×1060",
4041 PRINT "00006070",
4042 PRINT "000070506070×100000000"
4050 GOTO 10
5000 .NM
5010 FC=7:BC=8:NT=3
5015 CLEAR
5020 LIST 5030,10:PRINT
5030 . → NUMBER MATCH ←
5040 A=RND (10)
5050 INPUT "YOUR GUESS:"B
5060 IF B=0 GOTO 10
5070 IF B=A GOTO 5110
5080 IF B>A PRINT "LESS"
5090 IF B<A PRINT "MORE"
5100 GOTO 5050
5110 PRINT B, " IS RIGHT!"
5120 CLEAR :GOTO 5040

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IMPORTANT

This audio cassette interface power plug adapter is designed to plug into the accessory jack on the back of the Bally Professional Arcade. (Be sure the side that says TOP is facing up.) The audio interface power plug is inserted in the end of the adapter. Complete audio cassette interface hook-up instructions are packed with the audio interface.



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IMPORTANT

To avoid interference that might prevent your program from loading into your computer properly:

1. Do not operate the interface on top of your TV set.
2. Don't operate electrical appliances such as razors, sewing machines, and vacuum cleaners on the same AC line.

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