How to Program Me from your Personal Computer
CONTENTS

* HOW TO PROGRAM ME FROM YOUR PERSONAL COMPUTER  P.1

* FUNCTION AND NUMBER  P.7

* EDITING COMMANDS  P.8

* SYSTEM COMMANDS  P.13

* TROUBLESHOOTER GUIDE  P.19

* ERROR MESSAGES  P.20
1. Prepare your PC for operation:
a) For Apple II system, you require:
   * Super Serial Card (SSC) in slot 2 (start counting from slot 0).
   * Make sure the jumper block in SSC pointing at terminal side.
   * Disk controller card in slot 6.

b) For IBM XT system, you require:
   * Asynchronous Communication Adapter or multi-function card.
   * Diskette Drive Adapter.
II. Insert provided Diskette.

III. A tune of repeated musical notes will be audible and a menu is displayed when the system is ready.

IV. Type in any key for the music to stop and to start programming. (An incorrect entry will be shown on the screen as "INVALID KEY ENTRY")
The screen should display the following:

PROGRAM EDITOR VERSION 1

PROGRAM

SYSTEM & EDITING COMMANDS:

T = TRANSMIT
A = SAVE INTO DISK
H = DELETE FILE
← = CURSOR LEFT
N = INSERT
(CR) = DELETE

C = CLEAR PROGRAM
O = LOAD FROM DISK
Q = FILES DIRECTORY
→ = CURSOR RIGHT

FUNCTION:

F = FORWARD
L = TURN LEFT
E = CURVE LEFT
D = DANCE
B = BACKWARD
R = TURN RIGHT
I = CURVE RIGHT
X = MULTIPLY

S = PAUSE
G = GEAR
M = MUSIC

NUMBER:

1 2 3 4 5 6 7 8
V. Read "PERSONAL FILE" first.

Then refer to FUNCTION and NUMBER on the screen, try to type in your program.
For example:

  shift GEAR to higher speed
  move FORWARD 1 sec.
  move BACKWARD 2 sec. for 3 times
  and DANCE once.

Then you just type in G2F1B2X3D1 from your keyboard. For any program editing or manipulation, refer to SYSTEM or EDITING COMMANDS on screen.
VI. When your program is ready for transmission, type ‘T’ and connect a RS232 cable from your computer into me.

VII. Press the RECEIVE key on the remote controller. Both green and yellow headlights will light up.

VIII. Press any key on your’PC to start transmission and type ‘A’ to store the program in the diskette for latter use if you wish.

IX. Disconnect the RS232 cable. Press the key with the green dot on the remote controller and I will start immediately.
FUNCTION and NUMBER

FUNCTION and NUMBER are the actual program contents. Note that a command for me must include both a FUNCTION and a NUMBER key. Please refer to the 'PERSONAL FILE'.
EDITING COMMANDS

Enter the following demonstration sequence:

PROGRAM EDITOR VERSION 1
PROGRAM: G2F1B2X3D1_-

(That is to shift gear to higher speed, go forward 1 sec., go backward 2 sec. for 3 times and dance once.)
I. ‘←’ ‘→’ (CURSOR)

‘←’ and ‘→’ keys on your keyboard can be used to edit individual entries within the sequence.

Example: Type ‘←’ three times, then type number 2
The demonstration sequence should read:

PROGRAM EDITOR VERSION I
PROGRAM: G2F1B2X2D1
II. ‘—’ (SPACE)

The space bar can be used to delete the last key entry. It can also be used to delete a program command including both the function and the number keys when used with the cursor.

Example: Press space bar once to obtain the following:

PROGRAM EDITOR VERSION 1
PROGRAM: G2F1B2X2
III. ‘N’ (INSERT)

Move the cursor key to any position. Pressing ‘N’ will cause new program commands to be inserted before the cursor position.

Example: Move cursor key to B in the command sequence. Type N for program insert, then type in R8, hit return. The sequence should now read:

PROGRAM EDITOR VERSION 1
PROGRAM: G2F1R8B2X2
IV. ‘C’  (CLEAR PROGRAM)

Type ‘C’ and the program on screen will be erased. The ascending musical notes will become audible again. (Always store the program before clearing if you wish to save it).

PROGRAM EDITOR VERSION I

PROGRAM:  (PROGRAM ERASED)
SYSTEM COMMANDS

I. ‘T’ (TRANSMIT)

The program on the screen can be transmitted to me by typing ‘T’. The screen prompts with “PLUG IN SOCKET & PRESS RECEIVED KEY”. At this point, plug in the RS232 cable between me and your PC. Then press the RECEIVE key on the remote controller to enable me to receive the program. By this time, both my green and yellow headlights should be lit. Press any key on your PC to start transmission.

PROGRAM EDITOR VERSION I
PROGRAM: G2F1R8B2X2
PLUG IN SOCKET & PRESS RECEIVE KEY
'T' (TRANSMIT) cont'

When complete, both I and your PC should “beep” audibly. The screen will display its menu. Disconnect the cable from me. Press the key with the green dot on the remote controller to execute the transmitted program. Have fun!
II. **A** (SAVE INTO DISK)

Note: Remove the silver WRITE PROTECT label on the diskette before using this command.

‘A’ is the storage command for saving a program into the diskette. Type ‘A’ and the screen will prompt with “FILENAME”. You can give any name to your program. Let’s call your demonstration program ROBOT. Type in ROBOT for the filename and hit the return key. The program is now stored into the diskette. When complete, the screen will return to its menu. (You should give each new program a different name, otherwise the old program will be erased).
III.  ‘H’ (DELETE FILE)

Note: Remove the silver WRITE PROTECT label on the diskette before using this command.

Type ‘H’ to delete files which you no longer want to keep. When the screen prompts for FILENAME, type in ROBOT and hit the return key. The file called ROBOT will be deleted from the diskette and the screen will return to its menu.
IV. ‘O’ (LOAD FROM DISK)

Any program which has been stored into the diskette may be retrieved by simply typing the ‘O’ key. When the screen prompts for the FILENAME, type in ROBOT and hit the return key. The demonstration program will be shown on screen again.
V. ‘Q’ (FILE DIRECTORY)

Type ‘Q’ to see what programs are stored inside the diskette. At this point, the screen should show:

DISK VOLUME 254

* A 028 HELLO

T 002 ROBOT

Return screen to menu by typing any key.
# Troubleshooter Guide

## Problems

**A)**  
- Can’t edit properly  
- Can’t save into diskette  
- Can’t load from diskette  
- Can’t delete file  
- Can’t read file directory

**B)**  
- No audible “beep” from the PC after transmission is done  
- No audible “beep” from me after transmission is done

**C)**  
- I refuse to work when the key with the green dot is pushed on the remote controller

## Possible reasons

- Diskette, PC system
- RS232 connection, me
- Remote controller, me
## Error Messages

### Editor
- INVALID KEY ENTRY
- FUNCTION ONLY
- MULTIPLY ONCE ONLY
- CANNOT MULTIPLY
- 'DANCE 1' ALLOWED ONLY
- GEAR 1 OR 2 ONLY
- NUMBER ONLY
- PROGRAM FULL
- 'MUSIC' KEY ONLY
- PROGRAM FULL

### System
- INVALID KEY ENTRY
- NO PROGRAM
- PROGRAM INCOMPLETE
- ILLEGAL INSERT
- ENTER CORRECT COMMAND ONLY
- WRITE PROTECT
- FILE NOT FOUND
- NOT THE SAME DISKETTE
- I/O ERROR
- DISKETTE FULL
- FILE OPERATION ERROR