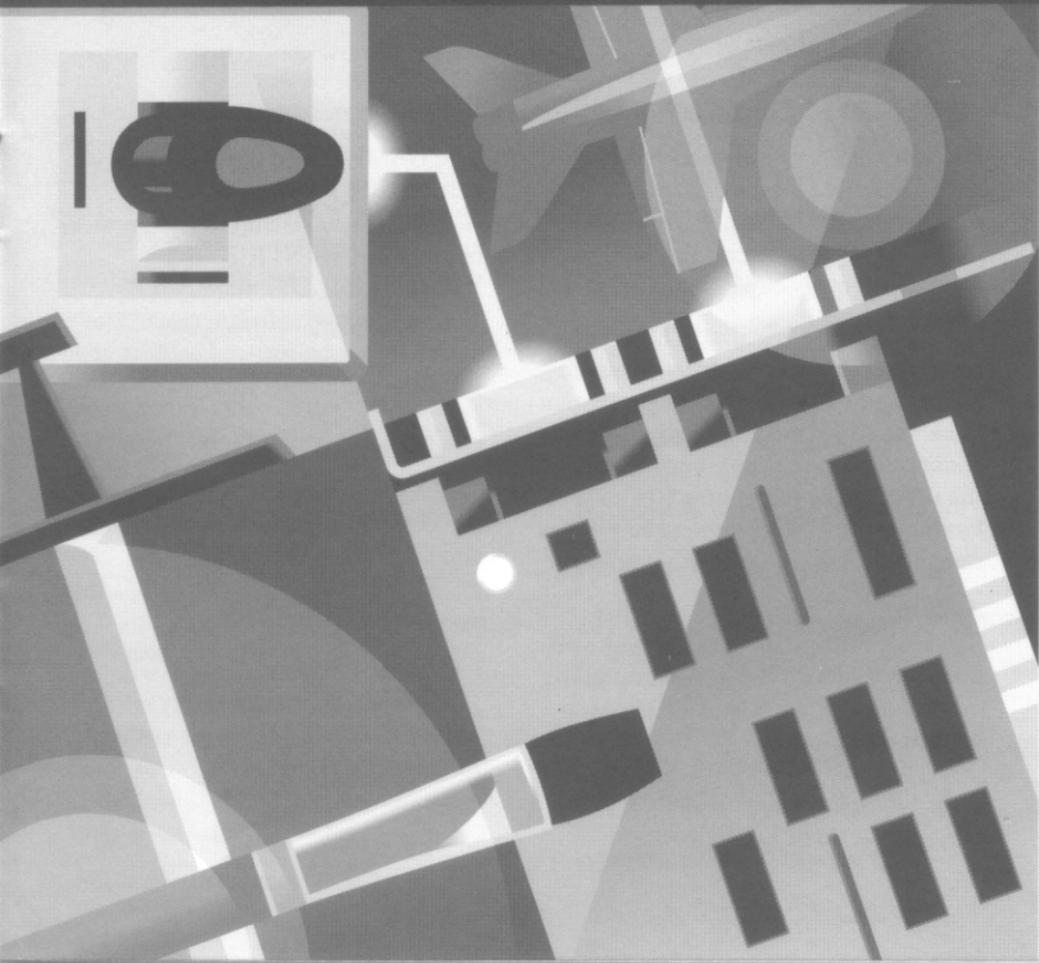


# GAMECARD 3 AUTOMATIC™ & MCA QUICK-START INSTRUCTIONS



.....



PRODUCTS

A Joystick  
Technologies, Inc.  
Company

.....  
*Send in your warranty registration card right now, and we'll keep you up to the minute on cutting edge technology at breakthrough prices.*

## **GAMECARD 3 AUTOMATIC™**

You have purchased the most advanced and compatible joystick adapter computer (up to 80 Mhz). Yet it's flexible, allowing you to custom-program as many as 32 levels of programming values.

At CH Products, we always have something new on the drawing board. Because as a customer you are important to us, we'd like to keep you informed about our latest designs, and offer you the opportunity to get new CH Products at special customer prices, plus terrific offers on other related products.

So please...

Send in your warranty registration card right now, and we'll keep you up to the minute on cutting-edge technology at breakthrough prices.

## **Features**

The GAMECARD 3 AUTOMATIC features two joystick ports, allowing you to use up to two joysticks or one FLIGHTSTICK™ or VIRTUAL PILOT™ flight yoke. We've included software that allows you to diagnose, test and calibrate two joysticks simultaneously.

## **Compatibility**

You can use your GAMECARD 3 AUTOMATIC with all game, graphics and CAD software for IBM PC/XT/AT/PS2 and 100% compatible computers.

PS2 models and compatibles with Micro Channel Architecture (MCA) require the use of GAMECARD 3 AUTOMATIC MCA.

The following six steps describe the proper installation of GAMECARD 3 AUTOMATIC. You can find additional detailed information on the installation of peripheral cards in the documentation provided with your computer system.

1. Turn off all power to the computer and disconnect the power cord.
2. Remove the cover of the computer. (See your computer manual for inst.)
3. Taking care not to touch the gold-plated connectors at the bottom of the card, gently plug the GAMECARD 3 AUTOMATIC into any of the available 8- or 16-bit expansion slots and secure the retaining bracket screw.
4. Replace the computer cover and re-connect the cables and powercords. Plug one or two joysticks into the GAMECARD ports and tighten the thumb screws.
5. Software installation for all computers:

Boot the computer, then insert the GAMECARD 3 AUTOMATIC diskette into disk drive A.

Now install the GAMECARD 3 AUTOMATIC software. You must have about (34K) available on your boot disk to store the CHJOY3.EXE file.

For FLOPPY DISK installation, place your normal boot diskette into drive B (first remove the write protect tab), then type:

A:JINSTALL B: (press enter)

For HARD DISK installation, type:

A:JINSTALL C: (press enter)

The JINSTALL program will interrogate your computer system and determine its operating speed. Then the GAMECARD will be configured for this speed automatically and modifications to the AUTOEXEC.BAT file will be made.

• • • • •  
**Note:**

*Please follow these instructions and those outlined in your computer manual closely. Incorrect installation of peripheral cards can cause severe damage to your computer. If you have any doubt about the proper installation of GAMECARD 3 AUTOMATIC, please seek expert assistance.*

.....

**Note:**

*After installing, you can run the file "JMENU" on your GAMECARD 3 AUTOMATIC disk or hard disk to perform any of the diagnostic programs or Read Me files (Items I through IV).*

The JINSTALL program will exit to a menu which will offer the following options:

- I. Test and Center the joystick(s).
- II. Examine the effect of different program values and customize the program value.
- III. Examine the joystick firmware in your computer's BIOS.
- IV. List the READ ME file for further information and details of program operation.

## **GAMECARD 3 AUTOMATIC MCA™**

### **Installation Only**

1. Boot the computer using the Reference Diskette.

The backup copy should contain your computer's current configuration information and testing programs. (The Reference Diskette came with your IBM PS/2.) If you do not

already have a backup, one can be made by booting from the Reference Diskette and selecting "Backup the Reference Diskette" from the main menu and following the directions displayed on the screen.

NOTE: You must use a backup Reference Diskette because the original is write protected.

If an IBM adapter configuration error message 165 appears, F1 will get you past it and into the main menu. This error occurs because the system has not yet been configured for the adapter.

- If asked to automatically configure the system, select "NO".
2. Select "Copy an option diskette" from the main menu and follow the directions on the screen. (The option diskette is the GAMECARD 3 AUTOMATIC MCA diskette.)

3. Next select "Set Configuration" and then "View Configuration". This will allow you to see that the GAMECARD 3 AUTOMATIC MCA is being recognized by the computer.
4. Quit back to the main menu and press ESC. This will usually bring up an Information block. Follow the directions on the screen to continue. (Pressing "Enter" is usually all that is required.)
5. Remove the backup Reference Diskette and reboot the computer in your normal fashion.

### Trouble Shooting

If you encounter a problem, run the file JMENU found on the GAMECARD disk and select "R" to view the READ ME file.

### Hardware Considerations

.....

GAMECARD 3 AUTOMATIC provides connectors for two joysticks. For general use, attach joystick A to the top connector and joystick B to the bottom connector.

Certain joysticks, such as the CH Products FLIGHTSTICK, have special functions, such as a throttle control. When you plug this type of joystick into the joystick A connector, the throttle control will function the same as the Y-axis on joystick B. In this configuration the throttle-controlled joystick is sometimes called a "one-and-a-half joystick."

.....

To use two FLIGHTSTICKS or one FLIGHTSTICK and a regular joystick at the same time you have three options.

1. Remove computer cover, unplug the GAMECARD 3 AUTOMATIC and remove the two jumpers behind Connector A (see Figure 1) to disable the throttle control on joystick A and allow "normal" joystick operations with both FLIGHTSTICKS.
2. Use one FLIGHTSTICK and another joystick, using a Y-cable attached to connector "A" (upper) of the GAMECARD. This is the preferred method if you plan to change configurations frequently. Y-cables are available for sale at most computer game dealers.
3. Connect the FLIGHTSTICK to connector B (lower) and the regular joystick to connector A (upper).

## Software Considerations

To play a game which requires that you boot your computer using the game disk, you must follow a special procedure to allow the GAMECARD to be properly programmed.

- A. Turn the computer on and boot-up normally without the game disk. This allows the installed AUTOEXEC.BAT file to communicate with the GAMECARD 3 AUTOMATIC and establish the correct operating speed.
- B. Once booted, insert the game disk into drive A and warm-boot the computer by pressing the CTRL-ALT-DEL keys at the same time. Because a warm boot does not turn the computer power off, the GAMECARD 3 AUTOMATIC will continue to remember the operating speed.

Figure 1: GAMECARD 3 AUTOMATIC

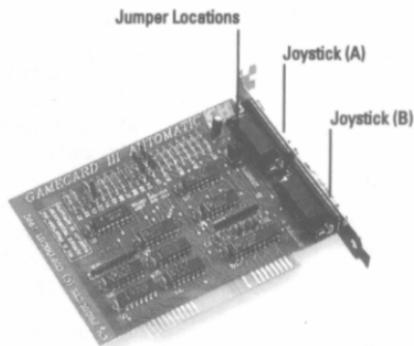
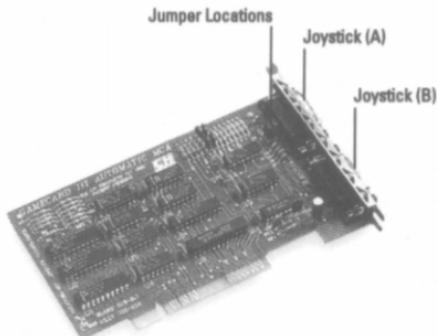


Figure 2: GAMECARD 3 AUTOMATIC MCA



## AUTOMATIC & MCA Connectors

.....

Pin #	Joystick (A)	Joystick (B)
1	+5VDC	+5VDC
2	Button 1 (A)	Button 1 (B)
3	X-AXIS (A)	X-AXIS (B)
4	GROUND	GROUND
5	GROUND	GROUND
6	Y-AXIS (A)	Y-AXIS (B)
7	BUTTON 2 (A)	BUTTON 2 (B)
8	+5VDC	+5VDC
9	+5VDC	+5VDC
10	BUTTON 1 (B)	BUTTON 1 (A)
11	X AXIS (B) opt.	NOT USED
12	GROUND	GROUND
13	Y AXIS (B) opt.	NOT USED
14	BUTTON 2 (B)	BUTTON 2 (A)
15	+5VDC	+5VDC

GAMECARD 3 AUTOMATIC I/O  
 PORT ADDRESSES 200, 201, 202 (HEX)  
 RESIDENT SOFTWARE  
 (TSR) - NONE.  
 INTERRUPTS - NONE

• • • • •  
*Please note: In order for an installation of this product to maintain compliance with the limits for a class B device, you must use shielded cables for the connection of any devices external to this product.*

Certified to comply with the limits for a class B computing device pursuant to Subpart J of Part 15 of FCC Rules. See instructions if interference to radio reception is suspected.

**WARNING:** This equipment generates and uses radio frequency energy and if not installed and used properly, in strict accordance with manufacturer's instructions, it may cause interference with radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is

encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the computer with respect to the receiver.
- Move the computer away from the receiver.
- Plug the computer into a different outlet so that the two devices are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems:"  
U.S. Government Printing Office  
Washington, DC 20402  
Stock No. 004-000-00345-4.

## **CH Products 1 Year Limited Warranty**

The CH Products GAMECARD 3 AUTOMATIC is warranted to the original purchaser to be free from defects in materials and workmanship for a period of ONE YEAR from the date of purchase. During the warranty period, CH Products will, at its option, repair or replace, at no charge, any component which is determined to be defective.

The warranty does not apply if, in the opinion of CH Products, the GAMECARD 3 AUTOMATIC has been damaged by accident, abuse, improper usage, or as a result of service or modification by other than CH Products.

"NO OTHER WARRANTIES ARE EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF SALEABILITY AND FITNESS FOR A PARTICULAR PURPOSE. CH PRODUCTS IS NOT RESPONSIBLE FOR CONSEQUENTIAL DAMAGES." SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

IBM PC, XT, AT, and PS/2 are trademarks of International Business Machines.

Copyright© 1990-1992 CH Products  
All rights reserved  
Revision 3.0  
P/N: 800-010  
Printed on recycled paper

.....  
*To obtain warranty services, send the GAMECARD 3 AUTOMATIC, postage prepaid, with a check for \$3.00 to cover shipping and handling, together with a dated proof of purchase to:*

**CH Products  
Customer Service  
970 Park Center Dr.  
Vista, CA 92083**