

# **HotRod** **Joystick™**

## **Instruction Manual**

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*Patent Pending*



*"Play it again"*



## **General**

Thank you for purchasing the HotRod Joystick. The HotRod Joystick is designed to give you playability and durability for many years to come. Thanks to your feedback, suggestions and support, we at HanaHo Games, Inc., manufacturer of the HotRod Joystick, have succeeded in producing a world class PC hardware product that has that true arcade feel built into it. The HotRod Joystick is the absolute best production joystick on the market today and we are proud to put our name on it!

The purpose of this manual is to get you familiar with some of the functions of the HotRod, and familiarize you with the way the HotRod operates.

## ***A word about Emulation and Classic Gaming***

Thanks to some very good programmers, multiple platform-based programs called emulators let you play actual arcade machine ROMS (Read Only Memory chips) on your PC at home. Most of these emulator programs are completely free and can be found from a variety of sources on the Internet. However we must warn you that acquiring licensed ROMS without owning the actual game or the license to hold the game is considered to be a violation of the law. We do not recommend or even endorse our customers holding ROMS that they do not hold the license to. We have however acquired the rights to legally distribute licensed copies of actual Capcom game ROMS used in arcade machines from 1980 all the way to 1995. We have added this CD-ROM to your purchase of the HotRod Joystick as a way to say "Thank You" for your order and have done this to preserve a rich history in memories of arcade games that would otherwise be lost because they are no longer produced for sale.

One of the most famous arcade emulator projects is called M.A.M.E. (Multi Arcade Machine Emulator). It is by far the biggest emulator with many followers and programmers writing drivers for well over 1600+ supported games to date. We have included a special version of MAME, bundled within the HotRod Joystick Products as well as Tips and Tricks, Cheat codes, source codes, utilities, and other data. See the CD-ROM in your package for more details.

We at HanaHo Games, Inc. would like to take a moment to acknowledge these individuals, for their hard work and devotion to preserving these Arcade memories of more than 20 years past!

Nicola Salmoria (MC6489@mclink.it) project coordinator of MAME, and the entire MAME team.

Saint (saint@null.net) from Build Your Own Arcade Control web page

Tim Erkel (Gecko@ArcadeAtHome.com) from Arcade@Home

JoseQ (joseq@emuviews.com) from Emuviews

Atila and Phopphet from Retrogramers web site

Neil Bradley from the Retrocade Emulator

Carl-Henrik Skårstedt (carl@mail.redm.lglass.com) from the Shark Emulator

Dave (nbbuse08@csun.edu) from Dave's Video Game Classics web site

And to the entire Emulation community as there is just too many great individuals to list here. Everyone has been fantastic in his or her support and suggestions, and we hope that we may now contribute our little piece of history to you!

Feel free to check out the HotRod web site for links to great classic game sites at <http://www.hanaho.com/products/HotRodJoystick/links.html>

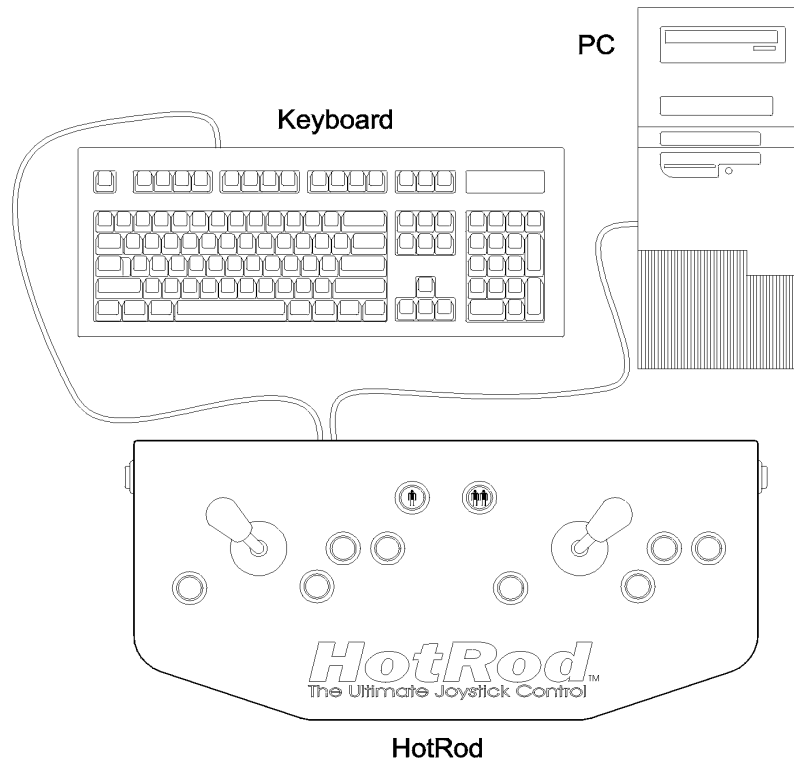
## **The HotRod Overview**

The HotRod Joystick is a PC based model on the original arcade control panel designed for home use. It plugs right into the back of your PC, through the PS/2 keyboard port in between the keyboard and the PC. The HotRod Joystick is a low-level bios input device, and it simulates a keyboard to your computer. No special drivers or software are needed. It was designed to replicate that classic arcade feel using Retrogaming emulation programs such as M.A.M.E., Retrocade, and commercial release titles such as Microsoft's(tm) "Return of the Arcade", and "Hasbro's Atari's greatest hits(tm)". It is possible to use the HotRod controller to play any computer game, such as

DOOM(tm), or TombRaider(tm), but we do not recommend this because these types of games were designed around your keyboard and should be played with your keyboard and mouse. Classic Arcade games originally made for the Arcade, were designed for joysticks and large buttons, and this is what the HotRod was designed to do.

HotRod simulates that "real" classic arcade experience, by using real commercial grade arcade components, that are actually an "overkill" for the home market. However, it produces a nice effect for that avid classic gamer who demands that authentic play. It is a very unique joystick, unlike any regular joystick you will find on the market. It is capable of playing 1 to 2 player games side by side with your friends, or complex arcade games that require dual joystick usage such as Robotron(tm), BattleZone(tm), or even CrazyClimber(tm). That old analog PC joystick could never do this!

The HotRod benefits by having superior durability. Outside you should also notice that even the playfield is capable of heavy duty extreme play conditions. Inside the HotRod is actually a very simple microswitch system, connected by wires to a microchip brain.



## ***Specifications***

- The HotRod has easy setup and low maintenance
- The HotRod Joystick cabinet measures 24 inches wide (61 cm), 11 inches (28 cm) deep, and 6 inches (15.25cm) tall and weights approximately 15-16lbs.
- HotRod should fit right on your desk and directly in front of your monitor. The top playfield has a 10 degree ergonomic angle, and is covered with a durable custom polycarbonate that is UV, soil, and scuff resistant just like the real arcade machines.
- 3M Polylastomer® feet designed for non-slip usage on your desk or any smooth surface.
- HotRod utilizes a MUX circuit design that we like to call Digital Multiplex Sampling™. DMS™ gives HotRod the fastest most accurate digital keystroke inputs, error free!
- HotRod comes with a male to male 6 foot PS/2 to PS/2 cord.
- HotRod is self-powered by the +5VDC feed from your PC's keyboard power, and needs no additional power sources or plug-ins.
- Happ™ super model joysticks and buttons are in all versions of the HotRod. All these component micro switches are rated at 10,000,000 cycles for reliability.
- Currently there are two versions of the HotRod Joystick. The HotRod -SE model, which has 16 independent arcade style microswitch buttons, 2x8-way arcade style microswitch joysticks, and player one and two start buttons. The HotRod -Classic model has 10 independent arcade style microswitch buttons, 2x8-way arcade style microswitch joysticks, and player one and two start buttons. Each version is arranged depending on your style of play and the type of games you like to play. The HotRod -SE model is set up more for StreetFighter™, Neo Geo™ type games, and the HotRod -Classic model is set up for those older games such as Pacman™, Galaga™, or Defender™.

## ***Installation***

Installing the HotRod Joystick is very simple. It is recommended that you read these instructions in their entirety, before attempting to install the HotRod Joystick to your computer.

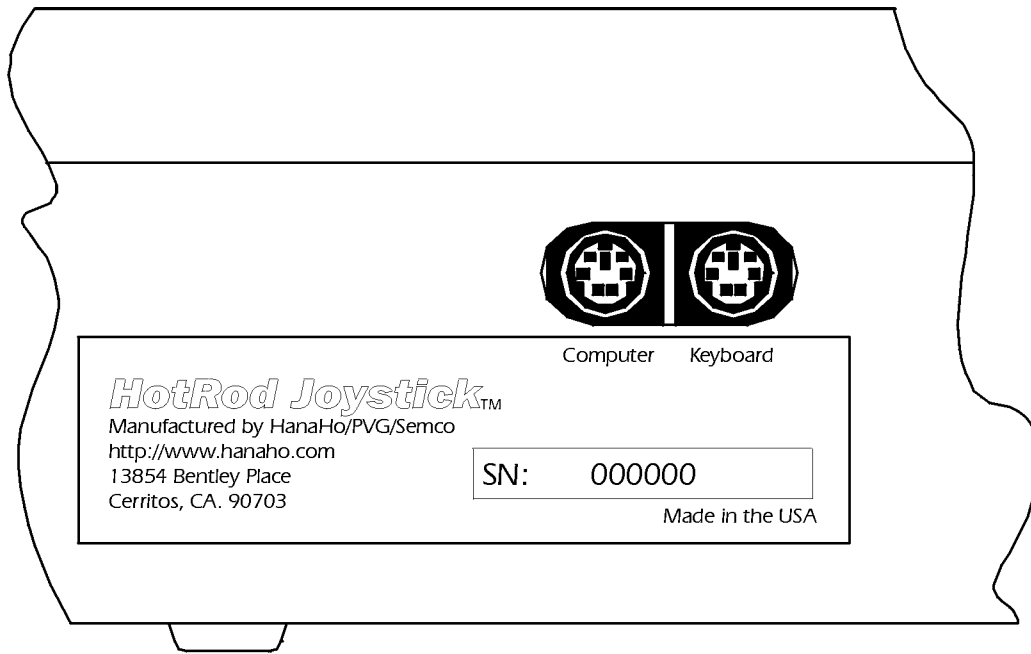
The box consists of a HotRod joystick, a manual, a registration card, a 6-foot PS/2 to PS/2 keyboard plug, and a CD-ROM.

Once you remove the HotRod Joystick from the box, please keep in mind that it is a good idea to store the box because you might need it in the unlikely event that you ship the HotRod back to the manufacturer or distributor. Set the HotRod down in front of your monitor where the keyboard would normally be, and move your keyboard off to the side of your work area.

Note: Before you start the installation, remember to turn off your computer first. Some PC's do not agree with hot swapping. Hot swapping is where you unplug a computer peripheral such as a keyboard, and plug in another similar peripheral. On occasion some PC's tend to "beep" multiple times as if you were holding down a key on the key

board. The buffer overfills causing the computer to "beep" continuously while a hot swap is preformed with the computer's keyboard still powered up. Most of the computers we tested in our lab accepted hot swaps, however we highly recommend that you shut down your PC first, and then perform the installation of the HotRod Joystick.

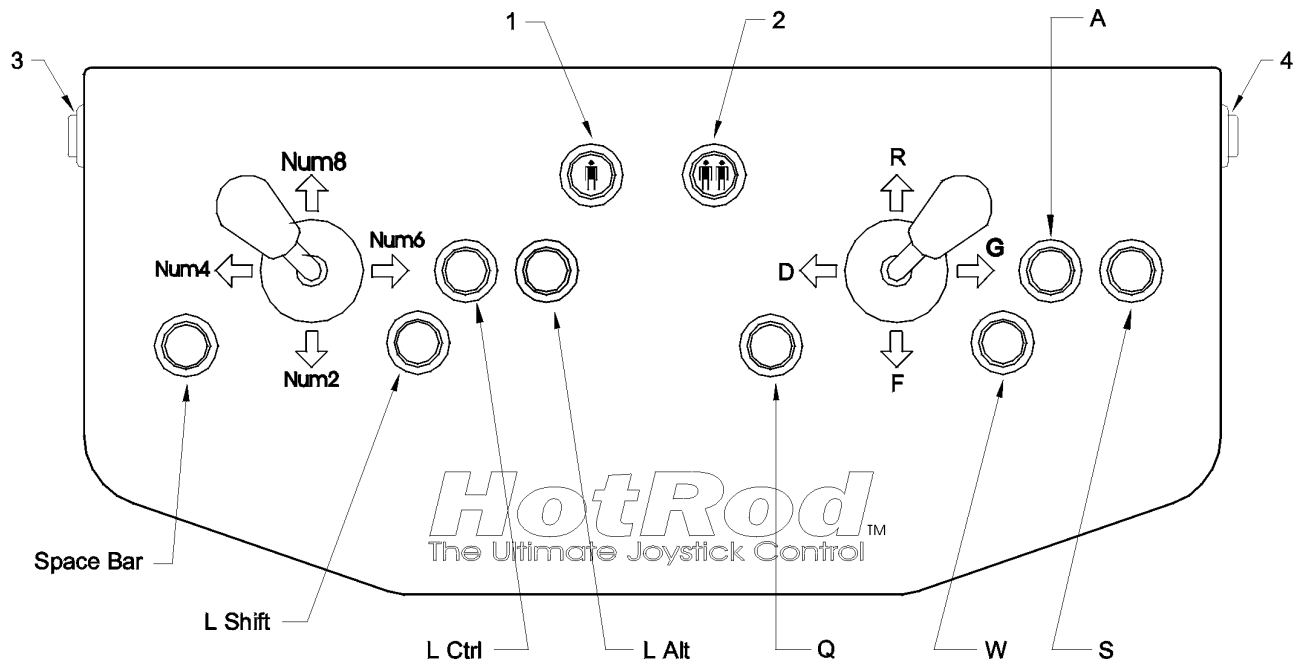
Start by locating your keyboard plug within the back of your PC, and remove the keyboard plug. Most PC's have



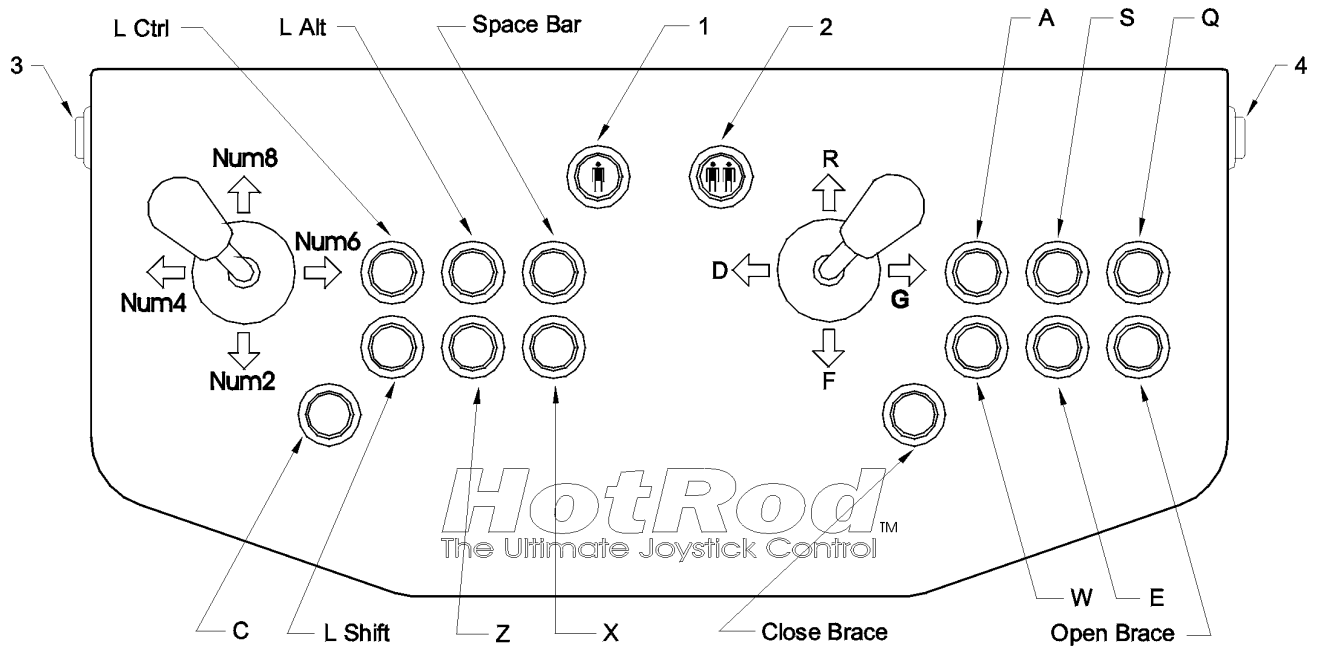
Rear View

the PS/2 style keyboard, but if you have an AT style plug you will have to purchase a converter plug that converts the plug from the AT style to the PS/2 style plug. If you have the At style, you will also need to purchase a converter plug to convert your PS/2 plug back to the AT style for your keyboard to plug in. Locate the 2 PS/2 plugs within the back of the HotRod. One is marked computer; the other is marked keyboard. The HotRod comes packed with a male to male PS/2 keyboard cord. Unpack this cord, and plug one side into the HotRod panel marked computer and the other side into your computer keyboard port where your keyboard was plugged into. Then plug the keyboard into the plug marked keyboard on the back of the HotRod. Power your PC back up.

Your keyboard will remain fully functional and in fact will work at the same time while plugged in. Your computer should not have any problems, because it believes you simply have a single keyboard in place.



HotRod Joystick -Classic Model



HotRod Joystick -SE Model

## ***Operation***

Each button on the HotRod joystick has been assigned a static keystroke. This means that the buttons are set to emulate specific keyboard keys. Your computer knows no difference between a button pressed on the HotRod, and a key pressed on the keyboard. However there is one very big difference. Unlike the keyboard, the HotRod's circuitry is specially designed to handle a large amount of tasks and instructions from the inputs, then organizes them into codes, and send them down the keyboard input fast and accurately without fail and at the highest performance. The keyboard is simply not designed to handle multiple keys pressed and held down for extended time periods. Keyboards will often miss inputs, whenever multiple keys are pressed down at the same time.

Most all games have two basic types of buttons. *Action* and *maintenance* buttons. All buttons located on the HotRod controller are buttons we call *action* buttons. *Action* buttons are buttons that are primarily used for direct game play within the game. Examples are "punch", "kick", or "fire" buttons. "Player One" and "Player Two" buttons fall into the *action* buttons category because they are used for direct play while the game is playing. The other types of buttons needed are *maintenance* buttons. These are for selecting a game, choosing options, enabling cheat codes, and general maintenance for that game. Most *maintenance* type keys vary greatly from game to game, but a lot of *action* buttons are the same through out different games. For example, the arrow keys are used for directions for almost 95% of all games for the PC. In the HotRod Joystick, *maintenance* buttons are left generally for your keyboard to handle, while *action* buttons are left up to the HotRod Joystick to input from within the game.

The default *action* keys on the HotRod are set to the MAME emulator defaults. Since HotRod is an input device that basically emulates the keyboard you want to make sure that in each game or emulator you have the keyboard input enabled in order for the HotRod to function correctly.

At the time of the writing of this manual, we have worked with a few emulator authors and have secured HotRod Joystick support within these emulators. More emulator authors will be adding in support for the HotRod Joystick as time goes on. There are a very large number of classic emulators and classic remake games available on the Internet and the commercial market. Since most all of these games allow you to program input keyboard keys directly into the program, the problem of programmability is often easily overcome. Software programming instructions for each and every game and emulator is way beyond the scope of this documentation, and we ask that you seek out the support of each software program, in order to find out how to reprogram the keyboard inputs for that particular software and or emulator.

## ***Troubleshooting***

The HotRod joystick is designed to work with the PC at the hardware interface level. This provides some huge benefits as no drivers are needed, and no software is needed to be loaded prior to an operating system. Since 99% of all computers have a keyboard, in theory the HotRod will work on any PC and with any operating system on that PC.

However if you plug your HotRod into your PC and suspect a problem, here are few helpful hints in order for you to trouble shoot your problem.

- Make sure you have all the PS/2 plugs in correctly and fully. Follow the PS/2 cord from the plug marked computer, to the computer and make sure it is indeed plugged into the PS/2 port marked for your keyboard. Then look at the HotRod again under the plug marked PS/2 keyboard and follow that one back to your keyboard to make sure that your keyboard is indeed plugged in.
- Take a look at your keyboard's Number lock light and toggle the Number lock light with your Number lock key. See if your keyboard is making a "pass through". If not, start the installation process once again.



- Drop to a DOS window (if in Windows) and try pressing a few buttons on your keyboard and the HotRod to see any keystrokes come up. Keep in mind that some of the HotRod buttons emulate the ALT key so you might not see any cursor movement when those buttons on the HotRod are pressed.
- In the HotRod CD-ROM that comes within the box of your HotRod controller, there is a utility called the HotRod Test Program™ (HRTEST.EXE) that gives you a complete button test for your HotRod Joystick. This simple utility is a GUI DOS/Windows9.x utility that will let you test every button/switch combination on the HotRod Joystick to make sure it is operating perfectly.
- Some Windows 9.x operating systems have unintended effects when the ALT button is pressed with other buttons or a combination of buttons, Microsoft has some tools on their web site to counteract some of these problems, as well as some great tools for remapping your ALT, control, and spacebar.
- If you are experiencing a problem within a certain game, seek out the properties or configuration within that game. Make sure that within the game, Windows disables all hotkeys to windows, so that certain button combinations do not have adverse affects.

## ***Customer Care***

Never use hard abrasive cleaners to clean the surface of the HotRod Joystick. Use a slightly damp towel or wash cloth to clean surfaces. Do not get the HotRod too wet, as an abundance of water might damage and warp the wood cabinet. Remember that the HotRod too is a computer peripheral, and should be treated as any other computer peripheral you might own.

## ***Warranty***

All HotRod Joysticks are covered by a 90-day product Limited Manufacturer's Warranty. Any and all claims must be brought to the attention of HanaHo Games, Inc. In order to receive proper service from HanaHo Games, Inc.; please register the product using the Manufacturer's registration card that is provided with the product. Refunds will only be made to the original purchaser. Remember to retain your bill of sale for warranty service. Any items returned without a copy of the bill of sale will be considered out of warranty.

The HotRod Joystick has been sealed up to maintain top working order and top performance. Opening up the HotRod cabinet will void all manufacturer's warranties, and should only be done by authorized personal such as trained technicians, or the manufacturer.

HanaHo Games, Inc. warrants the HotRod Joystick against defects in materials or workmanship as follows:

**Labor:** For a period of 90 days from the original date of purchase, if HanaHo Games, Inc. determines that the equipment is defective subject to the limitations of this warranty, it will be replaced at no charge for labor. HanaHo Games, Inc. warrants any such work done against defects in materials or workmanship for the remaining portion of the original warranty period.

**Parts:** For the period of 90 days from the original date of purchase, HanaHo Games, Inc. will supply, at no charge, new or remanufactured parts in exchange for parts determined to be defective, subject to the limitations of this warranty. HanaHo Games, Inc. warrants any such replacement parts against defects in materials or workmanship for the remaining portion of the original warranty period.

When shipping for repairs, please package the HotRod Joystick into its original box properly, using either the original shipping materials or the packaging in which the replacement equipment is shipped. Contact HanaHo Games, Inc. for an RMA number, write the RMA number in large, clearly visible characters on the outside of the

shipping box that you use to return the equipment. To avoid confusion and misunderstanding, shipments without the RMA number clearly visible on the outside of the box will be returned at your expense.

Shipping and handling charges are not refundable. If the product is returned in used, or not in new condition, or not in its original packaging complete with all accessories & documentation, the purchase price will be refunded less a 15% restocking fee. Products damaged by abuse or improper usage and not by manufacturer's defect, will not be accepted for refund or exchange.

HotRod Joystick is a continually developing product! This means that at any time HanaHo Games, Inc., may offer upgraded models, upgraded joystick conversions, or a service to upgrade your joystick model and reserves the right to set down rules regarding trade-ins, conversions or upgrades. If HanaHo Games, Inc. offers upgrades for the HotRod Joystick, it is the customer's responsibility to notify HanaHo Games, Inc. to inquire about these upgrades. HanaHo Games, Inc. will post upgrade info via the HotRod Joystick web site if and when it's available.

If you would like more information regarding warranty info and RMA numbers, feel free to e-mail us at [info@hanaho.com](mailto:info@hanaho.com).

## ***Legal***

HanaHo Games, Inc., PVG, or Semco will not be held liable for incidental or consequential damages for breach of any expressed or implied warranty on the HotRod Joystick, nor any incidental or consequential damages resulting from the use of, or inability to use the HotRod Joystick. Under no circumstances shall HanaHo Games, Inc. liability, if any, exceed the purchase price paid for the HotRod Joystick. HanaHo Games, Inc. reserves the right to refuse to honor this warranty if HanaHo Games, Inc determines any of the above exceptions to have caused the HotRod Joystick not to perform properly. This warranty shall be void if any factory-applied serial numbers have been altered or removed. This warranty shall also be void if the HotRod Joystick has been opened by an unauthorized person.



**HotRod Joystick Model Name:** \_\_\_\_\_

**HotRod Joystick Serial Number:** \_\_\_\_\_

The information in this guide is subject to change without notice.

Revisions may be issued to advise you of such changes and/or additions.

For the latest information and updates please check the HanaHo web site <http://www.hanaho.com> or the HotRod Joystick web site at <http://www.hanaho.com/products/HotRodJoystick/>

Correspondence regarding this guide should be addressed directly to HanaHo Games, Inc. 13854 Bentley Place - Cerritos, California 90703. (Sales@hanaho.com)

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