## **RoboWar Instructions**

## © 1995 David Harris

## I. Introduction

Welcome to RoboWar. In this game, you will pit armored robots against each other in gladitorial combat or build your own robots to vie for championship in the arena! Only clever design and skillful implementation will bring your robot to the top. May victory go to the strongest!

Features of RoboWar include animated combat, sound effects, a unique programming language (RoboTalk) with an assembler and interpreter, color graphics on Macs with color monitors, native Power Macintosh support, and a complete robot development factory with a Drafting Board, Hardware Store, Icon Editor, and Recording Studio.

This manual is divided into eight sections. Section I, the introduction, should be self-explanatory. Section II describes the four stations of RoboWar, the Arena, the Drafting Board, the Hardware Store, the Icon Factory, and the Recording Studio, and shows how to use RoboWar to watch predesigned robots fight on the screen. Sections III, IV, and V are for more sophisticated RoboWar users who want to design their own robots. Section III describes the structure of the RoboTalk language and includes a step-by-step tutorial for building a simple robot. Sections IV and V are references detailing the registers and operands used in RoboTalk to control robots. Section VI describes Interrupts, a new programming construct that can make your robots significantly more responsive, at the expense of additional programming complexity. Section VII describes the International RoboWar Tournaments in which hackers from around the world duel for glory, and discusses the tournament utility used ot automate such tournaments. Finally, Section VIII contains a rambling history of RoboWar.

If you would like to pit predesigned robots against each other in combat, read the first part of Section II on the Arena. If you would also like to learn to design your own robots, read the rest of Section II, along with Sections III-VI. If you don't like reading manuals, you'll find that running combats is mostly self-explanatory, so you can just start playing with RoboWar right now and come back to skim the later sections when you'd like to build your own robots. If you'd just like to throw away RoboWar and go burn penguins, please see a psychiatrist.

Please remember, RoboWar is shareware, not public domain. This means that you can use RoboWar for a while to see if you like it, but that if you wish to keep it and continue to use it, you are obligated to send a \$15 shareware registration fee. Unless registered, RoboWar will only allow you to compile robots of up to 100 instructions. In return for this registration fee, I will send you a registration number to allow you to compile full-length robots, inform you of new updates and provide free upgrades, let you know about RoboWar tournaments, and try to answer questions you have about RoboWar. Commercial games are typically at least \$40; while the artwork in RoboWar is less polished, I hope the enjoyment is just as great. So please support my efforts to write quality software for low prices. A registration form apppears at the end of these instructions for your convenience.

Send your registration to:

RoboWar HindQuarters 600 Park View Dr. #206 Santa Clara, CA 95054 (before August, 1995) RoboWar HindQuarters 1112 Evelyn Ct. Ridgecrest, CA 93555 (after August, 1995)

If \$15 causes you severe financial hardship, send me what you think RoboWar is worth and I'll send you a registration code so you can keep hacking. I don't want RoboWar to be inaccessible for money reasons.

Site licenses and charitable donations are also available. In general, these licenses apply to five or

more computers. One person is the point of contact for the site license and pays \$15 for a regular registration. Each additional user / computer costs only \$7.50 extra. I am happy to make charitable donations of site licenses to non-profit organizations, especially schools.

If you have questions, send email to harrisd@leland.stanford.edu. If you are on the Internet, you may wish to check out the RoboWar Web Page at http://www-leland.stanford.edu/~harrisd/robowar.html for the latest RoboWar news and to download recent tournament results.

Finally, you might be interested in the International RoboWar tournaments. In a tournament, robots from all over the world will compete for fame, honor, and glory. Tournaments generally have a small entry fee and winners have received cash prizes. Tournaments are your chance to see how your robot compares to the progeny of hackers around the country; at the very least, it's exciting; at best, you may win some money. Tournaments typically are held twice a year. Please write or check the RoboWar Web Page for information about upcoming tournaments.