



SPACEWAR! Instructions

V1.0 1/24/2021

SPACEWAR!

for the ColorComputer

SPACEWAR! for the Color Computer is a tribute to the 1962 game written by Stephen Russell, Peter Samson, Dan Edwards, and Martin Graetz.

Author: Rich Natili (rich.natili@gmail.com)

System requirements: 32K CoCo 1,2, or 3 emulator or hardware

Current Version: V1.0 (SPWAR21), 1/24/2021

Title Page



Summary of Ship Controls

Press Enter to Start and Restart game

Object of Game

Ship versus Ship space combat

First ship to score seven kills wins game

Crashing into center star or other ship counts as a point against

Flight Controls

Ship #1:



Z: Rotate Left

X: Rotate Right

Q: Thrust

A: Launch Photon Torpedo

W: Launch Mine

Ship #2:



N: Rotate Left

M: Rotate Right

P: Thrust

L: Launch Photon Torpedo

O: Launch Mine

Weapons



Photon Torpedo: Unlimited use
Not affected by gravity star

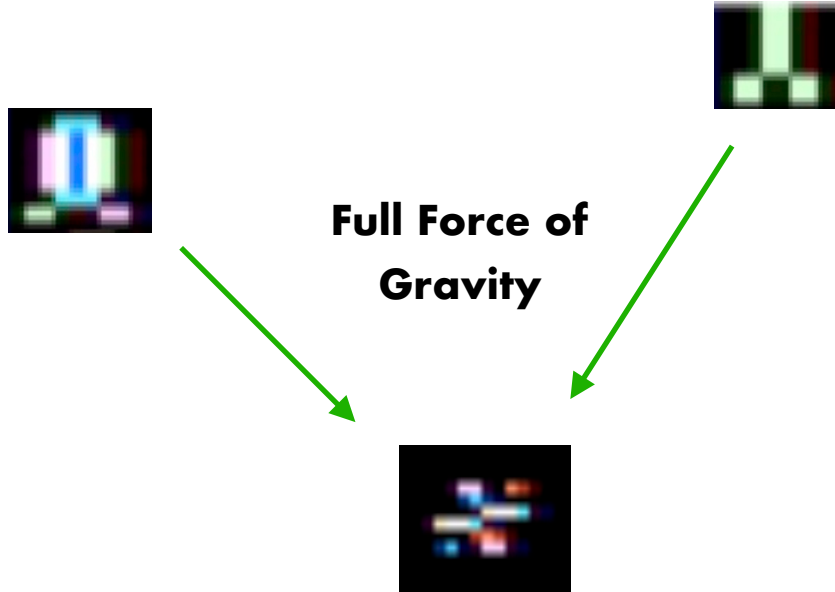


Ship #1's Mine: One use per round
Gravity star affect ~ 1/2 of ship
Slow moving
Larger kill radius than torpedo



Ship #2's Mine: One use per round
Gravity star affect ~ 1/2 of ship
Slow moving
Larger kill radius than torpedo

Gravity



Full Force of Gravity



Gravity Star

No Affect on Photon Torpedo



1/2 of Force Applied to Ship



Code and Compiling

Assembly Code: Mac TextEdit - Plain text encoding
MacBook Air - MacOS Mojave 10.14.6

Assembly: LW Tools - LWasm

Disk Image: MAME - Imgtool

Testing: MAME CoCo3 ROM and CoCo1 hardware

Mac Terminal command line examples:

```
lwasm -9bl -p cd -ospwar20.BIN spwar20.txt
```

```
imgtool put coco_jvc_rsdos SWDISK.dsk spwar20.BIN spwar20.BIN
```

```
mame coco3 -window -flop1 swdisk.dsk
```


References

Spacewar! emulation implementation by Norbert Landsteiner
(2012-2016)

www.masswerk.at

Cocotalk Live - 6809 Assembly by Steve Bjork

<http://cocotalk.live/6809asm/>

Glen's Weblog:

<https://nowhereman999.wordpress.com/2017/06/19/coco-6809-assembly-on-a-modern-computer/>

<https://nowhereman999.wordpress.com/2017/11/17/how-to-setup-and-use-irqs-on-the-trs-80-color-computer-part-4-simpler-ways-to-use-interrupts-on-the-coco/>

6809 Assembly Language Programming (1981 Leventhal)

Assembly Language Graphics for the TRS-80 Color Computer
(1983 Don Inman, Kurt Inman with Dymax)