F-Zero:SRAM map

The following article is a SRAM map for *F-Zero*.

The saveram .srm file is 2,048 (0x800) bytes long. It seems only 512 (0x200) bytes are used. A simple sum-of-bytes checksum is used on each of the 3 sections of best record time data.

Contents

File Format FZERO string bytes **League sections Best Record format** League checksum **Master Class unlock**

File Format

"FZERO"	0x05 bytes
Knight League + checksum	0xA7 bytes
Queen League + checksum	0xA7 bytes
King League + checksum	0xA7 bytes
Master Class enable	0x01 byte
"FZERO"	0x05 bytes
unused (0xFF filled)	0x600 bytes

FZERO string bytes

The sram data begins and ends with 5 bytes FZERO (0x46 0x5A 0x45 0x52 0x4F). These 5 bytes are compared to the ROM location \$00:8869 (PC file location 0x0869) and must match.

League sections

Each League section contains 55 best records, followed by a 2 byte checksum. There are 10 best records plus 1 best lap record per track (in that order). There are 5 tracks per League.

Best Record format

Each *best record* uses 3 bytes. The upper 4 bits of the first byte defines which car set the record, and whether or not it was in practice mode. If the upper 4 bits are 0, then the record is ignored. The lower 4 bits of the first byte are the minutes. The second byte is the seconds. The third byte is the milliseconds. The game initializes all records to **0x09 0x59 0x99**.

Best Record example

Bytes	Minutes	Seconds	Milliseconds
0xB2 0x07 0x45	2	7	45

Above: the upper 4 bits of the first byte is B, which represents the Fire Stingray set the time in Grand Prix mode.

Upper 4 bit values:

Value	Car	Mode
8	Blue Falcon	Grand Prix
9	Wild Goose	Grand Prix
Α	Golden Fox	Grand Prix
В	Fire Stingray	Grand Prix
С	Blue Falcon	Practice
D	Wild Goose	Practice
Е	Golden Fox	Practice
F	Fire Stingray	Practice

League checksum

Each League section contains 0xA5 bytes of *best records* followed by 2 bytes of checksum (stored little endian). To calculate the checksum, simply add each of the bytes together, and take the lower 16 bits of the total. Then you byte-swap the value and write that to the .srm. So if you add all of the 0xA5 bytes together and get **0x1234**, then it will be stored as **0x34 0x12**. There are 3 separate checksums for the 3 Leagues.

Master Class unlock

This is a single byte that unlocks *Master Class* for each League. It is not covered by a checksum and can be freely edited, but **the upper 4 bits must equal the lower 4 bits**. It is a bitwise value, so **0x33** would unlock for Knight and Queen but not King. Setting the upper most bit **0x88** results in an invalid value and gets reset to **0x00**.

Value	Unlocks
0x00	default: none
0x11	Knight
0x22	Queen
0x44	King
0x77	max value: all
0x88	invalid

Retrieved from "https://datacrystal.romhacking.net/wikid/index.php?title=F-Zero:SRAM_map&oldid=45760"

This page was last edited on 29 June 2021, at 13:17.

Content is available under GNU Free Documentation License 1.2 unless otherwise noted.