

SIGMA MARIO III

~ KOUMEI GRINDSET ~

INSTRUCTION MANUAL

~MANDATORY COPYRIGHT INFORMATION~ A . K . A . THE MOST BORING PART OF IT ALL

“Super Mario Bros.” (1985) and its characters are the intellectual property of Nintendo designated for the Nintendo Entertainment System™.

This is a non-profit ROM Hack/fan modification of the game created under the fair use doctrine.

Hack and design work by Eden GT, 2016—2024. Thank you for downloading this package.
[Stable Release ::: April-18-2024]



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This .zip file includes:

- *Sigma Mario III ~Koumei Grindset~ [stable release 18-04-24].ips*
- *SigmaMario3_Instructional Manual PROMO [ENGLISH].pdf*

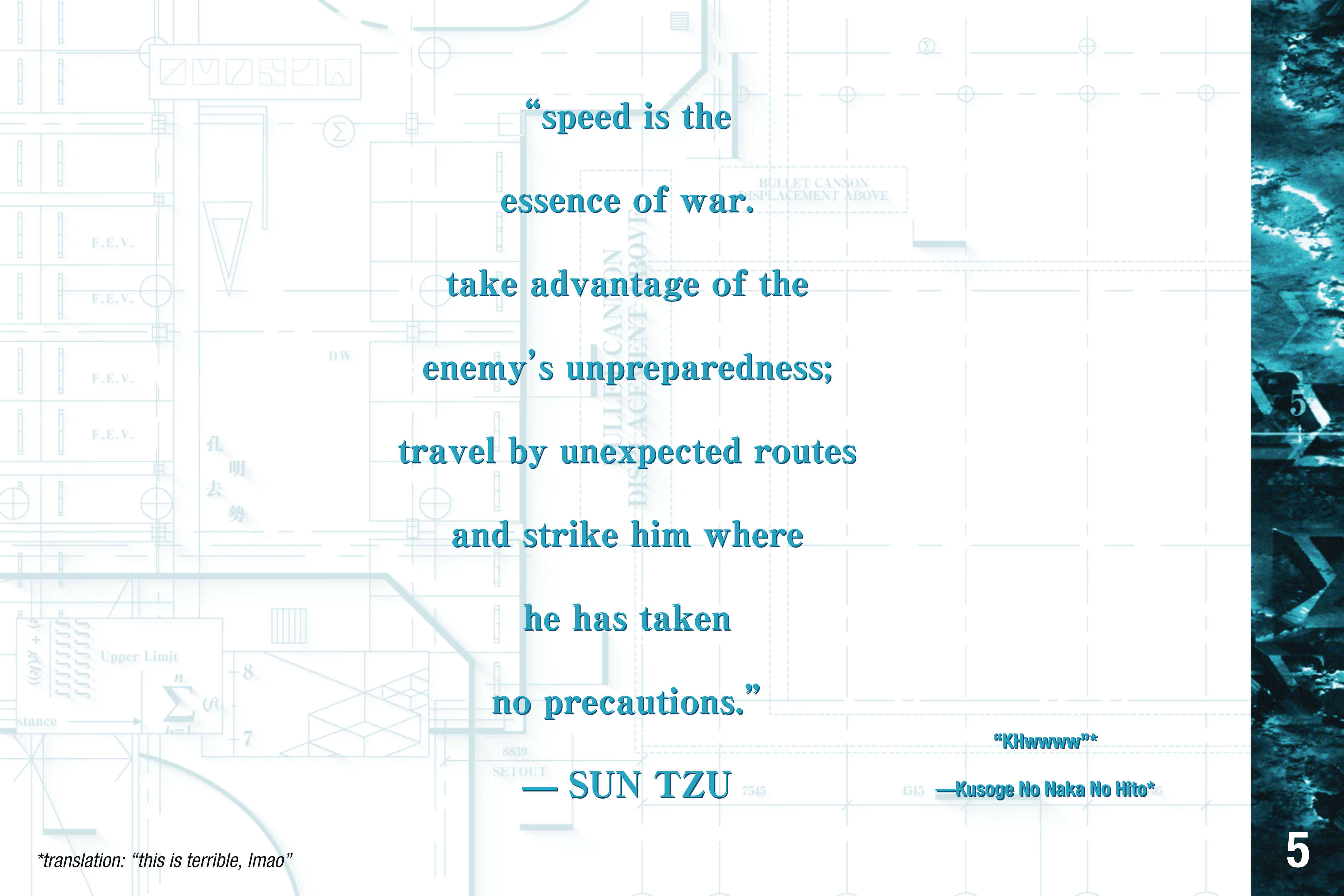
HOW TO PLAY

You will need the following:

- *An untrained, pure NES ROM of Super Mario Bros. (Japan/USA) with a size of 40,976 bytes.*
- *An IPS patcher (WinIPS is used for this operation).*
- *An NES emulator of your choice.*

In WinIPS, under the “**IPS patching**” operation, please load the “*Sigma Mario III ~Koumei Grindset~ [stable release 18-04-24]*” IPS patch file and your SMB1 ROM file respectively into the “**IPS file/File to be patched**” directories. After that, hit “**Apply**” to generate the now applied new ROM. It should now be displayed as 81,936 bytes.

Optionally (but recommended), watch the training montage intro from “*GAME KING: Takahashi Meijin VS Mouri Meijin*” as preparation before the storm.



“speed is the
essence of war.
take advantage of the
enemy’s unpreparedness;
travel by unexpected routes
and strike him where
he has taken
no precautions.”

— SUN TZU

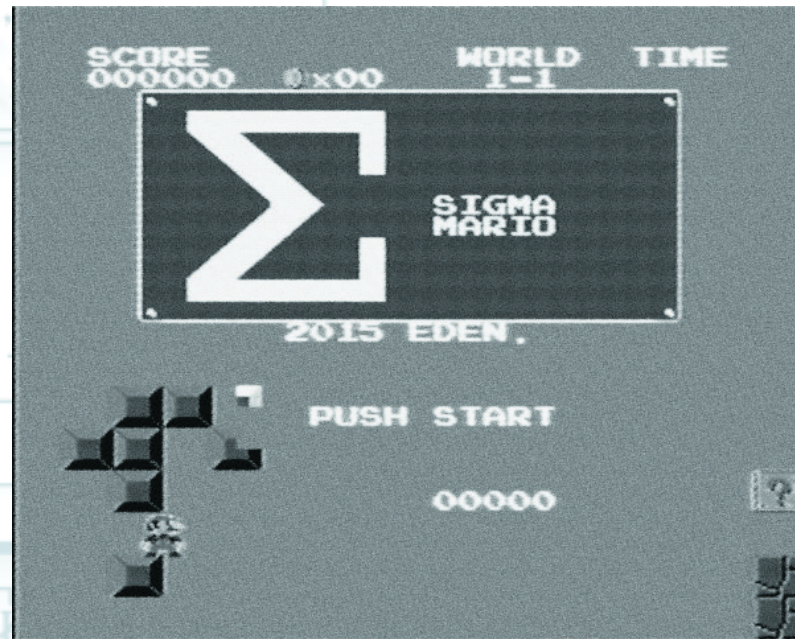
“KHwww”*

—Kusoge No Naka No Hito*

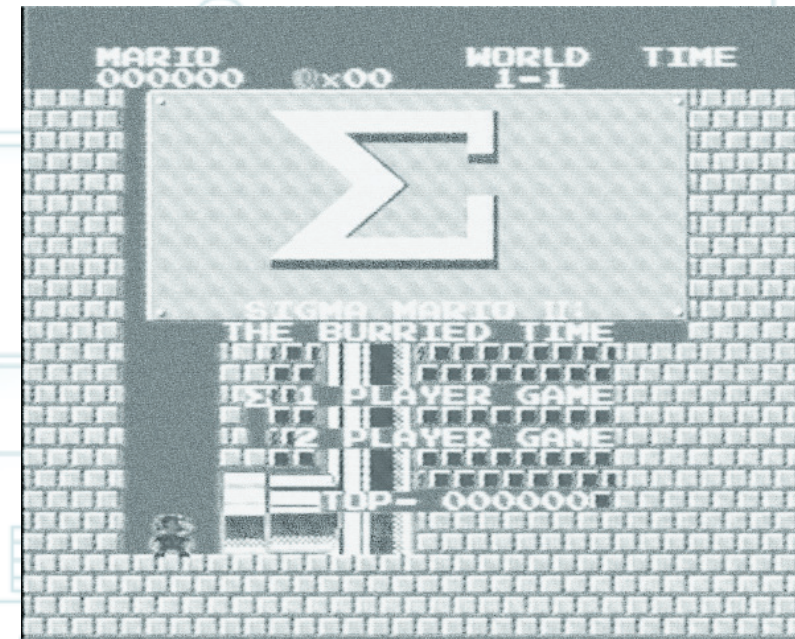
*translation: “this is terrible, Imao”

FOREWORD

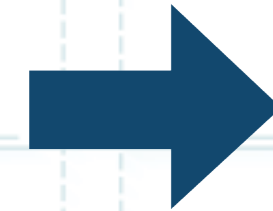
Hacking activity beginning: February 2015



Sigma Mario date publication:
May 31st, 2015
[OBSOLETE]



Sigma Mario II date publication:
February 14th, 2016



Sigma Mario III date publication:
April 18th, 2024

The ***Sigma Mario*** series begun as no more than a shameful attempt on copying some of the traits known in earlier SMB1 Hacks at the time, and the name was more chosen for more the “coolness” of the Greek letters after seeing it on a maths textbook and much less to do with its modern connotation associated with the word.

In other words, there wasn't much thought put into it.

The first one in the trilogy is known to require glitches to pass, minor-pitched music, hyper-fast enemies, slightly toned colour palettes, that later on defined the sequels.

However, **playing this is not recommended at all**, as it was my first ever ROM Hack publicly produced, and contains poorly designed levels due to an uninspired resemblance to the original SMB1 stages. It may be much better to avoid it. For the sake of posterity to display improvement of the series later on, it would not take too long to find it around, for those who are curious.

The second one is slightly more tolerable, as it begun with the prohibition of specific glitches that are present within the first. Towards the end of level production, the limitations of regular SMB1 had rendered it difficult to produce levels without the risk of running out of objects, especially on the last world, forcing to cut the output short.

Still leaving a lot of potential to be desired, with the end result being mediocre to my standardised tastes nowadays, there has been the decision to continue on with a third sequel with the plan to greatly expand upon the original underdeveloped ideas of the first two and take it to new heights.

A subtle hint being: A random string of six alphanumerical characters at the very end of ***Sigma Mario II***. What could this mean?

[Please note this work is originally aligned to my visions during 2017.

It it also not meant for casual players, requiring a decent knowledge of the game to make playing progress. If you are looking for “E”s, you’re barking up the wrong tree!]

CONTEXT / ORIGINS

Creating a work like this no doubt has to take inspiration from what comes before, mostly from the Japanese community of the early to mid 2000s.

The ***Kamikaze Mario*** series (prod. by 79) and ***Sirius Mario Bros High-Speed*** series (prod. by Sirius) were the root ground of the idea the “hyper-fast enemies” concept that in essence, requiring a degree of luck to get through the stages with their presence. The levels were somewhat fair enough (for experienced players, that is) that they could be beaten without the use of savestates with enough time and effort.

Falling Mario series (prod. by Wa) was one of the first ever “hardcore” glitchfest works that primarily focused on the unreasonable and precise timing of your inputs, as well as deep knowledge on the game mechanics. The bleakness known in these such as lack of backdrops soon became its own category fad in its own right; “***Hageo***”, “***Beta Mario***” series, etc. are some notable ones.

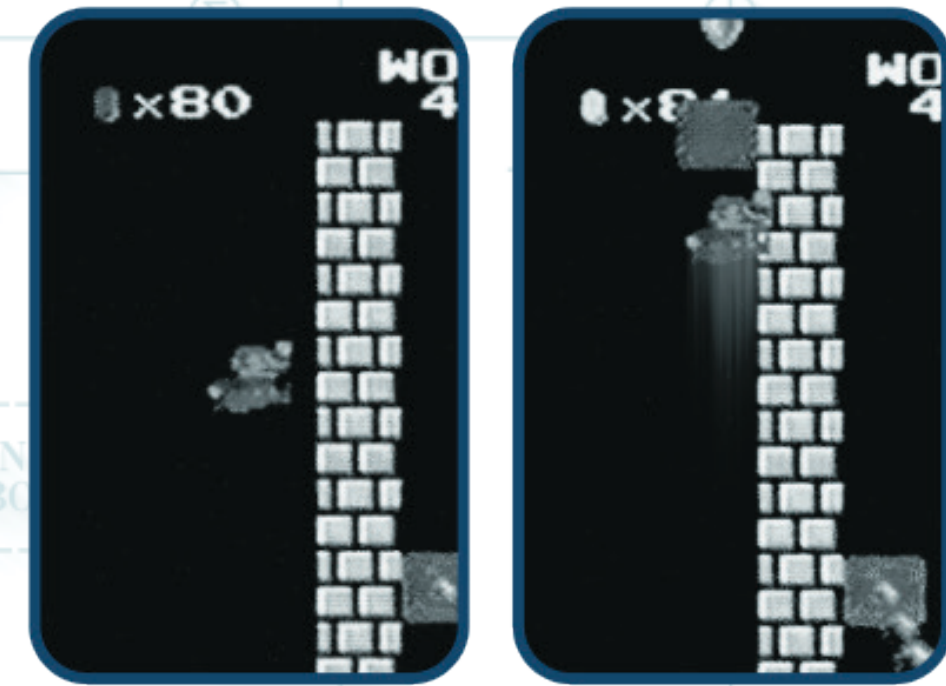
Sigma Mario III however focuses on the naturalism aspect of the original SMB stage formula while still giving them an unfair twist reminiscent of these hard-system hacks.

“Parallel World” is a reoccurring jargon across these era of hack releases that refers to new worlds/levels that can be accessed after first beating the game. Infamous examples include ***! Mario Bros.*** (prod. by Docokalaki) and ***Crystal Mario EV*** (prod. by Crystal/rbr) that features *World !*. Such extra content are included for this project too as a nod to this trope.

Soon, comes the PeerCast genre, where some of the most playful qualities came into play that deeply influenced the structure of the third hack...

ねずみ返し / Rat Guard

An unpenetrable disc as a dead end after crawling through a long tightrope, meant to prevent rodents from boarding boats and ships. In this context, it really means being greeted by a Koumei block after finding a tempting spot to walljump out of.



100秒面 / 100-Second Stage

These time attacks are a test of raw and fun speedrunning ability that leaves no room for error that usually ends in a few seconds (or none) left on the timer by the time you finish. In this hack it is slightly derivative of the idea in that you'll quickly find out it's not real-time input-friendly anyways.

♪ Zamagi's Song "It's So Good Now"...

凶悪クッパ戦 / Heinous Bowser Battles

A mixture of complex Koumei blocks puzzles while dodging all the hammers and fire breaths in sight—The goal is clearly right in front of you, which makes it all the more stimulating.

閉じ込めの罠 / The Traps of Confinement

Can't trust all the obstacles in sight! Some open spaces or difficult rooms lead to straight up dead ends, or falling into a pit trap where Koumei blocks are filled to the brim allowing no escape. Meant to kill easy save states accompanied with the fear of starting over, as they say.

You would find many of such traits in ***Sigma Mario III***.

But this is not all- check Page 17 for more information over what tricks and techniques aren't needed. Until then, enjoy the following details about the hack over the next few pages.

WHAT IS A KOUMEI BLOCK?

Commonly known as the “hidden block” in Western communities. Koumei is named after *Zhuge Liang/Kongming*; most people would know a common troll-case scenario of using them would involve open pits/enemies in sight only to not expect its sudden visibility, resulting in a cheap, unfair death. Ouch!

Allows the player to walk through walls from the left side with no effort.

You cannot run through 1-block holes if these fill in the gaps.

Getting to higher places to what seems like impossible leaps, if you could search for them.

One of the most frustrating blocks of all time.

Tip: When such blocks are arranged in a diagonal pattern, you could pass through the lower ones if the timing is right.

Ka-ching!
Ka-ching!
Ka-ching!

STAGE STRUCTURE

“Cool. But how long is this hack exactly?”

[W1]	1-1, 1-2, 1-3, 1-4	[Underground]
[W2]	2-1, 2-2, 2-3, 2-4	[Deeper Underground]
[W3]	3-1, 3-2, 3-3, 3-4	[Underwater]
[W4]	4-1, 4-2, 4-3, 4-4	[Clouds]
[W5]	5-1, 5-2, 5-3, 5-4	[Ice]
[W6]	6-1, 6-2, 6-3, 6-4	[Nighttime]
[W7]	7-1, 7-2, 7-3, 7-4	[Monochrome]
[W8]	8-1, 8-2, 8-3, 8-4	[Castle]

Every third level of each world is a 100-second stage.
There are no repeating levels, unlike most SMB hacks out there.

[WΣ]	Σ-1, Σ-2, Σ-3, Σ-4	[?]
[W9]	9-1, 9-2, 9-!	[??]
[W-]	-1, -2, -3	[???

World Σ is so obnoxiously created that viewers not playing the hack *may even find it difficult to watch all the way through!* Take caution that it takes much longer to beat compared to the other worlds! World “*Parallel Möbius*” 9 and World “*Abyss Negative*” Minus are optional as an extra “new quest” challenge; the former requires certain playing requirements that may or may not be unlocked after beating the hack.

CAST INTRODUCTION

Are we reinventing the wheel here by having to explain what these enemies do again? Perhaps, but this time they're much significantly faster that it's stupid, too.



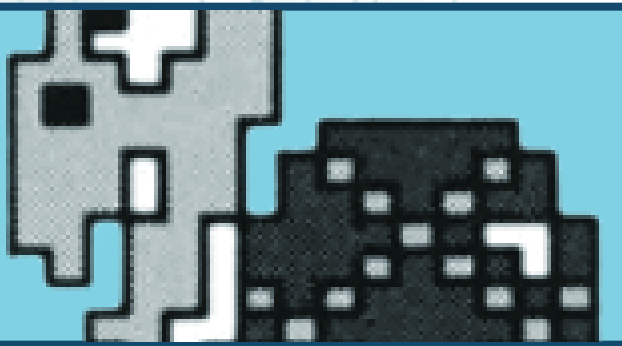
SIGMA GOOMBA

Goes at 114.514 miles per hour. Any faster than that and he would clip through all the walls in existence anyways. Always revives after stomping. What can I say, that Ritalin sure does wonders!



SIGMA TROOPA, OF THE GREEN VARIETY

Same speed as the Goomba. Revives faster than usual too. Their whole clan are just jittery in general.



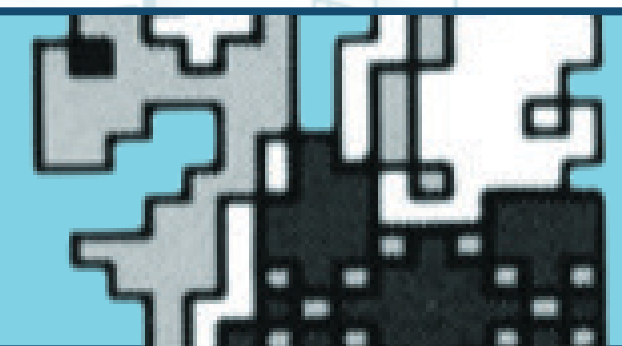
SIGMA TROOPA, OF THE RED VARIETY

The slightly more intellectual kind. No, not the being-able-to-recognise-yourself-in-the-mirror-sort of way.



SIGMA PARATROOPA, OF THE GREEN VARIETY

Split into 3 kinds: Ones took more than your regular recommended dose of vitamin gummies, ones that don't know how directions on a map work, and frozen ones that morph themselves to red Koopas but function like green ones when stomped.



KOOPA PARATROOPA, OF THE RED VARIETY

...Yeah, they look and function normally like the original game until you stomp them, that is.

SIGMA BEETLES

You could make a bomb shelter out of the shells they're made from. Mutated ones that get stuck in the air also exist.



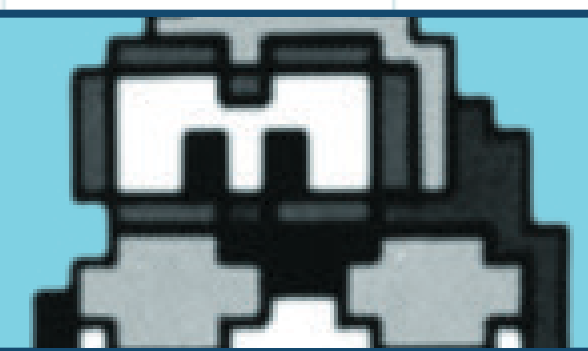
SIGMA BULLET BILLS

*Directly borrowed from **Kamikaze Mario**. Now it's a real bullet hell out there, beware of the frenzy zones.*



SIGMA LAKITU

Chases you appropriately as it should. You can reasonably control to escape their falling eggs.



SIGMA SPINY

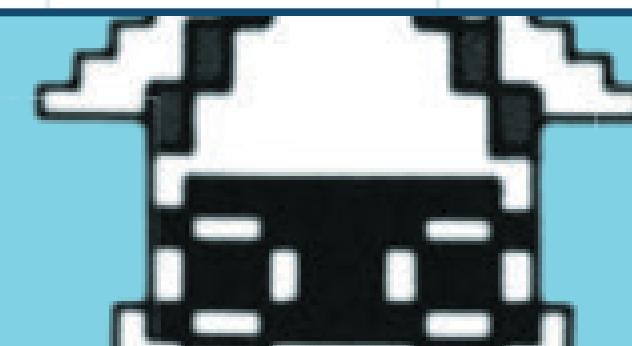
Comes for you just like the rest of the enemies, but more terrifying because of their general appearance and you can't stomp them either.

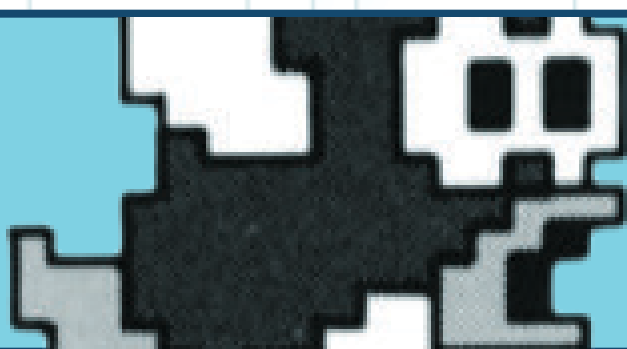
Stray ones at rest are also present.



BLOOPER

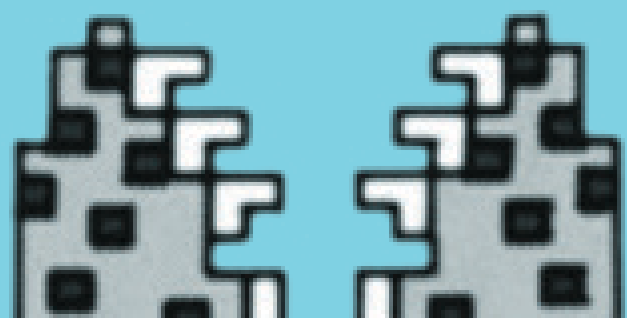
*They had a drastically changed behaviour before, but are reverted to default because it made the underwater levels nearly impossible to complete. But still, to quote Paulie Walnuts, “**you can’t even put them around fish, they suck the bread right out!**”*





SIGMA CHEEP-CHEEPS

Arguably even more terrifying than Bullet Bill zones, as they move either slightly diagonally or bounce up and down in the air unnaturally.



SIGMA PIRANHA PLANTS

If you've played Faisoft's "Syugyou", you'd be familiar. Doesn't discriminate between anyone: They bite, they bite and they still will bite without running out of breath. Like Vito, the butt muncher!



SIGMA LIFTS

What happens if you mixed up escalators with quicksands? Sinks you towards objects either upwards or downwards, beware of this power.



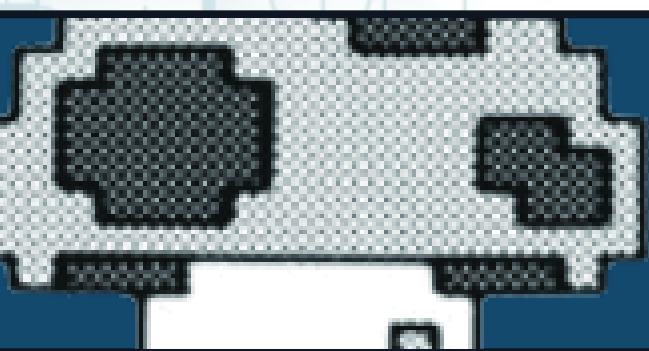
SIGMA HAMMER BROS.

They come for you and spam hammers everywhere. You've never felt true fear coming from such a small enemy before.



SIGMA BOWSER

*The King of the Koopas! Bowser has similar hammer throw patterns as the dastardly Hammer Bros., so watch out! The occasional blast of fire from this sigmatic dragon of darkness shoots so fast that one might pass through them unharmed, like one whose finger runs through the flame of a match unscathed! Despite his waning eye sight, he has his instincts intact and **WILL** hit you!*



DESTROYING ANGEL MUSHROOM

*Probably the most overpowered enemy in the entire game. Has the appearance of a poison mushroom, appears very rarely but in spontaneous amounts. It doesn't just take a life away, it brings you straight to the **Game Over** screen instead.*

PLAYING GUIDELINES

Do:

- i. Submit your playing progress by sending an email/common social media links. Proof may be required:
 - $\leq 3-4$ clears: Image proof.
 - $\geq 4-1$ clears: Video/emulator movie file proof (exceptions include streaming it on-site/certain trust).
- ii. Emulation save and load states are HIGHLY recommend and are essential to the experience. You will not be able to humanly clear it without them.
- iii. Emulation slowdown may be suggested in areas, but not necessary throughout.
- iv. Streaming this hack on common social media platforms are encouraged, under the condition that the video broadcasts aren't archived later on.*
- v. Download the source of the hack from its origin website(s). **If you must pass this hack to others, preferably others in the know, please make them aware of the playing guidelines.**

Do not:

- vi. Complain or whine about the difficulty or ask for hints of any kind. Ideally played independently.
- vii. **The following glitches/techniques are outright prohibited (known as Asu's Prohibitive Rule), and not be considered a true clear with any usage of them.** (See Page 17 for more details.)
- viii. Attempting to modify, cheat, RAM tampering, and/or analysing the contents of the hack are COMPLETELY prohibited.

Do not: (cont.)

- ix. Redistribution, reuploading, private transfer of this hack to unauthorised areas or other uploaders are prohibited**.
- x. Uploading any video footage of the hack publicly is prohibited for the time being. Screenshots may also be fairly restricted in quantity as I see fit*.
- xi. While there is no telling if later players are able to beat the stages without the aid of others, the true enjoyment comes from discovering the solutions independently on your own!

Miscellaneous:

- xii. As from the title screen suggests, you may retrieve the passcode from the ending text of ***Sigma Mario II*** in any fashion you'd like.
- xiii. If streaming, it is suggested to install “Métele al Ordenata” for frustration expression measures.
- xiv. Criticise the author's poor masochistic sense of level design and how gatekeepy this whole hack is in general, anyways.

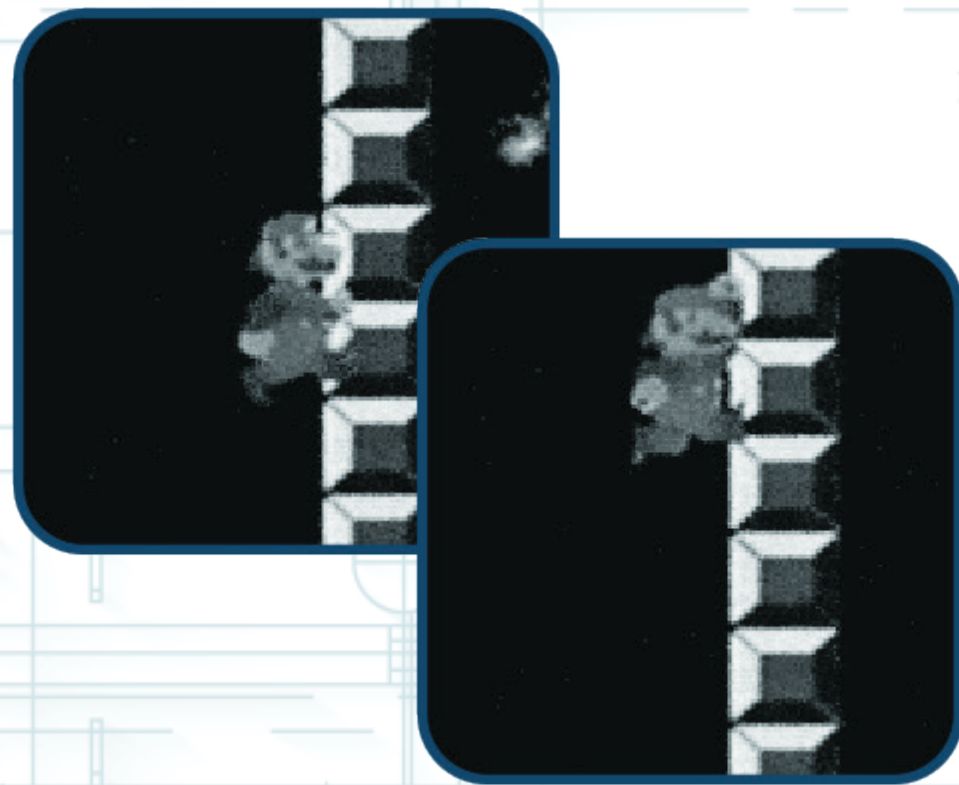
**This will spoil the game for others, so no cheating by watching playthroughs!*

Consider this guideline to be lifted after a certain set amount of time/enough clears across the boards.

***The only exception being archive.org; fire away.*

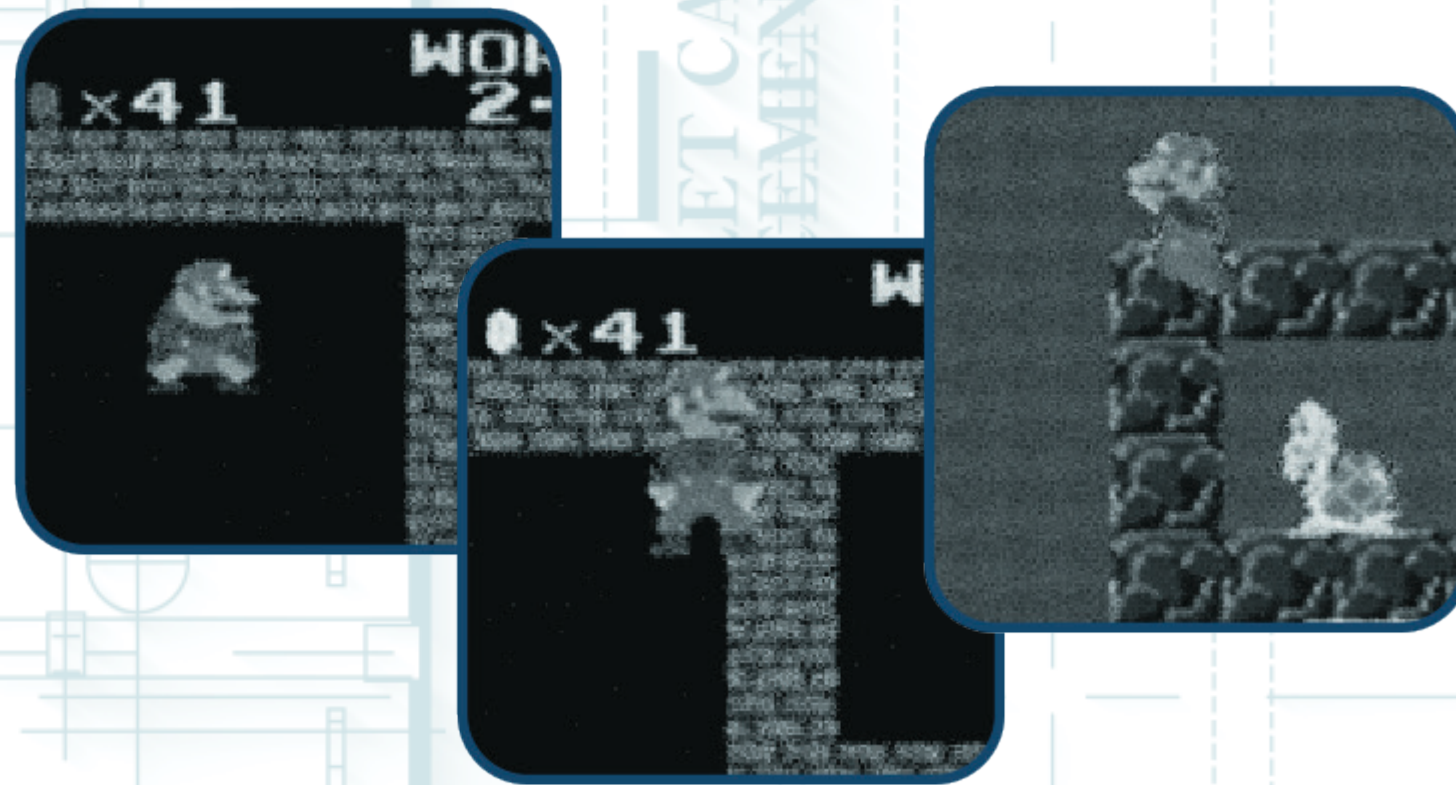
PROHIBITED TECHNIQUES

“Asu’s Prohibitive Rule” comes from how this hack author was the first to adapt not needing heavier glitches towards his works (e.g. **Temari**, **Terui**) under assumption they are not viable enough to be performed consistently without brute-force. The concept was later spread through other hacks as well, and **Sigma Mario III** refurbishes this philosophy that its precise difficulty is rooted in venturing your way *beyond relying towards any mainstream techniques* for all players. Use the Koumei blocks!



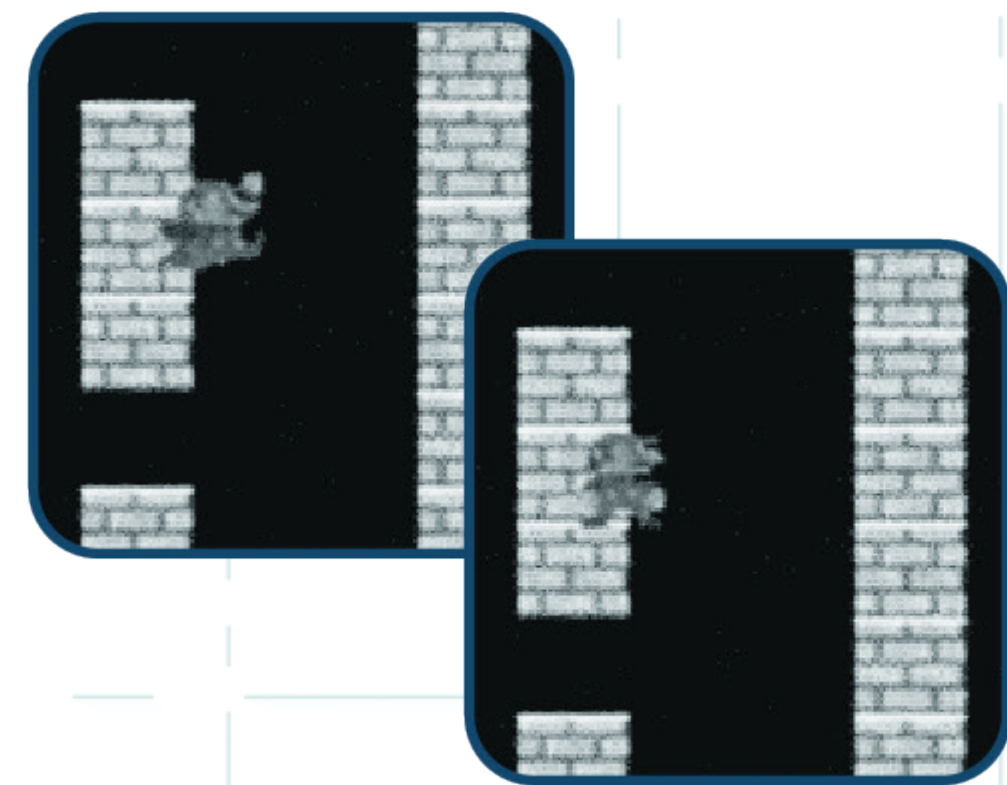
Walljump

Known as a singular pixel and frame perfect input, rat guards are set in place instead.



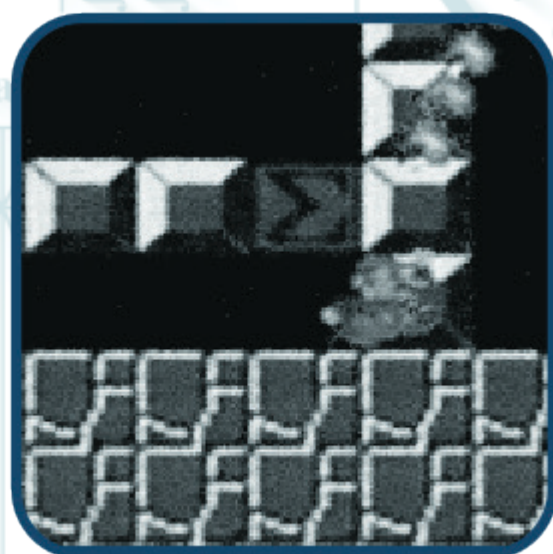
Inverted L/J Corner Clips

Most infamous use involve entering World “Minus” -1 in the original. No need for it either.

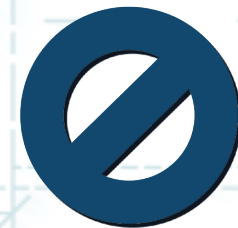
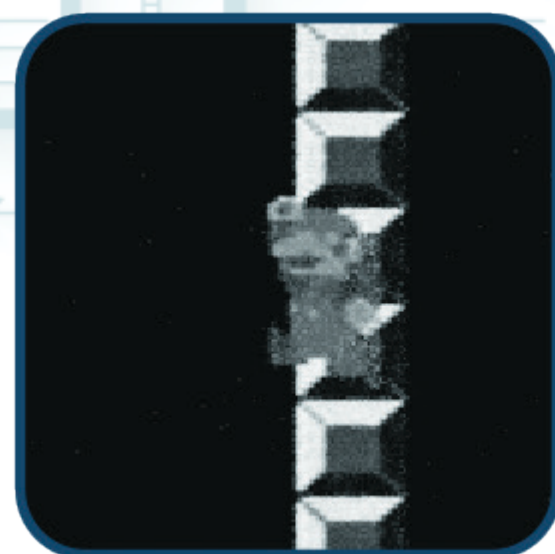


Devil’s Spell

Terminology for entering from the side.

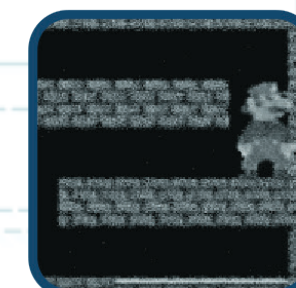


Raw Squeezing 1-Block Dead Ends With Small Mario



Direct Vertical “BLAZIT” Clip

Overpowered and too dependent on subpixel values.



n.b. This includes scenarios where Mario is unable to squeeze through small-Mario only spaces practically.

However, grabbing powerup blocks from the edge is permitted.

...AND IN COME NEW TECHNIQUES

*Everything else
is needed & permitted.*



Σ One-Way Bridges

You are now able to jump above bridge tiles, but you cannot sink back down. Functions similar to hidden blocks in that you could go through them.



- This game is beatable without the use of L+R on the D-pad. While you could freely use it, it is not advisable to exploit the technique of teleporting to the left/right side of the screen using climbable objects using this input, to ensure fairness between players who are not able to set this up.



Σ Bullet Leaps

Get through large gaps and hitting other unreachable blocks using bullet bills. Leaps of arbitrary faith even riskier than building.

Σ ???

The Excalibur that affects its surroundings. Reserve your "fuel" for its ramification...



Σ Higher Punch-Ups

Enemies bounce off super high upon taking damage to them, So Koopa shell behaviours are also changed as a result. Adapt to this like sinking your toes in cold water.

LEADERBOARD INFO

*First clears first served. It is not about how fast you can beat the game, but rather **if** you can beat the game.*

Wanna join the Sigma Mario III leaderboard? One does not have to beat the game to get up onto a listing, pushing as far as he/she could go. (Link may be updated over time)

<https://docs.google.com/spreadsheets/d/1vTkMpZWN9ygoB2huYQ8Vm5TqwnMXxsRCFRgd9DWCfas>

★★★ GOLD

Post-Game: Breaking out of the “Parallel Möbius”!!! 「World 9-! escapers」

If you are excellent enough... World 9 can only be unlocked from the title screen upon meeting certain simple requirements. Reach Lake Tiberias as the last mission.

★★ SILVER

Post-Game: Venturing the “Abyss Negative” exploration!! 「World -3 arrivers」

There are two methods to enter Minus World after qualifying for Bronze, including one that does not require the Gold qualifications. A one-way trip from here.

★ BRONZE

Summation Slow Burn: Conquerors & witness from victory! 「World Σ-4 defeaters」

Would you succeed in the triumph through unfairness, or would you give up and switch off the console/emulator in defeat?

ALUMINIUM

Marathon Runners: How far can one endure? (Up to 「World 8-4」)

The world and level status refers to where players have been defeated. Only counts for runs 1-3 and up.

Imperfect ClearΣ: Prohibited technique users... (see Guideline Rule #vii)

Does not apply if previous run(s) have met “Asu’s Prohibitive Rule”. It is also possible to migrate from this listing if later reruns meet the requirement too.

TECHNICAL DETAILS

Some aspects of this hack have been either fixed or enhanced over the original SMB1 that I've long desired since working with ***Sigma I & II***.

This is for those folks who are already familiar with the engine of the game:

- This ROM has been expanded to use the MMC3 mapper, allowing for IRQ splits between the HUD and main gameplay.
- There is x3.5 times the amount of object/enemy data as the original game, totaling a 16KB bank.
- All blocks function properly underwater. Bullet bill cannons were also known to not work in that area type, so that has been addressed separately.
- Upside down bullet bill cannons. *Courtesy of mio's patch.*
- Secondary unused scroll stop object turning into an autoscrolling trigger. *Courtesy of ATA's patch.*
- Now able to insert more than 3 objects across the Y axis without them disappearing on excess, although not utilised often. *Courtesy of Chacky's patch.*
- Fixed the glitched counterclockwise long firebar. No other hack is known to have both rotating types co-exist together as of this writing.

HASH INFORMATION: (Applies for patched ROM)

CRC-32: B8BB599E

MD5: 4C83BF97A96D5E0F1497FC3179C5E1EE

SHA256: FCA8003CA3CED13DA519F20DD4596A6BD4ADF303ACB38FAAF7F3B8EABBE1AFFA

SPECIAL THANKS

StudsX
jroweboy, ThroughT1m3
sullyrox

~~Morshu~~

/ ASM coding & programming assistance
/ Minor coding help
/ Cleaning the pool
/ He gives no credit, neither do I! MUAHAHAHAHA!

TOOLS & PROGRAMS USED:

M.K.S

YY

Kernel Software

Betaworld

Faisoft

Maikami

Maël Hörz

/ SMB Utility
/ YY-CHR
/ S.M.B. Remodeler
/ SMB Title Editor, SMBED
/ SMB Music Support Tool
/ NPSTool
/ HxD

CHANGELOG

2016-08-17:

- World 1 finished, World 2 in development
- Title screen draft

2016-11-27

- Trial version released, limited to a few people

2016-12-21:

- World 2 finished, World 3 in development

2017-02-18:

- World 4 finished, World 5 in development

2017-07-21:

- World 7 finished

2017-09-15:

- World 8 finished
- Initially planned to end the game here

2017-09-30:

- World Σ finished

2020-03-13:

- All custom music coded

2020-08-08:

- Laid out full ROM compiling plans & format

2020-09-16:

- W5-4 tweaked

2020-12-03:

- W1-2 tweaked

2021-04-09:

- Title screen + passcode system inserted
- All raw level data inserted

2023-08-23:

- Commissioned StudsX to code the object & enemy format work

2023-08-27:

- W8-4, other minor level tweaks

2023-12-31:

- Customised object & enemy format largely done

2024-01-01:

- All levels partially rewritten to fit new format

2024-01-02:

- Large amount of ASM work done
- Title screen system code rewritten, title renamed

2024-01-04:

- Custom music re-coded to fit within default music limitations
- Ending scene coded

2024-01-06:

- A few minor level tweaks
- Base goals finished within 2017 visions

2024-01-07:
-W2-4, WΣ-1 tweaked

2024-01-08:
-Title screen slight tweaks, improved sprite work

2024-01-12:
-W6-1 & W7-2 minor tweak, W8-4 bug fix
-Controller 3 & 4 code fixed, re-allowing the VirtuaNES L+R exploit
-CHR initialisation code addressed

2024-01-15:
-W8-1 bug fixed, optimised level data
-Soft resetting bug fixed, now works on all emulators available
-World select added back after beating the game

2024-01-31:
-Most levels being tweaked slightly for standards, should be finalised
-All levels playtested start to finish

2024-02-12:
-Two level fixes what was once thought to be bugs
-Text changes

2024-02-24:
-World 9 finished
-World “Minus” added
-X pos issue fixed (after Mario enters a downpipe)
-Added soft reset (addresses not being able to select worlds after beating the game)

2024-03-11:
-Status moved from Provisional Build → Release Candidate
-Spare Goomba tile freed up
-Flying Cheep Cheep behaviour enhanced
-Further polished a few more levels
-Poison mushrooms supplemented
-Checksum protection added (not coded in for this date release)

2024-03-13:
-Checksum verified & finalised

2024-03-18:
-Tweaked World Minus
-Addressed unchanged coin palettes for the first frame of specific level types
-A+START world selection issue bug-fixed
-RAM protection added
-Status bar sometimes flickering for a frame while paused behaviour bug-fixed

2024-03-29:
-Status moved from Release Candidate → Stable Release

2024-04-18:
-Tweaked a few objects



**PRODUCED BY
EDEN GT**