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NES PC and PA

By jstout, February 21, 2008 in Hacking Documentation

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---

jstout
Tecmo Super Champion
●●●●●

J

Members
➕ 92
537 posts

Posted February 21, 2008   ~~Report post~~ ⤴

Here is how to use the Pass Control and Pass Accuracy as used in the TSB III (SNES). The NES reads the PC when the ball is to be thrown (how accurate the ball is thrown) and then again elsewhere when the ball reaches a player (for a miss, drop, catch, deflection, or interception).
Pass Control = Ability to throw on target
Pass Accuracy = Ability to complete a pass

```
At x29E54:
20 F7 9F   JSR $9FF7 ; Go to new PA read

At x2A007:
A0 88      LDY #$88 ; Read PA
4C DD 9F   JMP $9FDD ; Go to Normal Code
```

Now PA will actually mean something

➕ Quote   ♡

---

buck
DARRELL GREEN

Posted February 21, 2008   ~~Report post~~ ⤴

wow... 😎

how will this change CCs and JJs?

does PA effect INTs at all?

now it's time to do some serious ratings testing...any recommended settings/combinations?

crazy!

+ Quote

"The right to speak and the right to refrain from speaking are complementary components of ... ✕ ▾ 'individual freedom of mind.'"

link to change one's signature

---

jstout
Tecmo Super Champion
● ● ● ● ●

Posted February 21, 2008   Report post ⤳

> ⌄ **buck said:**
>
> how will this change CCs and JJs?
>
> does PA effect INTs at all?
>
> now it's time to do some serious ratings testing...any recommended settings/combinations?

After my changes PA will be the only number used to check for QB ability to complete a pass. So Interceptions/CCs will be based upon the QB's PA, Receivers' REC, and Defenders' INT.

The PC will be the number used for how accurate the throws are. So JJs will be determined mostly by timing and this number (as in overthrows).

To check combos I suppose you could use TSB 3 as a reference or just play around a while. The easiest changes to view would be someone like John Elway. His PC is 31 and PA 69 and originally had a hard time completing passes and was inaccurate (obviously accuracy of the pass is very subtle as even Grogan doesn't spray everything). Now he should have the same inaccuracy but complete a lot more covered passes.

Some additional info if anyone wants to goof around with values. Each Accuracy is 4 hex numbers each is pulled and compared to a different random number depending on the situation.

Pass Control Skills (6 is the top and 100 is the bottom)

SET(0x2be14,0xf7348080)

SET(0x2be18,0xee328080)

SET(0x2be1c,0xe5308078)

SET(0x2be20,0xdc2e8078)

SET(0x2be24,0xd32c7870)

SET(0x2be28,0xca2a7870)

SET(0x2be2c,0xc1287868)

SET(0x2be30,0xb8267868)

SET(0x2be34,0xaf247060)

```
SET(0x2be38,0xa6227060)
SET(0x2be3c,0x9d207058)
SET(0x2be40,0x941e7058)
SET(0x2be44,0x8b1c7050)
SET(0x2be48,0x821a7050)
SET(0x2be4c,0x79187048)
SET(0x2be50,0x70166848)
```

+ Quote

---

buck
DARRELL GREEN
●●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●●

Members
➕ **2,060**
6,332 posts
Location: Tecmo Super
Street
Tecmo Titles: Lincoln V
(2015)

Posted February 22, 2008

So, using your new PA code, how would the ratings PC/PA need to be set up in order to make the QB throw exactly as he did before (only using PC - ie stock TSB)?
PA = PC?
I'm asking because I want to start with some setups (PS/PC) I'm used to - then tweak PA and see how things change.

+ Quote

"The right to speak and the right to refrain from speaking are complementary components of ... ✕ ▾
'individual freedom of mind.'"

link to change one's signature

---

jstout
Tecmo Super Champion
●●●●●

J

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➕ **92**
537 posts

Posted February 22, 2008

> **buck said:**
>
> So, using your new PA code, how would the ratings PC/PA need to be set up in order to make the QB throw exactly as he did before (only using PC - ie stock TSB)?
> PA = PC?

Yes, New_PA = Old_PC would be exactly like the original. So PC and PA would be the same skill.
I and others would probably like to hear the results.

+ Quote

MrNFL

Posted February 22, 2008

One of my biggest gripes of the NES game was this issue. I'd love to see it correct. Good work.

+ Quote

Creator of the Tecmo Legends Simulation and Rom, play as your franchise's greatest team here!

M **MrNFL uploaded a file to SNES**
April 26, 2016

COIN TOSS

Tecmo Football Legends 2016

ⓘ Version 1.0.1   ⬇ 2,791 downloads

Download this file

The Tecmo Football Legends rom for the SNES features the top team from 28 NFL franchises.   The teams span seven decades and include 17 ...

⬆ 1   💬 0 comments

Also check out my "Best of the New Millennium" and "Best of the 90s" roms.

Posted February 22, 2008

Report post ◁

Wow, this is fantastic news. I am sure that high PA players will now be viewed with more value once you have finished. Some online current roster leagues might now factor this into how they create players.

+ Quote

Top Tournament Finishes:

2019-New Jersey: Elite 8; Poughkeepsie: 2nd Place

2018- New Jersey: 1st Place; Philadelphia: 3rd Place; Long Island: 1st Place

2017- New York: Elite 8

---

buck

DARRELL GREEN

●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●●

Members

● 2,060

6,332 posts

Location: Tecmo Super Street

Tecmo Titles: Lincoln V (2015)

Posted February 22, 2008

Report post

here are the 'SET' commands to implement this using TSBTool:

```
SET( 0x29e54, 0x20f79f )
SET( 0x2a007, 0xa0884cdd9f )
```

+ Quote

"The right to speak and the right to refrain from speaking are complementary components of ... 'individual freedom of mind.'"

link to change one's signature

---

bruddog

Down with button mashing

●●●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●●

Moderators

● 3,074

11,466 posts

Location: Ca

Posted February 22, 2008

Report post

It's really a subtle difference as far as how many overthrows you see. I wouldn't even know quite how to value it. It would be a rating more valueable than avoid pass block but less valuable then the current PC, PS and QB MS

> **Bad Moon Rison said:**
>
> Wow, this is fantastic news. I am sure that high PA players will now be viewed with more value once you have finished. Some online current roster leagues might now factor this into how they create players.

+ Quote

buck

DARRELL GREEN

●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●

Posted February 22, 2008

> **bruddog said:**
>
> It's really a subtle difference as far as how many overthrows you see. I wouldn't even know quite how to value it. It would be a rating more valueable than avoid pass block but less valuable then the current PC, PS and QB MS
>
> > **Bad Moon Rison said:**
> >
> > Wow, this is fantastic news. I am sure that high PA players will now be viewed with more value once you have finished. Some online current roster leagues might now factor this into how they create players.

Well, now that PA dictates "Covered Catches" , how would it not be important?
I'm going to experiment to make a good JJ & good CC QB.

+ Quote

"The right to speak and the right to refrain from speaking are complementary components of ... 'individual freedom of mind.'"

link to change one's signature

TomTupa

Tecmo Legend

●●●●●●

Posted February 22, 2008

Watch out for the Bears and Broncos now!

+ Quote

sigs.php?player=dajabec
Tecmo Tunes Tecmo-themed song parodies

---

bruddog

Down with button mashing

●●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●

Posted February 22, 2008

Ya but PA is now just what PC was before more or less! The fact that PC now controls overthrow percentage
The way to make a good JJ and CC QB is the same as before.
Under the original scheme
Honestly the best JJ qb has low-medium PS with high PC

The best CC qb has high PS and high PC. (Increasing PS across the board is one way to cut down on jjs)
Under the new scheme
a low-medium PS with high PA is the best JJ QB
a high PS with high PA will be the best CC Qb
The PC will now just control how often the throw is errant...... as in catachable by no one.
It's hard to notice much difference unless you are playing with the extreme ends of the spectrum of thsi rating.

➕ Quote

---

bruddog
Down with button mashing
●●●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●●●

Report post

PA just replaces PC in value.
PC becomes slighty more valuable than APB.

➕ Quote

SBlueman
Tecmo Legend
●●●●●●

Report post

> **buck said:**
> how will this change CCs and JJs?

What are CCs and JJs? 😎

➕ Quote   Edit   Options ▾

Check out my latest release: <u>Tecmo Super Bowl 2020 - SBlueman Edition</u>

Check out my other releases: <u>SBlueman's Downloads</u>

Have any SET commands to share? Post 'em up in this thread: <u>SET Command List (Use with NES TSB & TSBTool)</u>

TomTupa
Tecmo Legend
●●●●●●

Members
⊕ 12
2,004 posts
Location: Indiana

Posted February 22, 2008

Report post   ⤴

> ▼ **SBlueman said:**
>
> > ▼ **buck said:**
> >
> > how will this change CCs and JJs?
>
> What are CCs and JJs? 😎

coverage catches and timed/lucky jumping catches

+   Quote   ♡

---

sigs.php?player=dajabec   ✕▾

Tecmo Tunes Tecmo-themed song parodies

---

buck
DARRELL GREEN
●●●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●●

Members
⊕ 2,060
6,332 posts

Posted July 12, 2008

Report post   ⤴

How does this (PA as INT&Completion control) change with season 'juice' values - With this code, Does the 'PC juice value' now boost the 'PA value' (instead of PC) when playing the CPU in later weeks?

+   Quote   ♡

"The right to speak and the right to refrain from speaking are complementary components of … 'individual freedom of mind.'"   ✕▾

link to change one's signature

Knobbe
Tecmo Godfather

●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●

Founder

SITE FOUNDER

+ 3,244
17,597 posts
Tecmo Titles: 1
Founder of T-Borg

Posted July 15, 2008

Report post

PC=100=no JJ?
It really makes you wonder if they simply forgot to implement this feature.
Good find!

+ Quote

♡

Elsewhere

- @Tecmogodfather
- TecmoSuperBowl Facebook
- Join us on Discord
- Tecmobowl Twitch
- Youtube

"You fail all of the time. But you aren't a failure until you start blaming someone else" - Bum
Phillips

---

bruddog
Down with button mashing

●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●●

Moderators

+ 3,074
11,466 posts
Location: Ca

Posted October 3, 2009

Report post

So I finally mostly figured out how the number work. Refer yourself to the byte strings listed
below by jstout.
ex 06 pc @2be14 f7 34 80 80
The first byte is the chance the pass is on target. It gets compared to a random byte from
00-FF. If its less than the random byte its on target otherwise there is a chance for an
underthrow/overthrow
This means
06PC= 4% chance of no underthrow/overthrow
100PC= 56% chance of being no underthrow/overthrow
Underthrow= ball goes out of bounds, stopped wr has to move to get the ball, Wr stops mid
route.
Overthrow= ball potentially sails way over WR head, just enough that he can jump an catch
it or dive and catch it
The second byte determines if the pass will be an underthrow or overthrow if its not ON
target. If the byte is greater than the random number it will be under thrown
A 06PC will have a 20% chance of underthrowing it if the ball is off target...or a total chance
of 19.6% of throwing an underthrow on any pass

A 100PC qb will have a 9% chance of underthrowing it if the ball is off target...or a total chance of 4% of throwing an underthrow on any pass.

A 06PC will have a 76.9% chance of throwing an overthrow on any pass

A 100PC qb will have a 40% chance of throwing an overthrow on any pass.

The 3rd byte has something to do with the underthrows. I'm not quite sure what it does. Perhaps the smaller the number the more catchable the underthrows tend to be.There was too much code to sort through for me to try and figure it out.

The 4th byte has to do with overthrows. And this is kind of interesting. The bytes only range from 68-80. However if you set this byte to 0. The overthrows are never overthrows. They act like normal on target passes. So by lowering this byte you could drastically reduce the number of long jj bombs or at least moreso for shitty qbs. Or you could increase the chance for underthrows. Timed jj's would still work as normal.

It's funny because after looking at this the 50-56 pc qb is probably the best for jjs since they run little risk of getting jj inted except by carrier/haddix and they will get more lob balls than a higer pc qb.

> ⌄ **jstout said:**
>
> Some additional info if anyone wants to goof around with values. Each Accuracy is 4 hex numbers each is pulled and compared to a different random number depending on the situation.
> # Pass Control Skills (6 is the top and 100 is the bottom)
> SET(0x2be14,0xf7348080)
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> SET(0x2be44,0x8b1c7050)
> SET(0x2be48,0x821a7050)
> SET(0x2be4c,0x79187048)
> SET(0x2be50,0x70166848)

+ Quote

⬆ 1

♡

---

buck

DARRELL GREEN

●●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●●●

Report post ◁

Agreed. 44-50 has always seemed best.

re: 50 PC best for JJs - I've known this from playing the game.

Quote

"The right to speak and the right to refrain from speaking are complementary components of … 'individual freedom of mind.'"

link to change one's signature

TomTupa
Tecmo Legend
●●●●●●

Posted October 3, 2009

So passing speed has nothing to do with overthrows/underthrows?

Quote

---

buck
DARRELL GREEN
●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●●

Posted October 5, 2009

bruddog, thanks for breaking down the PC controls - that is nice. I plan on tweaking PC for shit qbs so they can't throw bomb JJs 🙂 .
question: can all the attributes be broken down like this? the physics of TSB can really be altered if you dig this deep.

Quote

"The right to speak and the right to refrain from speaking are complementary components of … 'individual freedom of mind.'"

link to change one's signature

---

bruddog
Down with button mashing

Posted October 5, 2009

Not really. Unless you hack the rom and make passing speed too fast.

> **TomTupa said:**
>
> So passing speed has nothing to do with overthrows/underthrows?

+ Quote

TomTupa

Tecmo Legend
●●●●●●

Members
⊕ 12
2,004 posts
Location: Indiana

Posted October 6, 2009

> **bruddog said:**
>
> Not really. Unless you hack the rom and make passing speed too fast.
>
> > **TomTupa said:**
> >
> > So passing speed has nothing to do with overthrows/underthrows?

Well, I guess Marino just had too high PC and Brister and Tolliver too low PC. Just made it seem like high PS qbs couldn't throw consistent jjs. I could swear the arc is lower and easier to block though....

+ Quote

[image] sigs.php?player=dajabec
Tecmo Tunes Tecmo-themed song parodies

---

bruddog

Down with button mashing
●●●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●●●

Moderators

⊕ 3,074
11,466 posts
Location: Ca

Posted October 6, 2009

Are you talking about the short 10-15 yard timed ones or the 70yd variety?

+ Quote

bgboud2
Tecmo Legend
●●●●●●

B

2.0
⊕ 577
3,579 posts
Location: Irving, TX

Report post

Marino seems prone to throwing long on divers on ~20 yard routes on orignal

➕   Quote

AIM = bgboud2
🖼sigs.php?player=bgboud2

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SBlueman

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✔ Mark site read

NES PC and PA

J

By jstout, February 21, 2008 in Hacking Documentation

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bruddog
Down with button mashing
●●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●●

Moderators

⊕ **3,074**
11,466 posts
Location: Ca

Posted October 7, 2009

Report post ⤴

To clarify for overthrows/JJ's I'm talking more about the 50-70yd variety.
Same for timed JJ's. These numbers don't seem to affect the short timing JJ's. PS seems to have more to do with those as people have mentioned.

➕ | Quote   ♥

buck
DARRELL GREEN
●●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●●

Members

⊕ **2,060**

Posted July 1, 2010

Report post ⤴

did you ever come to any more detailed conclusions with this, bruddog? Like the 3rd byte? I'm trying to reduce the major overthrows on long throws...so many wide open WRs with the ball sailing 15 yards too long.

> 🔽 **bruddog said:**
>
> So I finally mostly figured out how the number work. Refer yourself to the byte strings listed below by jstout.
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6,332 posts
Location: Tecmo Super Street
Tecmo Titles: Lincoln V (2015)

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SET(0x2be48,0x821a7050)
SET(0x2be4c,0x79187048)
SET(0x2be50,0x70166848)
```

+ Quote

"The right to speak and the right to refrain from speaking are complementary components of … ✕ ▾
'individual freedom of mind.'"

link to change one's signature

bruddog

Down with button mashing
●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●

Moderators

➕ 3,074
11,466 posts
Location: Ca

Posted July 2, 2010

Sorry buck. I did not. I tried experimenting with the bytes but I never felt I was reaching any definitive conclusion.
You can pretty much achieve what you want with the first two bytes.

+ Quote

buck

DARRELL GREEN
●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●

Members
➕ 2,060
6,332 posts
Location: Tecmo Super
Street
Tecmo Titles: Lincoln V
(2015)

Posted July 2, 2010

> **bruddog said:**
>
> Sorry buck. I did not. I tried experimenting with the bytes but I never felt I was reaching any definitive conclusion.
> You can pretty much achieve what you want with the first two bytes.

yeah, the first two should do it. do you know where 0x to change the arc of a pass?

+ Quote

"The right to speak and the right to refrain from speaking are complementary components of … ✕ ▾
'individual freedom of mind.'"

drunken_honkey
Town Drunk
●●●●●●

Members
+ 390
1,019 posts
Location: Texas

Posted July 2, 2010

Report post

Hey buck, scroll down the active threads and check out my KO, Punts, Fumbles thread. I believe that you can find the pass height there. Sorry I'm on my phone, or I'd post a link to get there. The location starts with the KO height, and should have the Pass, Pitches, snaps, and FG in there too. I know where they are in TSB3, but I didn't check it for the NES, but I did post the location for the NES anyways.
[Post made on a Tecmo Super Mobile Device!] mobile.png

+ Quote

♥

Hook 'Em!! Whatcha know 'bout them Texas boys!!

✕▾

Our Rom discussion thread:
http://tecmobowl.org/topic/56988-2013-mt-remix-project-mayhem-trailer/

drunken_honkey
Town Drunk
●●●●●●

Members
+ 390
1,019 posts
Location: Texas

Posted July 2, 2010

Report post

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[Post made on a Tecmo Super Mobile Device!] mobile.png
[Post made on a Tecmo Super Mobile Device!] mobile.png
viewtopic.php?f=22&t=13674&p=110166

+ Quote

♥

Hook 'Em!! Whatcha know 'bout them Texas boys!!

✕▾

Our Rom discussion thread:
http://tecmobowl.org/topic/56988-2013-mt-remix-project-mayhem-trailer/

buck
DARRELL GREEN

Posted July 2, 2010

Report post

yeah, the way I see it - passing arc works like this, starting at x2CF09; PS (QB passing speed

rating) is grouped in two's. both numbers work together, I've experimented a little bit and have started to figure it out, but will get deeper into later today.

3rd column is the passing speed rating, 1st and 2nd columns are the trajectory bytes for each PS group.

```
80        01        6-13
```

64 01 19-25

48 01 31-38

2C 01 44-50

10 01 56-63

F4 00 69-75

D8 00 81-88

DC 00 94-100

thanks for the tip. 😊

> **drunken_honkey said:**
>
> Hey buck, scroll down the active threads and check out my KO, Punts, Fumbles thread. I believe that you can find the pass height there. Sorry I'm on my phone, or I'd post a link to get there. The location starts with the KO height, and should have the Pass, Pitches, snaps, and FG in there too. I know where they are in TSB3, but I didn't check it for the NES, but I did post the location for the NES anyways. Or PM me and Ill shot you those locs when I get home.

+   Quote   🤍

---

bruddog

Down with button mashing

Moderators

+ 3,074

11,466 posts

Location: Ca

Posted July 2, 2010   Report post ⤳

2CF09? for the nes?

I have the

actual speed starting at: 2BE54

the arc is at: 2BE64

> **buck said:**
>
> yeah, the way I see it - passing arc works like this, starting at x2CF09; PS (QB passing speed rating) is grouped in two's. both numbers work together, I've experimented a little bit and have started to figure it out, but will get deeper into later today.
>
> 3rd column is the passing speed rating, 1st and 2nd columns are the trajectory bytes for each PS group.

```
80      01      6-13
```

64 01 19-25
48 01 31-38
2C 01 44-50
10 01 56-63
F4 00 69-75
D8 00 81-88
DC 00 94-100

thanks for the tip. 😉

> **drunken_honkey said:**
>
> Hey buck, scroll down the active threads and check out my KO, Punts, Fumbles thread. I believe that you can find the pass height there. Sorry I'm on my phone, or I'd post a link to get there. The location starts with the KO height, and should have the Pass, Pitches, snaps, and FG in there too. I know where they are in TSB3, but I didn't check it for the NES, but I did post the location for the NES anyways. Or PM me and Ill shot you those locs when I get home.
> viewtopic.php?f=22&t=13674&p=110166

➕ Quote   ♡

---

drunken_honkey
Town Drunk
●●●●●●

Members
➕ **390**
1,019 posts
Location: Texas

Posted July 2, 2010   Report post ⌁

Yeah, I just got home and looked at my notes for TSB3 and realized the info I posted only assigns what tile to use for passes. (Which if I can dig into it, might be able to create spirals on passes... 😉) It does give the KO, FG, and punts its height. But what you guys are talking about is just as interesting. I'll have to see if I can find this in my rom. Thanks!
[Post made on a Tecmo Super Mobile Device!] 🖼 mobile.png

➕ Quote   ♡

Hook 'Em!! Whatcha know 'bout them Texas boys!!   ✕ ▾

Our Rom discussion thread:
http://tecmobowl.org/topic/56988-2013-mt-remix-project-mayhem-trailer/

---

buck
DARRELL GREEN
●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●●●

Posted July 2, 2010   Report post ⌁

so what the hell did I find? it definitely has something to do with PS and arc...try it out.

> **bruddog said:**

2CF09? for the nes?
I have the
actual speed starting at: 2BE54
the arc is at: 2BE64

> **buck said:**
>
> yeah, the way I see it - passing arc works like this, starting at x2CF09; PS (QB passing speed rating) is grouped in two's. both numbers work together, I've experimented a little bit and have started to figure it out, but will get deeper into later today.
> 3rd column is the passing speed rating, 1st and 2nd columns are the trajectory bytes for each PS group.
>
> ```
> 80      01      6-13
>
> 64 01 19-25
> 48 01 31-38
> 2C 01 44-50
> 10 01 56-63
> F4 00 69-75
> D8 00 81-88
> DC 00 94-100
> ```
> thanks for the tip. 😉

+ Quote

---

bruddog
Down with button mashing
●●●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●●●

Moderators

⊕ 3,074
11,466 posts
Location: Ca

Posted July 2, 2010   Report post ⤴

@ 2cF09 the hex bytes start off 01 01 85 84 85 A3....
And they don't do shit for the passing arc. So either you posted the location wrong or your smoking crack. All that location did was change tiles near the endzone.

+ Quote

buck

DARRELL GREEN

●●●●●●●●●●●●●●●
●●●●●●●●●●●●●

Members

⊕ **2,060**

6,332 posts

Location: Tecmo Super
Street
Tecmo Titles: Lincoln V
(2015)

Posted July 2, 2010

> **bruddog said:**
>
> @ 2cF09 the hex bytes start off 01 01 85 84 85 A3....
> And they don't do shit for the passing arc. So either you posted the location wrong or
> your smoking crack. All that location did was change tiles near the endzone.

damn, bruddog, I didn't know you liked to get wet...
sorry: x2DF09 😉
now go check it out, these do shit for passing arc (maybe all arc stuff like snaps and
kickoffs....like honkey said).
thanks for telling me the real locations, though.

➕ Quote

🤍

"The right to speak and the right to refrain from speaking are complementary components of ... ✕ ▾
'individual freedom of mind.'"

link to change one's signature

---

drunken_honkey

Town Drunk

●●●●●●

Members

⊕ **390**

1,019 posts

Location: Texas

Yeah, now I sat down for a second and looked again at that location. KOs starts with the
8001 byte to the A000 byte. The snap, fumbles, punts (FG I believe use the same bytes)
passes and pitches are all in this location. There should be a part where the first 2 bytes
control the graphic used, followed by the next 2 bytes that assign the height. In TSB3 30 and
70 are the graphics, and 38 and 78 are the shadows graphics. I only screwed with it a lil on
TSB3, and haven't searched for pointers that grab the code. Its in that, that I fully think its
possible to do cool things. I just found them the other night and like many things I find I will
go back and see what kind if magic I can do with it. But if ya'll figure some things out I'm all
ears.
[Post made on a Tecmo Super Mobile Device!] 🖼️mobile.png

➕ Quote

🤍

Hook 'Em!! Whatcha know 'bout them Texas boys!! ✕ ▾

Our Rom discussion thread:
http://tecmobowl.org/topic/56988-2013-mt-remix-project-mayhem-trailer/

---

bruddog

Posted July 2, 2010

buck those locations aren't linked to individual passing speed attributes.
In just two passes with marino the game read the majority of those bytes

+ Quote   ♡

---

buck

DARRELL GREEN

●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●●●

Posted July 2, 2010   Report post ⤴

I set up the code logger to look at rom locations accessed.
a state was set right before snap, turn on logger, snap ball, throw pass with 38,50,44
(PS,PC,PA) qb.
the locations in blue are accessed -which are not consistent with what I found earlier today
(with regards to PS and the spot accessed)
EDIT - these do affect trajectory, but must have to do with graphics for a certain pass angle
or something.

```
02DF00:  41 A5 AC 6A 85 40 4C BB 9E 80 01 64 01 48 01 2C
02DF10:  01 10 01 F4 00 D8 00 BC 00 72 01 54 01 36 01 18
02DF20:  01 FA 00 DC 00 BE 00 A0 00 A9 00 A3 00 A1 00 A3
02DF30:  40 A9 40 A3 C0 A1 80 A3 80 A3 AD 40 00 A1 A5 00
02DF40:  00 A3 AD 00 00 A9 A9 00 00 AD AD 00 00 A7 A7 00
02DF50:  00 AB AB 00 00 A3 A3 00 00 AB AD 00 00 A5 A1 00
02DF60:  00 AB AD 00 00 A1 A5 00 00 AD AD 00 00 A7 A7 00
02DF70:  00 AB AB 00 00 A3 A3 00 00 A9 A9 00 00 A3 AD 00
02DF80:  00 A1 A5 00 00 A3 AD 40 00 A3 A3 00 00 AB AB 00
02DF90:  00 A7 A7 00 00 AD AD 00 00 A1 A5 00 00 AB AD 00
02DFA0:  00 A5 A1 00 00 AB AD 00 00 A3 A3 00 00 AB AB 00
02DFB0:  00 A7 A7 00 00 AD AD 00 00 FF FF FF FF FF FF FF
02DFC0:  FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
```

+ Quote   ♡

"The right to speak and the right to refrain from speaking are complementary components of ... ✕ ▾
'individual freedom of mind.'"

link to change one's signature

---

quince3800

Starter

●●●●

Posted August 3, 2012   Report post ⤴

Greetings,
This is a novice question, but if PC and PA aren't where/as they're "supposed" to be, then
why not just switch the hex references within the game? That would make managers 'easier'

to utilize because you wouldn't have to revisit them or account for totally new information when rating players. Does anyone know how to do this?

+ Quote

bruddog
Down with button mashing
●●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●●

Posted August 3, 2012

Report post

Im not following your question...

+ Quote

Knobbe
Tecmo Godfather
●●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●●

Posted August 3, 2012

Report post

> On 8/3/2012 at 12:46 PM, bruddog said:
>
> Im not following your question...

Looking back through this thread, which is awesome, btw, the issue is that roms have been rated with PC in mind where with this hack PA would be more important.
It's really a lot more difficulty to switch the attributes of PC and PA than it would be to swap some ratings given how trivial it is to swap with a tool like TSB Supreme

+ Quote

Elsewhere

- @Tecmogodfather
- TecmoSuperBowl Facebook
- Join us on Discord
- Tecmobowl Twitch
- Youtube

quince3800

Starter

● ● ● ●

Members

➕ 15

151 posts

Posted August 6, 2012

Report post

> On 8/3/2012 at 12:46 PM, bruddog said:
>
> Im not following your question...

If in the original TSB rom PC controls the QB's accuracy and PA controls the completion/INT, etc. likelihood, couldn't the hex just be manipulated so that these attributes do that the say they do.
It seemed like JSTOUT's 2/2008 reply just tweaks the PA rating to make the QB's less INT prone (or am I misunderstanding?). I'm wondering if the attributes can't just be fixed to do what they say. Or is this really not worth the go-around?

➕ Quote

bruddog

Down with button mashing

● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●
● ● ● ● ● ● ● ● ● ● ● ● ● ●

Moderators

➕ 3,074

11,466 posts

Location: Ca

Posted August 6, 2012

Report post

Yes, one of jstouts hacks does exactly that.

➕ Quote

bruddog

Down with button mashing

● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●
● ● ● ● ● ● ● ● ● ● ● ● ● ●

Moderators

Posted August 6, 2012

Report post

In fact this hack does exactly that. Hence why i was confused by your question.

➕ Quote

quince3800

Starter

●●●●

Members

⊕ **15**

151 posts

> **On 2/21/2008 at 9:18 PM, jstout said:**
>
> Here is how to use the Pass Control and Pass Accuracy as used in the TSB III (SNES).
> The NES reads the PC when the ball is to be thrown (how accurate the ball is thrown)
> and then again elsewhere when the ball reaches a player (for a miss, drop, catch,
> deflection, or interception).
> Pass Control = Ability to throw on target
> Pass Accuracy = Ability to complete a pass
>
> ```
> At x29E54:
> 20 F7 9F JSR $9FF7 ; Go to new PA read
>
> At x2A007:
> A0 88 LDY #$88 ; Read PA
> 4C DD 9F JMP $9FDD ; Go to Normal Code
> ```
>
> Now PA will actually mean something

Ok,
Very sorry. I'm still confused. Is the above what you're referring to? I was confused by the
second of his responses. Does the quoted response establish PC as what it's "supposed" to
be? What exactly is happening to PA here? (He says, "Now PA will actually mean
something"). I'm stuck.
Thanks again.

＋ Quote ♡

bruddog

Down with button mashing

●●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●●

Moderators

Yes that hack is doing exactly as you suggested.
PC determines if the pass is on target
PA is used in the calculation to determine if a pass is caught, intercepted, deflected.

＋ Quote ♡

buck

DARRELL GREEN

●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●

Members

+ 2,060

6,332 posts

Location: Tecmo Super Street

Tecmo Titles: Lincoln V (2015)

Posted August 6, 2012

> **On 8/6/2012 at 11:34 AM, bruddog said:**
>
> Yes that hack is doing exactly as you suggested.
> PC determines if the pass is on target
> PA is used in the calculation to determine if a pass is caught, intercepted, deflected.

quince3800 -> in the original Tecmo Super Bowl (TSB) game for the Nintendo, "Pass Accuracy" (PA) did NOT DO ANYTHING. That attribute was NOT used by the game, ever. -> "Pass Control" (PC) attribute was used for BOTH QB "pass-control variable" and the "completion variable".

this here hack, like bruddog and everybody else says, modifies the TSB game-code in such a fashion that PA is now used for the "completion variable" and PC is simplly the "Control" ability of the QB.

+   Quote

"The right to speak and the right to refrain from speaking are complementary components of ... ✕ ▾ 'individual freedom of mind.'"

link to change one's signature

quince3800

Starter

●●●●

Members

+ 15

151 posts

Posted August 9, 2012

@ Buck,
Thank you. I tested a rom using extremes and figured out what was happening. Appreciate the response.

+   Quote

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SBlueman

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NES PC and PA

By jstout, February 21, 2008 in Hacking Documentation

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« | PREV | 1 | 2 | **3** | Page 3 of 3 ▾

quince3800
Starter
●●●●

Members
⊕ 15
151 posts

Posted March 23, 2013 (edited)   Report post ⤴

I'm trying to test the 3rd byte here right now by making 50 and 56 (hacked PC = accuracy) the same and changing the relevant byte. It looks like the smaller the byte the more "manageable" the ball.

When 78 is the value, there's more diving and leaping passes (the PA is 94 for both QBs here), whereas 00 (for an extreme) seems to produce a lot of short passes, where it's reasonably on target / "accurate," but the receiver often stops just briefly to be able to catch the ball. Even with a very wide range, however, the difference is barely noticeable though. I'll edit this when I see some more.

Edit 1: There also seem to be (only a bit) more errant (out of bounds) tosses for the higher value.

Edit 2: The byte seems to tighten the window within which the QB is accurate at the extreme I'm looking at now (00), but not generally allowing the WR to run through the ball (only rarely). The extreme does not eliminate errant throws, however.

Edit 3: I think the note about the frequency of errant passes should be my error, since the code breakdown suggests that it should have nothing to do with this byte. There may be only a minor difference, but I'm not sure.

Edit 4: The difference between a fictious extreme (00) and 06 skill (78 in hex) is not great and editing these values may need to take that into account if you're going to edit the hex to control the accuracy of QBs.

Edit 5 (April 2): These are some notes I have for retesting. I'm posting them because of my own confusion and wondering if anyone either has A- tested anything or B- looked at the code:

- testing FF (inaccurate) FF (underthrow) FF 00 against FF FF 00 00: the 3rd byte has no apparent effect on underthrows
- testing FF (inaccurate) FF (underthrow) FF (wide window) FF (??) against FF FF 00 FF: 3rd byte appears to have no effect on underthrows.

- testing FF (inaccurate) 00 (overthrow) FF FF against FF 00 FF 00: no definitive conclusion; both QBs seemed to behave about the same; the FF 00 (overthrow) FF (wide window) 00 (no overthrow??) QB can still over throw balls by a wide margin; lots of short (i.e., not in stride), but reasonably accurate passes for both
- testing FF (inaccurate) 00 (overthrow) 00 (tight window) FF (??) against FF 00 00 00: long throws still overly long for FF 00 00 00 QB and lots of jump balls for both

- testing 00 (accurate) 00 (overthrow) 00 (tight window) FF (??) against 00 00 00 00: 3rd byte maybe overriding the 4th byte, as all throws seem to be exactly on target
- testing 00 (accurate) 00 (overthrow) FF (wide window) FF (??) against 00 00 FF 00: everything still on target

- testing FF (inaccurate) FF (underthrow) 00 (tight window) FF (??) against FF FF 00 00: 4th byte has no apparent effect on underthrows
- testing FF (inaccurate) FF (underthrow) FF (wide window) FF (??) against FF FF FF 00: 4th byte has no effect on underthrows

Additional editing (4/4/2013):

- testing FF (inaccurate) 00 (overthrow) 90 (wide window) 00 (??) against FF 00 00 FF: first QB's throws left the WR stretching to make catches (as expected); Note: the computer only seems to respond to a certain range for the 3rd byte (FF entries had no appreciable effect); couldn't discern anything.concerning the 4th byte

- testing 00 (accurate) 00 (overthrow) 90 (wide window) FF (??) against 00 00 00 FF: both QBs extremely on target (in stride throws); even when the 2nd byte was changed to FF (for underthrows)

    - testing FF (inaccurate) 00 (overthrow) 90 (wide window) FF (??) against FF 00 90 00: 4th byte has no apparent effect at all
    - testing FF (inaccurate) 00 (overthrow) 90 (wide window) 80 (??) against FF 00 00 00: this was done with the aim of following the observation made (in blue) about the 3rd byte; however, no difference was apparent

At present I'm completely stuck with regards to the 4th byte. Any "observation" I make for one QB shows back up with the other QB's performance later one. (I've been dilligent about reseting the game so that both QB's are in AVERAGE condition throughout testing). I'm wondering if the 4th byte simply wasn't implemented.

@Bruddog: What I want to know is how you came to the conclusion that the 3rd byte was for underthrows and the 4th was for overthrows. That's completely not been my observation. Was this done using code entirely? I'm using FCEUX, but don't know how to interpret this area, so I didn't try to fetch anything.

@Buck: What's the rest of your spreadsheet doing? I can make the 'accurate/non' calculations independently, but I'm curious if there is anything additional that you'd found.

Edited April 4, 2013 by quince3800

+   Quote

---

philleyOphish
www.tecmosb.com
●●●●●

Members
➕ 61
691 posts
Location: Woodridge, IL

Posted April 2, 2013 (edited)   Report post

> **On 2/21/2008 at 9:18 PM, jstout said:**
>
> Pass Control = Ability to throw on target
> Pass Accuracy = Ability to complete a pass
>
> ```
> At x29E54:20 F7 9F   JSR $9FF7 ; Go to new PA readAt x2A007:A0 88
> ```

Please excuse my complete Noob Hex editing skills. I don't know what I am doing. Can someone explain in engrish what exactly to do here to make this work?

Am I supposed to replace "x29E54" with "20F79F"?
And then replace "x2A007" with "a0884CDD9F"?

I can't locate either one of those locations? Any tips?

Edited April 2, 2013 by philleyOphish

+ Quote

---===\ philleyOphish /===---

---

buck
DARRELL GREEN
●●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●

Members
⊕ 2,060
6,332 posts
Location: Tecmo Super
Street
Tecmo Titles: Lincoln V
(2015)

Posted April 2, 2013

at ROM location (address) 29E54, overwrite what is there (note that you are going to be replacing three bytes) with 20F79F...etc

+ Quote

"The right to speak and the right to refrain from speaking are complementary components of ...
'individual freedom of mind.'"

link to change one's signature

---

philleyOphish
www.tecmosb.com
●●●●●

Members
⊕ 61
691 posts
Location: Woodridge, IL

Posted April 2, 2013

Got it. Thank you buck and quince3800 for your help!

+ Quote

---===\ philleyOphish /===---

---

buck
DARRELL GREEN

Posted April 3, 2013

On 3/23/2013 at 1:13 PM, quince3800 said:

I'm trying to test the 3rd byte here right now by making 50 and 56 (hacked PC = accuracy) the same and changing the relevant byte. It looks like the smaller the byte the more "manageable" the ball.

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-
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-
- testing FF (inaccurate) FF (underthrow) FF (wide window) FF (??) against FF FF 00 FF: 3rd byte appears to have no effect on underthrows.

-

-
- testing FF (inaccurate) 00 (overthrow) FF FF against FF 00 FF 00: no definitive conclusion; both QBs seemed to behave about the same; the FF 00 (overthrow) FF (wide window) 00 (no overthrow??) QB can still over throw balls by a wide margin; lots of short (i.e., not in stride), but reasonably accurate passes for both

-

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  -

  -

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  -

- testing 00 (accurate) 00 (overthrow) FF (wide window) FF (??) against 00 00 FF 00: everything still on target

  -

  -

- testing FF (inaccurate) FF (underthrow) 00 (tight window) FF (??) against FF FF 00 00: 4th byte has no apparent effect on underthrows

  -

- testing FF (inaccurate) FF (underthrow) FF (wide window) FF (??) against FF FF FF 00: 4th byte has no effect on underthrows

  -

yes, I have looked into this a lot, but it's been a while. keep up the good work.
would you be interested in this spreadsheet? it breaks down 4 four bytes of PC for each skill (6-100). it has SET commands, but I usually just copy and paste by hand.

+   Quote

“The right to speak and the right to refrain from speaking are complementary components of … 'individual freedom of mind.'”

link to change one's signature

buck
DARRELL GREEN
●●●●●●●●●●●●●●●●
●●●●●●●●●●●●●●●

Members
 2,060
6,332 posts
Location: Tecmo Super
Street
Tecmo Titles: Lincoln V
(2015)

Posted June 12, 2013 (edited)   Report post

ok, love this thread and the PA hack is the best.

But, after looking at the attributes of the starting QBs of NES TSB - I'm thinking that PC should have been "completion/int" and PA should be "target ability".

(I understand that PC is more complicated, because of the "stuff" at x2BE14 (as noted above in the last few posts); and PA is just 16 values that get used in a calculation.)

Is there a simple way to re-assign the player PA attribute so that it points to the "PC table" at x2BE14 and is used for "on target"? And likewise, have the player PC attribute point to the "PA values" and be used as the "completion/int" variable?

yes - from jstout:

> ### Quote
>
> Change x29FEC from x87 to x88 and change the x88 to x87 in the PC/PA hack to reverse the values.

(ps - this is a reference to the thread I started: http://tecmobowl.org/topic/55328-possible-to-swap-pc-and-pa-nes-tsb/?hl=%2Battributes , but I realized maybe this here thread would be better place to raise the question instead)

EDIT - added jstout solution!

Edited June 12, 2013 by buck

➕   Quote

⬆ 1

🤍

quince3800 reacted to this

"The right to speak and the right to refrain from speaking are complementary components of ... ✕ ▾ 'individual freedom of mind.'"

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