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# **Mini-Helmet Designs** By jstout, January 19, 2005 in Hacking Documentation

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jstout



	Posted January 19, 2005	
ion		
	Mini-helmet Design:	
	x23BC6 to x23C51 is the mini-helmet designs.	
	BUF: 94 95 96 8B 00	
	IND: 88 89 8A 8B 00	
	MIA: C0 C1 AB 83 07	
	NE: 90 99 9A 9B 00	
	NYJ: BC BD 97 8B 3B	
	CIN: A8 A9 AA 8B 01	
	CLE: CC CD CE 00 09	
	HOU: 98 99 9A 9B 00	
	PIT: 8F 89 8A 8B 0D	
	DEN: 9E 9F A2 8B 00	
	KC: 9C 9D 97 8B 00	
	RAI: B0 B1 B2 9B 01	
	SD: BA BB 82 83 02	
	SEA: 86 87 82 83 10	
	WAS: 93 A1 A2 8B 16	
	NYG: A0 A1 A2 8B 00	
	PHI: BE BF 97 00 1B	
	PHX: 8C 8D 8E 83 1C	
	DAL: 80 81 82 83 00	
	CHI: 8F 89 8A 8B 21	
	DET: 84 85 82 83 00	
	GB: A3 A7 B7 9B 27	
	MIN: D2 D3 00 00 2A	
	TB: AE AF B3 83 2D	

SF: A4 A5 A6 83 30 RAM: B4 B5 B6 83 02 NO: AC AD A2 8B 31 ATL: 8F 89 8A 8B 35

The first number is the tile # for the top left tile, the second number is the tile # for the top right, the third number is the tile # for the bottom left tile, the fourth number is the tile # for the bottom right tile, and the fifth number chooses which palette and special tiles to use. There are 4 palettes:

00 = pink, silver-blue, and white

01 = grey, orange, and black

02 = white, dark blue, and yellow

03 = green, aqua, and white

The special tiles use higher numbers like:

04 to 07 places the special Dolphins' logo tile.

(04 = special tile and palette 00, 05 = special tile and palette 01, 06 = special tile and palette

02, and 07 = special tile and palette 03)

(All the following will follow the same format)

04 to 07 places the special Dolphins' logo tile

08 to 0B places the special Browns' tiles (white stripe and facemask)

0C to 0F places the special Steelers' logo tiles

10 to 13 places the special Seahawks' logo tile

14 to 17 places the special Redskins' tiles (Red helmet and logo tile)

18 to 1B places the special Eagles' tiles (logo tiles and silver-blue facemask)

1C to 1F places the special Cardinals' logo tile

20 to 23 places the special Bears' logo tile

24 to 27 places the special Packers' helmet (Yellow helmet)

28 to 2B places the special Vikings' helmet (Purple helmet)

2C to 2F places the special Buccaneers' helmet (White helmet)

30 to 33 places the special 49ers and Saints' helmet (Gold helmet)

34 to 37 places the special Falcons' logo tile

38 to 3B places the special Jets' facemask (Black facemask)

The special designs are marked at x23C52 to x23C60 and are designed at x23C61 to x23CE8.

The markings are 00,04,14,1C,20,2C,38,3C,40,4C,5C,68,74,78,88. These numbers mean x23C\_\_ 00 + "61" to 04 + "60" is the first design (x23C61 to x23C64). x23C\_\_ 04 + "61" to 14 + "60" is the second design (x23C65 to x23C74). Same pattern to the end.

The designs are:

x23C61 to x23C64; Dolphins' Logo

x23C65 to x23C74; Browns' Stripe and Facemask

x23C75 to x23C7C; Steelers' Logo

x23C7D to x23C80; Seahawks' Logo

x23C81 to x23C8C; Redskins' Helmet and Logo

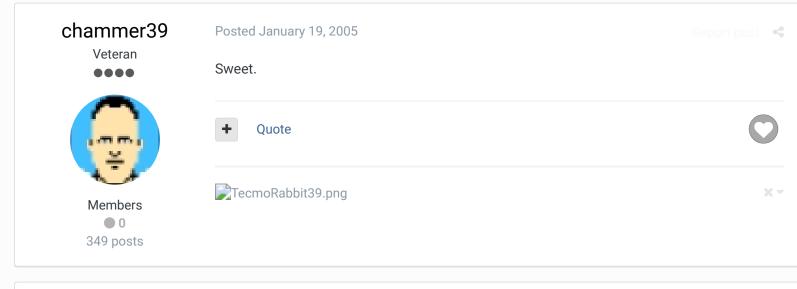
x23C8D to x23C98; Eagles' Logo and Facemask

x23C99 to x23C9C; Cardinals' Logo

x23C9D to x23CA0; Bears' Logo

x23CA1 to x23CAC; Packers' Helmet

x23CAD to x23CBC; Vikings' Helmet x23CBD to x23CC8; Bucs' Helmet x23CC9 to x23CD4; 49ers & Saints' Helmet x23CD5 to x23CD8; Falcons' Logo x23CD9 to x23CE8; Jets' facemask The design goes Y Pixel Location, Tile #, Palette # and lay type, and X Pixel Location. There are 4 palettes and 2 lay types: 00 = silver-blue, light green, and purple that places the tile over the team design 01 = red, black, and orange that places the tile over the team design 02 = yellow, pink, and white that places the tile over the team design 03 = white, grey, and white that places the tile over the team design 20 = silver-blue, light green, and purple that places the tile under the team design 21 = red, black, and orange that places the tile under the team design 22 = yellow, pink, and white that places the tile under the team design 23 = white, grey, and white that places the tile under the team design Using the Packers' Helmet as an example: 00 C8 22 00 00 C9 22 08 08 CA 22 00 The first tile is 00 C8 22 00 which is move 00 pixels down, tile C8, underlay the tile with palette 02, and move 00 pixels to the right. The second tile is 00 C9 22 08 which is move 00 pixels down, tile C9, underlay the tile with palette 02, and move 08 pixels to the right. The third tile is 08 CA 22 00 which is move 08 pixels down, tile CA, underlay the tile with palette 02, and move 00 pixels to the right. ÷ Quote



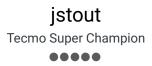
# BO FB Offtackle Left Tecmo Legend

# Posted December 14, 2006

Sorry for dredging this thread up again, but I still don't understand any of this. For example, how would I change the Jets helmet from green to orange, without affecting the Eagles or anything else. Is this possible?



Members • 253 3,135 posts Location: New York





# Quote

"There's nothing wrong with reading the game plan by the light of a jukebox." - Kenny Stabler

Posted December 14, 2006

Report post 🔍 <

### BO FB Offtackle Left said:

Sorry for dredging this thread up again, but I still don't understand any of this. For example, how would I change the Jets helmet from green to orange, without affecting the Eagles or anything else. Is this possible?

It just isn't that easy to explain. For changing colors, you only have 3 options and none of those are good.

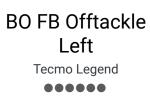
1. You may change the number that affects the palette of the single helmet. Example, NYJ: BC BD 97 8B 3B. If you change the 3B to 38, 39, or 3A then the NYJ mini-helmet will change color and affect no other helmet. However, it only changes between the 4 palettes.

2. You may redraw or use different tiles to make the helmet use a different color. This is the same as above but instead of changing the palette you change which color is where on the tile. However, all helmets that use that tile will be altered.

3. You may change the palette that is loaded. This will affect all teams that use that particular palette.

Ultimately, you will need to plan out the colors your mini-helmets if you really want to get them the way it is needed. This is very hard but once you get the right combination then it will make your life easy.







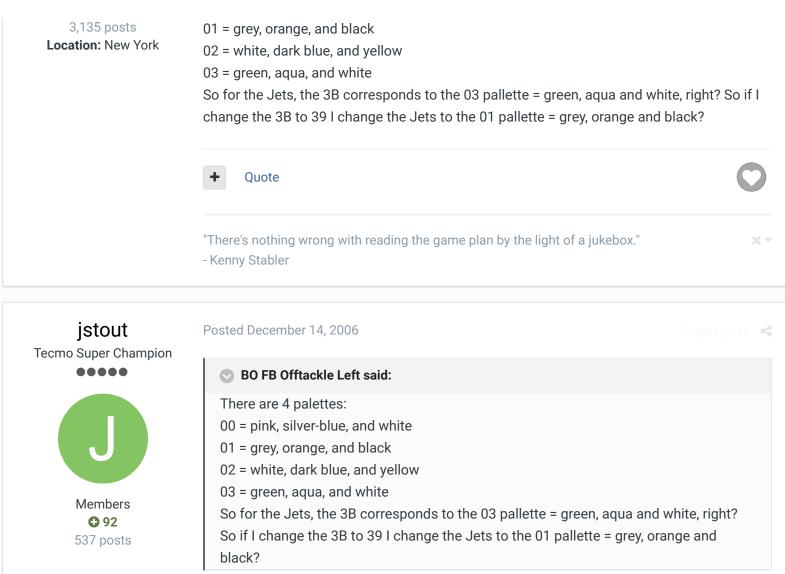
Members **253** 

### Posted December 14, 2006

### jstout said:

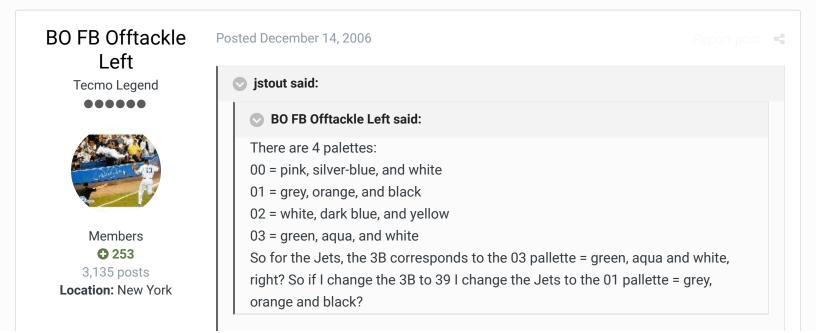
1. You may change the number that affects the palette of the single helmet. Example, NYJ: BC BD 97 8B 3B. If you change the 3B to 38, 39, or 3A then the NYJ mini-helmet will change color and affect no other helmet. However, it only changes between the 4 palettes.

Okay, I think this is the option I wanted. This comes from this table?: There are 4 palettes: 00 = pink, silver-blue, and white



Yes, exactly it. 3B = Green, Aqua, and White with the additional special design. When you change to 39 then it will be the Grey, Orange, and Black colors with the same special design.





Yes, exactly it. 3B = Green, Aqua, and White with the additional special design. When you change to 39 then it will be the Grey, Orange, and Black colors with the same special design.

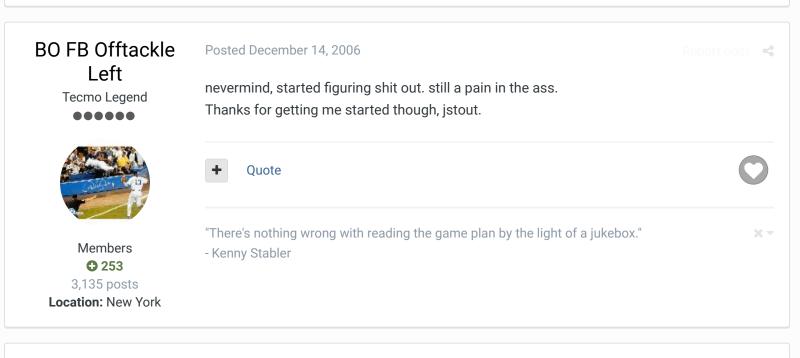
okay, and the special design for the Jets was just a black facemask. So if I make that 3B an 01, I get that pallette without the black facemask.

So essentially, if all I want are blank helmets to work with, just with certain colors, all I need are 00 to 03, right? All the rest just adds different masks, stripes, logos, whatever.

+ Quote
---------

"There's nothing wrong with reading the game plan by the light of a jukebox."

- Kenny Stabler



# BO FB Offtackle Left

Tecmo Legend



Members **253** 3,135 posts Location: New York

### Posted December 22, 2006

this is mostly for me, but i figured it might help other people out, as well. I'm reorganizing the first list so that it clearly shows which teams use which tiles. I organized it in order by tile. The first tile, the upper left portion of helmet, is unique to each team. The rest are as follows:

# Second Number - Upper Right Part of Helmet

<u>Tile Teams</u>
81 - DAL
85 - DET
87 - SEA
89 - IND, PIT, CHI, ATL
8D - PHX
95 - BUF
99 - NE, HOU
9D - KC

9F-DEN A1 - WAS, GIA A5 - SF A7 - GB A9 - CIN AD - NO AF - TB B1 - RAI **B5 - RAMS** BB - SD **BD - JETS** BF - PHI C1 - MIA CD - CLE D3 - MIN **Third Number - Lower Left Part of Helmet** Tile Teams 00 - MIN 82 - SD, SEA, DAL, DET 8A - IND, PIT, CHI, ATL 8E - PHX 96 - BUF 97 - JETS, KC, PHI 9A - NE, HOU A2 - DEN, WAS, GIA, NO A6 - SF AA - CIN

- AB MIA
- B2 RAI
- B3 TB
- B6 RAMS
- B7 GB
- CE CLE

### **Fourth Number - Facemasks**

This isn't really needed, as no one really cares about facemasks, but I thought I'd be complete.

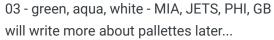
<u>Tile Teams</u>

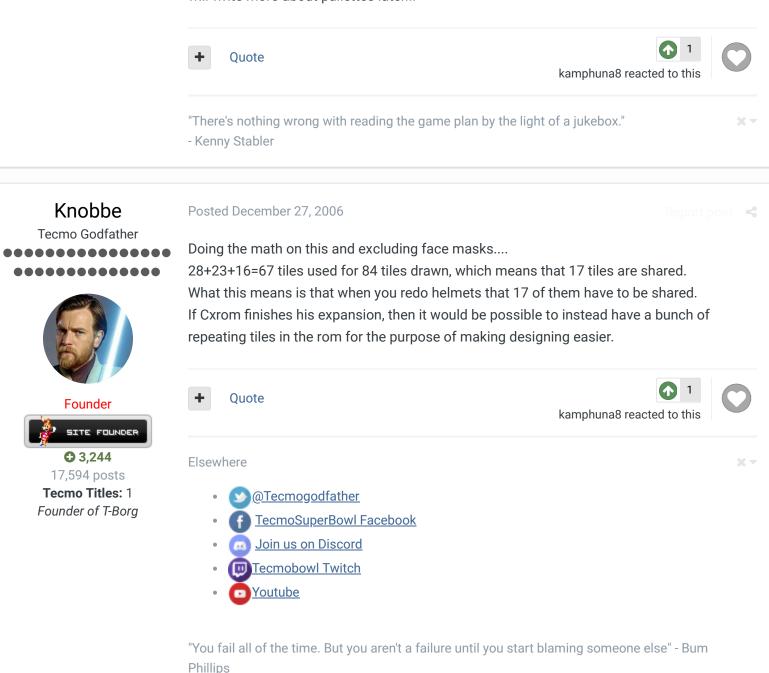
- 00 CLE, PHI, MIN
- 83 MIA, SD, SEA, PHX, DAL, DET, TB, SF, RAMS
- 8B BUF, IND, JETS, CIN, PIT, DEN, KC, WAS, GIA, CHI, NO, ATL
- 9B NE, HOU, RAI, GB

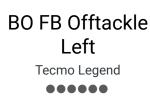
## Pallettes

### Number Colors Teams

- 00 pink (red), silver-blue, white BUF, IND, NE, HOU, DEN, KC, SEA, GIA, PHX, DAL, DET, SF
- 01 grey (silver), orange, black CIN, PIT, CLE, RAI, CHI, TB, NO, ATL
- 02 white, dark blue, yellow SD, WAS, MIN, RAMS









Members • 253 3,135 posts

## Posted December 27, 2006

Report post 🛛 📢

This is in answer to TJepp's question.

First, let's get you able to find hex addresses. You have to click the address tab in the hex editor, not the search box. You also have to make sure the hex format is selected, not decimal. In the hex addresses given above, the "x" is not part of the address. People just put "x" or "0x" or equally meaningless stuff in front of hex addresses, for no good reason as far as I can tell. This confused me when I started as well. The address of the first helmet (BUF) is 23BC6. That is what you type in the address field. When you get there, you should see the number 94 in the first box. The hex addresses 23BC6, 23BC7, 23BC8, 23BC9, and 23BCA are for Buffalo, and will have the number 94 95 96 8B 00. Now, to find Cleveland, for

example, move through the boxes with the arrow key until you get to the sequence CC CD CE 00 09. I'm not figuring out the actual addresses for you, because frankly I can't add hex in my head, and I can't download a hex editor right now because I'm at work. Now, to expand on what Rod said, changing hex values does nothing to the actual designs of the helmet. All you can do with hex is change which tiles and colors are used. So the first step to changing Cleveland to Balitmore might be to change the 09 to 1D, for example. This will give you the Browns helmet with the Cardinals logo on it, because you want to keep the same pallette that the Browns already use - 01: grey, orange, and black. To make the orange black you need to use a tile editor, since nesticle doesn't work for you. This is actually not that hard - just search "tile editor" on this site and you should be able to download one. You have to scroll through the tiles until you find the ones that look like small helmets. Then find the Browns tiles - CC CD CE (the 00 is the facemask, and mostly irrelevant). Then simply click on each tile and redesign them. One problem here is that you will still have a red bird. You can change the pallette of the logo, but I'll wait to see if you get this far before I get into that. You can also give yourself a blank helmet to work with by changing the 09 to 01.

### Quote

"There's nothing wrong with reading the game plan by the light of a jukebox."

- Kenny Stabler

CXFOM

Veteran

Veteran

Image: Comparison of the state

Image: Comparis





#### Posted February 13, 2007

Rod Woodson said:

Doing the math on this and excluding face masks....

28+23+16=67 tiles used for 84 tiles drawn, which means that 17 tiles are shared. What this means is that when you redo helmets that 17 of them have to be shared.

Actually, you can also use any special tiles that you don't need. I'm in the middle of doing my small helmets now and there are 10-12 special tiles that I'm not using, so I can use them for



the regular helmet designs if I run out of those tiles.

There are also various other tiles on the small helmet screens that you could use if you really needed to, like the stars and such. You would just have to make those designs blank wherever they actually appear, so you don't have pieces of helmets floating around in weird places.



"There's nothing wrong with reading the game plan by the light of a jukebox."

- Kenny Stabler





Members **0** 1 6 posts

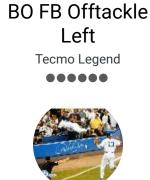


Posted March 1, 2007

# You can change the pallette of the logo, but I'll wait to see if you get this far before I get into that.

Would you mind expounding a little more of this? I don't want to have to live with the falcon design superimposed over the chiefs helmet... Thanks.

Quote



Members • 253 3,135 posts Location: New York

# Posted March 11, 2007

# svb1029 said:

# BO FB Offtackle Left said:

You can change the pallette of the logo, but I'll wait to see if you get this far before I get into that.

Would you mind expounding a little more of this? I don't want to have to live with the falcon design superimposed over the chiefs helmet...

Thanks.

I understand more now than I did when I posted that. I have actually changed all the small helmets on the rom. What exactly are you looking to do? If you are changing more than a few helmets, it is actually easier to start from scratch. If you are changing just a few, you have to determine which tiles are shared.





"There's nothing wrong with reading the game plan by the light of a jukebox." - Kenny Stabler

svb1029 Getting Started



Members 0 1 6 posts



"If you are changing more than a few helmets, it is actually easier to start from scratch." Ultimately, I'm looking to change every mini-helmet so I guess I should start from scratch. Can you give me a good starting point?

Quote



Members • 40 394 posts Location: MN Posted March 22, 2007

Just my opinion, but you really just need to dive into it and start changing stuff using jstout's "chart" as a guide.

I realize why people think they need to understand everything first, but it's really not necessary. Once you get a feel for it, you'll understand it better. There's only so much that can be explained.

Quote

TheRaja TFO Chief Operating Officer



Members **73** 273 posts Owner of the Tecmo Football Owners (TFO)

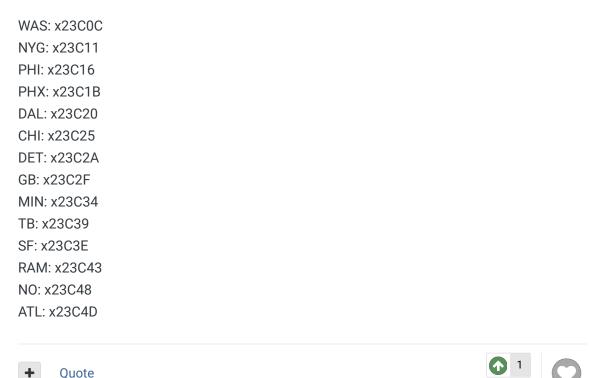
# Posted December 13, 2012

Starting Points for each Mini-Helm Data: BUF: x23BC6 IND: x23BCB MIA: x23BD0 NE: x23BD5 NYJ: x23BDA CIN: x23BDF CLE: x23BE4 HOU: x23BE9 PIT: x23BE8 DEN: x23BF3 KC: x23BF8 RAI: x23BFD

SD: x23C02

SEA: x23C07

× -



# swampymux12

Member



Members **2** 22 posts

### Posted June 1, 2013 (edited)

I'd have to say that editing mini helmets has given me the biggest headache of anything so far, but I finally got through my rom and I'm happy with the way they turned out. Without a doubt the info in the above posts was crucial to getting them done, but it is just a lot of trying things and seeing how they turn out. This has probably been all said before, but maybe others think in the same line as me, so hopefully this helps someone.

DFM reacted to this

First off, if you are doing your own thing, then starting from scratch is an absolute necessity! The hex positions are great to have right above, just remember that every team has 5 coordinates to deal with. The first 3 for the helmet (top left, top right, bottom) the next 1 for the facemask, and the last for the palette. The first thing you want to do is get a basic plan together, you have to be a little tricky with them because you are going to have to share the 4 palettes across the board for all of your designs, and each is only going to give you 4 colors (one of which has to be your background color, default of blue). Once you have that together, you can decide what your palettes are going to look like.

Then you can start getting in there with a tile editor and start designing (I had problems with both tile layer pro - which would reset my hex positions every time I try to edit and tileed 2002 - which would freeze every time I would try to save, so I used a pretty basic one called tileEd033, it doesn't have a ton of options, but it does work well, the only thing that I didn't like is that you can't expand the screen size so the tiles are not in the position on the screen that I was used to. So anyway, remember that the top left of the Cowboy helmet is at the 80

position when you start typing into hex. What I found easiest was to take the top lefts (the logo part generally) of my first grouping and lined them right up 80, 81, 82, and so on. Then I did the top rights (many of which I could share), and same for the bottoms. Then just do 3 facemasks (one of each color, which will change depending on what palette your mini corresponds to). Next, in the 90 row you can do your second group, A0 row the same, and then B0 for the final group. Then you should have plenty of blank tiles to do some fancier stuff if you want to , just make sure to leave some blanks if you took teams out so you can correspond their helm to blank (one thing I learned is that even if you take a helmet out, you have to link them to a palette otherwise you get a weird shape in your Team Ranking screen in season mode). Then just basically piece your helmets together through your hex and edit as you need.

Like i said, it turns into quite a bit of trial and error and changing of designs, but once you get the hang of it, it's not too bad, and when things start turning out it's really cool.

Also, when you are deleting original helmets to make room for yours, be careful because they sneak the "n" for the "man" option in team control into there, so mine kept ending up as "m, a, bottom part of a helmet" and it was baffling me for a bit.

Last thought, I used NES Palette editor to change colors, as stated, there are 4 groups, on the palette editor they start at the 1A150 and run right down that row, so once you find them, you got them.

Edited June 1, 2013 by swampymux12



TheRaja TFO Chief Operating Officer



Members **73** 273 posts

### Posted January 24, 2016

Mini Helmet Logo Info (Hex and Pallet)

This gives the Pallet Colors for the logos. I used this to make it easier for me when I made my TFO Helms. I didn't see anything in here that gave the default pallets for the logos so Im adding it here for reference. This saved me a ton of time when I did my mini helmets this year so hopefully it helps out others too  $\bigcirc$ 

Please note each Mini Helm is made up of 5 different Hex characters starting with the Bills at x23BC6. The first 4 Hex characters represents the Mini Helmet drawn (So Top Left, Top Right, Bottom Left, and Facemask). The last Hex character is for the Pallet/Logo. This is

Owner of the Tecmo Football Owners (TFO) what will allow you to change the Mini Helm colors and add different colored logos to each helm.

Please note that because of limited space some icons will need to be shared over multiple helmets. I try reusing Facemasks and under helmets when possible.

If a logo says "Under" that means the logo will be placed underneath the helmet itself. This can be used to make a color appear on the helm that the original pallet could not create (this is how I make Red or Gold Stripes on my helmets).

Normal Mini Helm Pallet Order: 00 (First) = Pink, Light Blue, White 01 (Second) = Grey, Orange, Black 02 (Third) = White, Blue, Yellow 03 (Fourth) = Green, Aqua, White

00-03 = No BG 04-07 = C7; Orangish Brown, Black, Pink 08-0B = B9; Pink, Grey, White 0C-0F = D0+D1; Pink, Grey, White 10-13 = C2; Light Blue, Green, Purple 14-17 = Red Helm (Under) 18-1B = C3 (Top Rlght of Helm); Grey, Light Green, Purple 1C-1F = C6; Red, Orange, Black 20-23 = C4 (Under); Red, Black, Orange 24-27 = Yellow Helm (Under) 28-2B = Purple Helm (Under) 2C-2F = White Helm (Under) 30-33 = Gold Helm (Under) 34-37 = C5; White, Grey, Light Blue 38-3B = FC+FD+FE+FF (Covers all 4 of Mini Helm, even Facemask); Orange, Black, Pink

Quote

1 buck reacted to this

# fgqb#19nyj

Promising Rookie

 $\bullet \bullet \bullet$ 



Members **22**  Posted February 2, 2018 (edited)

base helmet colors pertaining to 32 team rom, in case someone needs to design new helmets, or move teams into other divisions or conferences.

# at x425A

mia/buf F0 00; cle/cin 55 00; hou/ind 50 00; kc/den 0A 00; nyj/ne F0 00; pit/bal 55 00; ten/jac A5 00; sd/oak A5 00; was/? A0 00; chi/? 50 00; tb/? 50 00; sf/? 00 00; phi/nyg F0 00; gb/det F5 00; atl/no 55 00; sea/stl FA 00; ?/dal 00 00; ?/min 0A 00; ?/car 05 00; ?/ari 00 00 77 posts

at x4292

buf/? 00 00; cin/? 50 00; ind/? 00 0B; den/? AA 02; ne/mia 0F 00; bal/cle 55 00; jac/hou 55 00; oak/kc 50 00; ?/nyj FF 00; ?/pit 05 00; ?/ten 5A 00; ?/sd 5A 00; was/? A0 00; chi/? 50 00; tb/? 50 00; sf/? 00 00; phi/nyg F0 00; gb/det F5 00; atl/no 55 00; sea/stl FA 00; ?/dal 00 00; ?/min 0A 00; ?/car 05 00; ?/ari 00 00 Edited February 2, 2018 by fgqb#19nyj



### Posted March 11, 2018

Report post 🛛 🔩

Promising Rookie

adscl84

Members 29 96 posts I found some interesting stuff at x1a840. I searched the forums for that address and saw that jstout mentioned this area in this thread, but I didn't see any explanation about it.

R ren6175 created a topic in Hacking Documentation April 14, 2008	
С ряг. 🧌 т.а. 🔍 ять.	
CAR TEAM DATA CAR APC ALL STARS SELECT TEAM ONCO ALL STARS C BUT. C DIM. C DEM. C HID. C LC. C K.C. C HIG. C HOU. C RAI. C HIG. C PIT. C S.D. C JCTS C DAI.	

# simple mini-helmets question

I have read through the stickys and threads that talk all about mini-helmets and hex addresses. On a basic level is it possible to "pull" a helmet out of one rom and insert it into another rom using hex editing? It seems from what ...

26 replies

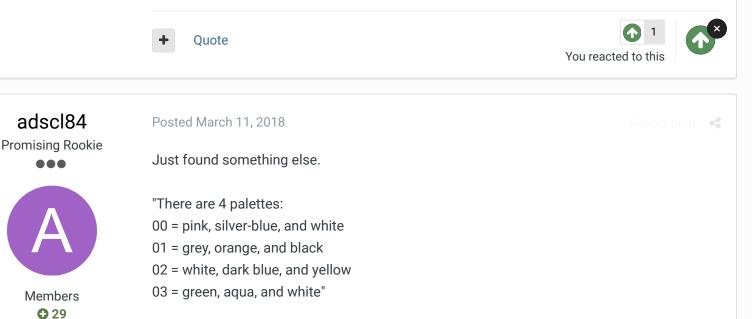
Anyway, these change the colors of the following:

- 1a840 background color
- 1a841 eagles wing/facemask
- 1a842 green in sehawks logo
- 1a843 vikings helmet
- 1a845 redskins helmet
- 1a846 jets facemask
- 1a847 orange in dolphins/bears logo
- 1a849 yellow in steelers stripe and packers/49ers/saints helmets
- 1a84a red in steelers logo

1a84d - white in browns stripe and buccaneers helmet 1a84e - falcons logo 1a84f - browns facemask and rear corner of helmet

Whatever hex code you put at these addresses directly corresponds to a color if you're looking at a hex chart of colors (0F is black, 30 is white, etc.). What's strange is that 1a840 = 11, which changes the background color. Every 5th byte is 11 as well, but changing those other ones does nothing as far as I can tell.

I'm not sure where in the other mini helmet code this stuff gets accessed, but maybe someone smarter than me can figure it out...if it's even significant. At the very least, if you design custom logos, you could replace the stuff mentioned here with particular things and then be able to modify the colors of those without having to worry about what palette you used for other stuff.



Starting at x1a150 is what determines these colors.

Each string of four bytes starts with "11" and it seems changing that does nothing. However, the three bytes after that are where the colors come from. So, you could change the four main palettes to suit your tastes. I imagine the special palettes are nearby as well, and I'll edit this post if I find it. I'm not even looking for this stuff, but rather stumbling upon it while using the code logger in trying to help TheRaja with his question here:



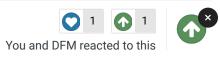
96 posts

**TheRaja created a topic in ROM Editing Discussion** June 25, 2017

# TSB NES ProBowl - Changing Teams via Pointers

Is there a way for me to set the ProBowl teams to actual teams? For a project Im working on I want to make them the JETS and the RAMS but Im having problems finding the correct pointers. I assume the once I find the right pointers...





leshro1 Getting Started	Posted December 7, 2019 Is there a way to delete the mini helmets and just not use them? • Quote	Report post
CoachMac Promising Rookie	Posted December 8, 2019 (edited)	Report post 🛛 名
•••	On 12/7/2019 at 5:40 PM, leshro1 said:	
Members	Is there a way to delete the mini helmets and just not use them? Yes sir! This will make them disappear. Set 0x23BC6 to 0x23C51 to all zeros (small helmets)	
<ul> <li>Content</li> <li>Content</li></ul>	More details and cool stuff in this thread.	
	CoachMac replied to a topic February 12, 2015         Make Helmets Disappear? Is there a way with a hex editor to just make the helmets small and large dis         Image: White Disappear is there a way with a hex editor to just make the helmets small and large disappear? Is there a way with a hex editor to make the helmets small and large disappear? Is there a way with a hex editor to make the Midfield logo disappear?	



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