HYOSUNG

BlueVerse Embedded 6.0 & 7.0 SD Card Reload Instructions

ATM Models Supported in this document:

1500SE, 1800SE, 2600 (Halo) Series, 2700 Series, 2800 (Force) Series, 4000W, 5000SE, 5200SE, 5300SE, & 5400SE (Hero)

Performing a SD Card reload will reset the ATM as if it came out of the box.

This includes the Master Keys / Des Keys / Comvilopes.

Requirements

- Computer with an SD Card slot or have a USB to SD Card reader
- SD Card
  - For BlueVerse Embedded 6.0 you need a 4GB or smaller SD Card formatted to FAT or FAT 32
    - Formatting to FAT or FAT32 of the SD Card can be done with any version of Windows or Mac OS (See Appendix's for instructions)
      - Windows 7 or Older is recommended for ease of use
      - Windows 10 or Higher can be used but you will have to use the Disk Part utility with Admin Access Right due to Microsoft changing the hidden ID Code used in formatting and the new ID Code is not recognized
    - If you can't find any 4GB or smaller devices you can use a larger one, but it must be partitioned down to 4GB
  - For BlueVerse Embedded 7.0 ATM's you need a 32GB or smaller SD Card formatted to FAT32
    - Formatting to FAT32 of the SD Card can be done with any version of Windows or Mac OS
    - If you can't find any 32GB or smaller devices you can use a larger one, but it must be partitioned down to 32GB
- Note:
  - SDHC type or Mini / Micro Size or Brand of SD Card does not matter anymore from our testing

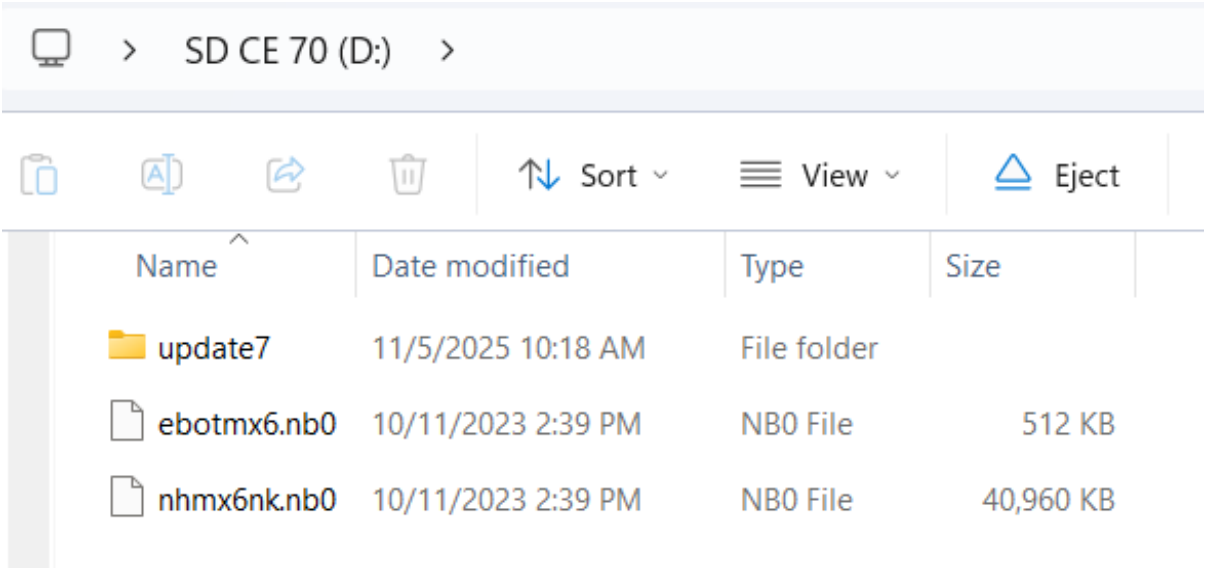
QUICK REFERENCE LOCATION AND STARTING POINTS:

- BlueVerse Embedded 7.0 SD Card Instructions — Starts at Page 2
- BlueVerse Embedded 6.0 SD Card Instructions — Starts at Page 5
- Master Password Reset due to FFFFF(FF) Error — Starts at Page 8
- Setting the ATM Model — Starts at Page 9
- CDU Encryption Reset — Starts at Page 10
- Verifying CDU Setup Information — Starts at Page 12
- Card Reader Setup for Anti-Skimming Card Readers — Starts at Page 12
- SD Card Formatting Appendix's — Starts at Page 14
  - Windows 10 or Newer SD Card Formatting & Partitioning — Appendix A
  - Windows 10 or Newer SD Card Drive Formatting — Appendix B
  - MAC OS SD Card Format & Resizing Instructions — Appendix C

BlueVerse Embedded 7.0 SD Card:

Prepping SD Card with Software

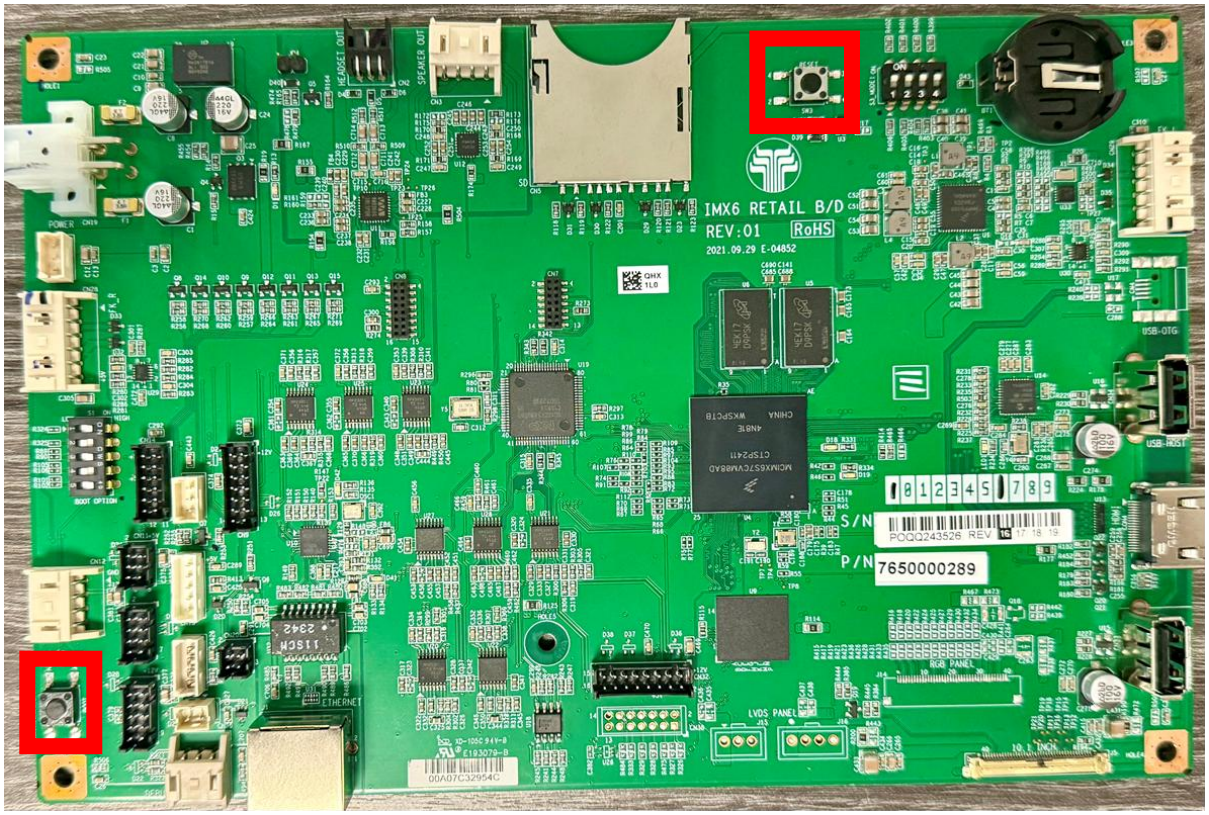
1. Open the .zip file that contains the loading files.
2. Copy the 2 .NB0 files and 1 Update7 folder files to the root directory of your SD Card (See below picture for reference)
3. Safely remove the SD Card from the computer by using the right click > Eject function (suggested to avoid potentially corrupting the files on the SD Card).



4. Continue to page 3

Format & Upgrade Reload Process

1. At the ATM turn the Power Off
2. Insert the SD Card into the SD Slot on the ATM's I/O Board
3. On the I/O Board, while the ATM is powered on, press & hold the bottom left black reset button and while holding that button press and release the top right black reset button



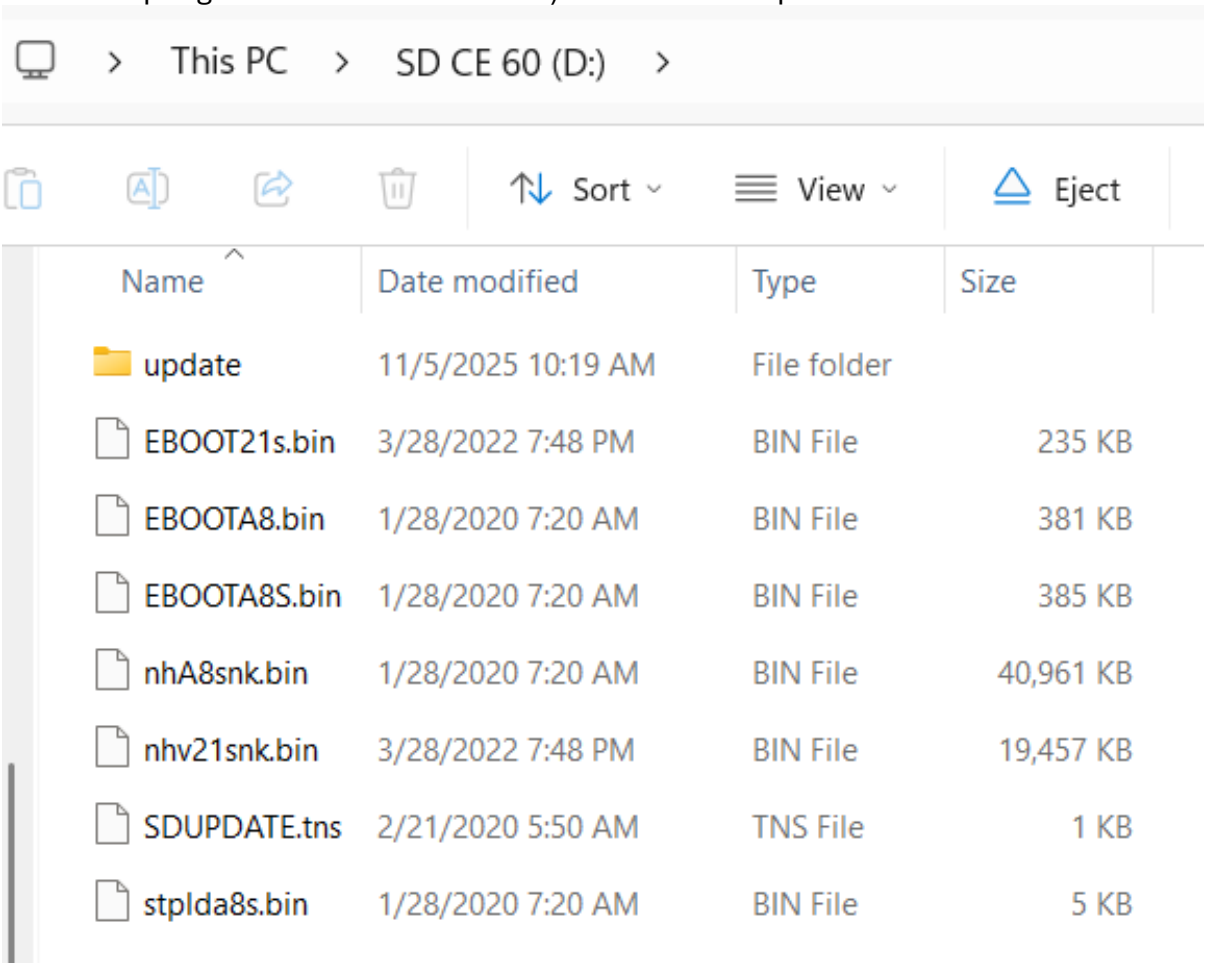
4. Once you have released the top right reset button while still holding down the bottom left reset button check the screen and see if you are on the DIAGNOSTICS MODE screen. If yes let go of the buttons fully.
5. On the right-hand side of the screen choose the SD CARD option
6. Choose the FORMAT & UPGRADE option on the left-hand side
7. Verify on the next screen with the YES option that this is indeed the desired load option
8. The Re-formatting of the software will now begin. You should see the progress of this load on the screen. It will go through the following load:
    - Flash Format
    - BootLoader Download
    - OSImage Download
    - Each should count from 1% to 100% before moving onto the next load item

9. *** If the progress says “Skipped” or “No File” then you either have an issue with the SD Card format, the SD Card is not Compatible, the File Structure of the files on the SD Card is incorrect, or an issue with your Download files on the SD Card potentially being corrupted in some way. ***
10. Once all files have loaded successfully, you will see a REBOOT option come up on the bottom right-hand side, repeat steps 3 through 8 one more time. Yes, we are doing Format & Upgrade 2 times.
11. Once you have done the SD Card Load a 2nd time and are back on the screen with the reboot option > remove the SD Card > hit REBOOT
12. After the ATM boots back up, wait for the Software Update screen
13. Once on this screen put the SD Card back in the SD Card Slot on the IO Board & then press the S/W Update Option in the bottom right corner
14. The ATM will start loading software automatically and we are just waiting for the Update Success screen
15. Once we get to the Update Success screen the ATM will start counting down from 60 seconds and then will reboot
16. Once the ATM reboots it might go to the Diagnostic Mode screen and if it does just remove the SD Card fully from the IO Board and select Exit Test Menu or power cycle the ATM or it will boot normally to the error screen
17. Continue to page 8

BlueVerse Embedded 6.0 SD Card:

Prepping SD Card with Software

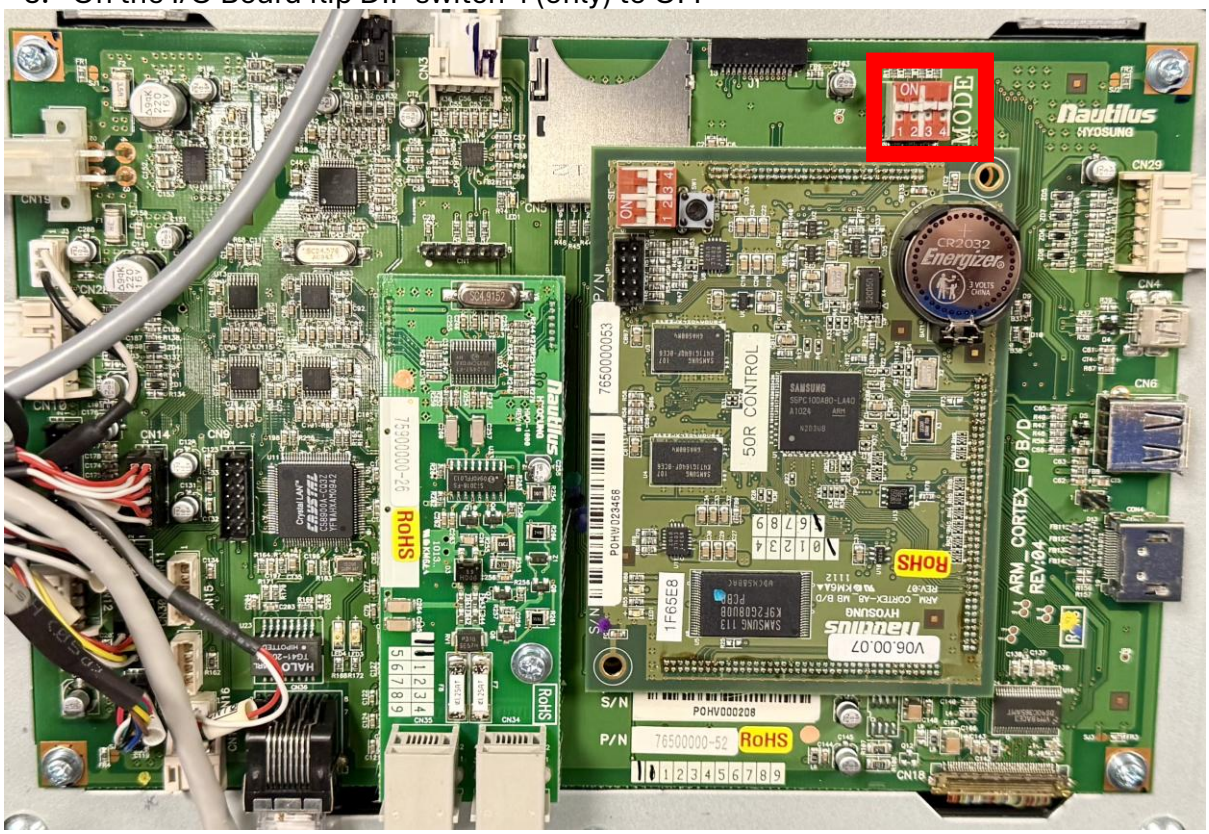
1. Open the .zip file that contains the loading files.
2. Copy the 6 .bin files, 1 Update folder and 1.tns file to the root directory of your SD Card
3. Safely remove the SD Card from the computer (suggested to avoid potentially corrupting the files on the SD Card). Move onto Step 4 at the ATM.



4. Continue to page 6

LOADING VIA THE FORMAT AND UPGRADE

1. At the ATM turn the Power Off
2. Insert the SD Card into the SD Slot on the ATM's I/O Board
3. On the I/O Board flip DIP switch 4 (only) to OFF



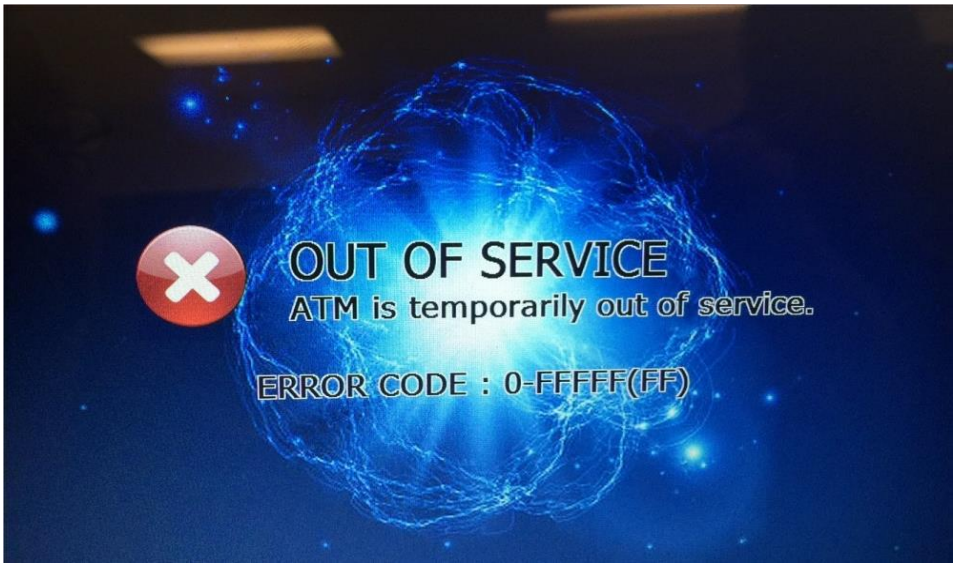
4. Turn on the ATM, which will boot you into DIAGNOSTICS MODE
5. On the right-hand side of the screen choose the SD CARD option
6. Choose the FORMAT & UPGRADE option on the left-hand side
7. Verify on the next screen with the YES option that this is indeed the desired load option
8. The Re-formatting of the software will now begin. You should see the progress of this load on the screen. It will go through the following load:
    - Flash Format
    - StepLoader Download (Weather you see this or not is nothing to worry about)
    - BootLoader Download
    - OSImage Download
    - Each should count from 1% to 100% before moving onto the next load item

9. *** If the progress says “Skipped” or “No File” then you either have an issue with the SD Card format, the SD Card is not Compatible, the File Structure of the files on the SD Card is incorrect, or an issue with your Download files on the SD Card potentially being corrupted in some way. ***
10. Once all files have loaded successfully, you will see a REBOOT option come up on the bottom right-hand side, select it to reboot back into the DIAGNOSTICS MODE.
11. Repeat steps 5 through 10 one more time. Yes, we are doing Format & Upgrade 2 times.
12. Once you are back on the Diagnostic Mode screen again turn the ATM off > Flip the #4 DIP Switch on the large IO Board back to the ON position > Remove the SD Card > Turn ATM back On
13. The next screen after the ATM boots back up will be the Software Update screen
14. Once on this screen put the SD Card back in the SD Card Slot on the IO Board & then press the S/W Update Option in the bottom right corner
15. The ATM will start loading software automatically and we are just waiting for the Update Success screen
16. Once we get to the Update Success screen the ATM will start counting down from 60 seconds and then will reboot
17. Once the ATM reboots it will most likely go to the Diagnostic Mode screen and if it does just remove the SD Card fully from the IO Board and select Exit Test Menu or power cycle the ATM
18. Continue to page 8

Master Password Reset due to FFFFF(FF) Error

1. Once the ATM boots up to the FFFFF(FF) Error/Out of Service Screen

   NOTE: **Do NOT go past this error screen** other wise you will have reboot and get back to it due to the master password reset process will not work



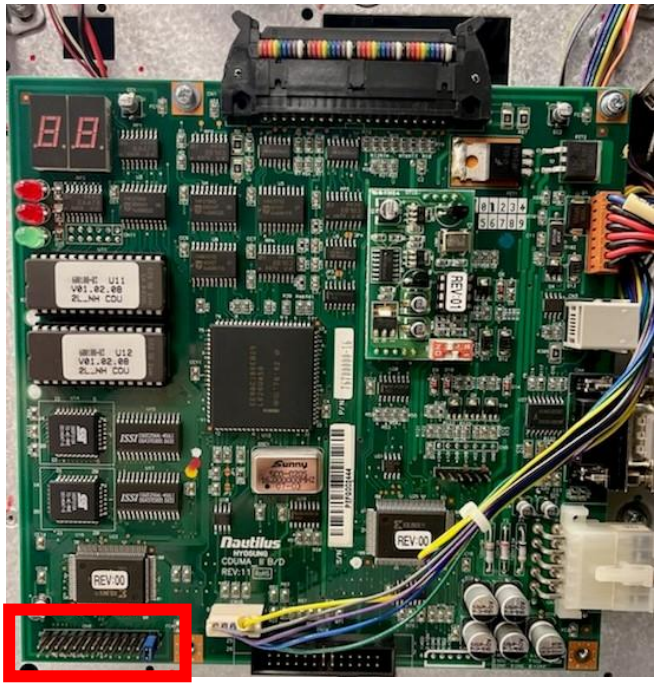
2. Open the Vault Door and leave open during this process
3. On the EPP (Pin Pad) hit the below keys
   - **CLEAR – LEFT ARROW – RIGHT ARROW – CLEAR – CLEAR – CANCEL**
4. The next screen you should see is the Master Password & EPP Reset screen
5. Hit Yes & the ATM will reboot and when it comes up it should come up to the 9740000 or 971A600 or 971A700 or 400BC00 or similar CDU Error
6. Once the ATM come up to the Out Of Service screen log in with the default master password of 555555
   - Hit Enter > Clear > Cancel > 1 > 2 > 3, then hit Operator Function , and then enter in the default master password of 555555
7. Once logged into the menus you will get a Quick Configuration screen & hit No
8. Before continuing we need to verify everything is loaded from the SD Card
9. Go to Report > S/W Version & verify the below versions are updated to latest
   - AP Colum
     - AP (Application Program)
       - v06.04.00
     - OS (Operating System)
       - For 6.0 Machines: v06.01.19.00 or v08.01.16.00
       - For 7.0 Machines: v10.11.13
     - BL (Boot Loader)
       - For 6.0 Machines: v06.22.16 or v08.02.10
       - For 7.0 Machines: v10.02.13
   - Note: These version numbers are the latest as of 07/27/2026
10. Hit cancel on the EPP 2 times
11. Continue to page 9

Setting the ATM Model

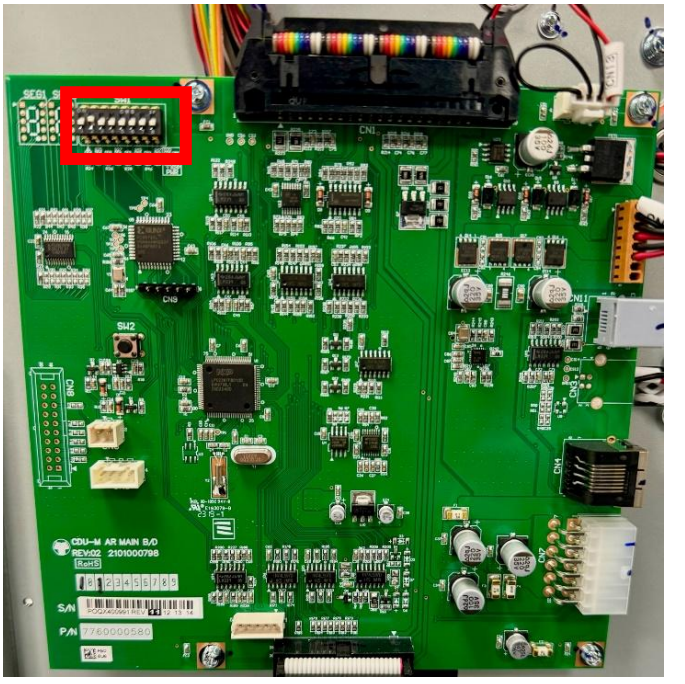
1. Hit cancel 2 times
2. Check the orange box in the top left of the Operator Program screen. Does that model number match the model number sticker of the ATM that has the S/N of the atm on it?
    - If yes, skip to step X due to you don't need to fix things
    - If no, continue to next step
3. Go to System Setup > System Control > NVRAM > Clear NVRAM
4. Select the correct model that is on either on the left or right side of screen.
5. Once you select the correct model, the box in the middle of the screen should change and match what you selected
6. As long as the correct model is now listed in the middle of the screen hit Apply & Clear
7. Select Yes to reset the whole ATM. Nothing will be lost due to nothing has been configured yet.
8. ATM will countdown from "60 Seconds" and reboot
9. Once the ATM reboots and stops on the Out of Service screen log into the menus and verify the Model Version the software has and it should match the model of ATM you are working on.
10. Continue to page 10

CDU Encryption Reset

1. With the Vault Door open, check the CDU Mainboard
2. If Board has Jumper PIN's in the bottom left corner area
    - Turn the ATM off > Open Vault Door > Put the CDU in Test Mode (See Step 4) > Turn the ATM on for 20 seconds > Turn the ATM off > Put CDU in Live Mode > Turn the ATM on > Verify CDU Works > Close Vault Door
3. If board has DIP Switches in the top right corner area
    - While ATM is on > Log in with Master Password > go to Diagnostics > Open Vault door > Put the CDU in Test Mode (See Step 4) > Press Black Reset Button & let go > wait 20 seconds > flip DIP Switch back to normal position > press black reset button & let go > wait 20 seconds > press Initialize > if CDU runs then you are good
4. CDU Test Mode:
    - Drawer Type CDU:
        - The number 1 Dip Switch at S1 must be On when power is applied
    - 1K/2K CDU Board:
        - Place a jumper on Pins 1 and 2 at CN8. The jumper must be in place when power is applied to the CDU.
    - 1K Only CDU Board:
        - The number 4 Dip Switch at SW2 must be On when power is applied
        - Place a jumper on pins 7 and 8. The jumper must be in place when power is applied to the CDU.
    - 2x1K/2K/4K/6K/8K Only Front/Rear Load CDU Board:
        - The number 4 Dip Switch at SW2 must be On when power is applied
    - NOTE: A Jumper Cap will possibly be needed if you CDU Mainboard has Jumper Pins. You can get this from old electronics or from amazon. We do not recommend using anything else due to possible shorting of the board.
5. Once the CDU initializes with out issue exit out of diagnostics
6. Continue to page 12

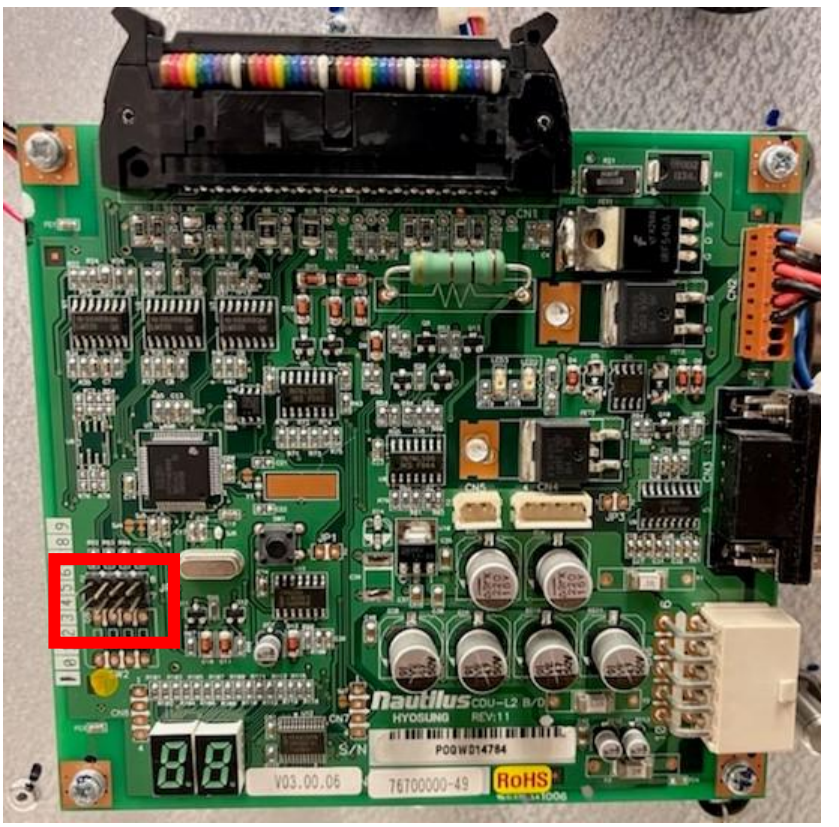


1K/2K CDU Board
w/ Jumper Pins



2x1K/2K CDU Board
w/ DIP Switches

1K Only CDU Board
w/ Jumper Pins



Verifying CDU Setup Information

1. From the Operation Program Screen go to System Setup > Device Setup > CDU Setup > Yes we are sure
2. Verify the below information is set correctly
   - Country
   - Cassette Volume
   - CDU Type
3. For CDU Types the options are below
   - Drawer Style – 00
   - 1k – 82 if you have it otherwise 80
   - 1k AR - 82
   - 2x1k – 0A
   - 2x1k AR - 02
   - 2k Front Load w/o Throat – 03 if you have it otherwise 81
   - 2k AR Front Load w/o Throat – 02
   - 2k Front Load w/ Throat – 0b
   - 2k AR Front Load w/ Throat - 03
   - 2k Rear Load – 43 if you have it otherwise 41
   - Note: AR = Automatic Recovery CDU (these are the latest version of our spray CDU's)
4. If anything is changed, you have to hit Execute to save it
5. Once all changed have been saved / verified it is correct hit cancel 1 time & yes we are sure
6. Continue to page 13

Card Reader Setup for Anti-Skimming Card Readers

1. From the Operator Program Screen to go System Setup > Device Setup > Card Reader Setup
2. If you have the Anti-Skimming option on the right side of the screen go to that option and turn it on
3. Once all of these steps have been accomplished/checked then you are free to setup the ATM fully and test.
4. The ATM has now had the SD Card Reload done to have the AP, OS, and BL reloaded & updated. Configure the ATM for service & verify everything works in a live mode.

Appendix A for Windows 10 or Newer

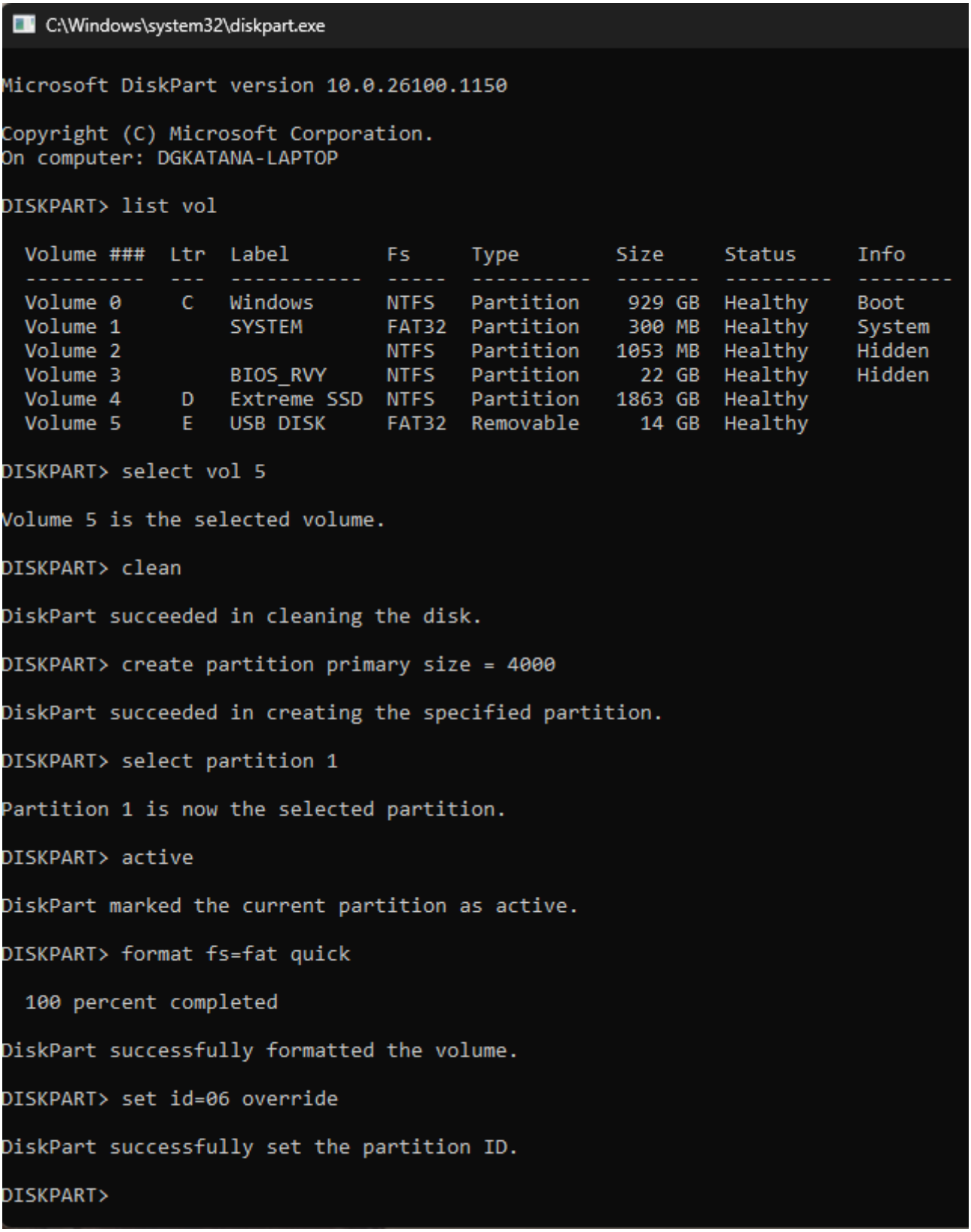
Formatting & Re-Partitioning a SD Card

This process requires Admin Access Rights and can mess up a PC or external drive if wrong device selected. Be careful & sure that you are choosing the right device.

1. Insert media into the Computer
2. Bring up the Command Prompt
3. Type DiskPart
4. Select yes for the acknowledgement popup

NOTE: Visual example of the below steps are on the next page

3. Type list vol
4. Look at the list of the volumes and find the letter associated with the SD card.
5. Type select vol X and press enter. With X being the number of the Volume.
    - Wait for the “Volume X is the selected volume.” message
6. Type Clean and press enter.
    - Wait for the "DiskPart succeeded in cleaning the disk." message
7. Setting the disk size of the SD Card (A is for 6.0 ATM’s and B is for 7.0 ATM’s)
    A. For 4GB Type : “create partition primary size = 4000” (size is in MB) and press enter
    B. For 32GB Type : “create partition primary size = 32000” (size is in MB) and press enter
    - Wait for the “DiskPart succeeded in creating the specified partition.” message
8. Type Select partition 1 and press enter.
    - Wait for the "Partition 1 is now the selected partition." message
9. Type Active and press enter.
    - Wait for the "DiskPart marked the current partition as active." message
10. Set the Format type
    A. For FAT: Type Format fs=fat quick and press enter.
    B. For FAT32: Type Format fs=fat32 quick and press enter.
    - Wait for the “DiskPart successfully formatted the volume.” message
11. Type set id=06 override and press enter.
    - Wait for the "DiskPart successfully set the partition ID." appears. message
12. Type Exit and press enter. This will close out of the DiskPart program, and you are ready to put software on the SD Card.


C:\Windows\system32\diskpart.exe
Microsoft DiskPart version 10.0.26100.1150
Copyright (C) Microsoft Corporation.
On computer: DGKATANA-LAPTOP
DISKPART> list vol
Volume ### Ltr Label Fs Type Size Status Info
Volume 0 C Windows NTFS Partition 929 GB Healthy Boot
Volume 1 SYSTEM FAT32 Partition 300 MB Healthy System
Volume 2 NTFS Partition 1053 MB Healthy Hidden
Volume 3 BIOS_RVY NTFS Partition 22 GB Healthy Hidden
Volume 4 D Extreme SSD NTFS Partition 1863 GB Healthy
Volume 5 E USB DISK FAT32 Removable 14 GB Healthy
DISKPART> select vol 5
Volume 5 is the selected volume.
DISKPART> clean
DiskPart succeeded in cleaning the disk.
DISKPART> create partition primary size = 4000
DiskPart succeeded in creating the specified partition.
DISKPART> select partition 1
Partition 1 is now the selected partition.
DISKPART> active
DiskPart marked the current partition as active.
DISKPART> format fs=fat quick
100 percent completed
DiskPart successfully formatted the volume.
DISKPART> set id=06 override
DiskPart successfully set the partition ID.
DISKPART>

Appendix B for Windows 10 or Newer

Formatting a SD Card

This process requires Admin Access Rights and can mess up a PC or external drive if wrong device selected. Be careful & sure that you are choosing the right device.

1. Insert media into the Computer
2. Bring up the Command Prompt
3. Type DiskPart
4. Select yes for the acknowledgement popup

NOTE: Visual example of the below steps are on the next page

5. Type list vol
6. Look at the list of the volumes and find the letter associated with the SD card.
7. Type select vol X and press enter. With X being the number of the Volume.
    - Wait for the “Volume X is the selected volume.” message
8. Type Clean and press enter.
    - Wait for the "DiskPart succeeded in cleaning the disk." message
9. Type create partition primary and press enter
    - Wait for the “DiskPart succeeded in creating the specified partition.” message
10. Type Select partition 1 and press enter.
    - Wait for the "Partition 1 is now the selected partition." message
11. Type Active and press enter.
    - Wait for the "DiskPart marked the current partition as active." message
12. Set the Format Type
    A. For FAT: Type Format fs=fat quick and press enter.
    B. For FAT32: Type Format fs=fat32 quick and press enter.
    - Wait for the “DiskPart successfully formatted the volume.” message
13. Type set id=06 override and press enter.
    - Wait for the "DiskPart successfully set the partition ID." appears. message
14. Type Exit and press enter. This will close out of the DiskPart program, and you are ready to put software on the SD Card.

Appendix C for Mac OS

FORMATTING &/or Re-Partitioning a SD Card and/or USB Thumb Drive

This process had the ability to mess up a PC or external drive if wrong device is selected. Be careful & sure you are choosing the right device.

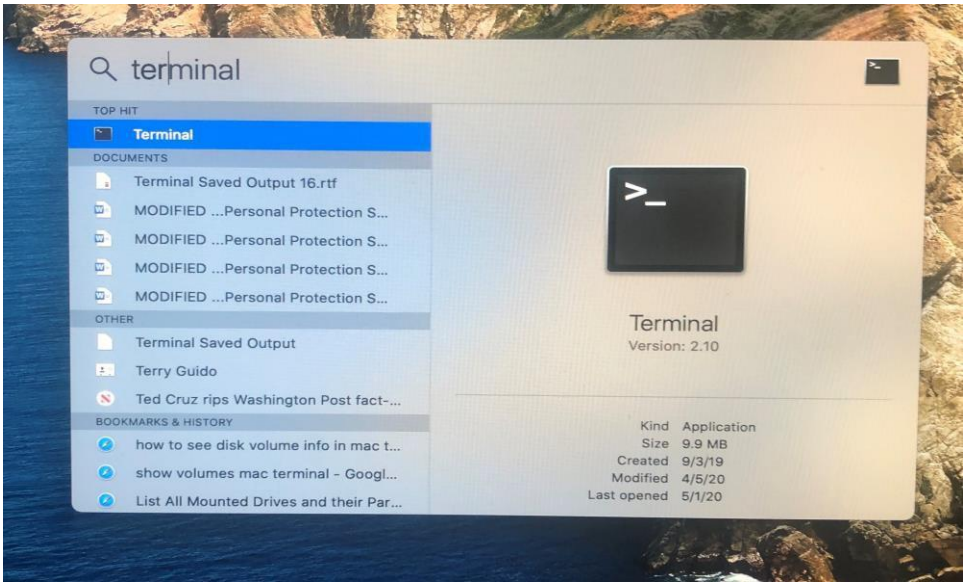
1. Insert media into the Computer.
2. On the Keyboard press Command + Space



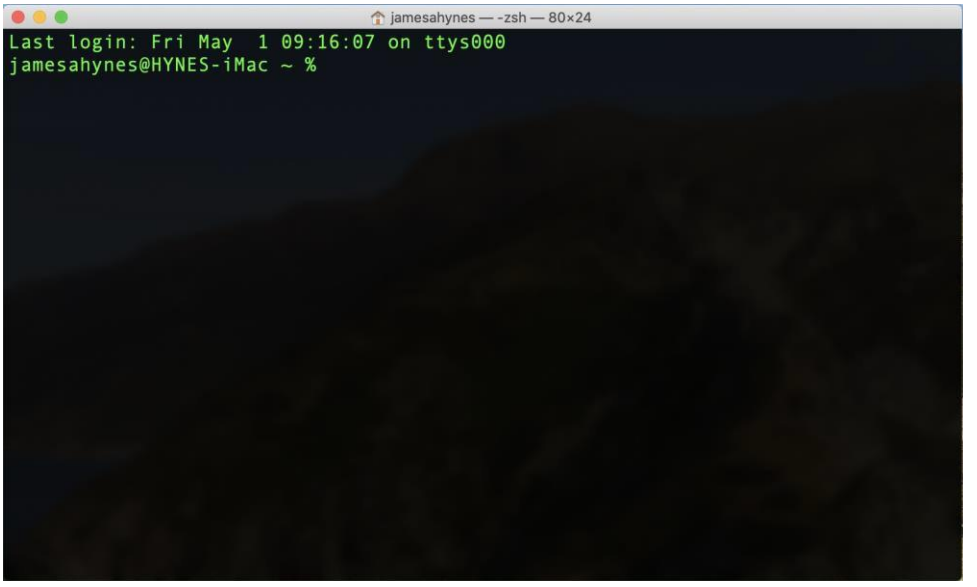
3. Spotlight will open



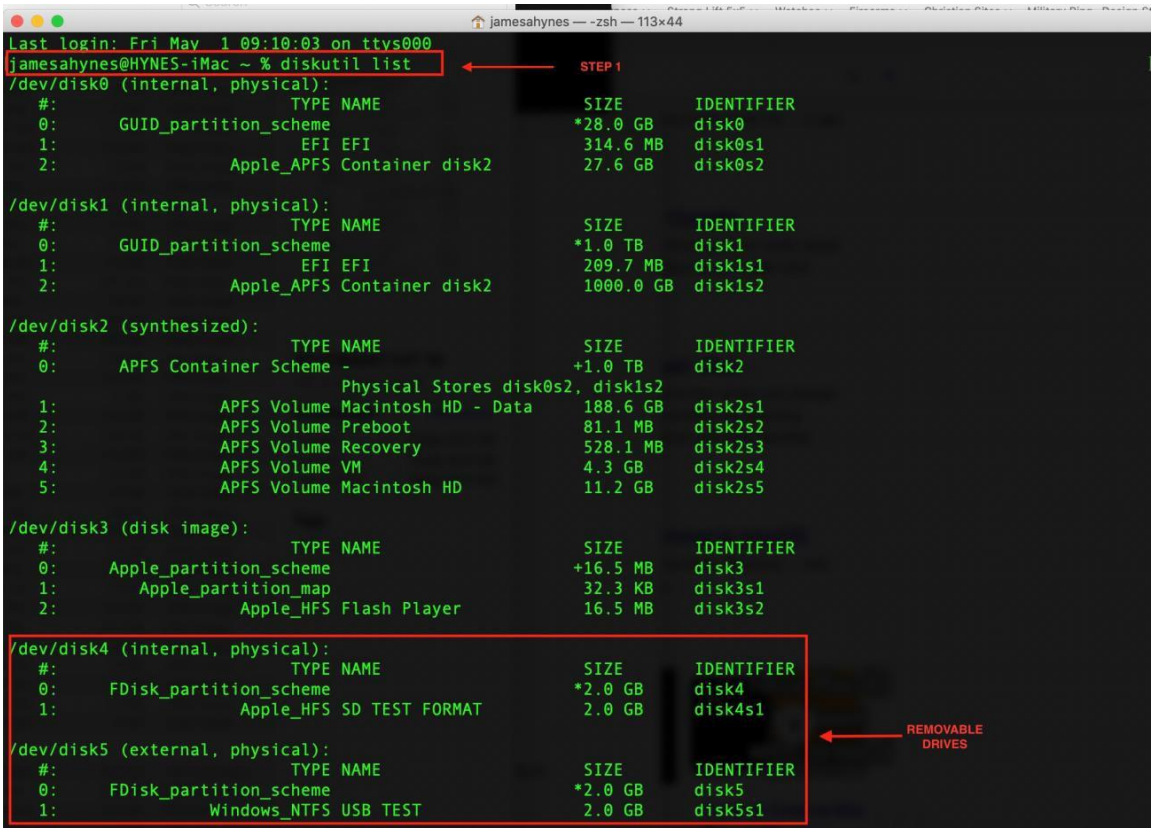
4. Type TERMINAL press ENTER



5. Terminal window will open



6. At the flashing prompt (it will have your MAC logon name) type **diskutil list** (Step 1) and hit enter you will see the list of drives on your MAC



7. At the flashing prompt, type the command below including the quotes and hit Enter but pay attention to your disk label (/dev/xxxx) - in this case disk4
8. Format Type
    6. For FAT32: Type **diskutil partitionDisk /dev/disk4 1 MBRFormat "MS-DOS FAT32" "HYOSUNG32" 1000M**
    7. For FAT: Type **diskutil partitionDisk /dev/disk4 1 MBRFormat "MS-DOS FAT16" "HYOSUNG16" 1000M**