



AP V06.02.XX and OS V08.01.12

Win CE 6.0 ATM SD Card Reload and Update

Instructions

ATM Models – NH1800SE, NH2700, NH2700T, MX4000W, MX5000SE, HALO, HALO II, MX5200SE, and MX5300SE

***** PERFORMING A FORMAT AND UPGRADE WILL RESET THE ATM AND MASTER KEYS *****

REQUIREMENTS:

- Computer with an SD Card slot or a USB to SD Card adapter
- SD Card (Not guaranteed to work with SDXD, SDHC, or Micro/Mini SD Cards)
- Suggested to Use Windows 7 or Later Operating System for formatting to the required FAT or FAT 32 format (**Windows 10 in many cases will not format properly to FAT or FAT 32, but the steps to do so are covered in this document – not guaranteed to work**)

SEE APPENDIX A FOR INSTRUCTIONS TO FORMAT SD/USB USING WINDOWS 10

SEE APPENDIX B FOR INSTRUCTIONS TO FORMAT SD/USM USING MAC OSX

QUICK REFERENCE LOCATION AND STARTING POINTS:

- Preparing a FAT or FAT 32 SD Card for Downloading to the ATM.....[Start at Step 1](#)
- Reloading via the Format and Upgrade option.....[Start at Step 4](#)
- Reloading via the Upgrade step ONLY.....[Start at Step 13](#)
- Resetting the Password after a Format and Upgrade.....[Start at Step 22](#)
- Setting the ATM Model Type.....[Start at Step 33](#)
- Setting the correct CDU Setup Information.....[Start at Step 43](#)
- Windows 10 SD/USB FAT16/32 Format instructions.....[Appendix A](#)
- MAC OSX SD/USB FAT16/32 Format Instructions.....[Appendix B](#)

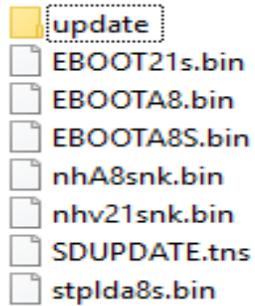
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PREPARING A FAT OR FAT 32 SD CARD FOR DOWNLOADING TO THE ATM

Step 1 – Open the .zip file that contains the loading files.

Step 2 – Copy the 6 .bin files and 1 Update folder and 1.tns file to the root directory of your SD Card

***NOTE - AP06.02.XX and OS V08.01.12, you will have an extra file named SDUPDATE.tns.**

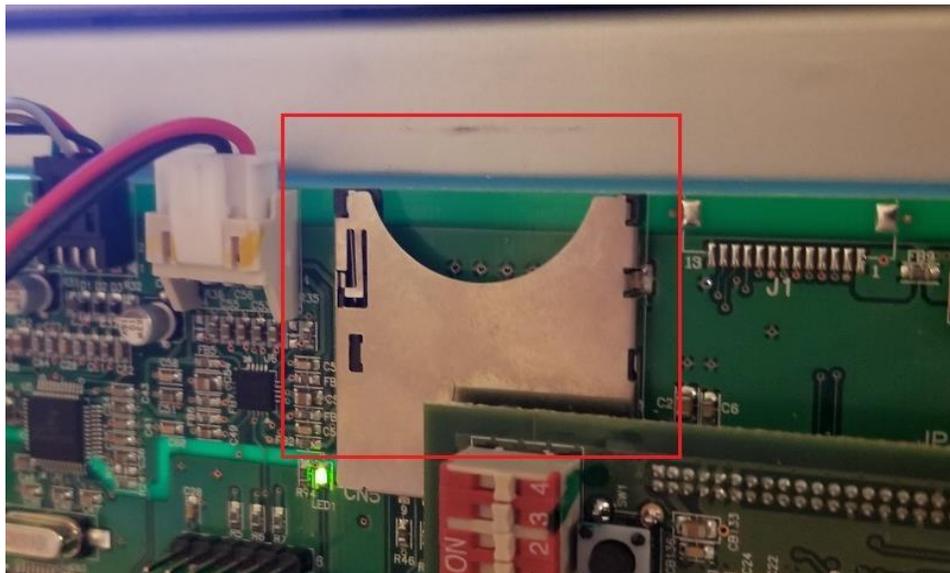


Step 3 – Safely remove the SD Card from the computer (suggested to avoid potentially corrupting the files on the SD Card). Move onto Step 4 at the ATM.

LOADING VIA THE FORMAT AND UPGRADE

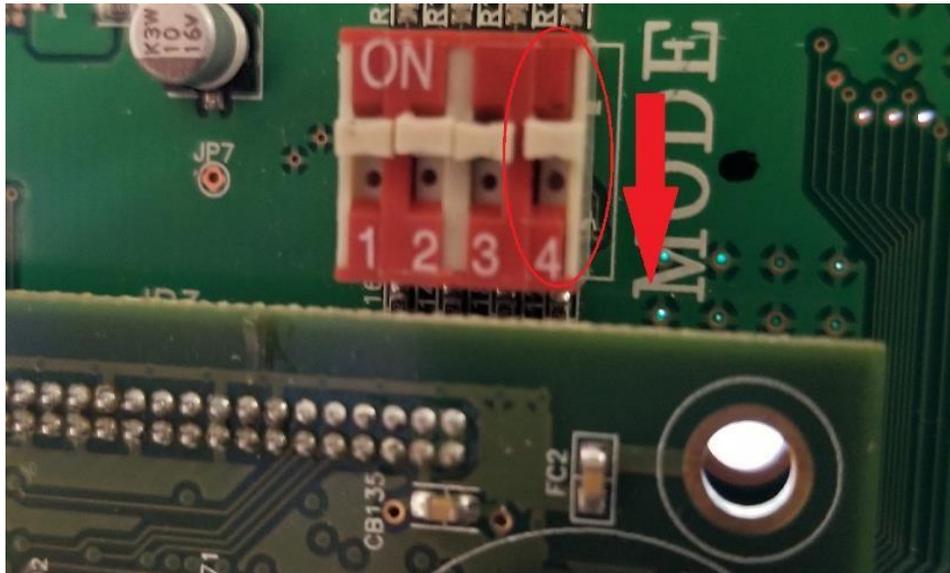
Step 4 – At the ATM turn the Power Off

Step 5 – Insert the SD Card into the SD Slot on the ATM's I/O Board

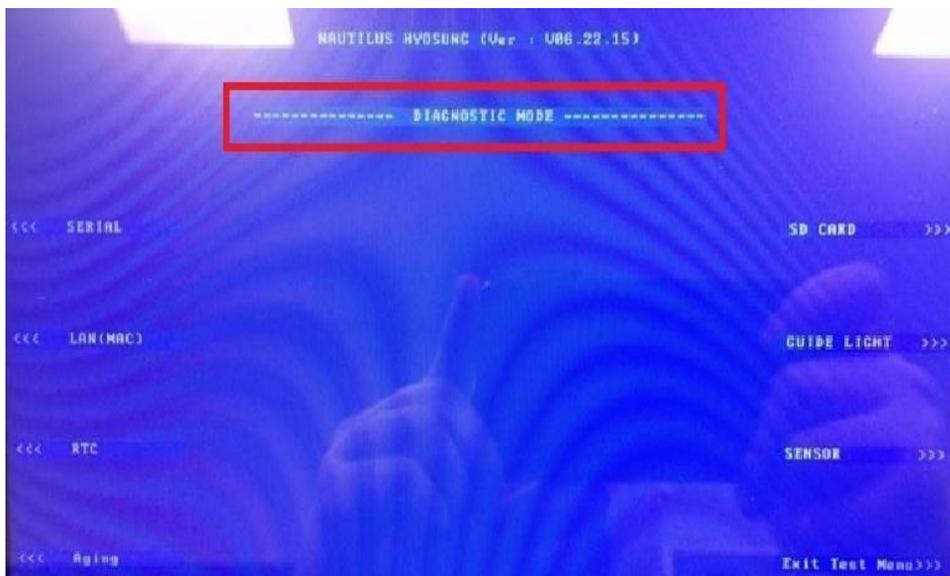


Step 6 – On the I/O Board flip DIP switch 4 (only) to **OFF**

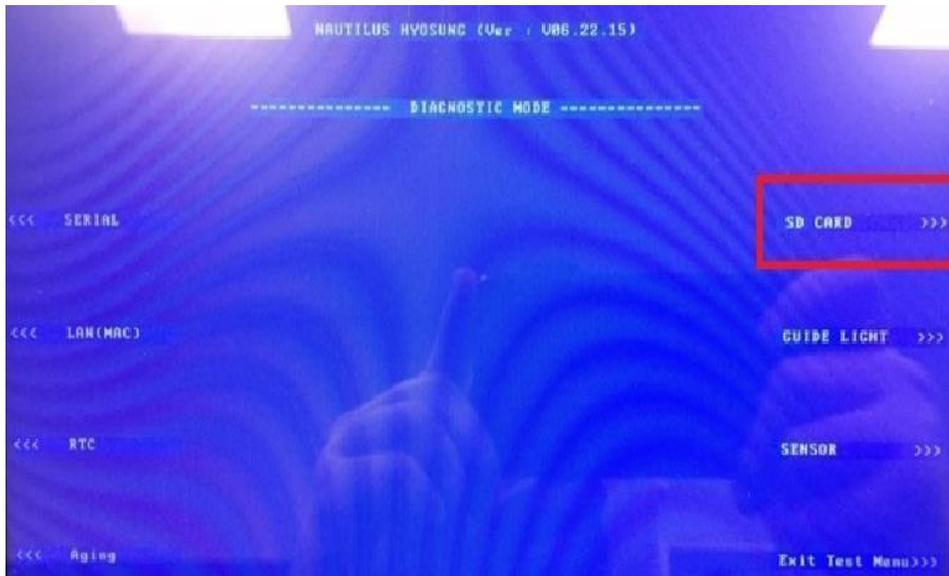
Note: After your ATM has OS V08.01.02 you will not have to switch the #4 dip s/w to the “off” position.



Step 7 – Turn on the ATM, which will boot you into **DIAGNOSTICS MODE**



Step 8 – On the right hand side of the screen choose the **SD CARD** option



Step 9 – Choose the **FORMAT & UPGRADE** option on the left hand side (For UPDATE ONLY via SD, move to Step 13)

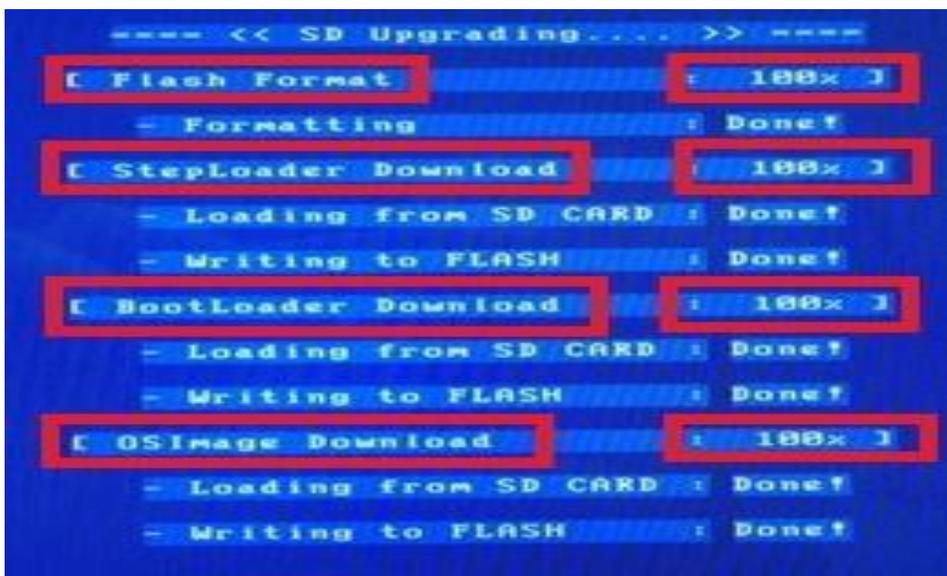


Step 10 – Verify on the next screen with the **YES** option that this is indeed the desired load option



Step 11 – 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
- Step Loader
- BootLoader
- OSImage
- Each should count from 1% to 100% before moving onto the next load item



*** 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. ***

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Step 12 – 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**. Move onto Step 13 from here.

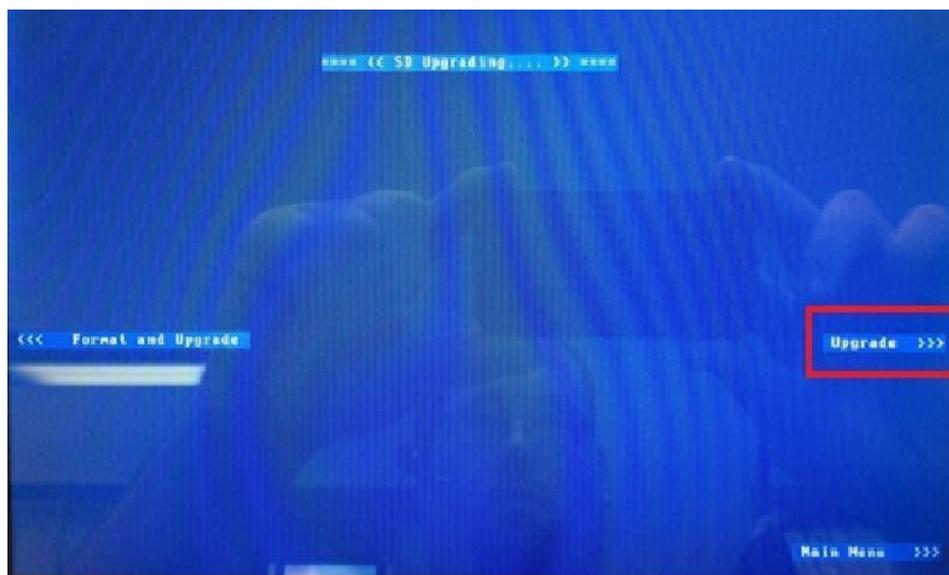
```
==== << SD Upgrading.... >> ====  
  
[ BootLoader Download : 100% ]  
- Loading from SD CARD : Done!  
- Writing to FLASH : Done!  
  
[ OSImage Download : 100% ]  
- Loading from SD CARD : Done!  
- Writing to FLASH : Done!  
  
Reboot >>>
```

LOADING VIA THE UPGRADE OPTION

Step 13 – Once in Diagnostics Mode choose the **SD CARD** option



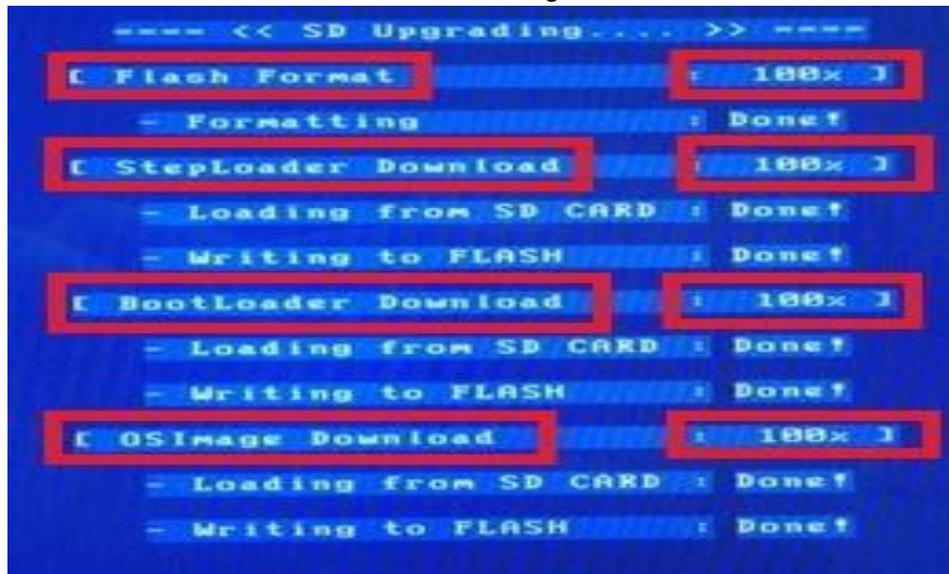
Step 14 – Choose the **UPGRADE** option



Step 15 - The Upgrading of the OS and BL software will now begin. You should see the progress of this load on the screen. If doing this step after a Format and Upgrade, you may notice this step takes an extra minute to two minutes to complete. It will go through the following load:

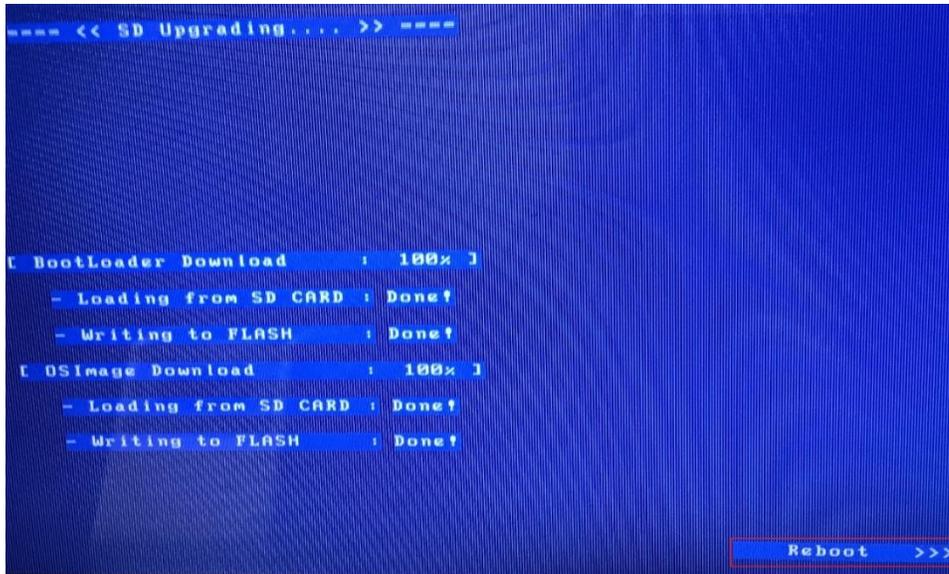
- Flash Format
- Step Loader
- BootLoader
- OSImage

Each should count from 1% to 100% before moving onto the next load item

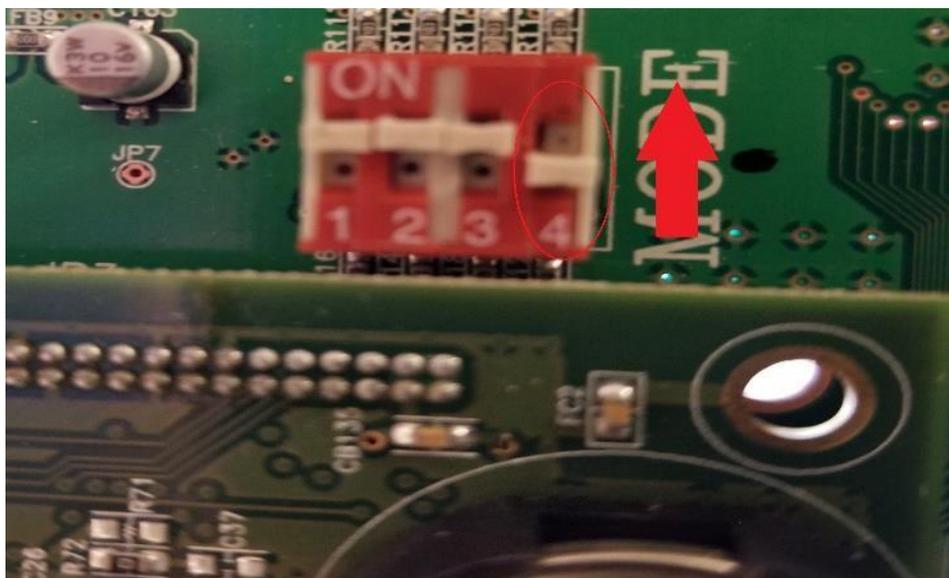


*** If the progress says "Skipped" or "No File" then you either have an issue with the SD Card format, the SD Card is not Compatible, the File Structure of the files on the SD Card is incorrect, or an issue with your Download files on the SD Card potentially being corrupted in some way. ***

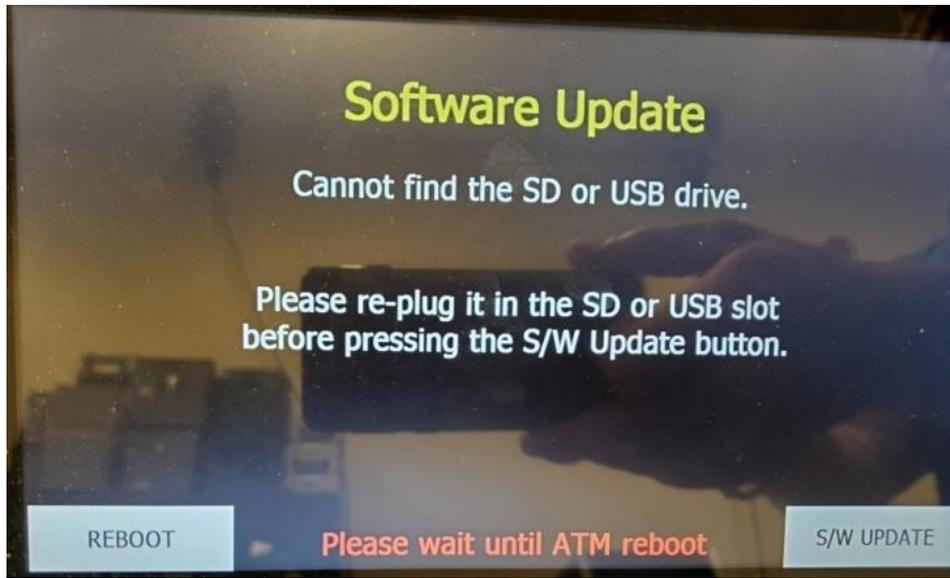
Step 16 – Once all files have loaded successfully, you will again see a **REBOOT** option come up on the lower right hand corner. **Do not select this until Step 17 is completed**



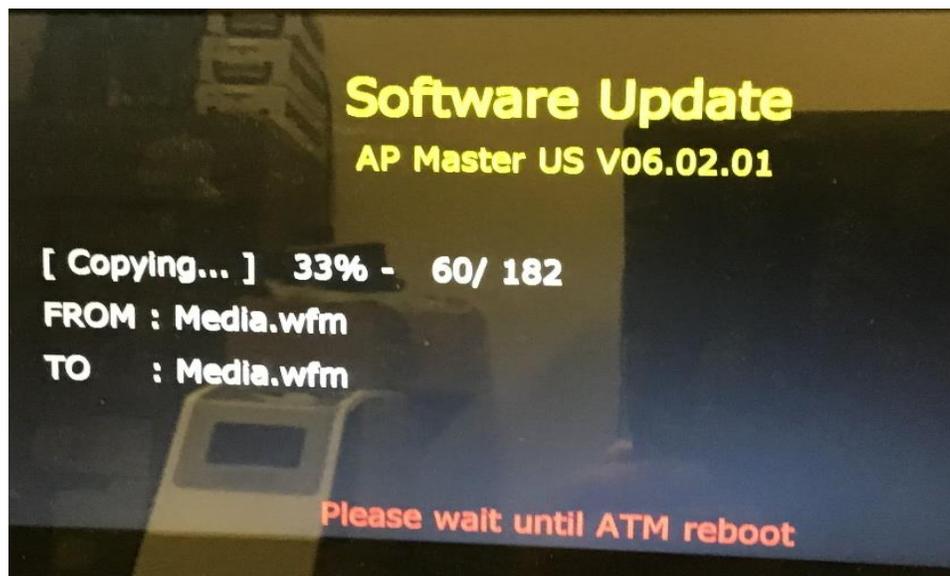
Step 17 – Flip DIP 4 back to the **ON** position, as it is in normal operations. ***Added Instructions: remove the SD Card and choose “Reboot” on the lower right hand corner of the screen shown above.**



Step 18 - The next screen after the ATM reboots will have “SW Update” in the lower right hand corner. Insert the SD back in the SD card slot on the I/O board and choose “SW Update”.

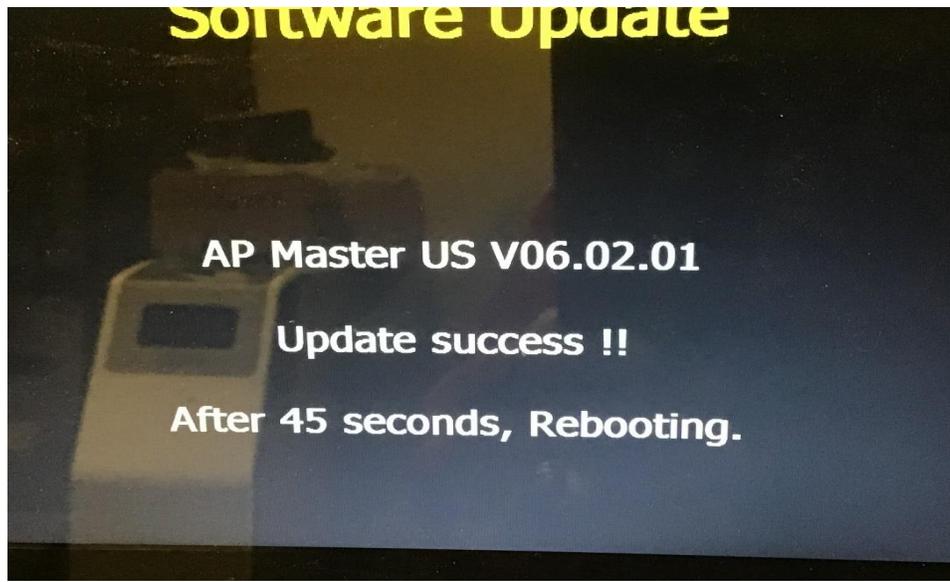


Step 19 - As the ATM boots up, it will begin reloading the application software

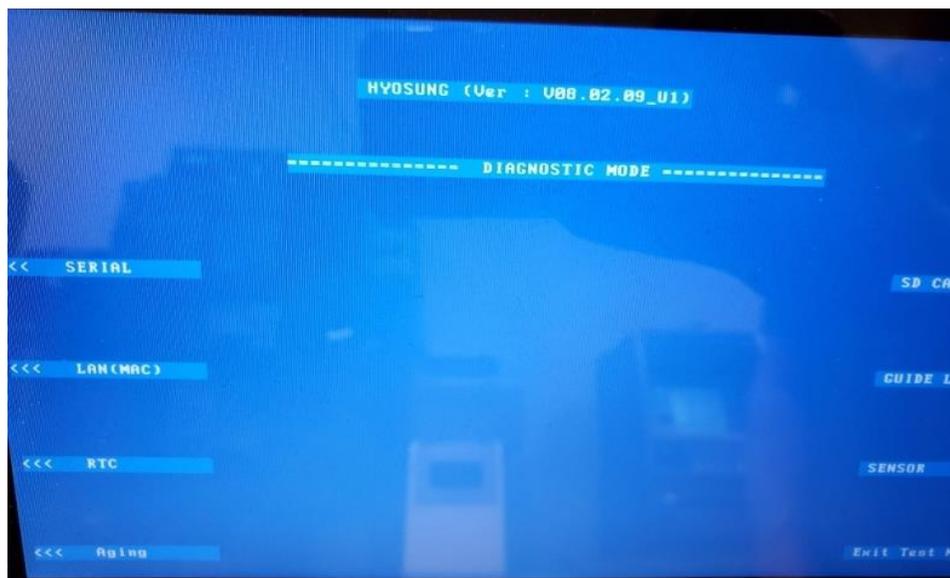


Step 20 - The AP Software will be updated and will shut down "After 60 seconds".

*****DO NOT TURN OFF THE ATM, LET IT REBOOT ON ITS OWN *****



Step 21 - After the ATM shuts down and reboots, you'll see the blue Diagnostic Mode screen below proceed to step 22.



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RESETTING THE PASSWORD AFTER A FORMAT AND UPGRADE

Step 22 – Power OFF the ATM

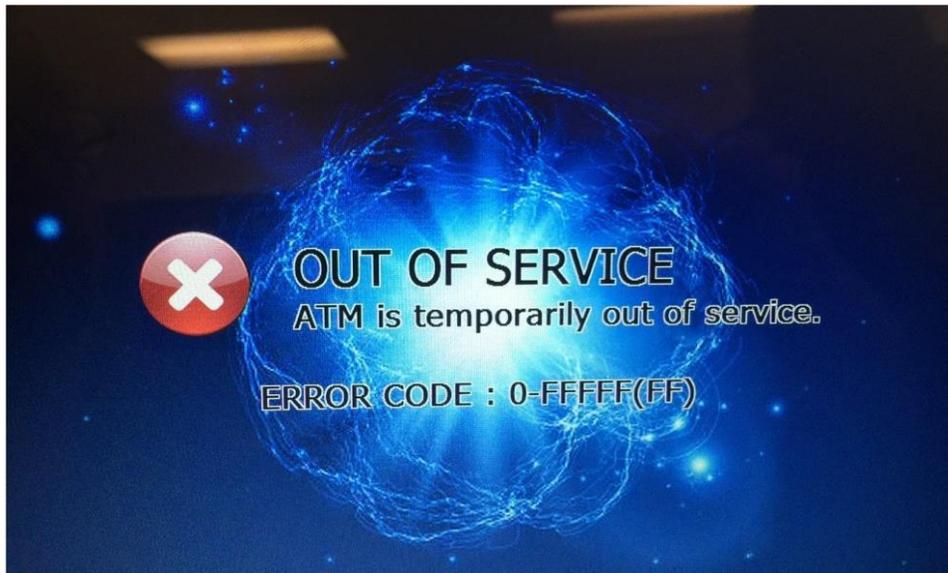
Step 23 – Remove the SD CARD from the ATM

Step 24 – Open the Vault Door

Step 25 – With the Vault Door Open, Power ON the ATM

***** Leave the Vault Door Open, Until the Entire Password Reset Procedure Has Completed *****

Wait for the OUT OF SERVICE screen to appear



Step 26 – At the OUT OF SERVICE screen, enter the sequence below.

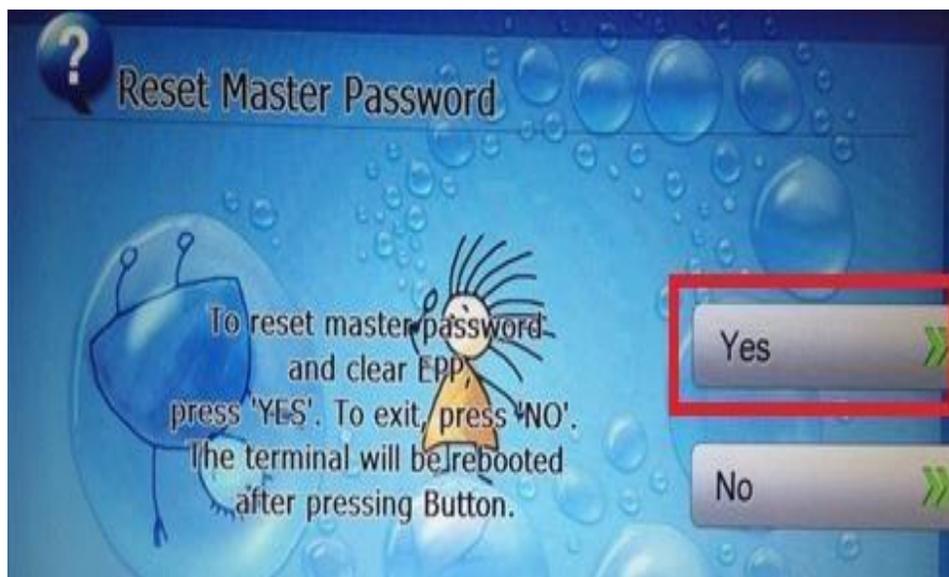
CLEAR – LEFT ARROW – RIGHT ARROW – CLEAR – CLEAR – CANCEL

If pressed within the time limit, and one at a time on the correct screen, you should hear an individual ding for each button press

Step 27 – If properly performed you will be taken to a **RESET MASTER PASSWORD** menu



Step 28 – From this menu choose the **YES** option



Step 29 – The ATM will then reboot on its own

Step 30 Once rebooted and back up you will be able to log into the ATM as you normally would via the ENTERCLEAR-CANCEL-1-2-3 procedure. The Master Password will now be at the default 555555

Step 31 – Once logged in go to REPORT



Step 32 – Choose S/W VERSION



Step 33 – You Can verify the OS, BL, and AP Versions are all up to date on this menu

AP		VDM		SP		EP	
AP	V06.01.00	CDU	V06.06.07.00	CDU	V 06.06.14	CDU	C03H1QV098019
OS	V06.01.16	SPR	V06.04.13.00	SPR	V 06.04.18	SPR	SPR12
RMS	V01.03.25	MCU	V06.00.04.00	MCU	V 06.00.12	MCU	3898-01G
B-L	V06.22.15	KMR	V06.00.00.15	PIN	V 06.04.07	PIN	V03.02.01
MWI	V06.03.14	RFID	N/A	SIU	V 06.03.10	SIU	N/A
EMV	N/A			RFID	N/A	RFID	N/A

PRINT CANCEL TO RETURN

*** Note Versions Listed Are Not Necessarily Indicative of the Versions You Should Have Loaded, Your Versions Should Be the Latest Versions of Each ***

SETTING THE ATM MODEL TYPE

Step 34 – If, when you log into the **OPERATION PROGRAM** menu you note that the ATM model is incorrect (Top Left Hand side of the screen) then it is suggested to fix this setting

Step 35 – Choose **SYSTEM SETUP**



Step 36 – Choose **SYSTEM CONTROL**

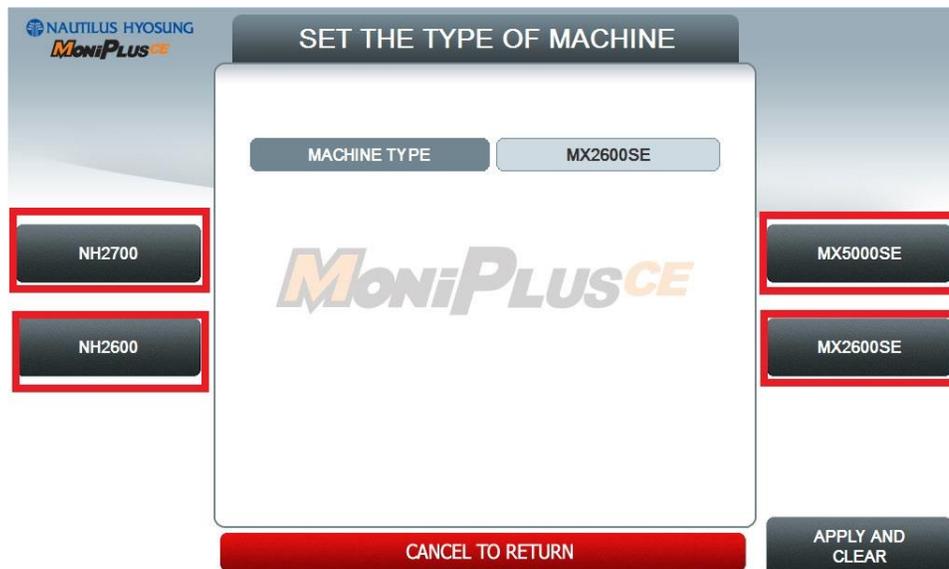


Step 37 – Choose **NVRAM** (**NOTE** –lower right button is now labeled **NVRAM**)

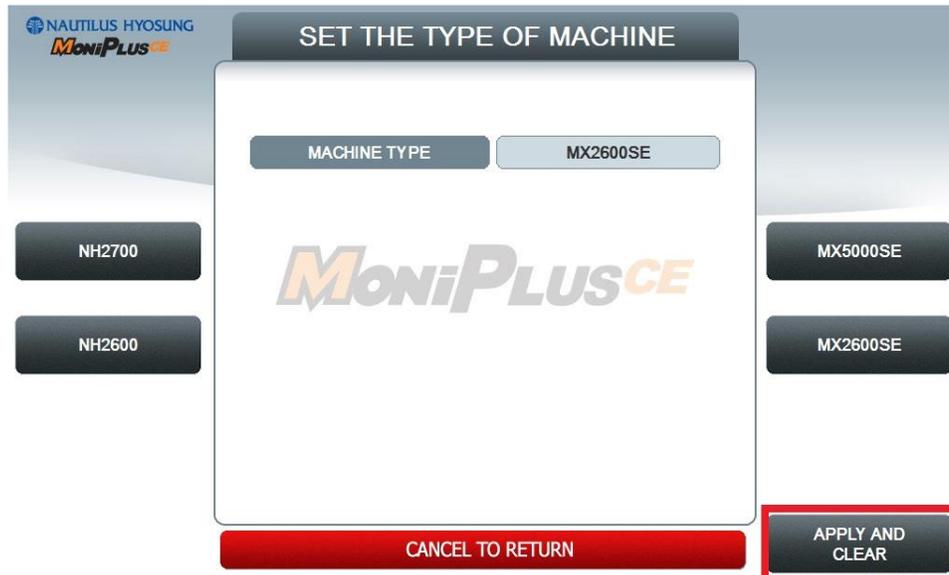


Step 38 – Choose **CLEAR NVRAM**

Step 39 – Select the Appropriate Model Type of the ATM



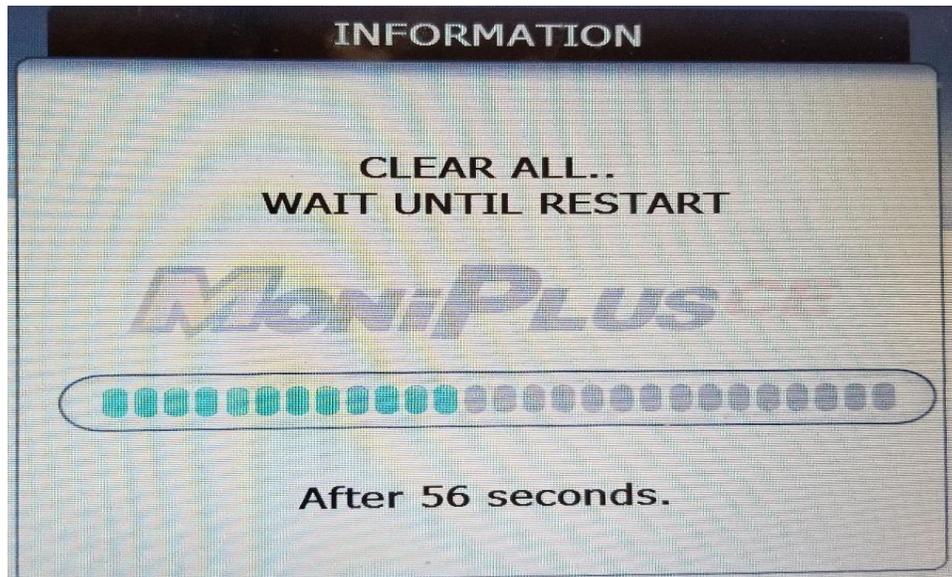
Step 40 – Choose APPLY & CLEAR



Step 41 - Confirm for the Application that you do indeed want to perform this function by selecting YES



Step 42 – The ATM will begin a countdown before self-rebooting the system



Step 43 – Once booted back up, log back in, and verify the model listing is now the correct one



SETTING THE CORRECT CDU SETUP INFORMATION

Step 44 – It is highly suggested to verify the correct CDU Setup Information has been set after doing the above Steps 1 – 41.

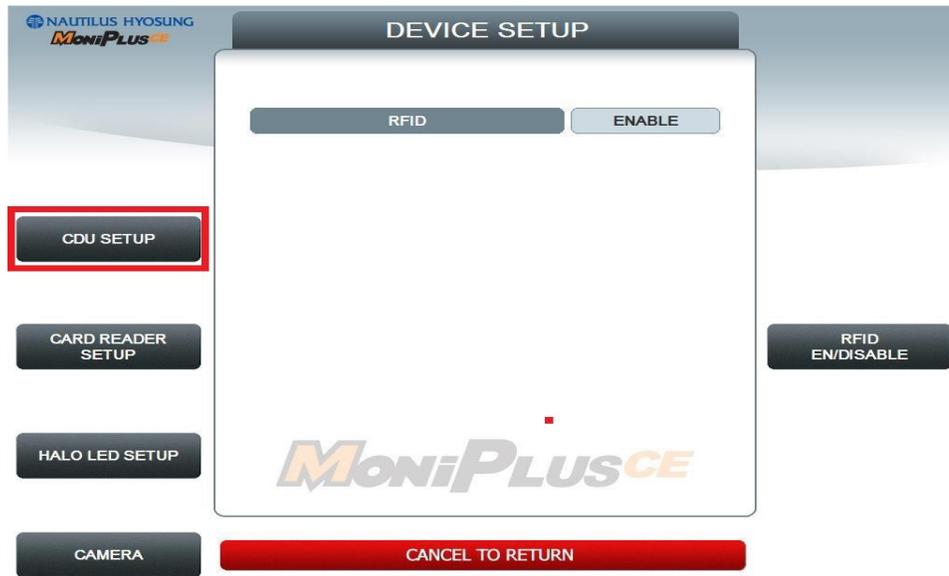
Step 45 – At the **OPERATION PROGRAM** screen choose **SYSTEM SETUP**



Step 46 – Choose **DEVICE SETUP**



Step 47 – Choose CDU SETUP



Step 48 – On this menu set the appropriate CDU Parameters as described below:

- ❖ Country
- ❖ CDU Type
 - For a Drawer Style CDU choose **00**
 - For a Removable 1K Cassette CDU choose **82**
 - For a Front Load 2K/4K/6K/8K in a **Biz Hour Safe** choose **03**
 - For a Front Load 2K/4K/6K/8K Level 1 Safe or **“Throated”** CDU choose **0B**
 - For a Rear Load CDU choose 43
- ❖ Cassette Volume
 - All Drawer Style CDUs are 1 Cassette
 - All Removable 1K Cassette CDUs are 1 Cassette
 - All Front Load 2K CDUs, regardless of Throat are 1 Cassette
 - All Front Load 4K CDUs, regardless of Throat are 2 Cassette
 - All Front Load 6K CDUs, regardless of Throat are 3 Cassette
 - All Front Load 8K CDUs, regardless of Throat are 4 Cassette
 - All Rear Load 2K CDUs are 1 Cassette

The screenshot displays the 'CDU SETUP' menu. At the top left is the 'NAUTILUS HYOSUNG MoniPLUS CE' logo. The main display area shows three rows of settings: 'COUNTRY' set to 'USA', 'CASSETTE VOLUME' set to '1 Cassette', and 'CDU TYPE' set to '80'. A large 'MoniPLUS CE' watermark is centered over the settings. On the left side, there are two buttons: 'COUNTRY' and 'CDU TYPE'. On the right side, there are two buttons: 'CASSETTE VOLUME' and 'EXECUTE'. At the bottom center, there is a red button labeled 'CANCEL TO RETURN'.

Step 49 – Once all the appropriate settings are set as they should be, choose **EXECUTE**



Step 50 – This should save the settings so that the application and CDU are properly talking to each other now, and it should eliminate erroneous errors due to incorrect CDU settings

For any questions or concerns about this process or please contact the Nautilus Hyosung America, Inc Technical Support Department toll free at 877-496-7864, or via email at TechSupport@nhausa.com

Tech Support operating hours are Monday through Friday 7am to 7pm (CST), and on Saturdays 8am to 5pm (CST). Department may be closed in observance of Holidays.

APPENDIX A

FORMATTING TO FAT OR FAT 32 VIA WINDOWS 10

This process is NOT guaranteed to work; it is still suggested that when available to use Win 7 formatting

1. Insert media into the Computer.
2. Identify the Drive Letter assigned by your computer to the media.
3. Navigate to Disk Partition Prompt by typing **diskpart** into the search bar located in the taskbar or by pressing the Windows key + R then typing **diskpart** and press Enter.
4. Visual examples are below for the **diskpart** commands used in this document. Once at the **diskpart** prompt you will type **list vol** and press enter
5. Look at the list of the volumes and find the letter associated with the SD card or USB. In this example we have Drive Letter G with Volume 6 and with the type Removable.
6. Type **select vol X** and press enter. With X being the number of the Volume, i.e. 6 with this example.
7. Type **Clean** and press enter. Wait until the message "**DiskPart succeeded in cleaning the disk.**" appears.
8. Type **Create partition primary** and press enter. Wait until the message "**DiskPart succeeded in creating the specified partition.**" appears.
9. Type **Select partition 1** and press enter. Wait until the message "**Partition 1 is now the selected partition.**" appears.
10. Type **Active** and press enter. Wait until the message "**DiskPart marked the current partition as active.**" appears.
11. Type **Format fs=fat quick** and press enter. This will do a quick format to the FAT file type. For Fat32 do **Format fs=fat32 quick**. Wait until the message "**DiskPart successfully formatted the volume.**" appears.
12. Type **set id=06 override** and press enter. Wait until the message "**DiskPart successfully set the partition ID.**" appears.
13. Type **Exit** and press enter. This will close out of the DiskPart program and you are ready to put software on the SD Card or USB Device.

C:\WINDOWS\system32\diskpart.exe

Microsoft DiskPart version 10.0.18362.1

Copyright (C) Microsoft Corporation.

On computer: LT-WILLWITTEN

DISKPART> list vol

Volume ###	Ltr	Label	Fs	Type	Size	Status	Info
Volume 0	E			DVD-ROM	0 B	No Media	
Volume 1	C	Windows	NTFS	Partition	439 GB	Healthy	Boot
Volume 2	D	LENOVO	NTFS	Partition	25 GB	Healthy	
Volume 3		WINRE_DRV	NTFS	Partition	1000 MB	Healthy	
Volume 4		SYSTEM_DRV	FAT32	Partition	260 MB	Healthy	System
Volume 5	F	Call Logs	NTFS	Removable	3744 MB	Healthy	
Volume 6	G		FAT	Removable	1920 MB	Healthy	

DISKPART> select vol 6

Volume 6 is the selected volume.

DISKPART> clean

DiskPart succeeded in cleaning the disk.

DISKPART> create partition primary

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

FORMATTING TO FAT OR FAT 32 VIA MAC OSX TERMINAL

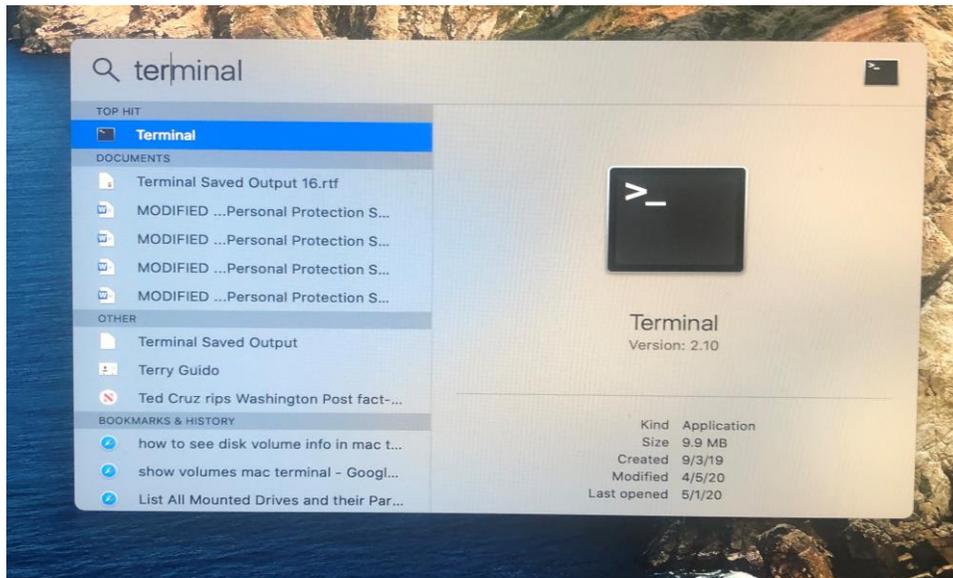
1. Insert the media into the computer.
2. On the Keyboard press Command + Space



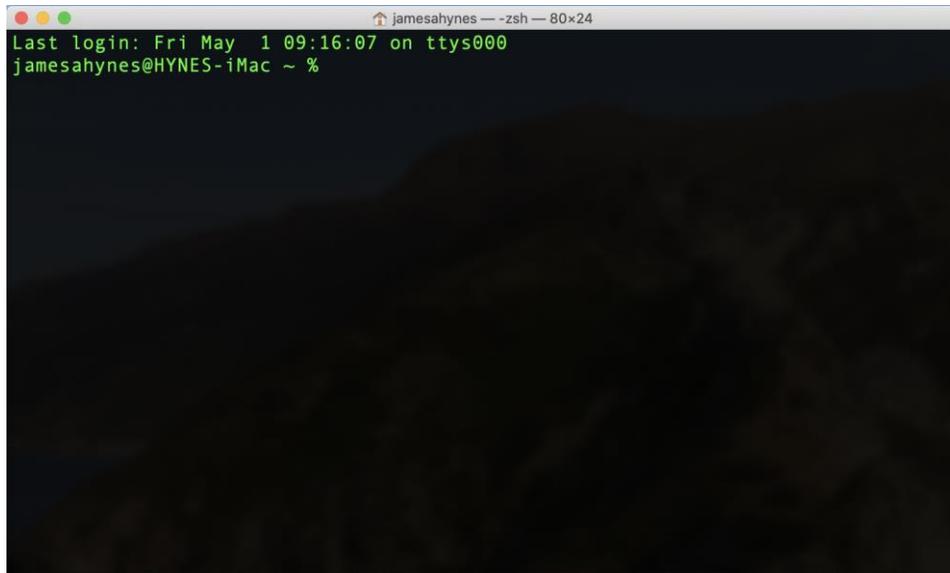
3. Spotlight will open



4. Type TERMINAL press ENTER



5. Terminal window will open



- 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

```
Last login: Fri May 1 09:10:03 on ttys000
jamesahynes@HYNES-iMac ~ % diskutil list ← STEP 1
/dev/disk0 (internal, physical):
#:#:      TYPE NAME              SIZE      IDENTIFIER
0:      GUID_partition_scheme   *28.0 GB  disk0
1:      EFI EFI                  314.6 MB  disk0s1
2:      Apple_APFS Container disk2 27.6 GB  disk0s2

/dev/disk1 (internal, physical):
#:#:      TYPE NAME              SIZE      IDENTIFIER
0:      GUID_partition_scheme   *1.0 TB   disk1
1:      EFI EFI                  209.7 MB  disk1s1
2:      Apple_APFS Container disk2 1000.0 GB disk1s2

/dev/disk2 (synthesized):
#:#:      TYPE NAME              SIZE      IDENTIFIER
0:      APFS Container Scheme -   +1.0 TB   disk2
      Physical Stores disk0s2, disk1s2
1:      APFS Volume Macintosh HD - Data 188.6 GB  disk2s1
2:      APFS Volume Preboot             81.1 MB   disk2s2
3:      APFS Volume Recovery             528.1 MB  disk2s3
4:      APFS Volume VM                   4.3 GB    disk2s4
5:      APFS Volume Macintosh HD        11.2 GB   disk2s5

/dev/disk3 (disk image):
#:#:      TYPE NAME              SIZE      IDENTIFIER
0:      Apple_partition_scheme   +16.5 MB  disk3
1:      Apple_partition_map       32.3 KB   disk3s1
2:      Apple_HFS Flash Player      16.5 MB   disk3s2

/dev/disk4 (internal, physical):
#:#:      TYPE NAME              SIZE      IDENTIFIER
0:      FDisk_partition_scheme   *2.0 GB   disk4
1:      Apple_HFS SD TEST FORMAT    2.0 GB    disk4s1 ← REMOVABLE DRIVES

/dev/disk5 (external, physical):
#:#:      TYPE NAME              SIZE      IDENTIFIER
0:      FDisk_partition_scheme   *2.0 GB   disk5
1:      Windows_NTFS USB TEST      2.0 GB    disk5s1
```

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

(Step2)

diskutil partitionDisk /dev/disk4 1 MBRFormat "MS-DOS FAT32" "HYOSUNG32" 1000M

```
jamesahynes@HYNES-iMac ~ % diskutil partitionDisk /dev/disk4 1 MBRFormat "MS-DOS FAT32" "HYOSUNG32" 1000M
Started partitioning on disk4
Unmounting disk
Creating the partition map
Waiting for partitions to activate
Formatting disk4s1 as MS-DOS (FAT32) with name HYOSUNG32
1024 bytes per physical sector
/dev/rdisk4s1: 3832480 sectors in 479060 FAT32 clusters (4096 bytes/cluster)
bps=512 spc=8 res=32 nft=2 mid=0xf8 spt=32 hds=255 hid=2048 drv=0x80 bsec=3840000 bspf=3744 rdcl=2 infs=1 bkbs=6
Mounting disk
Finished partitioning on disk4
/dev/disk4 (internal, physical):
#:          TYPE NAME          SIZE          IDENTIFIER
0:          FDisk_partition_scheme  *2.0 GB       disk4
1:          DOS FAT 32 HYOSUNG32    2.0 GB       disk4s1
```

Note – for FAT16 you will type “MS-DOS FAT16” “HYOSUNG16” in place of “MS-DOS FAT32” “HYOSUNG32”