INDMEM

User's Manual

SSD Upgrade Kits for Mac

INDMEM^{TM} DMPG3N
(Version 2.0)

Part 1: How to restore from a Time Machine Backup

Part 2: How to make Bootable Installer to install macOS

Part 3: How to install macOS from Internet Recovery

Part 4: FAQ & Solutions

CAUTION!

Please take the following electrostatic discharge (ESD) precautions during installation:
1. Work on a static-free surface
2. Wear an anti-static wrist strap

IMPORTANT NOTICE

Before moving out original SSD

Update Mac host to macOS 10.13 High Sierra (10.14 Mojave / 10.15 Catalina).

Why should update Mac before taking off the old SSD?

Because if the EFI firmware (on Mac's motherboard) is too old, it can not support our PCIe Gen3x4 SSD, it just can works for an old PCIe SSD.

So, new SSD will not be recognized if firmware is not upgraded.

The firmware can be updated while new macOS is installed. No other way to upgrade the firmware.

How to check the macOS version before taking out old SSD?

Start Mac, go into macOS system,

Click on the Apple logo in the upper left corner, select "**About This Mac**".

If need to upgrade, click "**Software Update**".
Or, **download** and install the version you need from Apple Store/Apple Support.

Part 1

How to restore from a Time Machine Backup

First

Before taking off original SSD:

Make sure you have upgraded Mac to macOS 10.13 (10.14 Mojave / 10.15 Catalina).
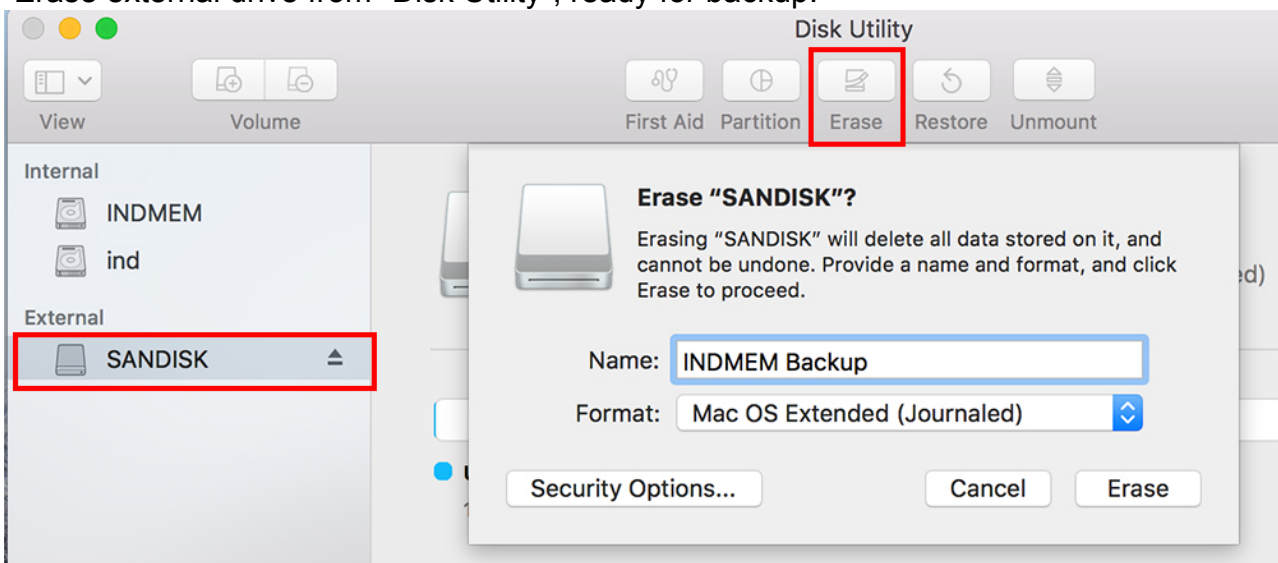Click "About This Mac" to check.

(If need to upgrade, click "Software Update". Or, download and install the version you need from Apple Store/Apple Support.)

Step 1

Connect a portable HDD / SSD to your MAC.
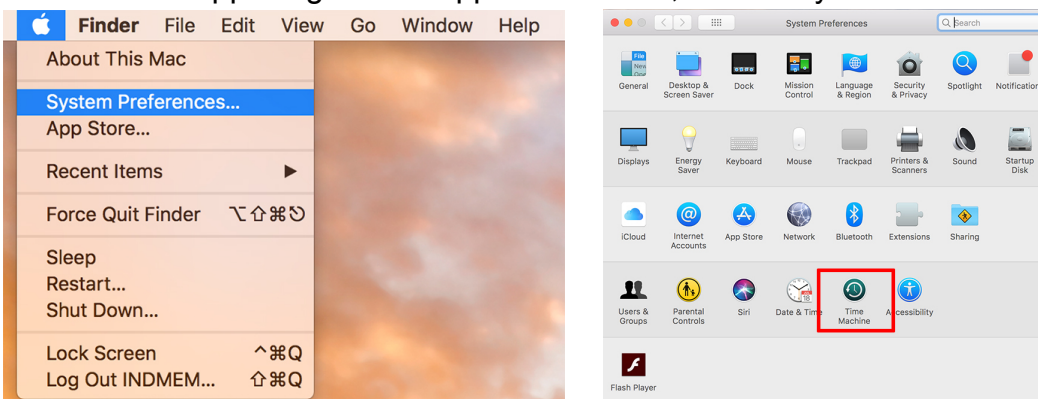Erase external drive from "Disk Utility", ready for backup.

USB flash drive is not recommended because of easy data corruption!
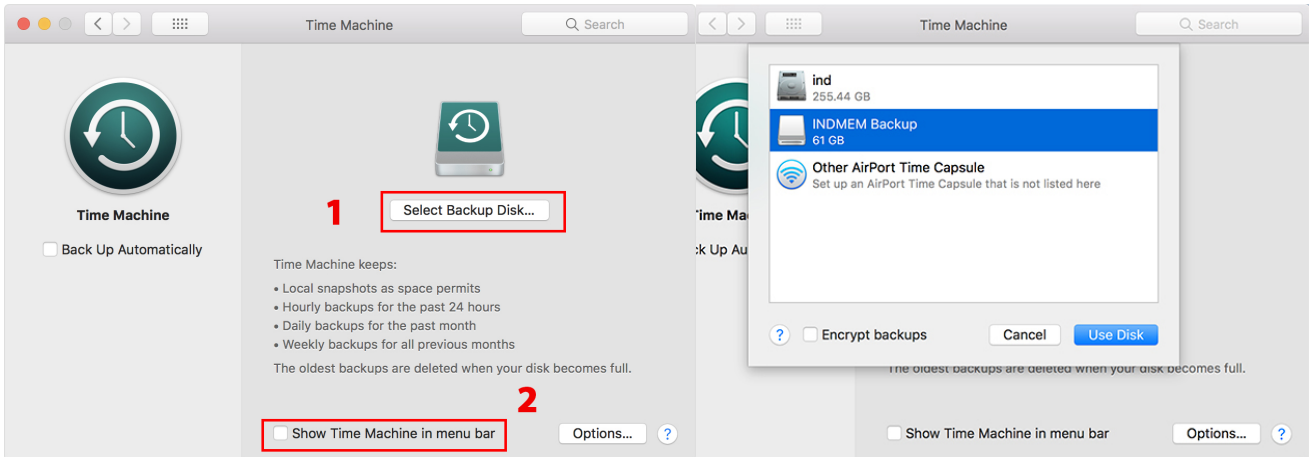**An error message may appear during the installation process.**

Step 2

Click on the Apple logo in the upper left corner, select "System Preferences".
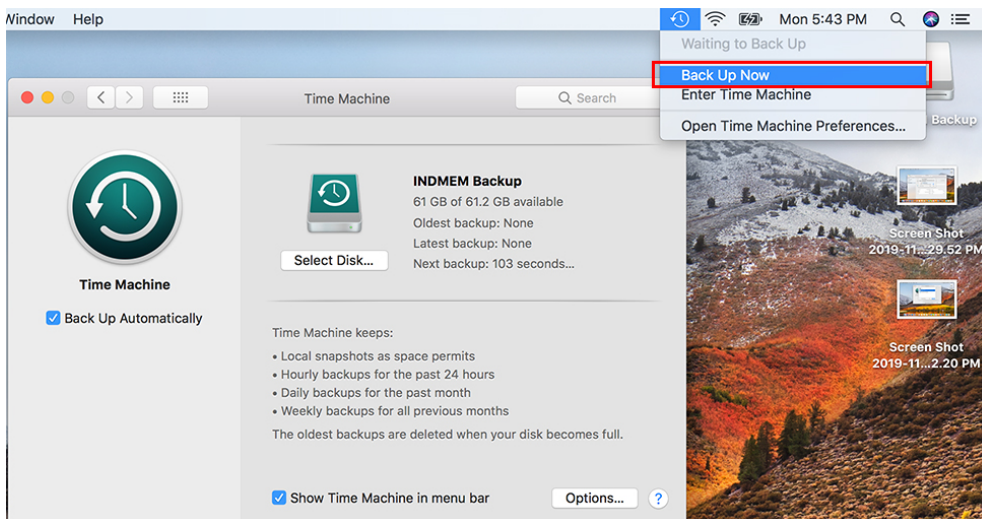
Step 3

Open Time Machine and select the external disk as backup disk.
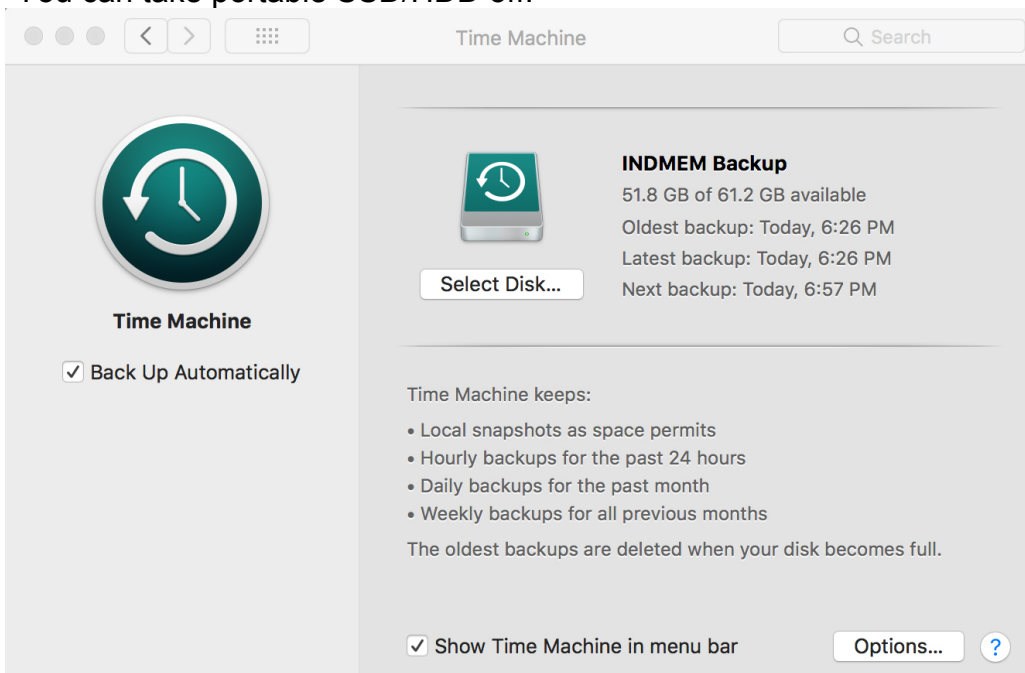Then check "Show Time Machine in menu bar".

Step 4

Select "Back Up Now" from the Time Machine menu.

Step 5

When backup is completed, you can see the summary of the backup.
You can take portable SSD/HDD off.

Step 6

Power off and replace your original SSD with the new INDMEM SSD.

Note:

1, In order to protect your safety and prevent the hard disk from being damaged by static electricity, please cut off the power supply on the motherboard before removing the original hard disk.

2, The power socket position is different on every Mac model. Below picture was from Early 2015 MacBook Pro A1502.
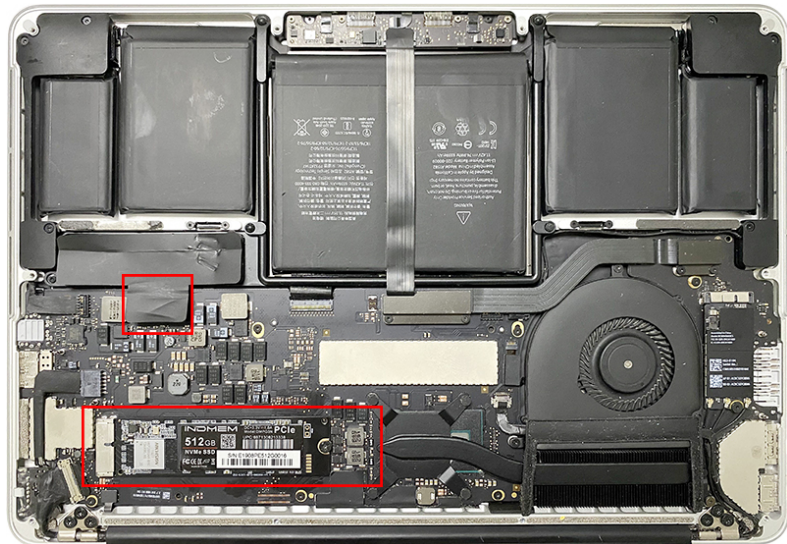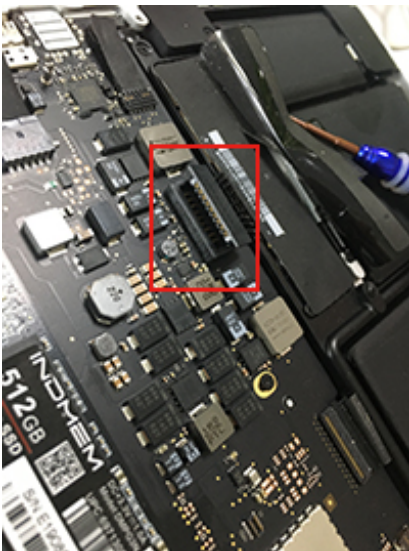
Step 7

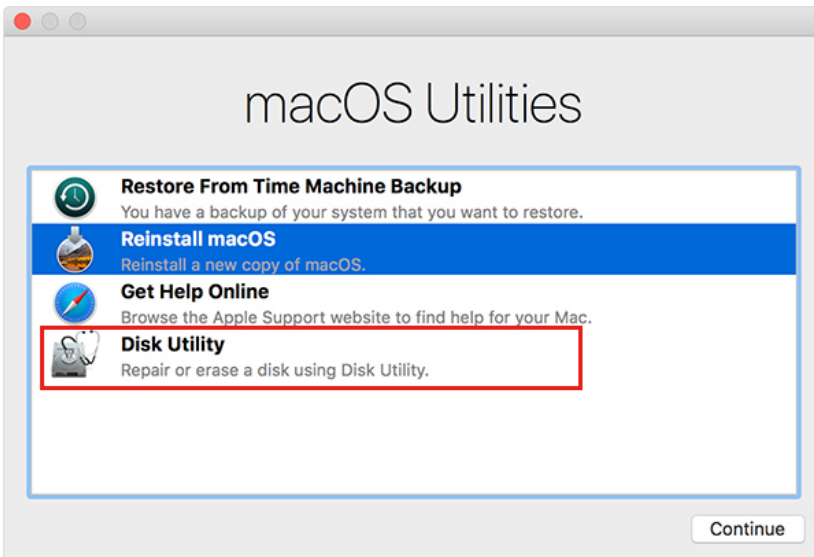Connect backup drive, power on your Mac and hold the "**Option**" key during startup.

Step 8

Select the backup disk to restore your Mac OS.

Step 9

Select "Disk Utility", click "Continue".

Step 10

Click "View", select "Show All Devices".
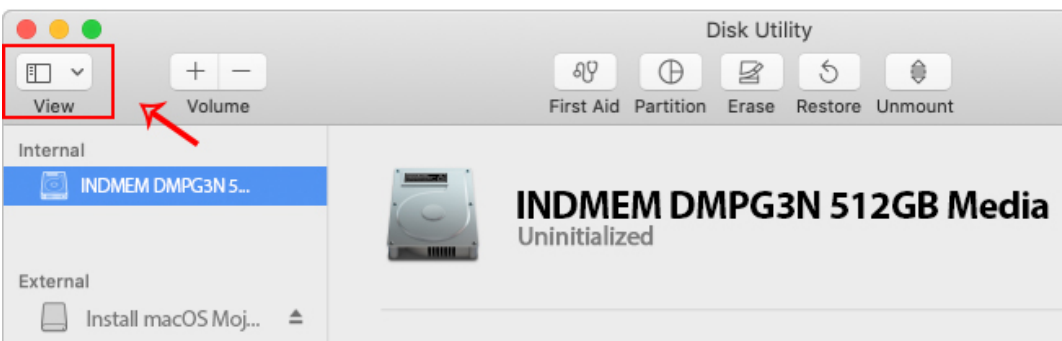
Step 11
Select the INDMEM DMPG3N on top and then click on "Erase".
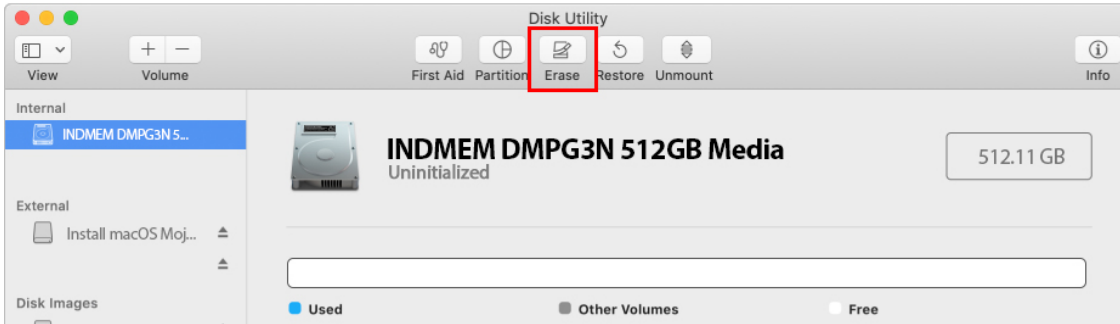
Step 12
Select "Mac OS Extended (Journaled)" as Format and "GUID Partition Map" as Scheme.
Click on "Erase", and exit Disk Utility after the Erase process is completed.
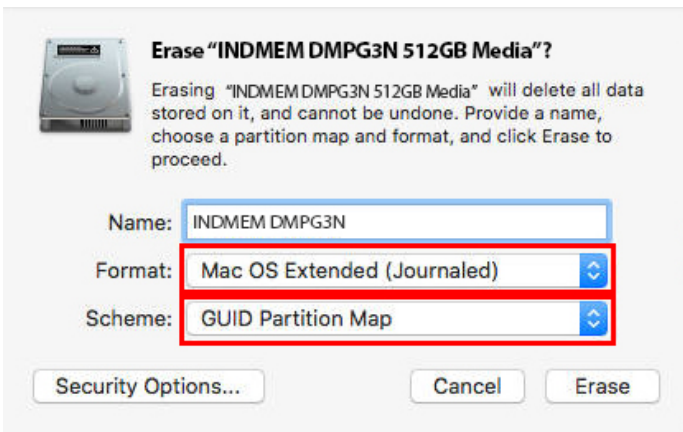
Step 13
Select "Restore From Time Machine Backup" and click on "Continue".
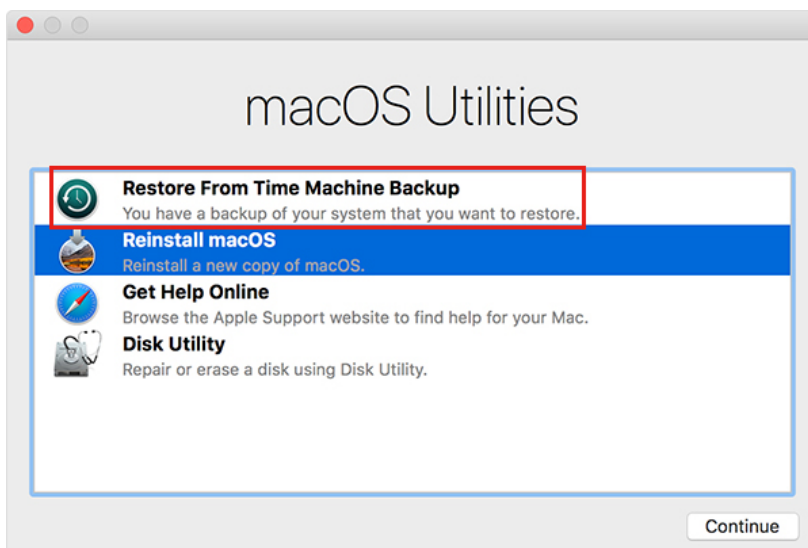
Step 14
Select the external Backup disk to restore your Mac OS (same disk as in Step 7) and click on "Continue".
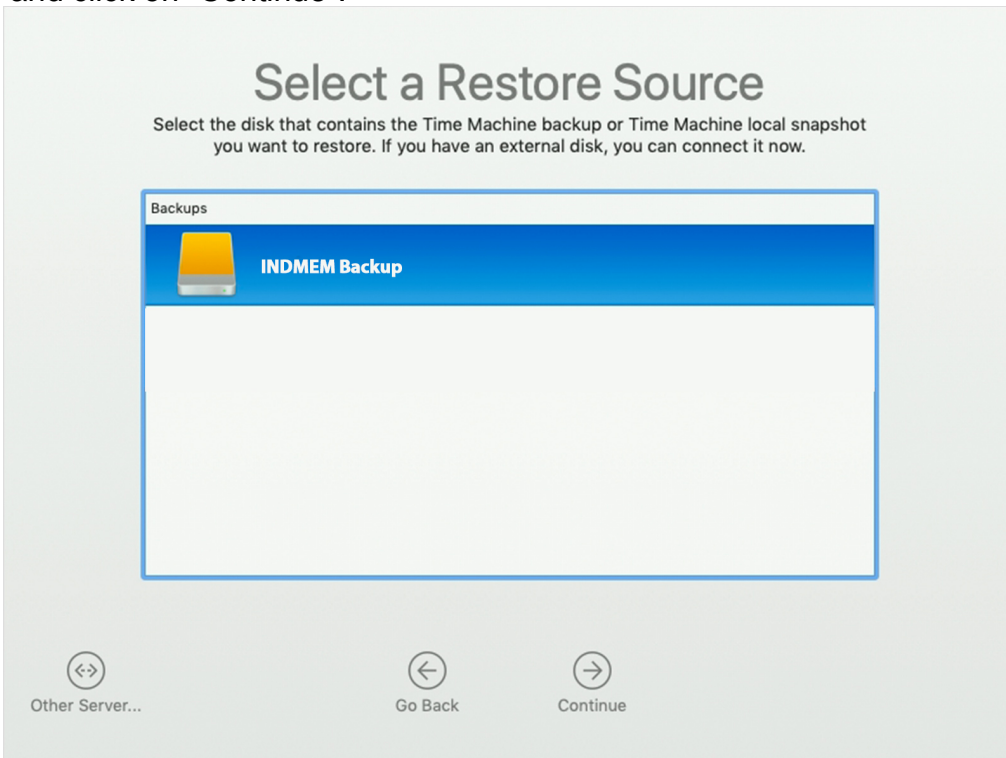
Step 15
Select a backup date and time, and click on "Continue."
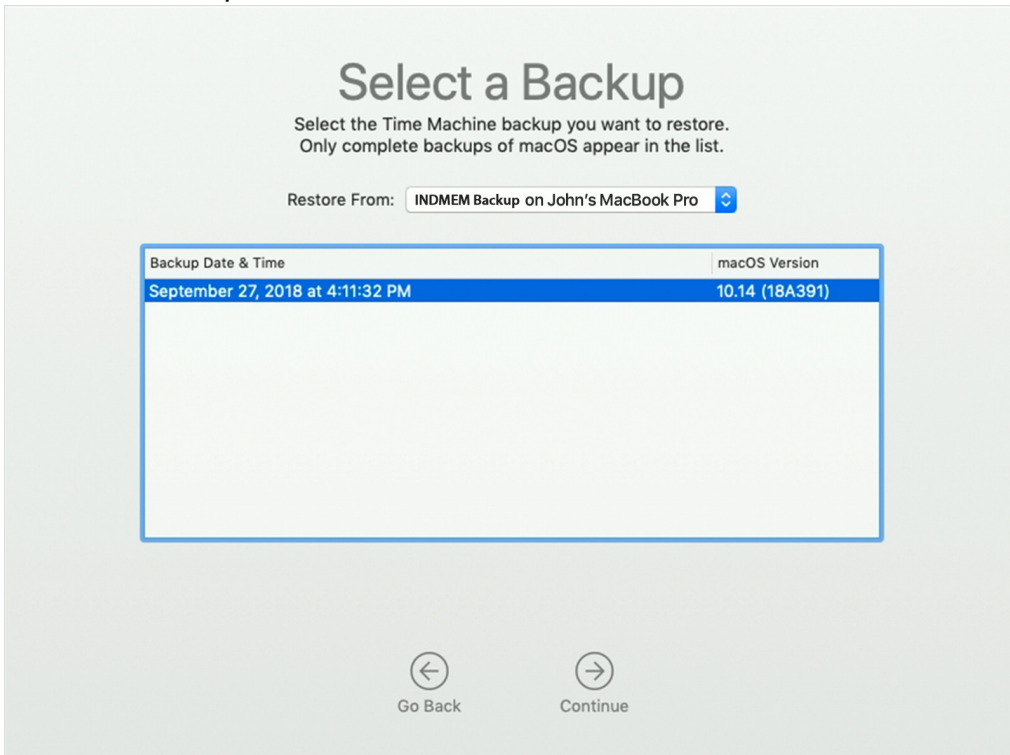
Step 16
Choose the Destination (INDMEM DMPG3N) Disk and click on "Restore".

Select a Destination

Restore Destination Disk	Space Available
INDMEM DMPG3N	506.89GB

The system will be restored onto this disk.

Go Back   Restore
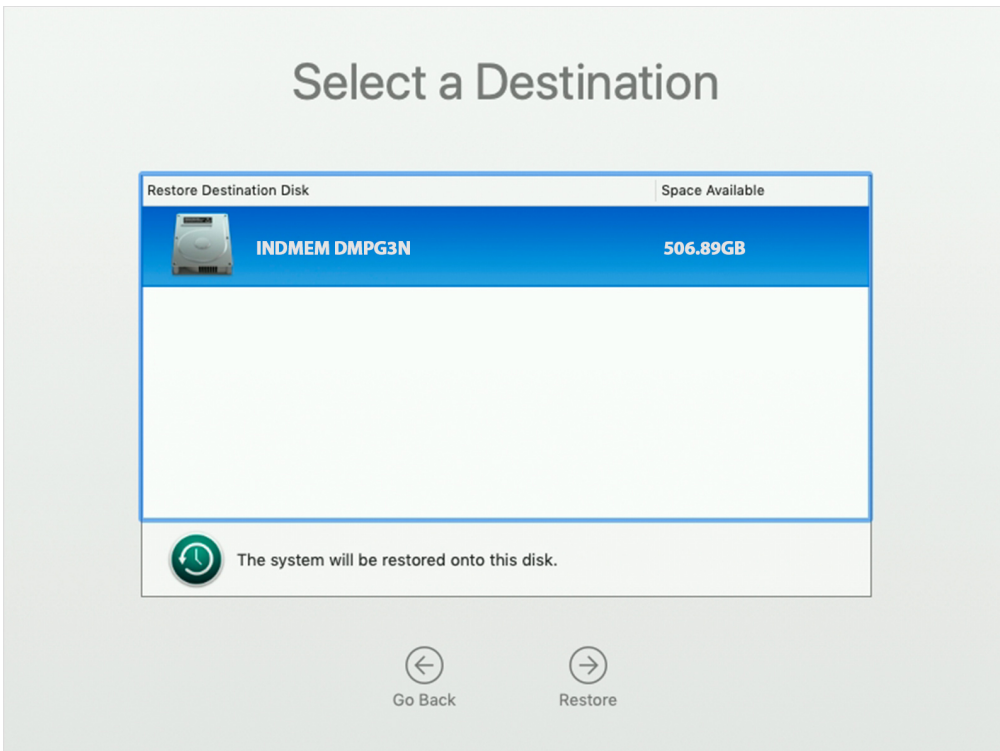
*Please refer to the Apple website for more information.

We recommend this way to install OS.
Can restore previously installed systems and applications to new SSD.

Part 2

How to bootable installer to install macOS

First

Before taking off original SSD:
Make sure you have upgraded Mac to macOS 10.13 (10.14 Mojave / 10.15 Catalina). Click "About This Mac" to check.

(If need to upgrade, click "Software Update". Or, download and install the version you need from Apple Store/Apple Support.)

Download macOS High Sierra, Mojave or Catalina on Mac.

Step 1
Connect a USB portable HDD/SSD to your MAC.
Erase and rename "Mojave". Remember the name you named USB drive.
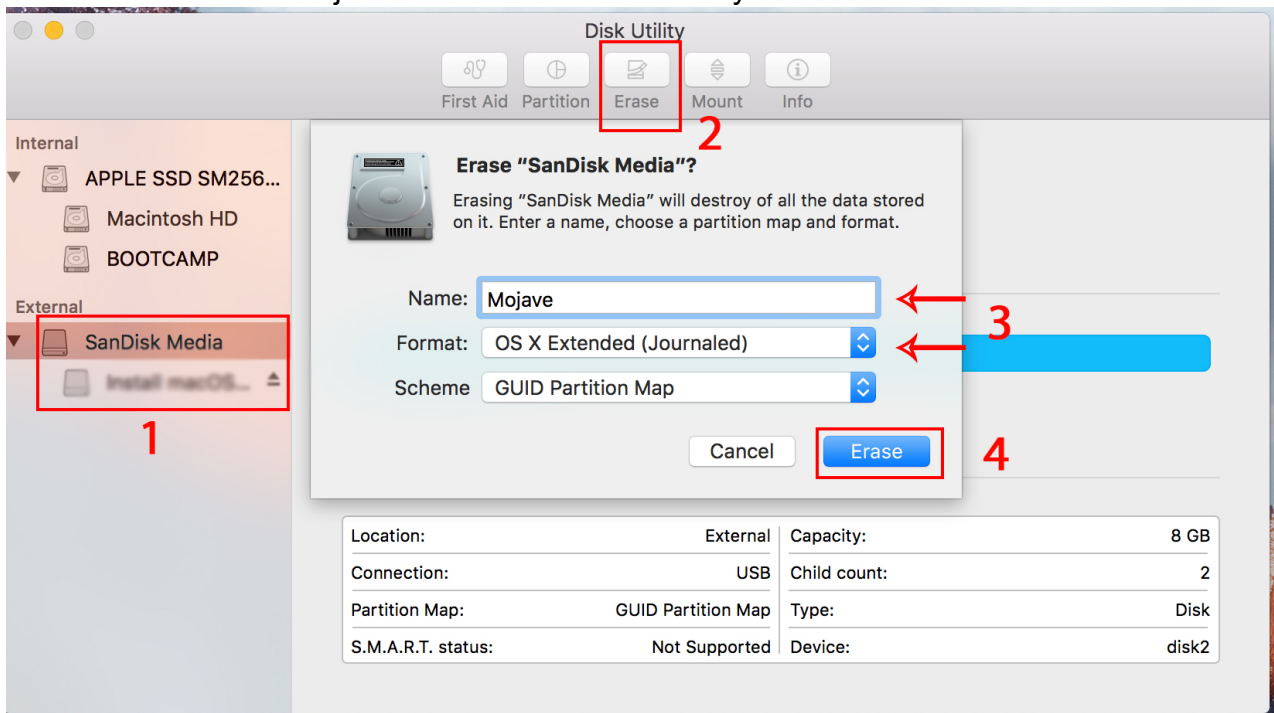
USB flash drive is not recommended because of easy data corruption!
An error message may appear during the installation process.

Steps 2
Open Terminal,

Step 3

Type or paste commands in Terminal.

The word "MyVolume" change to "Mojave" (same as the name of USB drive, otherwise it can not find the USB drive to install).
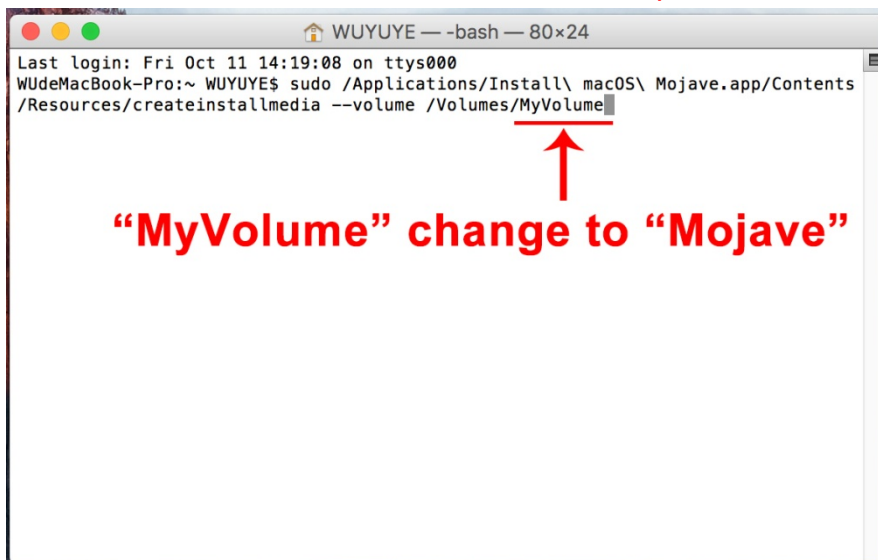
Type or paste one of the following commands in Terminal.
These assume that the installer is still in your Applications folder, and
MyVolume is the name of the USB flash drive or other volume you're using.
If it has a different name, replace <u>MyVolume</u> **in these commands with the**
name of your volume.

Catalina:*
sudo /Applications/Install\ macOS\ Catalina.app/Contents/Resources/createinstallmedia --volume /Volumes/MyVolume
Mojave:*
sudo /Applications/Install\ macOS\ Mojave.app/Contents/Resources/createinstallmedia --volume /Volumes/MyVolume
High Sierra:*
sudo /Applications/Install\ macOS\ High\ Sierra.app/Contents/Resources/createinstallmedia --volume /Volumes/MyVolume

For more help, visit Apple Support:

https://support.apple.com/en-us/HT201372

```
● ● ●                    🏠 WUYUYE — -bash — 80×24

Last login: Fri Oct 11 14:19:08 on ttys000
WUdeMacBook-Pro:~ WUYUYE$ sudo /Applications/Install\ macOS\ Mojave.app/Contents
/Resources/createinstallmedia --volume /Volumes/Mojave
```
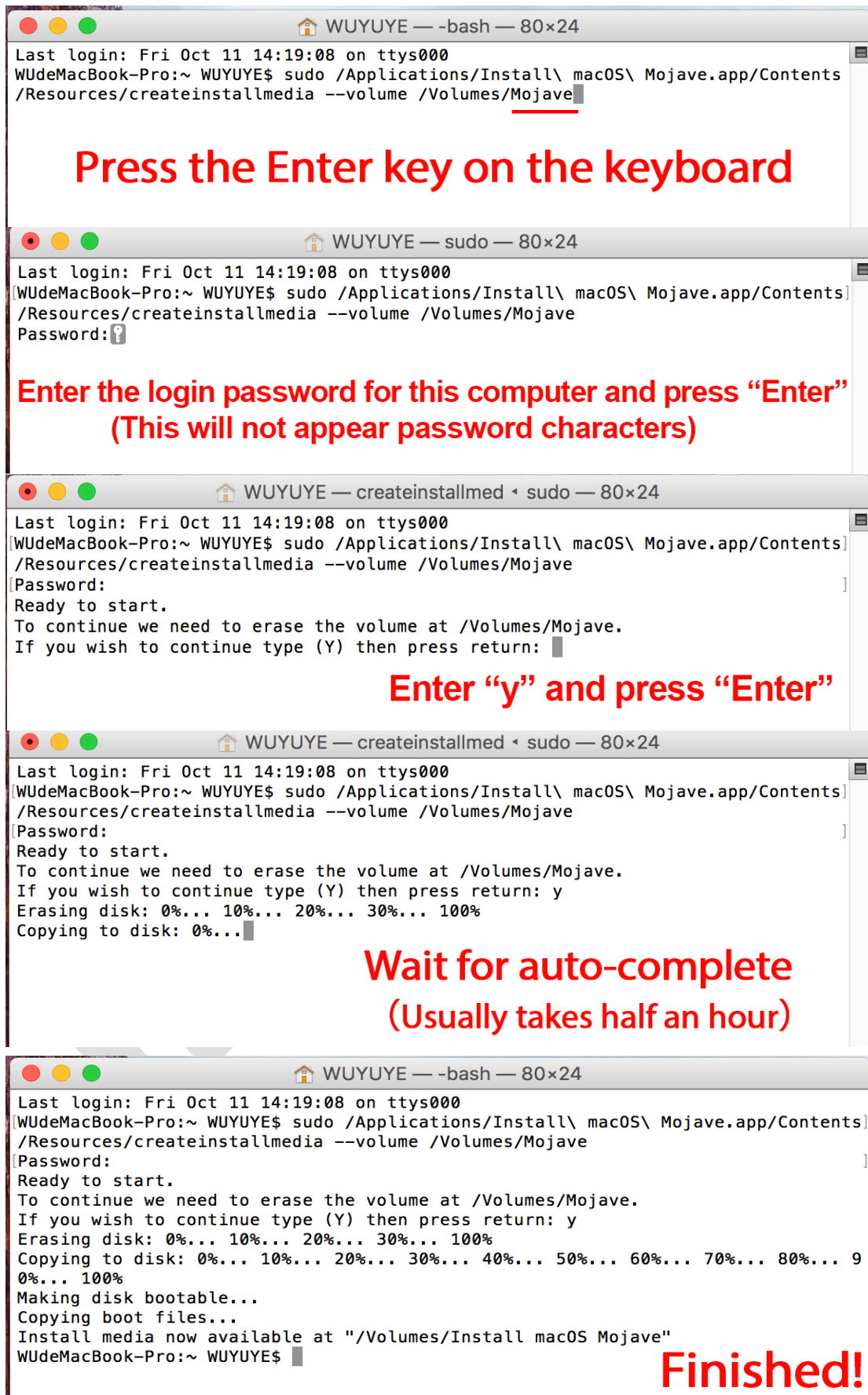
Press the Enter key on the keyboard

```
● ● ●                    🏠 WUYUYE — sudo — 80×24

Last login: Fri Oct 11 14:19:08 on ttys000
[WUdeMacBook-Pro:~ WUYUYE$ sudo /Applications/Install\ macOS\ Mojave.app/Contents]
/Resources/createinstallmedia --volume /Volumes/Mojave
Password:
```

Enter the login password for this computer and press "Enter"
(This will not appear password characters)

```
● ● ●                 🏠 WUYUYE — createinstallmed ‹ sudo — 80×24

Last login: Fri Oct 11 14:19:08 on ttys000
[WUdeMacBook-Pro:~ WUYUYE$ sudo /Applications/Install\ macOS\ Mojave.app/Contents]
/Resources/createinstallmedia --volume /Volumes/Mojave
[Password:                                                                      ]
Ready to start.
To continue we need to erase the volume at /Volumes/Mojave.
If you wish to continue type (Y) then press return:
```

Enter "y" and press "Enter"

```
● ● ●                 🏠 WUYUYE — createinstallmed ‹ sudo — 80×24

Last login: Fri Oct 11 14:19:08 on ttys000
[WUdeMacBook-Pro:~ WUYUYE$ sudo /Applications/Install\ macOS\ Mojave.app/Contents]
/Resources/createinstallmedia --volume /Volumes/Mojave
[Password:                                                                      ]
Ready to start.
To continue we need to erase the volume at /Volumes/Mojave.
If you wish to continue type (Y) then press return: y
Erasing disk: 0%... 10%... 20%... 30%... 100%
Copying to disk: 0%...
```

Wait for auto-complete
（Usually takes half an hour）

```
● ● ●                    🏠 WUYUYE — -bash — 80×24

Last login: Fri Oct 11 14:19:08 on ttys000
[WUdeMacBook-Pro:~ WUYUYE$ sudo /Applications/Install\ macOS\ Mojave.app/Contents]
/Resources/createinstallmedia --volume /Volumes/Mojave
[Password:                                                                      ]
Ready to start.
To continue we need to erase the volume at /Volumes/Mojave.
If you wish to continue type (Y) then press return: y
Erasing disk: 0%... 10%... 20%... 30%... 100%
Copying to disk: 0%... 10%... 20%... 30%... 40%... 50%... 60%... 70%... 80%... 9
0%... 100%
Making disk bootable...
Copying boot files...
Install media now available at "/Volumes/Install macOS Mojave"
WUdeMacBook-Pro:~ WUYUYE$
```

Finished!

**You can close this window. The bootable installer has been made to the USB drive.**

Step 4

Power off and replace your original SSD with the new INDMEM SSD.

Note:

1, In order to protect your safety and prevent the hard disk from being damaged by static electricity, please cut off the power supply on the motherboard before removing the original hard disk.

2, The power socket position is different on every Mac model. Below picture was from Early 2015 MacBook Pro A1502.
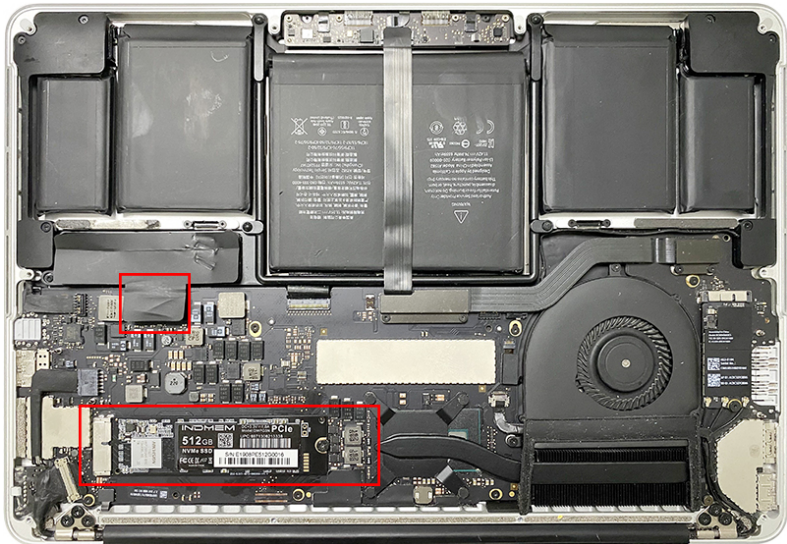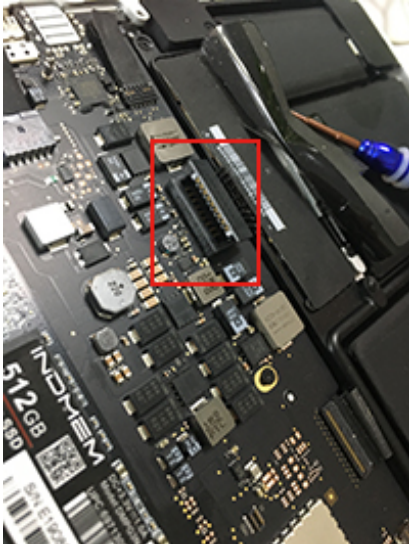
Step 5

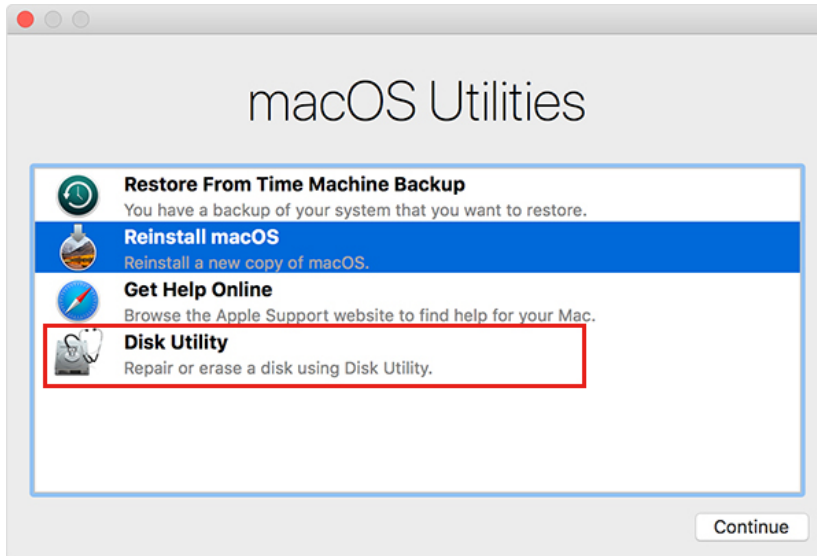Connect USB Bootable Installer.

Power on your Mac and hold the "**Option**" key during startup.

Step 5-2

Select "Install macOS Mojave".Click on the arrow.

Install macOS Mojave

Choose Network...

Step 6

On macOS Utilities, select "Disk Utility", click "Continue"

Step 7

<mark>(Click "View", select "Show All Devices")</mark>
Select the INDMEM DMPG3N on top and then click on "Erase".
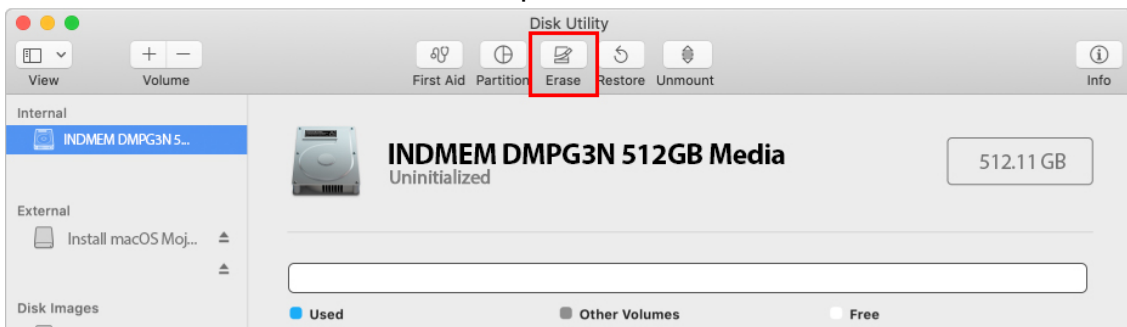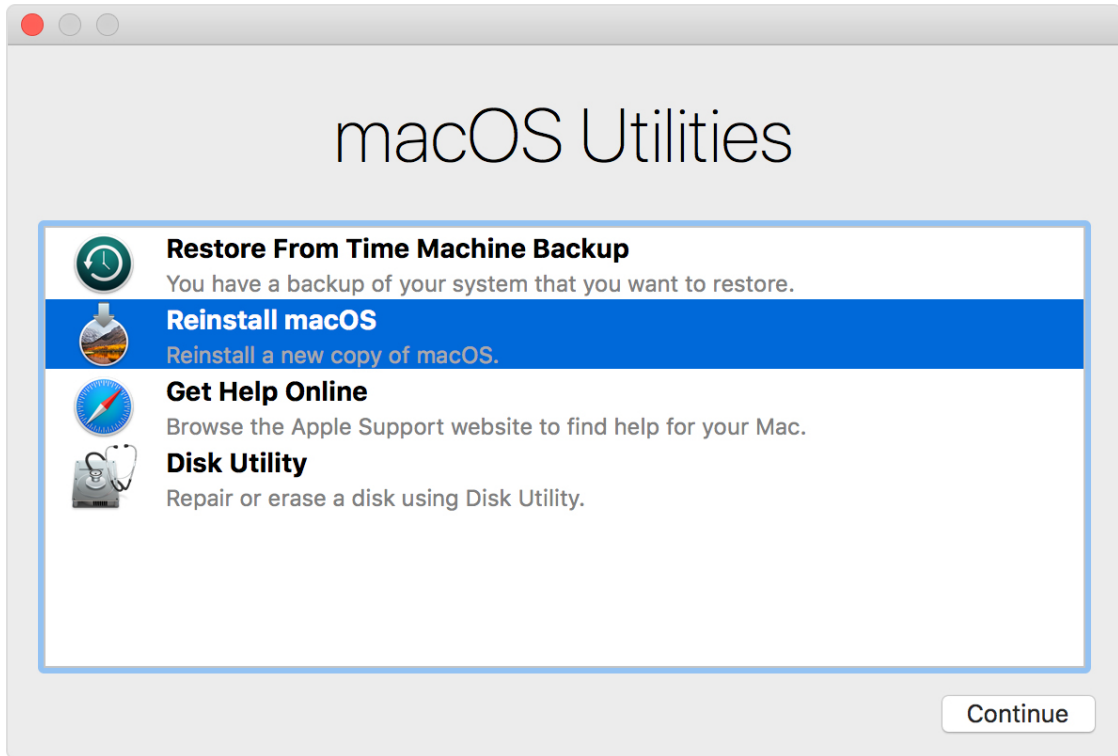

Step 7-2

Select "Mac OS Extended (Journaled)" as Format and "GUID Partition Map" as Scheme. Click on "Erase", and exit Disk Utility after the Erase process is completed.
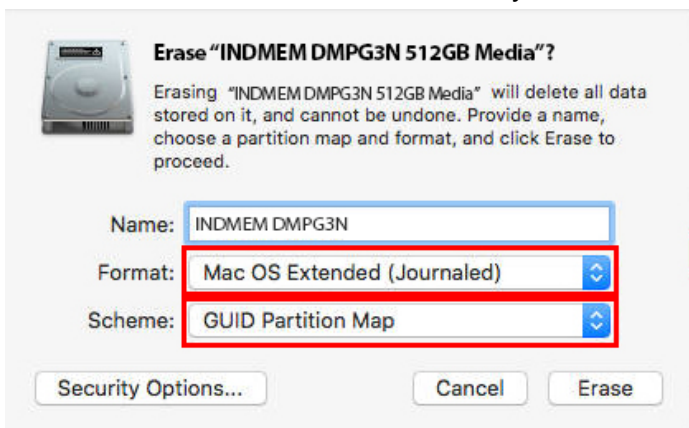
Step 8
Select "Reinstall macOS" and click on "Continue".

Step 9
Follow the prompts to proceed with the installation, click on "Continue" or "Agree".

Step 10
Select the hard drive you need to install. Click on "Install".

Step 11
Congratulations!
When you see the below page, the system has been successfully installed.
You can take off the USB drive.
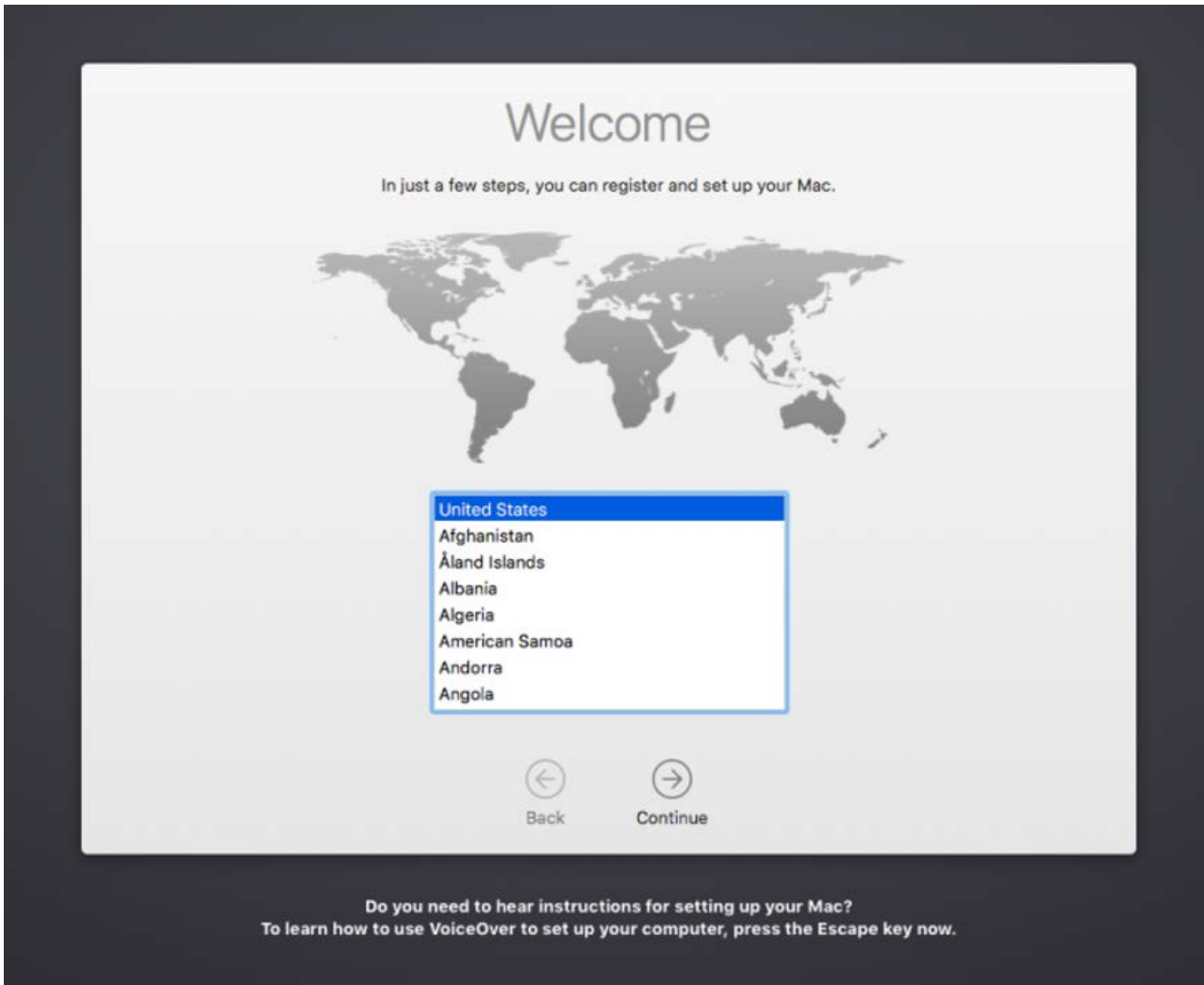
(You can set the system according to your preferences.)

Part 3

How to install macOS from Internet Recovery

First

Before taking off original SSD:

Make sure you have upgraded Mac to macOS 10.13 (10.14 Mojave / 10.15 Catalina). Click "About This Mac" to check.

(If need to upgrade, click "Software Update". Or, download and install the version you need from Apple Store/Apple Support.)

Step 1

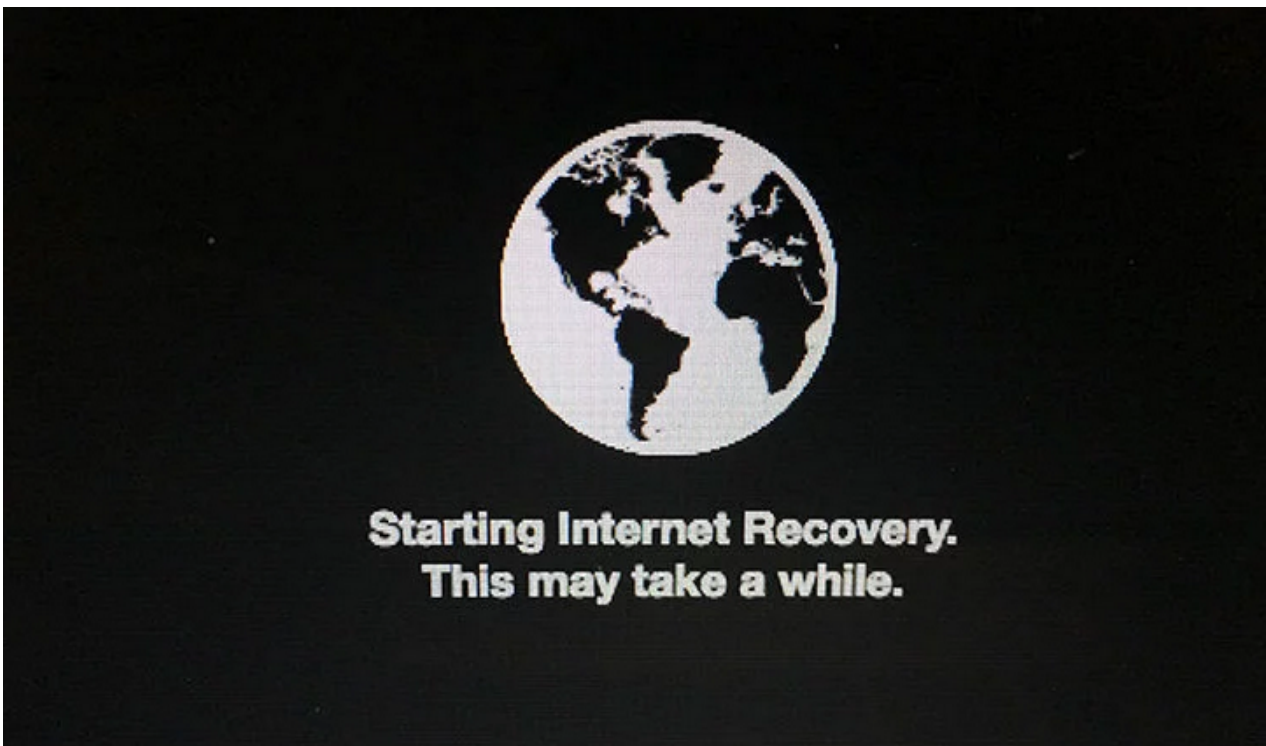Power off and replace your original SSD with the new INDMEM SSD.

Note:

1, In order to protect your safety and prevent the hard disk from being damaged by static electricity, please cut off the power supply on the motherboard before removing the original hard disk.

2, The power socket position is different on every Mac model. Below picture was from Early 2015 MacBook Pro A1502.
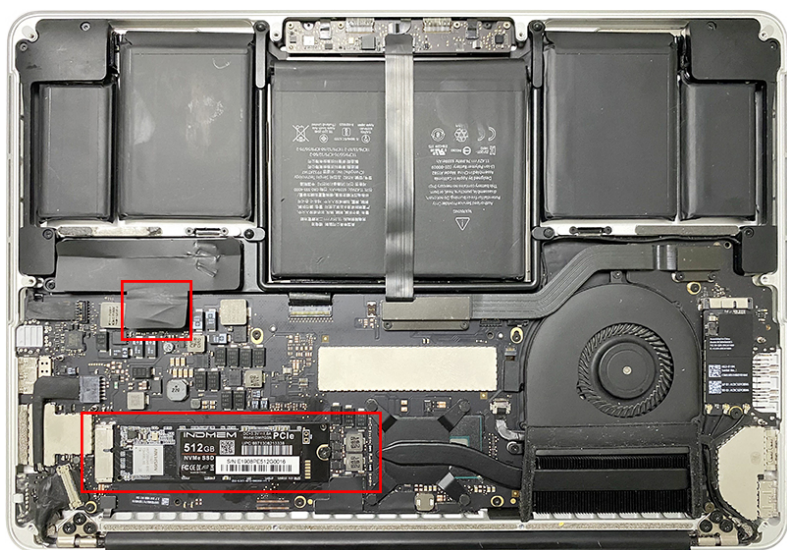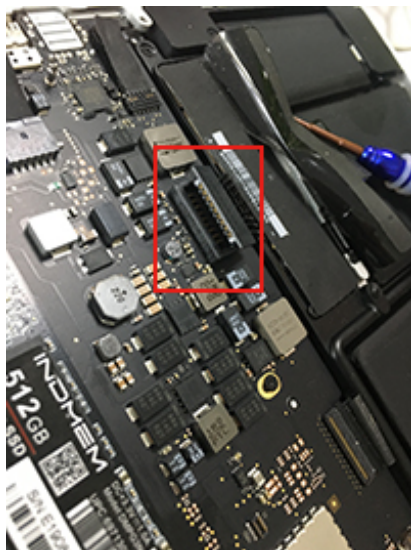
Step 2
Hold on **Command-Option-R**, then Power, until you see the Network!
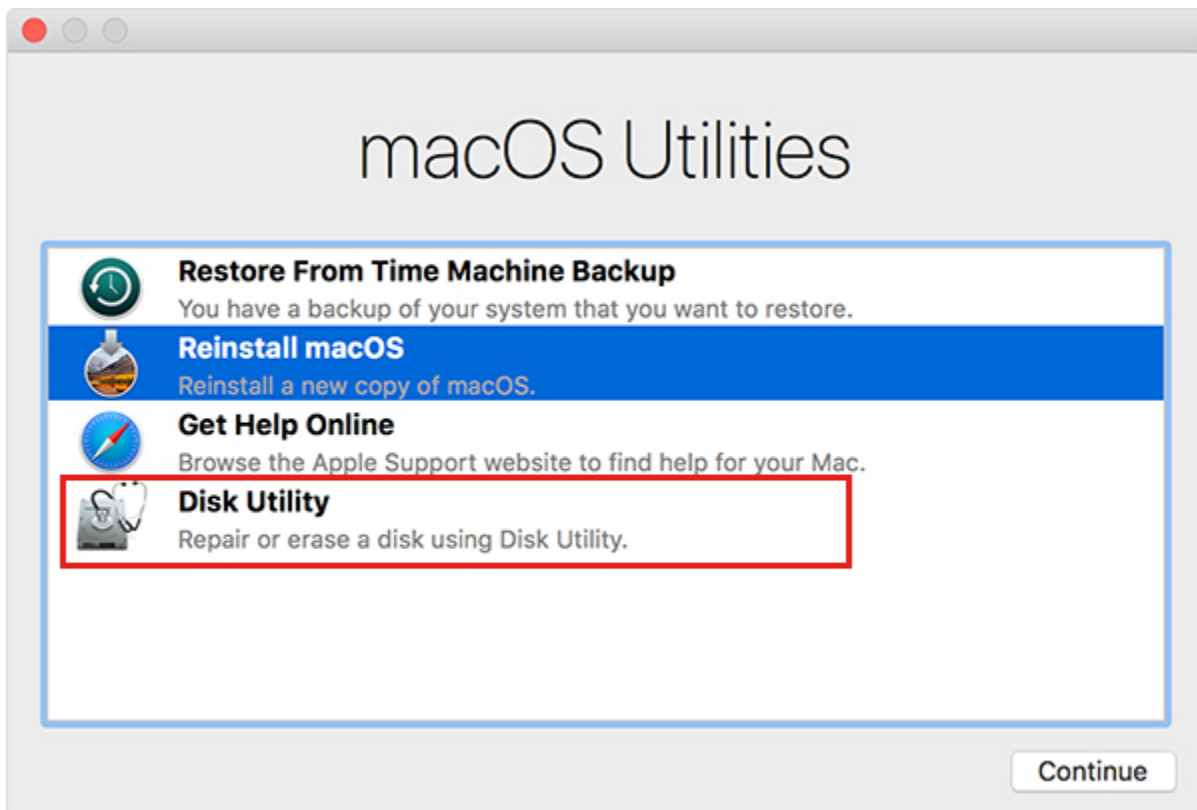Connect the WIFI. This will leading you to load the newest "macOS Utilities".

Step 2
On macOS Utilities, select "Disk Utility", click "Continue"

Step 3
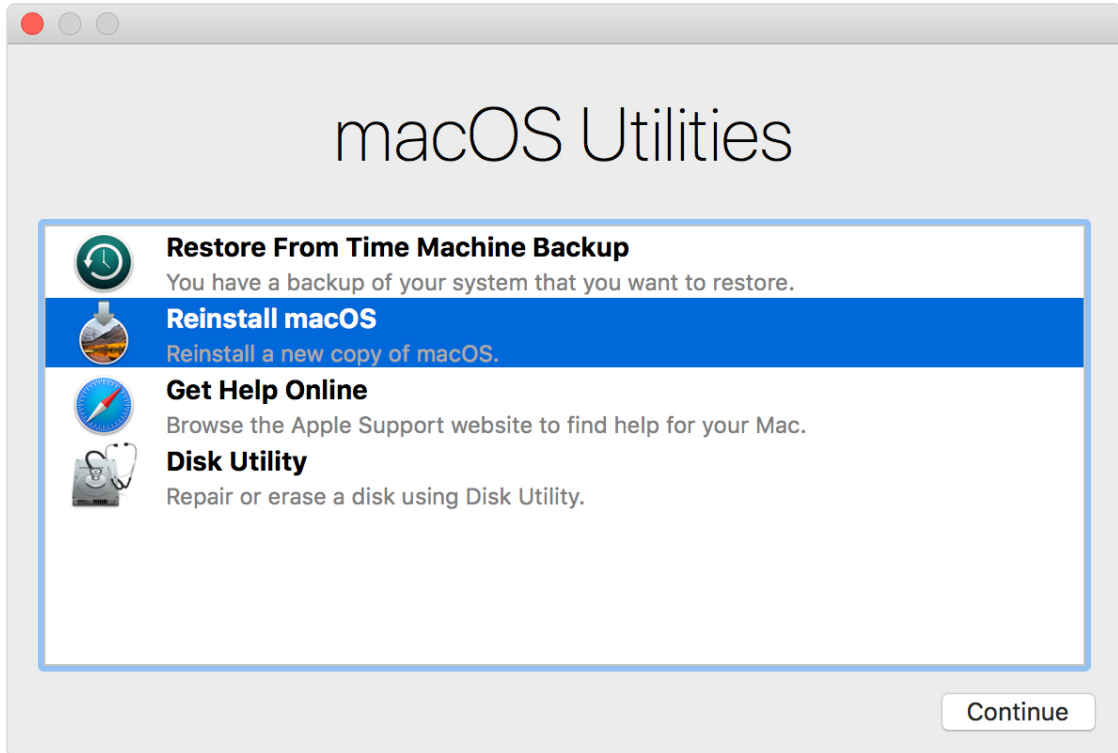Select the INDMEM DMPG3N on top and then click on "Erase".
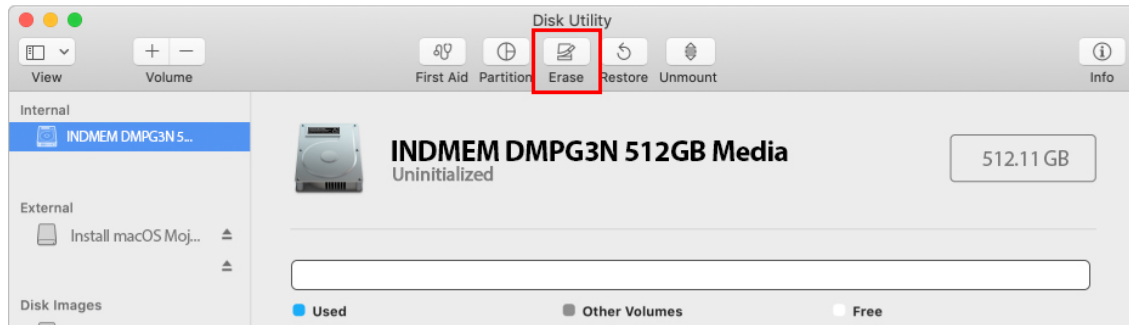
Step 3-2
Select "Mac OS Extended (Journaled)" as Format and "GUID Partition Map" as Scheme.
Click on "Erase", and exit Disk Utility after the Erase process is completed.
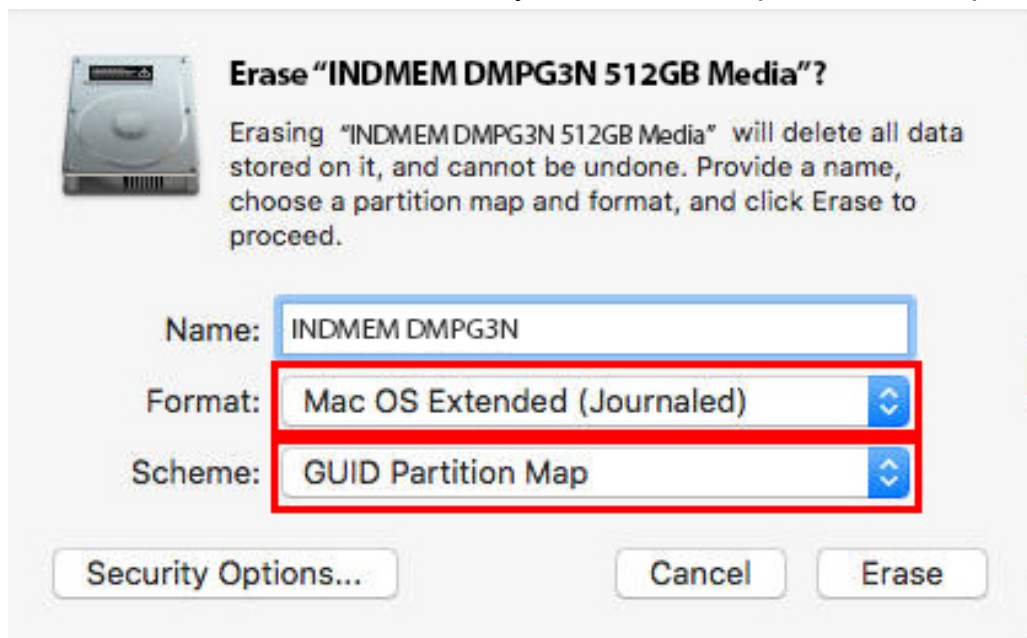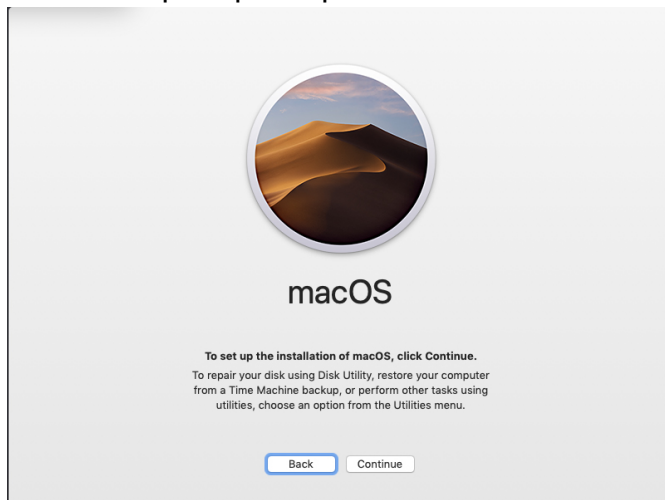
Step 4
Select "Reinstall macOS" and click on "Continue".

Step 5
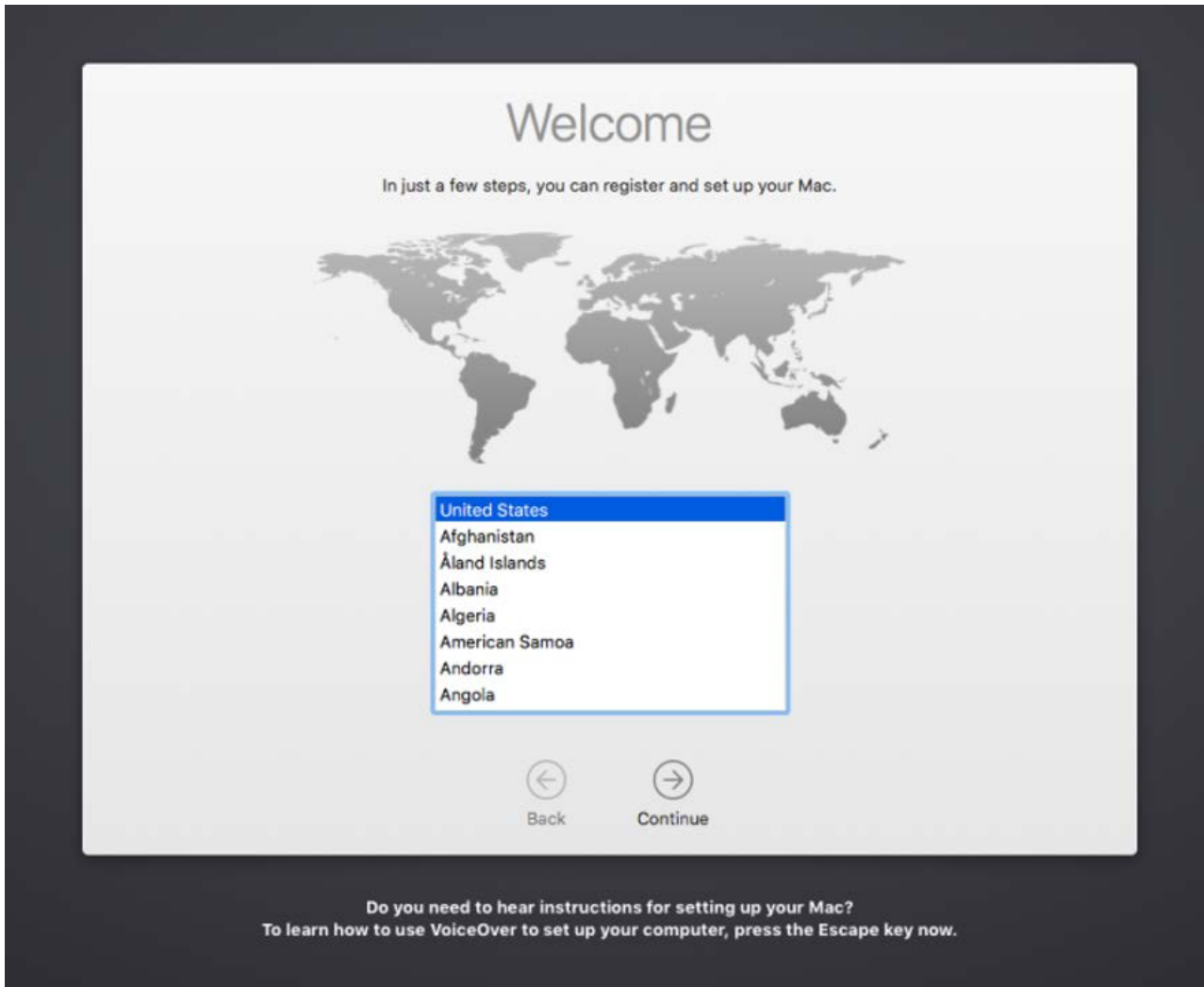Follow the prompts to proceed with the installation, click on "Continue" or "Agree".

Step 6
Select the hard drive you need to install. Click on "Install".

Step 7
Congratulations!
When you see the below page, the system has been successfully installed.

(You can set the system according to your preferences.)

Part 4

FAQ & Solutions

1, Can i put the SSD directly into my device and boot from it?
A: NO. It will not make it work. The SSD is new and not be formatted, no system can be booted.

2, Why not recommend online installation?
A: As the installed files are relatively large. The progress of the installation will be very slow. Sometime Internet Recovery always go into "Mac OS X Utilities", not "macOS Utilities". Disk Utility" on "Mac OS X Utilities" can not find an unformatted SSD, can't recognize it.

3, It is hard to find the power socket on motherboard. Is it necessary to cut off the power from it? Can I replace it directly, without having to do that?
A: This is not a must. Although there is a small chance of causing damage to the motherboard or hard drive, but we recommend doing this.

4, After installation, it often prompts system error and needs to restart. Or, there maybe an issue with a storage device, reference code: VDH002.

A: This is usually a hint of a system crash. Need to reinstall the system.
Usually caused by 2 ways:
1), Portable hard disk or U drive disk with bad sectors, more caused by U drive disk. The system lost important DATA when making Time Machine Backup or USB bootable installer.
2), INDMEM SSD or U drive disk selected uncorrect format type and scheme type when erasing.
Solution:
Use portable HDD or SSD to make backup / USB installer again, select correct format type and scheme type when erasing hard drive or U drive disk.

5, My computer has problems waking up from sleep.
This is a known issue that occurs when using NVMe SSDs with MacBooks from 2013 and 2014.

However, you can circumvent this issue using the following steps! This will still allow for regular sleep, just not deep "hibernation" mode.

1) Open up Terminal (open your Applications folder, then open the Utilities folder. Open the Terminal application.)
Type in the following code in the Terminal:
sudo pmset hibernatemode 0 standby 0
Press enter (return).

If that didn't work, try also doing the following:
2)Open up Terminal (open your Applications folder, then open the Utilities folder. Open the Terminal application.)
Type in the following code in the Terminal:
sudo pmset autopoweroff 0
Press enter (return).

Thank you for your support!