

User's Manual

SSD Upgrade Kits for Mac

INDMEM[™] 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.

<u>Part 1</u>

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

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			୶୰	•		5	♦	
View	Volume		First Ai	d Partition	Erase	Restore	Unmount	
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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".



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 ⁽¹⁾.



Step 5

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

	Time Machine	Q Search
 Time Machine Back Up Automatically 	Time Machine INDMEM Ba 51.8 GB of 6' Oldest backu Select Disk Time Machine keeps: Local snapshots as space permits Hourly backups for the past 24 hour Daily backups for the past month Weekly backups for all previous moth	Q. Search ackup 1.2 GB available up: Today, 6:26 PM up: Today, 6:26 PM : Today, 6:57 PM : Today, 6:57 PM
	 Daily backups for the past month Weekly backups for all previous mon The oldest backups are deleted when ✓ Show Time Machine in menu backups 	nths 9 your disk becomes full. r Options ?

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.

	•	
	INDMEM Backup	
(((•	Choose Network	\$

Select "Disk Utility", click "Continue".

0	Restore From Time Machine Backup You have a backup of your system that you want to restore.	
	Reinstall macOS Reinstall a new copy of macOS.	
Ø	Get Help Online Browse the Apple Support website to find help for your Mac.	
50	Disk Utility Repair or erase a disk using Disk Utility.	

Step 10

Click "View", select "Show All Devices".



Step 11 Select the INDMEM DMPG3N on top and then click on "Erase".

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Internal				
INDMEM DMPG3N 5		INDMEM DMPG3N 512GB Media	512.11 GB	
Install macOS Moj				
4)
Disk Images	Used	Other Volumes	Free	

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.

Era Stor pro	se "INDMEM DMPG3N 512GB Media"? sing "INDMEM DMPG3N 512GB Media" will delete all dat red on it, and cannot be undone. Provide a name, ose a partition map and format, and click Erase to ceed.	a
Name:	INDMEM DMPG3N	
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Internal		
External Install macOS Moj	INDMEM DMPG3N PCI-Epress Internal Physical Volume · Mac OS Extend	ed (Journaled) 511.77 GB
Disk Images	Used Other Volumes	Free

Step 13

00

Select "Restore From Time Machine Backup" and click on "Continue".

	Restore From Time Machine Backup	
9	You have a backup of your system that you want to restore.	
	Reinstall macOS Reinstall a new copy of macOS.	
0	Get Help Online Browse the Apple Support website to find help for your Mac.	
60	Disk Utility	
	Repair or erase a disk using Disk Utility.	

Select the external Backup disk to restore your Mac OS (same disk as in Step 7) and click on "Continue".

	Select a Restore Source Select the disk that contains the Time Machine backup or Time Machine local snapshot you want to restore. If you have an external disk, you can connect it now.	
	Backups	
↔ Other Server	. Go Back Continue	

Step 15

Select a backup date and time, and click on "Continue."

R	estore From:	INDMEM Backup	on John's MacBook Pro	\$
Backup Date & Time				macOS Version
September 27, 2018	at 4:11:32 PM			10.14 (18A391)

Step 16 Choose the Destination (INDMEM DMPG3N) Disk and click on "Restore".

Restore Destination Disk			Space Available	
	М ДМРДЗМ		506.89GB	
The system	n will be restored onto t	his disk.		

*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.

<u>Part 2</u>

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



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

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.



Step 6 On macOS Utilities, select "Disk Utility", click "Continue"

0	Restore From Time Machine Backup You have a backup of your system that you want to restore.	
	Reinstall macOS Reinstall a new copy of macOS.	
Ø	Get Help Online Browse the Apple Support website to find help for your Mac.	
80	Disk Utility Repair or erase a disk using Disk Utility.	

Step 7

(Click "View", select "Show All Devices")

Select the INDMEM DMPG3N on top and then click on "Erase".

● ● ● ■ ● ● View Volume		Disk Utility 아이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이	(j) Info
Internal			
INDMEM DMPG3N 5		INDMEM DMPG3N 512GB Media	512 11 GB
		Uninitialized	512.1100
External			
📃 Install macOS Moj 🔺			
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Disk Images	Used	Other Volumes Free	

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.

Era Stor cho prod	se "INDN sing "INDN ed on it, a ose a part ceed.	MEM DMPG3N MEM DMPG3N 5 and cannot be tition map and	N 512GB Media"? 12GB Media" will delete all data undone. Provide a name, I format, and click Erase to		
Name:	INDMEM	DMPG3N		1	
Format:	Mac O	S Extended	(Journaled)		
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Internal					
INDMEM DMPG3N			IDMEM DMPG3N I-Epress Internal Physical Volume • Mac O	S Extended (Journaled)	511.77 GB
Install macOS Moi	≜				
	≜				
Disk Images		Used	Cther Volumes	Free	

Step 8 Select "Reinstall macOS" and click on "Continue".

	Restore From Time Machine Backup	
Y	You have a backup of your system that you want to restore.	
	Reinstall macOS Reinstall a new copy of macOS.	
Current and	Get Help Online Browse the Apple Support website to find help for your Mac.	
ÊÛ	Disk Utility	
	Repair or erase a disk using Disk Utility.	

Step 9

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

macOS
To set up the installation of macOS, click Continue. To repair your disk using Disk Utility, restore your computer from a Time Machine backup, or perform other tasks using utilities, choose an option from the Utilities menu.
Back Continue
Install macOS Mojave Beta
I have read and agree to the terms of the software license agreement. Disagree Agree
macOS Mojave
To continue installing the software, you must agree to the terms of the software license agreement.
APPLE INC. SOFTWARE LICENSE AGREEMENT FOR APPLE CONFIDENTIAL macOS PRE-RELEASE SEED SOFTWARE PLEASE READ THIS SOFTWARE LICENSE AGREEMENT ("LICENSE") CAREFULLY BEFORE USING THE SOFTWARE, BY USING THE SOFTWARE, YOU ARE AGREEMENT TO BE BOUND BY THE TERMS OF THIS LICENSE. IF YOU ARE ACCESSING THE SOFTWARE ELECTRONICALLY, SIGNIFY YOUR AGREEMENT TO BE BOUND BY THE TERMS OF THIS LICENSE BY CICCING THE "AGREEMENT TO BE BOUND BY THE TERMS OF THIS LICENSE BY CICCING THE "AGREEMENT TO BE BOUND BY THE TERMS OF THIS LICENSE BY CICCING THE "AGREEMENT TO BE BOUND BY THE TERMS OF THIS LICENSE BY CICCING THE "AGREEMENT TO BE BOUND BY THE TERMS OF THIS LICENSE BY CICCING THE "AGREEMENT TO BE BOUND BY THE TERMS OF THIS LICENSE BY CICCING THE "AGREEMENT TO BE BOUND BY THE TERMS OF THIS LICENSE BY CICKING THE AGREEMENT TO BE BOUND BY THE TERMS OF THIS LICENSE BY CINES AGREEMENT TO BE BOUND BY THE TERMS OF THIS LICENSE BY CICKING THE "AGREEMENT TO BE BOUND BY THE TERMS OF THIS DO NOT
IMPORTANT NOTES:
Taka je bez. Park Sake Taka J. MATER SATERNASE MEANT FOR DAVI LETINA AM INDUS I DAMANY A copy of the Lucience will be same on on your system and can be found through About This Mac after installation. It is also posted at https://www.apple.com/lega/sla
€ ⊖ Disagree 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.

Welcome
In just a few steps, you can register and set up your Mac.
United States Afghanistan Åland Islands Albania Algeria American Samoa Andorra Angola
\odot \ominus

(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.





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".





NOTE:

If you still go into the "Mac OS X Utilities" (As below picture). This means the Mac cannot download the latest Utilities version. A PCIe Gen3x4 SSD cannot be recognized on "Mac OS X Utilities". **macOS can not be installed by this way, please use "Part 1" and "Part 2" to install OS.**



Step 2

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



(Click "View", select "Show All Devices")

Select the INDMEM DMPG3N on top and then click on "Erase".

•••		Disk Utility	
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View Volume		First Aid Partition Erase Restore Unmount	Info
Internal			
INDMEM DMPG3N 5			
	\bigcirc	Uninitialized	512.11 GB
External			
Install macOS Moj	≜ ¹		
	≜		
Disk Images	Used	Cther Volumes	Free

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.

pro	ceed.
Name:	INDMEM DMPG3N
Format:	Mac OS Extended (Journaled)
Scheme:	GUID Partition Map
curity Opt	ions Cancel Erase

		·		
			INDMEM DMPG3N PCI-Epress Internal Physical Volume · Mac OS Extended (Journaled)	511.77 GB
External				
Install macOS Moj	≜			
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Disk Images		Used	Cther Volumes Free	

Step 4 Select "Reinstall macOS" and click on "Continue".

	macOS Utilities	
0	Restore From Time Machine Backup You have a backup of your system that you want to restore.	
	Reinstall macOS Reinstall a new copy of macOS.	
	Get Help Online Browse the Apple Support website to find help for your Mac. Disk Utility	
	Repair or erase a disk using Disk Utility.	
		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.

Welcome
In just a few steps, you can register and set up your Mac.
United States Afghanistan Åland Islands Albania Algeria Andorra Angola
Back Continue

(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.

 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!