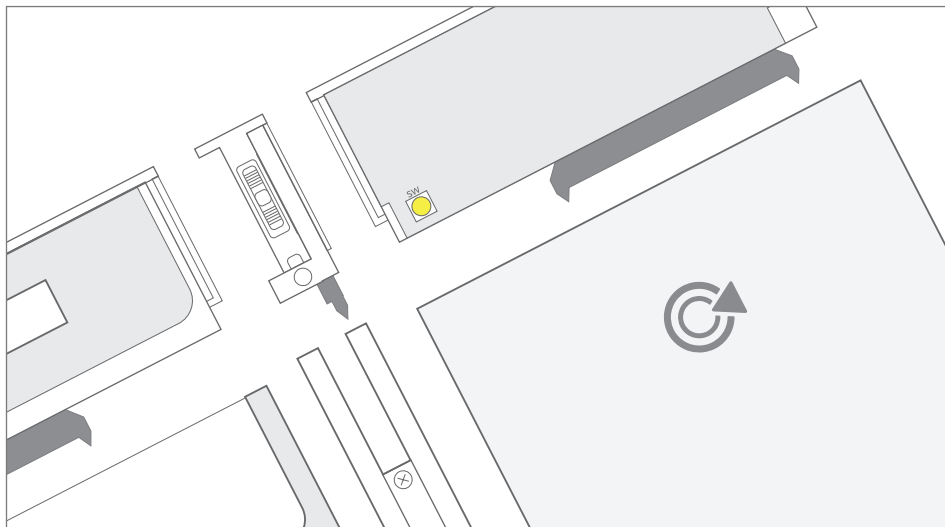


IODD Manual



IODD CO.,LTD.

Index

CHAPTER 1. Ready to use

Page 3

Manual Information	4	🔗
Product Components and Specifications	5 / 6	🔗
System / Boot Requirements	7	🔗
Part Names	8 / 10	🔗
How to assemble	12 / 13	🔗
LCD Screen display	14 / 15	🔗
Key functions	16 / 17	🔗
Connecting to PC	18	🔗
Check Basic Operations	19	🔗

CHAPTER 2. IODD Basic Guide

Page 21

Encryption Introduction	22	🔗
Set Encryption / Remove Encryption	24 / 25	🔗
Disk initialization and setup	26	🔗
Download the latest firmware/ Installing Firmware	27 / 28 / 29	🔗
Virtual ODD function Introduction	30	🔗
Virtual ODD function Setting	32	🔗
Changing the mode / Write Protect Function	34 / 35	🔗
USB Safe Removal / Reconnection/ Mounting virtual drives	36 / 37	🔗
S.M.A.R.T / IODD information	39	🔗
Setting/ Language	40	🔗
LCD Brightness setting / Language/ Instant Save		
Device Cleanup Tool(Remove all non-present devices from Windows PC)	41	🔗

CHAPTER 3. Advanced User Guide

Page 43

Create a VHD file by VHD Tool	44	🔗
Make a bootable USB Thumb drive with Rufus	46	🔗
Windows-To-Go Guide	48	🔗

CHAPTER 4. Menu Tree / Error Messages / First Aid

Page 51

Menu Tree	52	🔗
2541	52	🔗
2531	53	🔗
Error Messages	54	🔗
First Aid	55	🔗
CS and Technical support	55	🔗

[IODD Wiki \(Multi Language\) - External links](#)

[🔗 go to Wiki site](#)

CHAPTER 1. Ready to use

First of all, thank you for using IODD.

IODD is 2.5-inch external hard drive case. There is a virtual ODD and HDD virtual functions.

As well as it equipped a variety of additional functions.

IODD2531 / 2541 are registered trademarks of IODD Co. cautioned warranty applies only to the common use range.

For more details, please review the notes below.

Cautions

Be sure to observe these precautions.



- IODD Inc. does not provide the HDD with the device.
Therefore if there are any issues with the HDD, please contact the manufacturer or the place of purchase.
- IODD Inc. assumes no responsibility for any problems caused by use of the product outside of its intended use.
- IODD Inc. assumes no responsibility for the loss of data stored on the device.
- IODD Inc. assumes no responsibility for the loss of data due to the loss of the password, nor is IODD responsible for any other issues caused by the loss of the password.
- Avoid leaving the device in high temperature or humid environments because it can cause damage to it. In the case of damage, due to being placed in these kinds of environments, the warranty may become void. The repairs would be made at your expense.
- Placing the device near strong magnetic objects may cause the device to malfunction or data error.
- Removing or breaking the warranty label will void the warranty.
- Using unstable powered PC USB ports, USB extension cables, or BUS powered USB hubs can cause unstable behavior in the device and may even cause the loss of data or an outage.
- **Do not dismantle the device. Doing so will void the warranty.**

Manual Information

This manual is a guide for IODD 2541 and IODD 2531.

- There is no icon for that related to both IODD-2531 and IODD-2541.
- the description that is related to IODD-2541 is denoted by the following indications.



- the description that is related to IODD-2531 is denoted by the following indications.




- the Caution information is denoted by the following indications.
Please note essential when you use the feature

 **Caution**

Caution

- the tip information is denoted by the following indication.

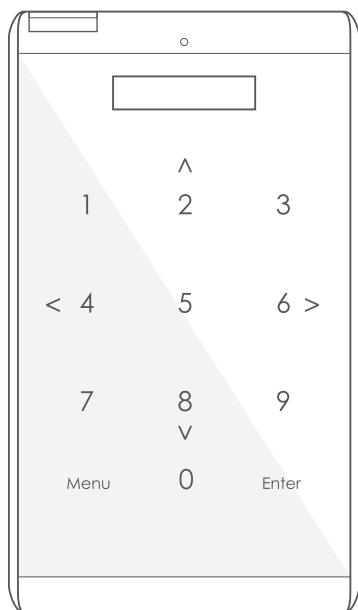
 **TIP**

- Hyperlink is displayed as an icon(), that is linked to the associated page in this manual or related website.
- The contents of this manual are based on the current latest firmware.
(2541: 69X_B05 & 79X_B05 releases / 2531: 1558 version)
This manual can be improved to meet new firmware.

IODD official website -  <http://www.IODD.kr>



Product Components and Specifications - 2541



Component

IODD body	1
Pouch	1
Screws and bolts set	Mini Screw x1, bolts X4
LCD protective film	1
USB 3.0 cable	1
Warranty card	1
Quick guide	1

Specifications

Encryption	AES256bit-xts H/W based 16-Digit encryption
Display	128 x 32 Dots
Control interface	mTouch capacitive sensing
Dimension	146 mm X 80.8 mm X 14 mm (LxWxH)
Weight	91g(except HDD)
Material	Aluminum Alloy, Acryl, Poly Carbonate(PC)
External Interface	USB 3.0 / USB 2.0 / USB 1.1
Internal Interface	SATA I/II/III (compatible)
Power Consumption	DC +5V USB power
Support drive	2.5 inch HDD and SSD, (Thickness is 9.5 mm)
Support files	ISO / VHD / VMDK / DSK / RMD / IMA
OS	Windows XP or later / MAC OSX or later / Linux
Color	Black
Manufacturers / Country	IODD CO.,LTD. / Republic of Korea

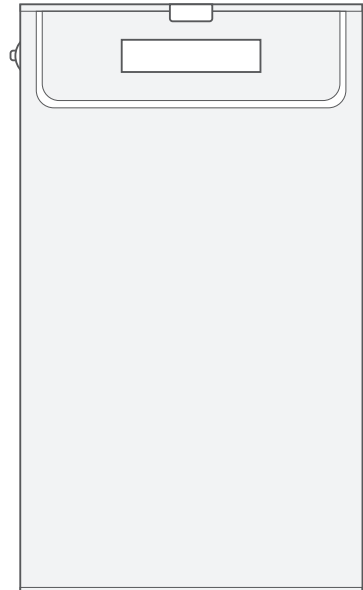
※ The components and specifications, country of origin are subject to change without notice.



Product Components and Specifications - 2531

Components

IODD body	1
Pouch	1
Screws and bolts set	Mini Screw x1, bolts X4
USB 3.0 cable	1
Warranty card	1
Quick guide	1



Specifications

Display	128 x 32 Dots
Control interface	3-state left thumb lever (Jog Switch/Button) and Back/up Button
Dimension	135 mm X 78.6 mm X 13.1 mm (LxWxH)
Weight	96g(except HDD)
Material	Aluminum Alloy, Acryl, Poly Carbonate(PC)
External Interface	USB 3.0 / USB 2.0 / USB 1.1
Internal Interface	SATA I/II/III (compatible)
Power Consumption	DC +5V USB power
Support drive	2.5 inch HDD (Thickness is 9.5 mm)
Support files	ISO / VHD / VMDK / DSK / RMD / IMA
OS	Windows XP or late / MAC OSX or later / Linux
Color	Black & Silver
Manufacturers / Country	IODD CO.,LTD. / Republic of Korea

※ The components and specifications, country of origin are subject to change without notice.

System / Boot Requirements

System Requirements

- A host system that can support USB 1.1/2.0/3.x interfaces.
(USB 1.x does not support multi-device connections.)
- A system that can boot via USB-CDROM/USB-HDD from the BIOS. IODD emulates a USB-CDROM and HDD virtually. If your PC does not support the physical USB-CDROM / HDD boot, IODD does not support boot functions.
- A system with a USB port capable of holding voltages over 4.75V with a maximum current of 900mA.
- A HDD that is less than 9.5 mm thick and has a SATA interface.

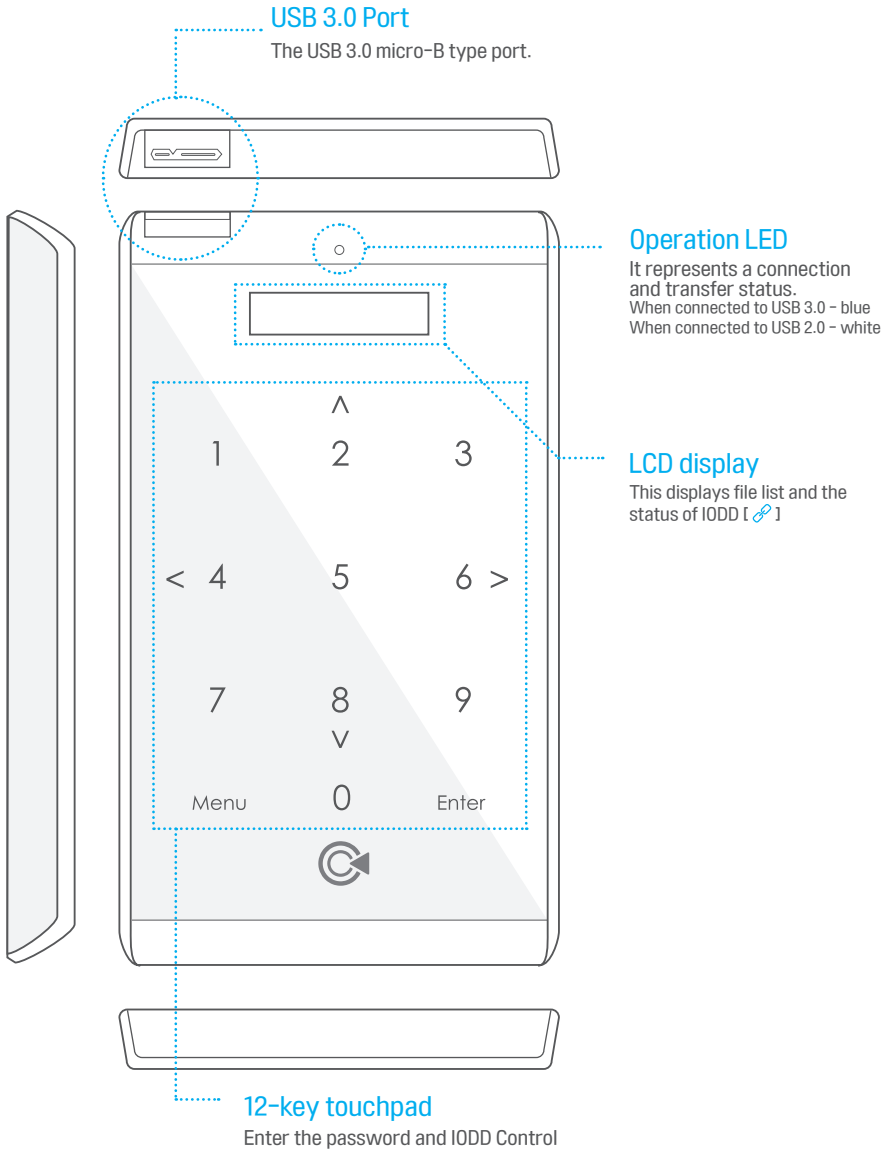
Boot Requirements

- When booting through the USB-CDROM, always use a bootable ISO file.
- When booting through the USB-CDROM, the OS installation (ISO) must include the USB host driver for the PC.
✘ In the case of Intel Chipset Skylake, Windows 7 Installation CD does not include that driver. you may experience an error when installing Windows 7. If so, refer to the following page, install a virtual USB drive.
[\[🔗 Create a Bootable virtual USB thumb drive using the Rufus\]](#)
- When booting through the USB-HDD / virtual Flash memory, always use a bootable VHD(RMD) file.
- The USB device must be enabled in boot priority list of BIOS.

Cautions

- Note: If your PC is unable to boot from USB device, contact your PC manufacturer for assistance.
Make sure your PC supports "USB booting."
- For the latest Sky Lake (Skylake) board and some boards may not support external USB-CDROM boot. Refer to the next page, please use the boot from the virtual USB drive functions.
[\[🔗 Create a Bootable virtual USB thumb drive using the Rufus\]](#)

2541 Part Names



Firmware reset button

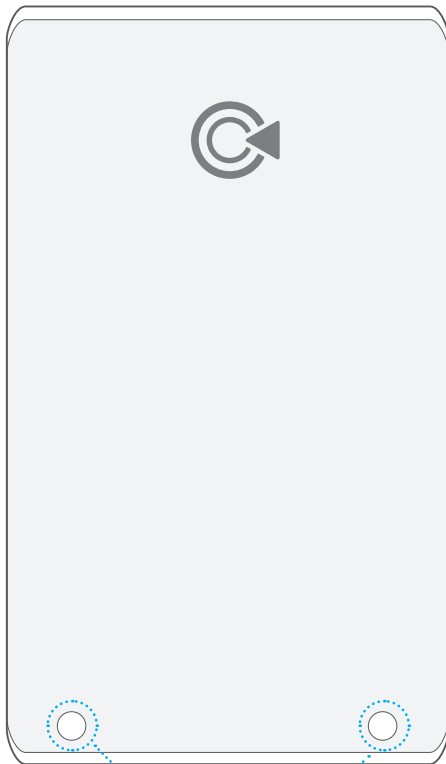
please refer to the link. [🔗](#)

Warranty label

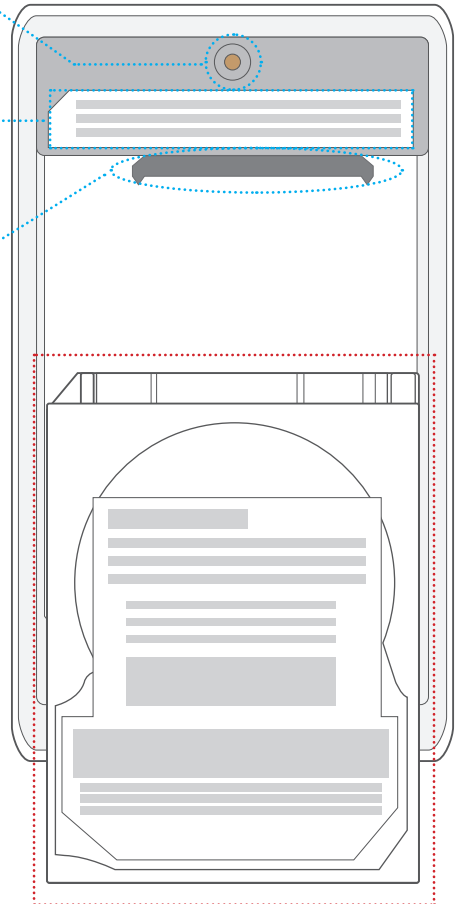
The product warranty information is listed.
You can check the serial.
Be careful not to damage.

SATA connector

2.5-inch HDD and SSD and can be connected.
Attach the HDD to match the orientation of the
SATA connectors

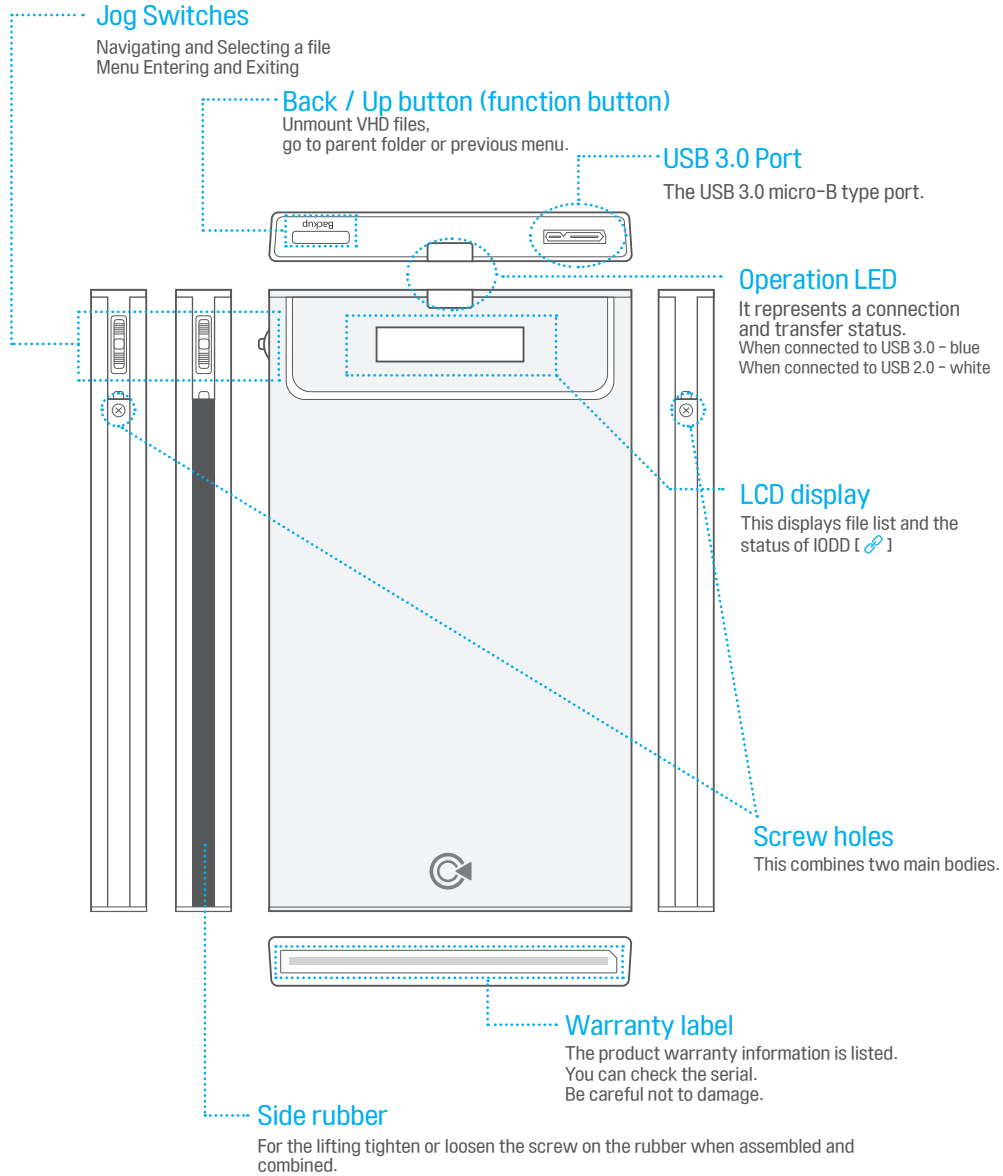
**Cover mounting holes**

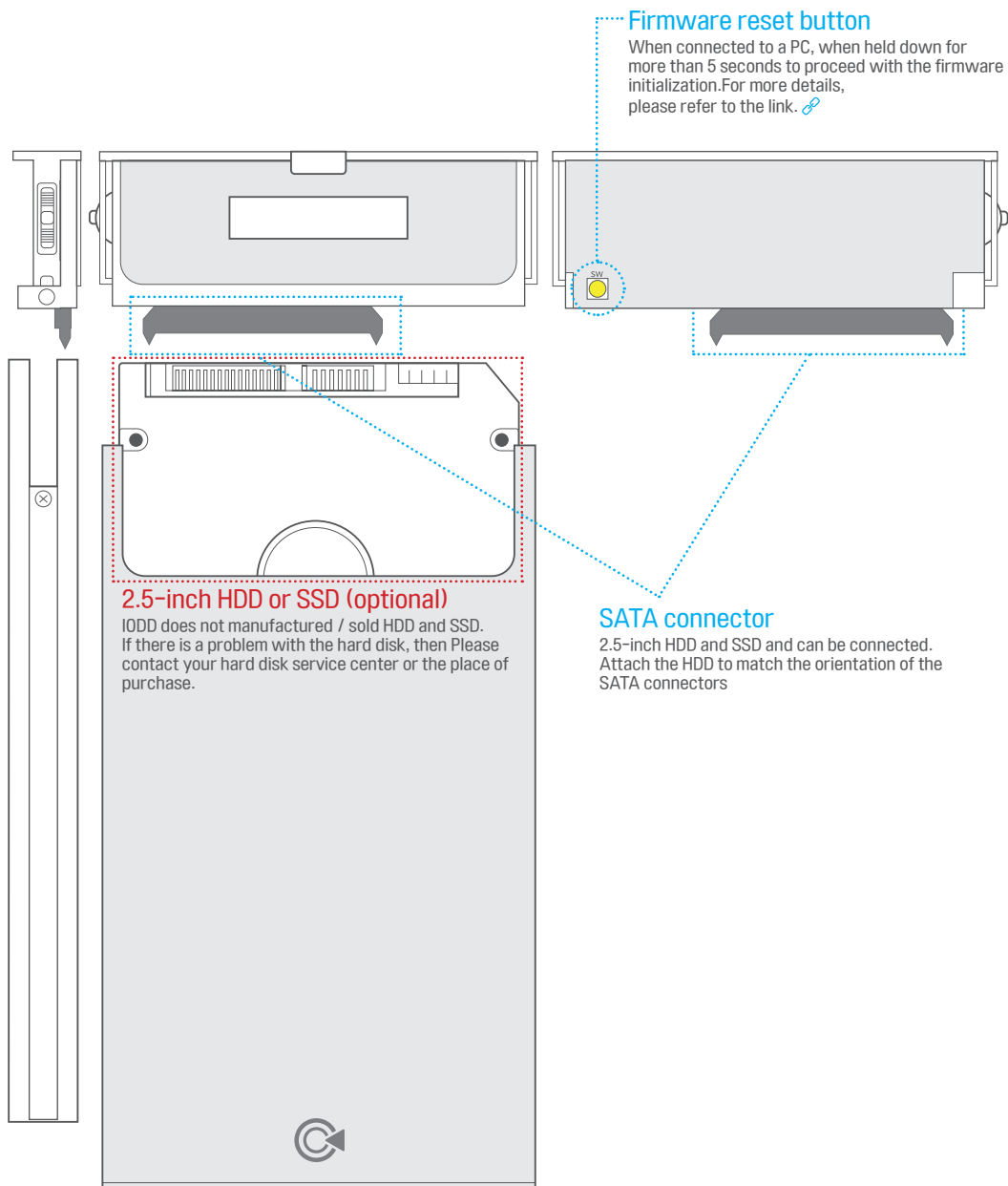
Use the screws to join the main body and the rear cover

**2.5-inch HDD or SSD (optional)**

IODD does not manufactured / sold HDD and SSD.
If there is a problem with the hard disk, then Please
contact your hard disk service center or the place
of purchase.

2531 Part Names



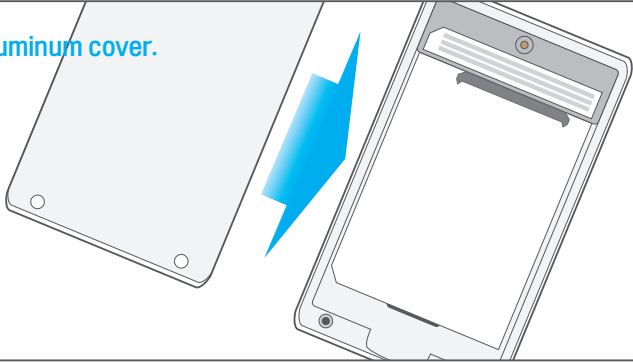


How to assemble 2541

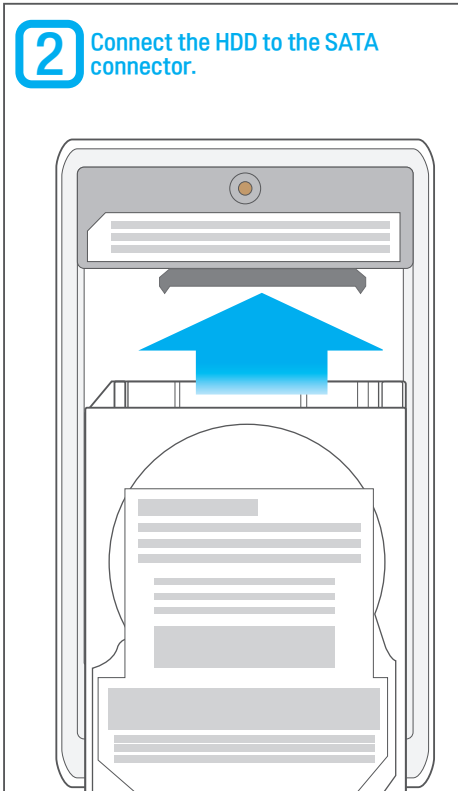


■ IODD 2541 Body and the HDD assembly guide.

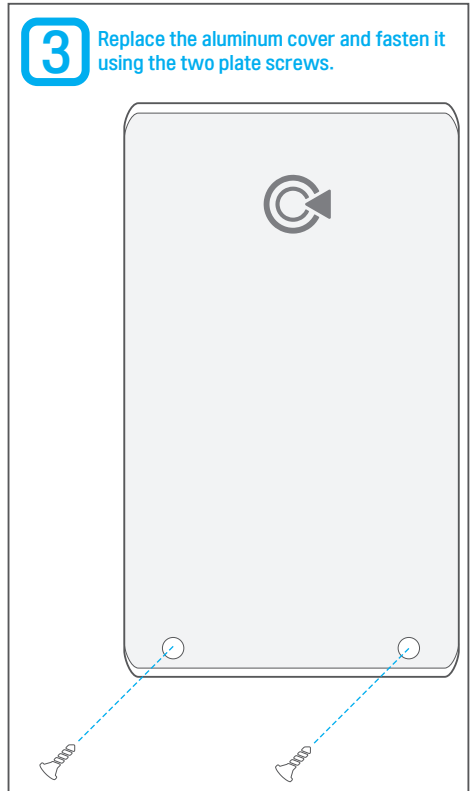
1 Remove the aluminum cover.



2 Connect the HDD to the SATA connector.



3 Replace the aluminum cover and fasten it using the two plate screws.

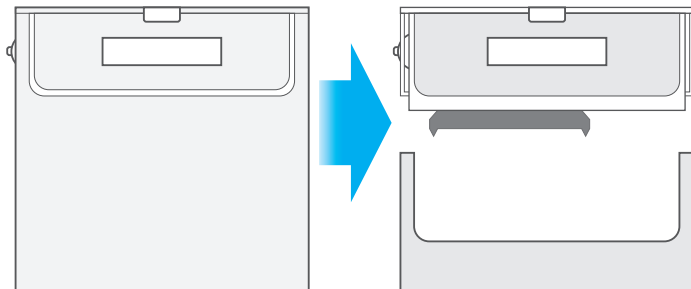


How to assemble 2531

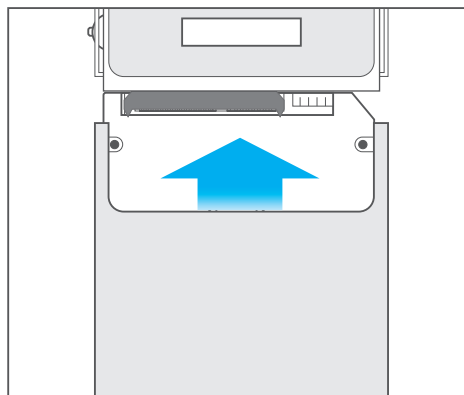
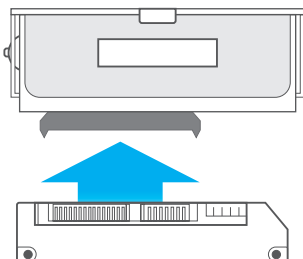


■ IODD 2531 Body and the HDD assembly guide.

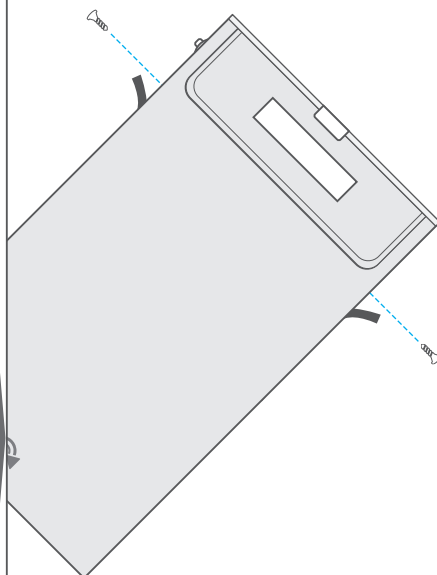
1 Remove IODD body and aluminum case.



2 Connect the HDD to the SATA connector.



3 Replace the aluminum case and lift side rubber. fasten it using the two plate screws.

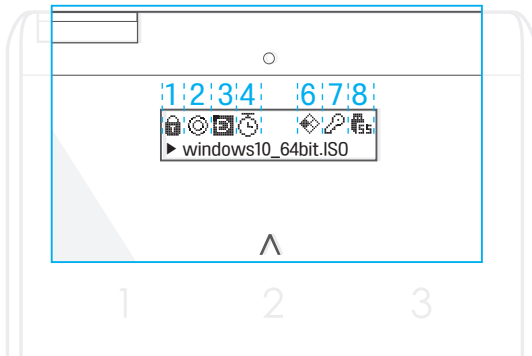
















2541 LCD Screen display



1 2 3
4 5 6
7 8 9
- 0 -

■ LCD status Guide



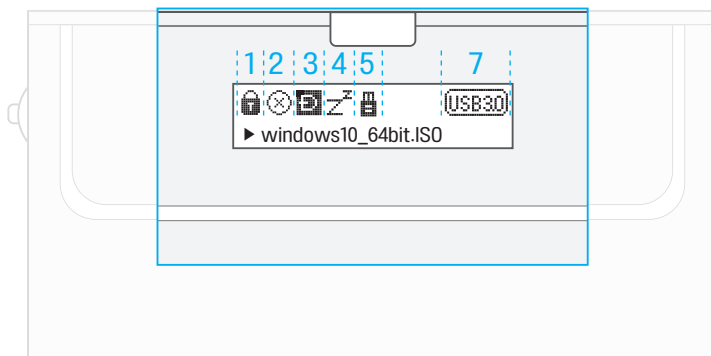
Function	Col.	Icon	State	This icon shows
Write Protection	1		ON	the drive is write protected.
			OFF	the drive is write enabled.
Virtual ODD	2		ISO Mounted	a optical disc is mounted.
			ISO Unmount	no optical disc is mounted.
Mode select	3		Dual Mode	1 USB CD-R0M and 1 USB HDD
			ODD Mode	1 USB CD-R0M
			HDD Mode	1 USB HDD
Standby Mode	4		Standby	power saving mode is active
			Set timer	Displays set stanby status timer
Virtual HDD	6		VHD(RMD) Mounted	one or more virtual drives are mounted (upto 4)
Encryption	7		ON	AES256 Encryption enabled
USB Speed	8		USB 1.1	USB 1.1 connection (16Mbps)
			USB 2.0	USB 2.0 connection (480Mbps)
			USB 3.0	USB 3.0 connection (5.0Gbps)













■ This information are based on the firmware 69X_B05/79XB-05 version. and can be improved to meet new firmware.

2531 LCD Screen display



■ LCD status Guide



Function	Col.	Icon	State	This icon shows
Write Protection	1		ON	the drive is write protected.
			OFF	the drive is write enabled.
Virtual ODD	2		ISO Mounted	a optical disc is mounted.
			ISO Unmount	no optical disc is mounted.
Mode select	3		Dual Mode	1 USB CD-ROM and 1 USB HDD
			ODD Mode	1 USB CD-ROM
			HDD Mode	1 USB HDD
Standby Mode	4		Standby	power saving mode is active
Virtual HDD	5		VHD(RMD) Mounted	one or more virtual drives are mounted (upto 4)
USB Speed	7		USB 1.1	USB 1.1 connection (16Mbps)
			USB 2.0	USB 2.0 connection (480Mbps)
			USB 3.0	USB 3.0 connection (5.0Gbps)

■ This information are based on the firmware 1558 version. and can be improved to meet new firmware.



2541 Key functions



■ Key Defines of IODD 2541.



TIP

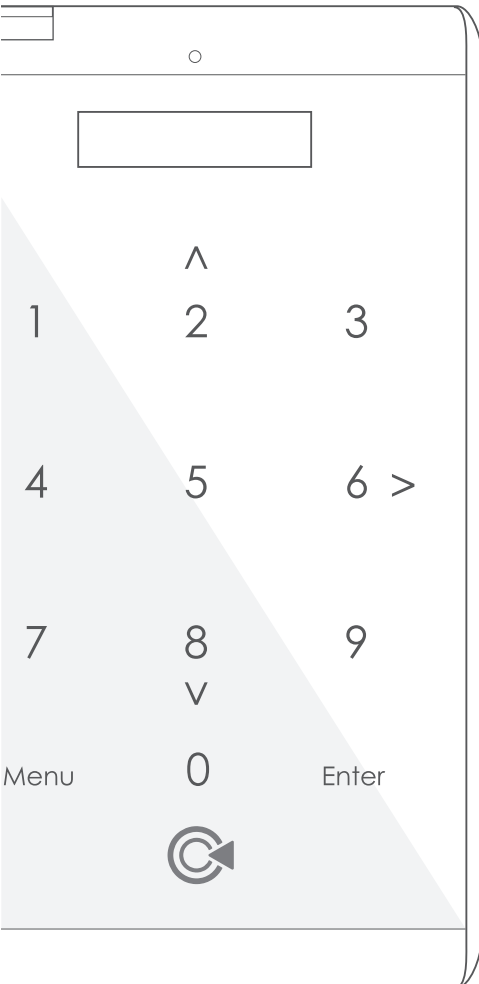
There are two ways to touch a button. One is just to touch, and the other is to touch a button for 3 sec. please see the following icons.



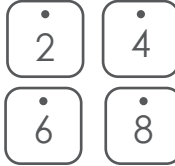
Click



Press and hold 3 seconds



General Navigation



Basic - **file or menu navigation**
if CD(ISO file) is loaded -
unloads CD(ISO file)



load or unload CD
(ISO file)&VHD(RMD)



enter to menu
or **exit**

during PIN input



delete last character(backspace)



go to **Root folder**
(resync file system)



Unload All
VHD(RMD) files



***.ISO file**

load or unload with saving loading status instantly



***.VHD(RMD file**

Mount only one VHD immediately



Save loading status
and **safely remove**



Reboot IODD
(USB reconnect)



2531 Key functions

■ Key Defines of IODD 2531.



TIP

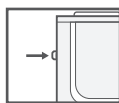
There are 3 ways to press a button. First is just to press a button. and the 2nd is to press a button for 3 seconds. the 3rd is to press a button during startup.

→ One Press → Press(Up/Down) and hold 3 sec.

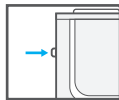
BASIC



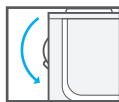
Jog switch up/down
ISO(VHD.RMD) **file navigation**
if CD is loaded -**unload CD(ISO)**



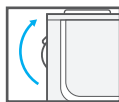
Jog button one press
load (ISO file)&VHD
(* 'instant save' menu is on - loading information will be saved instantly)



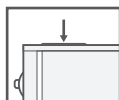
Jog press&hold
Go to menu



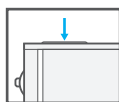
Jog Switch down&hold
Save loading status and safely remove



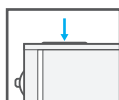
Jog Switch up&hold
Go to root folder



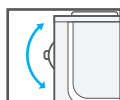
Back/up button one press
Go to root folder



Back/up button press&hold
unload all VHD(RMD)



Back/up button press&hold
the drive is write-protected

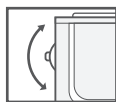


Jog Switch up/down&hold
UP - CD Mode
Down - HDD Mode

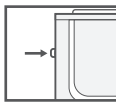
Back/up Button



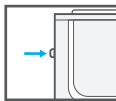
in Menu



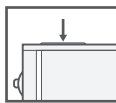
Jog Switch Up/Down
Menu navigation



Jog button one press
select menu



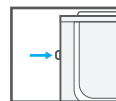
Jog Press and hold
Exit Menu



Back/up button one press
Previous menu

StartUp keys

press button during startup



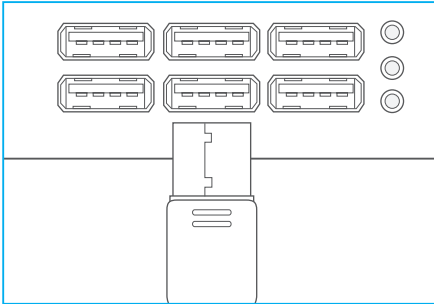
Jog button Press&hold
All settings are restored to default. (Dual Mode)



Connecting to PC

Be careful when connect to a PC.

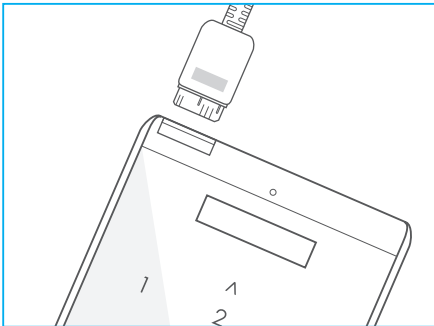
The external HDD is very sensitive to electrostatic discharge and short circuit. Please be sure to first connect the cable and the PC and IODD next. When you disconnect from the PC to turn the PC off or unplug After safe removal in the operating system.



1

First, please connect USB cable to a PC

It is recommend that you not use the USB ports on the front of your PC. It may cause issues, such as partition damage due to connectivity error. **Connect the rear port.**



2

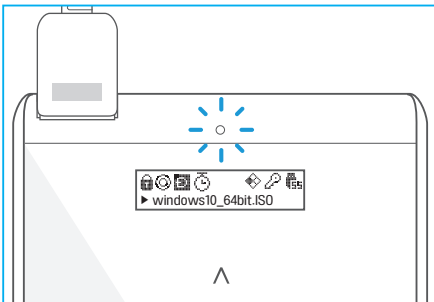
Connect the cable and IODD.

Coming to power IODD of LED and LCD will be recognized on the PC. LED and LCD displays are different depending on the connection speed.



TIP @ USB connection

	USB 1.1	USB 2.0	USB 3.0
2541			
2531	USB1.1	USB20	USB30



3

Check the screen of IODD.

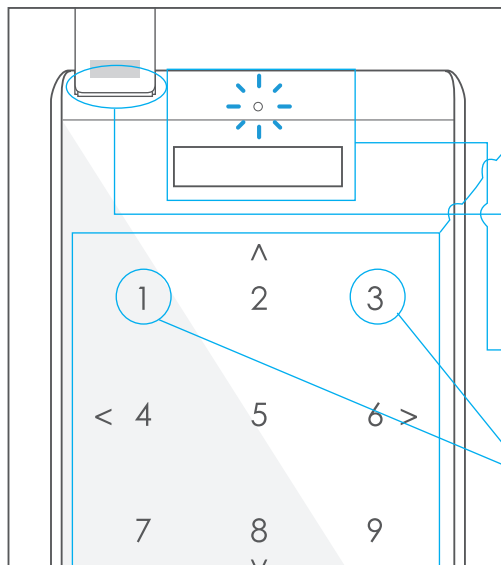
IODD2541 / IODD2531 is displayed, wait for a few seconds. The screen on the left will be displayed.

Even though the device is connected to a USB 3.0 port, it may perform as slow as USB 1.1 or USB 2.0 speeds.

(If this is the case, contact your PC manufacturer for optimal BIOS settings to improve your connection speeds.)

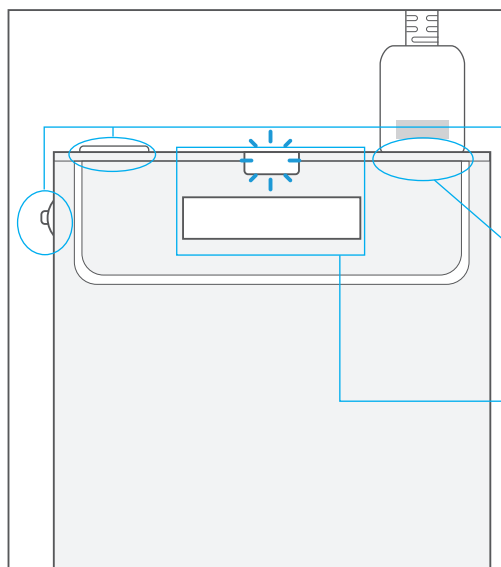
 Check Basic Operations

- Before use, check the basic operation mode.



2541 Check Basic Operations

- **Make sure that the touch screen is working properly.**
If the touch screen is not working properly, it may be due to the low electrical current of the USB port the device is connected to.
- **Check the cable for defectiveness.**
Make sure that the power is on and that both, USB 3.0 and 2.0, are recognized. If they are not working properly, it may be due to a simple defective cable. IODD uses the USB 3.0 Micro-B type cable.
- **Please check the LED and LCD.**
Does the backlight turned on properly? Does the screen is clear? Because the LCD blink every time you press the button on the touch IODD 2541? If so, good product.
- **Press&hold key "3" for 2 seconds to reconnect the USB.**
Press&hold key "1" for 2 seconds to safely remove the USB. Safe removal of the USB may not work when files on the HDD are in use.



2531 Check Basic Operations

- **Check the jog button and back / up button.**
Keeping jog up / down / press / press&hold and open menu. If the delay is caused in the operation likely to be delayed due to a HDD read error. If so, please check by removing the HDD or services received after the HDD manufacturer.
- **Check the cable for defectiveness.**
Make sure that the power is on and that both, USB 3.0 and 2.0, are recognized. If they are not working properly, it may be due to a simple defective cable. IODD uses the USB 3.0 Micro-B type cable.
- **Please check the LED and LCD.**
Does the backlight turned on properly? Does the screen is clear? If so, good product.

CHAPTER 1 Finished

■ Check defects

Are all the components listed on page 5/6 included? Yes No

Is the Warranty label on device well attached? Yes No

Is there an issue placing the cover back onto the device after connecting the HDD? Yes No

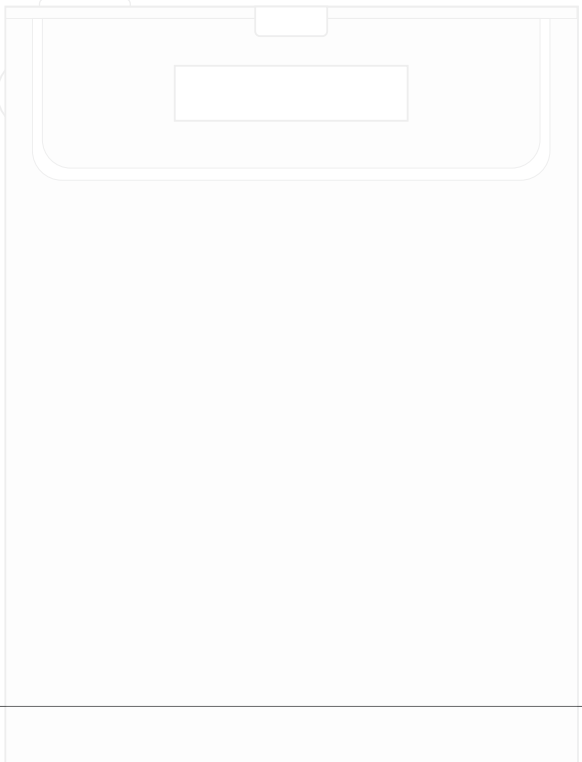
When the device is connected to a USB cable, does the connection appear to be strong? Yes No

After the device has made a USB connection, is there any defect on the LCD screen? Yes No

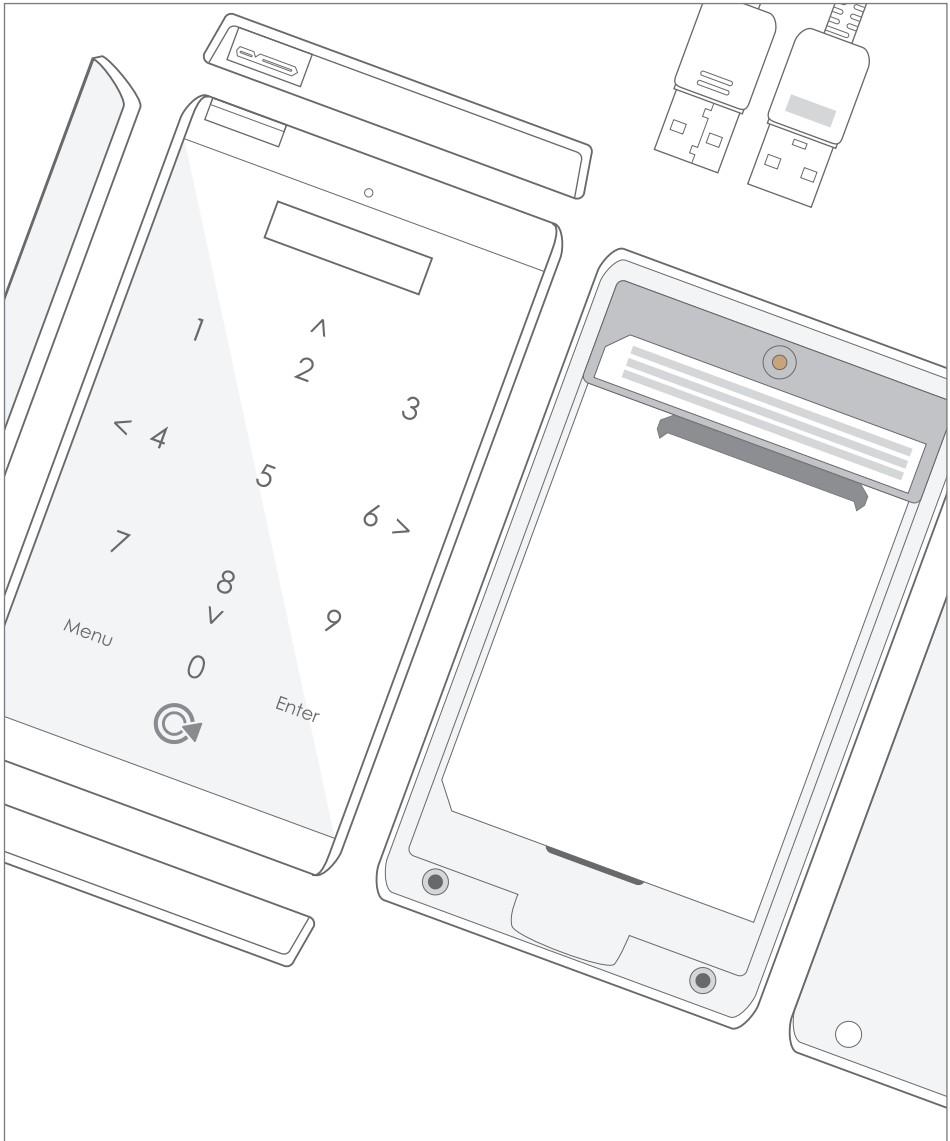
■ For the latest information, please visit the [Official site](#) and [IODD Wiki](#)

[⌘ Official website - http://www.IODD.kr](http://www.IODD.kr)

[⌘ IODD Wiki - http://en.IODD.kr](http://en.IODD.kr)

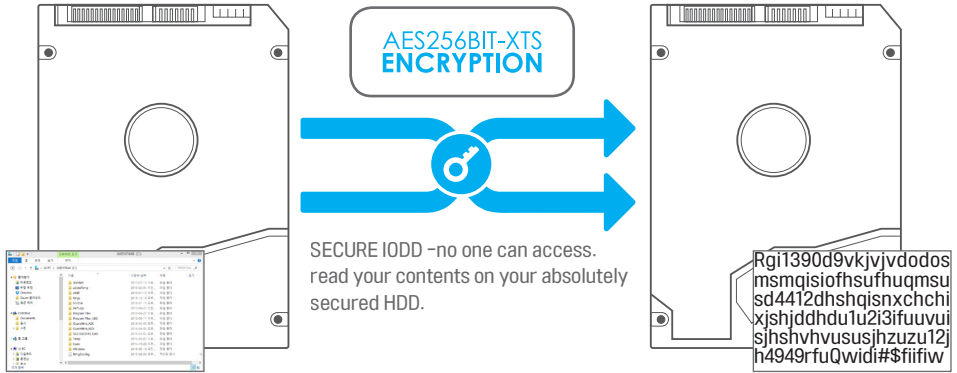


CHAPTER 2. IODD Basic Guide



- This chapter introduces the main features.

2541 AES256 Encryption Introduction



AES256BIT-XTS Encryption

AES256bit-xts is the **best existing encryption algorithm** that using not only US Department of Defense and but also leading companies in the world. Nobody can read the hard disk drive without passwords.

Fast and convenient

A **program or utility is not required** for using the encrypted HDD.If you only enter a password when PC is connected, you can use the same as using a regular HDD. Of course, the **HDD access speed is not slow**.

The safest key. It is your memory

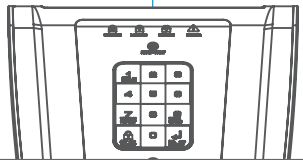
Half of keys are in hard drive and other half in your memory. IODD cannot be read except owner.**HDD encoding, now it is not optional but essential**.

do not worry about enclosure defect

because the half of key is stored in hard disk drive, **you don't lose your passwords if you change the product**. On the other hands, because products of other companies store the half of keys in the circuit memory, you have to visit service center and identify the user when you need follow-up service.

IODD are compatible to each other

IODD-2541 and SECURE DOCK (IODD-3544) can be used by same PIN.



 **FAQ about Encryption**

Q. If i set or reset password, is the data of HDD preserved?

A. No, it is all destroyed.

Q. Can i change many HDDs with diffent encryption PIN with one IODD-2541 ?

A. Yes you can. No limit.

Q. It can be used as it is in IODD a hard disk that has been used by third-party encryption external hard case? Also what about the reverse?

A. No, it cannot. and vice versa.

Q. I don't remember my PIN. But can i reset and use the drive without encryption?

A.HDD data all lost!

1. Connect HDD to PC directly. Initialize the HDD with GPT.
2. And again,
3. Initialize the HDD with MBR.

Q. I want to change the password.

A. You can't change instantly your PIN. Therefore you must backup your data before change your PIN.
1. backup your data 2. remove encryption PIN. 3. set encryption PIN.



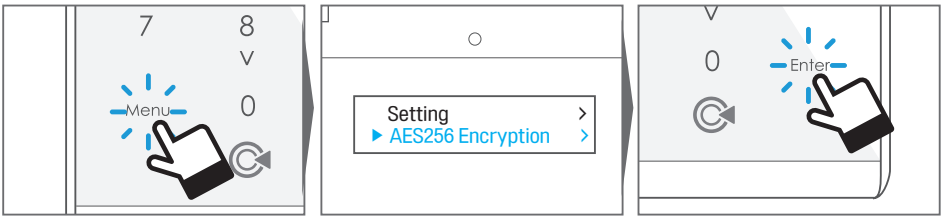
Set Encryption

Information about the encryption settings

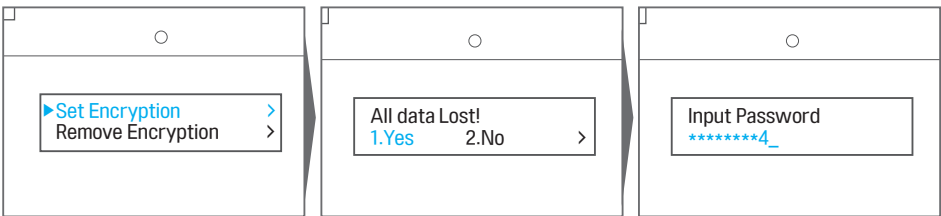
The encrypted disk requires a password whenever USB connecting
 If you use encryption with new disk, at first set the password, and then initialize the HDD.

⚠️ If you set encryption, all data on the HDD will be deleted !!!!!!!!!!!!!!!!!!!!!

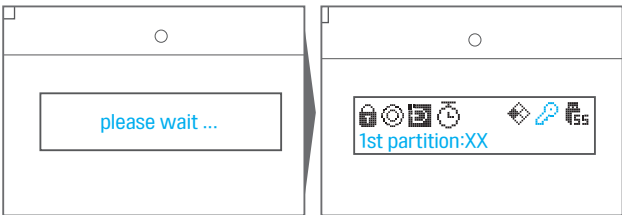
1 To activate the AES256 encryption, [MENU] button to open the main menu, select the fifth menu AES256 encryption is selected press [Enter] or [6] key



2 And choose [Set Encryption]. Confirm the warning message that all data to be deleted and select [1.YES]. The 4 to 16 digits When prompted to enter a password, enter twice.



3 [Please wait ...] Wait a few seconds, the following screen will be displayed in the message. LCD top right corner of the second. Please check the lock icon [🔒]. If you see a lock icon success.



💡 TIP # [1st Partition:XX]?
 After encryption [first unsupported partition] is displayed. see [🔗 Disk initialization and setup] to iODD basic setting

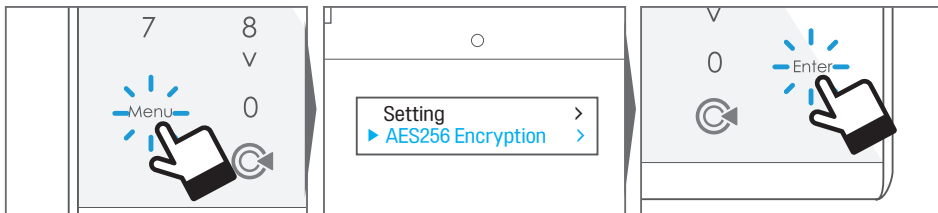
Remove Encryption



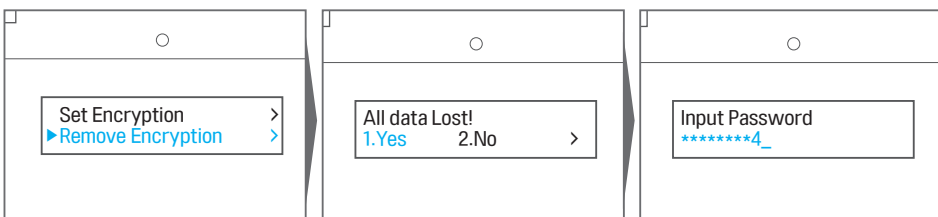
1 2 3
4 5 6
7 8 9
~ 0 ~

⚠ If you Remove encryption, all data on the HDD will be deleted !!!!!!!!!!!!!!!!!!!!!!!

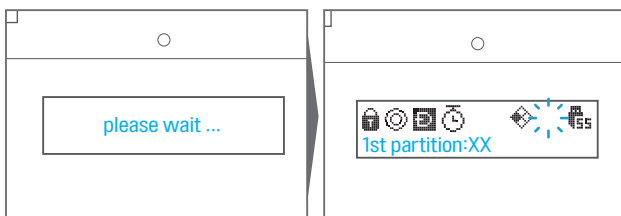
- 1** To activate the AES256 encryption, [MENU] button to open the main menu, select the fifth menu AES256 encryption is selected press [Enter] or [6] key



- 2** And choose [Remove Encryption]. Confirm the warning message that all data to be deleted and select [1.YES]. The existing password, enter twice.



- 3** [Please wait ...] Wait a few seconds, the following screen will be displayed in the message. LCD top right corner of the second. Please check the lock icon [🔒]. The lock icon goes off success.



⚠ Caution

- If you forget the password, there is no way to find it. Half of the keys are in your memory. IODD encryption algorithm does not store the password in IODD body.
- Did you set the encryption by mistake?, If the disk has been not written after encryption, then the data of the disk can be restored. Select [Remove Encryption] menu will remove the encryption. Reconnect the IODD to a PC. This is likely to be the old data has been restored. But, The reverse is not possible.
Encrypted HDD (old data) → Remove Encryption → set encryption → Old data recovery is impossible
- Changing password with maintaining the HDD data is not possible. Backing up data (old data) and Remove Encryption Run → a new password Set Encryption → The data (old data) to be copied again.

Disk initialization and setup

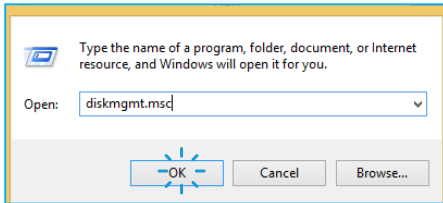
 **If you initialize the disk, all data on the disk will be deleted.**

1

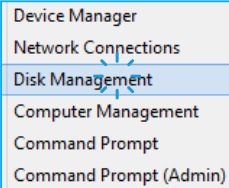
To initialize a disk, run the Windows [disk management].

Windows XP/7 Start Menu → run ( + R) → 'Diskmgmt.msc' type → 'ok' click

Windows 8 or later Start Menu right-click () → Select [Disk Management] from the menu ( + K)




◀ Windows XP/7



Windows 8 or later ▶

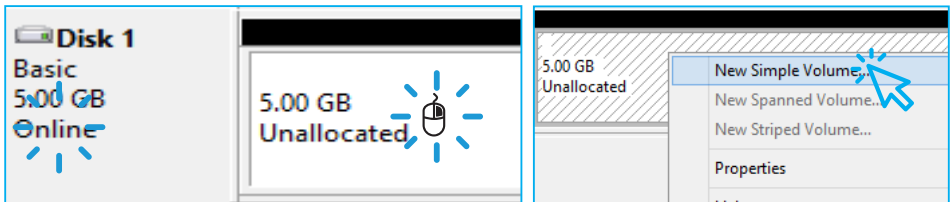
2

Check the HDD mounted in IODD in 'Disk Management' screen.

Right-click () in the left area are displayed as [Not initialized] and Select [Initialize Disk] menu. Select a MBR (Master Boot Record) .Proceed to the initialize disk.

3

If properly initialized, the display of [Not initialized] is changed to [Online],[unallocated] area to assign a partition, right-click () to select [New Simple Volume]



4

Set the partition size and segmentation, depending on user needs.

ISO files are saved in the first partition. For the first partition is set to a sufficient size. Finally, please note the following format entries in the file system settings.

TIP # File System



It Supports NTFS and FAT32(exFAT).IODD factory firmware is installed by NTFS.


You must install the firmware that matches the IODD drive's first partition format type.

N Firmware ▶ NTFS type

F Firmware ▶ FAT32 or exFAT type

 **If you fail to initialize disks, first check the mode icon and status of the LCD.**

If the first icon is  it can not be formatted. Check the link  , turn off the feature. and then try again.

if the second icon is  mode, IODD is recognized as a virtual CD-ROM.Unable to initialize the disk.

Please change to [ Dual Mode] or [ HDD Mode]

If the disk failed at initialization, then it may be due to HDD failure.

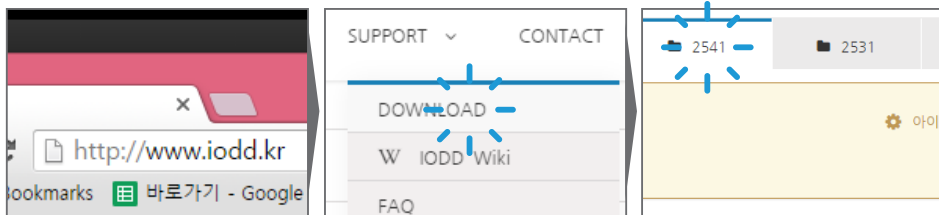
Remove the HDD from IODD, and connect it directly to PC.

In this case, if the initialization fails, then please contact HDD manufacturer.

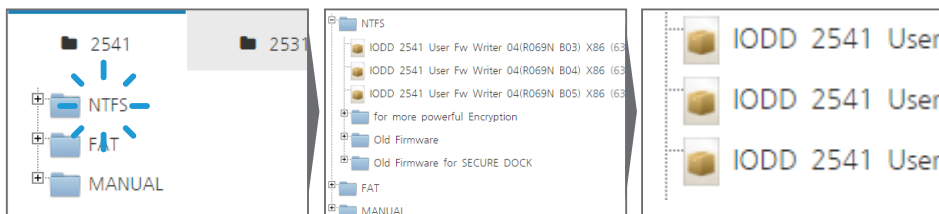
Download the latest firmware

! you must check HDD partition Format type before Firmware update.

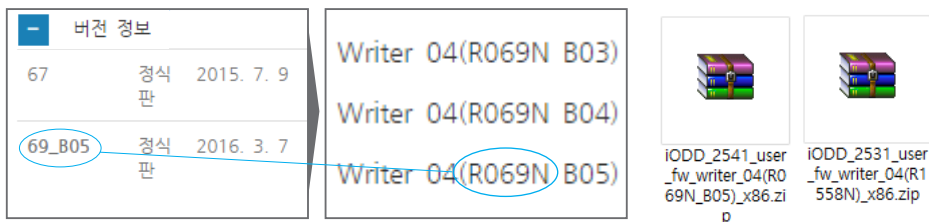
- 1** Go to the Download Center page on the IODD website.
Download Center : <http://iodd.kr/wordpress/download/>



- 2** Click on the tab of the product, you will see the NTFS and FAT folders.
Click the same folder as the first partition format type. and see a list of files.



- 3** Please check the revision information. [Click the firmware file to download.](#)
To set the location to save the file, right-click (Ⓜ) a file to select [Save Link As]



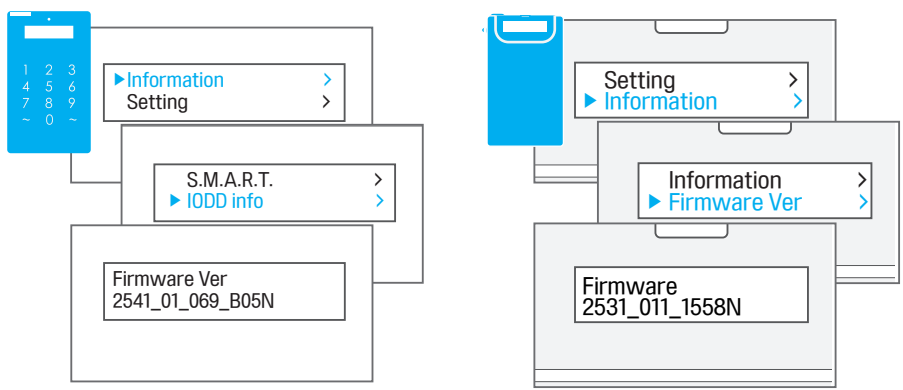
💡 Firmware File Name Information

iodd_2541_User_Fw_Writer_04(R069N_B05)_X86 (633.7 KiB)

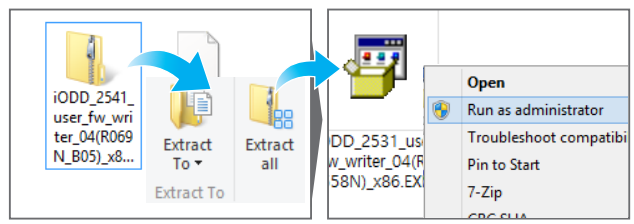
Model	Program name	Version number and Support Format type	File size

Installing Firmware

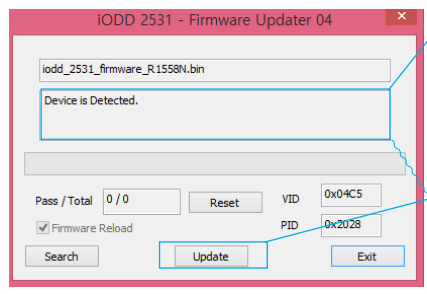
1 Check the current firmware version first. Menu to check the firmware version, refer to the picture below.



2 downloaded firmware file is ZIP archive. Unzip it and right-click on the executable file (*.exe), select [Run as administrator]

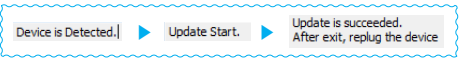


3 The update program will run like the below picture. IODD and PC must be connected. (The data in the HDD will not be affected)



When the updater recognizes IODD [Device is Detected.] Message is displayed.
if "Device is not matched" or "Device is not Detected" is displayed, 1. remove all USB devices other than IODD. 2. reboot the PC. 3. run the updater.

click the [Update] button, the update is in progress.



- 4** When the starts, [Device is Detected] message will change to [Update Start.]. Depending on the firmware update IODD and HDD status, it may take a few minutes. When complete, [Update is succeeded. After exit, replug the device] message is displayed.

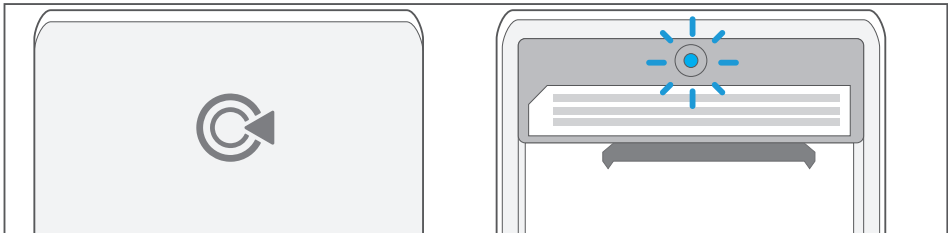


if the updater ends, exit the program and reconnect the IODD.

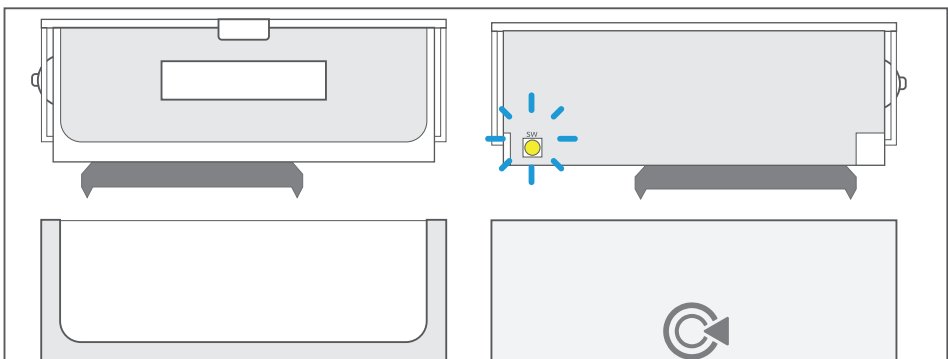
for 2541 update process is not end, until LCD shows [Flash updating ...] and LCD back light blinks and IODD reboot.

How to reset the firmware

- Does the firmware update fails? Disconnect all USB devices from the PC. Press the [Reset button] and hold, and connect the IODD, and hold until [IODD 2531 or IODD 2541] appears in LCD. and Update.



Firmware Reset button of IODD 2541 is blue (or yellow). You can find it if you remove the aluminum cover. Press the Reset button and hold, and connect the iODD. and hold the button for 1 second. and run the firmware updater.



Firmware Reset button of IODD 2531 is yellow (or silver). Press the Reset button and hold, and connect the iODD. and hold the button until USB detection (for about 5 seconds). and run the firmware updater.

If Firmware update has failed repeatedly. please refer to

[http://en.IODD.kr/Wiki/index.php/IODD-2541#How_to_update]

TIP # After installing the firmware [1st partition: XX] is displayed?

If that message is displayed, there are 2 reasons.

1. HDD is initialized with GPT 2. firmware and 1st partition are not matched.

- 1) Initialize the HDD to MBR.
- 2) Please check the format the first partition (NTFS or FAT). Install the correct version of the firmware.

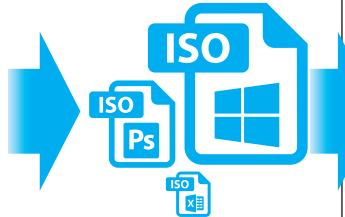
Virtual ODD function Introduction

IODD virtual ODD function

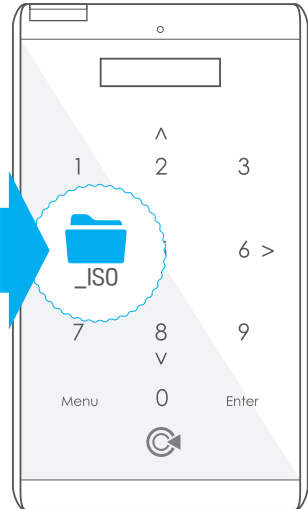


you can get ISO images

1. ripping CD or DVD to ISO images.
2. downloading ISO images from Internet.
3. create ISO images from files and folders with an utility.



Copy the ISO file to a folder `_ISO`
[For more information, see the next section]



Unlimited size and number

IODD is recognized as DVD or Blu-ray according to the size of ISO image.

Compatibility

IODD has the same functions as USB DVD-ROM. If you can boot from a USB DVD-ROM, then you can boot from IODD Regardless of OS.

USB 3.0 Super Speed

Modern motherboards have USB 3.0 ports to boot from USB devices.

Saving previous state

You can save the CD loading state automatically or manually



IODD eliminate as followings

1. piles of burned CDs, DVDs, Blu-rays.
2. buying and abandoning blank medias.
3. time for buying, burning and abandoning blank medias(or burned medias).
4. booting and loading time



Virtual ODD function FAQ

Q. IODD will not boot

A. follow the next steps

- Confirm whether the ISO file is bootable.
- If your PC is old or does not provide multi LUN, please select CD-MODE (or ODD-MODE).
- In order to confirm whether the ISO file is bootable, please try to test it with the validated PC.
- Although it is bootable ISO file, please confirm whether it is same result with USB DVD-ROM.
- If it can boot in USB DVD-ROM and can not boot in IODD, please use USB Y-CABLE for adding external power.
- If your laptop has own internal DVD-ROM and IODD does not boot, please disable internal DVD-ROM at BIOS settings. or remove it.

Q. Can I also ISO booting **motherboards that support only UEFI?**

A. Refer [🔗 Make a bootable USB drive with Rufus](#) in CHAPTER 3

Q. Trying to set up, **[No _ISO folder]** message appears.

A. Please make sure that the folder name exactly matches the **_ISO**. If match, please change the name of an existing folder, **and create a new _ISO folder**.

Q. When loading the ISO file, **[Defrag]** message on the LCD.

A. When a serious fragmentation of the ISO file is found, the message can be seen. **Please defragment the disk or file.**

Q. The PC motherboard **does not support an external CD-ROM boot**. Is there any way to boot?

A. Refer [🔗 Make a bootable USB drive with Rufus](#) in CHAPTER 3

Q. How do I get ISO file?

A. you can download ISO images from the Internet.

Q. When you boot "tiktik"(or similar) noise occurs in IODD. Very slow boot (or installation).

A. It may be due to a problem with the HDD. Please remove the HDD and IODD to connect directly with the PC. If the same noise, contact HDD manufacturer.

Virtual ODD function Setting

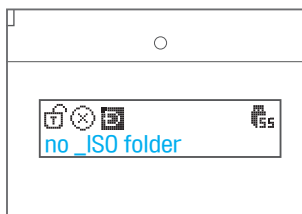
Please confirm the following

- is IODD drive initialized to **MBR(master boot record)**? Yes No
- The first partition is **[Healthy(Primary Partition)]**? Yes No
- IODD firmware matches the **first partition type**? Yes No
(N means NTFS, F means FAT32/exFAT)

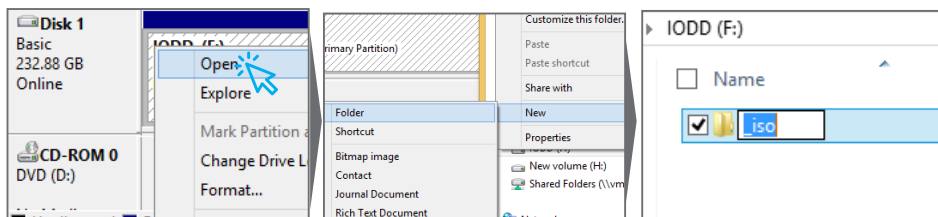
If [No] is checked, then [1st partition xx] message appears.

Please refer to [\[Disk initialization and setup\]](#) or [\[Installing Firmware\]](#) section of the previous page.

- 1 If the HDD is initialized correctly,
On the screen of IODD [No_ISO folder] message is displayed.



- 2 Open the first partition on the HDD, click the right mouse button (Ⓜ) in the root directory. Creates a [Folder]. named [_ISO].

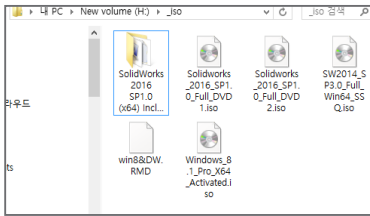


TIP # _ISO Folder

- [_ISO] folder is case insensitive. IODD finds this folder during startup.
- [_ISO] folder can have files and sub folder tree.

3

- Copy ISO files to the _ISO folder.
 - safely remove IODD.
 - reconnect IODD.
- Supported file types are as follows:

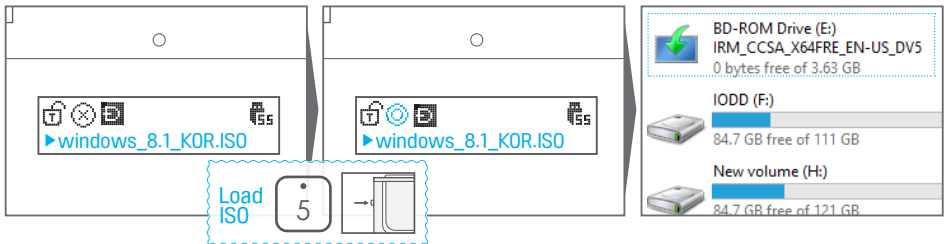


Supported image file types

CD/DVD/Blu-ray Image file	*.ISO
Virtual HDD file	*.VHD
Virtual USB drive file	*.RMD
Virtual Floppy file	*.IMA

4

- If IODD is set up correctly, the filename is displayed as the following navigate file list and select a file to load. If the file is loaded correctly, then the icon is changed to as follows [ → ] and IODD is recognized as USB ODD drive.



For key functions, please refer to the [\[Key functions \]](#) in chapter 1.

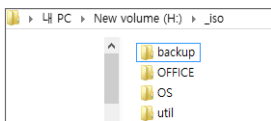
TIP # How to unload ISO file ?

- For 2541, to press one of the arrow keys (2,4,6,8) will Unload Iso file.
For 2531, to up or down jog switch will Unload Iso file.

⚠ Cautions

- IODD allows max 32 files or subfolders in a folder. (under "_ISO" folder) If not, [too many files] error message appears.

solution : Create subfolder tree in _ISO folder, and Split a folder into subfolders with less than 32 files



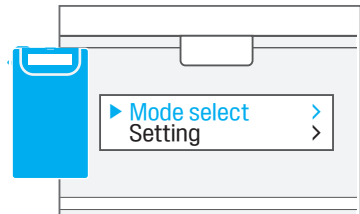
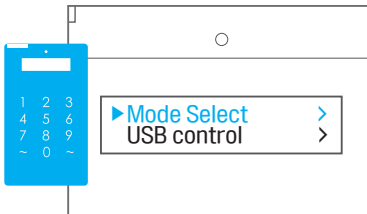
- If IODD will not boot, then confirm the ISO file with USB DVD-ROM.
Burn the ISO file to a blank media. and test if it works with USB DVD-ROM.

↻ Changing the mode

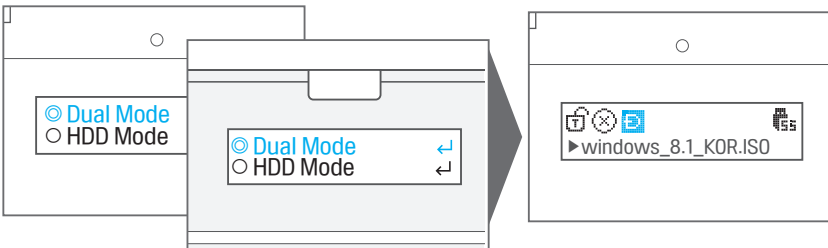
■ IODD provides three combinations of USB devices as follows,

icon	mode name	description
	Dual-Mode	a Virtual CD-ROM (ODD) and a physical HDD.
	CD(ODD)-Mode	a Virtual CD-ROM (ODD). (the best compatibility for boot).
	HDD-Mode	a physical HDD.

- 1 To enter menu mode, press [Menu], (2531, press **Jog button for 3 Seconds**). To select sub menu or item press [6] or [Enter]. (2531, press Jog button). Select menu item [Mode Select]

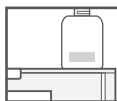
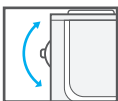


- 2 select the mode to change, and then IODD will reboot with that mode. the **mode icon will be changed to related icon**.



💡 TIP # Mode Change Startup key

IODD-2531 has this key. during startup, turn Jog switch as follows



Jog Switch up/down&hold

UP - CD -Mode

Down - HDD Mode

Write Protection Function

■ IODD Write Protection enhances as followings

1. logical and physical write protection / 2. safeguard against Virus
3. forensic data / 4. less read write than normal mode when USB connection

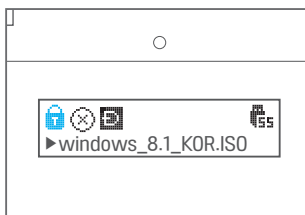
1

select menu item as follows.
2541 - [USB control] / 2531 - [advanced]



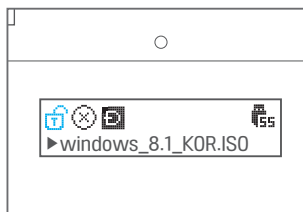
2

Check [Write Protect] checkbox. and IODD will reboot. [you can confirm the related !\[\]\(3e2231b1ad3ca8da8658228c00dd08e0_img.jpg\) icon](#)



3

You can set write protection disabled by unchecking the checkbox. [the related icon is !\[\]\(4fe57c3593bf1b21d272ae7ac8dfaf77_img.jpg\)](#)



Cautions

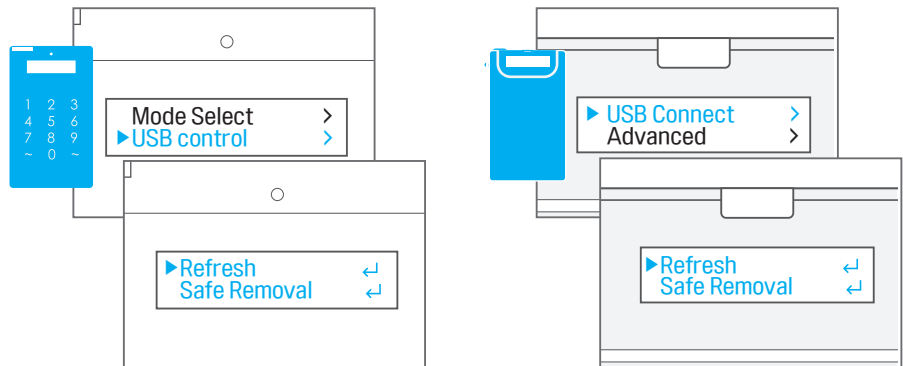
- If write protection is enabled, you can not format, write, copy, and move to IODD.
- If IODD has a error in reading or writing, then connect it directly to your motherboard via sata or IDE, and test the HDD. if the HDD has an error, then please contact the HDD manufacturer.

USB Safe Removal / Reconnection

- without stopping spindle motor, frequent USB disconnection can cause HDD defects. The best way to disconnect USB is as follows
 - safely remove USB device in OS.
 - if IODD is in power saving mode, disconnect the IODD.

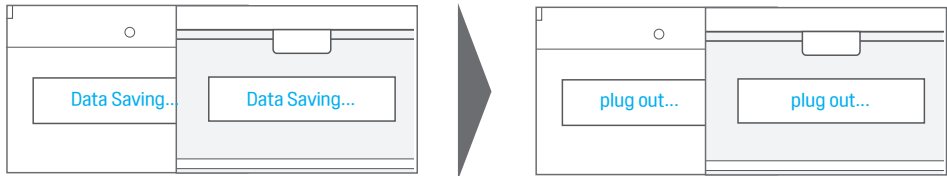
Commands in IODD (the second best method)

select menu item as follows. 2541 - [USB control] / 2531 - [USB Connect]



⚠ You should remove USB HDD by safely ejecting if they are formatted with NTFS or you have a higher risk of data corruption.

- If following message is displayed, disconnect the cable.





Commands in OS (the best method)

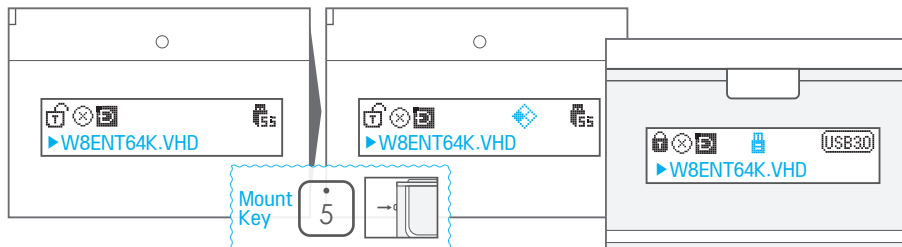
- If you safely remove the USB device, then please wait until IODD is in power saving mode. If IODD does not enter power saving mode in 5 seconds, please do manual power saving command as follows.



TIP # USB Reconnect / Removal Shortcuts

- Save loading status and safely remove
- USB Refresh
- Jog Swith down&hold Save loading status and safe removal

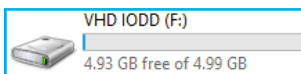
Mounting virtual drives

- 1** Mounting virtual drives is similar to mounting ISO. If you select VHD (or RMD) file, the file will be mounted as USB disk drive (or flash drive). The related icon is as follows.
2541 [] / 2531 []



- 2** Up to four VHD files can be mounted simultaneously. You can see the mounted VHD file number icons. IODD-2541 shows different icons depending on the number of mounted VHD files [ ~ ]

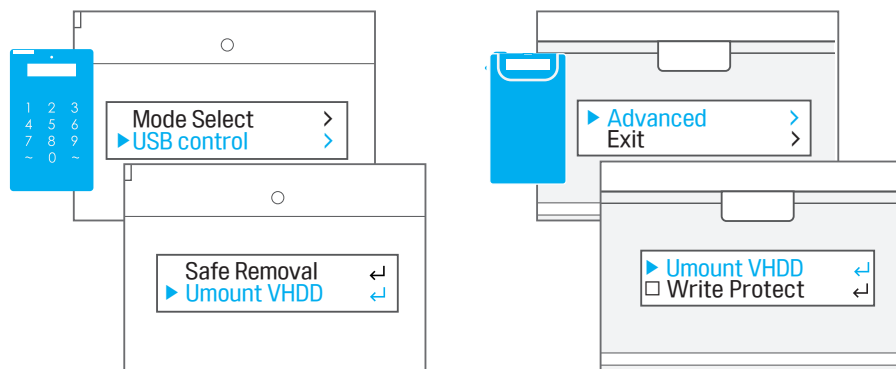
 When using the virtual disk function, hard disk space (for real HDD) for safety is write-protected state is the default.




- 3** VHD is mounted as USB fixed drive, and you can see the related icon in file browser.

Unmount

select menu item as follows. 2541 - [[USB control](#)] / 2531 - [[Advanced](#)]




 If VHD is mounted, Mode changes to the CD-ROM mode.
If VHD is mounted, the main mode is changed automatically to the [CD Mode].
If you want the VHD to boot with [Dual Mode], [[See Next page](#)]

Virtual HDD(VHD/RMD) Function Precautions

■ VHD filename option

According to VHD filename, IODD LUN mode is determined. default is CD-MODE.

Ex) IODD.VHD : CD-MODE / IODD.&D.VHD : DUAL-MODE,Write Protected / IODD.&DW.VHD : DUAL-MODE, write Enable

 This warning is only in the case when using virtual drive as an operating system.(or Win-To-Go)
If you use Virtual drives with "&DW" option, then you must not do as follows:

- 1** You must **not defrag** the real drive (IODD main drive).
- 2** You must **disable any automatic defrag service**.
- 3** You must **not move the RMD(VHD) file** that is been using.

Most important

If you use virtual drives with "&DW" option and violated the above cautions,
then the IODD will have fatal errors and the data will be corrupted.

TIP # VHD/RMD Unmount Shortcuts

5

ISO/VHD/RMD
Mount or Unmount

7

All VHD/RMD
Unmount



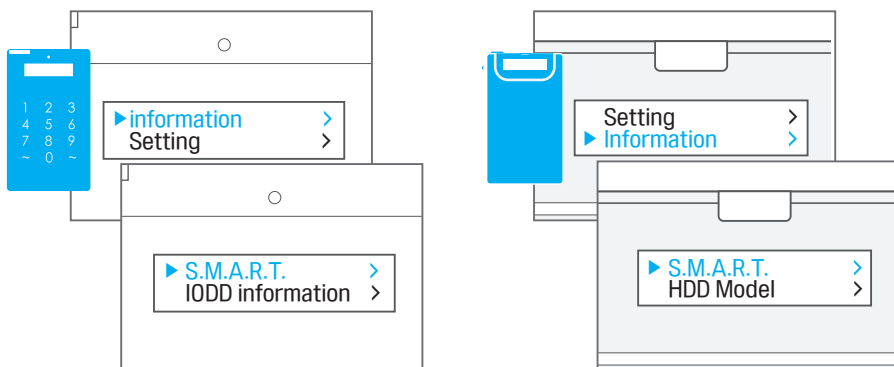
Back/up Key **press&Hold**
All VHD(RMD) Unmount

S.M.A.R.T / IODD information

- You can check the S.M.A.R.T. information of the HDD.
You can see the detail information of IODD.

How to enter

- select menu item as follows: 2541 / 2531 - [\[information\]](#)



Menu items Information

	2541	2531	Description
S.M.A.R.T	S.M.A.R.T Menu	S.M.A.R.T	Check HDD Condition GOOD / BAD / Warning
HDD Model		HDD Model	Check HDD Model
HDD Serial		HDD Serial	Check HDD Serial
HDD Temp		HDD Temp	Check HDD Temperature
Firm Ver	IODD Information Menu	Firmware ver	Check Device's Firmware version
USB Speed		USB Speed	Check USB connection speed
USB input V		USB input volt	Check USB current Voltage
USB Low v		N/A	Check USB lowest Voltage

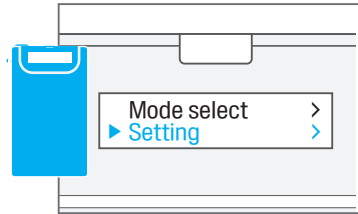
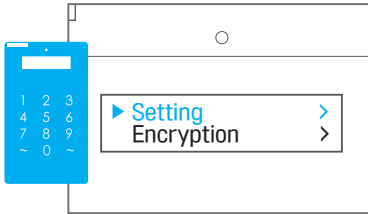
Note of S.M.A.R.T. information

- All HDD or SSD do not support this function.
This information are due to HDD or SSD, not to IODD.

Setting / Language

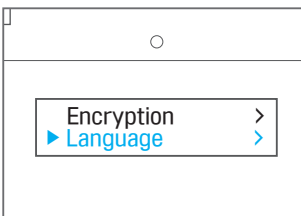
LCD Brightness setting

- select the menu item as follows: 2541 / 2531 [Setting]



Sub menu item descriptions.

Menu	Description
LCD Bright	adjusts LCD back-light brightness
Idle Bright	adjusts LCD back-light brightness in power saving mode
Standby time	adjusts the inactive time before power saving mode is active
Load Default	restores all settings to their default values



Language

IODD-2541 supports Multi-languages. [language] menu item is last item on the top menu list.

Multi-languages are as follows: [English][Korean][Chinese][Japanese][Russian] If you select a language, the menu language will be changed immediately.

Instant Save

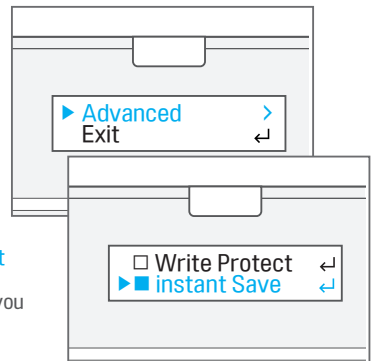
Function in [Advanced] menu.
for 2531 only. 2541 supports this functionality as a shortcut.

loading information will be saved instantly

If this option is checked and you select a ISO image, then **current loading state is saved instantly.**

If this option is unchecked and you want to save loading state , then you must save it manually.[Down Jog switch for 3 Seconds]

firmware version 1558 or later supports this.



TIP. Remove all non-present devices from Windows PC

- **Device Cleanup Tool** is a free portable tool that lets you remove multiple or all old, non-present, unused, previous hardware devices from your Windows computer. Windows may disable persistently devices that had an error at once in the past.

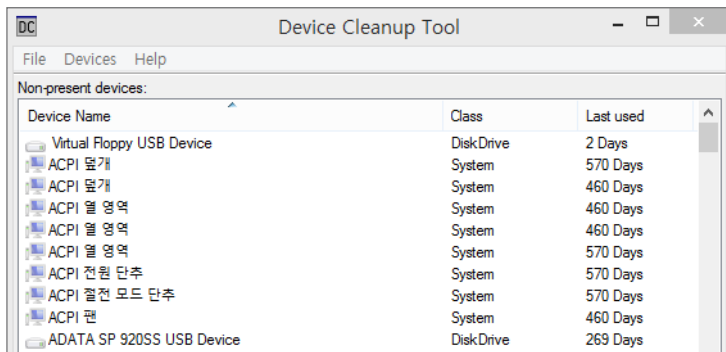
Device Cleanup Tool Download

Download link

<http://www.uwe-sieber.de/files/devicecleanup.zip>

Run Device Cleanup

uncompress it to a proper folder. [run EXE file as administrator](#).



In the **[Devices]** menu and select **[Select All]**.

If all devices are selected, **[Devices]** menu and select **[Remove Selected]**.

After the longest wait 10 minutes, when the operation is complete,

reboot the PC twice.

CHAPTER 2 Finished

- **Congratulations.** Thank you for coming up here.

The next chapter is a guide for virtual hard drive function guide.

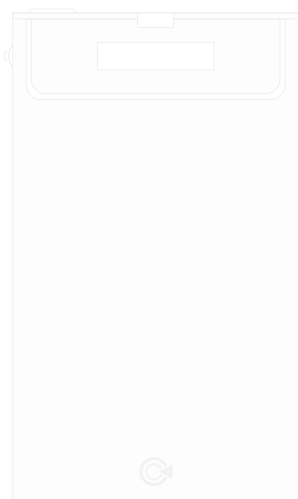
CHAPTER 2 is enough to basic guide of IODD.

Menu Tree / Error Messages / First Aid, please refer to the [[last chapter](#)]

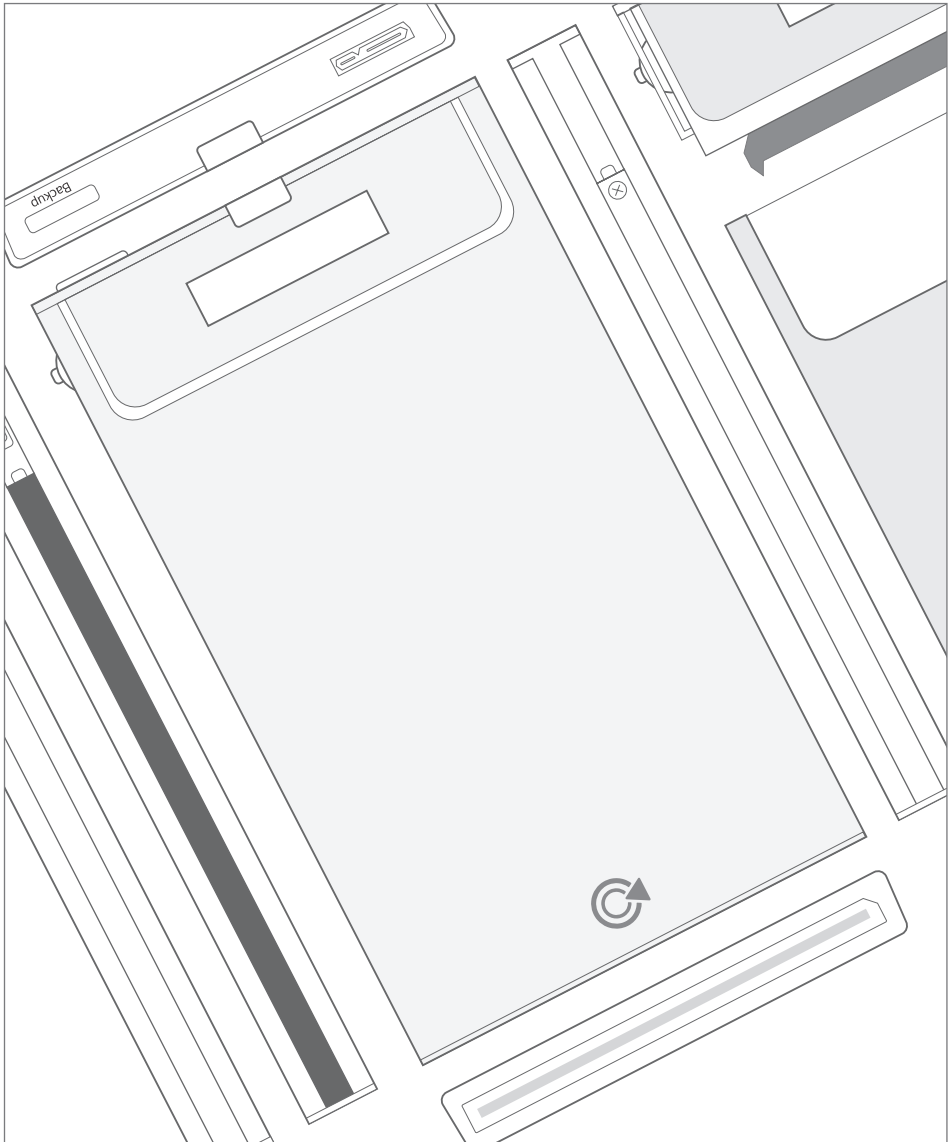
- For the latest information, please visit the [official site](#) and [IODD Wiki](#)

[Official website - http://www.IODD.kr](http://www.IODD.kr)

[IODD Wiki - http://en.IODD.kr](http://en.IODD.kr)



CHAPTER 3. Advanced User Guide



- This chapter will guide you through the advanced use. The overall knowledge of computing is required. Beginners please read and fully mastered basic functionality.

create a VHD file by VHD Tool

What is the VHD file

VHD (Virtual Hard Disk) is Windows virtual hard disk drive image file.It is like physical HDD.
Selecting a VHD file means Mounting a HDD drive.IODD 2531/2541 is Max 4 VHD files can be mounted.

1 Download VHD_Tool++ utility software.

You can download from followings,

- IODD Official Site download page

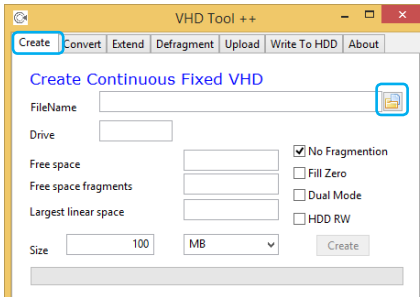
<http://IODD.kr/wordpress/support/download/>


- IODD Official FTP

<ftp://sps.IODD.co.kr/>

2 Run VHD_Tool++

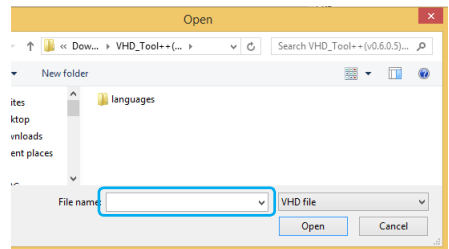
At first,connect IODD to PC. and run this tool.



This tool has many functions, but here is mentioned only **[Make VHD]** function. If you select the first **[Create]** tab at the top, you will see a screen like the left. First, please click on the icon  to create a VHD file.

Navigate to the location (folder) that a VHD file will be created on. Enter the name of the VHD file on the area **marked in blue box**. and click **[Open]**. The file name can be changed after creating.

✘ You can create it only on the HDD in IODD.



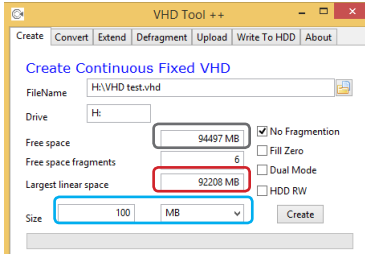
VHD file size settings

- VHD(fixed) is occupies the created size without the data. Determine the size carefully when you want to create.
- Variable VHD(VHDx) files are not supported.

3

size and options of VHD

Select the size and options of VHD. The picture below is sample.



How to find the largest size of VHD file to make.

- 'Free space' shows the total free space of HDD.
- 'Largest linear space' shows the **max size of VHD to make**.
- If you enter a **smaller size** than 'Largest linear space' on 'Size' input window, the VHD file can be made.

About 'Largest linear space'

'Free space' does not means you can use all the free space. If 'Largest linear space' is lower than the target, please defrag the drive. The VHD file can be generated only in linear free space.

4

Change the file name(Option)

VHD(RMD) file determines the mode based on the file name.



VHD filename option

According to VHD filename, IODD LUN mode is determined. default is CD-MODE.

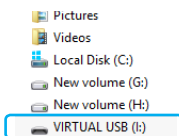
Ex) IODD.RMD : CD-MODE / IODD&D.RMD : DUAL-MODE,Write-Protection

IODD&DW.RMD : DUAL-MODE, Write-Enable

5

Mount

Select the file in IODD like selecting *.ISO file.



If mount is successful, 'Formatting is needed' message box will appear.

Format the drive as FAT32 or exFAT or NTFS. and the drive like the left picture will appear.

more information -refer to [\[VHD Mount/Unmount\]](#)

! if the format fails?

- There is a possibility that the VHD file is created incorrectly.Please delete the VHD file and re-created.

Make a bootable USB drive with Rufus

Using the virtual USB thumb drive image file (*.RMD), it can be bootable in the motherboards that can not be booted with USB DVD-ROM.

It can be especially useful for cases where :



- you need to create USB installation media from bootable ISOs (Windows, Linux, UEFI, etc.)
- you need to work on a system that doesn't have an OS installed
- you need to flash a BIOS or other firmware from DOS
- you want to run a low-level utility

Prerequisites

To follow this guide, you will need :



- IODD-2531 or IODD-2541 with HDD or SSD.
IODD 2541 - [69_B04, 79_B04](#) / IODD 2531 - [1555](#) Firmware or later
- an Bootable ISO file
- Windows XP or higher
- VHD_Tool++ (It's free for IODD user)
- Rufus tool (free ware)



TIP # Change VHD file to RMD file

According the extension, **VHD** is recognized as external HDD. and **RMD** is external USB thumb drive.



win8.vhd



win8&DW.RMD

what is Rufus?

Rufus is a utility that helps format and create bootable USB flash drives, such as USB keys/pendrives, memory sticks, etc.

1

Download the latest version

You can download from Rufus official site.

- Rufus Official Website

<https://Rufus.akeo.ie/>

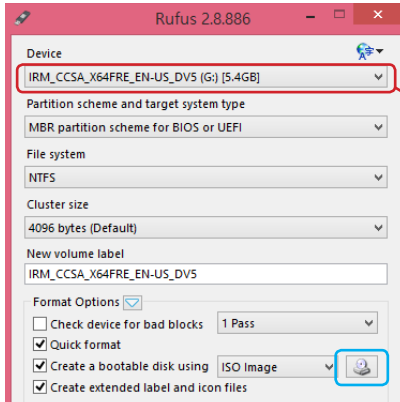
Setting BIOS

It depends on the motherboard manufacturer.

It is the best way to refer to the manual or to contact the motherboard manufacturer.

2 Run Rufus

Connect IOVD with mounted RMD, and Run Rufus.



The same picture on the left will appear.

⚠ **Caution** : You must select the drive of IOVD virtual drive.

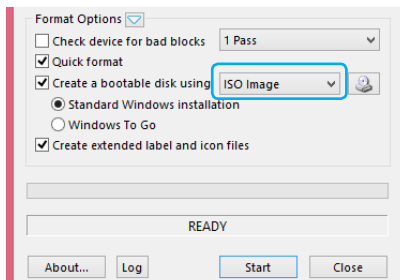
- This label will be the volume label name of the drive.

If all options are selected, click the button

 in blue rectangle.

3 Select an ISO file to make USB drive.


You can make a bootable device to install OS



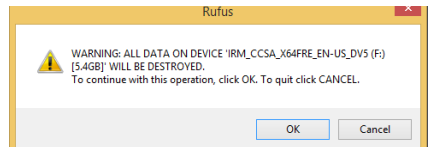
Select and open ISO file.

Automatically the combobox in blue rectangle will be changed appropriately.

[Free dos > ISO image](#)

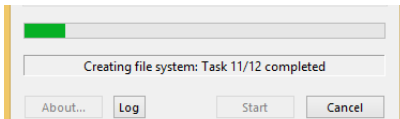
If all options are selected, press the  button below.

Press the button 



4 bootable USB completion and verification

Check the virtual USB drive



All operations will be completed.

Check the file and folder structure and properly are created.

💡 TIP # VHD/RMD Unmount Shortcut

5 ISO/VHD/RMD Mount or Unmount

7 all VHD/RMD Unmount

 Back/Up Key press&Hold all VHD(RMD)Unmount

Windows-To-Go Guide

What is **Windows-To-Go** ?

Supports Win to go ~ Portable personal computer - After installing Windows 8 into IODD directly, you can carry it and boot and use freely with IODD in any PCs

If you use IODD Win to go, you can operate roaming system that nobody can copy or peep.

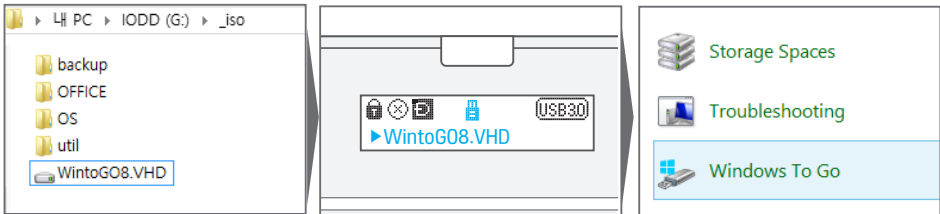
This section will guide you. (1) Install in the Windows Control Panel (2) Install the Rufus program through

Install in the Windows Control Panel

To Install through the Control Panel, the following two items must be prepared.

- Windows 8 install DVD or ISO file (Enterprise version or high)
- The installation destination that IODD2541 / IODD2531

- 1 To create a VHD file in the `_iso` folder [create a VHD file by VHD Tool], Mount the created VHD file. And run the [Windows-To-Go] in Control Panel.



- 2 Select the **mounted drive (VHD)**. And mount the **original Windows installation DVD or ISO file**, and select the **version** you want to install.



- 3 Skip to [Bitlocker encryption] dialog. When you click [Create] to begin the installation. (This may take a long time depending on the media and PC specification)

TIP # Win-to-go only the VHD file size
Win-to-go Minimum recommended size is 32GB,
But the recommended size of **50GB or more** for use.

Install the Rufus program through

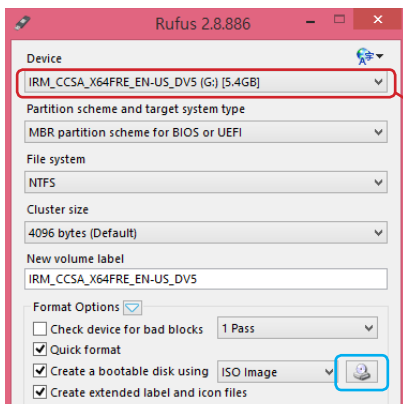
To Install through the Rufus Program the following two items must be prepared.

- Windows 8 install DVD or ISO file (Enterprise version or high)
- The installation destination that RMD file in IODD

1

Run Rufus

Connect IODD with mounted VHD, and Run Rufus.



The same picture on the left will appear.

⚠ Caution : You must select the drive of IODD virtual drive.

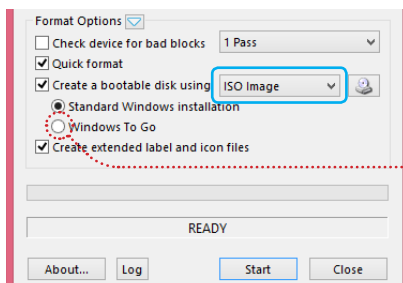
- This label will be the volume label name of the drive.

If all options are selected, click the button  in blue rectangle.

2

Select an Original Windows ISO file to make Win-To-Go drive.


After selecting an ISO file, you see the screen below, check the  Windows To Go



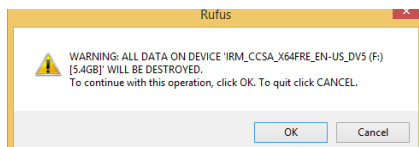
Select and open ISO file.

Automatically the combobox in blue rectangle will be changed appropriately.

Free dos > iso image

⚠ In the case of Windows 8 Enterprise Edition or higher only. This Windows-To-Go option is activated. Windows-To-Go options are selected, press the  button below.

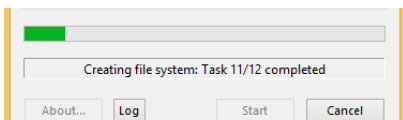
Press the button 



3

Win-To-go install and verification

Check the windows to go drive.

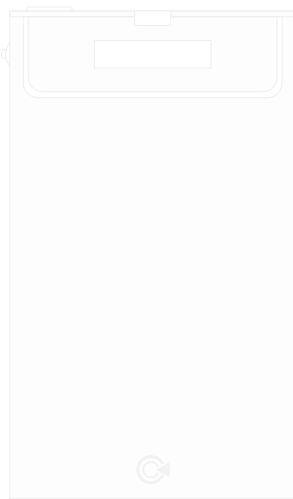


All this work has been completed.

Make sure the drive for Win-to-go is installed correctly.

CHAPTER 3 Finished

- **Congratulations.** Thank you for coming up here.
Please continue firmware updates for new features.
- For the latest information, please visit the [official site](http://www.IODD.kr) and [IODD Wiki](http://en.IODD.kr)
 - 🔗 [Official website - http://www.IODD.kr](http://www.IODD.kr)
 - 🔗 [IODD Wiki - http://en.IODD.kr](http://en.IODD.kr)

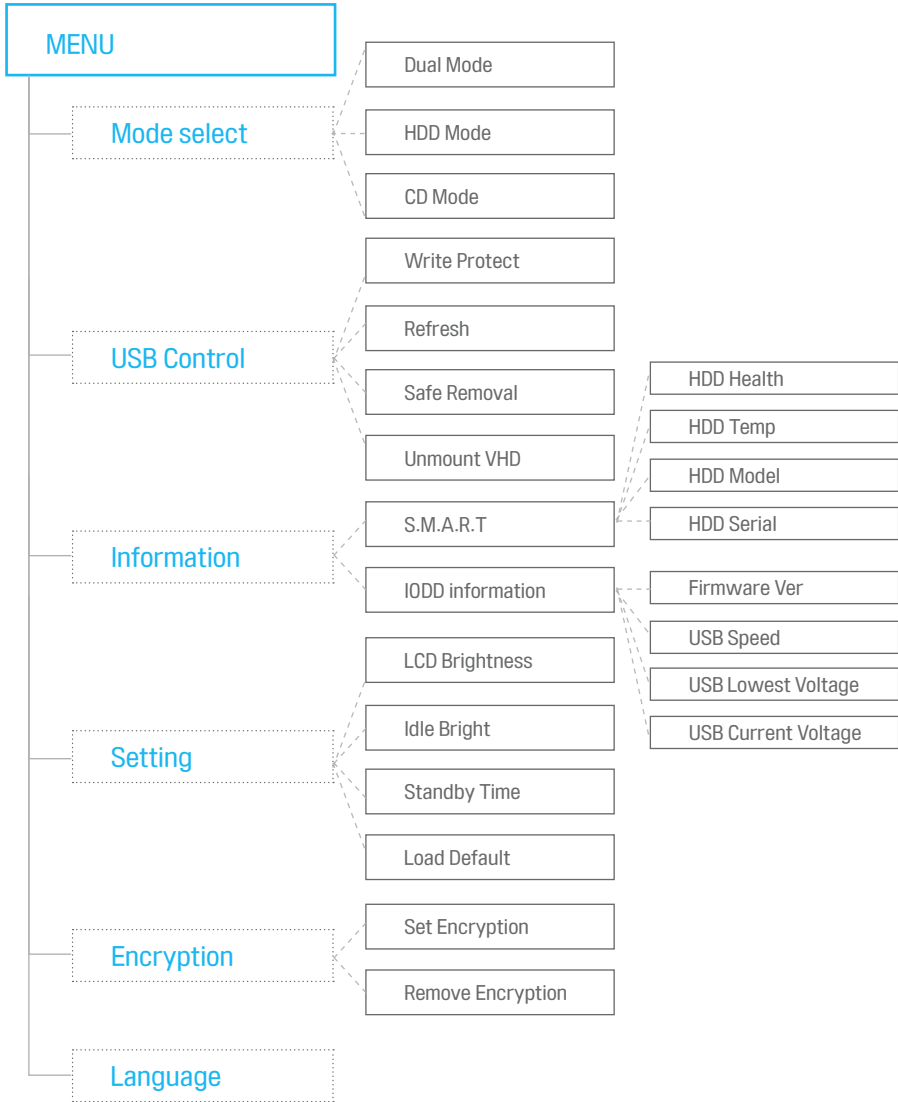


CHAPTER 4. Menu Tree / Error Messages / First Aid

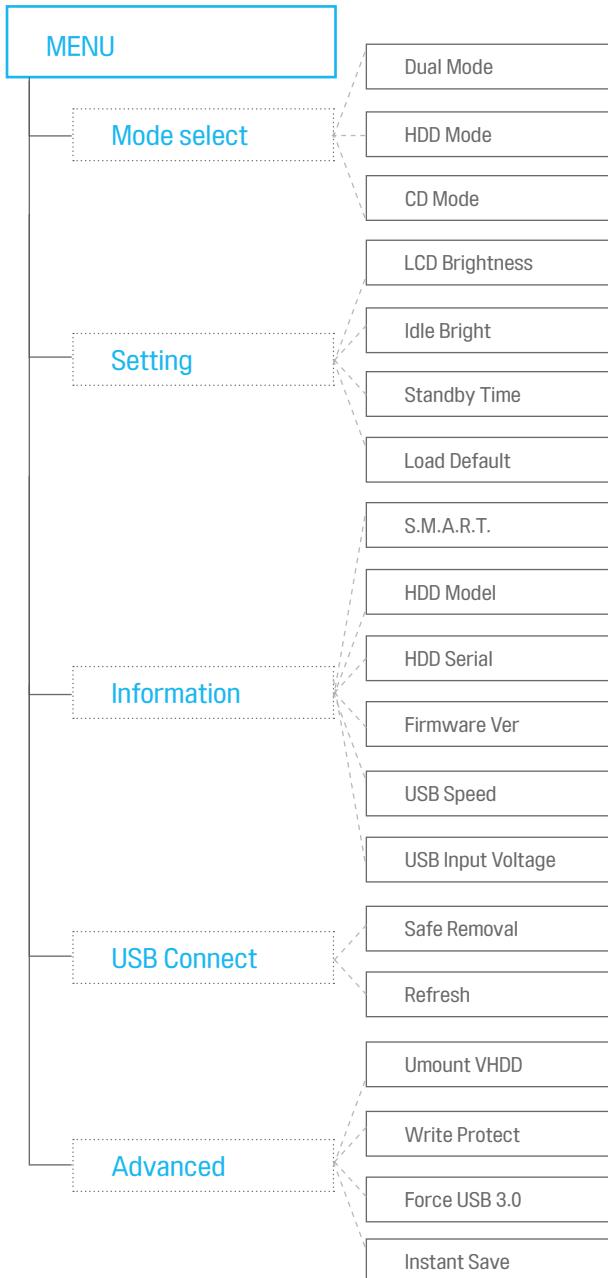


- The last chapter contains a Appendix, and more

2541 Menu Tree



2531 Menu Tree



Error Messages

■ If LCD message shows like the followings

Check HDD

Do [🔗 \[First Aid\]](#)

ChkDsk (or gErr) : xxx

Do [🔗 \[First Aid\]](#)

1st Partition

This error occurs when the Firmware and the First Partition of IODD is not matching. Please Check the above [\[Virtual ODD function Setting\]](#) section.

bad or N/S HDD

Because IODD does not read the internal HDD.
Please change the HDD or USB cable.

Too Many Files

IODD can list [max 32 files or sub folders in current folders](#).
Please use sub folders to avoid many files in a folder

NO _ISO Folder

Make a folder named [_ISO](#) at root folder.

NO - DISC

Because there in [no files or sub folders in _ISO folder](#).

Disc Locked

Because the OS or a application has locked the ODD drive at any reasons.
[Solution is to re-connect the IODD.](#)

DEFRAG

ISO file can have max 24 fragment in physical sector address. VHD and RMD must have no fragment.
[To solve this situation, please do Disk Defragmenter for Disk Defragmentation.](#)

vDISK Limit

[The max number of Virtual disk drives is 4](#), You may select more than 4 Virtual drives

Already Hit

[You may select the file that have been selected yet.](#)

Not Use Dynamic

The VHD file selected is Dynamic VHD file. [fixed VHD is only supported.](#)

Not Use Sparse

The [sparse image file is not supported](#) as Virtual Drive.

First Aid

If it has failure suddenly,
try one of next steps until the error is clear

- (2531) Jog button press&hold, and connect IODD to PC.
- try Safely Removal In OS.
- Check Disk for IODD (for Windows)
- Rename `_ISO` folder name to other name. Create new `_ISO` folder, and copy files to this folder. (not moving)
- Update with the latest firmware. [↗ \[Download lastest Firmware / installing Firmware\]](#)
- Backup the data of IODD, and Initialize All

If there is hardware problem

1. Reboot the PC
2. Please change USB cable
3. Connect IODD to the port of PC back panel.
4. Try it on another PC
5. Please change HDD.

🔧 CS and Technical support / Business



Technical support & Business

For English

Contact Alex Koh



Technical support

For Chinese

Contact Roy Che



IODD Wikipedia

For Multilanguage



Customer Services

For Amazon

Contact Email



IODD Official Website

Address | 714, 16-25,
Dongbaekjungang-ro 16beon-gil,
Giheung-gu, Yongin-si, Gyeonggi-do 17015, Rep. of KOREA



IODD CO.,LTD.

714, 16-25, Dongbaekjungang-ro 16beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do 17015, Rep. of KOREA

<http://www.IODD.kr>

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