

# Independent Disk Array

———— **Huge Extended Storage Capacity** ————



## User's Manual

Please read instructions thoroughly before operation and retain it for future reference.  
The image shown above may differ from the actual product appearance.

950\_951\_V1.4

# IMPORTANT SAFEGUARD



**CAUTION**

**RISK OF ELECTRIC SHOCK**



**CAUTION:**

To reduce the risk of electric shock, do not expose this apparatus to rain or moisture.

Only operate this apparatus from the type of power source indicated on the label.

The company shall not be liable for any damages arising out of any improper use, even if we have been advised of the possibility of such damages.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



**CE Mark**

This apparatus is manufactured to comply with the radio interference requirements.



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# PARTS AND FEATURES

## 1.1 FEATURES

### Independent Disk Array (IDA) Features

- ❖ Huge Extended Storage Capacity
- ❖ Support Hub Function (Hub Disk Array)
- ❖ Automatic Detection when Connected to DVR
- ❖ Easy Set-up and Use
- ❖ System Alarm LED Light Notification
- ❖ High Expandability and Reliability
- ❖ Support all types of 3.5" / vendor Hard Disk Drive
- ❖ Accommodates 3 IDE Hard Disk Drives

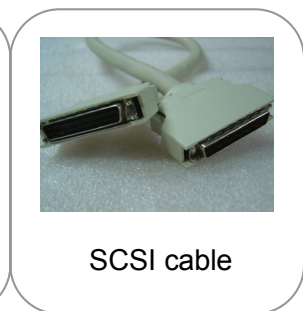
## 1.2 PACKAGE CONTENTS



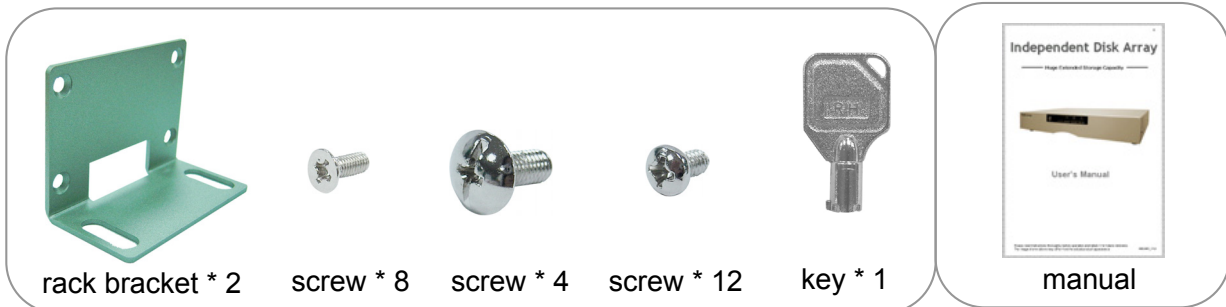
Independent Disk Array



adapter



SCSI cable



rack bracket \* 2

screw \* 8

screw \* 4

screw \* 12

key \* 1

manual

### NOTE :

Please check the package contents to make sure that you receive all accessories shown above.

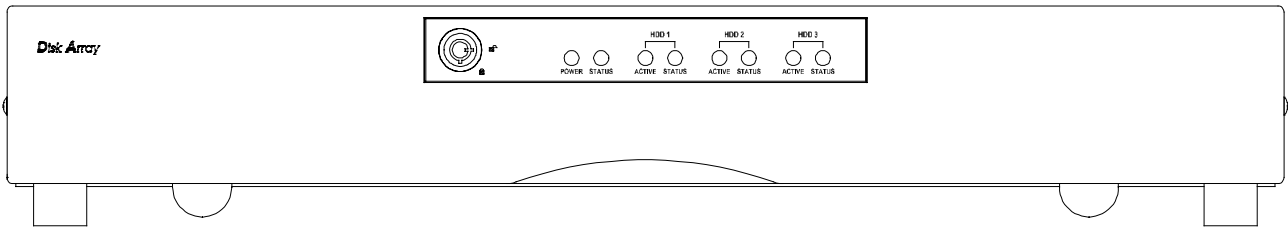
## 1.3 SPECIFICATION

Item	Disk Array	Hub Disk Array
Host Port Interface	1 x IDE interface ( with SCSI cable )	
Device Port Interface	No	3 x IDE interface
HUB Function	No	Yes
Operation Modes	JBOD (Just A Bundle of Disks) alike	
HDD Interface	ATA-6 (T13/1410D REV3) DMA100	
Number of HDD Bases	3 (Support all type 3.5" / vendor hard disk drive)	
HDD File Transfer Speed	Ultra DMA/100/66/33	
Power Supply	19 V	
Current Consumption	2.3 A	
Operation Temperature	5°C ~ 45°C (41°F ~ 113°F )	
Dimension(in)	60 (H) x 432 (W) x 304.4 (D) mm	
Gross Weight	7.5kg	

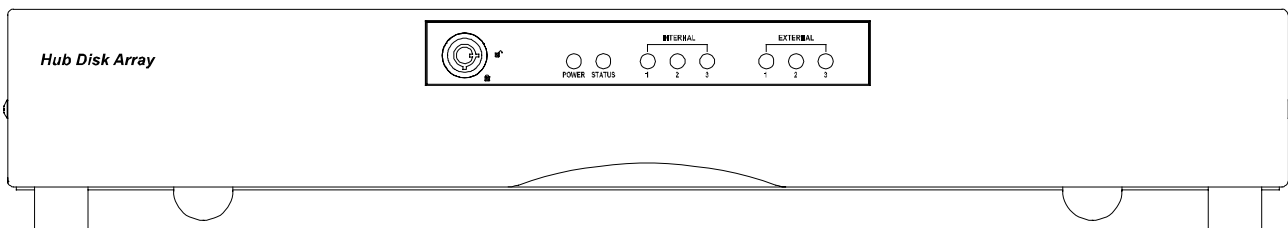
\* The specification is subject to change without notice.

# 1.4 FRONT PANEL

## [ Disk Array ]



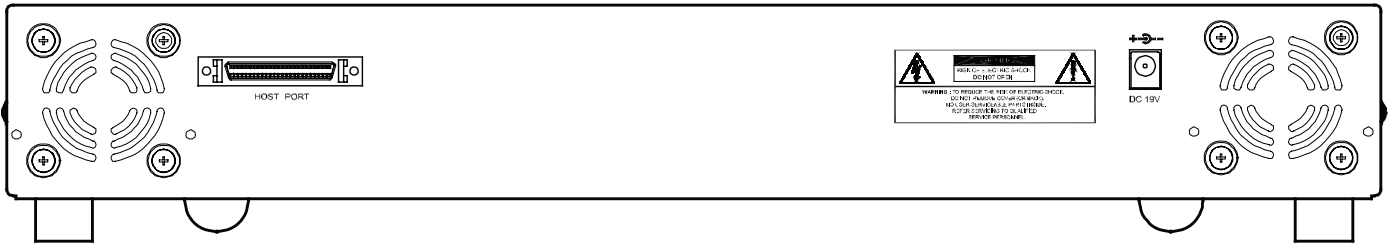
## [ Hub Disk Array ]



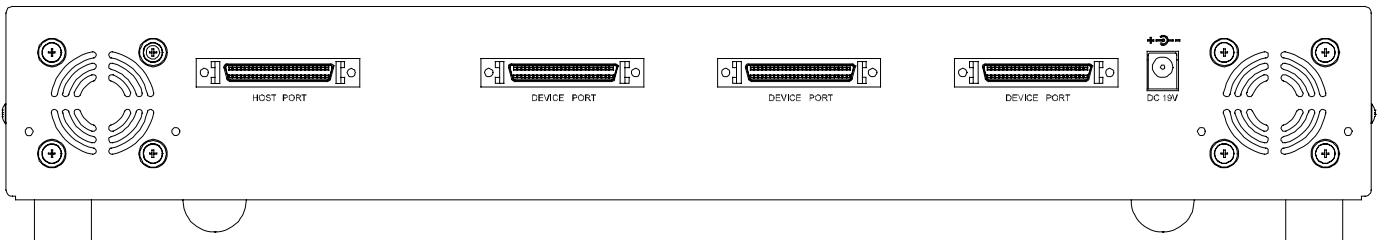
- 1) **POWER:**  
When the power is on, the POWER LED light will be shown as green.
- 2) **STATUS:**  
In the events of hard disk failure or other malfunctions, the STATUS LED light will be shown as red.
- 3) **HDD1\_ ACTIVE / STATUS:**
  - \* When the HDD is working, the ACTIVE LED light will be flashing in red.
  - \* When the HDD is detected, the STATUS LED light will be shown in green.
- 4) **HDD2\_ ACTIVE / STATUS:**
  - \* When the HDD is working, the ACTIVE LED light will be flashing in red.
  - \* When the HDD is detected, the STATUS LED light will be shown in green.
- 5) **HDD3\_ ACTIVE / STATUS:**
  - \* When the HDD is working, the ACTIVE LED light will be flashing in red.
  - \* When the HDD is detected, the STATUS LED light will be shown in green.
- 6) **INTERNAL 1, 2, 3 / EXTERNAL 1, 2, 3:**
  - \* When the HDD is working, the LED light will be flashing in red.
  - \* When the HDD is detected, the LED light will be shown in green.

# 1.5 REAR PANEL

## [ Disk Array ]



## [ Hub Disk Array ]



- 1) **HOST PORT:**  
Connect to DVR with a SCSI cable (IDE interface).
- 2) **POWER:**  
Connect to the provided adapter.
- 3) **DEVICE PORT (Hub Disk Array Only):**  
Connect to a disk array with a SCSI cable (IDE interface). Each hub disk array can connect up to 3 disk arrays. For connection details, please refer to P6.

**NOTE:** The maximum number of HDD that the disk array system can manage is 39.

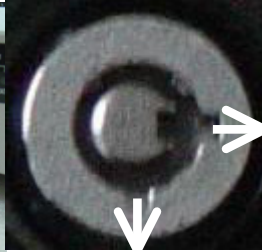
# INSTALLATION AND CONNECTION

## 2.1 PHYSICAL CONNECTION

- 1) **Install HDDs:**  
Follow the steps below to install HDDs.



Unlock the HDD tray



Lock

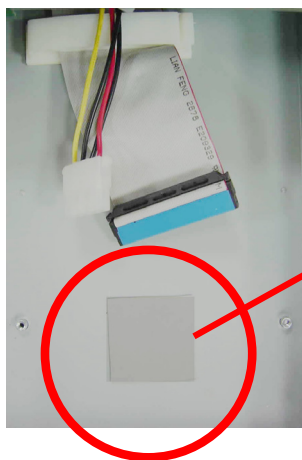
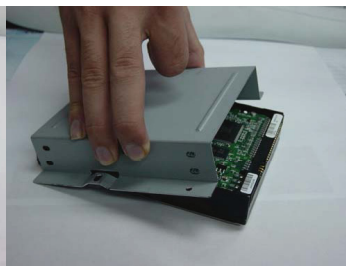
Unlock



Pull out the HDD tray

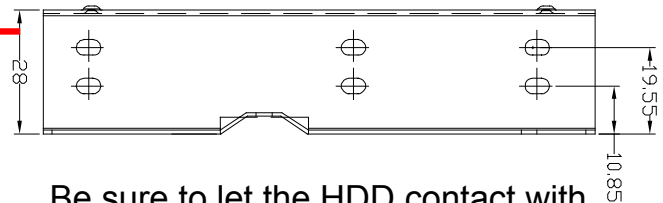


Screw the HDD into the HDD bracket



HDD bracket

Thermal  
conductive  
silicone  
rubber

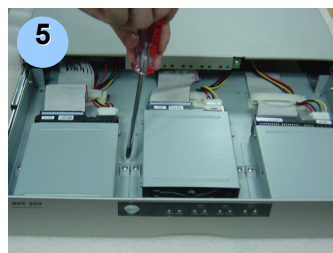


Be sure to let the HDD contact with the silicone rubber.

The normal height of HDD is 10.85 or 19.55 mm. Base on the height of HDD, please screw the HDD onto different height screw holes.



Connect the HDD to the power bus and data bus and secure the connection



Secure the HDD bracket to the IDA



Close and lock the HDD tray

**NOTE:** Please set the HDD as "Master" or "Single" mode (Do not use "Slave" mode).  
It's NOT recommended to use "Cable Select" mode for the HDD detection might get wrong.



2) **Connect all disk arrays with SCSI cables and turn the power on (hub disk array only):**

Connect all disk arrays to the provided adapters.

Connect all disk arrays with SCSI cables:

Connect from one of the three device ports at one IDA rear panel to the host port of another disk array.

One disk array (as the master layer) can connect up to 3 disk arrays as the second layer, and each disk array in the second layer can respectively connect up to 3 disk arrays as the third layer.

For details, please refer to the illustration below.

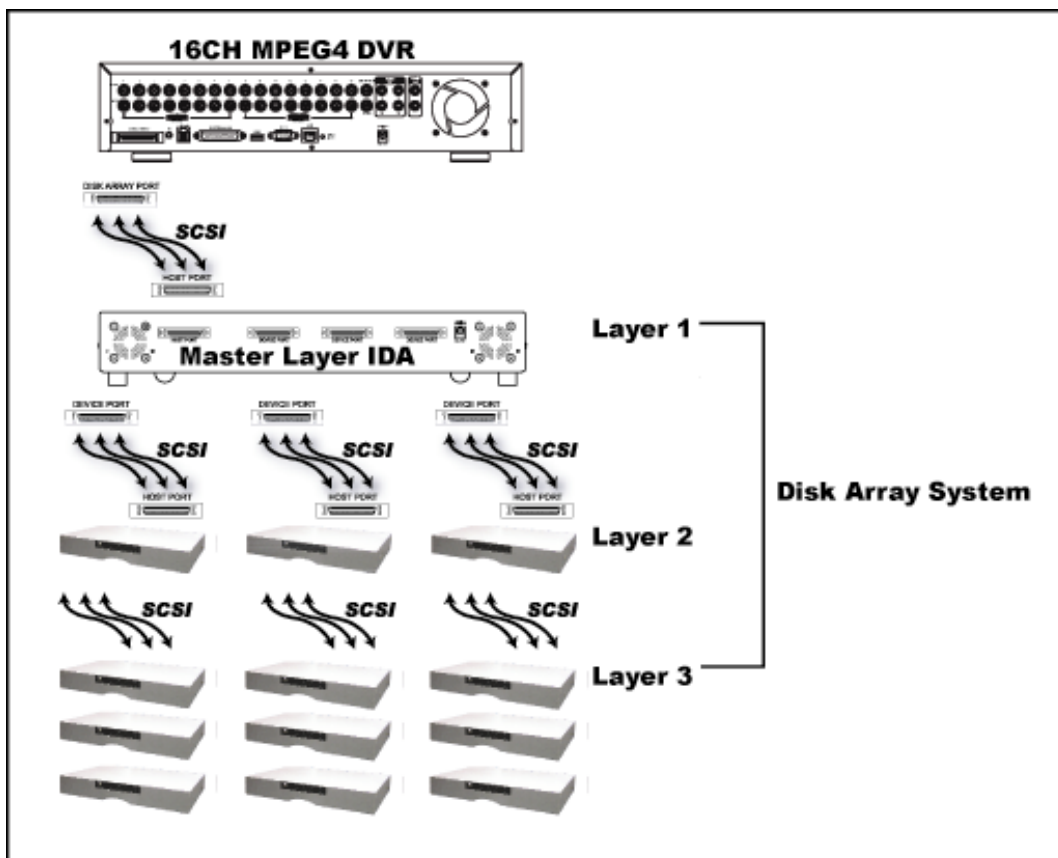
**Note:**

The maximum layer number is 3, totally 13 IDA.

In order to accurately detect all the connected disk arrays, please make sure to turn on the power of all the disk arrays after the connection is completed.

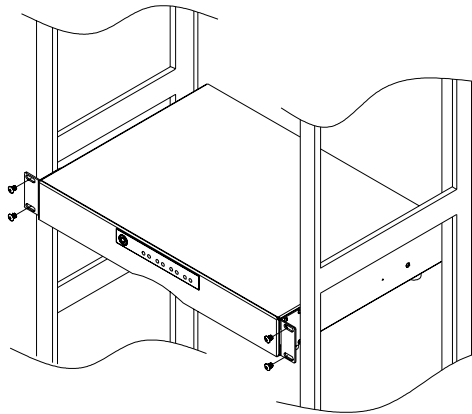
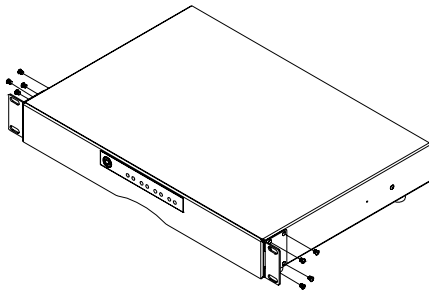
2) **Connect to DVR with a SCSI cable :**

Connect the host port of the master disk array to the “DISK ARRAY” port of your DVR. Please refer to the illustration below.



## 2.2 SECURE IDA

- 1) Use the “L” shaped rack bracket  to fasten the IDA to the shelf.



- 2) Use the “L” shaped rack bracket  to fasten the IDA to the desk.

