

DIGIEVER

Quick Installation Guide

DIGIARRAY

DA-4000E

1.0.0.3



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Quick Installation Guide

Thank you for choosing DIGIARRAY DA-4000E. The following quick guide will lead you to complete the installation and configuration of the DIGIARRAY. Please read the following description carefully.

Important Notice:

- For turn on (DIGIARRAY→NVR):
 - ◆ Please turn on DIGIARRAYs first and follow by NVR.
- For shut down (NVR→ DIGIARRAY) :
 - ◆ Please shut down NVR first and follow by DIGIARRAYs.

① Create RAID of DIGIARRAY

⚠ Note: Please do **not** connect DIGIARRAY to DIGIEVER NVR when setting RAID type.

Please follow the below steps to create RAID:

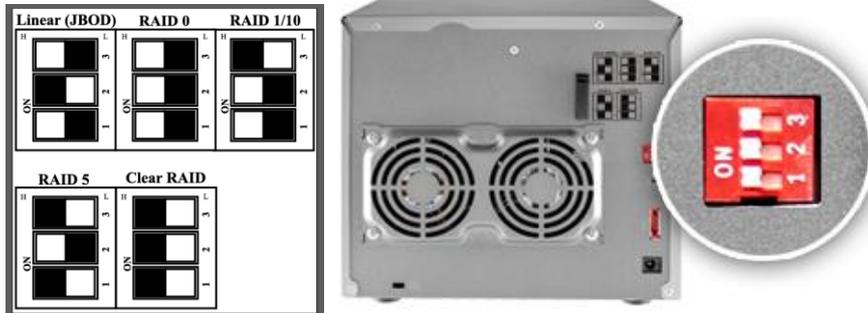
1. Put the HDDs into DIGIARRAY
2. Adjust DIGIARRAY's RAID type to "**Clear RAID**" on the rear panel of DIGIARRAY.



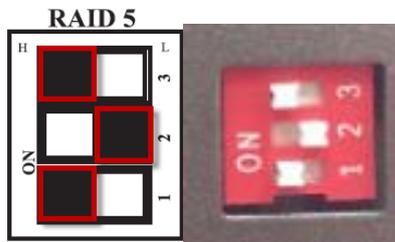
3. Simultaneously press "**reset button**" and "**power button**" until there is a beep sound. When DIGIARRAY powers on with a beep sound, the RAID configuration is done.
4. Press the power button to power off DIGIARRAY

5. Set up desired RAID type via dip switch on the rear panel of DIGIARRAY

⚠ Note: On the sticker, please refer to **black color** as RAID configuration.



For instance, if you would like to set up RAID5, the dip switch should be High/Low/High as below.



6. Simultaneously press "**reset button**" and "**power button**" until there is a beep sound. When DIGIARRAY powers on with a beep sound, the RAID configuration is done.

⚠ Note: User can use the paper clip in the accessory box to press the reset button.

② Connect DIGIARRAY to DIGIEVER NVR

Please connect your DIGIARRAY to a DIGIEVER NVR via **eSATA cable**.

DIGIARRAY is equipped with an **eSATA hook** to fix eSATA cable in order to prevent losing eSATA cable.



LED Indicators Status

LED indicator helps users to check HDD status and eSATA connection status.



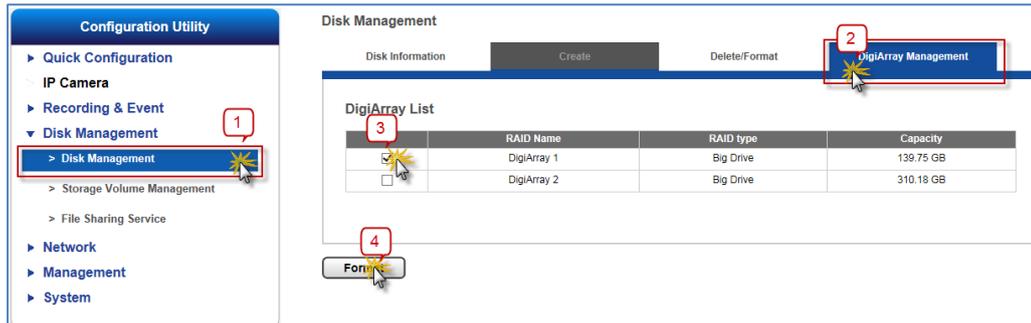
LED on Front Panel

LED	LED Color & Status	Indicate
eSATA	Off	No data transmission
	Orange blinking	The eSATA device is being accessed
HDD1	Off	Hard disk drive device is not established
HDD2	Green	Hard disk drive is ready to be accessed
HDD3	Green blinking	Hard disk drive data is being accessed
HDD4	Red	Hard disk drive failure and need to be removed

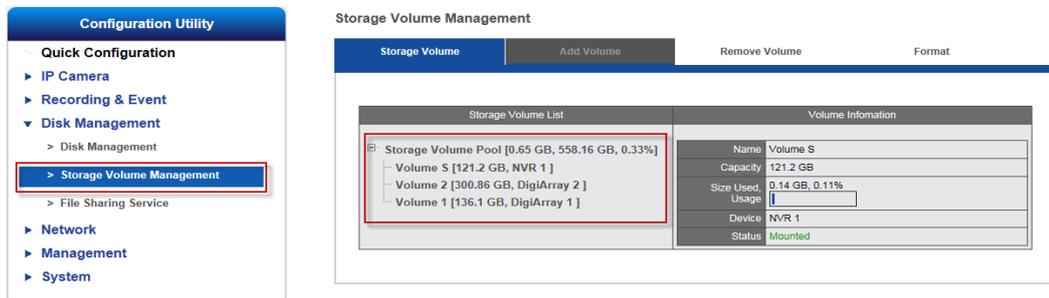
③ Add New Volume into Storage Volume Pool

Please make sure NVR and DIGIARRAY are power on with a complete RAID type, before you start to connect DIGIARRAY to NVR.

1. Go to Disk Management page on NVR configuration page:
Choose the volume which one you want to add into the volume pool and press “**Format**” button.



2. Check the information of storage volume pool from **Storage Volume Management** page.



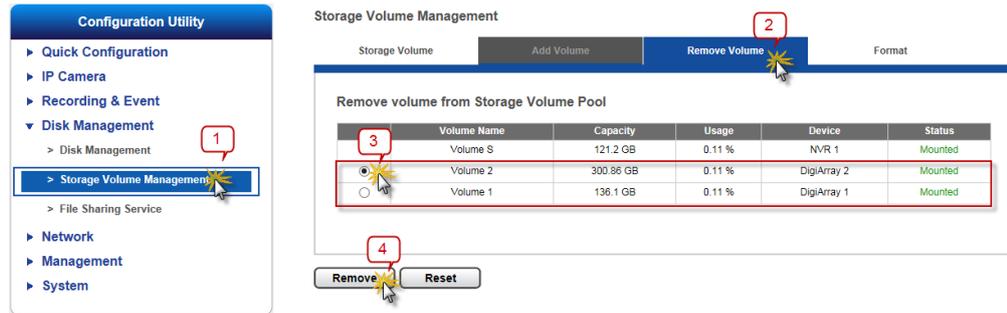
Volume of DIGIARRAY will be added into NVR's volume pool when DIGIARRAY is completely formatted.

④ Change the RAID Type of DIGIARRAY

Please follow below steps to modify the RAID type of DIGIARRAY that has been added to the NVR.

2. Remove DIGIARRAY from NVR

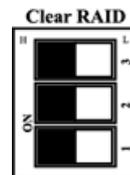
- Remove the volume of DIGIARRAY from **NVR Storage Volume Pool**.



- Unplug the eSATA cable from NVR.
- Power off the DIGIARRAY by pressing its power button until there is a “beep” sound.

3. Clear RAID Type

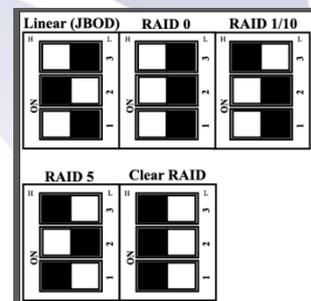
- Adjust DIGIARRAY’s RAID type to “**Clear RAID**” on the rear panel of DIGIARRAY.



- Simultaneously press “**reset button**” and “**power button**” until there is a beep sound. When DIGIARRAY powers on with a beep sound, the RAID configuration is done.
- Press the power button to power off DIGIARRAY

4. Change RAID Type

- Adjust **dip switch** to configure RAID type.
- Simultaneously press “**reset button**” and “**power button**” until there is a beep sound. When DIGIARRAY powers on with a beep sound, the RAID configuration is done.
- DIGIARRAY now is ready to connect to NVR.



⚠ Note: Before change DIGIARRAY’s RAID type, please make sure

1. eSATA cable is unplugged to DIGIEVER NVR
2. DIGIARRAY has been removed from NVR’s storage volume pool.

Appendix:

I. Package Contents

<p>① DIGIARRAY DA-4000E</p> 	<p>② Power adapter</p> 
<p>③ Screw bag</p> 	<p>④ eSATA cable</p> 
<p>⑤ CD-ROM</p> 	<p>⑥ Paper clip</p> 



II. Hardware Description



1. Power button
2. LED indicators: HDD x 4
3. LED indicators: eSATA
4. eSATA hook
5. Dip Switch
6. Reset button
7. eSATA x 1
8. Power connector

⚠ Note: DIGIARRAY has a **built-in buzzer** which will start alarm when DIGIARRAY encounters hardware error. For instance, if RAID failures, the buzzer will alarm and LED indicator will turn to red light. (There is a beep sound when users power on DIGIARRAY and set RAID type.)

III. RAID Introduction

The introduction of disk configuration is in the below table.

Linear (JBOD)	Linear is a collection of hard disk drives and does not provide any RAID protection. The data are written to the disks continuously.
RAID 0	RAID0 is one larger volume with 2 or more hard disk drives. The data are written to the hard disk drives without any parity information. The total storage capacity is the sum of all hard disk drives.
RAID 1	2 hard disk drives are required to create a RAID1 array. RAID1 can provide disk mirroring by duplicating the data between two hard disk drives.
RAID 5	A minimum of 3 hard disk drives are required to create RAID5. The data are striped in all hard drives in a RAID5 array and the parity information is stored in each drive. If a hard disk drive fails, the array enters degraded mode. The data can be rebuilt from other member drives after installing a new drive to replace the failed one.
RAID 10	Data are written in stripes across primary disks that have been mirrored to the secondary disks. A typical RAID 10 configuration consists of four drives, two for striping and two for mirroring