



MatriVideo™ Digital Video Recorder

Quick Installation Guide

I. Preparation

Please prepare following equipments before starting the system installation.

- Screw driver (to open front panel)
- PC or Laptop with Command Center Lite installed properly
- Network environment

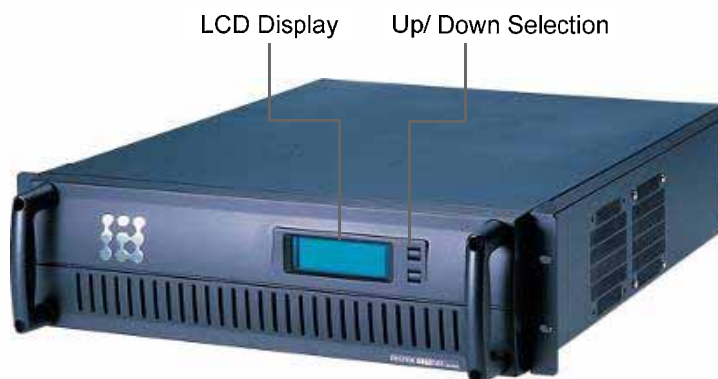
II. Box Contents

Inspect the packaging carton. Make sure your MatriVideo DVR is properly delivered to you. Remove all items from the box and make sure that the box includes the following items:

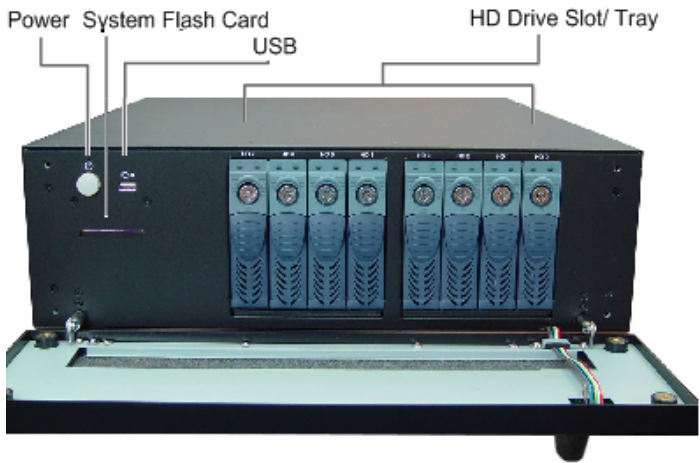
- **MatriVideo DVR** x1
- **Document CD** x1
- **Power Cable** x1 (*single power model*)
x2 (*dual power model*)
- **Bracket (Pair)** x1
- **Screws (Set)** x1
- **Warranty Card** x1
- **Registration Card** x1
- **A/V Extended Connector** x8 (*HR-DR3332-3U model*)

III. Unit Introduction

Front Panel



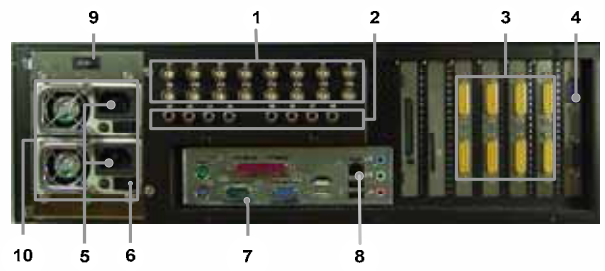
=> Open front panel



Rear Panel



Standard Model



Dual Power Supplies Model

1	Analog Video Inputs (BNC)	6	Single Power Switch
2	Audio Inputs	7	COM1 for External I/O module(RS232)
3	Analog Video/ Audio Inputs (for HR-DR3332-3U)	8	Ethernet (RJ45)
4	COM2 Port for PTZ control(RS232)	9	Main Power Switch (for Dual Power Model)
5	Power Socket	10	Dual Power Supply (for Dual Power Model)

VI. Get Started

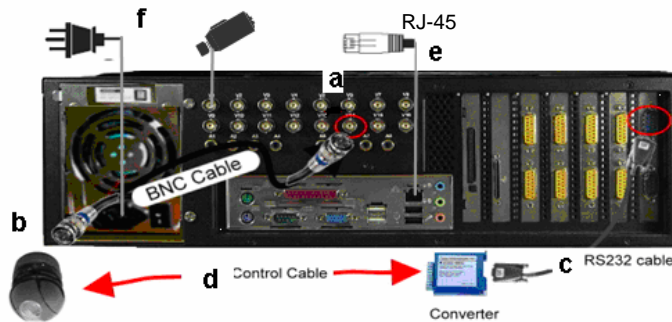
1. **Hard Disk Drives Installation**
 - a. Adjust SATA HDD to SATAII (3Gb/s)



- b. Install HD Drives in HD trays and insert into slots by order of hd0~hd7.
- c. Make sure all HDDs are properly installed.

Notice: Please use at least 200GB for first storage.

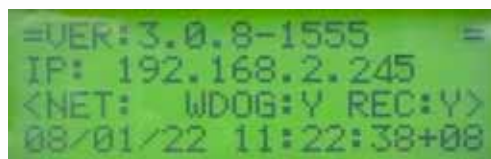
2. Basic Connection



- a. Connect one end of the BNC cable to the BNC port on the back panel of the MatriVideo DVR.
- b. Connect the other end of the BNC cable to an analog camera.
- c. If your analog camera is a PTZ camera, connect a RS-232 cable between converter and DVR COM2 port.
- d. Connect the PTZ camera and the RS232-RS485 converter by using control cable.
- e. Connect to Network.
- f. Connect Power cord.


3. Unit Boot-up

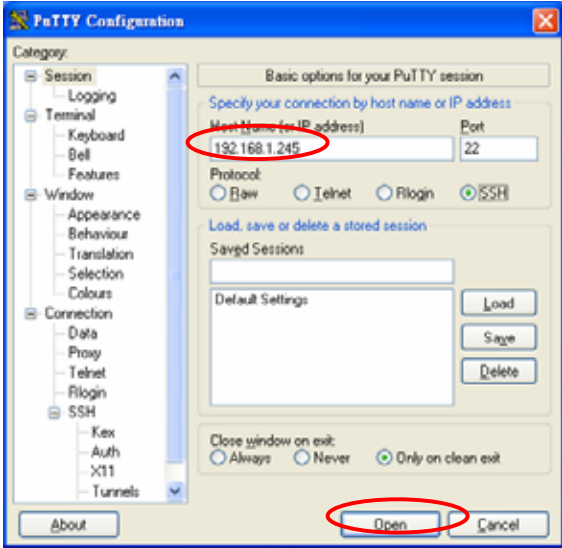
- a. Connect MatriVideo DVR to prepared Network environment.
- b. Connect Power cord.
- c. Power on MatriVideo DVR from rear panel.
- d. Check the LCD info on the DVR front panel
- e. When system is completely booted up, version number, IP address, system status, date, time and time zone will showed on LCD.



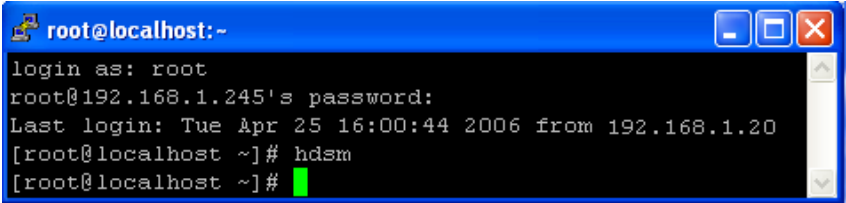
4. Basic Configuration

Use Command Center or another PC on Windows OS, connected to network, to configure MatriVideo DVR.

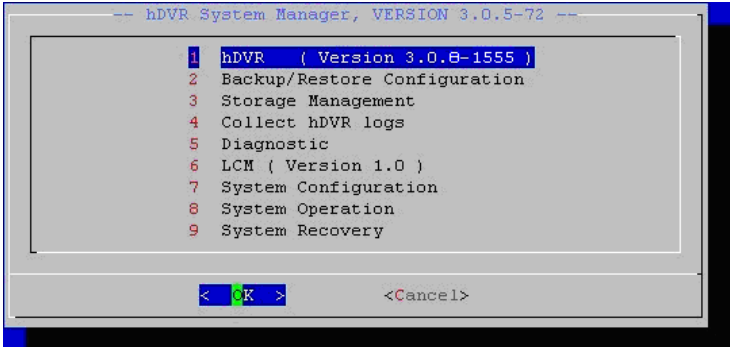
- a. Execute "Putty"  on Windows desktop to logon the MatriVideo DVR (refer to DVR LCD display on front panel, default IP: 192.168.1.245). A telnet window will be opened.



- b. Type 'root' and press [ENTER] to login the Linux system.



- c. Type the password (default: **id**).
- d. Type '**hdsmd**' and press [ENTER] to run hDSM. A main menu will show up.



hDSM is a menu-driven program with a user-friendly interface. Every screen of the program has two panels. The top panel shows the system message or the function list. Use the [↑] and [↓] arrow keys to move the cursor among function list, or type item number directly. The bottom panel has 1-3 options. Use the [←] or [→] arrow keys to move the cursor and press [Enter] to run the command.

To exit the hDSM, move the cursor to 'Cancel' and press [Enter].

Note: hDSM may request to stop hDVR before doing certain configuration or change, please follow the hDSM instruction to stop hDVR service for following configurations. After finishing the configuration, please remember to restart hDVR service.

4.1 Change Time Zone:

From hDSM main menu > System Configuration > Time Zone Change > Select continent or area (Listed by the alphabetic order. Please type a number to select) > Select Country or region (Listed by the alphabetic order. Please type a number to select) > Input '1' to confirm.

4.2 Change Date/Time

From hDSM main menu > System Configuration > Date/Time change > Stop hDVR process and wait seconds to stop > Use [Tab], [↑], [↓] to change year, month, date > Use [Tab], [↑], [↓] to change hour, minute, second > Press 'Proceed' to change

4.3 Sync DVR time with Time Server

Choose a Master Time Server. Suggest checking with IT Administrator for available Time Server.

From hDSM main menu > System Configuration > NTP Management > Add NTP Server > Stop hDVR process and wait seconds to stop > Input IP address of NTP server

4.4 Change IP Address

From hDSM main menu > System Configuration > Network settings > IP Configuration > Change IP Configuration > eth0> Input IP address, Netmask, gateway and nameserver. > Press 'OK' to proceed.

Notice: Press [Backspace] keys to remove value of Default gateway (IP) if it does not exist.

Notice: Press [Backspace] keys to remove value of Primary nameserver if it does not exist.

Notice: Keep MTU as default value.

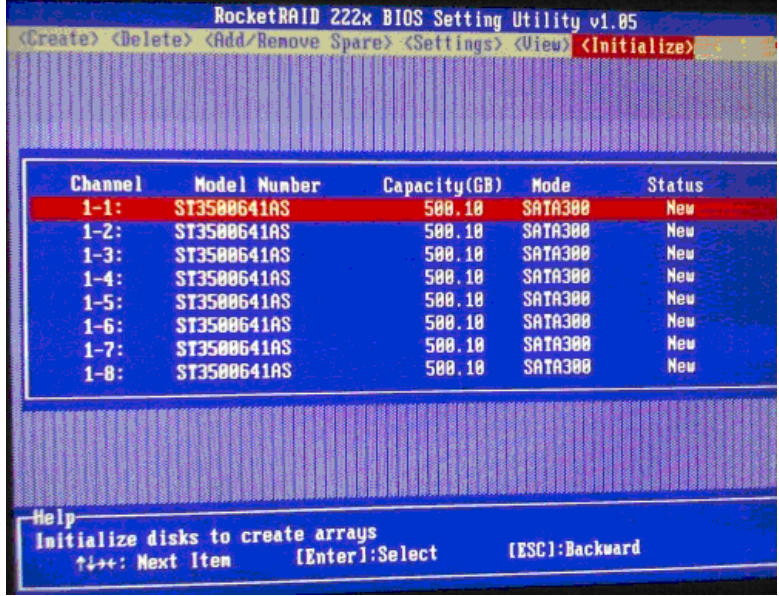
4.5 Add SATA Harddisk Storages to the DVR

R3.0.0 and later version add first storage automatically. If you have only one storage device, no need to add storage by manual.

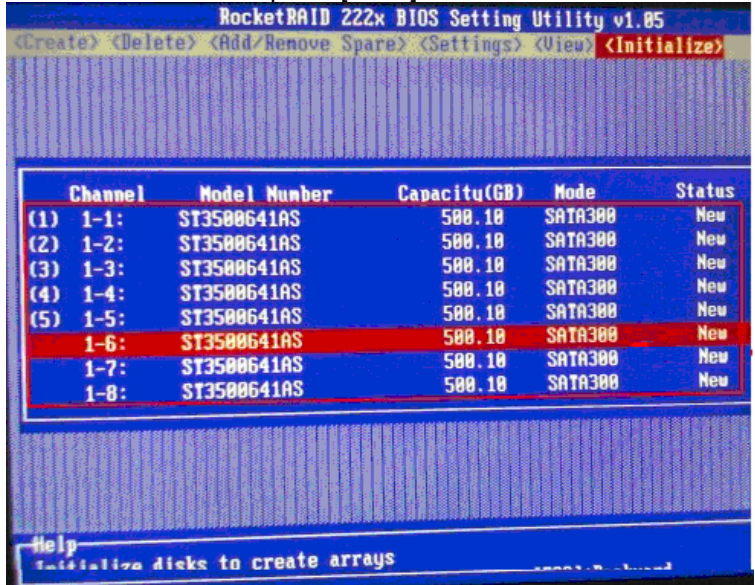
- a. Make sure all HDDs are installed on MatriVideo DVR properly.
- b. From hDSM main menu > Storage Management > Add storage repository > Stop hDVR process and wait seconds to stop > Select the available storage or all to add > 'OK' and wait until added > Detect available disk volume(s) to check the status
- c. If you need to install more HDDs, please power off hDVR from hDSM main menu > System Operation > Shutdown hDVR System > Wait seconds to power off hDVR > Install new HDDs > Remember to restart hDVR process > follow step 'b' to add storage

4.6 Add Internal RocketRAID 5 Storages to the DVR (Optional)

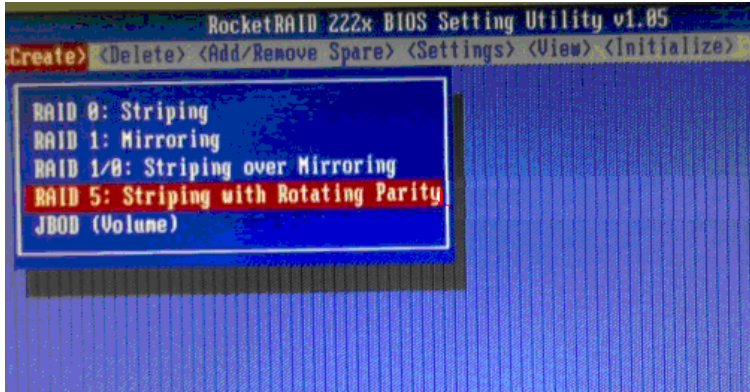
To setup the internal RAID array of the DVR, three HDDs are required at least. Follow the steps below:



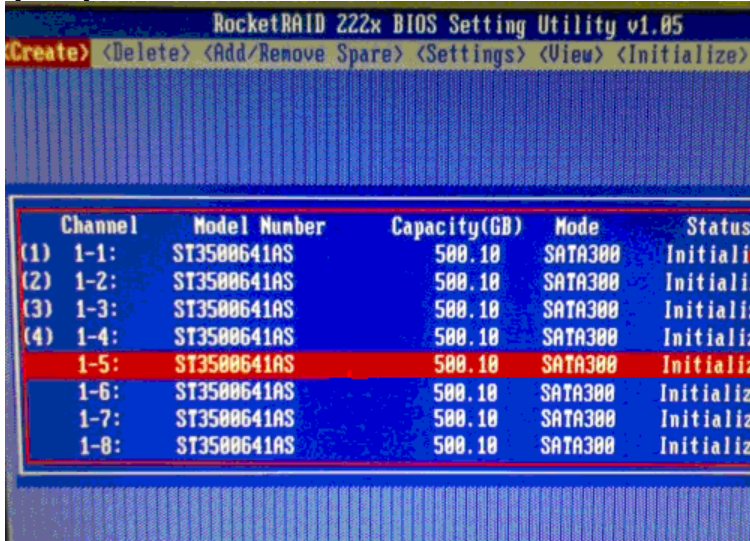
- a. Power on DVR
- b. During boot up, press CTRL+H to enter the BIOS configuration utility. The utility is a menu-driven program. Use the [←] or [→] arrow keys to move the cursor left or right. Use the [↑] or [↓] to move the cursor up and down. Press [Enter] to select the item. Press [Esc] to exit the program.
- c. Move the cursor to <Initialize> and press [Enter].



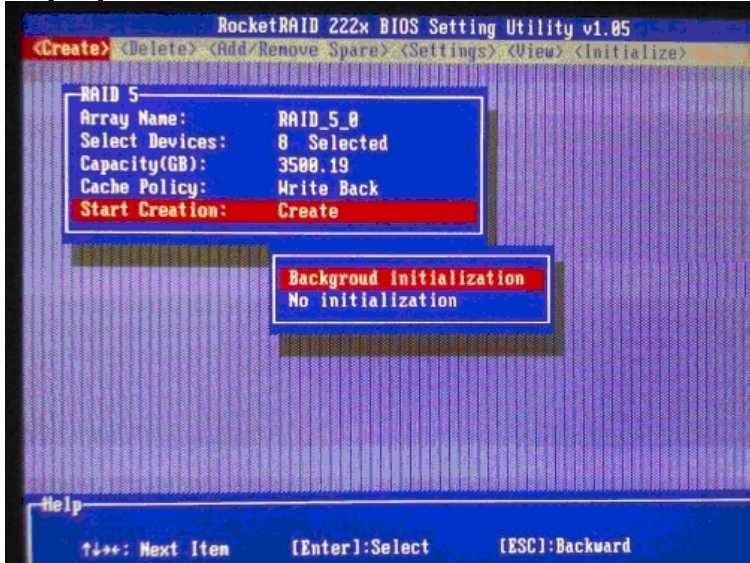
- d. Use the [↑] and [↓] keys to highlight the target hard disk. Press [Enter] to select the disk.
- e. Repeat step 'd' until all available disks have been selected.
- f. Press 'Y' to allow the disks to be initialized by the program.



g. Open the Create Menu by moving the cursor to <Create> and press [Enter]. Move the cursor to 'RAID 5' and press [Enter].

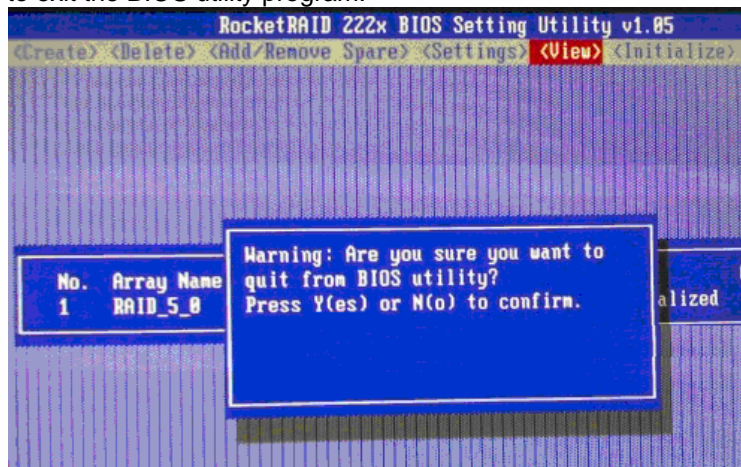


h. In the device list, use the [↓] key to highlight the target disk and press [Enter].
 i. Repeat step 'h' until all available disks have been selected. When all available disks have been selected, press [Esc] to return to the main menu.



j. A RAID 5 sub-menu pops up. Move the cursor to 'Start Creation' and press [Enter]. In the sub-menu, move the cursor to 'Background initialization' and press [Enter].

k. Press [Esc] to exit the BIOS utility program.



- l. The system raises a warning, 'Are you sure you want to quit from BIOS utility?' Press 'Y' to continue.
- m. After booting completes, go to hDSM main menu if it is not the first storage device > Storage Management > Add storage repository > Stop hDVR process and wait seconds to stop > Select RIAD 5 storage to add > 'OK' and wait until added > Detect available disk volume(s) to check the status

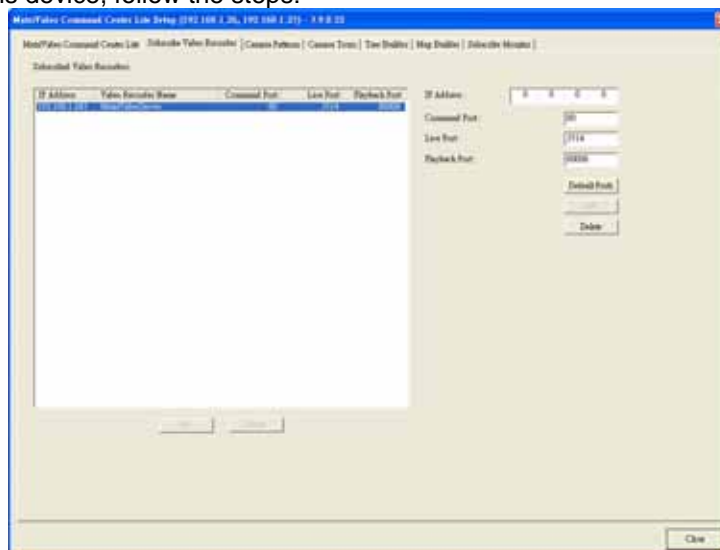
4.7 Restart DVR Service


After finishing all configurations, please remember to restart hDVR service.

From hDSM main menu > hDVR > Start

4.8 Subscribe This Device to Command Center or Command Center Lite

To subscribe this device, follow the steps:



- a. Run Command Center or Command Center Lite and login with user name 'admin' and password 'id'
 - b. Click button ().
 - c. Click the Subscribe Video Recorder tab.
 - d. Enter the value of IP address, Command Port, Live Port, and Playback Port of the video recorder.
- Notice:** Do not change those 3 port numbers of DVR and make sure they are not blocked by any firewall.



Command Port: 80

Live Port: 3514

Playback Port:60006

- e. Click 'Add'. (Repeat step c. to add other devices.)
- f. To set the order of all subscribed Video Recorders, click the target video recorder from the list first and click the 'UP' and 'Down' buttons. The video recorder list shows the result.
- g. Click 'Close'.
- h. The user needs to restart the Command Center to activate the newly added video recorder. See the following message that the system responses.

