

Mobile Digital Video Recorder MD04A

User's Manual

Mobile DVR



Thanks for using our products. Please read following user manual, so that you can use and protect your device correctly.

CONTENT

Chapter 1 . Feature	1
Chapter 2. Specifications	2
Chapter 3. Installation.....	3
Chapter 4. Front Panel and Remoter Controller	4
Chapter 5. Operating manual (Main Menu)	7
5.1 System Setup.....	7
5.1.1 Password Setup.....	8
5.1.2 Time Setuop	8
5.1.3 PTZ Baudrater Setup	9
5.2 Camera Setup	9
5.3 Record Setup	10
5.4 Programmed Record	10
5.5 Hard Drive Setup	11
5.6 System Restore	12
Chapter 6. View Control	12
Chapter 7. Playback Control	12
Chapter 8. Record Control	13
Chapter 9. NTSC / PAL System Seystem Setup	13
Chapter 10.. PTZ Operation.....	14
Chapter 11.. 4CH Recording Hours on 80GB Hard Drive	15
Chapter 12. DVR Viewer User Guide Revision V2.3EN	16
12.1 Hardware Installation	16
12.2 Software Installation	17
12.3 Execution.....	17
12.4 Via the attached USB cable to PC.....	17
12.5 DVR Viewer.....	18
12.5.1 Valid Stream Region Indication.....	18
12.5.2 Direct Access	18
12.5.3 Events List Button	19
12.5.4 Options Button.....	19
12.5.5 Status Button.....	19
12.5.6 Reset Button.....	19
12.5.7 Playback.....	20
12.5.8 Channel Selection.....	20
12.5.9 HDD Selection.....	20
12.5.10 Capturing Button	20
12.5.11 MYS File Player	21
Chapter 13: Installation Conditions and Precautions.....	21

Chapter 1. Feature

- 1、 Truly independent economic model car DVR
- 2、 Real Time display
- 3、 Display While Recording
- 4、 Record mode : Each mode ,Quad mode
- 5、 Compatible of NTSC/PAL format.
- 6、 Advanced JPEG-2000.
- 7、 Record mode :Manual / Motion / Schedule
- 8、 Search by Time / Date.
- 9、 When electronic power off ,recovering recording automatically as soon as the power on .
- 10、 HDD Volume Indicator.
- 11、 Use USB to link PC to read and backup the HDD data .
- 12、 Internal motion detect feature.
- 13、 Remote Controller .
- 14、 PTZ Control.
- 15、 CF card

Chapter 2. Specifications

Operation system	Embedded RTOS		
Video Input	NTSC/PAL		
Video Input Channel	4CH Composite		
Video Output Channel	2CH Composite (VCR OUT / MONITOR OUT)		
Display Frame	NTSC	120 fps (4x30 fps)	
	PAL	100 fps (4x25 fps)	
Recording Frame Rate(QUAD)	NTSC	Max 30fps	
	PAL	Max 25fps	
Recording Frame Rate(EACH)	NTSC	Max. 7.5fps(30 fps/4)	
	PAL	Max. 6.25fps(25 fps/4)	
Recording Mode	Continuous/motion/ Programmed		
Resolution	Display	NTSC	720x480
		PAL	720x576
	Recording	NTSC	640x224
		PAL	640x272
Compression Format	JPEG-2000	Low	12KBytes/Frame
		Normal	15KBytes/Frame
		High	20KBytes/Frame
HDD	Notebook drives (2.5-inch)		
CF card	Support (optional)		
Backup Device	VCR		
Search Mode	Time / Date / Event		
Full Screen	YES		
Motion Detect	YES		
Buzzer Output	YES		
Brightness Adjust	YES		
Contrast Adjust	YES		
USB Output	YES		
System a monitor	Power recover auto restore record mode		
Power Supply	DC 12V / 4A(AC110V-240V 50/60HZ)		
Dimension	185mm*170mm*42mm (W x D x H)		
Weight	1.3 KG		
Environmental temperature	Operating temperature: 0 ° C to +50 ° C, Humidity: <90%		

Chapter 3. Installation

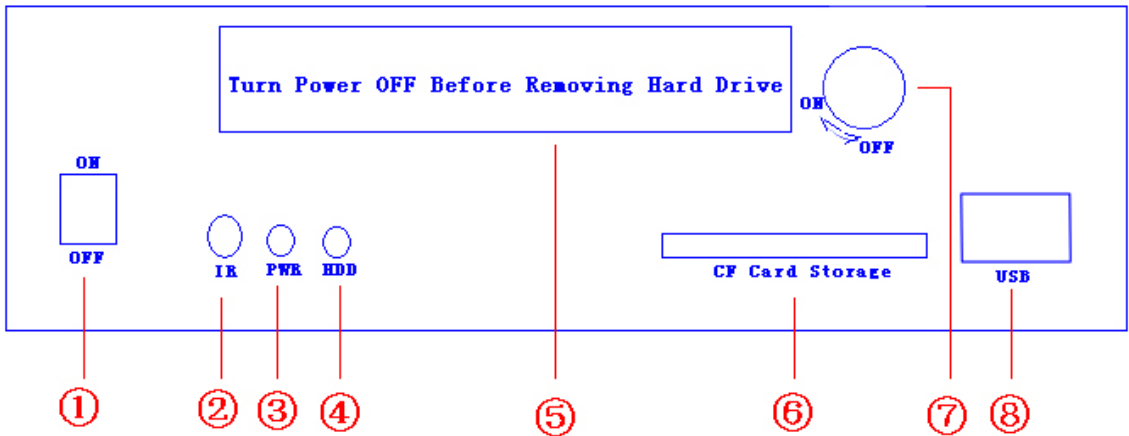
Rear panel



- ①: video output ports
- ②: Power input DC8V - 32V
- ③: Audio input / output interface
- ④: Power output DC12V/2A, power supply for the camera; PTZ terminals
- ⑤: Camera 1 input interface
- ⑥: Camera 2 input interface
- ⑦: Camera 3 input interface
- ⑧: Camera 4 input interface
- ⑨: Machine vents: the installation, will not have vents behind foreign bodies, so as to avoid adverse ventilation so that the machines work instability.

Chapter4. Front Panel and Remote Controller

1. Front Panel:













- ①: Power master switch
- ②: Remote receiving points
- ③: Power LED
- ④: Rec / Paly LED
- ⑤: Withdrawing drive box
- ⑥: CF card interface
- ⑦: drive box padlock
- ⑧: USB Interface

2. Remote Controller :

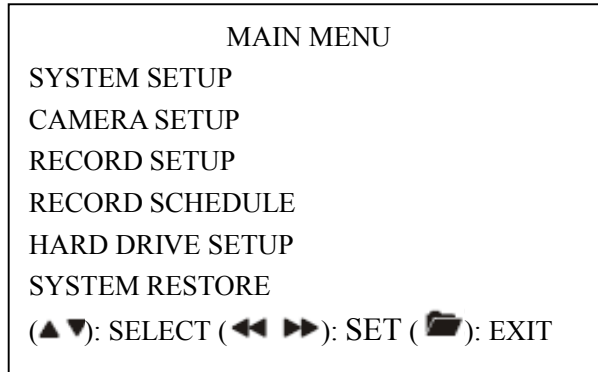


- (1) ◀◀ : FR /+

- (2)  : FF/-
- (3)  : CH1 FULL SCREEN / PTZ UP
- (4)  : CH2 FULL SCREEN /PTZ LEFT
- (5)  : CH3 FULL SCREEN /PTZ DOWN
- (6)  : CH4 FULL SCREEN /PTZ RIGHT
- (7)  : QUAD SCREEN
- (8) **[MENU]** : MENU/PTZ SPEED
- (9) **[SELECT]** : SET/PTZ CAMERA
- (10)  : PLAY
- (11)  : UP /MUTE
- (13)  : DOWN
- (14)  .PAUSE
- (15)**[REC]** : REC

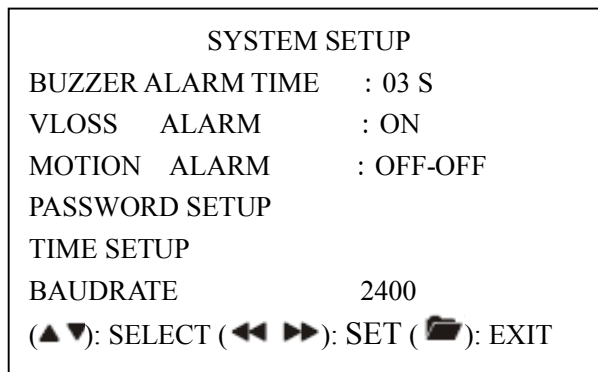
Chapter 5. Operation Manual

(Main Menu)



Press ▲▼ to select items, use ◀▶ to enter. Press ⏏ to exit.

5.1 SYSTEM SETUP



Press ▲▼ to select items, use ◀▶ to enter. Press ⏏ to exit and save data.

- (1) Buzzer Alarm Time Setup: 1-30 sec.
- (2) VLoss Alarm: ON/OFF.
- (3) Motion Alarm: ON-OFF (4 Type), front is buzzer alarm on /off; behind is jump to alarm a picture.
- (4)BAUDRATE: 2400、4800、9600、38400、57600、115200(6 Types).

5.1.1 PASSWORD SETUP

Select this item to setup and change password:

OLD PASSWORD: _____
NEW PASSWORD: _____
CONFIRM PASSWORD: _____

- (1) When the new password is accepted, the following screen message will flash : “PASSWORD CHANGING”.
 - (2) If the password is not accepted, you will receive a incorrect message “ INCORRECT”.
- ※You can use a combination of the buttons on the front of DVR to set a new password .
- ※The factory default password is 111111.

5.1.2 TIME SETUP

Select this item to set up current time.

Time format: **yyyy/mm/dd**

TIME SET
2004/12/17 18:00:30
SHOW: UP 1
(▲▼): SELECT (◀▶): SET (☑): EXIT

Press ▲▼ to select items, use ◀▶ to enter. Press ☑ to exit and save data.

Show Time setup:

OFF: Not show the time and date

UP 1: Displayed on up-right corner of screen, date & time listed in a row.

UP 2: Displayed on up-right corner of screen, date & time listed in two rows.

DOWN1: Displayed on down-right corner of screen, date & time listed

in a row.

DOWN2: Displayed on down-right corner of screen, date & time listed in two rows.

5.1.3 PTZ BAUDRATE SETUP

SYSTEM SETUP	
BUZZER ALARM TIME	: 03 S
VLOSS ALARM	: ON
MOTION ALARM	: OFF-OFF
PASSWORD SETUP	
TIME SETUP	
BAUDRATE	2400
(▲▼): SELECT (◀▶): SET (☑): EXIT	

Press ▲▼ to select items, use ◀▶ to enter. Press ☑ to exit and save data.

Baud rate setup:

BAUDRATE: 2400、4800、9600、38400、57600、115200(6 Types) will be optional

5.2 CAMERA SETUP

CAMERA SETUP	
CAMERA	: CH1
RECORD SETUP	: ON
BRI SETUP	: 05
CON SETUP	: 05
MOTION SETUP	: OFF
SENSITIVITY SETUP	:05
(▲▼): SELECT (◀▶): SET (☑): EXIT	

Press ▲▼ to select items, use ◀▶ to enter. Press ☑ to exit and save data.

(1)Camera select (default value CH1)

(2)Record set up: to setup camera record yes or not .

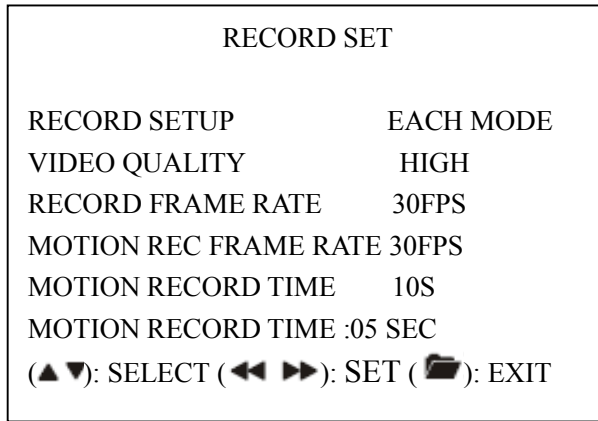
(3)Brightness / Contrast Set up: Numeris values :00-11 ,default value

is5.

(4) Motion set up: motion detector, ON/OFF.

(5) Sensitivity set up: the value of "SENTIVITY" is moving to 1-15, The meaning of "SENSITIV" is the sensitivity of software motion detector.

5.3 RECORD SETUP



Press ▲▼ to select items, use ◀▶ to enter. Press ■ to exit and save data.

(1) Record Setup: EACH MODE (frame recording),
QUAD MODE (quad recording).

(2) Video Quality: video quality selection: High, Normal, Low.

(3) Record Frame Rate: QUAD MODE frame rate alternatives as follows:

→ 30、20、15、10、7.5、6、5、4、3、2、1 fps.

→ In this mode ①、②、③、④ invalid.

Each Mode frame rate alternatives as follows:

→ Maximum : 7.5 fps each camera totally: 30 fps = 7.5 x 4 CH

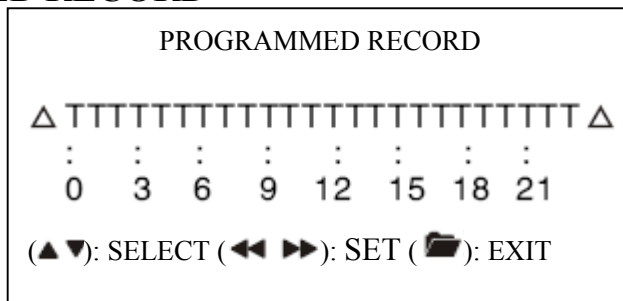
(4) Motion Record Frame Rate: setting record frame rate as (3) in Motion detector mode.


(5) Motion Record Time: maximum 60 seconds sensor recording time.

※ Record schedule only valid in "S" selection.

※ Above settings are NTSC Mode settings, use PAL Mode in a similar way.

5.4 PROGRAMMED RECORD



Press ▲▼ to select items, use ◀▶ to enter. Press  to exit and save data.

(1) Use  to change record mode.

(2) Range: 0-24 hrs.

(3) Set “T” for continuous recording.

(4) Set “M” for sensor recording. Please refer to 5-3 MOTION setup.


(5) Set up “-” to disable the record time.

□ If you want to enable Motion Recording, Please finish the setup procedure a. and b.

a. Select “MOTION SETUP”: “ON” in the menu option “CAMERA SETUP”.

b. Set “PROGRAMMED RECORD” --- “M” in the menu option “RECORD SCHEDULE”

5.5 HARD DRIVE SETUP

HARD DRIVE SETUP	
OVERWRITE ENABLED	(YES)
MASTER HDD SIZE	80000MB
MASTER HDD USED	10MB 0 %
MASTER HDD FORMAT	
SLAVE HDD SIZE	N/A
SLAVE HDD USED	N/A
SLAVE HDD FORMAT	
(▲▼): SELECT (◀▶): SET (): EXIT	

Press ▲▼ to select items, use ◀▶ to enter. Press  to exit and save data.

(1) Overwrite Enabled

YES: Overwrite.

NO: Stop Recording.

(2)Master HDD Status

Indicates use of the master HDD including volume & percentage

(3)Master Format

Select this item to format HDD, screen show: PASSWORD INPUT

(6) ----- 6 digits. If password correct, the screen shows: “password correct “. Otherwise, it shows: “password incorrect. “

※ Factory default password:111111.

※ HDD must be formatted before installation, replacement & re-installation.

5.6 SYSTEM RESTORE

Restore the default settings.

Chapter 6. View Control

(1)Can use the following view control to monitor images from cameras.

① Camera #1 (CH1), return to Quad Mode by press again.

② Camera #2 (CH2), return to Quad Mode by press again.


③ Camera #3 (CH3), return to Quad Mode by press again.

④ Camera #4 (CH4), return to Quad Mode by press again.

(2)Prior to view control, HDD must be formatted. Either “EACH MODE” or “QUAD MODE” should be selected. (Refer to 5-3)

(3)In mode of “QUAD MODE”, view control is only for quad display not available for CH1, CH2, CH3, and CH4.

Chapter 7. Playback Control

(1)Press  , and the system shows the recorded period.

(2)Each period is as four hour

```
SEARCH TIME






HARD DRIVER: MASTER
06/04/01 02:47:56 - 06/04/01 02:47:56
01 TIME 2006/12/10 02:47:50
02 TIME 2006/12/10 02:47:50
03 TIME 2006/12/10 02:47:50
(▲▼):SELECT (◀▶):SET (▶):PLAY
(⏏):EXIT (⏪) SELECT EVENT/TIME
```

Press  to select EVENT or DATE/TIME, press  to exit.



(1)EVENT:


Press   choose one period, then press to play.

(2)DATE / TIME:

The signal">" goes up to the "HARD DRIVER: MASTER". Press   to select items. Use  select to change data, and then press  to play.

(3)PLAYBACK:



*Press  to speed forward,continue to press  and show x2、 x4、 x8 multiple playing.

*Press  to show x2 multiple back motion.

*Press  to pause.

*Press  to stop.

Chapter 8. Record Control

(1)Press "  " key to start to recording. "  " show recording.

(2) During recording, the mark " * " appears in status of overwriting.

Chapter 9. NTSC / PAL System Setup

J1 Jumper Setting as follow:



Chapter 10. PTZ Operation

※The default addresses of CH1,CH2,CH3,CH4 dome are 01、02、03、04. If addresses are incorrect, you can not control those.

Remotel controller



[SELECT] : Into PTZ Mode and CAMERA+



: Up



: Down



: Left



: Right



: Stop



: Zoom in



: Zoom out

[MENU] : Set speed: the range is 1-7

Chapter 11. 4CH Recording Hours on 80GB Hard Drive

*Thereinafter a rough estimate a table for reference only, recording data quantity can follow an image a variation a rate somewhat different.

Recording Results in NTSC Format			30fps	15fps	7fps	1 fps
Video Signal	Display Format	Video Quality				
NTSC	QUAD MODE	High	36Hours	72Hours	144Hours	1080Hours
		Normal	48Hours	96Hours	192Hours	1440Hours
		Basic	58Hours	116Hours	232Hours	1740Hours
	EACH MODE	High	64Hours	128Hours	256Hours	1920Hours
		Normal	90Hours	180Hours	360Hours	2700Hours
		Basic	112Hours	224Hours	448Hours	3360Hours
Recording Results in PAL Format			25fps	12fps	6fps	1 fps
Video Signal	Display Format	Video Quality				
PAL	QUAD MODE	High	38Hours	76Hours	152Hours	950Hours
		Normal	48Hours	96Hours	192Hours	1200Hours
		Basic	60Hours	120Hours	240Hours	1500Hours
	EACH MODE	High	62Hours	124Hours	248Hours	1550Hours
		Normal	90Hours	180Hours	360Hours	2250Hours
		Basic	118Hours	236Hours	472Hours	2950Hours

Chapter 12. DVR Viewer User Guide Revision V2.3EN

Introduction

This document is the operation manual for DVR viewer. The application will show you stream image stored in the HDD which was previously formatted and recorded by the DVR.

If any DVR HDD is connected to your PC, the application will automatically detect the HDD and show the recorded stream. You can also save the current screen to a BMP file, and save the current stream to a MYS stream file or an AVI file.

※We suggest to backup the video stream in MYS format for the fast speed.

The application consists of two functional modules:

DVR HDD PC Viewer	Shows stream stored in the HDD directly.
MYS File Player	Plays captured stream MYS file.

Requirement:

OS	2000 SP4 / XP SP2 or later
DirectX	DirectX 7.0 or later

Recommendation:

◆ CPU	1.0 GHz or Higher
◆ RAM	256 MB or Greater

Installation:

12.1 Hardware Installation

- ◆ As stated above, the application shows stream which is stored in DVR HDD.
- ◆ Before installing and executing the application, make sure that you connected DVR HDD to the SATA cable of your PC directly, or via USB HDD adaptor

12.2 Software Installation

- ◆ Make sure that the OS of your PC is Windows 2000 SP4 or later [XP SP2 or 2003]. Otherwise, the application will not operate properly.
- ◆ Double click on the DVR_Setup.exe to install the program.

12.3 Execution

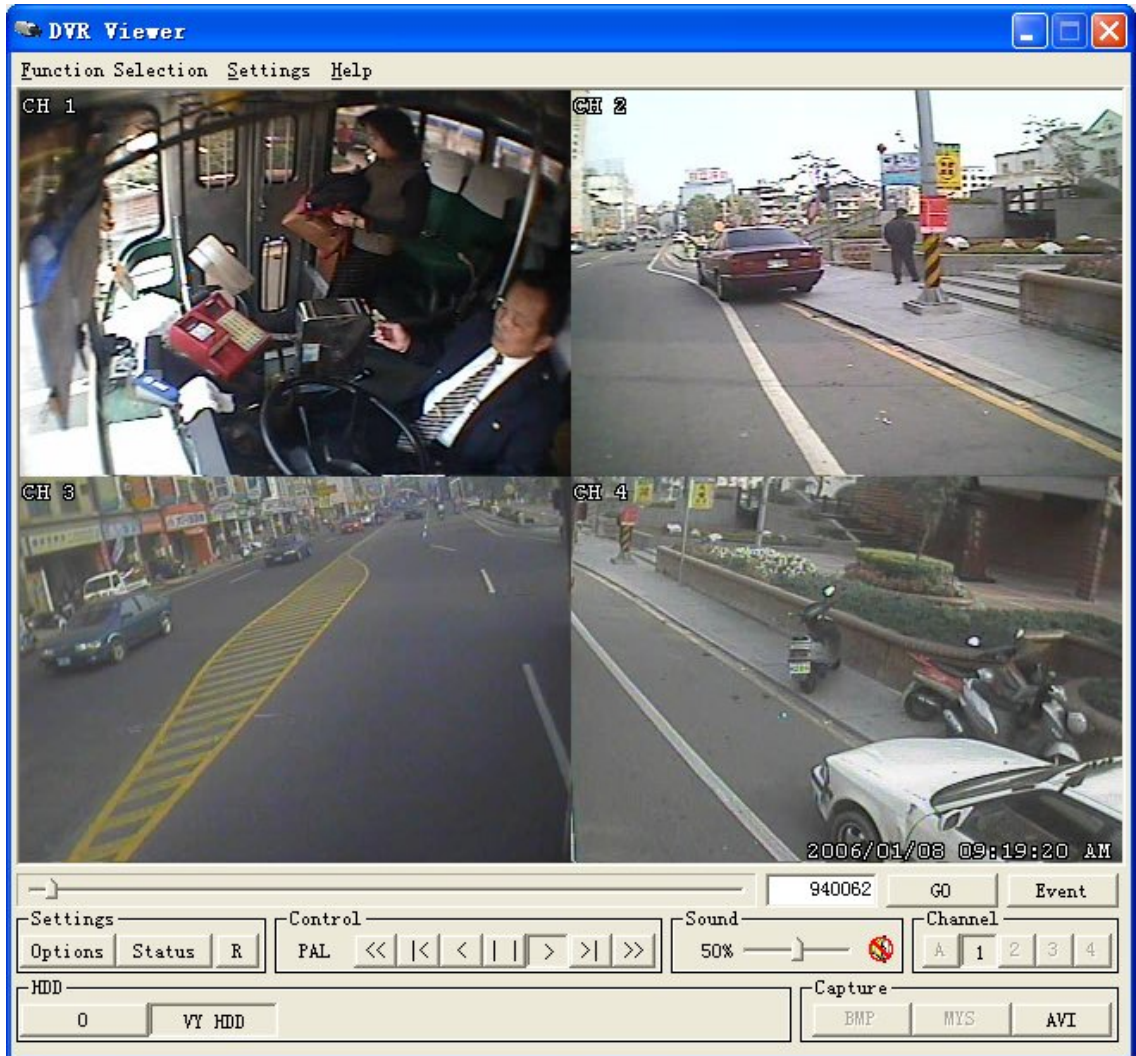
- ◆ Just double click the shortcut of the execution file.
- ◆ The application first detects physical HDDs installed at your PC and search for DVR HDD among them. This process may take up to 1 minute.

12.4 Via the attached USB cable to PC

- a. Connect USB cable both ends to the USB port of the DVR and your PC.
- b. Supply 12VDC power to the DVR.
- c. Wait until the message of USB detected pops up on the VGA monitor.
- d. Run the PC Viewer software accordingly.
- e. Wait until the very first image comes up to the PC Viewer.
- f. Click “Play” on the control panel of the PC Viewer to start viewing the video files.

12.5 DVR Viewer

User Interface:



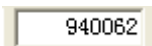
Functions

12.5.1 Valid Stream Region Indication



Once a DVR HDD is selected, the application detects valid stream region where valid video stream resides. You can drag this to access the whole streams of the DVR HDD.

12.5.2 Direct Access

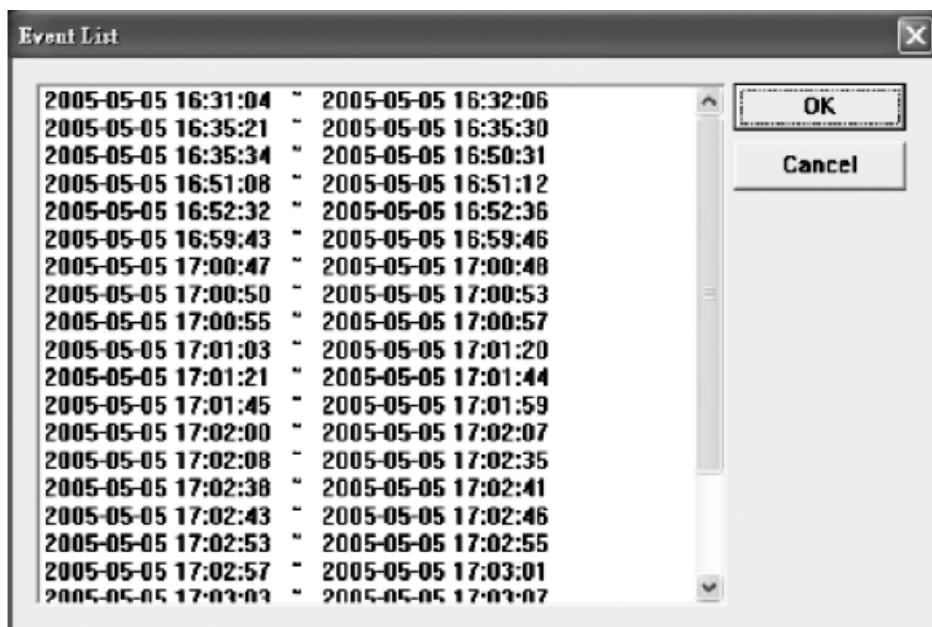


If the stream stored in a DVR HDD is quite long, you may have difficulty to find the exact scene you want to see. When you find a scene you would like to show your friend or report to police officers later, please remember the number in the Direct Access Input edit box, so that you can go there directly by entering the number in the edit box and pressing “GO” button .

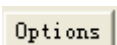
12.5.3 Events List Button



You can access the latest 64 events and go to the event directly by this button.

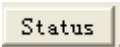


12.5.4 Options Button



You can change application settings such as MYS file save directory, or default video mode (NTSC/PAL). To change setting, press Options button

12.5.5 Status Button



Show the status on the screen.

12.5.6 Reset Button



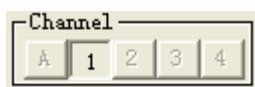
Reset the program.

12.5.7 Playback



Once a DVR HDD is selected, the application automatically displays first screen recorded at the very beginning of it. Then, you can see stream at anywhere within the valid stream reason.

12.5.8 Channel Selection



The default screen display channel setting is ALL CHANNEL, which shows all four channel at the same time. If you want to see a channel only or enlarge one channel, press any channel button you want.

12.5.9 HDD Selection




Once the application detects one or more DVR HDDs, it automatically selects the first DVR HDD. You can select any DVR HDD [the DVR HDDs are marked as "VY HDD ". to play .However, you cannot select the except DVR HDD, For example: Windows-formatted DVR.

12.5.10 Capturing Button



BMP BUTTON




If you want to capture one static picture , press  button. Then it will capture the

current screen and saves it as BMP file.


MYS BUTTON



If you want to backup the dynamic picture, press  button. Program will backup from current record station and save it as MYS file, whose format is Vineyard Technologies' proprietary stream file format. You can play the recorded file using MYS file player.

AVI Button



If you want to backup the picture of DVR, press  button. Then it will record the picture you want. It will create a AVI file. You can play the recorded file using any player which supports AVI file.

12.5.11 MYS File Player

You can play the recorded MYS file using MYS file player.

Chapter 13: Installation Conditions and Precautions

1. Installation Conditions

Digital Video Recorder is high quality precision equipment.

To maintain good performance and safe service, the following should be satisfied:

- (1) Put away from extreme hot places;
- (2) Avoiding direct sun light exposure;
- (3) Put away from high humidity places;
- (4) Always operate the unit in horizontal level position;
- (5) Avoid violent vibration;
- (6) The equipment should be put in well ventilating places. Do not place the recorder on rugs for not blocking the bottom ventilation opening; and put the recorder at least 5 mm away from its back wall for not blocking the cooling fan in the back of the recorder.

2. Installation precautions

- (1) After plugging in power plug, the voltage exists even before the machine is started.
- (2) To maintain stability of the system, suggest use hard disk of famous manufactures such as Maxtor, Seagate.
- (3) Do not open the cabinet by yourself, avoiding damage or electric shock.
- (4) Do not touch the surface and power source by wet hands.
- (5) Do not splash water into the recorder, avoiding short circuit or catching fire.
- (6) Do not put other stuffs onto the recorder.
- (7) Do not use the machine when the voltage is too high or too low.

3. Open Cabinet and Check Accessories

Check the completeness of the cardboard cases, contact the supplier immediately after any damage is discovered. The machine including accessories as following:

- (1) One power cord
- (2) One user's manual
- (3) One set of accessories.
- (4) One HDD cables
- (5) One remote controller

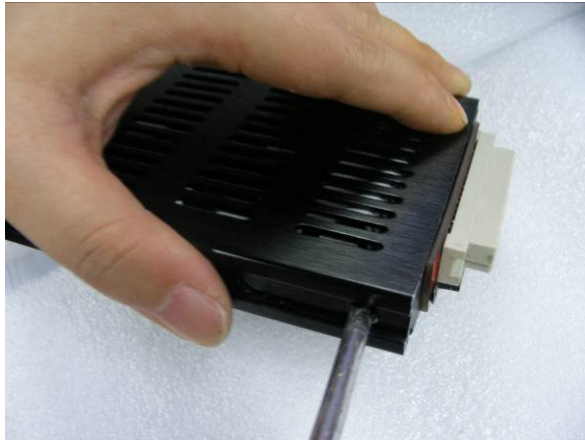
HDD Installation

Installation Steps:

- 1) First take out the HDD Case .Remarks: New machine is unlock , drag out the hard disk box directly ,if locks must unlock first; Already Installed on the bus, first turn the power off , then use the key open the lock , let directing "OFF" location ability take out the hard disk case , otherwise may lead to the hard disk breakdown.



2) Use screwdriver Take away the screw on side



3) Remove the upper cover



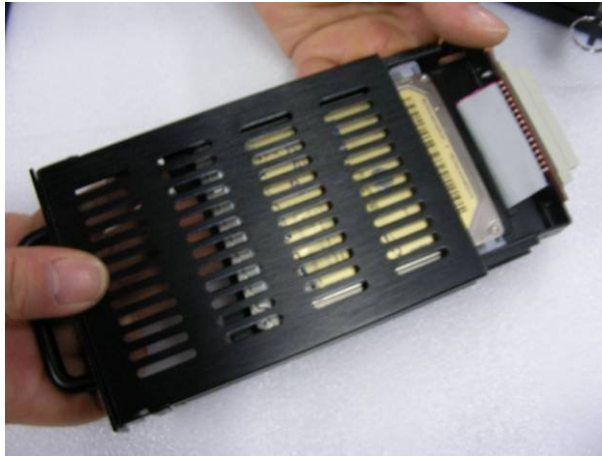
4) Connect HDD, take care the direction of HDD connection, don't install in wrong direction



- 5) Put the HDD through the rubber shock proof mat, and fix the HDD on the mat, Install side screws



- 6) Seal the HDD by upper cover after fix up HDD



7) HDD installation finish, then put the HDD case into the mobile dvr .last lock

