

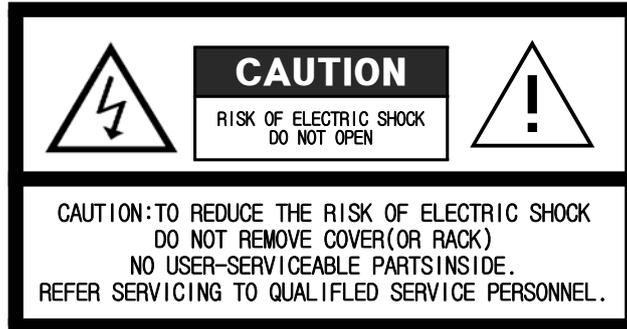
4CH CAR D.V.R

USER'S MANUAL - Eng



WARNIG AND CAUTIONS

CAUTION : TO REDUCE THE RISK OF FIRE OR ELECTRONISC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOIS-TURE. DO NET INSERT ANY METALLIC OBJECT THROUGH VEN-TILATION GRILLS.



Explanation of Graphical Symbols

The lighting flash with arrowhead symbol, within an equilateral triangle, is in-tended to alert the user to the presence of uninstalled "dangerous voltage" within the product's enclosure that may be of suffcient magnitude to constitute a risk of electric shock to persons.

USER OF THE SYSTEM ARE RESPONSIBLE FOR CHECKING AND COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND STATUS, CONCERNING THE MONITORING ANG RECORDING OF VIDEO AND AUDIO SIGNALS. OUR COMPANY SHALL NOT BE HELD RESPONSIBLE FOR THE USE OF THIS SYSTEM IN BIOLA-TION OF CURRENT LAWS AND STATUES.

INDEX

I . INTRODUCTION	4
II . FUNCTIONS	5
III . SPECIFICATION	6
IV . OPERATIONS	7
4-1. FRONT PANEL.....	7
1. LED	7
2. BUTTONS	7
1) REC(RECORD)	7
2) PLAY(PLAY / PAUSE)	7
3) DISPLAY MODE & LIST BUTTON	8
4) MENU (LOCK) SELECT BUTTON & (▲, ▼, ◀, ▶)BUTTON.....	9
4-2. REAR PANEL	9
1. CAMERA INPUT	9
2. VIDEO OUT	9
3. AUDIO IN AND OUT	9
4. ALARM IN AND GROUND	9
5. POWER	9
4-3. SETTING MENU.....	10
1. MENU (FUNCTION SELECTION)	10
2. TIME / DATE	10
3. FA / MEMORY (INITIALIZE CF-CARD)	10
4. RECORD	11
5. MOTION (SET MOTION MEDE)	11
★ PRECAUTION	12
V . SYSTEM CONNECTION	13
VI . REMOTE CONTROLLER	14

I INTRODUCTION

1. Before Usages

This manual is help to understand how to use _____ for all users. Also, must be read carefully before use it. All users must follow the steps this manual before installation hardware and set up the menu.

2. Important Safeguard and Warning

Warning

1. Use the adaptor, which is supplied or recommended by the supplier. It may cause fire.
2. Do not dismantle or assemble the product. It may cause malfunction or fire.
3. Do not touch the product with wet hands. it may cause malfunction or fire.
4. matters must vbe ensured to a professional for insallation. It may cause malfunction. electric shock or fire.
5. Consult the place of purchase if the need for installation arises. Delinquent installation may be the reason for malfunction. electric shock or fire.
6. Ground applies to video products equipped with a 3-wire grounding type plug having a third (grounding) pin. This plug only fits into a grounding-type power outlet. If grounding is not done, it may cause electric shock.
7. Ground connection must not touch gas pipe, water pipe or telephone line. If grounding is not done properly, it may cause electric shock.
8. Prevent metallic foreign substance inside the product. It may cause malfunction or electric shock.
9. Do not spray insecticide or flammable spray while driving. It may cause fire.
10. Prevent water from entering inside electrical parts. Clean with a dry towel or malfunction or electric shock could result.

Caution

1. Use the power cord, which is suploed or recommended by the supplier. The internal fan rotates at high wpeed and may cause an accident.
2. Do not frop, give strong vibration, or shock to the product. It may cause malfunction.
3. The air inhaler on each sides and the fan of the vack panel must not be blocked during installation. The internal temperature of the product would be greater than allowable and could cause malfunction or fire.
4. Do not touch the roduct or the power cord when there is thunder. It may cause electric shock
5. Do not install the product near or on top of heating source. The internal temperature would be greater than allowable and could cause malfunction or fire.
6. Do not install the product near or on top of heating source. The internal temperature would be greater than allowable and could cause malfunction or fire. be committed. It may cause malfunction.
7. Do not remove or insert CF-Card before turn off the electric power.
8. Must use CF-Card At least 1G or more.
9. Manufacturer or seller never response any problem relater CF-Cards.

II FUNCTIONS

Our 4 channel DVR (Stand Alone Digital Video Recorder) for CF-card interface is a Digital Security System designed to record/retrieve up to 4 channel video streams at the same time. It adopts a digital image compression technology to compress the input channel video streams, and uses a CF-memory card to record the compressed video stream.

SADVR display 1/4 channels partition on a screen by user's control. It can be surveillance 24 hours 7 days. It will be applied car or regular users.

All functions are:

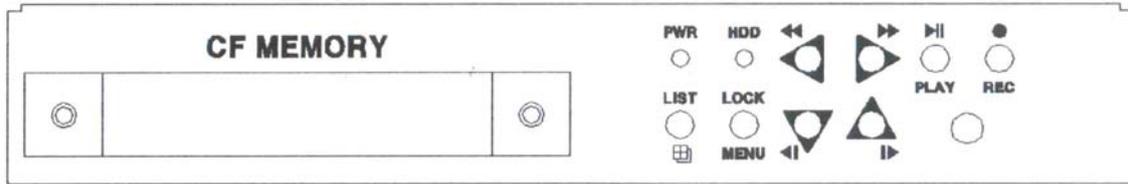
- * **Triplex (Record / Playback / Live)**
- * **Real Time Quad Display**
- * **High Quality Low Cost Simple Version System**
- * **Stand Alone Type (Non-Pc, Non-OS)**
- * **Full / quad Display Mode Selectable**
- * **Setting MENU in OSD (On Screen Display)**
- * **Built in Time / Date**
- * **Motion Detection Function (230 Lists)**
- * **Motion, Alarm / schedule recording**
- * **Quick Search : Time**
- * **CF-Memory Overwrite**
- * **MJPEG Compression**
- * **Remote Control**

III SPECIFICATION

Spec. Details			
System Type		NTSC	PAL
Video Signal	Input	Vp-p 75 Ohm, Input RCA(4Ch)	
	Output	Vp-p 75 Ohm, Output RCA	
Audio	Input/ Output	2 x RCA (1CH output,	
	Recording Mode	Moni PCM	
Display	Display Frame	120 FPS (Total)	
	Display Resolution	720 x 480	720 x 576
	Screen Split Mode	Full, Auto, Quad	
Triplex Mode		Triplex(Simultaneous Recording/Playback/Live)	
Recording	Video compression	Real-time full duplex M-JPEG codec core	
	Video Resolution	720(360) x 480 (240)	720(360) x 576(288)
	Recording method	Continuous, Scheduled, Event (motion, Alarm)	
	Recording FPS	120 (30) FPS	100 (25) FPS
	Image File Size	3 ~ 25 KB	4 ~ 27 KB
	External CF Memory	MLC, SLC, Type of CF Memory Card supported	
Remote access through Internet		N/A	
Playback	Playback mode	Live & Playback, Playback	
	Playback Screen Mode	FULL, Quad, Split	
	Search	Search by Date/Time List, Event List	
	Zoom Mode	N/A	
Alarm Control	External Alarm Input	Alarm Input : Terminal Block 1	
	Alarm Output	N/A	
Network	Protocol	N/A	
	Resolution		
	Remote Control		
	Browser		
	Recording		
Data Backup		N/A	
Others	Remote Control	IR Remote Control	
	Power	12V, 24V DC input (Locking wafer type)	
	Dimension	Set: 159 x 105 x 28 (mm), Board:138X91 (mm)	
	Weight	0.52Kg	
	Certification	CE, FCC	

IV OPERATION

4-1 FRONT PANEL



1. LED

It shows status of each operations

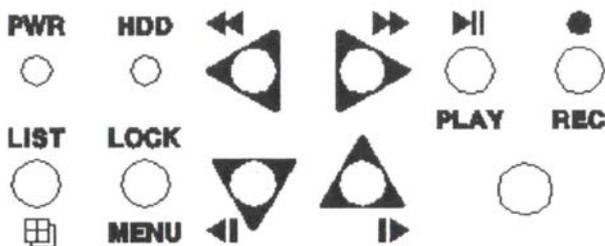
PWR LED : This LED shows status of DVR is power ON/OFF.

RUN LED : This LED is flash when DVR is operating (Play or Record)

2. Buttons

Front Panel have 8 buttons which have multi functions applied by modes. Must be careful how to use all buttons by different situations. It will explain special key with any actions.

1) REC (Record)



When you press this key, DVR will start recording and if you press one more, Recording will be stopped.

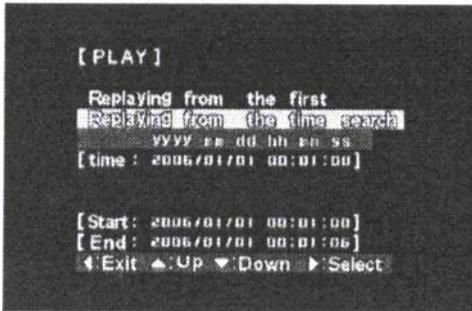
While you are watching live image, you can start recording by pressing this button. And if you want to stop recording, simply press this button again.

2) PLAY (PLAY / Pause)

Press this button (▶ ||), it will be displayed recorded time, and user can pick time after can play with play button. However, press one more time pause played screen. when you press (▶ ||) button, you will see below OSD (On screen Display) DHH First Display and TIME search.

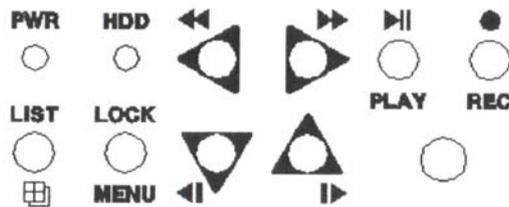
When you see there modes, PLAY (▶ ||) button has not only time search function but also simple play function.

IV. OPERATION



If you want simple play from the beginning, then choose CF-card FIRST DISPLAY by(▶, ◀)button then press PLAY((▶ ||)) button.

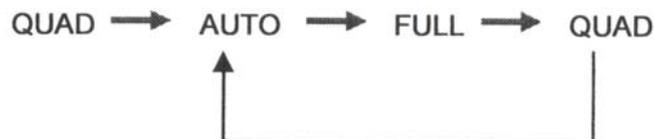
Once you have located an arrow mark at the mode (CF-card FIRST DISPLAY), press PLAY(▶ ||) button. Now you can see 8 different screens: the first 4 pictures are Live image screens(screen L1, L1, L3 and L4) and the last 4 pictures are previously recorded image screens(screen P1, P2, P3 and L4). And on top of the screen you can observe time being charged accordingly to the recorded time.



3) DISPLAY MODE & LIST BUTTON

This button enables users to change different screen settings such as Quad(4 screens) and full screen. For instance, when your screen shows 4 channels of different screen. Then press this button(MODE button) to change different screen. Factory setting is AUTO mode.

AUTO mode: Showing each camera channel one by one with Full screen. Also, can change time rate with up/down button 1 to 99 second.

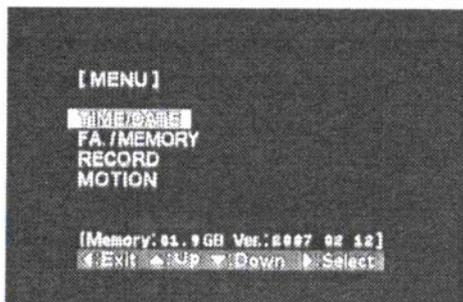


When you press and hold this button 3 second, screen will be show all list for alarm and motion detection time and date.

M in circle mean motion detection list and A in circle mean alarm detection list. This list shows up to 230 events.

IV OPERATION

4) MENU (LOCK) Select button & (▲, ▼, ►, ◀) Button

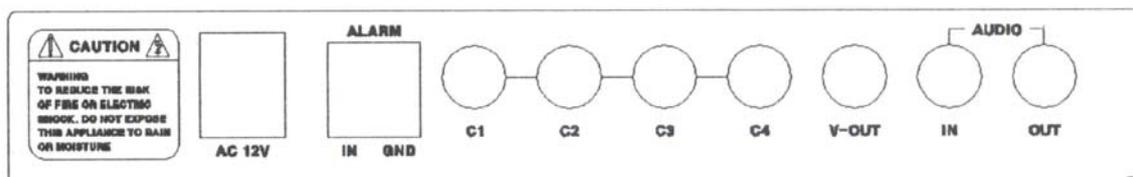


When you press Menu button, you can see "SETUP MENU" with 4 different options. You can adjust the setting by pressing MENU button.

when you go in to one certain mode, you can navigate each mode by pressing "MENU" button. but if the arrow make is on the EXIT and you will go out from this mode.

In play mode, 4 arrow buttons are changed to different functions. ►►(►) button is fast forward option which is playing speed to ×1, ×2, ×4, ×8 and ×16 for each time pressing the button, and ◀◀(◀) fast backward option which is same as fast forward option but it will be played to back. |► and ◀| are back to normal more time. it will be unlocked all key buttons.

4-2. REAR PANEL



1. CAMERA INPUT

Connect DVR to camera(s). Each channel port indicates a single camera connection. It has total 4 camera RCA connection ports.

2. VIDEO OUT

Use this port to connect DVR to the monitor.

3. AUDIO IN AND OUT

Use these port to connect DVR to the microphone and speaker.

Connect "AUDIO IN" for microphone and "AUDIO OUT" for a speaker connection.

4. ALARM IN AND GROUND

This is a alarm input terminal in case you need to install a single alarm device.

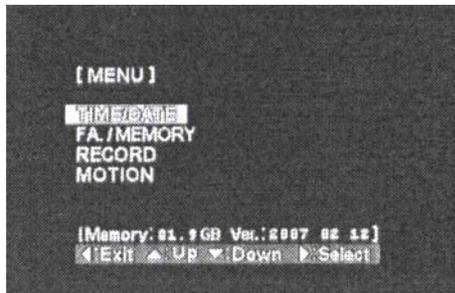
5. POWER

Free volt for 12 volt or 24 volt detect with automation. Approximately, this DVR use less than 1A.

IV OPERATION

4-3. SETTING MENU

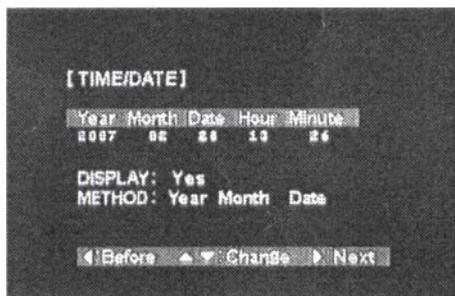
1. MENU (Function Selection)



When you press the menu button. You could control the 4 function mode setting (The Press ◀, ▶ button to select menu about 4 functions) But press up/down button will be moved to other functions.

Press MENU button again, it will be exit th Menu screen.

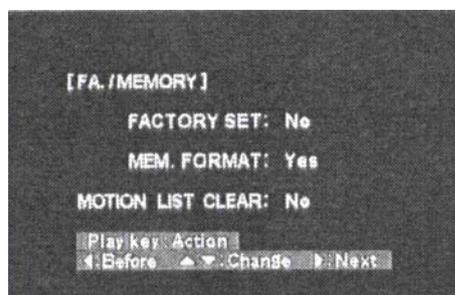
2. TIME / DATE



Press Adjust Time. Press ◀, ▶ to move year, date, time and press ▲, ▼ to adjust.

Time Display: Press Yes or No to select Time display on the screen.

3. FA/ MEMORY (Initialize CF-card)

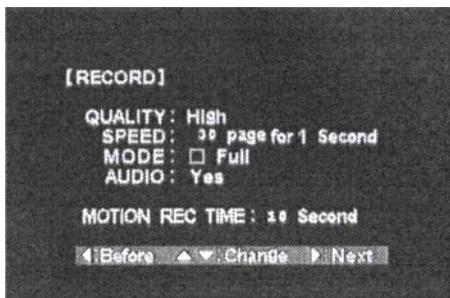


Initialize all settings and CF-card :

Press ▲, ▼ to initialize the settings, CF-card and, motion list. If you want to delete all info and data, choose Yes line of Factory Set. CF-card format mean deleting only data. Also, Motion List Clear mean delete Motion list only.

IV OPERATION

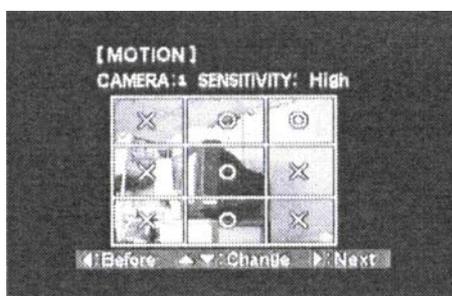
4. RECORD



- ① Image quality : Press ▲, ▼ to Adjust 3 level of image quality. (High, medium, low)
⇒ High image quality can't be saved long enough due to HDD recording mode.
- ② Speed : Press ▲, ▼ to adjust 6 level of camera speed 30/ 15/ 7.5/ 5/ 2.5/ 1 frames per second.

- ③ MODE : Press ▲, ▼ to select record type which mean if you choose 'FULL', it will be recorded with D1 type. It is recording each channel 1 by 1 each frames up to 30 frames per second that is why DVR has total pictures each channels but it has quarter of 30 frames actually. If you choose 'QUAD', it will be recorded with CIF type. It is recording all channels by quad type. So it has total picture of 4 channels 30 frames per second but it has half size of picture frames only quad type of pictures.
- ④ AUDIO : Press ▲, ▼ to select Yes or No. It mean user want to use audio or not.
- ⑤ ALARM : Press ▲, ▼ to select Yes or No. It mean user want to use Alarm or not
- ⑥ Event recording Time : Press ▲, ▼ to set the motion recording time. It can be set 1 to 99 Second.

5. MOTION (Set motion mode)

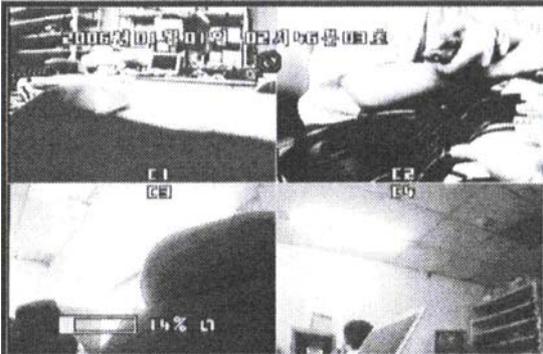


1. Camera—press ▲, ▼ button to set camera channel and transformation.
2. Sensitivity: Press ▲, ▼ to adjust sensitivity (High, medium, Low)
3. Press ▲, ▼, ◀, ▶ to set the motion Partition (0, X) and after selecting camera channel.

IV OPERATION

※ Precaution

1. HDD ERROR



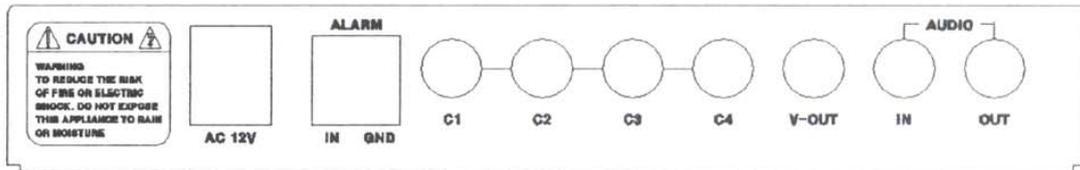
When CF-card error happened, the "ERROR" pop up on the screen. 4 screen partition played and no other function works.

※ Please check CF-card connectivity or CF-card defect.

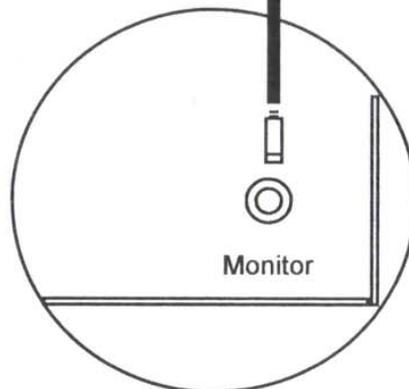
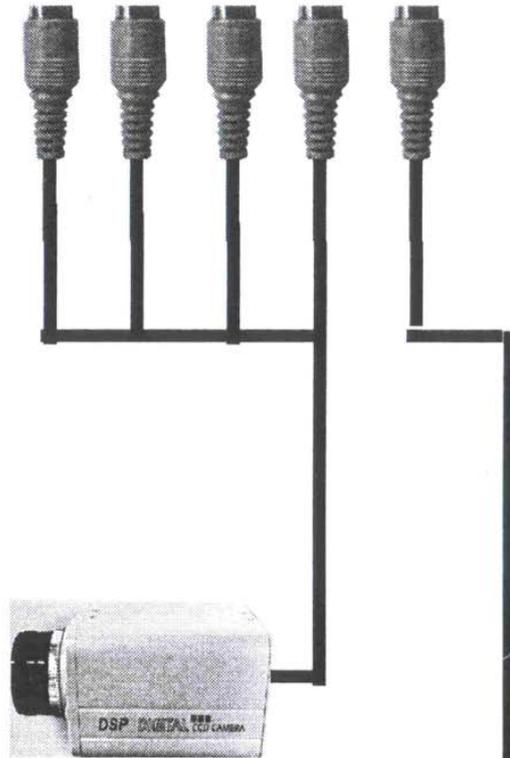
2. ⊙ Pop up

When there are no saved recording data, ⊙ pop up on the screen if using the remote control to search the recording data.

V. SYSTEM CONNECTION



SWITCHING
ADAPTER DC12V,3A



MONITOR (BACK VIEW)

VI. REMOTE CONTROL

REMOTE CONTROLLER

The picture is the Remote Controller for this DVR, and with this remote controller, you can get into the SETUP MENU. As you can see, remote controller can be divided into three different sections:

1. Top part is DVR operation with cursor movement which user can change SETUP MENU.
2. Middle part is number key which user can change to see full screen of each camera.
3. Bottom part is PAN/TILT control of a speed dome camera. This remoted controller is designed to work for both DVR and Speed dome camera. By using buttons in side of bottom black box, you can control a speed dome camera without help of a speed dome controller. However, SADVR doesn't have PAN/TILT control function.



Recording button from left.
Play button from right.
Motion list button right.
Rewind, Fast forward from left
Menu/Stop button from middle



Camera 1,2,3,4 button and
Quad/Full display button



PAN/TILT control of a speed dome

HELP

MEMO
