

4 CHANNEL MPEG4 DVR

Thank you for purchasing our product. Please read this User*s Manual before using the product

USER'S MANUAL

CE FC

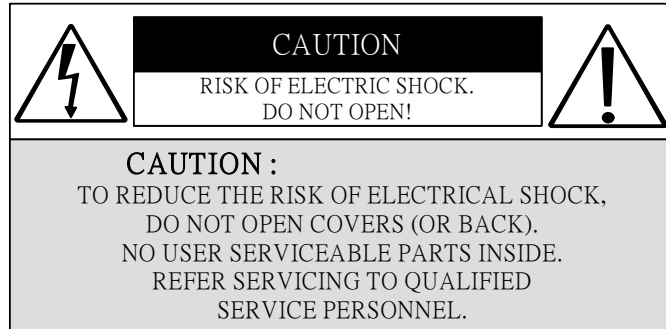
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The author assumes no responsibility for any errors or omissions that may appear in this document nor does it make a commitment to update the information herein.


2004/11/30, Ver.: 1.0, P/N: 040097

1. SAFETY PRECAUTIONS



It is advised to read the Safety Precaution Guide through carefully before operating the product, to prevent any possible danger.

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

 **CAUTION:** The exclamation point within an equilateral triangle is intended to alert the user to presence of important operating and maintenance (Servicing) instructions in the literature accompanying the appliance.

The power cord is the main power connection. Therefore, constantly plug and unplug of the power cord might result in malfunction of the product.

Do not install the product in an environment where the humidity is high.

Unless the product is waterproof or weatherproof, otherwise it can cause the image quality to be poor.

Do not drop the product or subject them to physical shocks.

Except for vandal-proof or shockproof product. Otherwise it will result malfunctions to occur.

Never keep the product to direct strong light.

It can damage the product.

Do not spill liquid of any kind on the product.

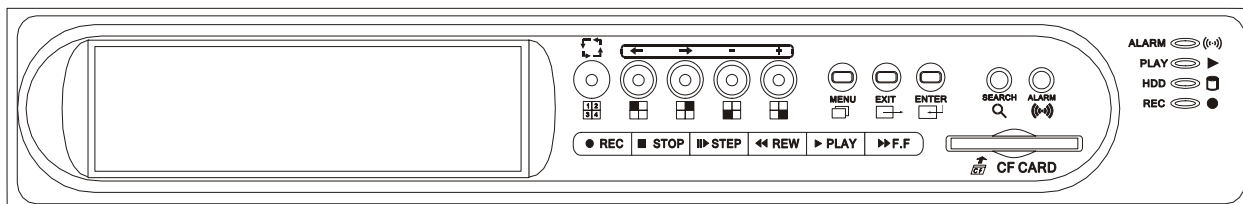
If it gets wet, wipe it dry immediately. Alcohol or beverage can contain minerals that corrode the electronic components.

2. FEATURES

- ❑ Supports NTSC/ PAL auto detection.
- ❑ Built-in HDD, stores videos digitally onto the HDD, replaces old traditional VCR tapes.
- ❑ MPEG4 compression technique.
- ❑ Multiple video quality setup selection.
- ❑ On power failure, the system is notified by alarm and is designed to reboot and continue recording.
- ❑ 4 Types of Record mode: Manual, Schedule, Motion Detection and Event trigger.
- ❑ The system supports 4 sets of Alarm input and 1 set of Alarm output Interface, it automatically starts recording when an alarm has been triggered.
- ❑ 1 channel recording.
- ❑ User-friendly video search (Date/ Time).
- ❑ Enables backup onto Compact Flash Card and are compatible to most multimedia systems.
- ❑ New disc formation function. Recording time is very long.
- ❑ Simple front panel user interface.
- ❑ When the HDD is full, it overwrites old data or gives off alarm notification.

3. NAME AND FUNCTION OF EACH PART

Front View



■ / □ : <QUAD> 4 quarterly split screen display button/ auto sequence button.

■ : Channel 1 full screen display button.

■ : Channel 2 full screen display button.

■ : Channel 3 full screen display button.

■ : Channel 4 full screen display button.

MENU : Press this button to display menu setup.

ENTER : Confirm button (enters the selected setup selection)

← : Cursor button; moves the cursor leftward (upward).

→ : Cursor button; moves the cursor rightward (downward).

— : To decrease a setup value under the function selection list.

+ : To increase a setup value under the function selection list.

EXIT : Exit button; to return to the previous selection list.

REC <●> : (Manual) Record button; to start record on all cameras.

STOP <■> : Stop button; during manual recording, press this button to stop manual recording. During playback, press this button to playback and return to the previous monitoring display.

STEP <II> : Step button; press each time for a picture frame to be displayed.

REW <◀◀> : Fast backward search button.

PLAY <▶> : Play button; when monitoring, press this button to playback the resent stored video data.

F.F. <▶▶> : Fast forward search button.

SEARCH : Supports fast data searching function.

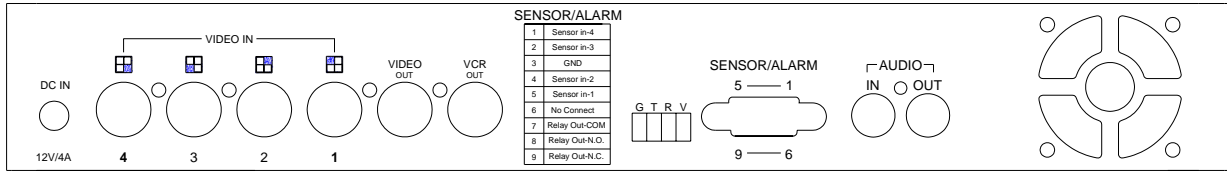
ALARM(ON/OFF) : Alarm switch; controls “Relay” and “Buzzer”.

ON : Starts up the Alarm trigger output function, LED lit.

OFF : Sets off the Alarm trigger output function, LED is unlit.

Alarm output switch <ALARM>, when alarm is set (OFF) and an event occurs during schedule recording (Motion Detect, Sensor Trigger and Video Loss), the alarm output will not trigger.

Rear View



POWER INPUT: DC 12V, 4A.

VIDEO IN: 4 camera signal input terminal; it is separately connected to number 1, 2, 3 and 4 camera.

VIDEO OUT: Video output terminal; it is connected to the monitor.

VCR OUT: Quad video output terminal; may be connected to the VCR.

AUDIO IN: Camera microphone input terminal (Line in).

AUDIO OUT: To play out recorded sounds during playback and microphone sounds when monitoring.

SENSOR/ ALARM: DB9 connector device; connects to the 4 external sensor input and 1 alarm output.

FAN: Heat release fan.



The device supports auto detection on NTSC/ PAL. Therefore, please connect the camera before power on.

GTRV: Internet device, please purchase separately.

DB9 - definition for the connector foot.



1	Sensor Trigger Input – 4	4 th external sensor input
2	Sensor Trigger Input – 3	3 rd external sensor input.
3	GND	Ground
4	Sensor Trigger Input – 2	2 nd external sensor input.
5	Sensor Trigger Input – 1	1 st external sensor input.
6	No Connect	
7	Relay Out – COM	Relay output common ground
8	Relay Out – N.O.	Relay output normal open ground.
9	Relay Out – N.C.	Relay output normal close ground.

4. SYSTEM SETUP

INSTANTANEOUS MONITORING MODE

The device automatically enters this display mode after power on, it supports quad and full screen monitoring.

Press camera selection button <F1>, <F2>, <F3> or <F4> to enter full screen monitoring.

Press <F5/F6> button to enter quad screen monitoring; press again to enter sequence mode.

※ For more information on **SEQUENCE** or **Dwell Time**, please refer to its relevant section in this manual.

PLAY MODE

1.1 PLAY

Under the monitoring mode, press <PLAY> button to playback the latest recorded videos,

Press <SEARCH> button (search according to date and time), to quick search the videos to be played back. Press <PLAY> button or <ENTER> button to play.

● Search :

Press <F.F.> or <▶▶> button: enables fast forward searching.

Press <REW> or <◀◀> button: enables rewind searching.

Press <PLAY> button: enables normal playback speed.

● Full Screen Display :

Press camera selection button: <F1>, <F2>, <F3> and <F4> to enable full screen playback display.

● Quad Screen Display / Auto Skip Display :

Press <F5/F6> button: enables quad screen playback display.

● Pause Playback :

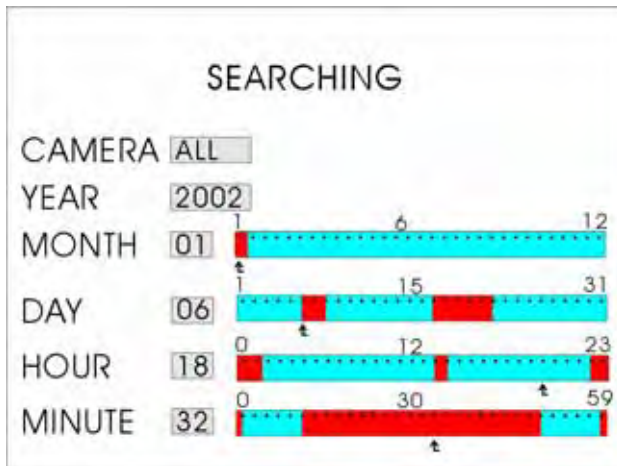
Press <STEP> button: 1 single frame is display each time.

● Stop Playback :

Press <STOP> button: stops playback and returns to instantaneous monitoring mode.

1.2 SEARCH

Supports searching function by camera, date and time, press <SEARCH> button on the front panel to display the image display below:



Use <←> or <→> button to move the cursor (Highlight) up or down to the location of adjustment, press <+> and <-> or <▶▶> and <◀◀> button to change the setup value and to move the index bar.

Camera :

Select the desired camera, press <←> or <→> button to move the cursor (Highlight) to the location of adjustment, press <+> or <-> button to select the camera (All, 1, 2, 3 and 4).

Year and Month :

To enter year, month and date; press <←> and <→> or <+> and <-> button to make the necessary adjustment.

Day, Hour and Minute :

To enter Day, hour and minute; use <←> and <→> button, to move the cursor (Highlight) to **Day**, press <+> and <-> or <▶▶> and <◀◀> button, to move the index bar and to show the Day (the setup for **Hour** and **Minute** are the same).

When the above setups are complete; press <PLAY> or <ENTER> button, to enter the playback mode or <EXIT> button, to return to instantaneous monitoring mode.

RED : Represents **Motion Recording** (displacement) or **Sensor Trigger Recording**.

BLUE : Represents **Manual Recording** or **Continuous Schedule Recording**.

RECORD MODE

Manual Recording : Under monitoring mode; press **<REC>** button on the front panel, to enable recording on all cameras and press **<STOP>** button, to stop manual recording.

- ※ The shortest applicable recording time is approximately 5 seconds : Press **<REC>** button and only after 5 seconds may one press the **<STOP>** button.
- ※ During the circumstance when the Schedule Recording has been set (ON) under the selection setup; the **<STOP>** button will not function (**<STOP>** button only functions under Manual Recording and not Schedule Recording).
- ※ Please refer to its relevant section in this manual for further information on **Continuous Schedule Recording, Motion Recording** and **Sensor Trigger Recording** setup.

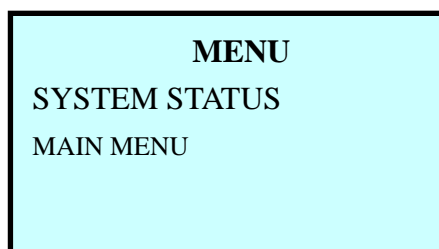
MAIN MENU

1.1 ENTER CONTENT

Press <MENU> button on the front panel, to enter the Selection, use the cursor button <<-> or <->> to move the cursor to the preset item, press <ENTER> button to enter the setup selection.

<EXIT> button: press to return to the previous selection.

<STOP> button: press to exit the selection.



1.2 VIEW CURRENT STATUS

After entering the Menu, move the cursor to **SYSTEM STATUS**, press <ENTER> button, to enter the selection.

TOTAL CAPACITY: Overall capacity of the HDD.

REMAINING TIME: Free space of the HDD.

VIDEO MODE: Record Mode.

QUAD: 4 split screen display recording.

EACH: Single screen display (4ch independent recording)

QUALITY: Record quality

RECORD MODE: Displays the current camera been recorded and its recording mode.

DISK FULL: Setup of HDD when full.

AUDIO: Shows the status of the microphone (ON/ OFF).

CURRENT DATE/ TIME: Current date and time.

SYSTEM STATUS	
TOTAL CAPACITY	: 80GB
REMAINING TIME	: 70 HR
VIDEO MODE	: EACH
QUALITY	: HIGH
RECORC MODE	
CAMERA 1	: CONTINUE
CAMERA 2	: MOTION
CAMERA 3	: SENSOR
CAMERA 4	: SCHEDULE
DISK FULL	: OVERWRITE
AUDIOAUDIO	: ON
TIME	: 02/01/01 20:30:00

To exit, press <EXIT> button, to return to the previous selection.

By pressing <STOP> button to exit the selection.

1.3 ENTER MAIN MENU

Move the cursor to **MAIN MENU**, then press **<ENTER>** button, before allowing to enter the **MAIN MENU** the system will request for the password (No password will be requested on first time setup).

Press **<<->** and **<->** button, to move the cursor (up or down).

Press **<+>** and **<->** button, to enter the password.

Press **<ENTER>** button, to enter the **MAIN MENU**.

After entering the **MAIN MENU**, use the cursor button **<<->** and **<->**, to move the cursor to the desired setup selection, press **<ENTER>** button to enter the setup selection.

Press **<EXIT>** button: return to the previous selection.

Press **<STOP>** button: exit the selection.

- ※ All other function selections are inapplicable during recording; only the **RECORD MODE** selection may be entered.
- ※ Therefore, to enter other function selections, one must first switch off all recording function (Manual, Schedule, Motion detection and Sensor Trigger Recording).

1.4 DATE / TIME SETUP

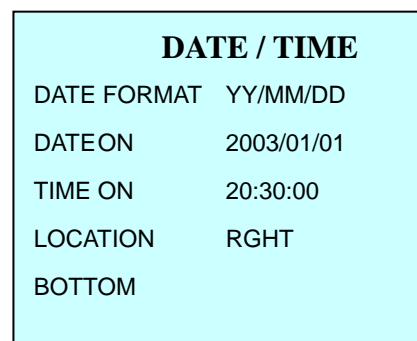
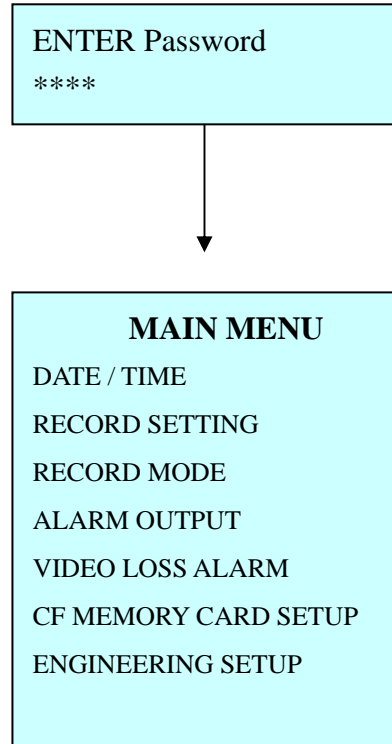
After entering the **MAIN MENU**, move the cursor to **DATE/ TIME**, press **<ENTER>** button, to enter the screen display shown on the right hand side:

Press **<<->** and **<->** button, to move the cursor (up or down).

Press **<+>** and **<->** button, to change the setup value.

Press **<EXIT>** button: returns to the previous page.

Press **<STOP>** button: exit the selection.



DATE FORMAT :

3 Types of Date Format setup:

- a. YY/MM/DD : Year/ Month/ Day
- b. MM/DD/YY : Month/ Day/ Year
- c. DD/MM/YY : Day/ Month/ Year

DATE :

ON : The date will be displayed on the screen.

OFF : The date will not be displayed on the screen.

TIME :

ON : The time will be displayed on the screen.

OFF : The time will not be displayed on the screen.

LOCATION :

Six locations to display time:

- a. LEFT TOP
- b. RIGHT TOP
- c. LEFT BOTTOM
- d. RIGHT BOTTOM
- e. TOP
- f. BOTTOM

※ During recording, date and time of the video image are also stored. Therefore, please do eliminate constant changing of data (to prevent future errors when data searching).

1.5 RECORD SETTING

Move the cursor to **RECORD SETTING**, press <ENTER> button to enter the selection and to show the **RECORD SETTING** screen display:

Press <<-> or <->> button, to move the cursor (up or down).

Press <+> or <-> button, to change the setup value.

Press <EXIT> button, to return to the previous page.

Press <STOP> button, to exit the selection.

Compression : MPEG4

RECORD SETTING	
COMPRESSION	MPEG4
RESOLUTION	704x240
VIDEO MODE	EACH
QUALITY	HIGH
FRAME RATE	30
DISK FULL	OVERWRITE
AUDIO IN	OFF
RECORD TIME	
TOTAL TIME	: 53HR
REMAINING TIME:	33HR

VIDEO MODE :

2 Types of Video Mode :

QUAD : 4-split screen display.

EACH : Single full screen display.

QUALITY :

3 Types of Record Quality: LOW, MIDDLE and HIGH.

RECORD SPEED : Frames per second

DISK FULL :

2 Types of option when disk is full:

OVERWRITE : When the disk is full the system overwrites the old data.

STOP : When the disk is full the system stops recording.

AUDIO IN :

ON : Microphone recording function ON.

OFF : Microphone recording function OFF.

RECORD TIME :

TOTAL TIME : According to recording resolution, recording speed and HDD recording time.

REMAINING TIME : According to recording resolution, recording speed and the remaining recording time.

1.6 RECORD MODE

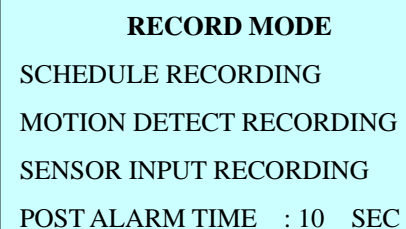
Move the cursor to **RECORD MODE**, press <ENTER> button, to enter the selection and to show the **RECORD MODE** screen display:

3 Types of Recording Mode:

a. SCHEDULE RECORDING

b. MOTION DETECT RECORDING

c. SENSOR INPUT RECORDING



```
RECORD MODE
SCHEDULE RECORDING
MOTION DETECT RECORDING
SENSOR INPUT RECORDING
POST ALARM TIME : 10 SEC
```

SCHEDULE RECORDING

CH	BEGIN / END	REC
ALL...	20:00-08:00	OFF
1	08:00-20:00	ON
2	00:00-00:00	ON
3	00:00-00:00	OFF
4	00:00-00:00	OFF

MOTION DETECT RECORDING

CH	BEGIN / END	REC	SEN
ALL...	20:00-08:00	Off	3
1	08:00-00:00	Off	3
2	00:00-00:00	Off	3
3	00:00-00:00	On	3
4	00:00-00:00	On	3

SENSOR INPUT RECORDING

CH	BEGIN / END	REC	SEN	TYPE
ALL...	20:00-08:00	OFF	3	NC
1	08:00-20:00	ON	3	NC
2	00:00-00:00	OFF	3	NC
3	00:00-00:00	OFF	3	NC
4	00:00-00:00	ON	3	NC

Press <<-> or <->> button, to move the cursor.

Press <+> or <-> button, to change the setup value.

Press <EXIT> button: returns to the previous selection.

Press <STOP> button: exit the selection.

CHANNEL : ALL Cameras or Camera No.: 1, 2, 3 and 4.

Select to setup all cameras at once or setup by individual camera (one by one camera setup; No.: 1, 2, 3 and 4).

TIME :

BEGIN : Beginning of record time.

END : Ending of recording time.

* Example: Recording beginning time starts from 8am and ends at 8pm; Enter: 08:00—20:00.

Whole day recording; Enter: 08:00—08:00 (begin time = end time)

SCHEDULE RECORDING :

ON : Schedule Recording is automatically switched on according to the setup of the schedule time.

OFF : Schedule Recording will not be switched on according to the setup of the schedule time.

MOTION DETECT RECORDING :

ON : Motion detection recording is automatically switched on according to the setup of the schedule time.

OFF : Motion detection recording will not be switched on according to the setup of the schedule time.

SENSOR INPUT RECORDING :

ON : Sensor Input Recording is automatically switched on according to the setup of the schedule time.

OFF : Sensor Input Recording will not be switched on according to the setup of the schedule time.

MOTION SENSITIVITY (SEN) : 5 Levels (Adjustable)

(1:maximum sensitivity level, 5:minimum sensitivity level)

SENSOR SENSITIVITY (SEN) : 1~5 Seconds (Adjustable)

1: 0.2 Sec. (Sensor triggers recording and alarm after 0.2 sec.)

2: 0.5 Sec. (Sensor triggers recording and alarm after 0.5 sec.)

3: 1 Sec. (Sensor triggers recording and alarm after 3 sec.)

4: 2 Sec. (Sensor triggers recording and alarm after 2 sec.)

5: 5 Sec. (Sensor triggers recording and alarm after 5 sec.)

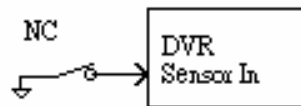
SENSOR TYPE :

NC → TTL level input

Setup NC (Normal Close) sensor alarm; when an event has been triggered.

NO → TTL level input

Setup NO (Normal Open) sensor alarm; when an event has been triggered.



POST-ALARM TIME :

Post-alarm time after a motion detection event has been occurred (Post-alarm Time: 0~99 sec.).

1.7 ALARM OUTPUT

Move the cursor to **ALARM OUTPUT**, press **<ENTER>** button, to enter the selection and to show the **ALARM OUTPUT** screen display:

Press **<<=>** or **<=>** button, to move the cursor (up or down).

Press **<+>** or **<->** button, to change the setup value.

Press **<EXIT>** button, to return to the previous page.

ALARM OUTPUT SETUP	
BUZZER: OFF	PERIOD : 01 MIN
RELAY : ON	PERIOD : 02 MIN

BUZZER:

ON: Buzzer set to “**ON**”; when an event trigger occurs, the buzzer will sound.

To enable this function, one must enable the alarm function by press the **<ALARM>** button on the front panel (LED will lit).

OFF: Buzzer set to “**OFF**”; when an event trigger occurs, the buzzer will not sound.

RELAY:

ON: Relay set to “**ON**”; the relay function is enabled, when an event trigger occurs.

To enable this function, one must enable the alarm function by press the **<ALARM>** button on the front panel (LED will lit).

OFF: Relay set to “**OFF**”; the relay function is disabled, when an event trigger occurs.

PERIOD: The duration time of alarm output (Duration Time: 1~15min).

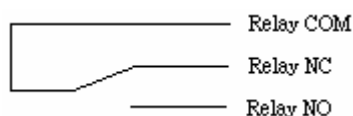
Press **<ALARM>** button on the front panel to switch off the alarm output function.

3 Types of Event Trigger:

- ① MOTION DETECT: Triggered by motion detection.
- ② SENSOR TRIGGER: Triggered by sensor.
- ③ VIDEO LOSS: Triggered by video loss.

Alarm Out (Relay) :

2 Types of Alarm Out: Normal Close (NC) and Normal Open (NO).



1.8 VIDEO LOSS ALARM

Move the cursor to **VIDEO LOSS ALARM**, press **<ENTER>** button, to enter the selection and to show the **VIDEO LOSS ALARM** screen display:

Press **<<->** or **<->** button, to move the cursor (up or down).

Press **<+>** or **<->** button, to change the setup value.

Press **<EXIT>** button, to return to the previous page.

VIDEO LOSS ALARM	
CH	ALARM
ALL...	
1	ON
2	OFF
3	ON
4	OFF

CHANNEL :

Select “**ALL**” to setup all cameras or select from number **1 to 4** cameras for individual setup.

ALARM :

ON : Alarm set to “**ON**”; when video loss occurs the alarm will buzz.

To enable this function, one must enable the alarm function by press the **<ALARM>** button on the front panel (LED will lit).

OFF : Alarm set to “**OFF**”; when video loss occurs the alarm will not buzz.

Although no buzzer sound, VIDEO LOSS will be displayed on the screen to notify the user.

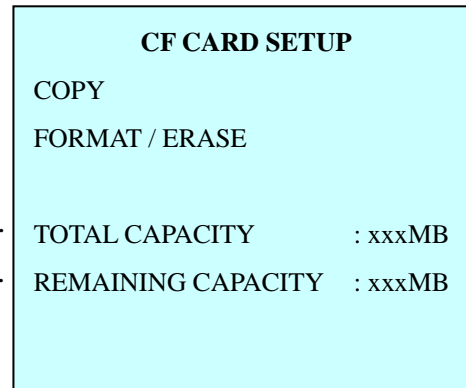
1.9 COMPACT CARD SETUP

Move the cursor to **CF CARD SETUP**, press **<ENTER>** button, to enter the selection and to show the **CF CARD SETUP** screen display:

Press **<<=>** and **<=>** button, to move the cursor (up or down).

Press **<+>** and **<->** button, to change the setup value.

Press **<ENTER>** button, to return to the previous page.



COPY : Duplicate the data onto the CF card.

FORMAT/ERASE : Delete all data stored in the CF card.

TOTAL CAPACITY : Storage capacity of the CF card.

REMAINING CAPACITY : Remaining storage space of the CF card.

1.9.1 COPY

Move the cursor to **Copy**, press **<ENTER>** button, to enter the selection and to show the **COPY** screen display:

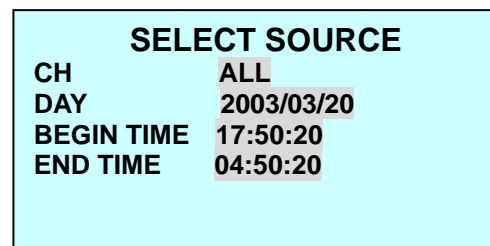
SELECT SOURCE :

Select all cameras or select individually:

Press **<+>** or **<->** button, to change the setup value.

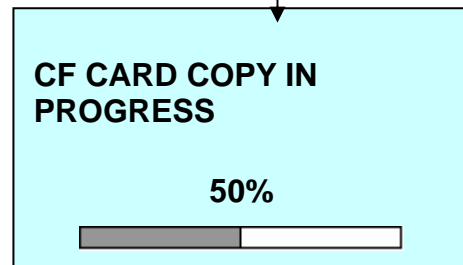
Press **<<=>** and **<=>** button, to move the cursor (up or down).

Press **<ENTER>** button, to start copy.



SELECT TIME :

BEGIN/ END: The system will start copying according to the setup (begin and end time).



1.9.2 CF CARD DATA FORMAT / ERASE

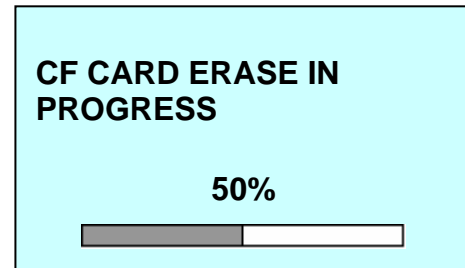
Move the cursor to **ERASE**, press **<ENTER>** button to enter the selection and to show the **CF CARD ERASE** screen display:

※ At this time all data in the CF card will be forever erased.

<EXIT> button: press to return to the previous selection.

<STOP> button: press to exit the selection.

※ Due to timing issue, We suggest strongly that you use Transcent, SanDisk or Aplus Compact Flash Card.



1.10 ENGINEERING SETUP

Move the cursor to **ENGINEERING SETUP**, press **<ENTER>** button, to enter the selection and to show the **ENGINEERING SETUP** screen display:

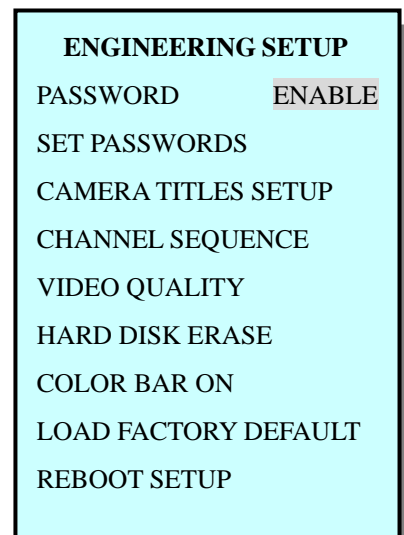
Press **<<=>** and **<=>** button, to move the cursor (up or down).

Press **<+>** and **<->** button, to change the setup value.

Press **<ENTER>** button, to return to the previous page.

1.10.1 PASSWORD PROTECTION

Move the cursor to **Password Protection**, press **<ENTER>** button, to show the **Password Protection** screen display:

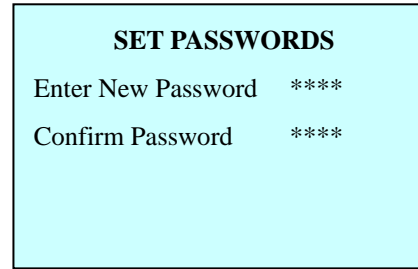


ENABLE: Password protection setup. Password is requested before entering the MAIN MENU.

DISABLE: Canceling of password protection setup. Password will not be requested when entering the MAIN MENU.

1.10.2 SET PASSWORD

Move the cursor to **SET PASSWORDS**, press **<ENTER>** button to enter the selection and to show the **SET PASSWORDS** screen display:



Press **<←>** and **<→>** button, to move the cursor (up or down).

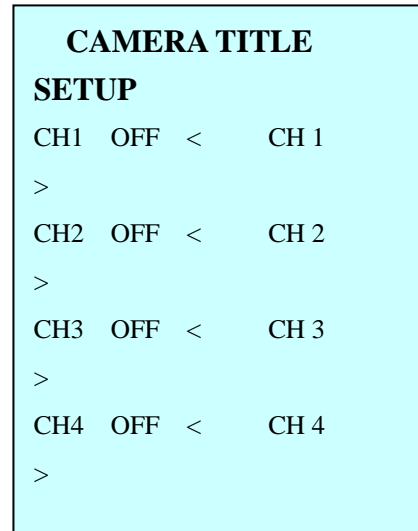
Press **<+>** and **<->** button, to enter the password.

Press **<ENTER>** button, to confirm the password and to exit, press **<EXIT>** button.

(Password: 0000)

1.10.3 CAMERA TITLE SETUP

Move the cursor to **CAMERA TITLES SETUP**, press **<ENTER>** button, to enter the selection and to show the **CAMERA TITLE SETUP** display (Maximum characters per title is 8).



Press **<←>** and **<→>** button, to move the cursor (up or down).

Press **<+>** and **<->** button, to change the setup Value.

Press **<ENTER>** button, to return to the previous page.

ON: Displays camera title.

OFF: Camera title not displayed.

1.10.4 CHANNEL SEQUENCE

SEQUENCE:

The Channel Sequence is set according to the Sequence:

1, 2, 3, 4, 5, 6, 7 and 8.

Each sequence may be setup individually.

CAMERA NUMBER :

6 Types of Sequence setups:

- Q : Quad screen display.
- 1 : Camera 1 screen display.
- 2 : Camera 2 screen display.
- 3 : Camera 3 screen display.
- 4 : Camera 4 screen display.
- : Ignore this channel and skip to the next channel.

CHANNEL SEQUENCE								
SEQUENCE	1	2	3	4	5	6	7	8
CAMERA NUM	Q	1	2	3	4	-	-	-
DWELL TIME	3	3	3	3	3	3	3	3

Dwell Time: The dwell time per each channel is 2~9 seconds (adjustable).

EXAMPLE:

- <Sequence 1>: Quad screen display, 3 sec dwell time.
- <Sequence 2>: Camera number 1, 3 sec dwell time.
- <Sequence 3>: Camera number 2, 3 sec dwell time.
- <Sequence 4>: Camera number 3, 3 sec dwell time.
- <Sequence 5>: Camera number 4, 3 sec dwell time.
- <Sequence 6>: Ignore this channel and skip to the next one.
- <Sequence 7>: Ignore this channel and skip to the next one.
- <Sequence 8>: Ignore this channel and skip to the next one.

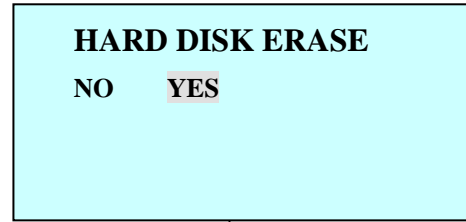
1.10.5 VIDEO QUALITY

Adjustment of camera: Brightness, Contrast, Chroma and Sharpness (cameras may be separately adjusted).

VIDEO QUALITY			
CH1		CH2	
BRIGHT	33	BRIGHT	33
CONTRAST	26	CONTRAST	26
CHROMA	37	CHROMA	37
SHARP	0	SHARP	0
CH1		CH4	
BRIGHT	33	BRIGHT	33
CONTRAST	26	CONTRAST	26
CHROMA	37	CHROMA	37
SHARP	0	SHARP	0

1.10.6 HARD DISK ERASE

Move the cursor to **HARD DISK ERASE**, press **<ENTER>** button, to enter the selection and to show the **HARD DISK ERASE** screen display.

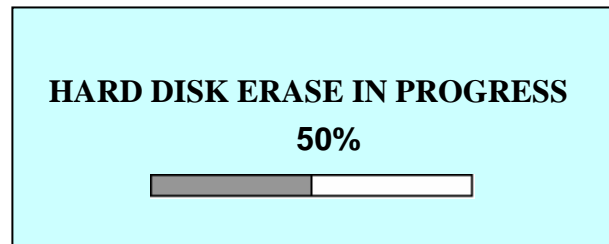


Select "**YES**" and then press **<ENTER>** button, to enable Hard Disk Formation and Erase.

At this time all recorded data are forever deleted.

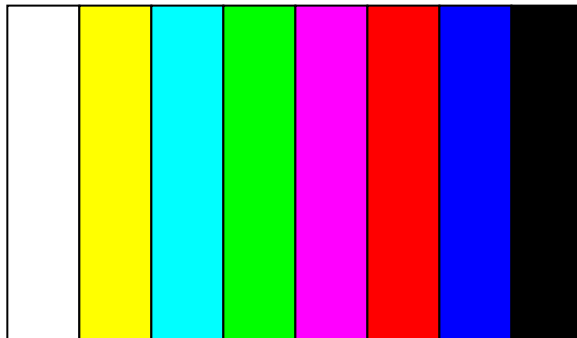
※ When **PASSWORD ENABLE** setup was previously set, the system will ask for the password before erasing the data on the HDD.

To exit, press **<EXIT>** button.



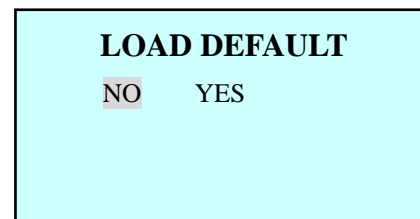
1.10.7 COLOR BAR ON

By using the color bar, the user may adjust the color of the monitor. Select "**ON**" under Color Bar selection to display the image below:



1.10.8 LOAD FACTORY DEFAULT

To adopt the factory default value, please select "**YES**" and then press the **<ENTER>** button, to enable the setup.



To exit, press **<EXIT>** button.

1.10.9 REBOOT SETUP

The system supports daily rebooting function (by fixed setup time). The system default is set to “OFF” and the time modulates per hourly.

REBOOT SETUP	
SYSTEM REBOOT :	OFF
REBOOT EVERYDAY	
REBOOT TIME :	03:00:00

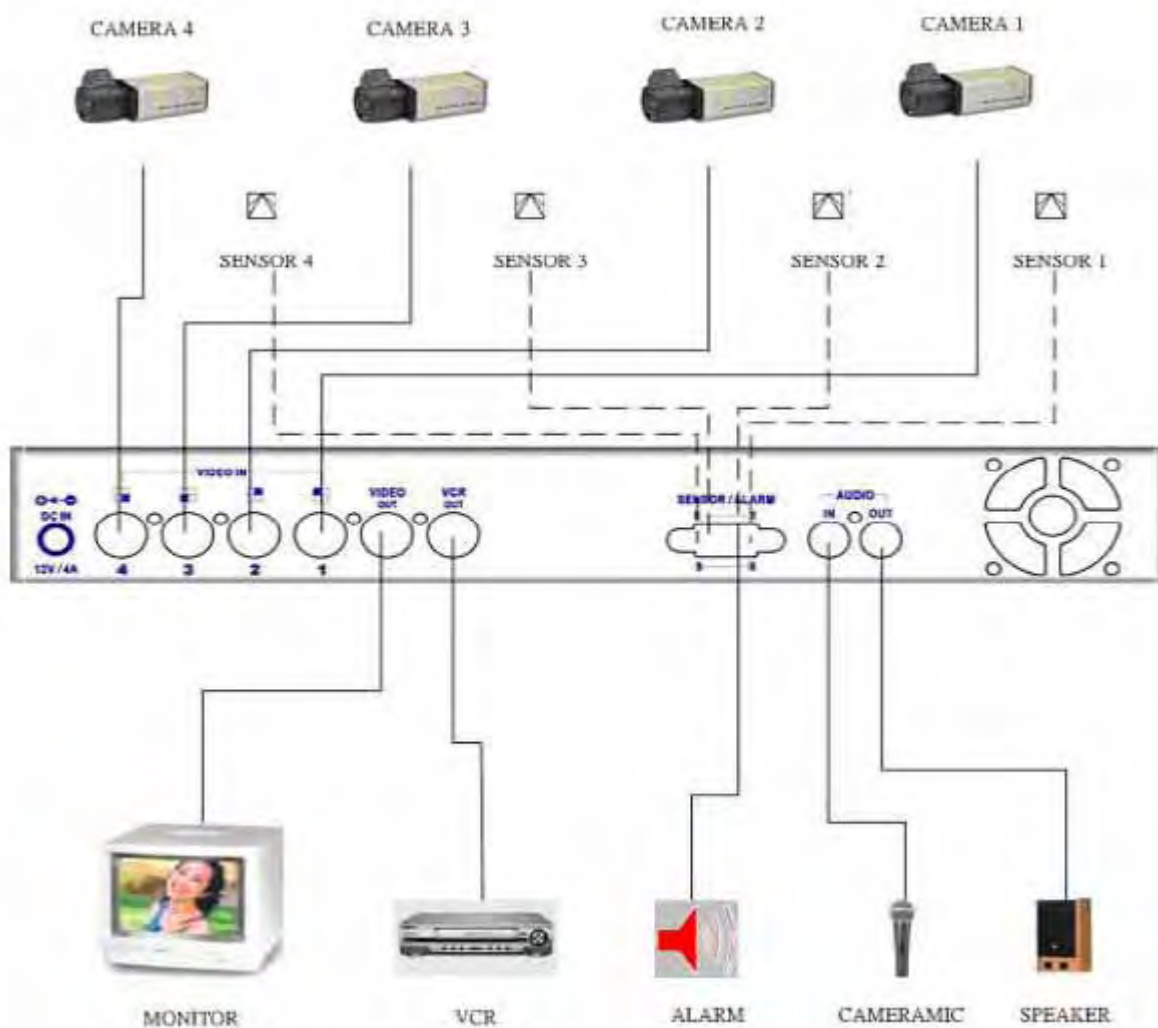
NEW HDD FORMATION

Format the HDD first before replacing the new HDD.

Steps:

1. The HDD must be set to Master.
2. Follow the above given instruction on HDD formation (No.: 1.10.6 on page 23), to enable the setup on HDD formation.

5. SYSTEM CONFIGURATION DIAGRAM



6. SPECIFICATIONS

Operating Mode	Front control panel and monitor display control.
Display Mode	Single channel display (CH 1, 2, 3 and 4). Auto continuous channel skipping (Channel skip frequency: 1 - 9 sec, adjustable). Quad display.
Record Quality	NTSC: 704 x 240: 15 Frames /sec (adjustable). 352 x 240: 30 Frames /sec (adjustable). PAL: 704 x 288: 15 Frames /sec (adjustable). 352 x 288: 30 Frames /sec (adjustable).
Record Mode	Manual Schedule Event Trigger Motion Detection
Sound Record/ Instant Broadcast	CH1 (G.726)
Compression	MPEG4
Screen Division	Quad and full screen.
Camera Input	4 CH BNC (NTSC/PAL)
Video Output	Channel format (BNC connector x 2) (Video out x 1, VCR out x 1)
Playback Function	Standard Playback — Rewind and Forward. Fast Forward Fast Rewind Step
HDD	40 ~ 120GB
Buzzer	Built-in— Video-loss trigger. ∙ Motion detection. ∙ Event trigger.
System Monitor	Auto rebooting.
Search Mode	Camera, date, time and event.
Temperature	5 °C → 40 °C
Power Supply	AC100V~240V, 50/60HzDC 12V/4A
Power consumption	20 W
Dimension	430mm x 305mm x 77mm (W x D x H)
Weight	3Kg

7. TROUBLESHOOTING

Q1: What could be the cause when partial selections are unable to be selected or setup?

A1: 1. Please enter Record Mode selection, check and make sure that all channels are setup to “OFF”.

2. If not, setup all channels to “OFF” and then press <STOP> button to skip to live display.

All channels must be preset to “OFF”, then press <STOP> or <EXIT> button to skip to live display and the setup will be stored.

3. To change setup after setup has already been completed. Firstly, setup all channels to “OFF”, then skip to live display. It enables the system to reset the recording mode.

Q2: Why is the actual CF card duplication time longer than the chosen duplication time?

A2: 1. Due to the reason of CF Card compatibility, there’s a time limitation (minimum 5 min.) on file duplication. Therefore, file duplication time of more than 5 min. is referred, the best case (A file should be approx. 7MB and the time range is approx. 4 min.).

2. Due to CF Card been slower in transforming data (2.5 MB/S highest). Therefore, please be patient, as backing up from DVR to the CF Card requires some time.

3. It is normal for the DVR to start rebooting after inserting the CF Card (It will not influence the recording function.).

Q3: How to update the DVR software by using the hard disk or CF Card?

A3: 1. Copy the software to be updated (file name: YOKO4CH.BIN) straight to the hard disk or store it in the CF card (FAT16 format).

2. Store the hard disk back onto the device and then power-on.

3. Under live display press <MENU> button, to enter menu display.

4. Under menu display press <MENU> button 3 times and then <SEARCH> button 3 times, to enter update firmware display.

5. Press <←> or <→> button, to select between hard disk or CF card.

6. Press <ENTER> to update the firmware.

7. After a few seconds (approx. 30sec.) after system update firmware has been completed, it will auto-reboot.

8. Press <MENU> button, to enter menu (bottom right corner displays version change).

Q4: Why is the DVR unable to detect the CF card?

A4: When using the CF card, please note on the following points below:

1. Applicable CFC card file systems: FAT16 or AT32.
2. It is suggested not to use CF card with storage capacity below 8Mbytes (the system is often unable to detect or determine the MBR files with storage capacity at below 8Mbytes).
3. Suggested CFC card name brand: Apacer, Sandisk, Transcend, Hagiware, Silicon and so forth. Test result shows that some unknown brand CF cards may not be as compatible due to connector head been a bit wide.

Q5: Why does it sometimes take a longer time to exit “Check Hard Disk” selection?

A5: After power-on the system determines whether or not it is under overwrite status. When it is under overwrite status, the system auto deletes the earliest video data. Checking and deleting data requires some time; it will be longer than normal power-on time (longer than 45sec). Please be patient.

Q6: Why during software update, after power-on it remains on live display for quite some times and all buttons has no functions.

A6: When proceeding software update, the system formats the whole hard disk after the first time power-on (to ensure that the system operates normally after software update). It will take up some time, please be patient.

Q7: Why does it show only 137G-storage capacity, while the actual capacity is 160G?

A7: The highest compatible storage capacity supported by the DVR is 120G. Hard disk compatibility tests have been made on many other brands.

Following brands has been tested:

MAXOTR 120G, 80G, 40G, WD 120G, 80G, 40G, HITACHI 120G, 80G and 40G.

Q8: What are the formats for hard disk and CF card? Which type of software is used to support the hard disk and CF card?

A8: Hard disk uses FAT32 format. The sub file name for Hard disk and CF card is **.asf** file. Therefore, it may be viewed by using the window media player supported by the PC.

Q9: What should be noted, when purchasing the hard disk? Except for the 120GB capacity limitation, is there any other specification limitations (e.g.: ATA66, ATA100, ATA133, 2MB Buffer, 8MB Buffer, 5400RPM, 7200RPM, 10000RPM, and etc.)?

A9: Suggested hard disk capacity: 40GB, 80GB and 120GB (specification limitation for RPM is 7200RPM and no limitations on ATA or Buffer).