Model: EDVRCD4/8/16
Entry Level 4/8/16 Camera DVRs
with Integrated CD Writer

Introduction

The EDVRCD Entry Level DVR range is ideal for use as a direct replacement for an existing video recorder and switcher, quad or multiplexer or as the heart of a new CCTV system. They are competitively priced with features you would normally expect to see only on more expensive DVRs. This includes superior picture quality, fast frame rates and an integrated CD Writer for easy backing up. They are simple to install and use and are designed for use in low to medium risk applications.

Main Features

- Real Time Live Display of up to 16 cameras
- Real Time recording of up to 4 cameras on the EDVRCD4 and up to 100fps recording on the EDVRCD8 & EDVRCD16
- Near DVD quality recording • 2 Camera audio recording
- Supports up to 2 hard drives for 1000GB recording capacity
- Duplex operation for multi screen recording & playback independently of live viewing selection
- Integrated CD Writer for easy backing of recordings to CD, which can be played back in any compatible Windows PC

Main Features in detail

Live Viewing Features

Full and Multi Screen Display: During live viewing on the EDVRCD4 (4 camera version) it is possible to view each camera full screen or all 4 as a quad image, in addition to this on the EDVRCD8 (8 camera version) the cameras can also be viewed as an 8 camera cameo, and on the EDVRCD16 (16 camera version) as a 16 camera cameo also.

Real Time Live Display: On all models the cameras are displayed in real time for smooth movement in all displays views and at 720x 576 resolution for excellent quality when in full screen.

Audio: All models have 2 audio inputs which can be monitored live during live viewing.

Standard & VGA Monitor Support: All models have a standard BNC socket for video output to a Tv with Scart or AV inputs or a CCTV monitor, and optional VGA output for connection to a PC monitor by adding the BNC2VGA adaptor.

Recording

Real Time Recording: The EDVRCD4 features real time recording at 360x288 resolution allowing it record in real time. The EDVRCD8 and EDVRCD16 record at near real time with 100 fps shared between all cameras.

Near DVD Quality Recording: All models have a near DVD quality recording option which is 720x288 resolution recording. In this mode they will record at 50fps shared between all cameras.

Wavelet Compression: The EDVRCD range uses the unique Xvision Wavelet+ compression codec for the highest quality picture recording and lowest file size possible with wavelet compression. Up to 5 different recording qualities and 6 different fps recording speeds can be set allowing the user to adjust the quality and speed to achieve the best balance of recording time and picture quality.

Audio Recording: As well as camera images all models will also record up to 2 audio inputs.

Duplex Recording: The duplex recording feature of the EDVRCD range allows the user to select any camera full screen or as a multiscreen layout during live viewing without disturbing the recording of all cameras as full screen images.

Continuous Recording: The standard recording mode of the range is continuous recording, in this mode the DVR will record all the time.

Motion Detection Recording: The range also includes a motion detection recording feature, this allows areas of each cameras view to be highlighted and then the DVR will only record when motion is detected in those areas. Allowing the DVR to record for much longer than continuous recording would achieve.

Event Recording: The DVRs are fitted with alarm inputs for each camera input which will trigger recording of cameras if the corresponding alarm input is triggered. Allowing the DVR to record for much longer than continuous recording would achieve.

Timer Recording: The DVRs will allow the user to set up a comprehensive timer schedule so that it only records during the times and days recording is required.

Recording Recycling: Once the hard drive is full the DVRs can be set to re-record over the hard drive or display a message alerting the user that the hard drive is full.

Playback

Full and Multi Screen Playback: During playback on the EDVRCD4 (4 camera version) it is possible to view each camera full screen or all 4 as a quad image, in addition to this on the EDVRCD8 (8 camera version) the cameras can also be viewed as an 8 camera cameo, and on the EDVRCD16 (16 camera version) as a 16 camera cameo also.

Playback Speed Control: The playback speed can be reduced by 16x and increased by 16x for accurate control during playback

Recording Search: Recordings can be quickly and easily found by simply entering the time and date the user is looking for or by selecting from the motion or event recording lists, which list the time date and camera number that was recorded.

Backing Up

Backup to CD: The EDVRCD range is fitted with a CD Writer for easy backing up on to a compatible Windows PC. To back up the user simply inserts a CDR or CDRW and then selects the recording that needs to be backed up. The unit then copies the recording requested and the Windows Playback Software on to the CD, this CD can then be played back on any compatible Windows PC.

Networking/Internet Access

The EDVRCD range does not have networking/internet access, if you require these features please see the Xvision TDVR Professional DVR range.

Recording Times: The following table shows an estimation of the recording space required to record for a day on all the different fps and picture quality settings that can be selected. The GB shown are per day of recording time, to calculate the time for a particular hard drive size that will be fitted in the DVR simply divide the Hard Drive size by the GB shown on the table. (eg. For an 80Gb being recorded to at 25 fps in Best quality and at 720x288 resolution, the calculation will be 80GB divided by 40GB which is 2 days)

Speed	1 fps						4 fps						12 fps						25 fps						50 fps						100 fps					
Quality	Low		Good		Best		Low		Good		Best		Low		Good		Best		Low		Good		Best		Low		Good		Best		Low		Good		Best	
Resolution (x288)	360	720	360	720	360	720	360	720	360	720	360	720	360	720	360	720	360	720	360	720	360	720	360	720	360	720	360	720	360	720	360	720	360	720	360	720
GB per Day (24 hours)	0.4	0.8	0.8	1.5	1.6	3.2	1.6	3.1	3.0	6.1	6.4	12.8	4.7	9.3	9.1	18.2	19.2	38.4	9.7	19.5	18.9	37.9	40.0	80.0	19.5	38.9	37.9	75.8	80.0	160.0	38.9	N/A	75.8	N/A	160.0	N/A

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THANK YOU FOR PURCHASING THIS EDVRCD SERIES DVR

• Please unpack the box carefully and identify that all the parts are present (see below).

• Do not cut the remove the warranty label from the side of the unit, this will void the warranty.

• Make sure you use only the recommended power supply. Damage caused to the unit by incorrect voltage or wiring is not covered by the warranty.
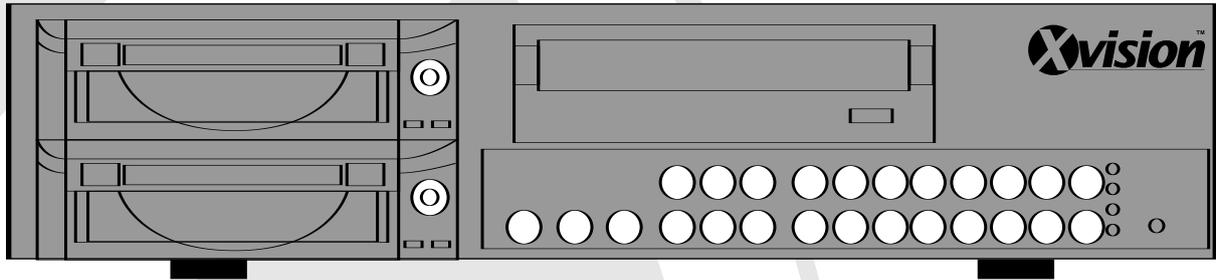
EDVRCD Series Digital Video Recorder (4,8 and 16 Channel)
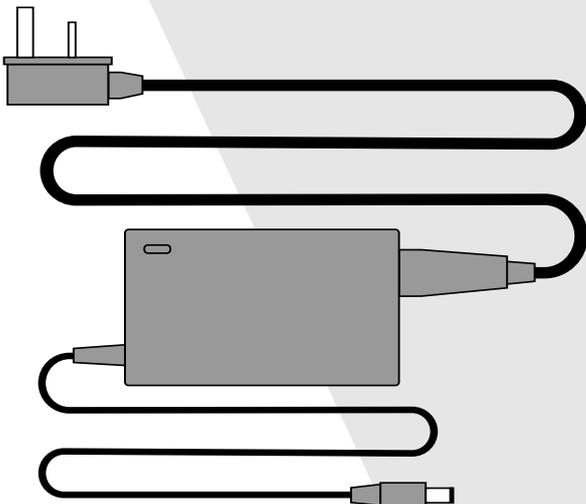
Video Viewing Software CD

Power Supply and Lead
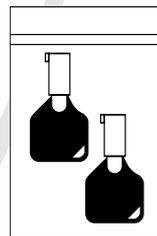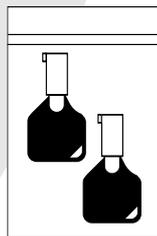
Drive Caddy Lock Keys
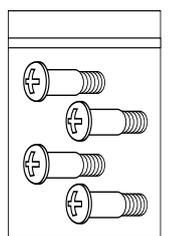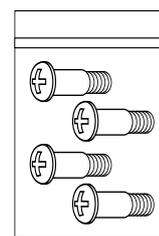
Hard Drive
Retaining Screws

Hard Drives

This DVR unit is shipped with a choice of 80GB, 160GB, 250GB, 320GB, 500GB, 800GB or 1000GB of Hard Drive space or no hard drive. Depending on the hard drive configuration you have chosen either one or both of the drive caddys will contain hard drives. Alternatively, if you have chosen the version with no hard drive, you can install your own drives. (see Chapter 4).

Front Panel Detail
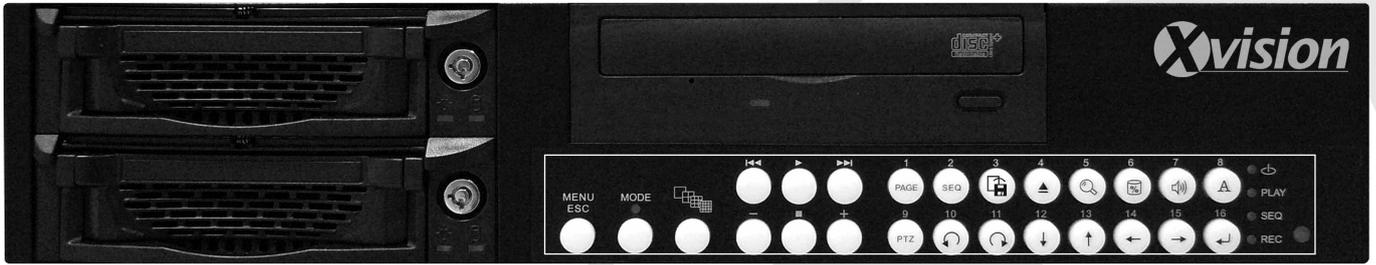
EDVR4CD- 4 Camera Digital Video Recorder
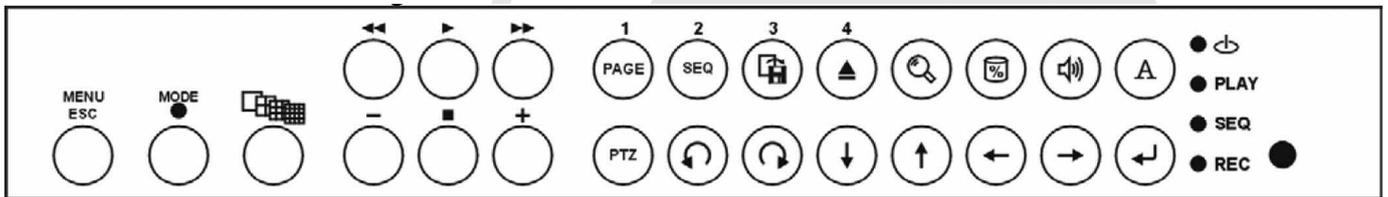
EDVR8CD- 8 Camera Digital Video Recorder
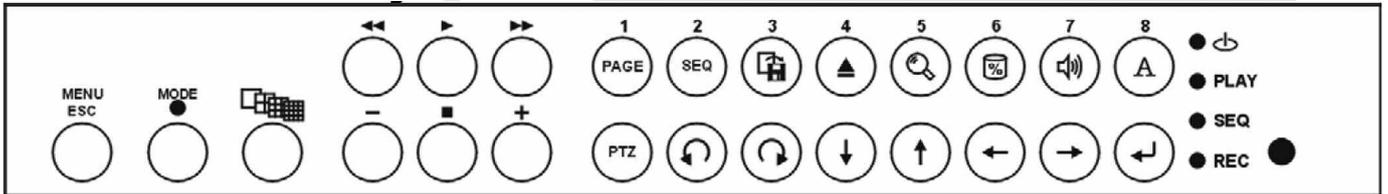
EDVR16CD- 16 Camera Digital Video Recorder
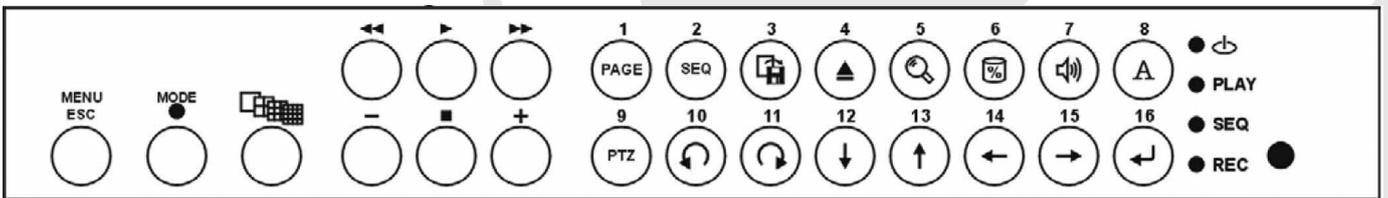
Buttons Description

Button Descriptions for Keypad Control

MENU ESC ◯	-On Screen Display (OSD) Setup -Back to the Previous Page - Back to Live/REC Mode - Disable sequence (SEQ)	◯	Change Screen Display
► ◯	-Enter Playback Mode -Play	■ ◯	Stop Playback
◄◄ ◯	Rewind During Playback	►► ◯	FF During Playback
– ◯	Decrease (-)Playback Speed	+ ◯	Increase (-)Playback Speed
4ch 1-4 8ch 1-8 16ch 1-16	-Full Screen Display of the Selected Channel -Spot Screen Display of the Selected Channel -Alarm Confirmation under Live Mode	(PAGE)	Switch Page of Screen Display (Press MODE + (PAGE))
(SEQ)	Enable sequence Channel (Press MODE + (SEQ))	(▲)	Nr of installed HDD (Press MODE + (▲)) - No HDD - 1 HDD - 2 HDD 1 - 2 HDD2
(📇)	Export video into CD during Playback mode	(%)	Hard disk usage indicator (Press MODE + (%))
(🔍)	Time search Function in Playback mode (Press MODE + (🔍))	(A)	Enable/Disable the display title (Press MODE + (A))
(🔊)	Audio Output (Audio1/Audio2/Off/Audio1,2) (Press MODE + (🔊))	(↵)	Enter
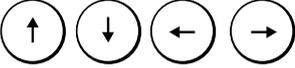
(↑) (↓) (←) (→) -OSD: Up Down Left Right
-Motion Area Setup
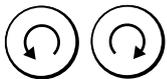
(↺) (↻) **✋ Note:** These two buttons are disabled on the EDVRCD

EDVR4CD- 4 Camera DVR Connections

ALARM/RS232

IN 1
OUT 1
IN 2
OUT 2
AUDIO
1-4CH 75Ω
ON/OFF

M.OUT CH1 CH2 CH3 CH4

DC 12V/3A

Monitor   Cameras x4   Audio IN x2   Audio OUT x2

Alarm 2   RS232-RX   RLY-NC
Alarm 0   GND   RLY-NO

Alarm 1   GND   RLY-COMM
Alarm 3   RS232-TX
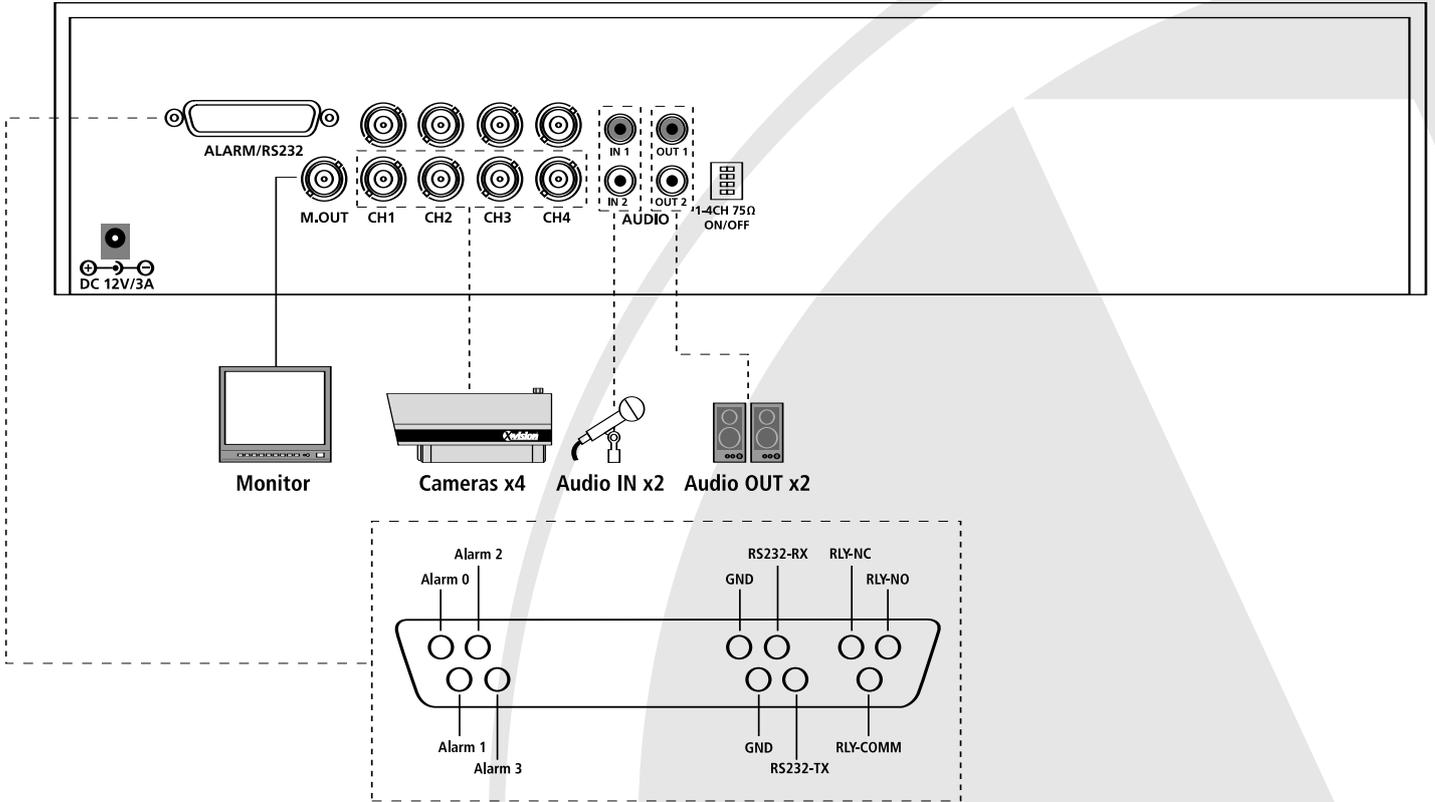
EDVR8CD- 8 Camera DVR Connections

ALARM/RS232

IN 1
OUT 1
IN 2
OUT 2
AUDIO

M.OUT CH1   CH2   CH3   CH4   CH5   CH6   CH7   CH8

DC 12V/3A

Monitor   Cameras x8   Audio IN x2   Audio OUT x2

Alarm 2 Alarm 6 Alarm 10 Alarm 14 RS232-RX RLY-NC
Alarm 0 Alarm 4 Alarm 8   Alarm 12   GND   GND   RLY-NO

Alarm 1 Alarm 5 Alarm 9   Alarm 13   GND   RLY-COMM
Alarm 3 Alarm 7 Alarm 11 Alarm 15 RS232-TX
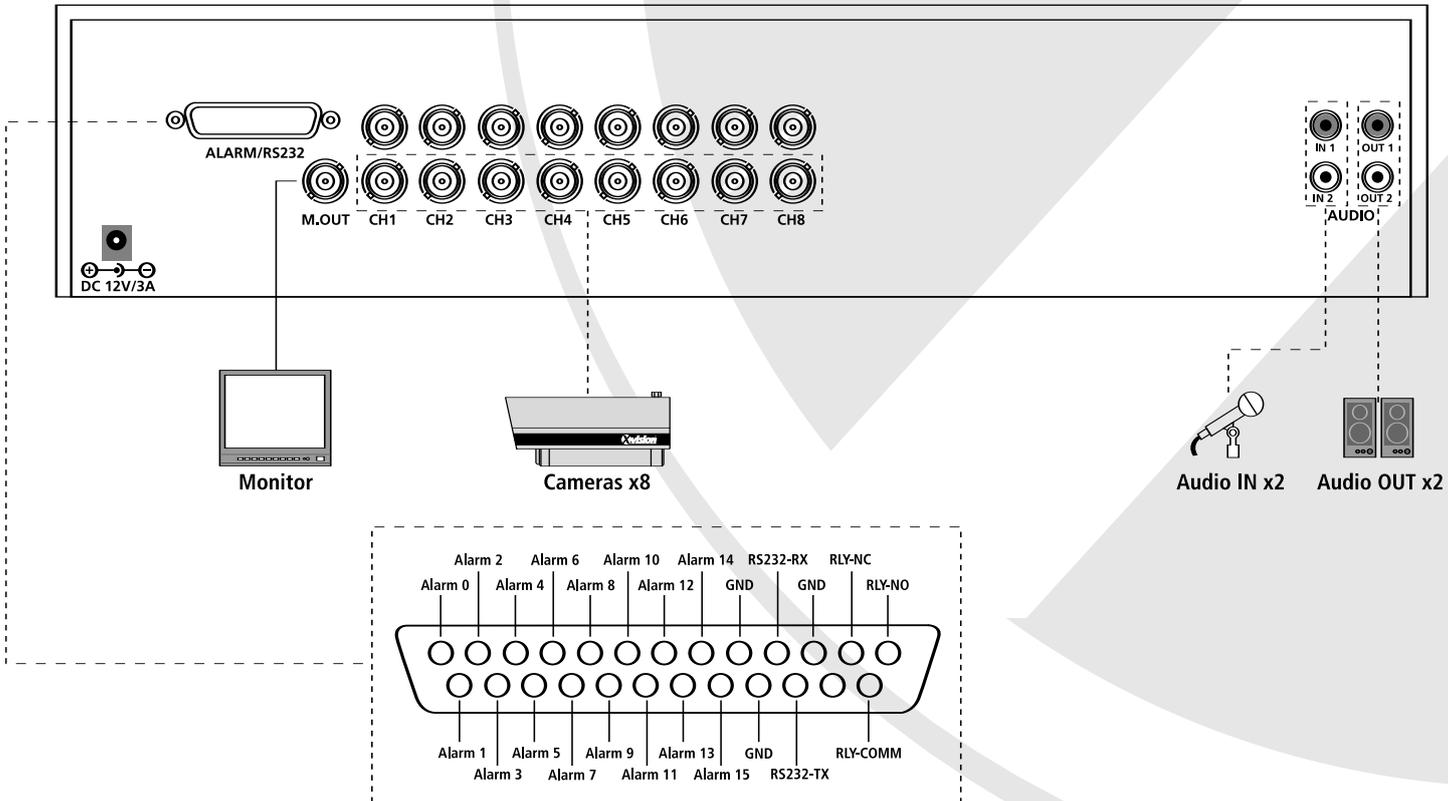
EDVR16CD- 16 Camera DVR Connections

ALARM/RS232

DC 12V/3A

M.OUT CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8 CH9 CH10 CH11 CH12 CH13 CH14 CH15 CH16   AUDIO

IN 1   OUT 1
IN 2   OUT 2

Monitor

Cameras x16

Audio IN x2   Audio OUT x2

Alarm 2   Alarm 6   Alarm 10   Alarm 14   RS232-RX   RLY-NC
Alarm 0   Alarm 4   Alarm 8   Alarm 12   GND   GND   RLY-NO

Alarm 1   Alarm 5   Alarm 9   Alarm 13   GND   RLY-COMM
Alarm 3   Alarm 7   Alarm 11   Alarm 15   RS232-TX
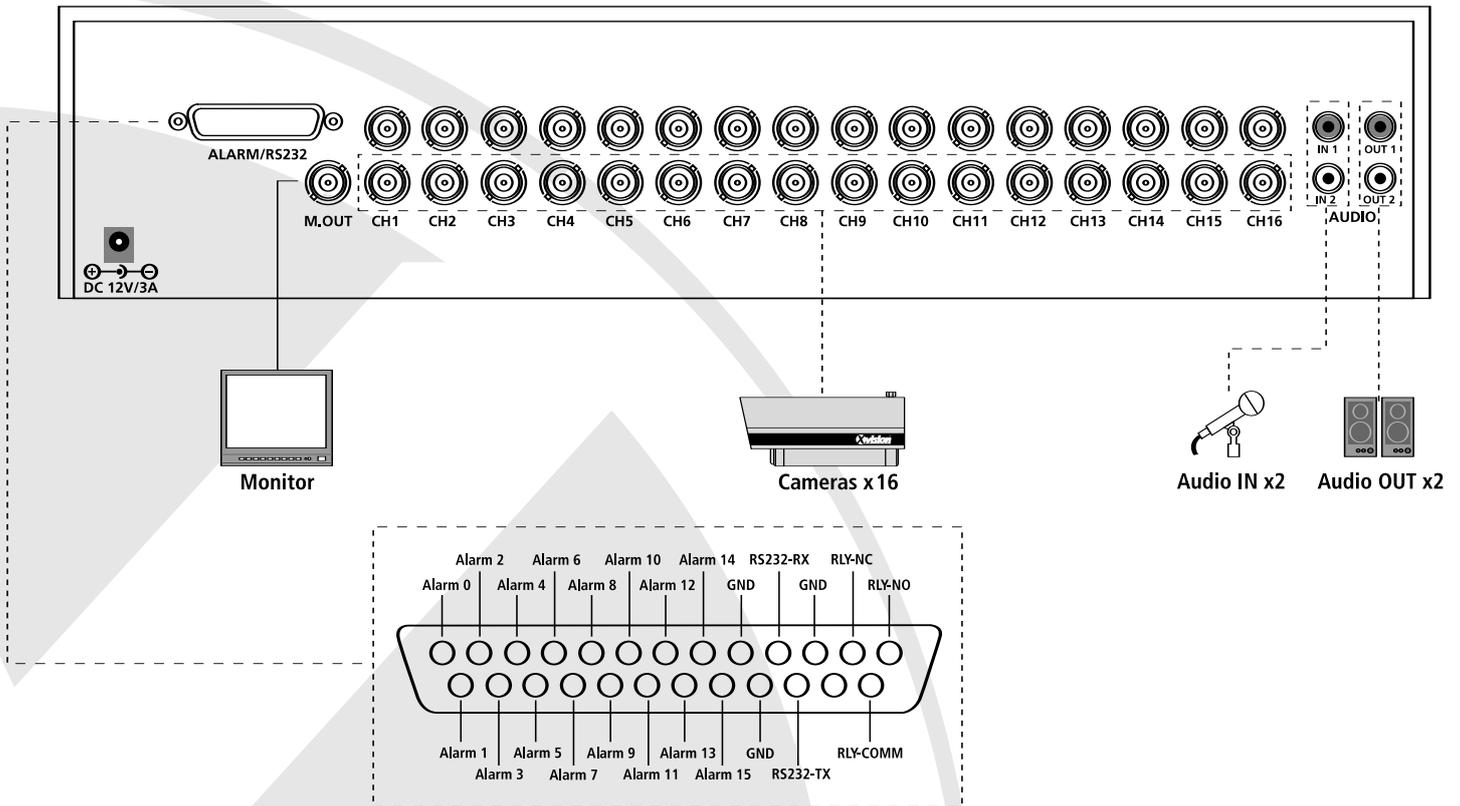
Chapter 3   Installation and Setup

Installing your DVR system

Follows these easy steps to set up and install your DVR:

1. Connect a monitor to the BNC socket (M.OUT) on the back of the unit.

2. Connect your camera(s) to the BNC socket CH 1 to CH16 (depending on model, see this and previous page for connection diagrams).

3. If you have cameras with audio facility, then connect them to the phono sockets (AUDIO IN) on the back of the DVR. **Note:** This DVR has the capability to connect two cameras with audio. Use the (AUDIO OUT) phono sockets to connect speakers or other audio device, if required.

4. Power up your cameras, monitor and DVR unit.

Start Up

1. When you first power up the DVR and you have a hard drive installed the camera will automatically start to record to the hard drive (the DVR is factory set to record continuously at 100fps).

2. Your monitor screen will be split into a quad, 8-way or 16-way. If you have cameras connected the images from the cameras will appear on screen (see Figure 4.1).

This diagram shows the camera titles, time/date positions and the way your screen will be split (depending on whether you have a 4,8 or 16 channel model).
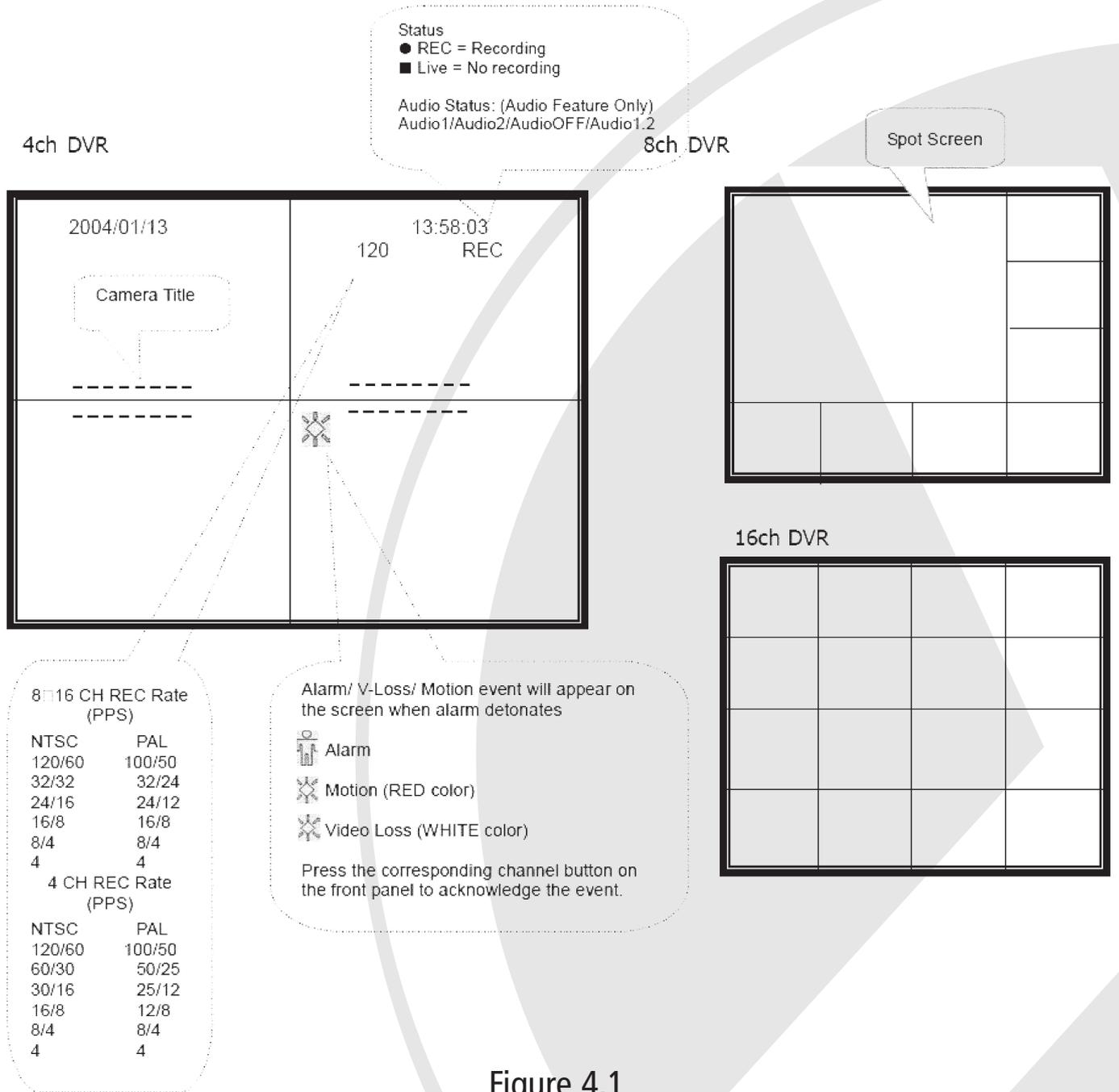
Status
● REC = Recording
■ Live = No recording

Audio Status: (Audio Feature Only)
Audio1/Audio2/AudioOFF/Audio1.2

4ch DVR

2004/01/13   13:58:03
                         120   REC

Camera Title

- - - - - - - -   - - - - - - - -
- - - - - - - -   - - - - - - - -

8ch DVR

Spot Screen

16ch DVR

8 16 CH REC Rate
(PPS)

NTSC	PAL
120/60	100/50
32/32	32/24
24/16	24/12
16/8	16/8
8/4	8/4
4	4

4 CH REC Rate
(PPS)

NTSC	PAL
120/60	100/50
60/30	50/25
30/16	25/12
16/8	12/8
8/4	8/4
4	4

Alarm/ V-Loss/ Motion event will appear on the screen when alarm detonates

Alarm

Motion (RED color)

Video Loss (WHITE color)

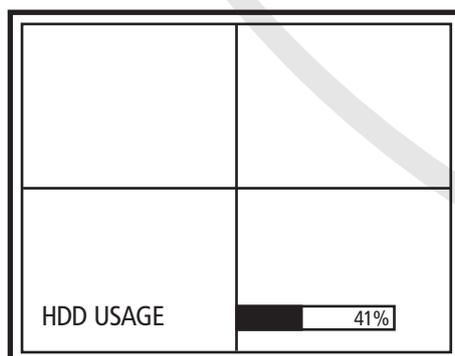Press the corresponding channel button on the front panel to acknowledge the event.

Figure 4.1

Hard Drive Space Check

Keypad Control: Press MODE, then press ⊚ ; the DVR will then show the usage indication bar as shown below:
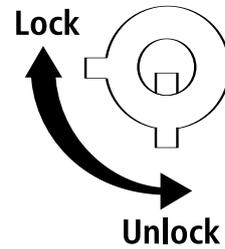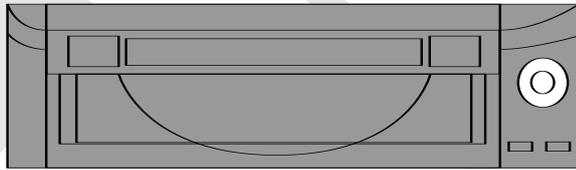
HDD USAGE   41%

The usage bar will disappear after displaying for several seconds

Inserting a Hard Drive into the caddy

If you have bought an EDVRCD series DVR with no hard drive(s) or need to replace a hard drive which is full follow these steps to install a hard drive(s):

1. Unlock (using keys supplied) and remove the caddy from the front of the unit.

Lock

Unlock

2. Remove the lid from the caddy by pressing the release button 'OPEN' and sliding the lid off backwards.

3. Place the new hard drive into the caddy and connect both the connector block and ribbon cable to the rear of the new drive.

4. Fix the drive in place using the four retaining screws supplied (see diagram below).

Hard Drive

Connector Block

Ribbon Cable

Retaining Screws
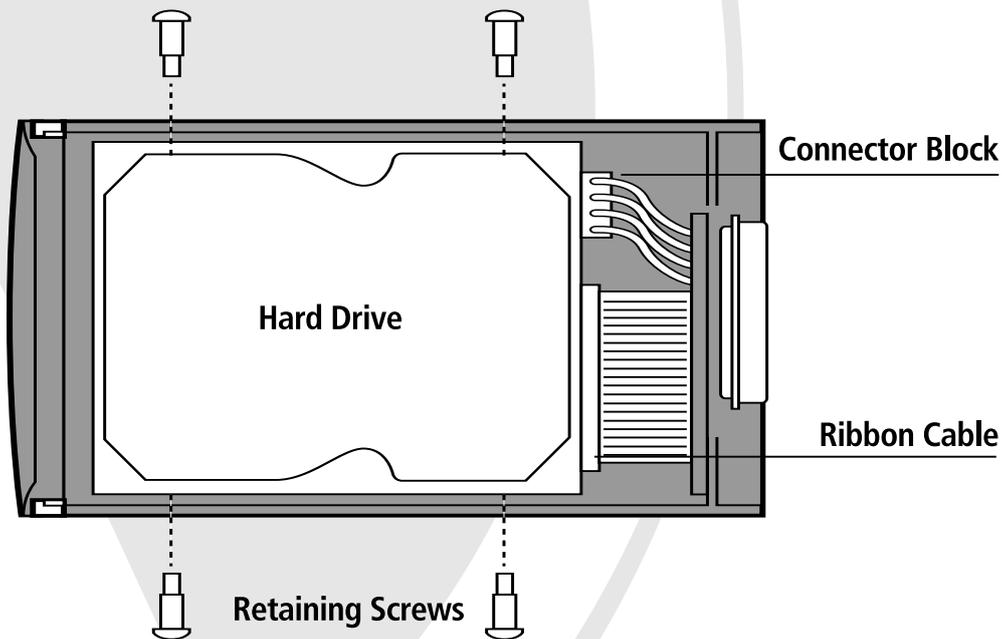
5. Replace the lid of the caddy and slide forward until the lid locks.

6. Repeat steps 1-5 if you are installing another drive.

7. Once you have finished inserting the drive into the caddy, replace the caddy in the DVR and lock by turning the key clockwise.

Hard Drive Guidelines

For trouble free operation of this DVR we recommend that you adhere to these guidelines when choosing hard drives for the EDVRCD series:

- **Use the same IDE protocol** (e.g. ATA133) of Hard Drive (HDD)

- **These drive sizes only must be used;** Choose either 80/120/160 or 250Gb Hard Drive Different IDE protocol is NOT supported (e.g. 1st Drive: ATA133, 2nd Drive: ATA???)

- Preferably use the same size Hard Drives for both (e.g. 1st Drive: Maxtor 160Gb ATA133, 2nd Drive: Maxtor 160Gb ATA133) although different size drives are still compatible.

- **Maxtor and Seagate Hard Drives are both compatible with the EDVRDCD series.**
  This DVR does not support Western Digital Hard Drives.

Initialising the Hard Drives

Once you have either installed or replaced one or both hard drives in the drive caddy follow these steps to initialise the hard drives:

Keypad Control: Press MODE, then press (▲).
If the password is required, insert the password and then press (↵) .
If there is no password protection, press (↵) when the message, 'Please confirm to remote hard drive' is shown.

Note: Don't remove the Hard Drive until 'Remove HDD now' message is shown. The DVR will keep beeping with the message 'Insert HDD now' until you have inserted the hard drive back in the DVR for recording.

REMOVE HDD NOW
AND PUSH ENTER BUTTON
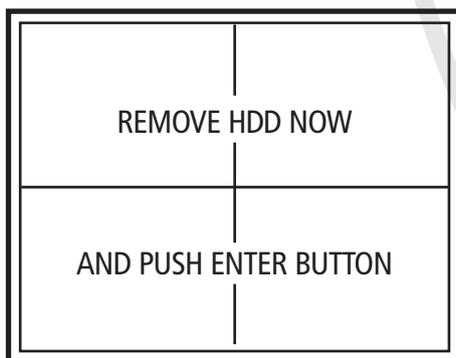
The DVR will keep beeping after the Hard Drive is removed

INSERT HDD NOW
AND PUSH ENTER BUTTON
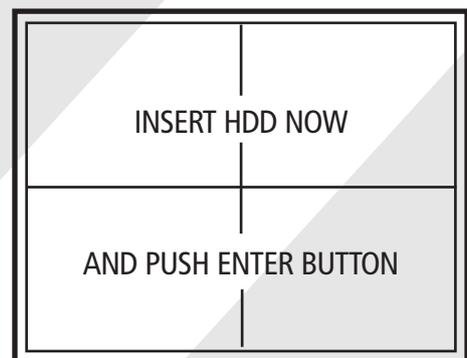
Insert a new hard drive press (↵) you will hear a short beep which notifies that the hard drive is activated and ready to record. If two hard drives are installed you will hear two beeps.
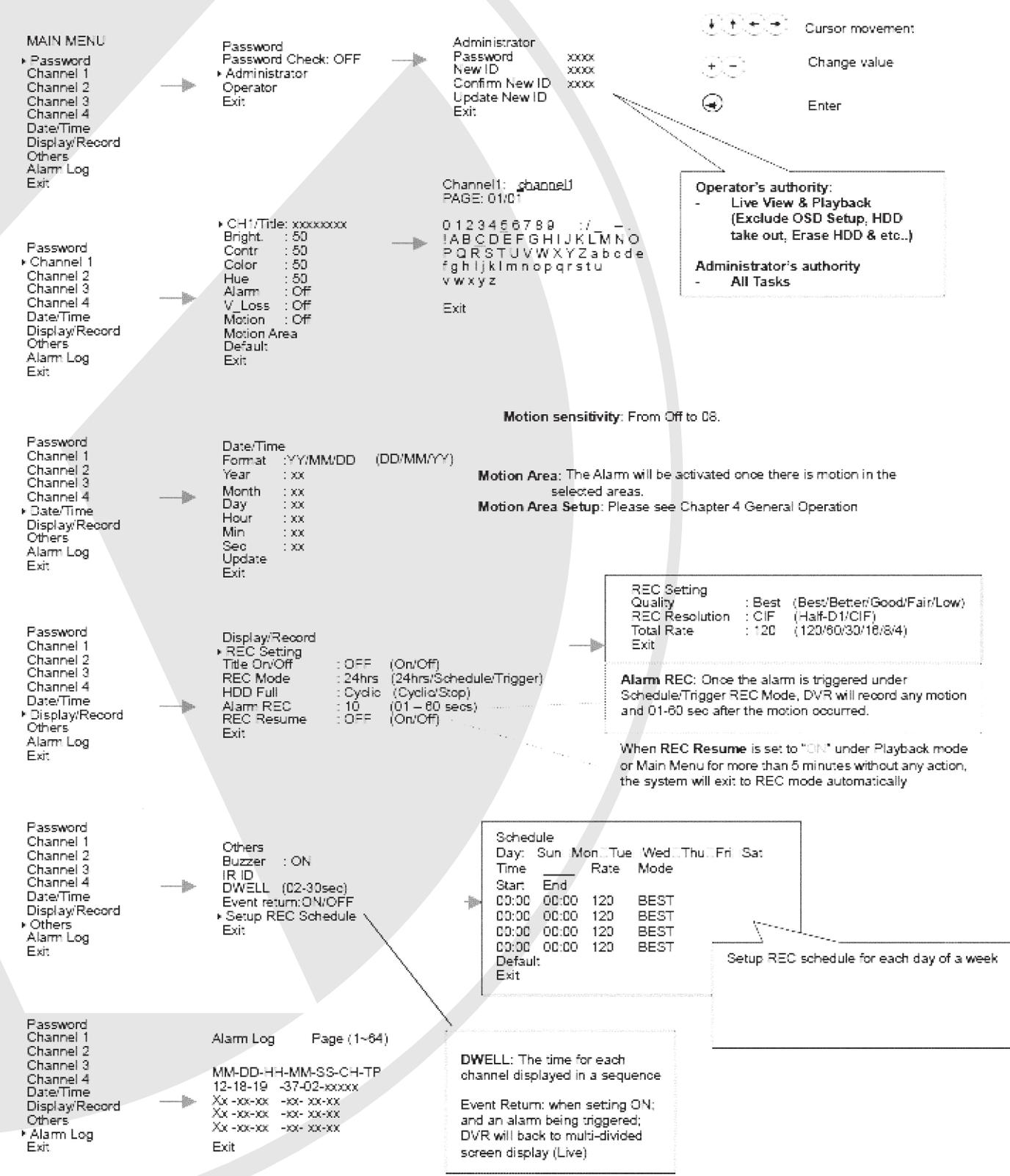
Note: If your 'HDD Full' under Display/Record is set to 'STOP', the message 'HARD DISK IS FULL' will be shown on the screen and the DVR will stop recording until the Hard Drive is replaced or inserted again.
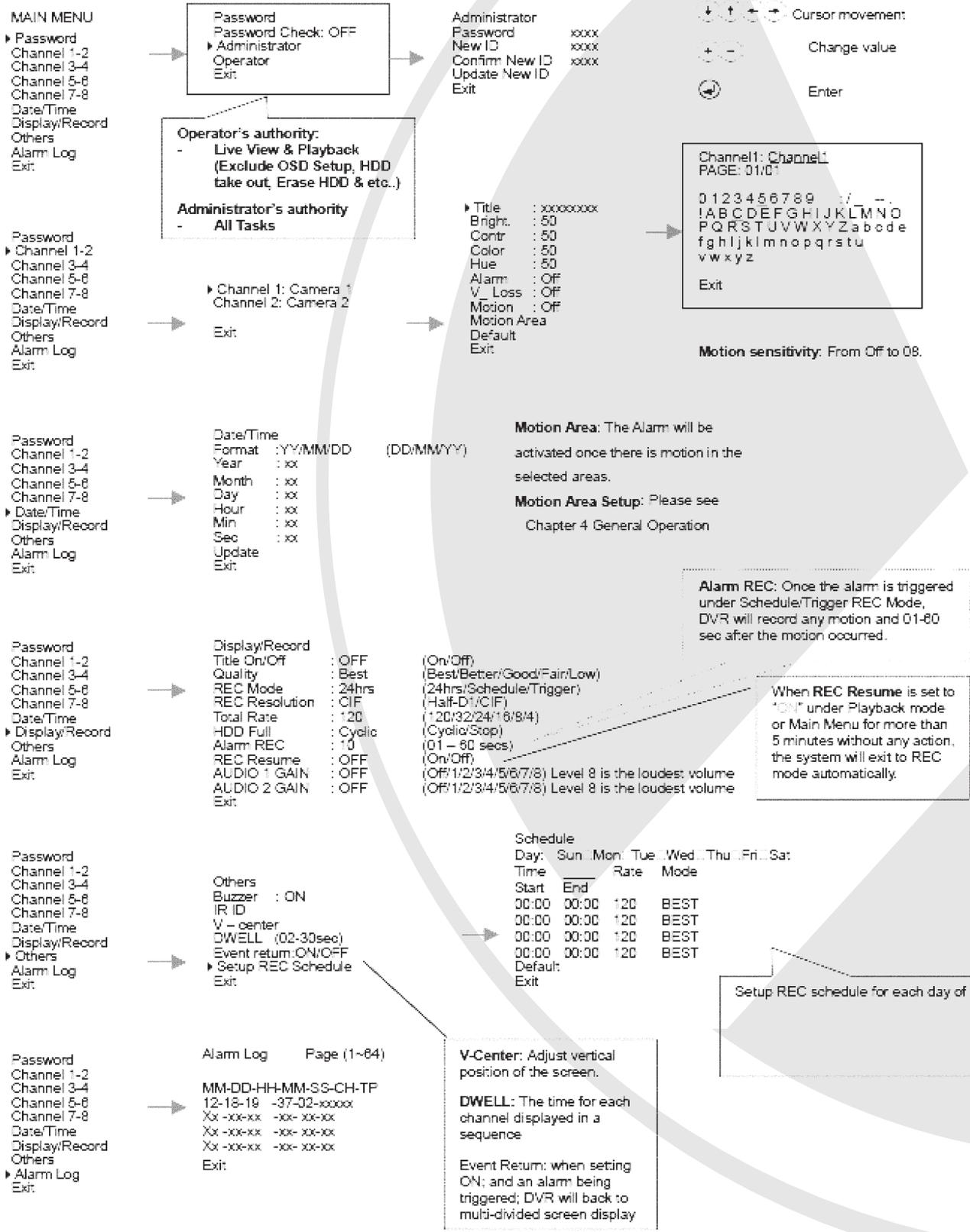
On Screen Display (OSD) Setup

EDVR4CD- 4 Camera Digital Video Recorder

The following diagram shows how to navigate through the menus and set up more advanced functions of the EDVR4CD - 4 Camera DVR.

Press (MENU ESC) to go to the 'MAIN MENU' screen

```
MAIN MENU               Password                    Administrator
▶ Password              Password Check: OFF    ⇨    Password        xxxx
  Channel 1           ▶ Administrator               New ID          xxxx
  Channel 2             Operator                    Confirm New ID   xxxx
  Channel 3             Exit                         Update New ID
  Channel 4                                          Exit
  Date/Time
  Display/Record
  Others
  Alarm Log
  Exit
```

```
                                                    Cursor movement:

                                                    Change value

                                                 ⊷  Enter
```

```
                                                Channel1:  channel1
                                                PAGE: 01/01
Password          ▶ CH1/Title: xxxxxxxx
▶ Channel 1         Bright.   : 50               0 1 2 3 4 5 6 7 8 9   : / _ - .
  Channel 2         Contr     : 50        ⇨      ! A B C D E F G H I J K L M N O
  Channel 3         Color     : 50               P Q R S T U V W X Y Z a b c d e
  Channel 4         Hue       : 50               f g h I j k l m n o p q r s t u
  Date/Time         Alarm     : Off              v w x y z
  Display/Record    V_Loss    : Off
  Others            Motion    : Off              Exit
  Alarm Log         Motion Area
  Exit              Default
                    Exit
```

```
                                    Operator's authority:
                                    -   Live View & Playback
                                        (Exclude OSD Setup, HDD
                                        take out, Erase HDD & etc..)

                                    Administrator's authority
                                    -   All Tasks
```

Motion sensitivity: From Off to 08.

```
Password          Date/Time
Channel 1         Format    : YY/MM/DD    (DD/MM/YY)
Channel 2         Year      : xx
Channel 3         Month     : xx
Channel 4         Day       : xx
▶ Date/Time       Hour      : xx
  Display/Record  Min       : xx
  Others          Sec       : xx
  Alarm Log       Update
  Exit            Exit
```

Motion Area: The Alarm will be activated once there is motion in the selected areas.
Motion Area Setup: Please see Chapter 4 General Operation

```
                                    REC Setting
                                    Quality        : Best   (Best/Better/Good/Fair/Low)
                                    REC Resolution : CIF    (Half-D1/CIF)
                                    Total Rate     : 120    (120/60/30/16/8/4)
                                    Exit
```

```
Password          Display/Record
Channel 1       ▶ REC Setting
Channel 2         Title On/Off  : OFF     (On/Off)
Channel 3         REC Mode      : 24hrs   (24hrs/Schedule/Trigger)
Channel 4         HDD Full      : Cyclic  (Cyclic/Stop)
Date/Time         Alarm REC     : 10      (01 – 60 secs)
▶ Display/Record  REC Resume    : OFF     (On/Off)
  Others          Exit
  Alarm Log
  Exit
```

Alarm REC: Once the alarm is triggered under Schedule/Trigger REC Mode, DVR will record any motion and 01-60 sec after the motion occurred.

When **REC Resume** is set to "ON" under Playback mode or Main Menu for more than 5 minutes without any action, the system will exit to REC mode automatically

```
Password          Others
Channel 1         Buzzer    : ON
Channel 2         IR ID
Channel 3         DWELL   (02-30sec)
Channel 4         Event return:ON/OFF
Date/Time       ▶ Setup REC Schedule
Display/Record    Exit
▶ Others
  Alarm Log
  Exit
```

```
Schedule
Day:  Sun  Mon  Tue  Wed  Thu  Fri  Sat
Time  ____    Rate    Mode
Start    End
00:00  00:00  120    BEST
00:00  00:00  120    BEST
00:00  00:00  120    BEST
00:00  00:00  120    BEST
Default
Exit
```

Setup REC schedule for each day of a week

```
Password          Alarm Log       Page (1~64)
Channel 1
Channel 2         MM-DD-HH-MM-SS-CH-TP
Channel 3         12-18-19  -37-02-xxxxx
Channel 4         Xx -xx-xx  -xx- xx-xx
Date/Time         Xx -xx-xx  -xx- xx-xx
Display/Record    Xx -xx-xx  -xx- xx-xx
Others
▶ Alarm Log       Exit
  Exit
```

DWELL: The time for each channel displayed in a sequence

Event Return: when setting ON; and an alarm being triggered; DVR will back to multi-divided screen display (Live)

On Screen Display (OSD) Setup

EDVR8CD- 8 Camera Digital Video Recorder

The following diagram shows how to navigate through the menus and set up more advanced functions of the EDVR8CD - 8 Camera DVR.

Press ◯ (MENU/ESC) to go to the 'MAIN MENU' screen

MAIN MENU
▶ Password
Channel 1-2
Channel 3-4
Channel 5-6
Channel 7-8
Date/Time
Display/Record
Others
Alarm Log
Exit

→

Password
Password Check: OFF
▶ Administrator
Operator
Exit

→

Administrator
Password   xxxx
New ID   xxxx
Confirm New ID   xxxx
Update New ID
Exit

↓ ↑ ← → Cursor movement
+ − Change value
↵ Enter

Operator's authority:
- Live View & Playback
  (Exclude OSD Setup, HDD take out, Erase HDD & etc..)

Administrator's authority
- All Tasks

Password
▶ Channel 1-2
Channel 3-4
Channel 5-6
Channel 7-8
Date/Time
Display/Record
Others
Alarm Log
Exit

→

▶ Channel 1: Camera 1
Channel 2: Camera 2

Exit

→

▶ Title   : xxxxxxxx
Bright.   : 50
Contr   : 50
Color   : 50
Hue   : 50
Alarm   : Off
V_ Loss : Off
Motion   : Off
Motion Area
Default
Exit

→

Channel1: Channel1
PAGE: 01/01

0 1 2 3 4 5 6 7 8 9   : / _ --.
! A B C D E F G H I J K L M N O
P Q R S T U V W X Y Z a b c d e
f g h I j k l m n o p q r s t u
v w x y z

Exit

Motion sensitivity: From Off to 08.

Password
Channel 1-2
Channel 3-4
Channel 5-6
Channel 7-8
▶ Date/Time
Display/Record
Others
Alarm Log
Exit

→

Date/Time
Format   : YY/MM/DD   (DD/MM/YY)
Year   : xx
Month   : xx
Day   : xx
Hour   : xx
Min   : xx
Sec   : xx
Update
Exit

Motion Area: The Alarm will be activated once there is motion in the selected areas.

Motion Area Setup: Please see Chapter 4 General Operation

Alarm REC: Once the alarm is triggered under Schedule/Trigger REC Mode, DVR will record any motion and 01-60 sec after the motion occurred.

Password
Channel 1-2
Channel 3-4
Channel 5-6
Channel 7-8
Date/Time
▶ Display/Record
Others
Alarm Log
Exit

→

Display/Record
Title On/Off   : OFF   (On/Off)
Quality   : Best   (Best/Better/Good/Fair/Low)
REC Mode   : 24hrs   (24hrs/Schedule/Trigger)
REC Resolution : CIF   (Half-D1/CIF)
Total Rate   : 120   (120/32/24/16/8/4)
HDD Full   : Cyclic   (Cyclic/Stop)
Alarm REC   : 10   (01 – 60 secs)
REC Resume   : OFF   (On/Off)
AUDIO 1 GAIN   : OFF   (Off/1/2/3/4/5/6/7/8) Level 8 is the loudest volume
AUDIO 2 GAIN   : OFF   (Off/1/2/3/4/5/6/7/8) Level 8 is the loudest volume
Exit

When **REC Resume** is set to "ON" under Playback mode or Main Menu for more than 5 minutes without any action, the system will exit to REC mode automatically.

Password
Channel 1-2
Channel 3-4
Channel 5-6
Channel 7-8
Date/Time
Display/Record
▶ Others
Alarm Log
Exit

→

Others
Buzzer   : ON
IR ID
V – center
DWELL   (02-30sec)
Event return :ON/OFF
▶ Setup REC Schedule
Exit

→

Schedule
Day: Sun Mon Tue Wed Thu Fri Sat
Time   Rate   Mode
Start   End
00:00   00:00   120   BEST
00:00   00:00   120   BEST
00:00   00:00   120   BEST
00:00   00:00   120   BEST
Default
Exit

Setup REC schedule for each day of a week

Password
Channel 1-2
Channel 3-4
Channel 5-6
Channel 7-8
Date/Time
Display/Record
Others
▶ Alarm Log
Exit

→

Alarm Log   Page (1~64)

MM-DD-HH-MM-SS-CH-TP
12-18-19   -37-02-xxxxx
Xx -xx-xx   -xx- xx-xx
Xx -xx-xx   -xx- xx-xx
Xx -xx-xx   -xx- xx-xx

Exit

V-Center: Adjust vertical position of the screen.

DWELL: The time for each channel displayed in a sequence

Event Return: when setting ON; and an alarm being triggered; DVR will back to multi-divided screen display

---

On Screen Display (OSD) Setup

EDVR16CD- 16 Camera Digital Video Recorder

The following diagram explains how to navigate through the menus and set up more advanced functions of the EDVR16CD - 16 Camera DVR.

Press ( ) MENU ESC to go to the 'MAIN MENU' screen

MAIN MENU
▶ Password
Channel 1-2
Channel 3-4
Channel 5-6
Channel 7-8
Date/Time
Display/Record
Others
Alarm Log
Exit

Password
Password Check: OFF
▶ Administrator
Operator
Exit

Administrator
Password   xxxx
New ID   xxxx
Confirm New ID xxxx
Update New ID
Exit

↓ ↑ ← → Cursor movement

+ – Change value

(↵) Enter

Operator's authority:
- Live View & Playback
(Exclude OSD Setup, HDD take out, Erase HDD & etc..)

Administrator's authority
- All Tasks

Channel1: Channel1
PAGE: 01/01

0 1 2 3 4 5 6 7 8 9   :/_ --.
!ABCDEFGHIJKLMNO
PQRSTUVWXYZabcde
fghljklmnopqrstu
vwxyz

Exit

Motion sensitivity: From Off to 08.

Password
▶ Channel 1-2
Channel 3-4
Channel 5-6
Channel 7-8
Date/Time
Display/Record
Others
Alarm Log
Exit

▶ Channel 1: Camera 1
Channel 2: Camera 2

Exit

▶ Title   : xxxxxxxx
Bright.   : 50
Contr   : 50
Color   : 50
Hue   : 50
Alarm   : Off
V_ Loss   : Off
Motion   : Off
Motion Area
Default
Exit

Motion Area: The Alarm will be activated once there is motion in the selected areas.

Motion Area Setup: Please see
    Chapter 4 General Operation

Password
Channel 1-2
Channel 3-4
Channel 5-6
Channel 7-8
▶ Date/Time
Display/Record
Others
Alarm Log
Exit

Date/Time
Format :YY/MM/DD   (DD/MM/YY)
Year   : xx
Month   : xx
Day   : xx
Hour   : xx
Min   : xx
Sec   : xx
Update
Exit

Password
Channel 1-2
Channel 3-4
Channel 5-6
Channel 7-8
Date/Time
▶ Display/Record
Others
Alarm Log
Exit

Display/Record
Title On/Off   : OFF   (On/Off)
Quality   : Best   (Best/Better/Good/Fair/Low)
REC Mode   : 24hrs   (24hrs/Schedule/Trigger)
REC Resolution   : CIF   (Half-D1/CIF)
Total Rate   : 120   (120/32/24/16/8/4)
HDD Full   : Cyclic   (Cyclic/Stop)
Alarm REC   : 10   (01 – 60 secs)
REC Resume   : OFF   (On/Off)
AUDIO 1 GAIN   : OFF   (Off/1/2/3/4/5/6/7/8) Level 8 is the loudest volume
AUDIO 2 GAIN   : OFF   (Off/1/2/3/4/5/6/7/8) Level 8 is the loudest volume
Exit

Alarm REC: Once the alarm is triggered under Schedule/Trigger REC Mode, DVR will record any motion and 01-60 sec after the motion occurred.

When REC Resume is set to 'ON' under Playback mode or Main Menu for more than 5 minutes without any action, the system will exit to REC mode automatically.

Password
Channel 1-2
Channel 3-4
Channel 5-6
Channel 7-8
Date/Time
Display/Record
▶ Others
Alarm Log
Exit

Others
Buzzer   : ON
IR ID
V – center
DWELL   (02-30sec)
Event return:ON/OFF
▶ Setup REC Schedule
Exit

Schedule
Day: Sun Mon Tue Wed Thu Fri Sat
Time   Rate   Mode
Start   End
00:00 00:00   120   BEST
00:00 00:00   120   BEST
00:00 00:00   120   BEST
00:00 00:00   120   BEST
Default
Exit

Setup REC schedule for each day of a week

Password
Channel 1-2
Channel 3-4
Channel 5-6
Channel 7-8
Date/Time
Display/Record
Others
▶ Alarm Log
Exit

Alarm Log   Page (1~64)

MM-DD-HH-MM-SS-CH-TP
12-18-19 -37-02-xxxxx
Xx -xx-xx -xx- xx-xx
Xx -xx-xx -xx- xx-xx
Xx -xx-xx -xx- xx-xx

Exit

V-Center: Adjust vertical position of the screen.

DWELL: The time for each channel displayed in a sequence

Event Return: when setting ON; and an alarm being triggered; DVR will back to multi-divided screen display

Change Screen Display under Live Mode

Display Mode (▢▦)
Press ▢▦ once at a time to switch the screen display
4ch: Full/quad screen display selection
8ch: Quad/8-way screen display selection
16ch: Quad/8-way/16-way screen display selection

PAGE (PAGE)
Press MODE+ PAGE to switch page of screen display
4ch: Not applicable
8ch: 1st Quad/2nd Quad screen display switching
16ch: Quad mode: 1st Quad/2nd Quad/3rd Quad/4th Quad screen display switching
      8-way mode: 1st 8-way/2nd 8-way screen display switching

SEQ (SEQ)
Press MODE+ SEQ to switch page of screen display
4ch: 1st Full > 2nd Full > 3rd Full > 4th Full > Quad > 1st Full....
8ch: 1st Full > 2nd Full > 3rd Full.... > 8th Full > 8-way > 1st Full....
16ch: 1st Full > 2nd Full > 3rd Full.... > 16th Full > 16-way > 1st Full....

Motion Area Setup

Select 'Motion Area' under the selected camera. The previous Motion Area will show on the screen when you enter. Use ↑ ↓ ← → to move the cursor to the beginning point (upper left) of your first detection zone, then press ○ for confirmation.

Move the cursor to the end (bottom right) point of the zone and press ○ for confirmation. The cursor will then appear for you to set up your next zone. Repeat the process until you have set up to four zones. Press to complete the motion setup ('**Motion set up OK**' will be shown on the screen).

Adjust **Alarm REC** if your DVR is NOT in 24-hr REC Mode. Video Motion detection (VMD) function will be enabled **ONLY if** the 'Motion' has been turned ON; and one detection zone (minimum) has been set up.

REC Schedule Setup

Please make sure the **REC Mode** under **Display/Record** is in **Schedule** mode, and enter the desired time into **Setup REC Schedule** under **Others**.

Confirm Alarm Buzzer

Once the alarm has been triggered, the screen will switch back to the original screen display. Push the button with the corresponding channel number.

Playback

Press ⭕ to activate Playback mode. Use buttons on the front panel to adjust playback status.

Full screen display

Press the corresponding channel buttons for FULL screen display of that channel whilst in any mode.

Display Mode ▦ (16 channel only)
Press ▦ to select Quad/16-way screen display

PAGE (PAGE) (both 8 and 16 channel)

Press MODE+ (PAGE) to switch page of screen display
4ch: Not applicable
8ch: 1st Quad/2nd Quad screen display selection
16ch: 1st Quad/2nd Quad/3rd Quad/4th Quad screen display selection

SEQ (SEQ) (not valid for Playback mode; valid for LIVE display mode only)


```
                                100  ▶
```
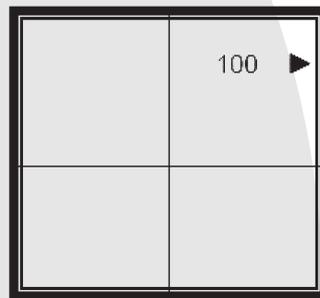
Playback Status
■   Stop
▶   Play
(+) / (-)   (+) / (-) Speed
◀◀   Fast Rewind   x2 - x16
▶▶   Fast Forward   x2 - x16

Date/Time Search Playback

For keypad control, press MODE, then press 🔍 on the front panel.


```
      TIME         SEARCH
  YY-MM-DD       HH:MM:SS
  12-08          15:05:04

  Enter
  Exit
          START TIME
    YY-MM-DD HH-MM-SS
          END TIME
    YY-MM-DD HH-MM-SS
```
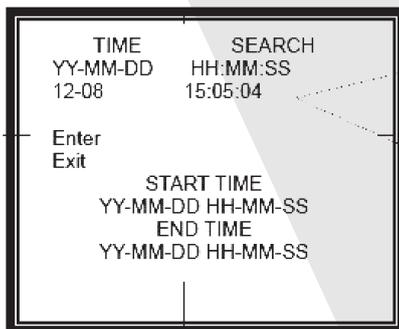
Operation:
⊕ ⊕ Move the cursor
⊙   Increase the value
⊖   Decrease the value

Move to "Enter"

Click ⏎ to start the Date/time search PLAYBACK

"**WAITING for SEARCH now**"
→ DVR is searching video now

"**FILE NOT EXIT**"
→ No recorded video the time you entered

Alarm/Motion Search Playback

Once an alarm has occurred, the date/time will be saved to **Alarm Log**. Enter the main menu and select **Alarm Log**. The alarmed incident can be played back by pressing ⏎ on the desired log.

```
  Alarm Log      Page (1~64)

  MM-DD-HH-MM-SS-CH-TP
  12-18-19    37-02    xx-xx
  xx-xx-xx    xx-xx    xx-xx
  xx-xx-xx    xx-xx    xx-xx
  xx-xx-xx    xx-xx    xx-xx
  xx-xx-xx    xx-xx    xx-xx

  Exit
```
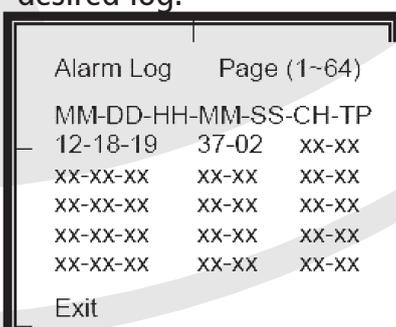
Operation

⊕ ⊕   Move the cursor

⏎ OR ▶   Playback

Setting the Recording Speed

1. Push (MENU/ESC) button to enter MENU mode.

2. Follow this sequence: Display/Record > REC Setting > Total Rate

3. Use the (+) or (−) buttons to select from 4, 8, 12, 25 50 or 100 frames per second recording speed.

4. Scroll down to 'EXIT' and press (↵) to return to the previous menu. Repeat this procedure to exit each menu until you return to the camera view screen.

CDRW User Guide

1. Push (▶) button to enter PLAYBACK mode.

2.Use (↑)(↓)(←)(→) or Time Search to find the desired time.

3. Push MODE+ (▤) button to export the first 100MB File.

On screen display:

```
COPY TO CD ROM
     Start      End
04/11   18:48:00   18:50:00  ────  The Starting and Ending time of the first 100MB file


ADD
WRITE CD  ────  Playback Display
EXIT
```

4. Add/delete the listed files:

   A. For a 600MB CD you may choose up to 6 clips of files. After selecting the first clip, **EXIT** the menu then repeat step 1,2,3 to select the 2nd file.

   B. You can also select **ADD** and continue to export another 100MB file from the ending time of the 1st file.

   C. Delete the listed files on the screen:
   Key Control: Move the cursor to the desired file and push (−) to delete and (↵) to confirm.

   D. Push **ESC** button **(or Exit)** to return to the previous page. Returning to Live mode will delete all the selections.

On screen display:

```
        COPY TO CD ROM
          Start        End
04/11   18:48:00   18:50:00
04/12   13:00:00   13:01:20
04/12   13:01:20   13:02:10
04/13   15:11:00   15:12:11
04/13   15:12:11   15:13:13
04/13   15:13:13   15:14:45


ADD
WRITE CD
EXIT
```

The Starting and Ending time of the 1st file

The Starting and Ending time of the 2nd file

Continue exporting another 100MB file beginning from the end time of the 1st file

Start to burn CD

Back to Playback Mode

5. Move the cursor to WRITE CD and push (↵) to start burning the CD. It may take up to 20 minutes to burn a full CD.

Note: While burning the CD, the orange LED will keep flashing.

On screen display:

```
        COPY TO CD ROM
             DONE

04/11   18:48:00   18:50:00


      □□□□□□□□□
```

Note: ESC button is disabled during the burn function

Once the CD burning is completed, the DVR will show a **DONE** message, eject your CD and return to PLAYBACK mode

6. If you want to burn the same selected files to another CD, insert a blank CD first, then push **MODE + ENTER** to start the burning process.

This DVR will automatically copy the player software onto the CD. You can play back the CD on any PC using the player software which supports multi-channel video and audio display

Offline Playback (FAT32- Format recording only)

Options to play back the recorded video file offline

1. Via IDE interface

Step1: Make sure the installed Hard Drive caddy is compatible with the following:
    BT-27, BT-32, BT-42, RH-17, RH-27, RH-32, RH-42, MR-27 or L-007
Step2: Power of the PC before inserting the hard drive with drawer directly into the PC.
Step3: Power on the PC and run the supplied off line player to play back the recorded files.

Note: If your PC cannot recognise the Hard Drive, please change the hard disk jumper configuration (Master only).
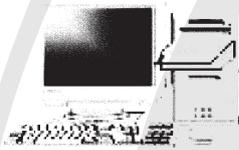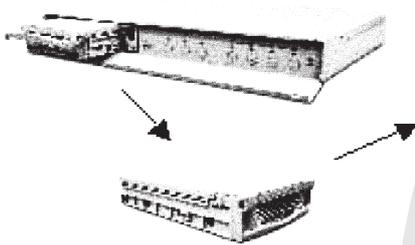
Internal HDD caddy (Drawer) is compatible with one of followings:
BT-27, BT-32, BT-42, RH-17,RH-27,RH-32, RH-42, MR-27 and L-007

2. Via USB2.0/IDE convertor (optional item that can be purchased from your local distributor)

Step1: Plug the USB2.0/IDE convertor in to the the IDE socket of the mobile drawer.
Step2: Connect the USB2.0 convertor to the PC with the USB2.0 cable.
Step3: Power on the USB2.0 convertor, then run the offline player.

Note: Please complete Step1 before powering on the USB2.0 convertor to prevent unnecessary hard drive damage. Keep the jumper configuration of the hard drive in 'Master' mode.

USB2.0 Kit Package includes:
- USB2.0/IDE converter
- USB2.0 cable
- 90-240 Vac power adaptor for USB2.0/IDE converter
- Driver Setup Disk

- Removable HDD with caddy

USB 2.0
for off-line player
(FAT32 Format ONLY)

USB2.0/ IDE
converter
(option)

AVI Export
onto CD

Recommended PC requirement for offline viewer software

Your PC should have the following specifications to use the offline player software.

- **CPU:** Pentium3 1.0GHz or above • **RAM:** 256MB or above
- **Hard Drive Space:** 100MB or more
- **Operating system:** Windows ME and Windows 2000 with Microsoft DirectX 9.0 or later, Windows XP with Microsoft DirectX 8.1 or later

IMPORTANT:
For NTSC and PAL the screen resolution should be set to 1024x758 pixels or above and the colour quality set to 24bit or 32bit for play back on a PC.

Data Transfer Rate Table of different Interface Ports

	Interface Port	Data Transfer Rate	Recommended (Yes/No)
1	IDE ATA66	66 MB/s	Yes
2	IDE ATA100	100MB/s	Yes
3	IDE ATA133	133MB/s	Yes
4	USB2.0	60 MB/s (480M bps)	Yes
5	USB1.1	1.5 MB/s (12M bps)	No

Note:
1. MB/s = 8 Mbps etc.
The following is a list of the time required to read the files structure, for the first time, and image to the hard drive:
- USB 1.1:   takes 5 to 10 minutes
- USB 2.0:   takes 30 seconds
- IDEATA 100:   takes 15 seconds

2. The use of USB1.1 is not recommended because of its slow transfer rate. You could upgrade your PC from USB1.1 to USB2.0 by adding an 'IDE/USB2.0 card' for desktop PCs or a PCMCIA/USB2.0 card for notebook PCs.

Install the Offline Viewer Software on to your PC

1. Insert the software CD supplied into your CD-ROM and installation will start automatically.
2. Click 'playback software' to install.
3. If the CD does not start automatically, please follow these steps:
>   3.1 Go to 'My Computer' and double click the CD-ROM.
>   3.2 Double click software folder.
>   3.3 Double click NR folder.
>   3.4 Double click 'setup.exe' to start installation.

After setup is complete, a shortcut is created on the desktop.

Run OFFLINE Viewer Software
(Double click the shortcut and select the required language in the pop-up window or in the main menu).
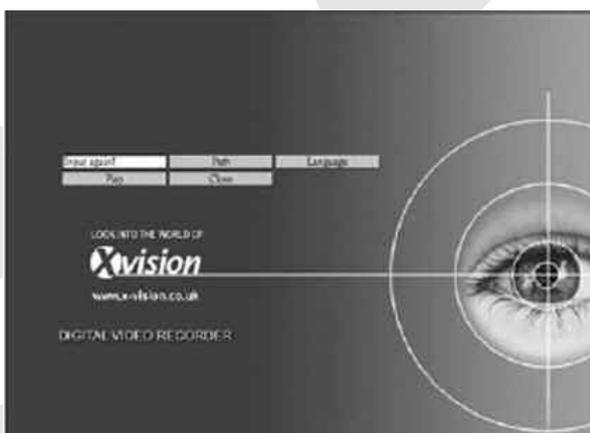
1. Click **path** to browse for folder shown.
2. Select the path to where the recorded files are located and click PLAY. (Recorded files should be in the hard drive labeled TC-400_001).
3. Click OK.
4. Click **Play** a loading dialogue box will appear on screen and the following USB message will be displayed:

USB

If your USB device version is 1.0, the loading time will be over 5 minutes!!!
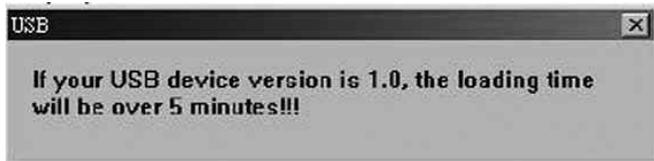
5. Playback screen will be shown after loading is completed. **When an error occurs during the loading process, the offline player will skip the error file and create 'errfile.txt' in the C drive.**

116 2006/02/24 17:05:44 X1

Speed Down (Down to 1/32x)
Rewind
Play
Stop
Speed Up (Up to 16x)
Date/time Search
Alarm Log
File List
Printing
AVI Video output
Audio Output: Audio1/Audio2/Audio off/ Audio1&2
Exit
Playback Speed
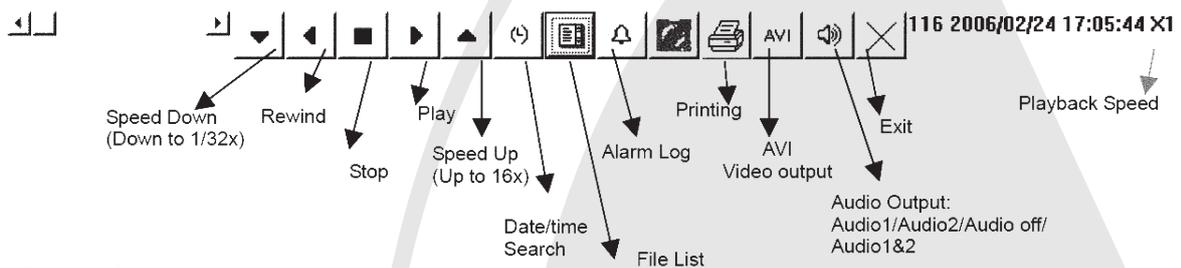
AVI Video Output
After pressing the 'AVI' button, then choose the export file type from 'Standard AVI' or 'Private VDO'.

AVI Export Process:

Select export category

Options
⦿ Standard AVI
◯ Private VDO

- 'Select Camera No.' will be shown when checking 'Standard AVI'
- Choose the record time scale and then press 'OK'.

Select Camera No
11
12
13
14
15
16
OK
Cancel

Select export end time
Start time
Date : 2004 / 10 / 7
Time : 16 : 48 : 40
End time
Date : 2004 10 7
Time : 16 55 3
OK
Cancel
Reset

Save As
Save in: AVI
New Folder
NTSC
PAL
Camera1-1.avi
File name: Camera1.avi   Save
Save as type: AVI Files (*.avi)   Cancel

Export Status Menu
Path : D:\AVI\Camera1-1.avi
Space : 69777466604 Free Bytes
Camera No : 1
Frame Count : 12
END
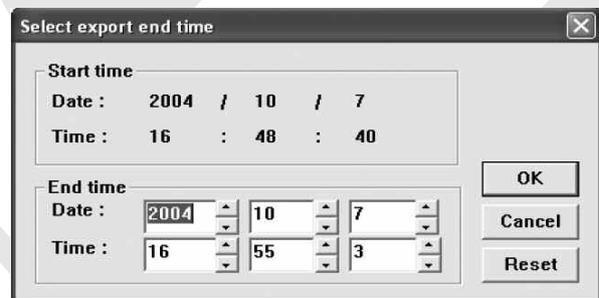
- Play AVI files using Windows Media Player:

Note: Only Windows XP Media Player can adjust the playback speed.
Windows XP Media player speed settings: Click **View** > **Enhancements** > the click **Play Speed Settings** (as below).
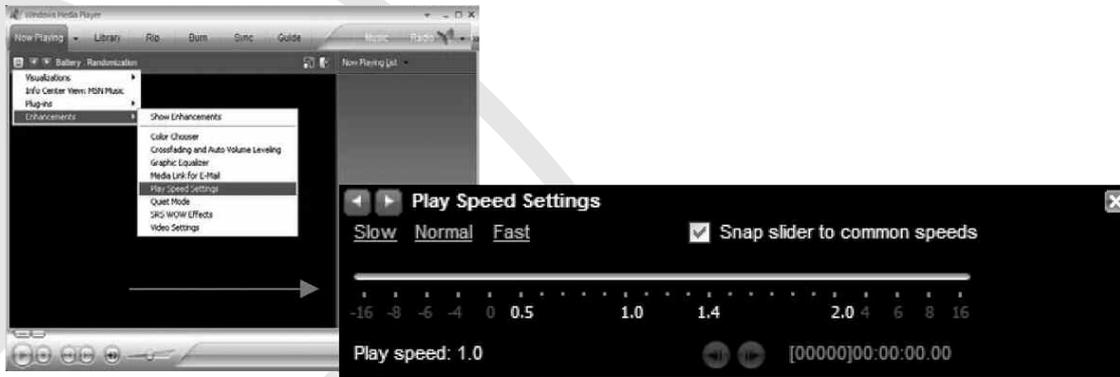
- Select 'Private VDO' export.
- Play the file and push 'STOP AVI' to start export.

- Click STOP AVI to start video export.

- Check to export offline player also.
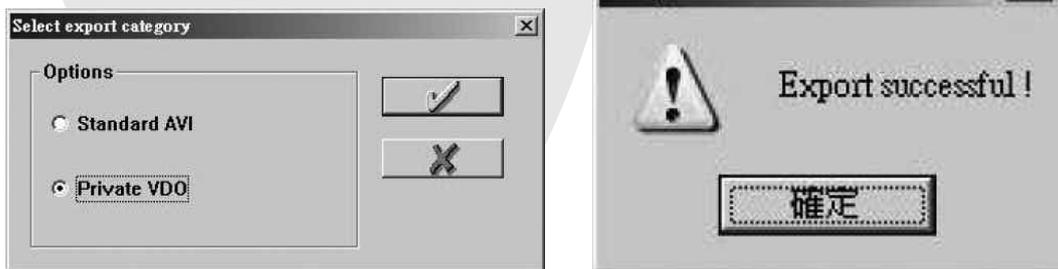
Printing Images
- Make sure your computer has been connected to a working printer.
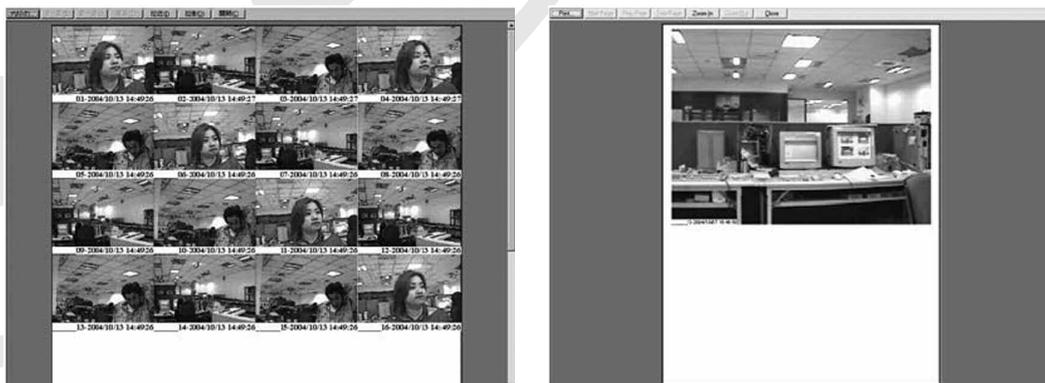
Image Zooming
- To zoom in or out on an image, select the image you require and the following will be displayed:

Preview Screen | Original size | Zoom In | Zoom Out | Save as JPEG file | Print Out | Exit

Default: Default value

Optimized: optimization value (auto)

Brightness adjustment

Contrast adjustment

Color adjustment

Alarm Log

Log # | Start Time | Alarm Type | Ending Time

Alarm Playback

Exit

Date/Time Search Playback

Search Time:
The time and date in this section always fall within the Start Time and End Time parameters. Enter the time and date press OK button to search.
Start Time:
Start Time shows the starting time of the first record file on hard disk.
End Time
End Time shows the starting time of the last record file on hard disk.

Q: **How long will it take to format the hard drive?**
A: The DVR will support FAT32 recording automatically. You don't have to partition the hard drive before installing it in the DVR. It will take around 10 minutes for an 80GB hard drive, to prepare the FAT32 formatting, and about 20 minutes for a 160GB hard drive.

Q: **How can I get a video clip from the EDVRCD?**
A: Follow Chapter 5 to playback the recorded video and export it into a video clip using the offline viewer.

Q: **What is V_Loss (Video Loss Alarm)?**
A: V_Loss is the alarm mode that detects the connections of the cameras. The alarm will be activated in any camera disconnects from the DVR.

Q: **Will my DVR record any motion that occurs during any other time than my REC schedule?**
A: Yes. Once your cameras are in ANY alarm mode, your DVR will automatically record any motion even if it is not in the REC schedule.

Q: **How long will my DVR record for if the motion occurs during any other time than my REC schedule?**
A: The DVR will record the whole event and from1 to 60 seconds after the event occurred. The recording time after the motion event can be adjusted in Alarm REC under Display/Record.

Q: **Can I 'Search Playback' the recorded file via the index of Date/Time or Alarm Log?**
A: Yes. You can easily play back the recorded video file by searching the index of date/time or alarm log on the DVR or by using the offline player on your PC.

Q: **Will my DVR keep recording during 'Playback' mode?**
A: No. Note that once REC Resume is on, the system will automatically return to live record mode after 5 minutes of inaction during 'Playback' mode.

Q: **What is the largest hard drive capacity the EDVRCD series can support?**
A: The EDVRCD series can support all hard drives from Maxtor and Seagate with capacities from 40Gb up to 250GB. Note: The EDVRCD series does not support 'Western Digital' hard drives.

Q: **Why does VMD (video motion detection) not work when I have set 'Motion' ON already?**
A: You have to set up at least one motion detection area in order to ENABLE the VMD function.

TECHNICAL SUPPORT:

For Technical Support for any x-vision product please contact your local distributor.

LIMITED WARRANTY:

This product is supplied with a limited 1 Year warranty. The Warranty excludes products that have been misused, (including accidental damage) and damage caused by normal wear and tear. In the unlikely event that you encounter a problem with this product, it should be returned to the place of purchase.

Manufactured exclusively for:
x-vision (Europe) Group,
Head Office: London, U.K.
Email: info@x-vision.co.uk
Web: www.x-vision.co.uk