# Stand-alone Type

**User's Manual** 

# 4-CH DUPLEX DVR

4 Channel MJPEG DVR



Thank you for purchasing our 4CH duplex DVR. Please read this User Manual carefully to ensure that you can use the device correctly and safely.

Please take actual machine model number as quasi to validate DVR specification.

The contents of this Manual are subject to change without notice.

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# 1. INTRODUCTION

THE VX4SL system provides total video security solution for 4-channel digital surveillance system supporting duplex (simultaneous playback and record) functionality.

Either front panel buttons or remote control unit or mouse can operate all DVR menu setting.

The functionality of each button both on remote control or front panel is exactly same.

Note: Front panel and rear panel are different due to machine model.

## 2. DVR FEATURES

- True Duplex Functionality: Simultaneous Play/Record.
- PAL/NTSC Optional.
- High Quality Color Video at 50fps or 60 fps Recording/Playback.
- Display Resolution: PAL 704\*576; NTSC 704\*480.
- Recording Resolution: PAL 640\*288(Half D1); NTSC 640\*240(Half D1).
- Recording Speed: PAL max. 50 fps (Quad); NTSC max. 60 fps (Quad).
- Recording Mode: Continuous, Motion Detection, Time Schedule.
- 15 days continue recording at 25 fps with 500GB HDD.
- Recording and Compressing Video Signal Real Time.
- With USB port for media backup via HDD Avg. 200KB/Sec.
- With Motion Detection and Video Loss Alarm Function.
- OSD: Support Multi-language.
- With Power Recovery Auto-record Function.

# 3. PHYSICAL UNIT

### 3.1 Front Panels (Please take actual machine model as quasi)

Front panels are different in term of different machine model.

- IR Remote Receiver (optional)
- LED Light

- (a) GREEN (PWR): The DVR unit is powered up and running.
- (b) RED (HDD): System is in Recording Mode or in Playback Mode.
- USB PORT

Use this port to backup with USB disk.

Note: For some machine model USB port is on the rear panel.

PS/2 MOUSE PORT (optional)

Use this port for PS/2 mouse connection. If you have USB port mouse, use USB - PS/2 adapter to connect with this port.

Note: For some machine model PS/2 Mouse port is on the rear panel.

- HDD BOX Press-button (optional)
- HDD Lock (optional)

Some DVR is provided with touch-tone front panels. A series of button on DVR front panel make a system to operate its basic functions, such as recording, playback, fast-forward, reverse, etc. For more details about the DVR menu, refer to "6. SETUP".

The front key panel function is the same as remote control (refer to "3.3 Remote Control").

#### 3.2 Rear Panel (Please take actual machine model number as quasi)

AUDIO OUTPUT (Only for some models)

Use "AUDIO OUT" port for speaker (mono) connecting. And this port is audio output for playback.

AUDIO INPUT (Only for some models)

Use "AUDIO IN" port for microphone connection. If signal audio input is from channel 1, there will be audio output in channel 1 view and quad view. If signal audio input is from channel 2, channel 3 or channel 4, there won't be audio output until in channel 2 view, channel 3 view or channel 4 view.

## VIDEO INPUT

Use this BNC port to connect cameras to DVR system. You might need BNC adapter for

each (CH1-CH4) camera connection.

#### VIDEO OUTPUT

Use this port to connect DVR to the monitor.

#### AC-DC POWER ADAPTER JACK

Connect the power adapter into DVR and plug the power cable into the wall.

Some DVR models do not have a power adapter so you may not see this. In case, just plug power cable from the behind the DVR into the wall. Below is the information of input/output voltage for the power adapter.

[Input: AC 100-240V, 50/60Hz, 1.5A / Output: DC +12V == 3A]

Fan

#### 3.3 Remote Control (optional)

A series of button on DVR remote unit make a system to operate its basic functions, such as recording, playback, fast-forward, reverse, etc. For more details about the DVR menu, refer to "6. SETUP".

#### (1) **CH1**↑

Use this button for full screen display for channel 1 on the monitor or move the cursor up.

#### (2) CH21

Use this button for full screen display for channel 2 on the monitor or move the cursor down.



(3) CH3←

Use this button for full screen display for channel 3 on the monitor or move the cursor left.

Also user can press this button to reduce value when adjust parameters.

#### (4) CH4→

Use this button for full screen display for channel 4 on the monitor or move the cursor right.

Also user can press this button to increase value when adjust parameters.

#### (5) Quad

Use this button for full screen display for quad display on the monitor screen. If you push this button, DVR will display all 4 channels (cameras) at the same time in quad screen.

#### (6) **● (REC)**

Press "REC" button to start manual recording. Then you will see this mark '•' on the selected channel of the screen, which means that the channel is now recording.

To stop manual recording, press "REC" again during recording mode.

To stop playback, press the "STOP" button.

After recording, press "PLAY" button to start video playback.

Playback will start with the oldest unread video data and then continue playing.

This is the fast forward button. To play the recorded stream faster, press the "FWD" button.

There are three levels of fast forward playback speed.

- (a) FF 1 (▶▶): Play two times faster (x2) than the normal play.
- (b) FF 2 (▶▶▶): Play three times faster (x3) than the normal play.
- (c) FF 3 (▶▶▶): Play four times faster (x4) than the normal play.

To change the fast forward play back speed level, press the "FWD" button again.

#### (10) **◄◄(REW)**

This is the rewind button. To play the recorded stream backward, press the "REW" button.

[NOTE]: The fast forward and reverse playback speeds will vary depending on the frame rate and record quality settings, as well as the number of channels recorded.

#### (1) **[ (PAUSE)**

To pause the video playback, press the "PAUSE" button. Then the video displaying will be

stopped.

To continue playback, push the "PLAY" button.

(12) Menu / ESC

It displays menu option or will be to the previous.

(13) UP / DOWN

To change a menu field, use the "UP" or "DOWN" buttons.

(14) Select /Enter

Use this button to change values on main menu or sub menu setting. Also use can use this button to increase value when adjusting parameters.

## 4. GETTING STARTED

Install a hard disk drive into your DVR.

Connect DVR to monitor.

Connect cameras (up to 4) to DVR.

Connect other peripheral devices (mouse, USB Drive) if necessary. And PS/2 Mouse must be connected to DVR before startup system.

Connect the power adapter into DVR to turn on the DVR.

Start TV Monitoring and Recording.

Make sure that a hard disk drive and camera(s) are properly installed.

If a removable HDD rack is used in DVR, after installation of hard drive, the hard drive drawer must be locked with key.

If a fixed HDD rack is used in DVR, after installation of hard disk drive, the hard disk drive must be fixed tight enough with bolts.

If the power is turned off while recording (i.e. a power failure), the DVR will enter "Power Recovery" modes at start up, detect that it has been shut down, and then reinitiate the recording process.

# 5. HARDWARE SETUP

#### 5.1 Hard Disk Drive Installation

The method of hard disk drive installation is different according to different DVR. Some DVR is built in fixed HDD rack and some DVR is built in removable HDD rack.

If building in fixed HDD rack, user must draw out the cover of DVR first. Then install a HDD into DVR, and for some type DVR the HDD is need to fix into the bottom.

If built in removable HDD rack, user must draw out the HDD rack first. Then install a HDD into HDD rack.

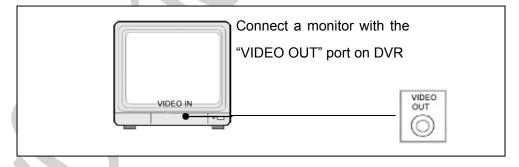
Connect power cord and data cable to hard disk drive. (HDD is recommend to be provided by user)

Connect the cables as follows.



#### **5.2 Monitor Connection**

To display video image from cameras on the monitor, the DVR's video output signal should be transferred to your TV set or monitor.

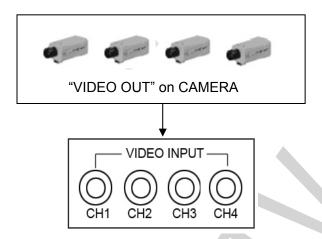


Connect "VIDEO IN" of the monitor to "VIDEO OUT" of the DVR system.

#### **5.3 Camera Connection**

Connect between "VIDEO IN" of your DVR and "VIDEO OUT" of camera with video cable

and plug in the camera's power adapter.



"VIDEO IN" on DVR

## 5.4 Mouse Connection (Only for some models)

Connect PS/2 mouse with the port below on the system. And PS/2 Mouse must be connected to DVR before startup system.



[PS/2 Mouse Port]

#### **5.5 DVR Power Connection**

Connect a DVR power adapter to the adapter jack at the rear panel of DVR unit.

It will boot up the system.

If users install a new hard disk drive, it will ask for HDD formatting before a system starts to run (**Below Fig**). Choose format option pressing "PLAY" button.

```
4CH DVR
FW: 1.1.9 UCODE: 32
Compile date: 2009/06/10

Video: PAL
Disk: 190782MB ST3200826A
New disk
Disk configuration changed
[PLAY] change configuration
Disk: press [PLAY] format, [STOP] cancel
Format...OK
```

Below is the information of input/output voltage for the power adapter.

Input: AC 100-240V, 50/60Hz, 1.5A

Output: DC +12V == 3A

# 6. SETUP



After installing a new hard drive on the system, user had better to format the hard drive first. If the system includes login window, and there are three password levels

in the system, including admin (highest), operator, and guest (lowest). If the user does not login the system, he can only view live video display. And when the user login the system, if he can't operate the system in one minute the system will be logout automatically.

The system allows up to four user accounts. The administrator can set up the login name, password and level for each user. The administrator can also add or delete user that he wants to. (Please refer to Section **6.6.2** for Account Setup.)

The **admin** can operate everything. The **operator** can operate anything except examining user accounts, formatting HDD and modifying his password level. The **guest** can operate live video display and image playback, or modify some parameter value that is independent



Fig (a)



Fig (b)

of recording. If user has no right to modify parameter value, there will be an identifier "
on top right corner of the screen.

#### A: Mouse Control ---- (optional)

After system boot-up, hold a right mouse click button and there will be login window. Hold a left mouse button to click the order of "Account", and input correct account. Then left click the order of "Password" and input correct password. At last left click "Login" to enter system. There is one factory-preset login "account/password" "admin/11111" at admin level. The user can

use it to login the system for the first time.

After system boot-up, hold a right mouse click button and there will be suggestive window options on the monitor (Fig (a)). Hold a left mouse button to click the icon "\equi". You will see the screen below on the monitor (Fig (b)). If the machine has no audio-port, the order of "Audio" will disappear on the menu "Setup".

Suggestive window options:

"OFF".

	Channel 1 view		Channel 2 view
	Channel 3 view		Channel 4 view
	All channel view		Manual recording or Stop manual recording
<b>&gt;</b>	Play record list		Menu option
093	Logout		
$\rightleftharpoons$	Channel auto sequence. The iron " ⇌	" w	on't display if the order of "auto sequence" is

Move the mouse up or down to move the cursor. Hold a left mouse click button to change the settings. Click a right mouse to go back to the previous.

#### **B:** The DVR Front Panel or Remote Control (optional)

After system boot-up, Press the "MENU" button on the DVR front panel or remote control and there will be login window. There is one factory-preset login "account/password" "admin/11111" at admin level. The user can use it to login the system for the first time.

After login the system, press button "MENU" to make any changes of DVR settings and you will see screen on the monitor as Fig (b). If the machine has no audio-port, the order of "Audio" will disappear on the menu "Setup". Then press the "UP" or "DOWN" key on the DVR front panel or remote control to move the cursor. Press "SELECT" button on the front panel or remote control in order to change the settings. In the MAIN MENU, the cursor "▶" will be shown on the screen right next to each sub menu. To the previous, press "MENU" button on the front panel or remote control.

#### 6.1 Camera

Use this option for video color adjustment for each channel (1,2,3,4). Go to DISPLAY option to enable or disable for screen display of each camera. Modify camera name of each channel that user wants to.



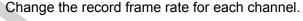


#### 6.2 Record



Use this option to choose the channel (1,2,3,4) for recording. Only selected channel will be recorded no matter how many camera channels are displayed on the screen.

#### A: [RECORD FRAMERATE]





The higher the record frame rate, the more natural movement you will see while playback.

Independent each channel frame rate adjustment is possible.

For PAL video output format, system default value is **12** frames per second with each channel,

which means the system will record 48 frames per second with all channels. User can set frame rate as 3~25 frames per second with each channel. The max value of total frames per second with all channels is 50 frames.

For NTSC video output format, system default value is **15** frames per second with each channel, which means the system will record 60 frames per second with all channels. User

can set frame rate as **3~30** frames per second with each channel. The max value of total frames per second with all channels is **60** frames.

Press button [SEL]/[CH4] or hold the left mouse button to click icon "▶" to increase the record frame rate for each channel. Press button [CH3] or hold a left mouse button to click icon "◄" to decrease the record frame rate for each channel.

If you make the record frame rate off, the channel won't record.

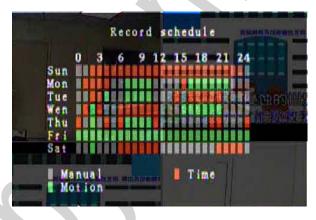
#### B: [RECORD QUALITY]

Choose record quality among 1 / 2 / 3. The best record quality is 3, and the lowest record quality is 1. The higher the record quality is, the higher the video image quality is well you playback. Higher quality cost more hard disk space. Record frame rate, record quality and hard disk space will affect total record time of DVR system.

#### C: [RECORD SCHEDULE]

Notice: To start motion record, make sure the period that you intend to record is " in the "record schedule" menu.

Press button <code>[Up] / [Down]</code> or move the mouse to move the prompt, then press <code>[SEL]</code> or hold a left mouse button to adjust video record method during each time period. Also user can adjust the same record method during the whole time periods synchronously, press <code>[QUAD]</code> button in the <code>DVR</code> front panel or remote control, or hold a left mouse button to click the time period 24.



- Grey bar: No record will be made for this time period if user can't activate manual recording.
- Red bar: The time period with a red bar will activate continuous recording mode (Time record) unless there is any manual stopping during recording during that time.

- Green bar: The time period with a green bar for built-in motion recording (MD). (See also

the following chapter "MOTION DETECTION")

#### **6.3 Alarm** (Optional)

Using [SELECT] button or hold a left mouse button to click icon "◀" / "▶", adjust parameters of each option.



#### A: [BUZZER DURATION]

It sets the buzzer duration time (in seconds) after alarm is activated.

Value at "05、10、15、20、25、30、CONT、OFF" (in seconds). Default at "OFF". When "buzzer duration" is "cont", the buzzer will

work continuously.

#### **B:** [EVENT REC DURATION]

It sets the record time of duration (in seconds) after motion recording is activated.

Value at "05、10、15、20、25、30"(in second).

#### C: [MOTION DETECTION]

#### [CHANNEL]



Select the channel (1,2,3,4) for recording mode by internal motion.

#### [SENSITIVITY]

It adjusts the sensitivity of the built-in motion sensor on the DVR system while recording.

The lower the number, the higher the

sensitivity is. Value at "1, 2, 3, 4, Off". The maximum sensitivity level is 1.

#### [MOTION AREA]

Use this option to select the range of motion detection area.

Use the keypad button, remote control button or mouse click to assign the area.

The keypad and mouse control instructions are below.

#### [Using keypad or remote control button]

Press [SEL] once to pitch on the area, press [SEL] twice to cancel the area.

CH1 - Up / CH2 - Down / CH3 - Left / CH4 - Right

#### [Using Mouse button]

While holding a left mouse click button, move the mouse to select, deselect or reselect the motion detection area for recording.

By the way, the area only can be selected from up to down and from left to right. When the block is covered by blue shadow, it's active to record. When the block is transparent, it can't be recorded.

After completed the motion area setting, press "MENU" button or hold a right mouse click button to exit.

To start Motion Record, user must complete the "Motion area" setup.

#### 6.4 Screen

#### [BORDER]

User can make the white borderline around each channel to appear or disappear by using

this option to be "on" or "off".

#### [AUTO SEQUENCE]

This is for auto screen switch rotation.

Value at "Off 1~10(in seconds)". Default at "Off".

#### [VIDEO ADJUSTMENT]

You can move the entire video screen up, down, left and right using this option.

Keypad assignment in the front panel or remote control is below.

-CH1 for up, CH2 for down, CH3 for left, CH4 for right.

Mouse function is below:



Hold a right mouse click button, there will be some irons on the screen as follows

". Hold a left mouse button to click each iron to select.

--"▲"for up, "▼" for down, "◄" for left, "▶" for right, " 🏂" for ESC.

#### **6.5** Audio (Only for some models)



Make the record "ON" to enable sound recording when a microphone device is attached in AUDIO INPUT port on the system.

Adjust volume for speaker and the intensity level of sound recording. To make the sound enabled for speaker, leave the mute "OFF".

### 6.6 System





Fig (c)

Fig (d)

In this menu, you can see the information of the hard disk drive installed in the DVR, change the system password, adjust keypad tone, browser event list or adjust current time on the system.

If user login the system at **admin** level, the menu bar will be displayed as Fig (c). The user can enter into the order of "**account**" to examine all user accounts, add or delete user that he wants to (Please refer to section "6.6.2" for account setup).

If user login the system at operator or guest level, the menu bar will be displayed as Fig (d). The user can only modify its own password. (Please refer to section "6.6.3" for password setup)

#### 6.6.1 Hard Disk Setup

#### [OVERWRITE ENABLED]



If you choose Yes, recording continues and overwrites previous recording when hard disk drive space is full.

If you choose No, the recording stops when the hard disk drive is full. It won't record until "overwrite enable" is "Yes".

#### [FORMAT HDD]

If you format the hard disk drive, all the video data stored on the hard disk drive will be deleted. Remind that the system has no restore option once the hard drive is formatted.

When you choose this option, it will ask for password before formatting. The default password is "111111". Type the password and press any key button.



When HDD is successfully formatted, you will see the message below blinking.





If the password is incorrect, you will see the below message blinking. Then try to type right password again.



#### 6.6.2 Account Setup







Only user log in the system at admin level, the Account Setup allows the administrator to add new users, delete existing ones and modify the user's name/password/and level. The system allows up to 4 user accounts.

#### [Account]/[Password]

In setup Menu display, move the cursor to change the highlighted option to Account, and then press button [SEL] to call up Account/Password as shown. All numbers, letters and sign in the pane

can be used as user account or password. Press 「SEL」 to input value, and move the prompt to the option of "Enter", press 「SEL」 to confirm.

 CH1 for up, CH2 for down, CH3 for left, CH4 for right, Press "Shift" for change characters.

#### [Level]

Move the cursor to change the highlighted option to Level, and then press [SEL] to adjust user level (operator/guest).

#### 6.6.3 Password Setup



The default password is 111111. All numbers, letters and sign in the pane can be used as password. Press <code>[SEL]</code> to input value, and move the prompt to the option of "Enter", press <code>[SEL]</code> to input current password.

Button function on the front panel or remote control:

— CH1 for up, CH2 for down, CH3 for left, CH4 for right.

And the same operation measure to input new password and confirm password.

When password change succeed, user will see the below message blowing.



When password change fail, user will see the below message blowing.



#### 6.6.4 Clear Account Info

If you choose ON, the account information will be cleared when you logout the system. If you choose OFF, the account information will be kept when you logout the system.

#### 6.6.5 Logout

"Logout" can be set as "1~10(in minutes). Off". It decides how much time the system will logout automatically if user can't operate the system beyond the period.

#### 6.6.6 Keypad Tone

Make the keypad tone "ON" or "OFF" to enable or disable keypad tone during operating.

#### **6.6.7 Time Set**



You can adjust the current time, date and year at any time. Set your region first and set the current time so that the video back-up data can be played without time shifting later on.

Date and Time format are below.

\*\*\* YYYY/MM/DD (2009/06/13 — year/month/day).

\*\*\* MM/DD/YYYY (06/13/2009 — month/day/year).

\*\*\* DD/MM/YYYY (13/06/2009 — day/month/year).

\*\*\* 01:01:00 — hour: minute: second

To move the cursor on the screen, use "UP" and "DOWN" key on the DVR front panel or remote control and then press "SELECT" button to change the numeric value. Once you finish time setting, press "MENU" button. Then press "DOWN" key and "SELECT" button to apply the new time set. Or move the mouse to move the cursor up and down, hold a left mouse click button to change the numeric value. Once you finish time setting, hold a right mouse click button to return. Then move the mouse to the order of "Apply" to left click to apply the new time set.

#### 6.6.8 Event List



Event list function enables playback by event. On the Event list menu, it shows all past recorded video, start time and end time of each recorded video, and etc showing recording year/date/time in list. The HDD can be stored 300 pieces of event in it at most. If the events are over

300 pieces, user can play previous event according to input time period if the data hasn't been over-written.

To playback by Event list, using [UP]/[DOWN] or channel number (CH3 for Page Up or CH4 for Page Down) key on the front panel or remote control, select the event that you want to playback and press "PLAY" button. Another way move the mouse up and down or click the left mouse button ("◄" for Page Up or "▶" for Page Down), select the event that you want to playback and double click the left mouse button. Then it wills playback the recording video data.

## 6.6.9 F/W Upgrade

This menu is for firmware upgrade of DVR system through USB host (USB memory stick) connection, you can simply upgrade the system once you connect the USB memory stick

that contains a firmware file.

[CAUTION]: 1. Do not turn off the system while the system is upgrading. Otherwise, it will cause the breakdown of the system that needs a special recovery process.

- 2. If you don't install a HDD in the DVR, the system can't be upgrade.
- 3. Before the system is upgrade, you must stop recording.
- 4. Before the system is upgrade, make sure you are the administrator.

#### 6.7 Language

Our system supports multi-language OSD. As a whole it includes two types of language system (western and east). The language is provided with user's requirement.

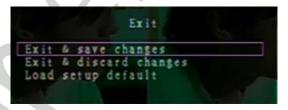
On the menu of "Language", you can move the cursor to change it by pushing "SELECT" button on the front panel or remote control, and also can move the mouse to single left-click to select the language.

#### 6.8 Logout

User can use this option to log out the system.

#### 6.9 Exit

After you change setting on DVR menu, you need to confirm the changes under EXIT menu.



[EXIT & SAVE CHANGE]

Save change and go back to main screen.

[EXIT & DISCARD CHANGES]

No change and go back to main screen.

[LOAD SETUP DEFAULT]

Load default setting.

# 7. VGA SET (Optional)

Some machine model number has VGA output port. User can press button [Resolution] on the panel to adjust VGA resolution (1600\*1200,1280\*1024, 1024\*768, 800\*600).

# 8. PLAYBACK WITH TIME SEARCH FUNCTION



This is an enhanced playback option, which enables the user manually to adjust a specific starting time for playback.

#### [Keypad Control]:

In order to playback with time search function, press "PLAY" button on front

panel or remote control first. And then press "SELECT" key to change the value of the playback start date & time and press "PLAY" button again. The playback will start from the date & time indicated by the user.

#### [Mouse Control]:

Hold a right mouse click button and left click the icon "▶". And then press the left mouse button to change the value of the playback start date & time and press the right mouse button. Then hold a left mouse button to click "Search", the playback will start from the date & time indicated by the user.

# 9. BACKUP via USB memory stick

Our 4-channel DVR system has an enhanced back-up feature so that it's possible to transfer the video data image recorded on the hard drive to USB memory stick.

Before you back up a stream of video data, have the USB memory stick to be ready and attaches it into DVR system.

In order to save the video data with these back-up devices, you should first start with

playback. And then press "MENU" button. Use "UP" key or "DOWN" key to move the prompt, then press "SELECT" button to set the start time and the end time of the recorded video data, which will be saved on back-up devices. If you want to setup the end time faster, you can press the button [>>FWD] to change the play speed that you want, and then press [DOWN] to select end time again.

Move the prompt to "USB copy", and press "SELECT" button or hold a left mouse click button to back up a stream of video data on USB memory stick.

```
Start time: 2008/08/22 12:09:43
End time: 2008/08/22 12:09:45
Size: 1152 KB
```





It will take a few minutes to write the video data on USB memory stick. The file size number

is going up until it's done with the message below.

WRITING...

Then it will show the following message on the screen.

FIXATING...

Take out the USB memory stick and attach it into your PC when it's done.

Press "PLAY" button to continue with a system.

Start time 2008/08/22 12:07:57
End time 2008/08/22 12:08:06
Disk available
Copy size
File name
Writing to USB
Time to remain

OX

Exit

2008/08/22 14:27:15

To view the video image saved on back-up devices on the computer, you need our software provided with this package.

# 10. RECORDING LENGTH

Video System is "PAL". Estimate record time basing on 320G Byte HDD.

The best record quality is 3, and the lowest record quality is 1.

Record Speed	REC Quality	DATA RATE (GB/Hour)	Record Time (Hour)
	3	4.4	73
50F/Sec	2	2.8	114
	1	2.3	139
	3	2.4	133
25F/Sec	2	1.6	200
	1	1.3	246

# 11. PLAYBACK WITH BACK-UP VIDEO DATA ON PC

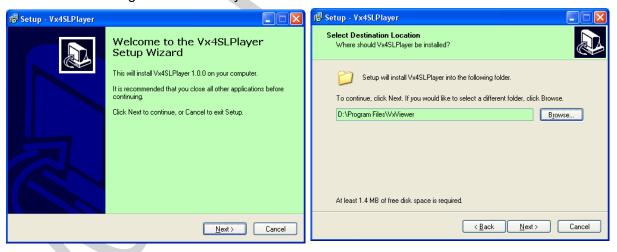
#### 11.1 Install

Put the Driver Program CD in your CD-ROM.

Go for installing by setup.

Set up the install directory.

Execute: Start >Program> Vx4SLPlayer.



## 11.2 Program Interface

Double click icon " " on desktop to run the program.

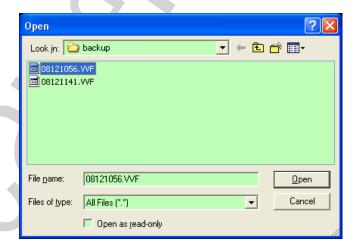


#### **11.3 Button Function**



1. Open File	2. Fast Backward
3. Play Reverse	4. Previous Frame
5. Pause	6. Next Frame
7. Play	8. Fast forward
9. Still Capture	10. Split 1
11. Split 4	12. Volume Scroll Bar
13. Mute On/Off	14. Playing Scroll Bar
15. Minimize the window	16. Close the window

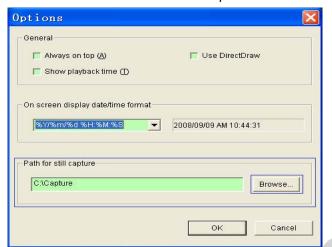
## 1) Click "a" to play the video recorder in "\*.VVF" format.

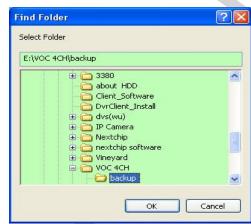


## 2) Still Capture

Click " to still capture. Click the right mouse button to select "Options..." to setup path for

still capture. Click the left mouse button to select folder that you want to, for example select the folder as "E:\VOC 4CH\backup".





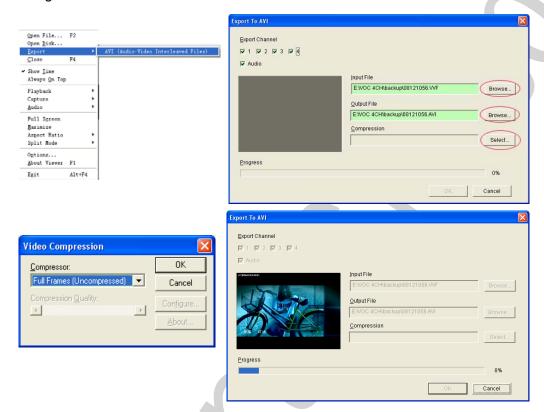
- 3) In "Options" window, you can setup other menu selection such as "General & On screen display date/time format".
- $\square$  Always on top ( $\underline{A}$ ): The client window will always display on top of all the windows.
- ☑ Use DirectDraw: Show a piece of run dialog to you graphic card.
- $\square$  Show playback time ( $\underline{T}$ ): The playback time will display on screen during play backing. On the menu selection "On screen display date/time format", you can adjust the date/time format displayed on screen that you want to.
- 4) Press the keyboard "F1" or click the right mouse button to select option "About Viewer F1", you can see the version of current client.



5) Translate "VVF File Format (\*.VVF)" into "AVI File Format (\*.AVI)".

According to the below figures, first click the right mouse button to select the option "Export", and then click the left mouse button you will see the window "Export To AVI". Secondly select channels you want to export, you can choose the audio to export whether or not.

Thirdly click "Browse..." " to select input file and output file, and click "Select..." " to select video compression mode. Finally click "OK " to start, and progress will be showed at percentage.



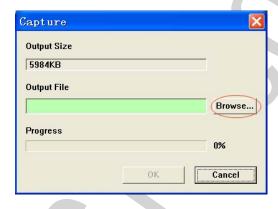
- Note: 1. When selecting video compression mode, user had better to test the compression that he selects is matching with his computer whether or not. Or else the transposition AVI file will be failed possibly.
  - 2、1) ☑ Audio: The audio will be backup for with audio model.
    - 2) □ Audio: The audio won't be backup.

#### 6) Capture

If you want to save moiety of VVF file format (\*.VVF) on your computer rapidly, you must make sure the playback view be in pause state. Drag playing scroll bar to select start time, click the right mouse button to select the option "Capture", then left click "Mark In". Drag playing scroll bar ahead to select end time, click the right mouse button to select the option "Capture", then left click "Mark Out". Last left click "Export" and there will be a window

"Capture" on screen. The "Output Size" is the size of output file. Left click "Browse..." "to setup save path. Then left click "OK".





# 12. APPENDIX

## 12.1 Fitting Come Along With DVR (Please take actual machine model number as quasi)

1. Power Adapter	1pcs
1. I Olioi / laaptoi	1,000

2. Power Cord 1pcs

3. Remote Control (optional) 1pcs

4. User Manual 1pcs

5. USB Drive CD 1pcs

6. Mouse (Only for some models) 1pcs

7. Batteries Of Remote Control (optional) 1pcs

8. Key Of HDD Box and Bolts (optional) 1pcs

















#### 12.2 Model VOC 4CH DVR series used the compatible USB Stick.

In case the noise occurs on USB line due to a variety of reasons such as power noise, it might cause the error while data transferring process. In this case, it require re-transfer the date on memory stick. If the device can process things normally for this kind of exceptional case, things are okay. However, for some case, it doesn't operate normally.

For example, in case of PC, it might not cause any problem under this kind of situation because it is immune to process this kind of exceptional cases. However, in case of our products, they work only with the limited resources, which ends up with restore-impossible situation.

#### WORKING DEVICE LIST

MAKER	MODEL	SIZE
SONY	MICROVAULT (SOK-USM1GJ)	1GB
SAMSUNG	SUM-LCB1	1GB
TRANSCEND	JF V30	2GB
APACER	Weblink (SYE5003358)	2GB
SANDISK	CRUZER micro	4GB
FLEX	FD-02	1GB
KINGSTON	Data Traveler	2GB
KINGSTON	Data Traveler	1GB
LEMON	LEMON USB Drive	1GB

#### HDD compatible list(SATA Type)

HD Brand	HD Model No.	Capacity	Origin
Samsung	SP2504C/CNG	250GB	korea
Maxtor	STM3320820AS	320GB	Thailand
Hitachi	HDP725050GLA360	500GB	China
Seagate	ST380011AS	80GB	Singapore
Seagate	ST3160815AS	160GB	China
Seagate	ST3160812SV	160GB	Thailand
Seagate	ST3250310AS	250GB	China
Seagate	ST3320620AS	320GB	China
Seagate	ST3500320AS	500GB	Thailand
Seagate	ST3750330AS	750GB	Thailand
Seagate	ST31000333AS	1.0TB	Thailand

HD Brand	HD Model No.	Capacity	Origin
Western Digital	WD7500AAKS-00RBA0 (5VDC 0.7A/12VDC 0.55A)	750GB	Thailand
Western Digital	WD5001ABYS (5VDC 0.7A/12VDC 0.55A)	500GB	Thailand
Western Digital	WD10EACS-00D6B0 (5VDC 0.7A/12VDC 0.55A)	1.0TB	Thailand
Western Digital	WD20EADS-00R6B0 (5VDC 0.6A/12VDC 0.45A)	2.0TB	Thailand

# 12.3 Specification

ITEM	4CH DVR		
Video Format	NTSC / PAL		
Operation System	Linux		
Video Input	4 cha	nnel Composite BNC	
Video Output	1 cha	nnel Composite BNC	
Audio Input	4 channel compo	site RCA (Only for some models)	
Audio Output	1 channel compo	site RCA (Only for some models)	
Display Speed		L: 100fps (4*25fps); GC: 120fps (4*30fps);	
Recording Speed	PAL: Max. 50 frame per second;3fps~Max 25fps(each channel)adjustable; NTSC: Max. 60 frame per second;: 3fps~Max.30fps (each channel)adjustable		
Compression Method	Enhanced M-JPEG	Video Quality: Low@13kBytes; Normal@16kBytes; High@26kBytes.	
Recording Mode	Manual, Moti	ion detection, Time Schedule	
Recording Time	15days continue re	ecording at 25fps with 500GB HDD	
Hard Disk Capacity	Up to 1.0 T	TB SATA interface HDD×1	
SATA interface and HDD rack	Fixed×1		
USB port for media backup	Yes, USB port for media backup and software upgrade		
PS/2 Mouse	Only for some models		
38KHZ IR Remote Control	Only for some models		
VGA	Resolution: 1600*1200, 1280*1024, 1024*768, 800*600 (Optional)		
Power Input	100-240VAC/DC 12V, 3A(Adapter supplying)		
Dimension (mm)	Length 250* Width 218* Height 42		