DIGITAL VIDEO RECORDER

IDVR-2300L/2304L Operation Manual (Rev.1.0)

(INFORMATION MAY CHANGE WITHOUT NOTICE)

Physical Unit 1

System Install 4

System Setup 7

Playback Function 17

Back Up 18

PC Viewer 20

FCC NOTICE

This device has been tested and found to comply with the limits for a Class A digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide Reasonable protection against harmful interference in a commercial, industrial or business environment can generate, use and radiate Radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not Occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received,

including interference that may cause undesired operation.



CAUTION ON MODIFICATIONS

To comply with the limits for the Class A digital device, pursuant to Part 15 of the FCC Rules, this device must be installed in computer equipment certified to comply with the Class A limits. All cables used to connect the computer and peripherals must be shielded and grounded. Operation with non-certified computers or non-shielded cables may result in interference to radio or television reception.

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

CE NOTICE

This is a Class A product.

DISCLAIMER

No warranty or representation, either expressed or implied, is made with respect to the contents of this documentation, its quality, performance, merchantability, or fitness for a particular purpose. Information presented in this documentation has been carefully checked for reliability; however, no responsibility is assumed for inaccuracies.

The information contained in this documentation is subject to change without notice.

In no event will interVision be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or inability to use this product or documentation, even if advised of the possibility of such damages.

CAUTION

TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT OPEN COVERS. NO USE SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

CAUTION

THE LIGHTING FLASH WITH AN ARROWHEAD SYMBOL WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.

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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.

NOTICE : THE SPECIFICATIONS CAN BE CHANGED OR IMPROVED W/O NOTICE.

WARNING

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE UNITS NOT SPECIFICALLY DESIGNED FOR OUTDOOR USE TO RAIN OR MOISTURE.

ATTENTION

INSTALLATION SHOULD BE PERFORMED BY QUALIFIED SERVICE PERSONNEL ONLY

NOTICE

POWER DISCONNECT. UNIT WITH OR WITHOUT ON-OFF SWITCHES HAVE POWER SUPPLIED TO THE UNIT WHENEVER THE POWER CORD IS INSERTED INTO THE POWER SOURCE; HOWEVER, THE UNIT IS OPERATIONAL ONLY WHEN THE ON-OFF SWITCH IS IN THE ON POSITION. THE POWER CORD IS THE MAIN POWER DISCONNECT FOR ALL UNITES.

NOTICE

Please do not open the unit. There's no any parts has to be fixed by end user. For any problems on the unit, please contact your dealer.

This manual is published on the time of the product has been made. The manufacture has the right to change or upgrade the product without any announcement. All the spec of product is basis on the product sold by time.

<u>About This Manual</u>

Before installing stand-alone DVR, be sure to thoroughly review and follow the instructions in this User's Manual. Pay particular attention to the parts that are marked NOTICE.Also, when connecting with external application, first turn the power OFF and follow manual instruction for appropriate installation.

Before Reading This Manual

- 1. This document is intended for both the administrator and users of stand-alone DVR model.
- 2. This manual contains information for configuring, managing and using stand-alone DVR model.
- 3. Be sure to read through this manual before using this stand-alone DVR model.
- 4. To prevent fie or electrical shock, do not expose the product to heat or moisture.
- 5. Check electricity at the place you want to install the DVR unit if it is stable and meets our electricity requirements. Unstable electricity will cause malfunction of the unit or give critical damage to the unit.
- 6. Several chips on the main board of the DVR unit and hard disk drive inside the unit generate heat, and it must be properly discharged. Do not put any objects near or on top of the unit.
- 7. Put the DVR unit at well-ventilated place and do not put heat-generating objects on the unit. When it is installed inside 19 inch mounting rack together with other devices, please check built-in ventilation fan of the rack is properly running.

NOTICE

Open Package:

Please be care to open the package to avoid dropping the unit. This might hurt any parts of your body or the system will be broken.

Checking and Confirm:

- 1. If there's any damage happened on the shipping, please pack the unit in the original box and return back.
- 2.Please check the goods shipped inside the package (as below). If there's any lose, please contact your dealer.

Standard Goods with one package:

- a. DVR main system *1
- b. 100~240 Power Cord *1
- c. DC 12V 3A Power Supply *1
- d. User's Manual *1
- f. Hard Disk Screws *4
- 3. Please keep the packing box as it is made to protect the unit in case if the unit needs to be returned for any reason.

Working Environment:

Please do not set the unit in any case with no air circulation as the unit might be dead on heat.

Remove Hard Disk Box:

Please turn off the system first while take out the Hard Disk Box.

TABLE OF

1.	
2.	Physical Unit
	2-1 Front Panel
3.	Getting Start
4.	System Install
	4-1 Monitor Connection
5.	Screen Introduction
6.	System Setup7
	6-1 Camera. 7 6-2 Record 8 6-3 Motion Detection 10 6-4 Screen 10 6-5 Audio 11 6-6 System 11 6-7 Search 15 6-8 Language 16 6-9 Exit 16
7.	Playback Function
8.	Backup
9.	PC Viewe

1. INTRODUCTION

- 1. Support true duplex functionality (Simultaneous playback, record and USB media back-up)
- 2. Support 50-field recording frame rate
- 3. Host USB (avg. 300 KB/sec) drive
- 4. User flexible and high-quality audio (8/16/20 KHz) interface
- 5. Support PS/2 USB type mouse
- 6. Support USB upgrade
- 7. Support (BNC) to connect 1~4 Cameras

2. Physical Unit

2-1 Front Panel

ڻ	Power	
Ō	HDD Indicator	
	Remote Receiver(OPTION)	
Mouse	PS/2 Mouse Connection	
Flash Disk USB Storage		

2-2 Back Panel

2



	Video Output(BNC)
	Video Input(BNC)
vGA o∭oo	VGA Output(Option)
DC-IN.12V.	Power Supply (Adaptor DC12V/5A)
	Audio Input/Otput RCA

2-3 Remote Control(Optional)



3.GETTING STARTED

Install a hard drive into your DVR Connect DVR to monitor Connect cameras (up to 4) to DVR Plug the power cord into power jack on the wall Turn on the power switch on the back of the DVR Start TV Monitoring and Recording

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

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

4. SYSTEM INSTALL

4-1 Monitor Connection

4



[" VIDEO IN" port on Monitor]

["VIDEO OUT" port on DVR]

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

The DVR supports BNC output

 1. BNC Output Connect the DVR "VIDEO OUTPUT" to camera(s)
 "VIDEO INPUT" then see the recording screen.

4-2 Camera Connection

Connect between " CHANNEL IN" of your DVR and " VIDEO OUT" of camera with video cable and plug in the camera's power adapter.



VIDEO IN: Also can use VIDEO BALUN to connect DVR with internet cable plug

4-3 HDD SETUP

Please use SATA HDD.

4-4 Power Connection

Connect a DVR power adapter to the adapter jack at the rear panel of DVR unit. And turn the power switch on. It will boot up the system. If you install a new HDD, it will ask for HDD formatting before a system starts to run. Choose format option using "SELECT" button. Below is the information of input/ output voltage for the power adapter.

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

5.Screen Introduction

Ch1	条 🛛 🔵	Ch2 🕹	条 🕢 🧿	
Ch3	<u>م</u>	Ch4	∱2 4⊠ ⊝	
a	<u>e</u> 0% 🔂	2005/08/01	11:00:25	
	000	000	-	

Ch1= First Camera Ch2= Second Camera Ch3= Third Camera Ch4= Forth Camera

= Motion Detecting On Ц× = Video Loss





6

= Recording



🚺 = Vidio On

- Writing to HDD, % is the HDD recording space

6. System Setup

Choose the "MENU" after turn on the DVR power.



* Using button " Ħ / ▲ , Ħ / ▼ " to choose the language

On the DVR front panel or remote control, press " $\blacksquare / \blacktriangle$, \blacksquare / \lor " can move the cursor up or down, Press " $\blacksquare / \checkmark$ " can go to each sub menu.

To go back to the previous menu, press" and "button on the front panel or remote control.

6-1 Camera Setup



Press" 🗄 / 📲 " enter the camera video

Channel: Press " /↓", " , 0R" / , 0R" . 0R"

Press" \blacksquare / \blacktriangle " or \blacksquare / \blacktriangledown " to setup

The original setup is 5, can change it from 1~10

6-2 Record



Press Ħ/▲, Ħ/▼ to move the cursor Press Ħ/↓, ►►/<>, ◄ to setup Press Ħ to exit

RECORD SPEED: It can be changed the frame numbers

RECORD QUALITY: Press" **I** / " to chose HIGH/NORMAL/LOW Event Rec Duration: You can adjust it depending on your need. (Act time from 5~30)

RECORD SCHEDULE: It can set up the time of recording.

*If you want to stop recording, please set up the record schedule.

6-2-1 Record Speed

8



Press II / ▲ , II / ▼ to choose the channel, press ◀ to decrease the frame ►►/ < > to increase the frame. Totally are 50 frames, the most frame of each channel are 30 pcs, you can depend on your need to change the numbers. TOTAL USED FRAME: It will show how many frames you chose in 50 pcs.

* Same adjust way for real time and motion record.

6-2-2 RECORD SCHEDULE



Press< 🖬 / 🚽 >, can choose

- No record : Only if pressing ●/■ or the DVR is set on Auto Record, the DVR will record. When recording, you can press●/■ at anytime to stop record. For update the firmware, DVR should be in this mode and stop recording.
- Time Record : In this mode, you don't need to press ●/ DVR will record automatically. Once it is on recording, DVR won't stop recording unless switch to No Record mode. Time Record mode is suggested to avoid recording loss.
- Motion+Sensor Record : When individual camera is on,DVR will only record while motion or sensor alarm is triggered. It can save the HDD space.
- Time+Motion+Sensor Record : DVR is on recording.When motion or sensor alarm is triggered, it will stop recording and switch to motion or sensor record.
 - * Record Schedule set on 24 hours basicly

Press ◀< > ►►/
> to move the cursor
Press ►/■■ to set all
Press ♀ to exit

6-3 Motion Detection



Press ⊞ /▲, ⊞ /▼ to move the cursor Press ⊞ /↓ , ►►/<>, ◄◄ to setup Press ♀ to exit

Channel : Press "∎ / ◄ " to setup

Sensitivity : Press" ◀ ","►►/<▷" or "⊞/↓ " to setup

Motion Area : Press[™] /▲ "," → /▼ " to move the cursor up and down. Press " ◄◄ "," →>/ <⊃ " to move the cursor right and left.

Setup : Select motion area first. Move the cursor from left-top corner and press " 册 / ← J " to right-bottom corner then press" 册 / ← J ".

When motion alarm is on, it will show and for recording.

6-4 Screen



10

Press Ħ/▲, Ħ/▼ to move the cursor Press Ħ/↓, ►►/<⊃, ◀◀ to setup Press Ĥ to exit

BORDER LINE : Chose ON/OFF VIDEO ADJUSTMENT: Press 표 /▲ ■ /▼ ◄ ►►/ <>

6-5 Audio



Press ⊞ /▲, ⊞ /▼ to move the cursor Press ⊞ /↓, ►►/<>, ◄ to setup Press ♀ to exit

Record : Press" / " to select On/Off Mute : Press" / " to select On/Off Input Volume : Press" / " to adjust. From 0~10 Output Volume : Press" / " to adjust. From 0~10

6-6 System



System

Hard Disk Setup Password Change Time Set Even List Network F/W Upgrade Load Active-x Control Sequence Time Set

Press ⊞ /▲, ⊞ /▼ to move the cursor Press ⊞ /↓ , ►►/<>, ◄◄ to setup Press ♀ to exit

6-6-1 HDD Setup



Overwwrite Enabled: If you choose YES, recording continues and overwrites previous recording when HDD space is full. If you choose NO, the recording stops when HDD is full.

TOTAL: HDD Capacity.

USED: Size of been record.



Format Master HDD To format HDD, you must stop recording and enter the password first, then format.

Press ⊞ /▲, ⊞ /▼ to move the cursor Press ⊞ /↓ , ►►/ເ⊃, ◄◄ to setup Press ♀ to exit

6-6-2 Password Change



Default Password is 111111

Password Change : Enter "Password Change"

Current Password : Input the old password New Password : Input the new password Current Password : Confirm the new password

Password Change Successful

* If you lost your password, please ask your agent.

Press Ħ/▲, Ħ/▼ to move the cursor Press Ħ/↓, ►►/<>, ◄ to setup Press Ħ to exit

6-6-3 Time Set



According the time zone to do the time set

Enter the Time Set then can change the time, date and year.

Press Ħ /▲, Ħ /▼ to move the cursor Press Ħ /↓ , ►►/<>, ◄ to setup Press Ħ to exit

*Once you finish time setting, move the cursor to Apply then press Enter.

If you have NTP server, please key in the server IP address, the time will be the same with NTP server.

6-6-4 Even Listt



System will record when the power switch on/off, record start/stop, and alarm on ...etc.



6-6-6 F/W Upgrade

F/W Upgrade	
Searching Firmware	
000000	

F/W Upgrade

Current Ver : 2.19

New Ver: 2.19

Press [PLAY] UPLOAD, [STOP]CAI

000000

The DVR can make the F/W Upgrade by USB(HOST/Flashdrive),please ask your manufacturer.

Plug the USB(HOST/Flashdrive) into the USB Link, and press"ENTER" in the upgrade list.Then press"PLAY", it will copy the file into the DVR.

DVR restart automatically after upgrade completely.

*When upgrade the F/W, Stop DVR record first.

*HDD will format after F/W upgrading, please make sure there is no important files in the HDD.

*It is not 100% guaranteed with using USB upgrading the F/W, please beware of using carefully. If fail the upgrading, please contact your manufactory.



Press Ħ/▲, Ħ/▼ to move the cursor Press Ħ/↓, ►►/<>, ◄ to setup Press Ħ to exit

6-6-8 DVR Setting



Sequence Duration: Set sequence duration(1~9 sec), press ►►/c> sequence on, it will show Auto record : Can be OFF or set the sequence duration 1~9 mins. When record schedule is set on no record, if you didn't press the record key, it's easy forget to record. If you set on Auto Record, it will record automatically on the set time. Menu Password: Can be On or Off. When it is on, you have to key passwords when enter Menu. Stop Password: Can be On or Off. When schedule record is set on OFF, you have to enter the password to stop the record to avoid recording loss. Camera Name Hide: Can be On or Off. Loss Alarm: Can be On or Off. When it is on, it will alarm when loss video. Alarm Duration: Set alarm duration.

6-7 Search

	Time Search	
	Start 2007/06/09 17:18:26 End 2007/06/12 16:03:55	
	2007/06/09 16:36:40	
	Search	
C)	
	000000 🗖	

In the live screen, press"SELECT" to search the time.Press"FASTWARD" &"BACKWARD" to adjust the time.

> Press ⊞ /▲, ⊞ /▼ to move the cursor Press ⊞ /↓ , ►►/<>, ◄ to setup Press ♀ to exit

> > 15

6-8 Language



Press Ħ/▲, Ħ/▼ to move the cursor Press Ħ/↓, ►►/Ϛ⊃, ◄ to setup Press Ħ to exit

6-9 Exit



16

Please save then exit, if have any changes.

If want to back to the original setup, please move the cursor to the Load setup Default, press" I / I and input the password then it back to the original setup.

7. Playback Function

7-1.Record

- There are 3 types of DVR recording as below:
 1. Setup the record schedule at real time. It will start record when switch on the DVR power, but it can't stop when it's recording.
- Do not setup the record schedule. Press "RECORD" to record and press "RECORD" again or "STOP" to stop record.
- 3.Setup the record as ALARM or SENSOR record. Press "RECORD" to record real time, cancel record will be ALARM or SENSOR record.

7-2.Playback

There are 3 ways to playback

- 1. Press "PLAY" to show out the "Search" list on the screen. And chose the time that you're going to playback.
- 2.Select the "Search" at "System" list, and chose the time that you're going to playback.
- 3.Select the"EVEN LIST" at "System" list, and chose the even that you're going to playback.

- 8. Back Up
 - 8-1.USB HOST Back Up
 - (1). Playback operation

First: make sure starting and ending time is recorded. Prepare the USB host to connect to the DVR to start recording at start up time.



Press" **I** / I 'to ajust playback time , suggest the starting time should be 2 sec before the time you want to backup.

Time Search
Start 2007/06/09 17:18:26 End 2007/06/12 16:03:55
2007/06/09 16:36:40
Search
000000 🗖

(2).Set back up file starting time

When DVR playback to the starting time of the file,

press" \square '', then press " $\blacksquare / \blacktriangle$ ''system will record the time and display on the monitor.



(3).Set Back Up file ending time

After set the starting time, press" $\blacktriangleright / \Box$ " fastfoward to the end of back up file, press " $\blacktriangleright / \blacksquare$ " back to normal play, when it is on the back up file ending time, press " $\blacksquare / \blacksquare$ ", system will record the time and the size of the back up file and show on the monitor.



(4). Flash drive setup information via USB

After confirming the flash drive capacity connects via USB port and press" / / ". The unit automatically sets up the required procedures.

Backup To USBStart2007/06/24 17:14:15End2007/06/24 17:14:17Disk Available508156KBCopy Size2368KBFile Name01010058.VVFWriting To USB2368KBTime To Remain9 SECSCOMPLETE	Backup file name
000000 🗖	Writing to USB displays hard drive size
Backup To USB Start 2007/06/24 17:14:15 End 2007/06/24 17:14:17 Disk Available 508156KB Copy Size 2368KB File Name 01010058.VVF Writing To USB 2368KB Time To Remain 9 SECS	Elapsed time.
000000 🗖	

Upon successful completion of setup, the Copy Frames to USB screen will be displayed. Press " ►/■■" to return to normal view.

9. Instructions of PC VIEWER Minimum System Requirements Windows 2000/ XP Requirements Direct X 7.0 Requirements CPU 1GHz Requirements RAM 256Mbytes Requirements

(1)Setup

Play the CD and chose the "4ch PC VIEWER"



(2).0pen:



(3). Function





:Step Review



:Pause



:Step Forward



Fast Forward x2, x4, x8, x16, x32, x64, x128, x256, x512, x1024....

21



:Switch single channel.



:Switch to Quad screen.



22

(4). Transfer to AVI file%Please transfer the file to VVF first.Than transfer to AVI file.

AVI file size is more bigger then VVF file.



Click mouse right key to transfer AVI file.

xport To A¥I			×
Event Obernel			
Export Channel			
	74 🔽 5 🔽 6 🔽	7 🔽 8 🔽 9	Audio
Input File			
			Browse
, Output File			
			Browse
P.			5101100
Compression			
			Select
Progress			
			0%
		OK	Cancel

To call AVI file. System transfer automatically. User select channel 1~4.

User can change the save place.



Compress quality : User can choose AVI format.



About

24



USB setup time procedure

HDD TIME(S)	DATE SIZE KB	Backup time
30sec.	22016KB	85 sec
90sec.	68288KB	260 sec
180sec.	132160KB	504 sec
300sec.	215744KB	794 sec
600sec.	449664KB	1711 sec

℁The form only for reference

Select compress format than press Enter.

Export To AVI	x
Export Channel	
	Z Audio
Input File	
H:WOC00010.VVF	Browse
Output File	
H:WOC00010.AVI	Browse
Compression	_
	Select
Progress	
	18%
OK	Cancel

Transfer information.

Export To AVI	×
Export Channel	
	🔽 Audio
Input File	
H:WOC00010.WF	Browse
Output File Start Local Recording H:WOC00010.AVI Image: Start Local Recording	Browse
Compression OK	Select
Progress	
	99%
OK.	Cancel



Screen shows each camera time. PC viewer will always on top of screen.

Use full screen to operate PC viewer.

Change resolution 640x448 or 640x554.

For more information please contact your sales agent.

Sales Agent:

