CMS USER'S MANUAL

VER: 1.0

2009-1-6

INDEX

Preface

Central management software (short for CMS below) is a typical client management program whose main function is to centralize all devices together and realize the unified management of parameters and authorization, which is greatly improve the efficiency of control and operation to all embedded digital video recorders and network video servers as well as software compressed cards connected through the network.

This manual will help you to familiarize with the software and master its operation methods.

Notice:

- As product update, the contents of this manual are subject to change without notice.
- Some part functions and symbols may not be completely same with what you get due to the continuous revision of this software.

1.Introduction

Central Management Software is a client procedure designed specially for embedded digital video recorders, network video servers and software compressed cards to realize remote centralized management. In the video surveillance system, the administrator can control video input devices and conduct all possible rights such as setting up cameras, PTZ, etc through configuring parameters, viewing the live site to achieve the purpose of live site surveillance, video record and record file backup and so on. It possesses three main functions: preview the live site, system configuration and video search, which will be presented specifically in the third function part.

2.Install and uninstall CMS

2.1 System requirement

- Supported Operating System:

Operating system	Comments
Windows XP	Windows XP SP2 or most updated patch, Direct 9.0c or the higher
Windows 2000	Windows 2000 SP4, Direct 9.0c or the higher
Windows Vista	Windows Vista Direct 10.0c or the higher

Note: Windows 2003 series.

- Supported Browser

Operating system	Comments
Microsoft Internet Explorer v6.0	IE 6.0 with most updated service pack
Microsoft Internet Explorer v7.0,	IE 7.0 with most updated service pack

2.2 Computer Hardware Requirements

To ensure the software running well, please make sure the computer is compatible.

●Recommended PC Specification – 4 channels

Item	Specification
CPU	Intel Pentium 3.0 GHz or AMD 3000+
Memory	1GB
HDD	160GB

●Recommended PC Specification -8 channels:

Item	Specification
CPU	Intel Core 2 Duo 1.8 GHz or AMD Dual core 3800+
Memory	1GB
HDD	250GB

●Recommended PC Specification -16 channels:

Item	Specification
CPU	Intel Core 2 Duo 2.2 GHz or AMD Dual core 3800+
Memory	2GB
HDD	250GB

Note:

- The upper recommended specification aims at CIF real-time resolution.
- The AMD chip hyper-3800+ and X64 series are not tested;
- If user wants to have real-time live view with CIF resolution, the max connection number is 16 in one computer according to the current capacity;
- If user wants to have real-time live view with D1 resolution, the max connection number is 4 in one computer.

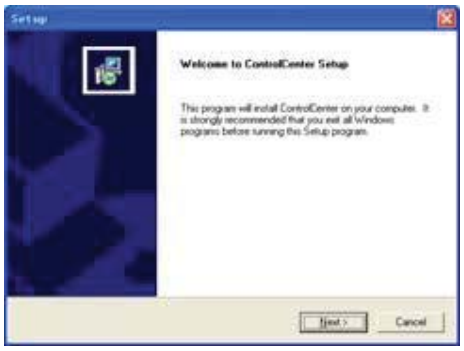
2.3 Process of Installation

a) Before to install central management software in your computer, please make sure all the anti-virus software in your computer closed so that the control center program can install correctly in your

computer. In addition, the setting of your IE browser must enable the download of activeX control.

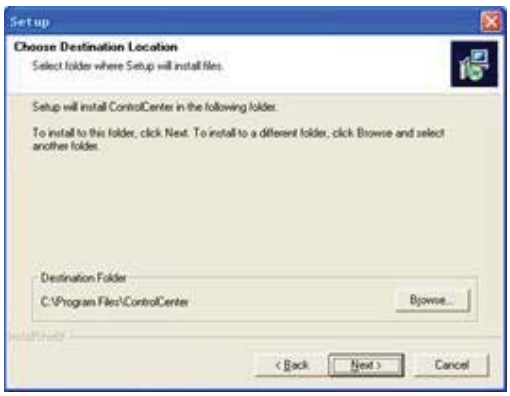
b) Run the “Control Center” from software CD, the next menu will pop up;

Figure2-2 Welcome menu



Click “Next” to enter the next step;

Figure2-3 Choose the installation destination

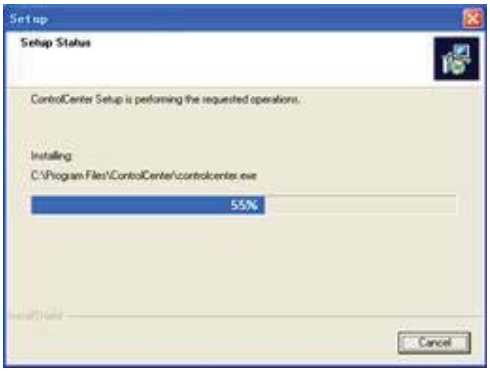


The default installation destination folder is “C:\Program Files”, user could click “Browser” button to change it. After selecting the destination, click “Next” to enter the next step.

Figure2-4 Type a new folder name or select an existing folder to install

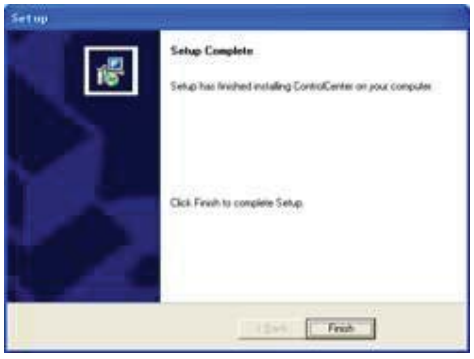
Click “Next” to start installing;

Figure2-5 The rate of installation progress



The installation is completed.

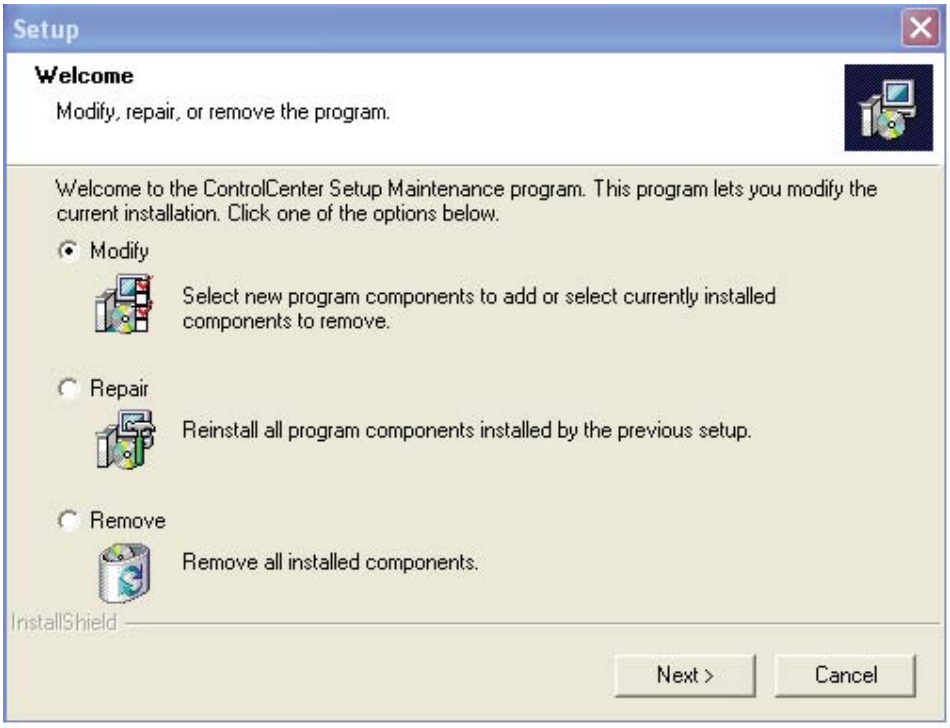
Figure2-6 Completed menu



2.4 Remove the Software

There are two methods to remove the software. One method to uninstall the software is like all other software. Users shall enter the removal interface and then

click 'remove" to uninstall this control center. The other way is to click the setup icon, and then a window shown below will pop up, users select "Remove" to dismantle this software. After Removed, the computer system will reboot automatically.



3.Login and exit

3.1 Login

After building Network Video Surveillance System and installing the Control Center program, user need login the Control Center to set parameters and watch the locale. Steps of login are described as below:

Double-click 

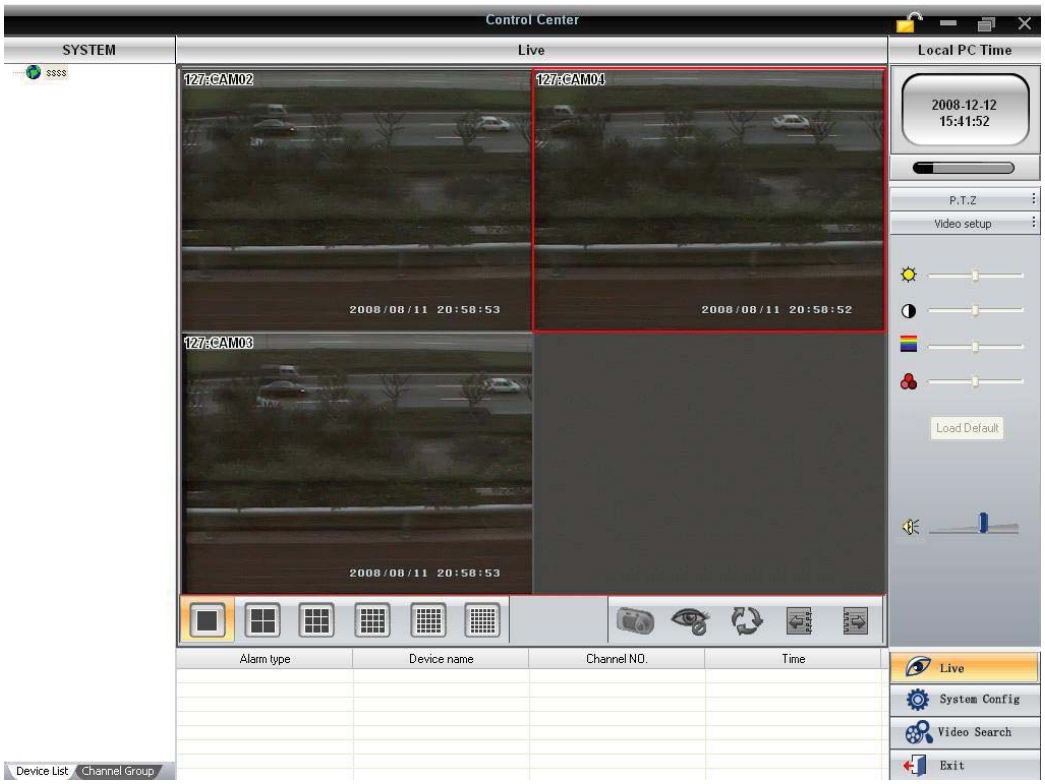
icon on the desktop, it will pop up 'Login' dialog box, referred to Figure1.

Figure 1

Input username and password on 'Login' dialog box. The default original username is SYSTEM and password is 123456.

Click 'OK' button to enter the Control Center. The Control Center Operation Interface is shown as Figure2.

Figure 2



3.2 Exit

There are two ways to exit control center normally.

Firstly, please click 

button, and then an inquiry dialogue will pop up. If you confirm to exit, please click "yes", the system will close.

Secondly, user can click  button to exit.

4.Functions and operations

In this chapter we will divide four parts to instruct the functions and specific operations of this software. Users can enter the control center to watch locale through Internet, to set parameters, to enable the record, to playback the record files, and to backup the record and so on.

Main Function List:

- Basic Function
- Preview
- Remote System Config
- Video Search

4.1 Basic function

After entering the Control Center, users can operate following functions. The operation methods are described as below:

4.1.1 Lock & Unlock

 'Lock & Unlock' button.

 expresses the Operation Interface is on 'Unlock' status.  expresses the Operation Interface is on 'Lock' status.

User could lock current operation interface. When current operation interface is on 'Lock' status and user need to operate the Control Center, he needs input username and password on 'Login' dialog box to unlock the Control Center Operation Interface. The Control Center Operation Interface which user could operate is on 'Unlock' status.

4.1.2 Minimize & Maximize

Click  to maximize 'Control Center' window. Click  to minimize 'Control Center' window or revert the 'Control Center' to original size.

4.1.3 Alarm Display

In the alarm display item, all the alarm information will be displayed. It mainly includes: Alarm Type, Device Name, Camera Number and Alarm Time as well as

video lose, motion and so on. Alarm Display List is shown as Figure1.

Figure1

Alarm type	Device name	Channel NO.	Time
Stop Motion Alarm	tc201	CAM1	2008-12-13 09:39:33
Motion Alarm	tc201	CAM1	2008-12-13 09:39:12
Stop Motion Alarm	tc201	CAM1	2008-12-13 09:37:02
Motion Alarm	tc201	CAM1	2008-12-13 09:36:42

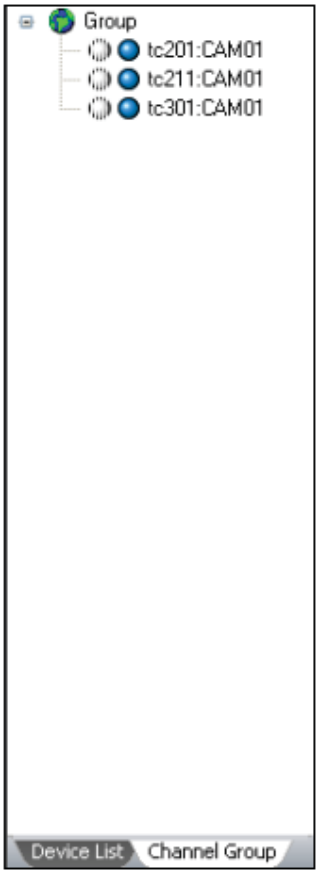
4.1.4 Camera Display List

Camera Display List is used to display all devices added. User may Click 'Device List' or 'Camera Group' page to switch display mode.

Figure2 displayed the DVS aligned according device list. User may drag device in the Device List to Operation area for watching the locale. Figure3 displayed the DVS aligned according camera list. User may drag the group to Operation area for watching all camera of this group.

Figure2 Device list

Figure3 Camera group



If user needs add region, group or device, please refer 'Device Manager ' to add.

Notice:

Before switching the display mode, user needs click  button firstly and then close all preview pictures.

4.2 Preview

On Menu area, after clicking 'Preview' menu, it will display the locale preview picture on Operation area. Main function of 'Preview' menu contents: Preview Locale, PTZ Configuration and Video Set.

Function List:

- Preview Locale
- PTZ Configuration
- Video Set

4.2.1 Preview Locale

On Operation area, users can select preview mode of locale, select automatic dwell, snap picture and close all previews, etc. Function Buttons of Preview Locale are described as table1.

Table1 Function Buttons & Explanation of Preview Locale

No.	Buttons	Meanings
1		Single Picture Preview' button. Click this button to watch every camera in single picture preview mode.
2		'4 Picture Preview' button. Click this button to watch every camera in four picture preview mode.
3		'9 Picture Preview' button. Click this button to watch every camera in 9-picture preview mode.
4		'16 Picture Preview' button. Click this button to watch every camera in 16-picture preview mode.
5		25 Picture Preview' button. Click this button to watch every camera in 25-picture preview mode.
6		'36 Picture Preview' button. Click this button to watch every camera in 36-picture preview mode.
7		'Snap' button. Click this button to snap locale picture of one camera you select. User could snap 10 pictures once at best. Click 'Snap' button to pop up a dialog, referred Figure2.
8		'Close All Preview' button. Click this button to close current locale picture and stop preview. Before switching display mode, user must close all previews first.
9		'Dwell' button. Range of selecting to dwell is from single picture preview mode to 9 picture preview mode. Notice: ● Dwell means to display every locale picture according to the sequence of the DVS in Camera Group. ● Only when selecting 'Camera Group' on Camera Display List area and current display mode couldn't display all cameras, 'Dwell' button is enabled. ● It will dwell among the cameras that have locale pictures.

10		'Pre-Group' button. Click this button to display pre-group locale pictures. Notice: If there are some cameras not connecting with locale pictures, please click 'Pre Group' button, they will be also displayed on the screen, but it only displays in blue screen.
11		'Next Group' button. Click this button to display next group locale pictures. Notice: If there are some cameras not connecting with locale pictures, please click 'Next Group' button, and they will also be displayed on the screen, but it only displays in blue screen.

Figure 1 Camera preview

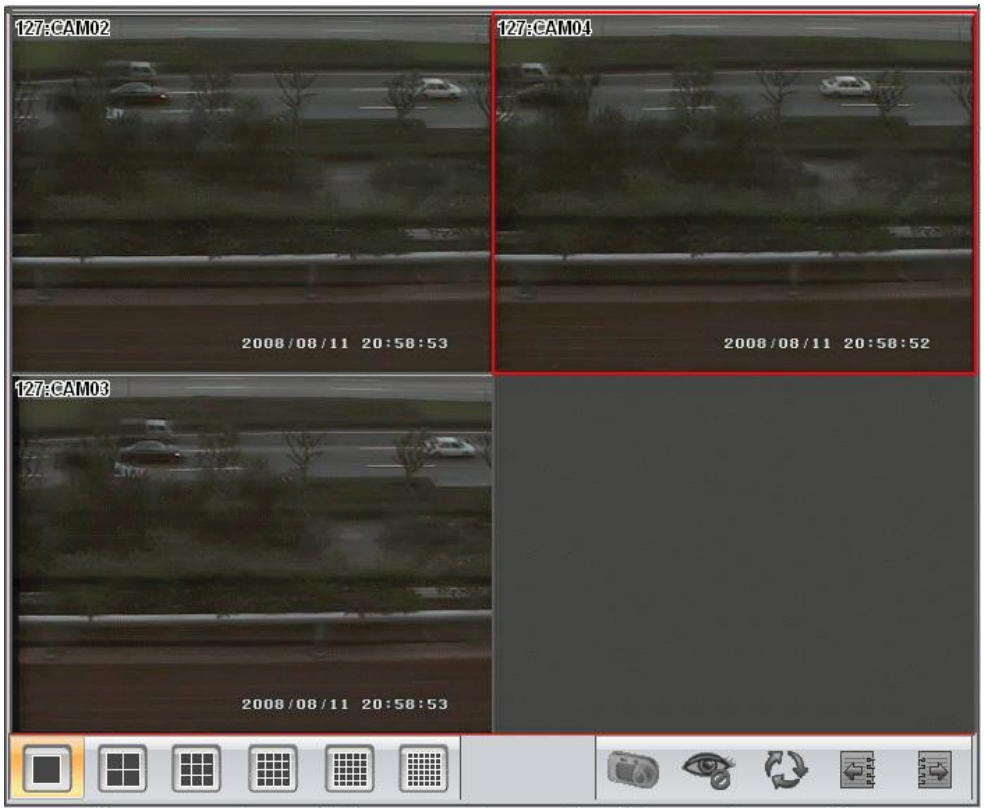
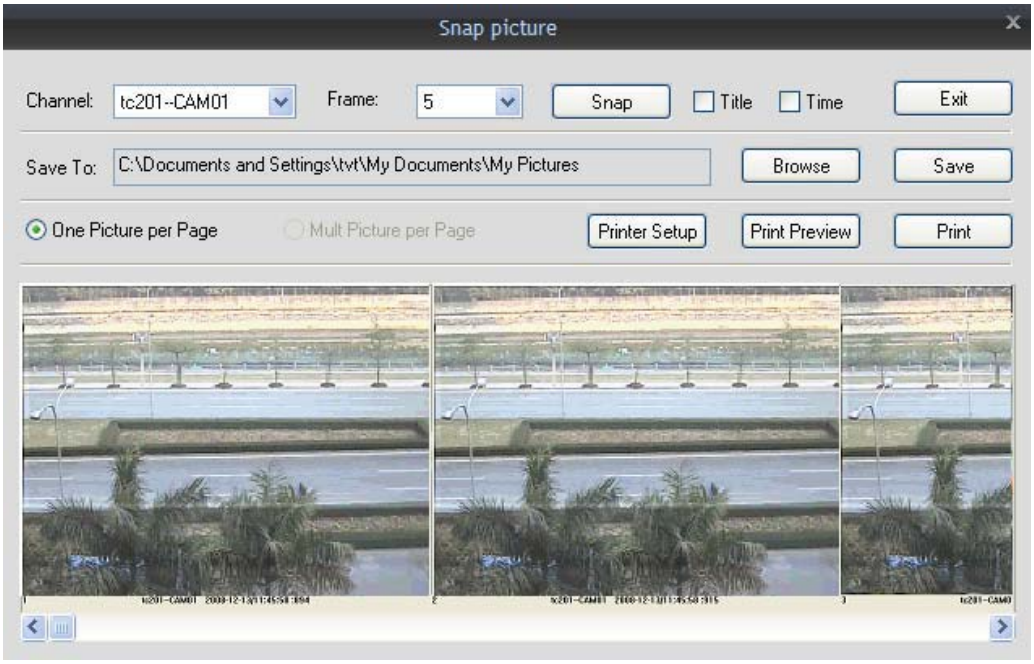


Figure2 “Snap” Dialog Box



4.2.2 PTZ configuration

After connected with dome, user can control the dome on Control Center. User could control the dome up, down, right, left or stop rotating, adjust rotation speed, Iris and zoom, focus on the dome, and set the presets and so on...

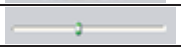
Function List:

- Dome Control
- Preset Setting

4.2.2.1. Dome control

On 'PTZ Configuration' menu, user could control rotation position and speed of the dome. Function buttons of the Dome Control are described as Table1

Table1 Function Buttons & Explanation of PTZ Configuration

No.	Buttons	Meanings
1		means the dome rotate up. means the dome rotate down. means the dome rotate left. means the dome rotate right. means the dome stop rotating.
2		Drag the bar to adjust rotating speed of the dome.
3		'Iris' button. Click button near 'Iris' button to increase light of the dome. Click button near 'Iris' button to decrease light of the dome.
4		'Zoom' button. Click button near 'Zoom' button to zoom in the locale picture of this camera. Click

		button near 'Zoom' button to zoom out the locale picture of this camera.
5		'Focus' button. Click button near 'Focus' button to have long focus. Click button near 'Focus' button

4.2.2.2. Preset setting

Preset means user sets a camera surveillance point for a special position of the locale. When setting the preset, user may adopt function buttons in Table1 of Dome Control to adjust the dome, so that it will display the best picture of locale on Control Center.

- Setting Steps

i. Click button in  item, it will pop up a drag-down list.
ii. Select the preset which user wants to set in drag-down list.
iii. Use function buttons in Table1 of Dome Control to adjust the dome.
iv. Click button, it will pop up 'Modify Name' dialog box.
v. Input the preset name in 'preset' textbox.
vi. Click 'OK' button to save the preset which you set.

- Parameters Configuration

Parameters and explanation of setting preset refer below table.

Parameters	Meaning	How to Set...
preset	Name of the preset.	Input manually. It could input 11 characters at most.

4.2.3 Video Set

On Video Set menu, user could set the quality of locale picture. Function buttons of the Video Set are described as belowTable1.

Table 1 Function Buttons & Explanations of Video Set

No.	Buttons	Meanings
1		Brightness adjustment
2		Contrast adjustment
3		Saturation adjustment
4		Hue adjustment
5		Sound adjustment

Notice:

Click 'Default' button to resume the default settings.

4.3 Remote System Configuration

On Menu area, after clicking 'System Configuration' menu, there will display the entire submenu. Main function of the System Configuration contents: Device Manager, Local Configuration, Server Configuration, E-map, User Manager and Log Inquiry.

Function List

- Device Manager
- Local Configuration
- Server Configuration
- E-map
- User Manager
- Log Inquiry

4.3.1 Device manager

User could add regions, groups and devices to manage all DVS in the network. After adding regions, groups and devices, they will display on Camera Display List area

Function List

- Add Region
- Add Group
- Add Device
- Modify
- Delete

4.3.1.1 Add region

User may set regions. The regions could be an indoor environment, outdoor environment or other area.

Setting Steps:

i. On System Configuration menu, click 'Device Manager'  , it will display 'Device Manager' interface.

ii. Click  button, it will pop up 'Add Region' dialog box.
Input the region name in 'Region' textbox.

iii. Click 'OK' button, it will display the added region on Device List box and Camera Display List area.

Notice

Before adding sub region, user needs select parent region first. If user doesn't select any region, it means adding senior region.

Parameters Configuration

Parameters and explanation of adding region refer to below table.

Parameters	Meanings	How to Set...
Region	Region name of the DVS.	Input manually. It can input 32

		characters at most.
Parent Region	Superior region of current region.	Display parameter.

4.3.1.2 Add group

User may set camera group. The group could be some floors, rooms or other groups which installed in the DVS.

Setting Steps

i. On 'Device Manager' interface, click  button, it will pop up 'Add Group' dialog box.

ii. Input group name in 'Group Name' textbox which the DVS belong to.

iii. Click 'OK' button, it will display the added group on Device List box and Camera Display List area.

Notice

When adding parent group, user must unselect any group and click  button to add.

Parameters Configuration

Parameters and explanation of adding group refer below table.

Parameters	Meanings	How to Set...
Group Name	Group name of the DVS.	Input manually. It will input 32 characters at most.

4.3.1.3 Add device

Only after adding region or group, user could add the DVS below region and group. User may select region or group every time to add the DVS. We take adding device in the region as example to describe steps.

Setting Steps

i. On 'Device Manager' interface, select the region in Device List and click  button; it will pop up 'Add Device' dialog box.

ii. Click 'Search Device' button, it will pop up 'DVS searching' dialog box.

iii. Double-click the DVS in left device list to go back 'Add Device' dialog box.

iv. Input the DVS name in 'Device Name' textbox.

v. Select data type in 'Bit rate Type' drag-down list.

Notice

User may set data type in 'System Configuration -> Server Configuration-> Camera Configuration' after adding the DVS, referred Channel Configuration'. We suggest user selecting first stream in LAN and selecting "small stream" in WAN.

vi. Select IP of the DVS in 'IP Address' drag-down list.

vii. Input username and password of the DVS in 'User Name' and 'Password' textbox. The default username and password of the DVS are admin and admin.

viii. Input the visiting port of the DVS in 'Port' textbox.

Notice

- If the DVS is in LAN, user may use the default port: 9008. If the DVS is in WAN, user need set only one port for every DVS so that the computer in network could visit the DVS.
- If the DVS is in WAN, user could modify port in 'Server Configuration->Net Configuration', referred ' Net Configuration '.

ix. Click 'OK' button to display the added DVS in the Device List.

Parameters

Please refer to the following table for parameters and instructions of adding device.

i. For the device added successfully, all channels it connecting with will display under the name of the device. Herein, we only introduce the network video surveillance server with single channel, thus the server can only connect with the one video input terminal.

ii.  This icon denotes region or group；  it denotes device, viz. server；  it denotes channel

iii. After added device to "device edition" box, users can add the channel in the device to the relative channel group, and then select the channel group in" channel group edition" box and click  button， and the channel will be added in the channel group. If the channel is in the recycling condition, please close live preview at first and then add the channel to the group.

Parameters	Meanings	How to set
Device name	The name of the device	Input manually, 32 characters at most
Streaming type	Net transmission type of video & audio data of server	Select at the pull-down list, selectable items: main stream and sub-stream.
IP address	IP address of the server	After searched device, select at the pull-down list.
Region name	Name of the region where the device is	System display item
User name	User name to visit server	Input manually, 19 characters at most.
Password	Password to visit server	input manually, 19 characters at most
Server terminal	Port number to visit server	Input manually, 32 characters at most.

4.3.1.4 Modify

Users can modify region names, group names, device names and channel names.

Setting Steps

i. Modify Region

- In camera group list, select the group and click  button, it will pop up 'Modify Group Info' dialog box.
- Input new group name in 'Group Name' textbox.

- Click 'OK' button to modify the group name.

ii. Modify Group

- In camera group list, select the group and click  button, it will pop up 'Modify Group Info' dialog box.
- Input new group name in 'Group Name' textbox.
- Click 'OK' button to modify the group name.

iii. Modify Device

- In device list, select the device and click  button, it will pop up 'Modify Device Info' dialog box.
- Input new device name in 'Device Name' textbox.
- Click 'OK' button to modify the device name.

iv. Modify Channel

- In device list, select group name and click  button, it will pop up 'Modify Channel Info' dialog box.
- Input new channel name in 'Channel Name' textbox.
- Click 'OK' button to modify channel name.

Parameters Configuration

Parameters and explanations to modify region names, group names, device names and channel names refer to table below.

Parameters	Meanings	Setup
Modify region name		
Region name	Name of the region where monitor points are	Input manually, 32characters at most
Superior region	Parent region name	System display item
Modify group name		
Group name	Name of the group where monitor points are	Input manually, 32 characters at most
Modify name		
Device name	Name of the device	Input manually, 32 characters at most
Stream type	Net transmission type of video & audio data	System display item
IP address	IP address of the server	System display item
Region name	Name of the region where the device is	System display item
User name	User name of the server to visit	System display item
Password	password of the server to visit	System display item
Terminal server	Terminal number of the server to visit	System display item
Modify channel name		
Channel name	Channel number in the device	System display item

Channel name	Channel name in the device	Input manually, 32characters at most

4.3.1.5 delete

Users can delete region, group, device and channel.

Setting Steps

i. Select the region, the group, the device or the channel needing to be deleted.

ii. Click  button, pop up "confirm" dialogue box

iii. Click “yes” button to delete this item

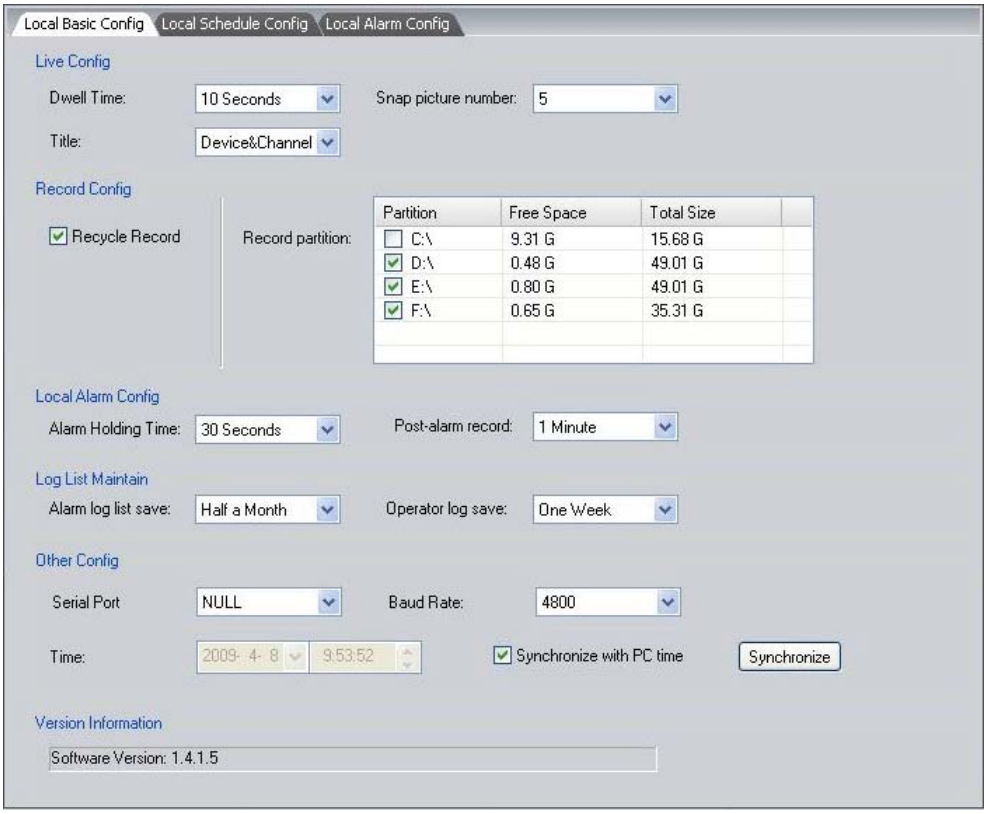
4.3.2 Local configuration

In the system configuration interface, after clicking “local configuration" submenu, in the operation area all setting tags will pop up. The setting functions of local configuration are: local basic configuration, local schedule configuration and local alarm configuration.

Function List

- Local basic configuration
- Local schedule configuration
- Local alarm configuration

4.3.2.1. Local basic configuration



In the “local basic configuration" interface, users can set live configuration, record configuration, local alarm configuration, log list maintain, other configuration, and version information.

Setting Steps

i In the “system configuration" menu, click "local configuration” icon.

ii The “local configuration" will pop up in the operation area.

iii Select “local basic configuration" tag, and the “local basic configuration" interface will appear.

iv In " preview setting" box, set display time and headline display mode of the channel at recycle play

v In the "video setting" box, set whether to do record recycle and set save path of video files.

vi In the "server alarm configuration" box, set alarm holding time for each alarm and post-alarm record time.

vii In the "maintenance of journal" box, set periods to save alarm journal and operation journal.

In the “other configuration “box, set picture numbers being cut for each time, save path to store copy files and control center time.

Note:

Users can set control center time by themselves, or select the time synchronous with the computer

viii After finished, select any other operation interface to save the setting.

Parameters

Please refer to the following table for parameters and instructions of local basic configuration.

Parameters	Meanings	Settings
Live configuration		
dwell time	set the holding time in one picture at recycle play	Select at the drag-down list, selectable items 5s、10s、15s、20s、30s、40s、50s and 1min.
Snap picture numbers	Set live picture numbers being cut each time for single channel	Select at the drag-down list, users can set up to photo 1--30 pictures
Title	Channel and device information displayed on the top of live pictures	select at the drag-down list, selectable items: none, channel name and device name +channel name
Record configuration		
Recycle recording	To set whether to continue recording to cover the earliest video file when the disc storing video files is full.	Tick off the check box in the front of " recycle record"
Record partition	set save path of video files,	Tick off the check box in the

	users can set many a discs to save video files	front of the disc.
Local alarm configuration		
Alarm holding time	.Alarm holding time after being triggered	Select at the drag-down list, selectable items 10s、20s、30s、40s、1min. and 2min.
Post-alarm Record time	Recording time after alarm being triggered	Select at the drag-down list, selectable items:10s、20s、30s、1min.、2min.、5min and 10min.
Log	**list**	**maintenance**
Alarm log list save	set periods to save alarm journal	Select at the drag-down list, selectable items : within one week, within half a month and within one month
Save time of operation journal	Set periods to save operation journal	Select at the drag-down list, selectable items: within one week, within half a month
Other configuration		
Serial port	Set live picture numbers being cut each time for single channel	Select at the drag-down list
Abut Rate	Set the value according to the setting of speed dome	Select the value at the drag-down list
Time	Set control center time	users can input manually(must 14 numbers) and also may select the time synchronous with computer (click " rectify" to realize)
Version information		
software version	Display software version number in the control center	System display item

4.3.2.2. Local schedule configuration

Schedule record refers to the system to record according to the fixed record time of single channel. In “local schedule configuration" interface, users can set record periods of every week and record periods in special days, viz. week schedule and day schedule.

Setting Steps

4.3.2.2.1 Week Schedule Configuration

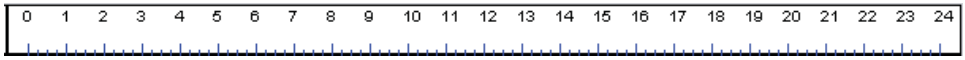
User could set the record time from Monday to Sunday for recording everyday in one week.

i On 'Local Configuration' interface, select 'Local Schedule Configuration' page, it will display 'Local Schedule Configuration' interface.

ii In device list of left Operation area, select camera to set week schedule, and click  button.

iii On 'Week Schedule' item, drag the mouse to the weekday, and drag to select the time when there is  in blank area.

Notice

Ruler 

means 24 hour in one day, the lest graduation is 15 minutes.

After setting, user could select other interface to save the settings.

4.3.2.2.2 Day Schedule Configuration

User could set record time for recording in some time of special day, such as holiday.

i On 'Local Schedule Configuration' interface, select camera to set day schedule in device list of left Operation area.

ii On 'Day Schedule' item, input date which needs to set schedule in 'date' textbox, or click  near 'date' textbox to select.

iii Click  button, move the mouse to 'Holiday' item in 'Date Schedule' item, drag to select time when there is  in blank area.

iv After setting, user could select other interface to save the settings.

4.3.2.3. Local alarm configuration

Local alarm configuration is a kind of alarm mode of control center which is triggered by alarm after alarm input device (such as motion detection sensor, infrared sensor etc.) detects alarm information.

Setting Steps

i In the “local configuration" interface, select” local alarm configuration" tag, and the" local alarm configuration" interface will pop up.

ii In the “local alarm configuration" interface, select a channel in one server in the left device list.

iii In the “alarm type” list, click to select one alarm type of the channel, e.g. “motion detection".

Note:

When to select a server in the left device list, users can do alarm linkage configuration to select the sensor connecting with device in “alarm type ".

iv In the “alarm linkage type" list, tick off alarm linkage type needing to trigger.

Note:

- alarm linkage mode: sound alarm, e-map alarm and linkage channel record

Sound alarm is control center sound "di, di" in which is triggered by alarm information when the sensor detects alarm. Sound alarm can be triggered by sensor alarm, motion detection or video loss.

E-map alarm is that alarm information triggers the alarm input device which is opposite to the scene in the e-map to alarm by blinking. After setting alarm link of

alarm information and e-map alarm, users should set the relative camera of alarm link in the e-map and map configuration. For further details, please refer to chapter “set camera”

Linkage channel record is that alarm information triggers the channel to record when the sensor detects alarm. After setting up linkage channel record, if users need to modify alarm time and record time, please refer to "local basic configuration" to modify. Linkage record alarm may be triggered by sensor alarm or motion detection alarm.

- After set the mode of alarm, users need to set alarm input and relative alarm output data in the “server alarm configuration" interface of the menu” local configuration".

v After finished, select any other interface to save the setting.

4.3.3 Server Configuration

Please refer to the user’s manual of DVR or DVS, which is packed in the box with the device.

4.3.4 E-map

In the menu region, click "e-map", and the setting function will appear in the operation region. The setting functions of e-map are map configuration and map alarm.

E-map is a plan which is to simulate pictures in the scene. In the e-map, users can add or delete camera at the position which is opposite to the scene as well as set e-map alarm.

Function List

- Map configuration
- Map alarm

4.3.4.1 Map configuration

In the interface of “map configuration", users can add or delete e-maps, modify map names, and set whether to start map alarm function.

Functions List

- Add maps
- Add brother nodes
- Add sub nodes
- Modify map names
- Delete sub nodes
- Set camera
- Change icon
- Delete camera

4.3.4.1.1 Add maps

Users can add many e-maps in the map adding area.

Setting Steps

i. In the " system configuration" menu, click  " e-map" icon "E-map" interface will pop up in the operation region.

ii. In the "e-map" interface ， click "map configuration"  button，and then right-click in the "map" tree, quick menu will pop up.

iii. In the quick menu, select "add map", and the dialogue box to add map will pop up.

iv. Input name of the map at the text box " name"

v. In the "path" box, click  button, and the "open" dialogue box will pop up.

vi. Select the save path of e-map, and click "open" button to confirm path.

vii. Click "confirm" button to add e-map in control center successfully.

4.3.4.1.2 Add brother nodes

Users can add e-maps which is parallel with the previous map.

Setting Steps

i. In the " e-map" interface, click  "map configuration" button，and then right-click the added map in "map" tree, the quick menu will pop up.

ii. In the quick menu, please select "add brother nodes", a dialogue of "add map" will pop up.

iii. Input name of the map at the text box of "name".

iv. In the "path" box ， click  button, and the " open" dialogue will pop up.

v. Select the path to save e-map, and click "open" button to confirm the path.

vi. Click "confirm" button to add map in the map control center successfully.

4.3.4.1.3 Add sub nodes

Users can add sub nodes in the previous maps.

Setting Steps

i. In the "e-map" interface，click "map configuration"  button，and click the added map in the" map" tree with the right key of the mouse, and a quick menu will pop up.

ii. In the quick menu, select "add sub node"," add map "dialogue will pop up.

iii. Input the name of the map at the text box of "name"

iv. In the "path" box，click  button, " open" dialogue will pop up.

v. Select the path to save e-map and click "open" button to confirm the saving path.

vi. Click "confirm" button to add map in the map control center successfully.

4.3.4.1.4 Modify map names

Users can modify e-map names.

Setting Steps

i. In the “e-map”interface，click “map configuration”  button，and then right-click the added map in the " map" tree, and a quick menu will pop up.

ii. In the quick menu, select "modify sub node names", the dialogue of "modify map name" will pop up.

iii. Input the name of the map at the text box of "name"

iv. Click "confirm" button to modify the e-map name successfully.

4.3.4.1.5 Delete sub nodes

Users can delete e-maps.

Setting Steps

i. In the “e-map” interface，click “map configuration”  button.

ii. In the “map" tree, select the map needing to delete and then right-click, a quick menu will pop up.

iii. In the quick menu, select “delete node", the "confirm" dialogue will pop up.

iv. Click "yes" button to delete the map.

4.3.4.1.6 Set camera

Users can set a camera in the e-map where is opposite to the live.

Setting Steps

i. In the “e-map” interface，click “map configuration” button.

ii. In the “map” tree，select the map to add camera.

iii. Select a channel in the server at the left device list of control center, drag the channel into the e-map where is opposite to the live.

Note:

- In this way, the channel in the server will connect with camera.
- After set the camera, users can click button to select the relative map, and then select the camera in the map to click right key to watch live pictures.

4.3.4.1.7 Change icon

Users can change camera icon according to the type of camera connected with in the live,

Setting Steps

In the "e-map" interface, click "map configuration"  button.

i. Select the camera needing to change icon in the e-map and click right key of the mouse, and a quick menu will pop up.

ii. In the quick menu, select "change icon", and the dialogue "change icon" will pop up.

iii. Select the type of camera at the "icon" box

iv. Click “confirm" button to change the icon of the camera successfully.

4.3.4.1.8 Delete camera

Users also can delete the camera according to their specific requirement.

Setting Steps

i. In the “e-map” interface，click “map configuration ”  button.

ii. Select the camera needing to change icon in the e-map and then right-click mouse, a quick menu will pop up.

iii. In the quick menu, select "delete”, and “confirm" dialogue will pop up.

iv. Click "yes" button to delete the camera successfully.

4.3.4.2 Map alarm

Map alarm refers to the camera in the map will blink to alarm after receiving the alarm information which is detected at the live. It is necessary for the user to set the link of camera and alarm type in “local alarm configuration" of” local configuration in the system configuration and set the schedule of camera alarm type in “server alarm configuration in “remote configuration".

Setting Steps

i. In the “e-map" interface, click “map alarm”  button.

ii. Select e-map in the “map" tree.

iii. Select the camera which is blinking to alarm and then right-click the mouse and the window of live pictures will pop up.

iv. Click “Exit" button to exit the window of the live pictures.

4.3.5 User Manager

For the administrator, they have the right to add common users and set server menus that they have right to visit.

Notice:

The administrator can add users to visit one server at user configuration of remote configuration in system configuration; and also the administrator can add users to operate one control center and visit some channel in a server at “user administration" of system configuration.

Function List

- Add user
- Set authorization
- Modify password
- Delete users

4.3.5.1 Add user

For the users added successfully, they can operate control center in the range of authorization which is endowed by the administrator. But, for the common user, they can only modify their password in the menu of "user administration" in” system configuration".

Setting Steps

i. In “system configuration” menu，click  “user administration”button, and the " user administration" interface will appear in the operation region.

ii. Click “add user”  button, and the dialogue of "add user" will pop up.

iii. Input user name and password for common user in the text boxes of "user", "password" and "confirm", respectively.

iv. Click "confirm" button to add user successfully.

Parameters

Parameters	meanings	Settings
user name	User names that user logs in control center.	Input manually, 32 characters at most
Password	Password for user to log in control center	Input manually, 32 characters at most
User class	The right class of the user which can be classified	System display item
Confirmed password	The password for users to log in control center. Note: Confirmed password must accord with the password	Input manually, 32 characters at most

4.3.5.2 Set authorization

After added user, the administrator can set common user's authorization.

Setting Steps

i. In the “user administration" interface, select the user needing to modify operation authorization at the user list.

ii. In the authorization list, select the menu authorization to impart it to the user.

iii. After finished, select any other operation interface to save the setting.

4.3.5.3 Modify password

Administrator can modify their password, and also can reset common user's password to resume it as default password. The following will introduce the steps to modify their own password.

Setting Steps

i. In the “user administration” interface，click “modify”  button, and the dialogue box of " modify password" will pop up.

ii. Input present password at the text box of "password".

iii. Input new password at the text boxes of "new password “and" confirmed password".

iv. Click "confirm" button to modify user password successfully.

Note:

When the administrator to reset common user's password, he/she should do as

followings: Firstly select the user at the user list, click " modify"  button, and then click "yes" at the popped dialogue box.

Parameters

Please refer to the following table for parameters and instructions of modification of user password.

Parameters	Meanings	Settings
User name	The user name for logging on control center	System display item
Password	The password for user to log on control center	Input manually, 32 characters at most.
New password	New password for user to log on control center	Input manually, 32 characters at most
Confirmed password	New password for user to log on control center Note: Confirmed password must be accord with new password	Input manually, 32 characters at most

4.3.5.4 Delete users

The administrator has the right to delete common users.

Setting Steps

i. In the “user administration" interface, select the user needing to delete at the user list.

ii. Click “modify”  button, and the dialogue box of “confirm" will pop up.

iii. Click “confirm" button to delete the user successfully.

4.3.1 Log Inquiry

User can inquire menu operation log and alarm log as well as other operation logs. The following will take alarm log inquiry as an example to illustrate.

Setting Steps

i.In the "system configuration" menu, click “log inquiry”  icon, and the "log inquiry” interface will appear in the operation region.

ii.Select " alarm type" at the pull-down list of " log type"

iii.Select alarm information type at the pull-down list of " alarm type"

iv.Click button at the side of "start" ， and then select the journal and date at the popped calendar box.

Note:

Users can only inquire the journal limited in the current day.

v.Click  icon, and the dialogue box of "select channel" will pop up.

vi.Tick off the check box in the front of the channel to inquire journal.

vii.Tick off whether to inquire other journals.

viii.Click "confirm" button to return “journal inquiry " interface.

ix.Click  button, and the inquired journal will display at the interface of "log inquiry ".

Parameters

Please refer to the following table for parameters and instructions of journal checking.

Parameters	Meanings	Settings
Journal type	The type of the inquired journal belonging to	Select at the pull-down list, selectable items : alarm type, operation type and all types
Alarm type	The type of alarm journal	Select at the pull-down list, selectable items; all alarm, motion detection alarm, video loss alarm and sensor alarm.
Operation type	The type of operation journal	Select at the pull-down list, selectable items: all operation, PTZ control, user configuration, playback, backup, network preview, video parameter setting, monitor point setting, local configuration, remote configuration and e-map.
Start time	The start time to inquire journal	Click button at the time box of Start, and select the date to check journal at the popped calendar, and then input manually the time to inquire or click button to select time.
End time	The end time to inquire journal	Input the time to inquire journal at "end time" box or click button to select time.

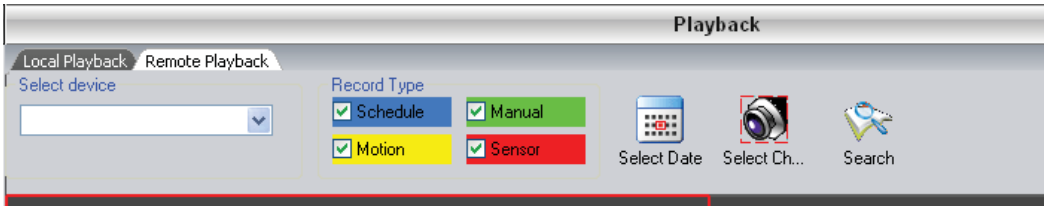
4.4 Video Search

In the menu zone, after clicking “video index", all submenus will appear in the menu zone. The main functions of video search are video playback and video backup.

Function List:

- Video playback
- Video backup

4.4.1 Video playback



Users can play back video files in a channel within a fixed playback period set in the control center. At playback, users can select four channels simultaneously at most. This system supports local playback and remote playback. The local playback is to play the files in the local, and the remote playback refers to play the files in the remote DVR, which is much more convenient to operate. Although these two types playback are different from the path of record files, they have the same settings and other operations.

Please use buttons in the table 1 to view record at playback.

Table 1 Buttons instructions for playing back

Serial number	Buttons	Meanings
1		Play button. After searched record files, click this button to play record files
2		“Suspend” button. When playing, click this button to stop playing
3		“Stop“ button。When playing or suspending, click this button to stop playing
4		“Playing speed” button. When playing, click this button and select playing speed at the pull-down menu, selectable speed : 1⁄4X，1⁄2X，1X，2X and 4X.
5		“Next frame" button, when suspending, alter present channel to big picture mode, and click this button to play files by single frame.
6		Fence 。After searched record files, drag the fence to the period of playing to play the file. Click “ ” on the fence to amplify or shrink the precision of time scalar
7		Drag mouse here, all searched information list will pop up. Double-click record file in the list to play back the file in the channel in big picture mode.

Setting Steps

i. In the “system configuration” menu，click “record playback”  icon,

and the "playback" interface will pop up in the operation region.

ii. Input the type of the playback record file at “record type" box.

iii. Click  button，select the date of playback record at the popped calendar.

iv. Click  button，tick off the channel to play back record at the popped dialogue box" select channel".

v. Click  button，the record file will display automatically at the scalar in operation zone.

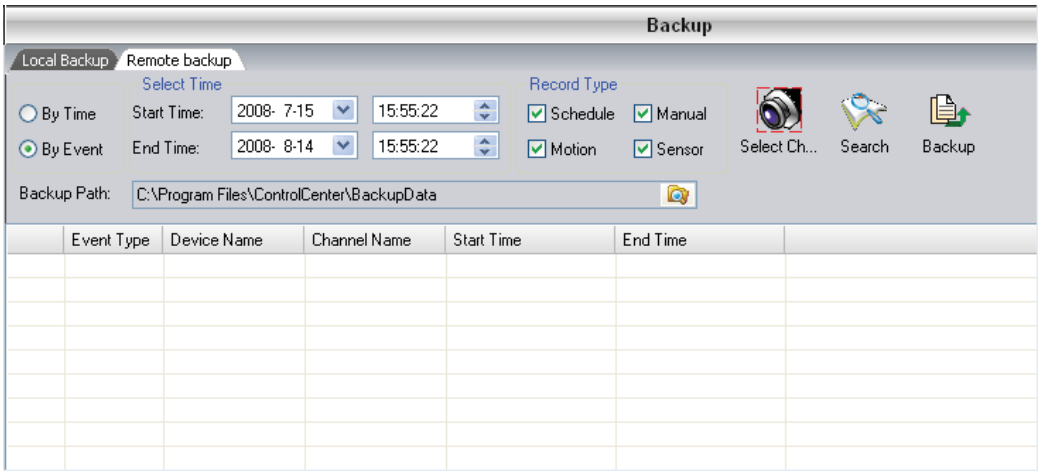
vi. Drag fence to the playing period, and click “△” to amplify the precision of time scalar.

vii. Click  button，or drag fence to begin playing record file.

Note:

The basic precision of time scalar is 15 minutes and the range of scalar is 0-24 which denotes 24 hours in a day respectively; click“” to amplify scalar precision to 1 minute. The scalar range is 0-60 which denotes every minute in one hour.

4.4.2 Video backup



Users can copy files within some period in the channel of the server according to time or events. There are two types backup: local backup and remote backup. The former is to copy the files in the local and the latter is to copy the files from the remote DVR. They have the same operations. For the specific setting, please follow the above interface.

Setting Steps:

4.4.2.1. Backup by Time

When backing up record files by time, user just needs to set start time, end time and cameras.

i. On 'System Configuration' menu, click ‘Backup’  , it will display 'Backup' Interface on Operation area.

ii. Click radio-button before 'By time' to backup the record files by time.

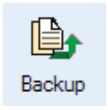
iii. Click button near the Start Time and End Time, and then select time when user wants to backup in popped calendar.

Notice: The End time must more than the Start Time.

iv. Click  button, it will pop up 'Select Camera' dialog box.

v. Select the check-box before the cameras.

vi. Click 'OK' button to go back 'Backup' Interface.

vii. Click 

button to begin searching and backing up the record files.

Notice: Folder of backup the record files needs user configuration in 'Other Configuration' of 'System configuration->Local configuration->Local Basic Configuration'.

4.4.2.2. Backup by Event

When backing up the record files by event, user needs to set start time, end time, record type and cameras.

i. On 'System Configuration' menu, click 'Backup'  , it will display 'Backup' interface on Operation area.

ii. Click radio-button before 'By Event' to backup the record files by event.

iii. Click button near the Start Time and End Time, and then select time when user wants to backup in popped calendar.

Notice: The End time must more than the Start Time.

iv. Select the type of record files in 'Record Type' item.

Notice: Record types’ content: Schedule, manual, motion and sensor.

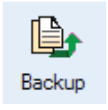
v. Click  button, it will pop up 'Select Camera' dialog box.

vi. Select the check-box before the cameras.

vii. Click 'OK' button to go back 'Backup' Interface.

viii. Click  button to search the record files.

ix. In the record files list, select the check-box before the record files which need to backup.

x. Click 

button to backup the files.

Notice: Folder of backup the record files needs user configuration in 'Other Configuration' of 'System configuration->Local configuration->Local Basic Configuration'.

1 Introduction

1.1 Summarization

Thank you for choosing our digital video capture cards.

4 Channel, 8 Channel, 16 Channel and 32 Channel cards adopt MPEG4 /H.264 compression format, and enable maximum 32 channels real-time or no none-real time surveillance. Our cards are mature and cost-effective products that should be your ideal choices. They enable synchronous audio and video compression and transmission, with their powerful compression rate and network transmission function. They are widely used in banks, intelligent communities, traffic management units, medical systems, educational systems, armed forces and so on.

This manual is suitable for MAXDVR 6.2, which supports DR3004F, DR3008F, DR3016F, DR3116, DR3216, DR5016F, USBDVR04 and DR9016F cards.

In this manual, you will learn how to install the hardware and driver (software), and how to setup the systems of this range of products. Please make sure your operations with the products are strictly in accordance with the manual, so as to keep the stability of the digital surveillance systems.

The following are standard functions of the products:

(1) Schedule record mode

Users can choose any term in a day to record and set up record modes, i.e. sensor alarm record, motion detection record, manual record, Schedule Record.

(2) Motion detection mode

Motion detection areas are adjustable and maximum 16 areas for each channel. Users can also set motion detection sensitivity for each channel. The

system begins to record only when motion of the detected object happens, and it will stop recording after a certain period, this function is adjustable by users.

(3) Sensor alarm record mode

With extra alarm board, the system enables alarm input and output.

(4) Recycling record mode

Users can set recording storage sequence for HDD partitions. The recording storage will automatically swap to the next partition when it is full. If all the partitions are full and recycling record mode is enabled, the former recorded data will be covered by new data. Users can also set HDD minimum storage alarm. Then once the present storage space is less than the minimum storage and recycling record mode is not enabled, the record will automatically stop.

(5) P.T.Z control function

Support a number of decoders. Users can control multiple speed domes and integrative cameras, including pan, tilt, zoom, and focus and iris adjustment for P.T.Z devices. Support preset point and auto scout.

(6) Users management

Different users have different rights，user names and passwords, so as to ensure system security.

(7) Multi-channel display

Support different multi-channel display modes, full screen display and auto dwell display.

(8) Watch dog function

The 16 Channels card has watchdog function. In case MAXDVR driver or windows system is frozen, the watchdog will restart the computer and login MAXDVR system again automatically.

(9) One PC support 1 to 4 cards of the same model, the maximum frame rate can be 200 fps and 16 channels at most.

(10) Support 320×240, 640×480 standard resolutions.

(11) Image color adjustable for each channel, including contrast, lightness,

hue and saturation.

(12) MPEG4/H.264 compression format, greatly reduce HDD usage

(13) Powerful video playback functions, including playback, pause, stop, fast-forward, single-frame play and image capture.

(14) Support advanced search mode. Users can search by date/time, camera, record mode, and random combination of the three methods.

(15) Support recorded files backup, delete by date/time, camera.

(16) Convenient to extend system functions by software upgrade.

(17) Supply multiple languages, including Chinese (Traditional), English, German, Spanish, Portuguese and other customized languages.

(18) CPU and storage resources saving by advanced technology

(19) Remote Surveillance and P.T.Z control through LAN, Intranet, and Internet.

(20) Support alarm pre-record.

(21) Support buzzer, email alarm out.

(22) Can greatly decrease fragmented files while using NTFS partition.

(23) User-friendly graphical user interface.

1.2 System Requirements

1.2.1 DR3004F~DR3216 series cards system requirements

Card / PC Module	DR3004F、DR3008F、DR3016F、DR3116、DR3216
CPU	Intel PIII processor，minimum 800MHz
Motherboard	Intel 815/845/865/915 series
HDD	80G minimum
RAM	256M minimum
VGA	GeForce2，GeForce4，FX5200，ATI Rage128
OS	Windows2000 / XP

DirectX	9.0

Table1.1 DR3004F~DR3216 series cards system requirements

Notice, motherboards listed below which has passed the test can work well with DR3004F~DR3216:

GIGA: GA-8IRXI (Intel 845D)

GA-8IE2004 (Intel 845E)

GA-6OXT (Intel 815EP)

GA-8PE800 (Intel 845PE)

GA-8IPE1000-G (Intel 865PE)

ASUS: P4S8X (Sis 648)

TUSL2-C (Intel 815EP)

P4P800 (Intel 865PE)

MSI: MS-6566E (Intel 845E)

Intel845DDA+ (Intel 845E)

1.2.2 DR5016F system requirement

Card / PC Module	DR5016F
CPU	Intel P4 2.8G minimum
Motherboard	Intel 865/915
HDD	160G minimum
RAM	512M minimum
VGA	NVIDIA GeForce MX440/FX5200 ATI RADEON 7500/ X300/ X250/ X5518
OS	Windows 2000(SP4 above)/ Windows XP(SP1above)
DirectX	9.0

Table1.2 DR5016F system requirement

Notice：Motherboards listed below which has passed the test can work well with DR5016F:

Foxconn 865A01（Intel 865）

Ga-81pe1000-G 865（Intel 865）

Asus P4p800 865（Intel 865）

ASUS P5GD1-VM 915（Intel 915）

MSI 6728 865（Intel 865）

Abit IS7-E 865（Intel 865）

ASUS-P4GPL-X 915（Intel 915）

ASROCK 775I915PL-SATA2 915（Intel 915）

Special Notice:

If recorded disk partition's format is FAT32 and the system has run for a long time, the system will create a lot of data fragments that may results in system runs slowly. It's recommended to make disk defragmenter every 10 to 30 days. We strongly suggest that use NTFS format for record disk partition.

1.2.3 USBDVR04 System Requirements

Card / PC Module	USBDVR04
CPU	Intel P4 Celeron processor，minimum 1700MHz
Motherboard	Intel 845/865/915 series
HDD	80G minimum
RAM	256M minimum
VGA	GeForce2，GeForce4，FX5200，ATI Rage128
OS	Windows 2000(SP4 above) /2003(SP2 above) /XP(SP2 above) /VISTA
DirectX	9.0
USB	2.0

Table1.3 USBDVR04 System Requirements

1.2.4 DR9016F system requirement

Card / PC Module	DR9016F*one card	DR9016F *two cards
CPU	Intel P4 Celeron processor 3.0G minimum	Intel PD Dual-core 2.8 G above
HDD	80G minimum	160G minimum
RAM	1G minimum	2.0G minimum
OS	Windows 2000/2003/XP/VISTA	
DirectX	9.0	

Table1.4 DR9016F system requirement

Motherboards and VGA cards listed below which have passed the test can work well with DR9016F in Windows XP system:

Motherboard	VGA card
COLORFUL C975X-MVP	ATI HD2400
	NVIDIA GeForce 7600
	NVIDIA GeForce 7300
ASUS P5LD2-X	ATI HD2400
	ATI X300
ASUS P5B	ATI HD2400
	NVIDIA GeForce 7600
	NVIDIA GeForce 7300
	ATI X300
GA-965P-S3	ATI HD2400
	NVIDIA GeForce 7300
	ATI X300
GA-945PL-S3E	ATI HD2400
	NVIDIA GeForce 7600
	ATI X300
ASUS P5L-1394	ATI HD2400
	NVIDIA GeForce 7600
	ATI X300
ASUS P5GD1-VM	ATI HD2400
	NVIDIA GeForce 7600
	ATI X300
	ATI X700

Table1.5 Motherboards and VGA Cards Support XP OS

Motherboards and VGA cards listed below which have passed the test can work well with DR9016F in Windows VISTA system:

Motherboard	VGA card
COLORFUL C975X-MVP	ATI HD2400
ASUS P5LD2-X	ATI HD2400
	ATI X300
GA-965P-S3	ATI HD2400
	ATI X300
ASUS P5L-1394	ATI HD2400
	ATI X300
ASUS P5GD1-VM	ATI HD2400
	ATI X300
	ATI X700

Table 1.6 Motherboards and VGA Cards Support VISTA OS

1.3 System Specifications

Format: PAL/NTSC

- Resolution: DR3004F、DR3008F、DR3016F、DR3116、DR3216 support 320×240 / 640×480 ， DR5016F supports 352×288 / 352×240 and DR9016F supports 704x576(PAL).

Maximum Frame rate per channel: 25 fps (PAL), 30 ftp (NTSC)

Screen set: resolution 1024×768, color quality 16 bits or 32 bits

Compression code rate: 50kbps – 1.2Mbps

Data format: MPEG4：USBDVR04、DR5016；H.264: DR3004F、DR3008F、DR3016F、DR3116、DR3216 and DR9016F.

2 Hardware installation

2.1 Video Capture Card Hardware

2.1.1 DR3004F Card Hardware

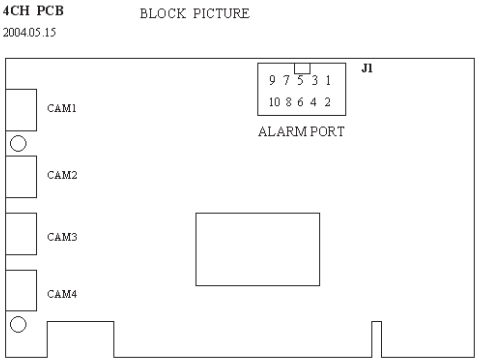


Fig 2.1 DR3004F Video Capture Card

Pin Port	Define	Interpret
1PIN	5V	Power Source (5V)
2PIN	ALARM_COM	Alarm COM
3PIN	ALARM_NC	Alarm Normal Close
4PIN	ALARM_IN1	Alarm Input 1
5PIN	ALARM_NO	Alarm Normal Open
6PIN	ALARM_IN2	Alarm Input 2
7PIN	GND	Ground
8PIN	ALARM_IN3	Alarm Input 3
9PIN	GND	Ground
10PIN	ALARM_IN4	Alarm Input 4

Table 2.1 DR3004F card pins

2.1.2 DR3008F Card Hardware

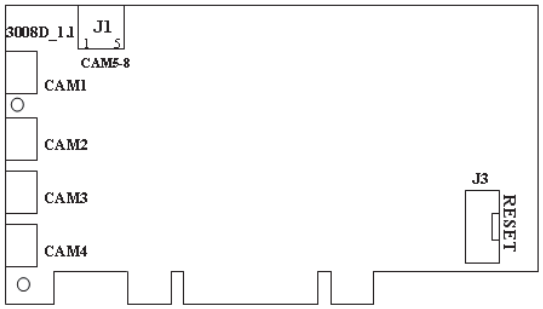
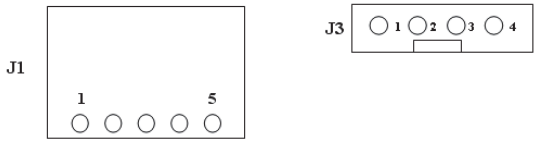


Fig2.2 DR3008F Video Capture Card



PIN1	CAMIN5
PIN2	CAMIN5
PIN3	CAMIN7
PIN4	CAMIN8
PIN5	GND

PIN1	RESET+
PIN2	RESET-
PIN3	RESET+
PIN4	RESET-

Fig2.3 pin definitions of DR3008F Video Capture Card

2.1.3DR3016F Card Hardware

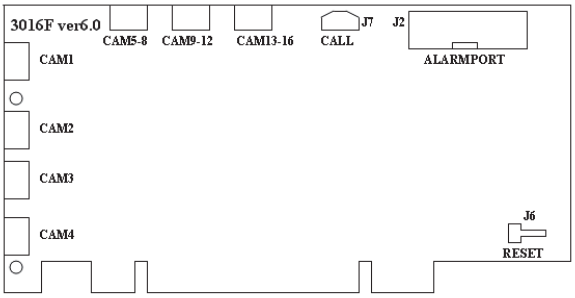


Fig2.4 DR3016F Video Capture Card circuit link for Watchdog function

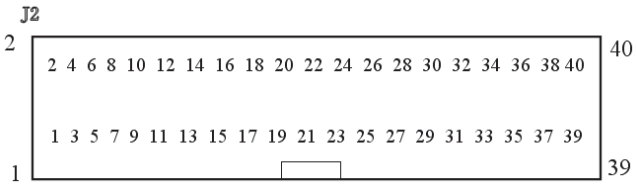


Fig2.5 DR3016F Video Capture Card Alarm Port

The Alarm Port pin definitions of DR3016F Card are as below:

Pin Port	Define	Interpret	Pin Port	Define	Interpret
Pin1	Alarm_in1	Alarm Input 1	Pin21	Alarm_out5	Alarm Output 5
Pin2	Alarm_in2	Alarm Input 2	Pin22	Alarm_out6	Alarm Output 6
Pin3	Alarm_in3	Alarm Input 3	Pin23	Alarm_out7	Alarm Output 7
Pin4	Alarm_in4	Alarm Input 4	Pin24	Alarm_out8	Alarm Output 8
Pin5	Alarm_in5	Alarm Input 5	Pin25	Alarm_out9	Alarm Output 9
Pin6	Alarm_in6	Alarm Input 6	Pin26	Alarm_out10	Alarm Output 10
Pin7	Alarm_in7	Alarm Input 7	Pin27	Alarm_out11	Alarm Output 11
Pin8	Alarm_in8	Alarm Input 8	Pin28	Alarm_out12	Alarm Output 12
Pin9	Alarm_in9	Alarm Input 9	Pin29	Alarm_out13	Alarm Output 13
Pin10	Alarm_in10	Alarm Input 10	Pin30	Alarm_out14	Alarm Output 14
Pin11	Alarm_in11	Alarm Input 11	Pin31	Alarm_out15	Alarm Output 15
Pin12	Alarm_in12	Alarm Input 12	Pin32	Alarm_out16	Alarm Output 16
Pin13	Alarm_in13	Alarm Input 13	Pin33	Alarm_Com	Alarm COM
Pin14	Alarm_in14	Alarm Input 14	Pin34	Alarm_NO	Alarm Normal Open
Pin15	Alarm_in15	Alarm Input 15	Pin35	Alarm_NC	Alarm Normal Close
Pin16	Alarm_in16	Alarm Input 16	Pin36	GND	Ground
Pin17	Alarm_out1	Alarm Output 1	Pin37	GND	Ground

Pin18	Alarm_out2	Alarm Output 2	Pin38	5V	Power Source (5V)
Pin19	Alarm_out3	Alarm Output 3	Pin39	Not Used	Not Used
Pin20	Alarm_out4	Alarm Output 4	Pin40	Not Used	Not Used

Table2.2 Pins definitions of DR3016F Card

2.1.4 DR3116 Card Hardware

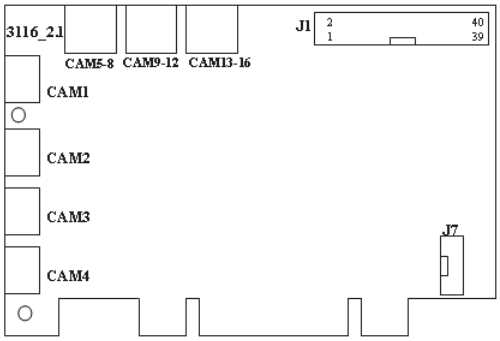
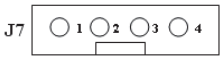
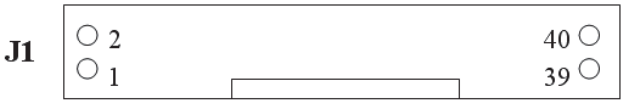


Fig2.6 DR3116 Video Capture Card



PIN1	RESET+
PIN2	RESET-
PIN3	RESET+
PIN4	RESET-

Fig2.7 Reset Pins definitions of DR3116 Video Capture Card



PIN1	AI1	PIN9	AI9	PIN17	AO1	PIN25	AO9	PIN33	ALAM-COM
PIN2	AI2	PIN10	AI10	PIN18	AO2	PIN26	AO10	PIN34	ALAM-NO
PIN3	AI3	PIN11	AI11	PIN19	AO3	PIN27	AO11	PIN35	ALAM-NC
PIN4	AI4	PIN12	AI12	PIN20	AO4	PIN28	AO12	PIN36	GND
PIN5	AI5	PIN13	AI13	PIN21	AO5	PIN29	AO13	PIN37	GND
PIN6	AI6	PIN14	AI14	PIN22	AO6	PIN30	AO14	PIN38	5V
PIN7	AI7	PIN15	AI15	PIN23	AO7	PIN31	AO15	PIN39	NOT USED
PIN8	AI8	PIN16	AI16	PIN24	AO8	PIN32	AO16	PIN40	NOT USED

Fig2.8 Pins definitions of DR3116 Video Capture Card

2.1.5 DR3216 Card Hardware

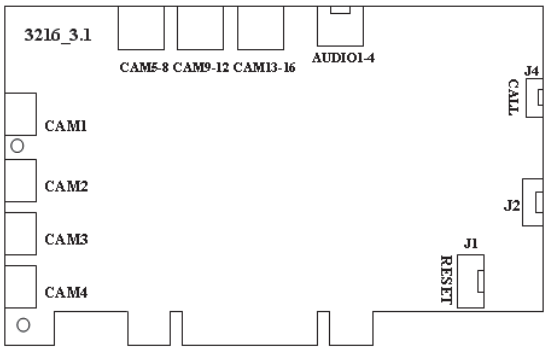


Fig2.9 DR3216 Video Capture Card

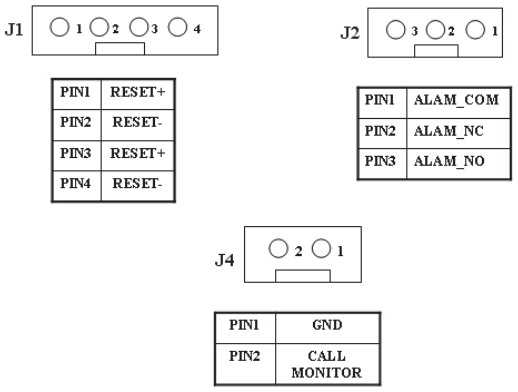


Fig2.10 Pins definitions of DR3216 Video Capture Card

2.1.6 DR5016F Card Hardware

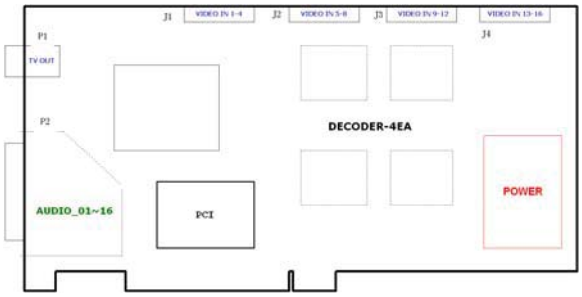


Fig2.11 DR5016F Video Capture Card

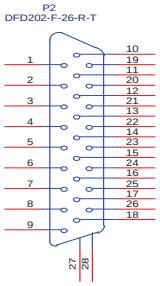
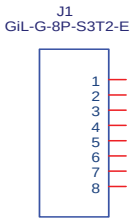


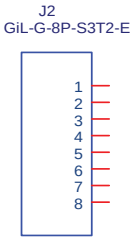
Fig2.12 Audio Connector

PIN1	AUDIO2	PIN11	AUDIO3
PIN2	AUDIO4	PIN12	AUDIO5
PIN3	AUDIO6	PIN13	AUDIO7
PIN4	AUDIO8	PIN14	AUDIO9
PIN5	AUDIO10	PIN15	AUDIO11
PIN6	AUDIO12	PIN16	AUDIO13
PIN7	AUDIO14	PIN17	GND
PIN8	AUDIO15	/	
PIN9	AUDIO16		
PIN10	AUDIO1	PIN26	

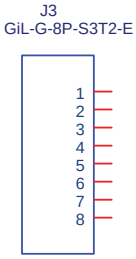
Table2.3 definitions of Audio connector's PINs



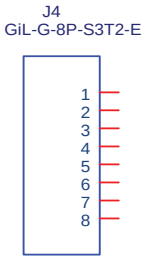
PIN1	VIN-1
PIN2	GND
PIN3	VIN-2
PIN4	GND
PIN5	VIN-3
PIN6	GND
PIN7	VIN-4
PIN8	GND



PIN1	VIN-5
PIN2	GND
PIN3	VIN-6
PIN4	GND
PIN5	VIN-7
PIN6	GND
PIN7	VIN-8
PIN8	GND



PIN1	VIN-9
PIN2	GND
PIN3	VIN-10
PIN4	GND
PIN5	VIN-11
PIN6	GND
PIN7	VIN-12
PIN8	GND



PIN1	VIN-13
PIN2	GND
PIN3	VIN-14
PIN4	GND
PIN5	VIN-15
PIN6	GND
PIN7	VIN-116
PIN8	GND

Fig2.13 Video PINs definition

2.1.7 USBDVR04 Card Hardware

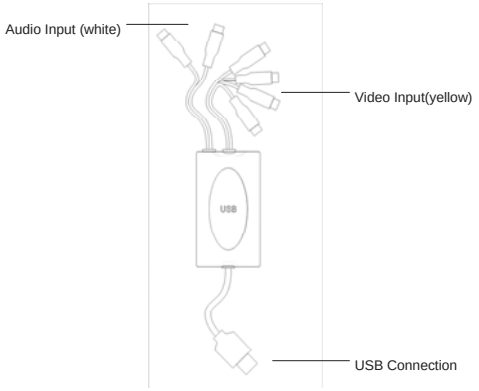


Fig 2.14 USBDVR04 Video Capture Card

NOTICE

- Make sure that your PC USB interface is 2.0.
- USBDVR04 card can only support USB 2.0.

Please accord to the following steps to safely remove the USB card: Right clicks on the Taskbar Stop device pull out the USB card.

Using USBDVR04 card with other USB device simultaneously may cause PC cannot identify USB card.

Do not insert two or more USB video capture cards simultaneously.

Do not use with the other PCI video capture card simultaneously.

2.1.8 DR9016F Card Hardware

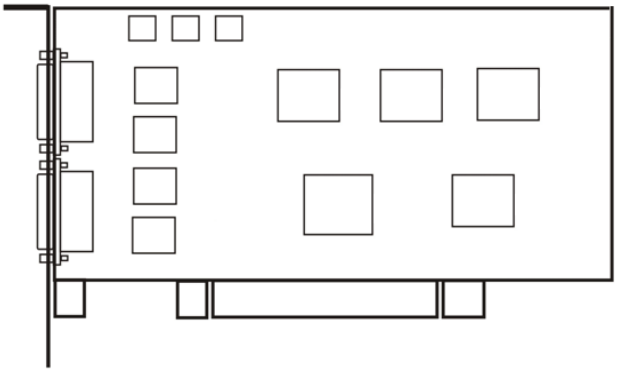


Fig 2.15 DR9016F Video Capture Card

The Call Monitor interface is used to connect the stimulant monitor.

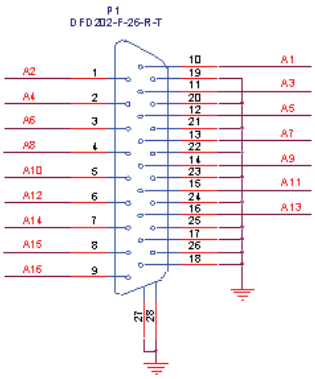


Fig 2.16 Audio Connector

PIN1	AUDIO2	PIN11	AUDIO3
PIN2	AUDIO4	PIN12	AUDIO5
PIN3	AUDIO6	PIN13	AUDIO7
PIN4	AUDIO8	PIN14	AUDIO9
PIN5	AUDIO10	PIN15	AUDIO11
PIN6	AUDIO12	PIN16	AUDIO13
PIN7	AUDIO14	PIN17	
PIN8	AUDIO15	PIN18	
PIN9	AUDIO16		
PIN10	AUDIO1	PIN19-26	GND

Table 2.4 Definition of Audio Connector's Pins

2.1.9 Alarm Board Hardware

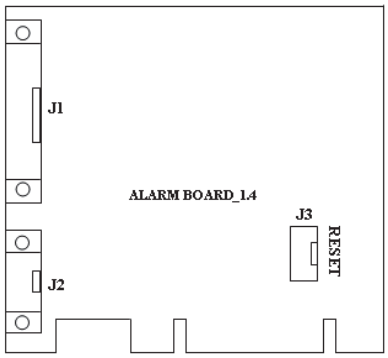


Fig2.17 Alarm Board

PIN1	AI0	PIN6	AI5	PIN11	AI10	PIN16	AI15	PIN21	ALAM_COM
PIN2	AI1	PIN7	AI6	PIN12	AI11	PIN17	A0	PIN22	ALAM_NO
PIN3	AI2	PIN8	AI7	PIN13	AI12	PIN18	A1	PIN23	ALAM_NC
PIN4	AI3	PIN9	AI8	PIN14	AI13	PIN19	A2	PIN24	GND
PIN5	AI4	PIN10	AI9	PIN15	AI14	PIN20	A3	PIN25	VCC

Fig2.18 Pins definitions of Alarm Board

Connect J2 to PC serial port and you may use alarm board by MAXDVR system.

2.1.10 Connect Audio Signal

Connect the audio input device to the microphone connector on the motherboard.

Note:

Before installing the Video Capture Card hardware in PCI port of the motherboard, make sure you've installed Microsoft DirectX 9.0. Then turn on the computer, the system will remind you to "Found new hardware".

Notice: Just click "cancel" and ignore the pop-up message.

Insert the CD that contains DR series capture card driver into the CD tray, and run Setup.exe program to install the driver. The default installation path is 'C:\Program Files\MAXDVR'.

Notice: In case it warns that 'Can't find card' when running the MAXDVR software, please restart the computer.

2.2 Install Video Capture Card Driver

Run Setup.exe, and the installation interface appears as below:

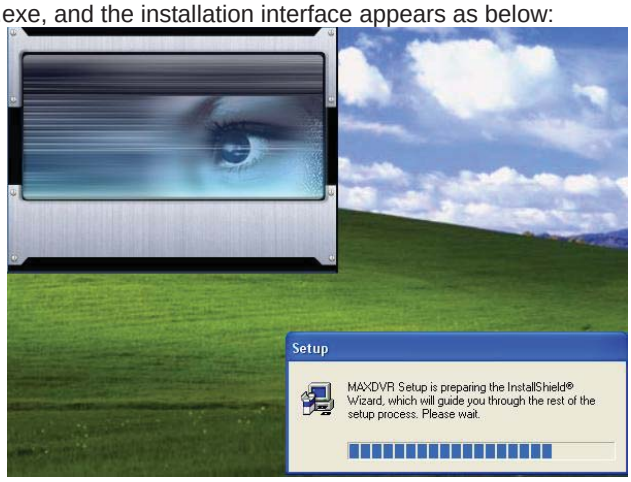


Fig2.19 DR Series video capture card installation interface

Fig2.20 Welcome page

Select 'Next',

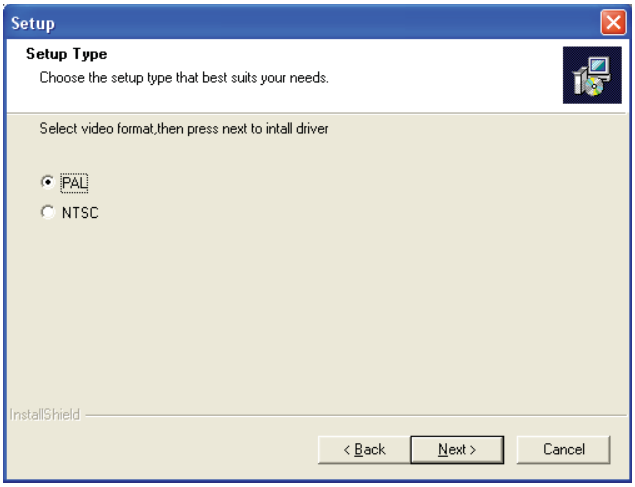


Fig2.21 Select video format

Select 'Next',

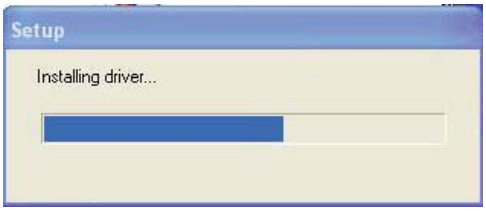


Fig2.22 Rate of progress of driver installation

After this process it appear a “choose product type” window, user can select DR9016F type by ticking off the check box of “CIF (16-Channels)” then click “Continue”:

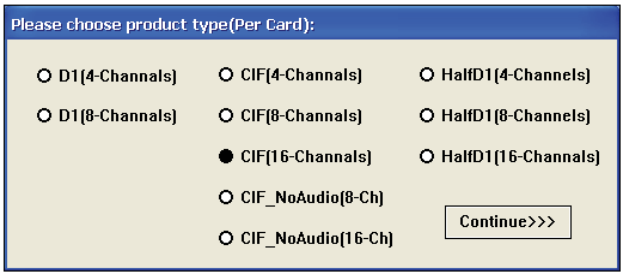


Fig2.23 Choose product type

It begins to install the application package MAX DVR, as below:

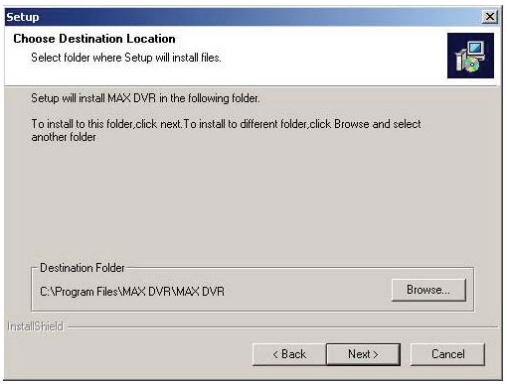


Fig2.24 Select installation pass

Select the suitable option, and click ‘Next’.

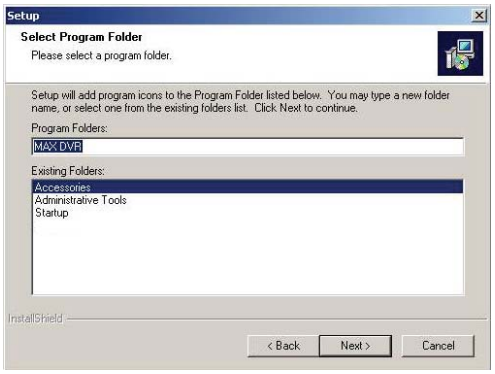


Fig2.25 Register application

Click 'Next',

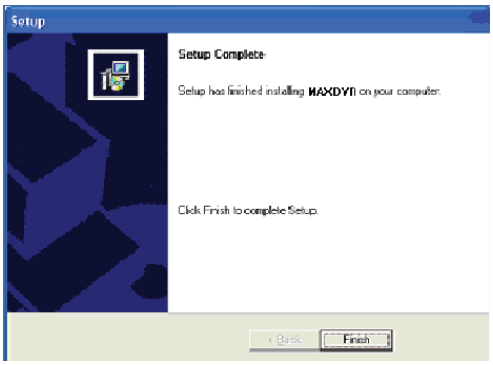


Fig2.26 Driver and application installation finished

Click 'Finish'

Now, after all the processes are finished, restart the computer and launch the surveillance program. It will create a shortcut on the desktop.

Fig2.27 Shortcut of MAX DVR

Notice: In case users cannot run the MAX DVR program, users have to restart the computer.

3 Main display Interface

Run MAXDVR program and the main display interface appear as below:

Fig3.1 MAXDVR Main Display Interface

3.1 Display Control Panel

3.1.1 Display Control Panel

Fig3.2 Display control panel

Display control panel includes Display Mode buttons and disk free space indicator, 'Auto Dwell' button. Every button has its built-in indicator light. When switch on and off the buttons, the relative indicator lights turn on and off to indicate the working status.

Notice: Users can judge which buttons are working by the color of the buttons.

3.1.2 Display Modes

Fig3.3 Display Modes Panel

3.1.3 Flip Pages

When the display mode is 1CH, 4CH, 9CH, 16CH, click, system will display the next page according to the display mode.

3.1.4 Auto Dwell display Mode

In case users want to see all the channels in sequence, then click and enter Auto Dwell display mode.

3.1.5 Capture

In case users want to capture picture quickly, they can click, system will save 32 pictures to the default folder on disk, c:\ path.

3.1.6 Urgent Record

Click, system will be recorded and saved all the cameras.

3.2 Login

Click, and login window appears. Input the user name and password, the default user name is 'SYSTEM' with no password, users can access to the main interface. Users can change password for SYSTEM and create new user names and passwords once has entered the system.

Fig3.4 Main Interface

3.3 Record

3.3.1 Record Modes

According to different record triggering methods, DR series video capture cards offer users with 4 kinds of record modes:

(1) Schedule record mode (timer)

(2) Manual record mode

(3) Motion Detection record mode

(4) Sensor Alarm record mode

Motion Detection record mode and Sensor Alarm record mode are together called as Alarm Record.

Multiple cameras record

In case users use multiple cameras to record, every camera works separately and the record file are also saved separately. The parameters, i.e. camera ID, record date/time and record mode are all saved together with the record file.

3.3.2 Record Setup

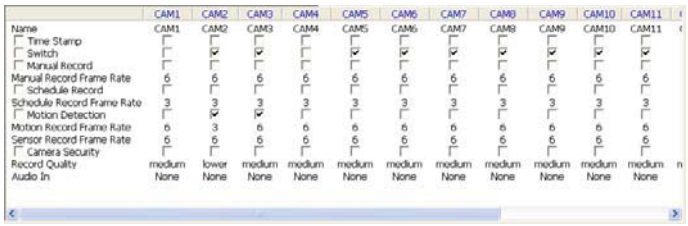


Fig3.5 Record Configuration Panel

In the 'Record Panel' of the Basic Configuration page, users can set all kinds of necessary parameters for recording.

[Time stamp]: By selecting the options, the record date / time message appears in the record file images.

[Switch]: By selecting the options, users can turn on corresponding cameras. In case there is no camera for some channel, don't select the option so as to save system resource.

[Manual record]: By selecting the options, the relative camera images will be recorded and saved all the time.

[Manual recording frame rate]: Select the record frame rate for manual record mode

[Schedule Record]: Schedule record option.

[Schedule Record Frame Rate]: Select Schedule Record frame rate

[Motion Detection]: By selecting the options, users can set relative channels' record mode as motion detection

[Motion Record Frame Rate]: Select record frame rate for Motion Detection record mode

[Sensor Record Frame Rate]: If sensors are utilized to trigger recording, users can select record frame rate here.

[Camera Security]: The users are divided into three standards: Normal user, Power user and Administrator. By selecting the options, only administrators can see the corresponding channels.

[Record Quality]: Select record image quality here.

[Audio In]: MAXDVR 4.3 system can support one channel of microphone audio input signal on the PC motherboard and audio inputs on the card if it has. Users can choose one video channel associate these audio signals.

Note:

Users can select more than one record mode.

3.3.3 Record Status Panel

Fig3.6 Record Status Panel and Alarm Output Status Panel

Meanings of indicator light colors in row one are as below:

-  Grey light: Normal State
-  Viridescent light: Manual Record State
-  Bottle-green light: Schedule Record State
-  Yellow light: Motion Detection Record State
-  Red light: Sensor Alarm Record State
-  Blue light: Video Loss State

When the indicator light color turns into  in row two, it means there is alarm output.

3.3.4 Manual Record Mode

Manual Record mode is the most commonly used record mode. In case there is any special event happens, users can select this record mode and record timely.

Note: You can select high frame rate for short time manual record, while select low frame rate for long time Schedule Record.

3.3.5 Sensor Alarm Record Mode

Users can use sensors to trigger sensor alarm record for relative channels. At that time, the record status indicator light will turn red  .

3.3.6 Motion Detection Record Mode

It will enable the system to detect image changes and begin to record by activating motion detection and motion alarm record. For instance, somebody opens the door, and the system detects image changes and begins to record, then users can play back the recorded file and find out who opened door. When there is no movement, the system won't record and that's helpful for saving system resource, and convenient for searching for event record file. The indicator light color in the record status panel is yellow  .

Note: Users may need to setup in three places so as to enable motion detection record.

(1) Select 'Motion Detection' for certain channels in 'Basic Configuration'
(2) Configure the motion detection areas for certain channels in 'Motion Detection configuration'
(3) Configure working schedule for certain channels in 'Schedule configuration'

3.3.7 Schedule Record

Users can set working schedule for all kinds of record modes in 'Schedule configuration'. The green light  in record status panel shows the corresponding channel is in Schedule Record mode. Users can change record mode to manual record at any time, and the green light  will change into blue light  .

Please refer to chapter 4.4 for details.

3.3.8 Recycling Record

If users enable Recycling Record function and all the selected HDD partitions are full, the former record data will be covered by the latest record data.

Users can set recording storage sequence for HDD partitions. The recording storage will automatically jump to the next partition when it's full. If all the partitions are full and recycling record mode has been enabled, the new data will overwrite the former recorded data automatically. Users can also set HDD minimum storage alarm. Then once the present storage space is less than the minimum storage and recycling record mode hasn't been enabled, the record will automatically stop.

4 System Setup

Click  and enter the main setup interface.

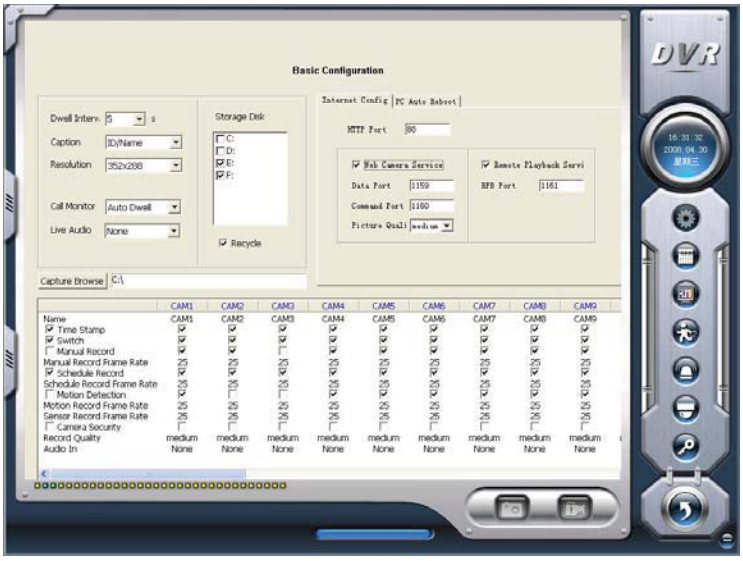


Fig4.1 Basic Configuration

The definitions of the buttons in Fig4.1 are as below:


Basic Configuration


Video configuration


Alarm Configuration


User Configuration


Schedule configuration


Motion Detection Configuration


P.T.Z Configuration


Save and Return

4.1 Basic Configuration

Click  and enter the basic configuration page where users can setup the system or just use the defaults.

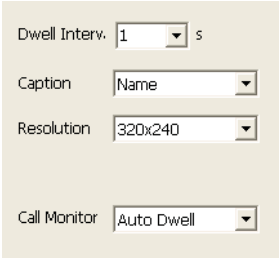


Fig4.2 Caption and General Configuration

[Dwell Interval.]: If users enable Auto Dwell function in the main interface page, users can set the dwell time of a page here.

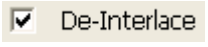
[Caption]: There are four options, None, ID, Name and ID/Name for users to select for all the channels.

'None' means no title;

'ID' means camera numbers, i.e. 1, 2, 3 and so on

'Name' means camera names, i.e. Cam1, Cam2 and so on

'ID/Name' means both camera number and camera name, i.e. 1/Cam1, 2/Cam2 and so on

[Resolution]: There are four options,320×240、352×288、352×240、640×480 for users to select for all the channels. As the video may have interlace lines if the users select 640x480, users may choose 

for solve this problem, but it will occupy much more CPU loading.

[Call Monitor] Only DR3016F, DR3216 and DR5016F have call monitor function at present. Users can connect another monitor to the card and select

the display modes here.

The following is about record data storage. Please check Fig4.3

Fig4.3 Record data storage precept

Above, MAXDVR system shows all the available HDD partitions for users. Users can select one or more of the partitions that will be used in sequence from up to bottom. Please refer to chapter 3.3.8 to learn more about recycling record.

In the following area in the basic configuration page, users can input the computer user name and password in the relative boxes. Then when restarting the computer system, it will access to the system with the user name and password input in the boxes.

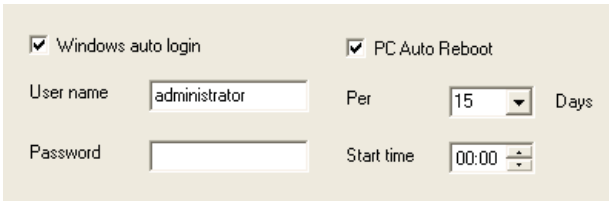
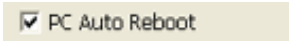


Fig4.4 Computer System Reboot setups

As the windows system may become unstable after a couple of days continue operating, which will cause MAXDVR system unstable? Then users should reboot the computer. Select 

and set the

interval by day, which will guide the system to reboot automatically according to the setups.

Click  to return to the main display interface.

4.2 Video Configuration

Click  and enter the video configuration page as below. Users can change the values of corresponding items, i.e. contrast, brightness, hue, saturation, auto gain, by drawing the levers on the bars. Click ‘Default’, and all the values will return to the default value.

Fig4.5 Video Configuration

Definitions of the setup items:

[Contrast]: set image color contrast

[Brightness]: set image brightness

[Hue]: set image hue

[Saturation]: set image Saturation

[Default]: load defaults, i.e. set the first four items value as 5000 and the last item value as 0.

4.3 Motion Detection configuration

Click  and enter Motion Detection Configuration page, DR3004F, DR3008F, DR3016F, DR3116, DR3216 and DR9016Fas below:

Fig4.6 Motion Detection Configuration

Definition of the setup items:

[Sensitivity]: users can set motion detection sensitivity here.

[Speed]: Motion detection sensitivity

[Block Number]: Set grid's number.

[Defaults]: Set as default.

[Select all]: select all the areas of the channel as detection area

[Clear]: clear all the detection areas and then users can select customized detection areas by cursor.

4.3.1 DR5016F Card Motion Detection Configuration:

Fig4.7 DR5016F's configuration page

[Speed]: motion detection sensitivity.

[Block Number]: set grid's number.

[Defaults]: set as default.

4.3.2 Set Motion Detection Area

In case users want to customize the detection areas for a certain channel, first select the camera, then select 'Clear' and drag the cursor in the box on the left side. Now, users can see a green box appears which shows the motion detection area. Users can select maximum 16 customized areas for each channel.

By click 'Clear', users can clear all the selected areas.

4.3.3 Set Motion Detection Sensitivity

Draw the bar and select a certain value for motion detection sensitivity.

4.4 Schedule configuration

Click  and enter Schedule Configuration page as below:

Fig4.8 Schedule Configuration

Our DR series system offers the users with powerful schedule configuration options. Every channel has three kinds of record modes, i.e. schedule record, motion detection record and sensor alarm record. We provide users to set schedules from Sunday to Monday separately for all of the three record modes. Sensor alarm record mode has the highest priority among all record modes. Here users can set schedules for it.

When users need to edit schedule for a channel, first select the camera name in the three record modes group, and select the color bars on the right side, then select 'Edit' to edit schedules. Click 'Add' to add schedule for a certain channel.

Note: the added schedule should not be reduplicate to the former settings.

Click ‘Delete’ to delete schedule. Click ‘Clear All’ to delete all the schedules of a certain channel.

See the Fig4.9 and learn how to edit schedules for a channel:

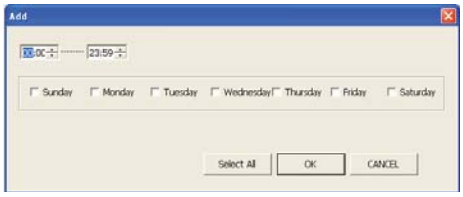


Fig 4.9 Edit Schedule

4.5 Motion Detection Alarm Configuration

4.5.1 Alarm Triggering Conditions Configuration

The system can receive alarm both from local place and network

Local place alarm record triggering conditions configuration

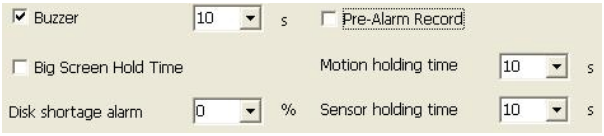


Fig 4.10 Local alarm triggering configuration

Relative Explanations:

[Buzzer]: Users can select whether to open the computer buzzer if the alarms have been triggered and also select how long the buzzer rings

[Pre-Alarm Record]: Users can select whether to enable alarm pre-record and also pre-record time.

[Big Screen Holding Time]: The corresponding channel will be full screen when alarm triggered. Set the full screen hold time here.

[Motion Holding Time]: Motion sensor may detect some movement, only if the movement lasts for a period exceeding the default time, then the alarm record will begin and buzzer beeps.

[Sensor Holding Time]: The continuous recording time after sensor stopped.

[Disk Shortage Alarm]: If the HDD available space is less then the set value, the buzzer will beep if 'Buzzer' has been selected.

4.5.2 Alarm Record

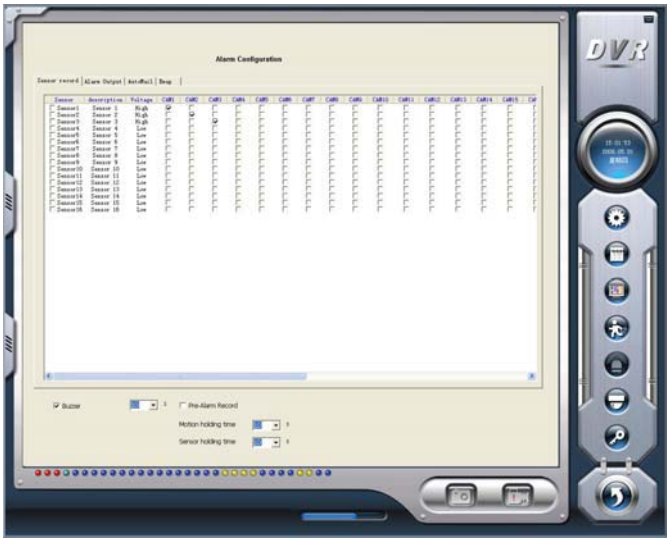


Fig4.11 Alarm trigger method configuration

Every sensor can trigger multiple channels to record. For example, if users select CAM1, CAM4 and CAM5 for Sensor2, then once the sensor is activated, CAM1, CAM4 and CAM5 will begin to record. Users can also select the voltage, high and low, for alarm signals.

4.5.3 Alarm Output

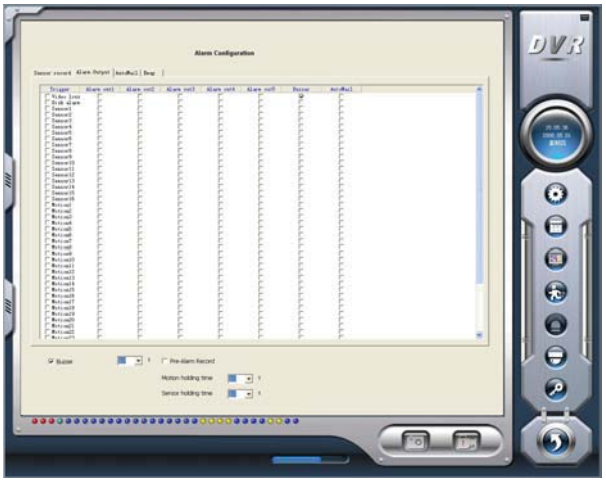


Fig4.12 Alarm output Configuration

Press  in the main interface and access to the following Alarm Configuration area where users can make a setup for motion detection alarm, sensor alarm setup and short of HDD space alarm setup.

[Video Loss]: Users can select alarm output for this option. For example, users select alarm_out1 and alarm_out3 and remote alarm for video loss. Then video loss of any channel will trigger alarm_out1, alarm_out3 to show red light in the Alarm output status panel (refer to Fig3.6 for reference), and the system will give out related warning message to the terminals in List of alarm output LAN terminals .

[Disk Alarm]: when HDD available space is less than the set value (refer to Fig4.9), it will trigger selected alarms.

[Sensor 1]: If users have mounted sensors, when the sensors have been activated, then it will trigger the selected output alarms.

Sensor 2 - Sensor 16: Two DR9016F cards have maximum 16 sensors.

[Motion 1]: Users can set motion detection alarm output by different

alarms and remote alarm.

Motion 2 - Motion 16: 32CH card has maximum 16 motion alarms.

Notes：You should choose our additional alarm device board while using DR3008F, DR3216 cards for alarm I/O.

4.5.4 Auto Mail Function

Now users can select the above-mentioned alarms to be output by Auto Mail. Click '**Auto Mail**' icon on the left top side of alarm configuration page and enter the following area to make Auto Mail setup, referred Fig 4.13.

Fig 4.13 Auto Mail Setup Interface

In this area, users can set receiver and sender's E-mail SMTP server and address. Note: the address of receiver and sender can be the same.

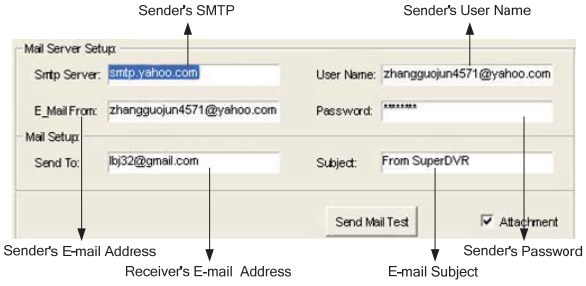


Fig 4.14 Auto Mail setup

To test the settings, click '**Send Mail Test**'. If all settings are okay, message 'Message Sent Successfully' will pop up. If some settings are wrong, there will pop up corresponding warning message.

Enable 'Attachment', then the present image when an alarm triggered will be sent to appointed mailbox, referred Fig 4.15

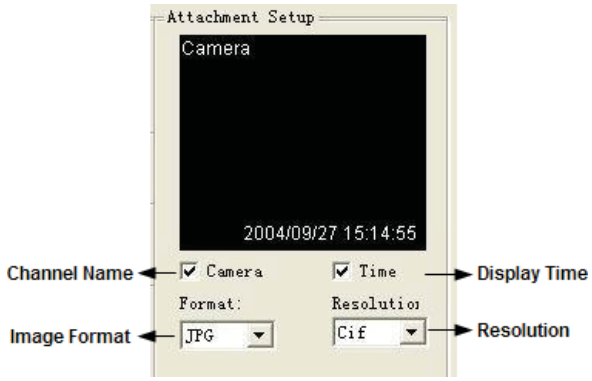


Fig 4.15 Attachment Setup

Note: for every alarm event, only one picture will be sent.

4.6 E-map Configuration

E-map is used to show full geographic range covered by the whole monitoring system in the form of map .An E-map has the feature of simple operation and direct display of status and it is generally graded or tiered in the form of a tree diagram.

4.6.1 Edit Map

It supports only the image format of bmp or jpg.

Click  to enter 'Emap → Emap Edit', press right key of Load Picture in the default interface of map and select the required map file in the related folder, open the file and the map will be displayed in this interface, as Fig4.16 E-Map

Edit.

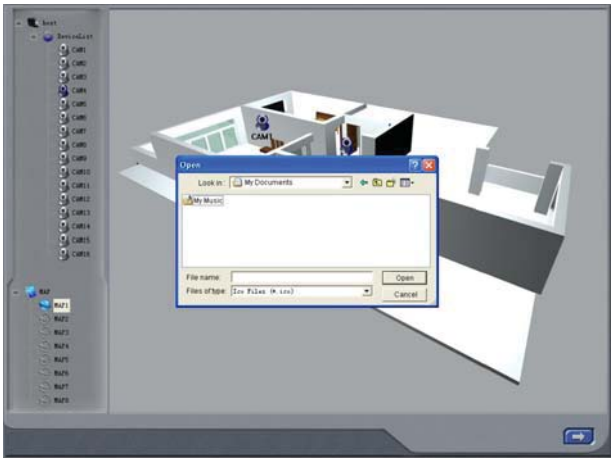


Fig4.16 E-Map Edit

Draw the icon of camera to the corresponding position in the map, maximum 32 cameras can be set simultaneously, Click ‘change icon’ of camera by right key to change icon and click ‘Delete’ to cancel camera. After editing, click right key in the map and select ‘Save Map’ to save the current map.

A gray map icon can be drawn to the corresponding position in the map on the right and set it as a sub-map of the current map, or click the gray map icon on the left by right key and select ‘Open’ to build a new map. And you can also click the blue map icon on the left by right key, and select ‘Rename’ to change name of the map or select ‘Close’ to cancel this map.

4.6.2 View Map

Click  to enter E-map, where the user can view distribution of all cameras in the map, as Fig4.17 View Camera.

Fig4.17 View Camera

When a channel alarm, the camera icon will flash yellow alarm signal. Select 'Auto Show', in case of accident alarming, an alarming screen will pop out automatically and you can know about the alarming position rapidly. Click the camera head by right key to show the screen on the spot.

NOTICE

1. The map tree currently supports three levels and it is invalid for addition exceeding three levels.
2. For loading of a picture, when any side of length and width of the picture exceeds size of picture frame, it will be enlarged and shortened proportionally and standard size of picture frame is 833*678.
3. On this interface, click camera by right key to display the spot and the DR5016F card does not support this function temporarily.
4. If '**Auto Show**' is set in case that E-map pops up by automatic alarming, the E-map interface set with '**Holding Time**' without any operation and alarm will be close automatically. '**Auto Show**' is invalid when the E-map is opened manually.
5. The map in the E-map is the default demonstration map, and the user can invite an engineering merchant to make the practical map or draw a map by their own according to their actual needs, then scan and save it in the computer to picture.

4.7 P.T.Z Control Configuration

Click  and enter the following area:

Fig4.18 PTZ configuration panel

4.7.1 Protocol Setup

Users can select different protocols, serial port number for P.T.Z devices.

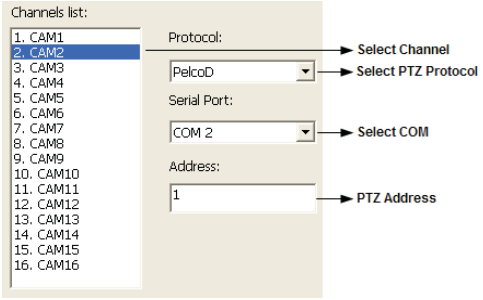


Fig4.19 P.T.Z protocol setup

Relative Definitions:

[Port]: users can set serial port number

[Protocol]: P.T.Z device communication protocol

[Address]: P.T.Z device communication address

4.7.2 Serial ports setup

Users should firstly enable the P.T.Z control function of a certain camera and select a port number in P.T.Z Protocol Setup (refer to Fig4.20), and then set corresponding parameters in the area below:

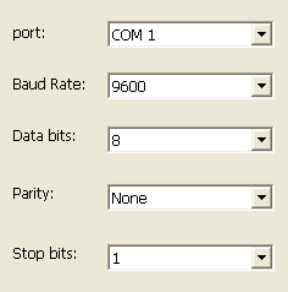


Fig4.20 P.T.Z serial port setup

Relative explain:

[Port]: users can set port number

[Baud Rate]: set P.T.Z device Baud Rate, default value is 9600

[Data bits]: default value is 8

[Parity]: odd and even parity bit, default Null

[Stop Bits]: default value is 1

Notice: Users should look into the P.T.Z device and get the Baud Rate, Protocol, and Address first, then set their values accordingly.

4.8 Users Configuration

Click  and access the following area:

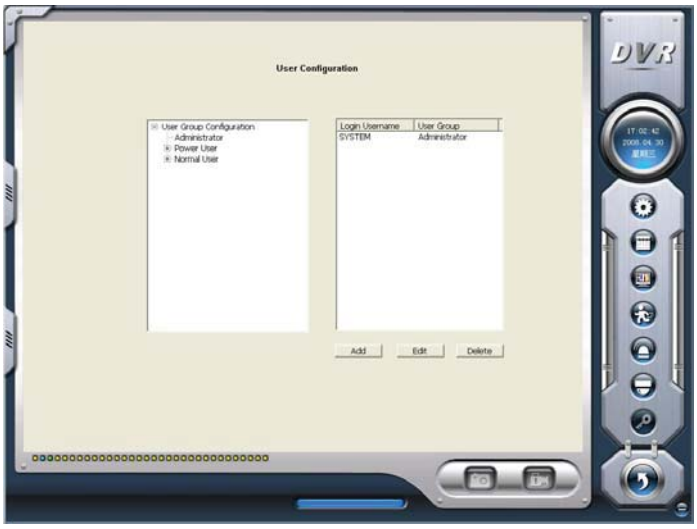


Fig4.21 User configuration

After installing the MAXDVR system, it will automatically create an administrator user of which user name is SYSTEM with no password. Users can use this user name to log in the system and 'Add', 'Edit' and/or 'Delete' users' parameters.

4.8.1 Change User rights

Select a user in User Configuration area (refer to Fig4.21), and click 'Edit' and enter Edit User area, as below:

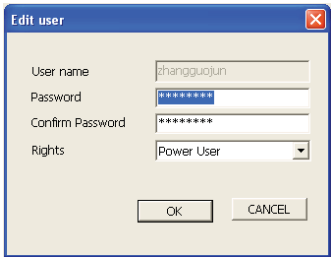


Fig4.22 User password and rights edit

- Power user: The right of this kind of users is authorized by the administrator. The administrator endows rights to power users by ticking off boxes in the right list. Please refer to the following figure.

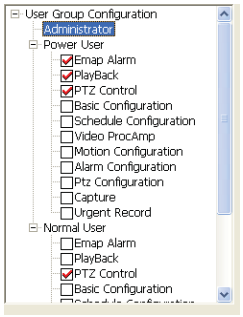
Users can edit user's password and rights here, but not the user name.

Note: The system offers three kinds of rights:

Administrator: This kind of user of the highest rights to change all the settings and playback. Meanwhile, the user also has the right to authorize power user rights and normal user rights

Power user: The right of this kind of users is authorized by the administrator. The administrator endows rights to power users by ticking off boxes in the right list.

Normal user: Normal user's right is also endowed by the administrator. They have the same right list as power user. However, whether they can possess some right should be decided by the administrator. Only if the administrator ticks off some right, they will have the right. For example, if ticking off Basic Configuration, the normal user can conduct this right. Please refer to the following figure:



Notice: Administrators can change Power users and Normal users' rights, but can't change other administrators' rights.

4.8.2 Add User

Click 'Add' in User Configuration (refer to Fig4.21), and access the following area:

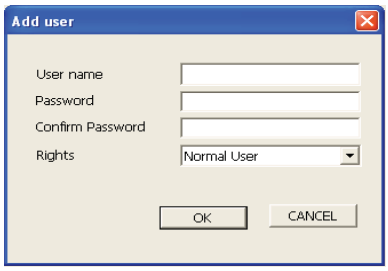


Fig4.23 Add user

Input user name, password, confirm password and select user rights, and then click 'OK'.

4.8.3 Delete User

Select the user name in User Configuration (refer to Fig4.21), and click 'Delete', and confirm delete. See below:

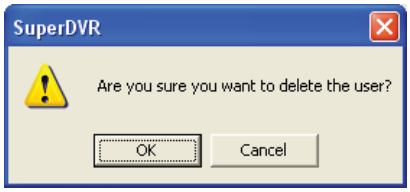


Fig4.24 Confirm delete user

5 P.T.Z control

Click  in the MAXDVR main display interface (refer to Fig3.1) and access to the following area:

Fig5.1 P.T.Z control interface

Users can control P.T.Z devices by the function buttons on the right side, see as below:

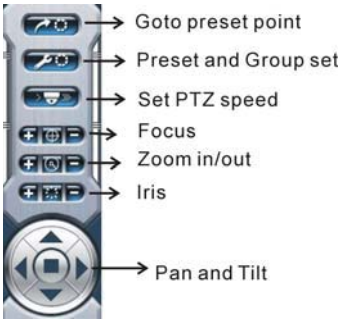


Fig5.2 P.T.Z Control function buttons panel

In the upper circle, there are five function buttons, i.e. upward button, downward button, leftward button, rightward button, and stop button. The other buttons are Focus buttons (+ and -), Zoom buttons (+ and -), Iris buttons (+ and -). Click  and  to increase and decrease the corresponding values. When users need to utilize P.T.Z control, first enter P.T.Z Control Interface (refer to Fig5.1), and click the corresponding channel (users can see a red fringe around the channel), then users can begin to control the enabled P.T.Z control enabled camera.

Notice:

After pressing left mouse button on any function button in P.T.Z Control Function Buttons Panel (refer to Fig5.2), PTZ device starts moving, when user releases it, PTZ device stops moving.

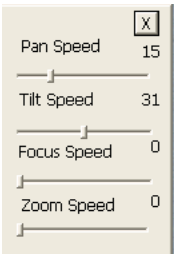


Fig 5.3 Speed adjustment

Users can select different Pan Speed, Tilt speed, Focus speed and Zoom speed for P.T.Z devices.

[Pan Speed]: set horizontal rotating speed

[Tilt Speed]: set vertical rotating speed

[Focus Speed]: set camera focus speed

[Zoom Speed]: set zoom in/ zoom out speed

Click  and a pop-up window will appear, users can choose different preset or group set.

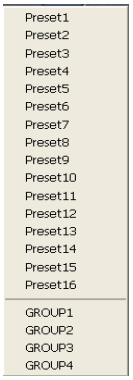


Fig 5.4 Preset and group select

Click  to set Preset point and change Preset point name. Every Group includes multiple Preset points. In case users select preset1, preset2 and preset3 for group1, preset1, preset2 and preset3 will be automatically accessed in sequence after users select group1 for auto scout.

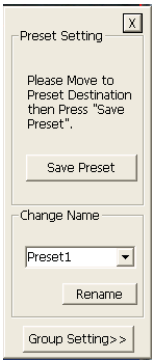
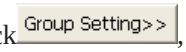


Fig 5.5 Preset **Fig 5.6 Group configuration**

Click  , a pop-pup window as following will appear, as show as Fig 5.6:

[Dwell]: users can set the dwell time of a page here.

6 Record Search and Playback

Click  in the MAXDVR Main Display Interface (refer to Fig3.1) and access to the following area:

Fig6.1 Search and playback Interface

This interface is divided into 4 parts, i.e. record search area, record playing back area, record play area, and other functions area.

Press  and return to the live surveillance status.

6.1 Record Search

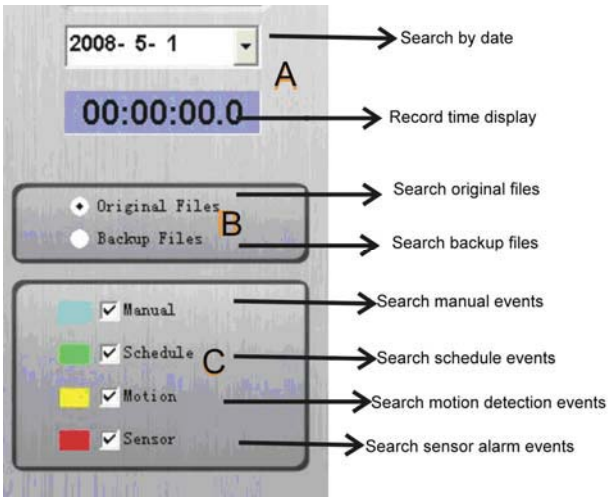


Fig6.2 Record search area

A, B and C marks the areas of three search methods.

- A: Search by date (range from Jan 1st, 1971 till now)
- B: Search in backup file and original file
- C: Search by record mode. This is useful when user wants to look through some important events.

Users can select one or above of the three searching methods to search for needed record file.

6.2 Playback and Control

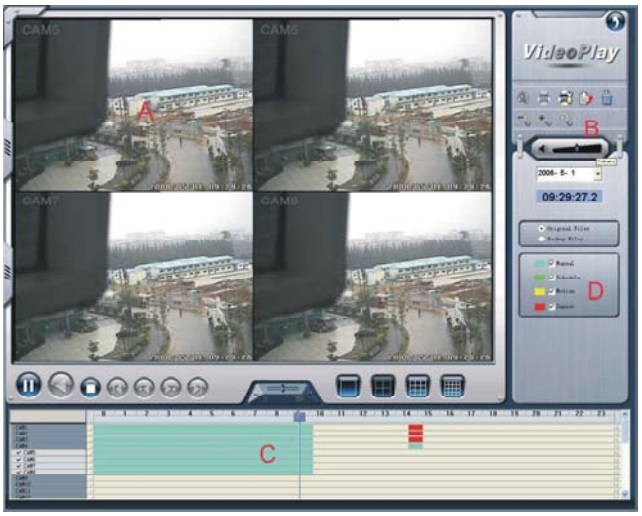


Fig6.3 Record playback and control

Explain of the button function:

-  : Play / Pause
-  : Stop
-  : Play backwards. This button is valid when playing back by single channel
-  : Previous Section. This button is valid when playing back by single channel
-  : Next Section. This button is valid when playing back by single channel
-  : Previous Frame. This button is valid when playing back by single channel playing back pause mode
-  : Next Frame. This button is valid when playing back by single channel playing back pause mode

Users can select suitable play speed in the area as below:

Fig6.4 Play Speed Controller

The following area shows the record files of different channels:

Fig6.5 Record Files Browser

The upper bar shows the hours in a whole day. Click the bar, and it will be magnified 10 times, therefore users can see the detailed time marks. When searching for a certain section of the file, users can draw the scrolling-bar to the area that most likely contains the needed section. If necessary, click the bar once and see the magnified time marks for precise search.

The left side shows the available channels. When a certain channel has been selected for playing back, the background color will be highlighted, or it's dark gray, and a tick sign will appear beside the channel title.

The main area at the center gives details of the record files. Different colors of the bar show different kinds of record modes of the files. The following are the definitions of the color bars:

- Blue: Manual Record Events
- Green: Schedule Record Events
- Yellow: Motion Detection Record Events
- Red: Sensor Alarm Record Events

Click  to play selected record files. The system offers playing back modes 1 Ch, 4CH, 9 CH, and 16CH. The following is multiple channels playing back control area:

Fig6.6 Multiple Channels Playing Back Control

The system default playing back mode is one channel. That is Camera1. In

case users need to change to other channels, then click  and the window of following channel configuration will appear, as below:

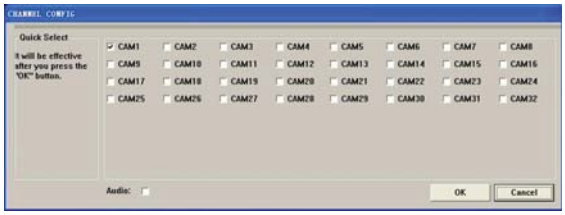


Fig6.7 Channel Configuration Window for 1 Channel Playback Mode

Users can select any four channels from all the available channels for playing back.

The system offers quick select methods for users. For example, by selecting 'Third 4 Channels', Camera9, Camera10, Camera11, and Camera12 will be quickly selected simultaneously.

In case user need to playback 9 channels at the same time, then click  , and the following channel configuration window will appear, as below:

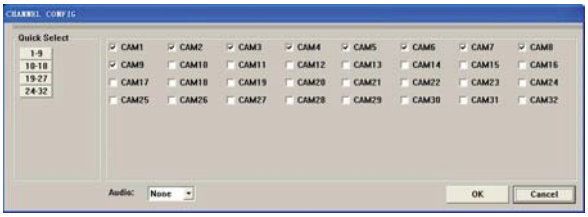


Fig6.8 Channel Configuration Dialog for 9-channel Playing Back Mode

Users can select any 9 channels from all the available channels for playing back. Users can also use the quick select methods by the system.

In case user needs to play back 16 channels at the same time, then click  , and the following channel configuration window will appear, as below:

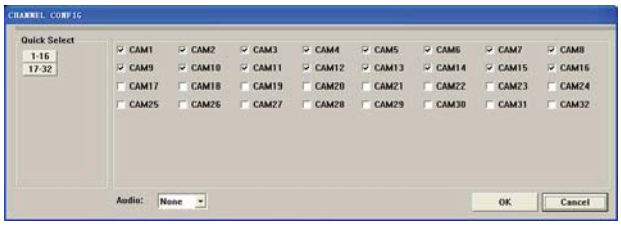


Fig6.9 Channel Configuration Dialog for 16-channel Playing Back Mode

Then click '**OK**' to play back.

TIPS
Click any channel and magnify it to see the single channel. Click again to return to the former playing back mode.

6.3 Other Functions

6.3.1 Record File Backup

Click  and enter the following menu:

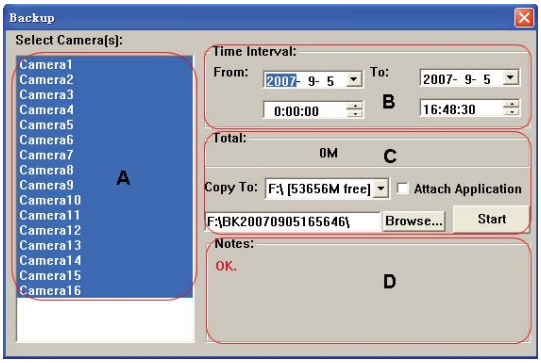


Fig6.10 Recorded files backup

The interface is divided into four areas:

- **A**: Camera Selection Area
- **B**: Time and Date Selection Area
- **C**: Operation Area

- **D**: Information Area

In A area, users can select one or more cameras.

In B area, users can set start time/date and end time/date, and then backup the files recorded by channels selected in A area by the time interval.

In C area, users can set backup path.

Click '**Start**' to backup files.

6.3.2 Delete Record Files

Click  and the following window will appear:

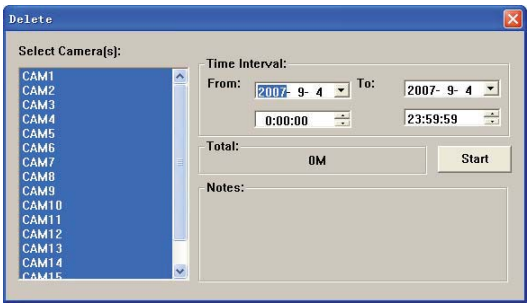


Fig6.11 Delete recorded files

Users first select the channel on the left side, and then select start time/date and end time/date of the record files, click 'Start' to delete files.

6.3.3 Capture Pictures

The definitions of the function buttons are as below:

 : Capture picture

 : Print setup

 : Print captured picture

NOTICE

This  function is valid only in playback pause mode of single channel.

When in single channel playing back pause mode, automatically the following color control panel (Fig 6.12) will appear, by which user can make color rectification for the present channel, including brightness, contrast, saturation and hue, and press '**Default**' to recover to the original settings.

Fig6.12 Color control panel

When in the single channel playback pause mode, click  and the following window will appear as below:

Fig6.13 Capture multiple images in sequence

Select path and click 'Save' to save the picture. User can also print the images that have been captured.

Click  and make corresponding print setup as below:

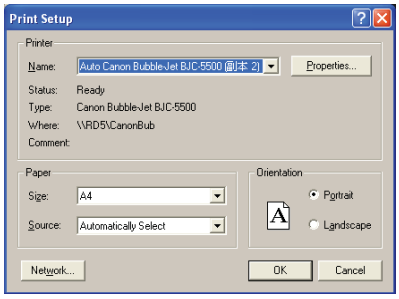


Fig6.14 Print setup

Click  users can have print preview as below:

Fig6.15 Print preview

Select Position and then click + or - to move the picture upward, downward, leftward and rightward. Select Size and then click + and - to zoom in and out the image. Press Default return to the original settings. Press 'Print' in the print preview window, users can print the image directly.

6.3.4 Image Zoom In / Out

When in single channel playing back state, the zoom control icons  will appear. Select  and click on the channel will zoom out the image. By clicking continuously, the image will be zoomed out continuously. Select  and do the same operations to get the opposite effect. Click  and recover the original size. Take the following three pictures for example.

Fig6.16 Example: original size

Fig6.17 Example: zoomed out

Fig6.18 Example: zoomed in

7 IE Client

7.1 Remote Live Surveillance

Surveillance system supports Remote Surveillance through LAN, Internet, and Intranet. Simply enable web cam function of the system on a computer which is connected to Internet, and the computer system will become an Internet web cam server. On any other computer that connects to Internet or the same LAN network, input the MAXDVR server address in IE browser, the end users can get high quality real time image from the server and also control the P.T.Z devices.

7.1.1 Remote Surveillance Server Configuration

Users should firstly enable the Web Camera Services in Basic Configuration (refer to 4.1) and set other settings as below:

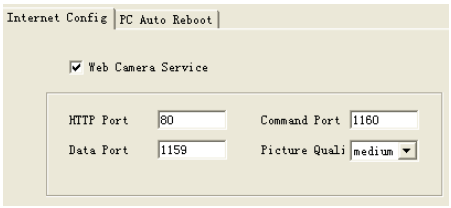


Fig 7.1 WebCam Server Configuration

HTTP Port

Web service & download service port, default value is 80.

Data Port

Data transmission port, default value is 1159.

Command Port

Control command port, default value is 1160.

Picture Quality

Default value is medium.

7.2 Accessing IE client

If users want to remote view pictures, the IE client should be connected to LAN or Internet. And then enable network server in the unit. Please refer to Fig 7.1 IE client Server Configuration. This unit supports IE browser, not any client software installed. And it supports Win XP and vista.

Input the IE client server IP address in Internet Explorer and selected install ActiveX control, then the following figure appears:

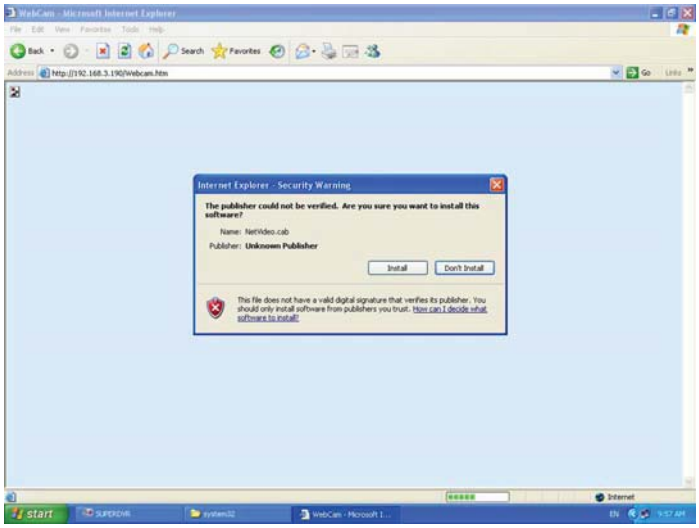


Fig 7.2 WebCam install interface

Click install button, then the WebCam main interface will appear as below:

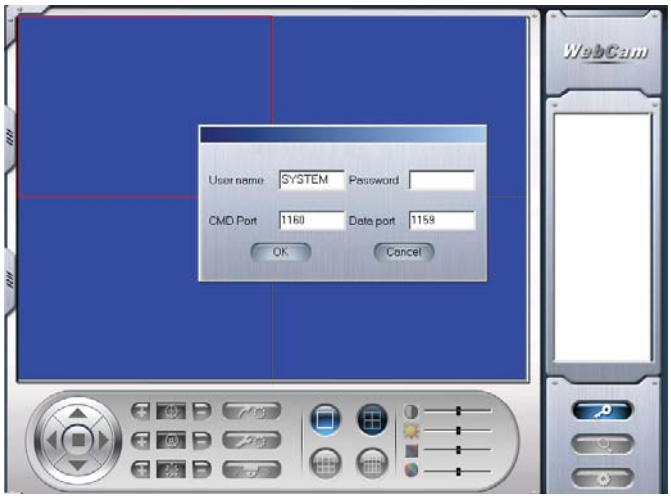


Fig 7.3 WebCam Login interface

NOTICE: The default User name is SYSTEM with no password. Users can set user name and password at the server. Click OK **and then enter into WebCam Main interface.**

Fig 7.4 WebCam Main interface

Corresponding Explanations:

Icon	Description
	means the dome rotate up. means the dome rotate down. means the dome rotate left. means the dome rotate right. means the dome stop rotating.
	'Focus' button. Click button near 'Focus' button to have long focus. Click button near 'Focus' button
	'Zoom' button. Click button near 'Zoom' button to zoom in the locale picture of this camera. Click button near 'Zoom' button to zoom out the locale picture of this camera
	'Iris' button. Click button near 'Iris' button to increase light of the dome. Click button near 'Iris' button to decrease light of the dome.
	Go to the presenting Point
	Set the Presetting Point
	Speed dome. Adjust PTZ speed. It sets the rotational speed of the PTZ
	Single channel with full screen display
	Four channel with four pictures display
	Contrast adjustment
	Brightness adjustment
	Hue adjustment
	Saturation adjustment
	Log in/ Log out
	Record playback
	System Configuration

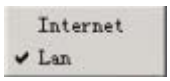
	Enable the Lan that is Master stream, has higher frame rate and needs higher network bandwidth; Internet that is sub stream, has low frame rate and requires low net work bandwidth. Users can select the stream according to their bandwidth.

Table 7-1 the function of the main interface buttons

Click the right mouse in the main interface a sub menu will appear:

Open Stream: Click this item, selected channel will open

Close Stream: Click this item, selected channel will close

Close All: Click this item, all channels will close

Full Screen: Select this item, the picture will display in full screen. Double click or click right mouse to return to the previous interface.

7.3 Remote playing back

7.3.1 Record play back and control

Click  button on the Webcam main interface, the remote play back picture will appear:

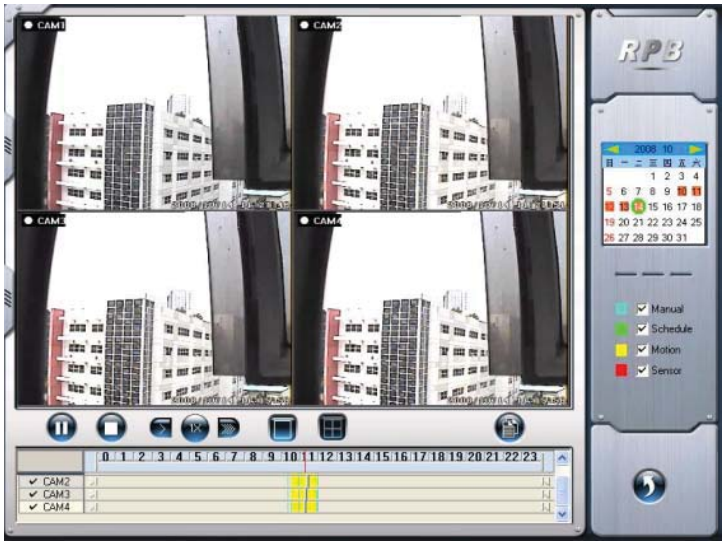


Fig 7.5 Remote play back

Explain of the button functions:

: Play/ Pause

: Stop

: Adjust the speed of playing back. Users can select suitable play speed in needed.

: Playing back backup. Back up record data of server-end.

Users can click Backup, enter into the below interface:

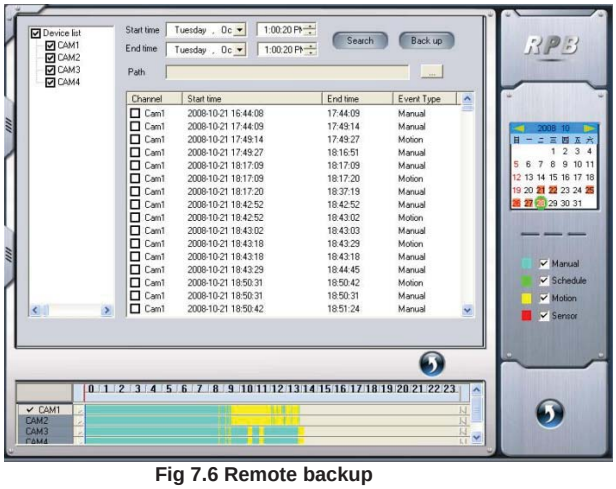
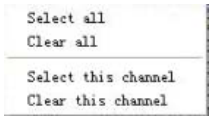


Fig 7.6 Remote backup

Select the date, channel, then click Search button. It will list all files recorded in the day.
Click Browse button, set the saving path.
Select files in the search area. Users can hold shift button of keyboard and select multi files with mouse simultaneously.
Click Backup button to do remote backup.

Notice: the backup files are AVI format. Users can play with the third player directly.

Click the right mouse in the search area, a sub menu will appear:



If users select all channels, click Select all, then all check box before channels will be selected. Users can click Clear all to clear all selected channels; if users select a certain channel, click Select this channel, then just this channel be selected only. Users can click Clear this channel to clear that selected channels.

 : Return to previous main interface

 : Multiple Channels playing back control

The system default playing back mode are single and four channel. In case users need to change to other channels, then click  button, the following channel configuration window will appear:

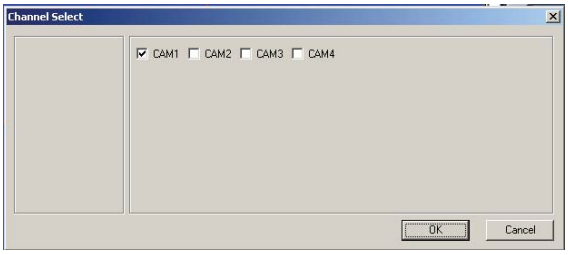


Fig 7.7 Channel configuration window for 1 channel play back mode

Users can select one channel from all the available channels for playing back. Click  , users can play back in four channels mode. Four channels configuration window will as show as below:

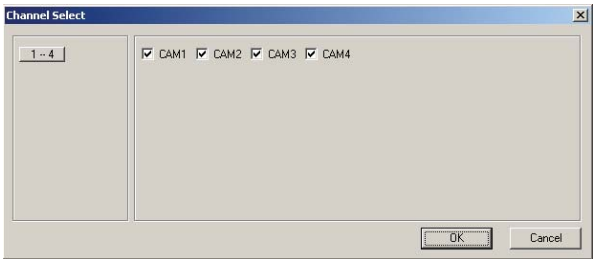


Fig7.8 Channel configuration window for 4 channel playback mode

Users can select any four channels from all the available channels for playing back.

The following area shows the record files of different channels:

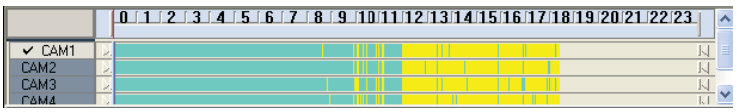


Fig 7.9 Data Preview

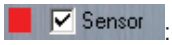
Data preview shows the record data for different channels in corresponding time, the left side shows the available channels. When a certain channel has been selected for playing back, the background color will be highlighted, or its dark gray and a tick sign will appear beside the channel title.

The data preview area at the center gives details of the record files. Different colors of the bar show different types of records. The following are the definitions of the color bar:

: Manual Record Events

: Schedule Record Events

: Motion Detection Record Events



: Sensor Alarm Record Events

The ruler on top of the bar shows the hours in whole day. Right-click the ruler, it will be magnified 10 multiples. Therefore, users can see the time marks in details.

STEP1 When users want to search for a certain section of record, draw the bar to the desired position. If necessary, right-click the bar to see the magnified time marks for precise search.

STEP2 Users can click  button to play the selected record, Then return to live display mode after finishing remote playback, it will display a word 'Connecting…'on the screen. And users may click "Large Picture"or"Quad Picture" button to fresh screen to get live picture.

7.4 System setup

Click  and enter into the main setup interface.

Fig 7.10 Basic Configuration

Notice: When multi-client accessed the system configuration interface simultaneous, the user who enters into that interface priority and then others will lack of accessing rights.

7.4.1 Basic Configuration

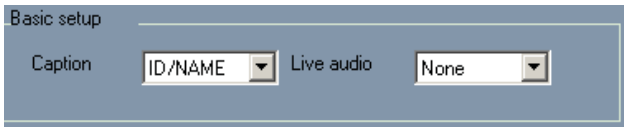


Fig 7.11 Basic setup

1. Caption

There are four options: None, ID, Name and ID/Name for select from.

‘None’ means no title

‘ID’ means camera numbers, i.e.1,2,3 and so on

‘Name’ means camera names,i.e.Cam1, Cam2 and so on

‘ID/Name’ means both camera number and camera name,i.e.1/Cam1, 2/Cam2 and so on

2. Live audio

Supports one channel of microphone audio input signal on the PC motherboard and audio inputs on the card if it has… Users can choose on video channel associate these audio signals.

In the following area in the basic configuration page, users can input the computer user name and password in the relative boxes. Then when restarting the computer system, it will access to the system with the user name and password input in the boxes.

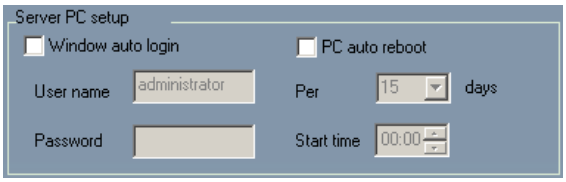


Fig 7.12 Computer System Reboot Setup

As the windows system may become unstable after a couple of days to continue operating. It may cause MAXDVR system unstable. The software supports auto-reboot. Select 

and set the interval by day, which will guide the system to reboot automatically according to the setups.

3. Alarm setup

The Alarm setup configuration is show as below:

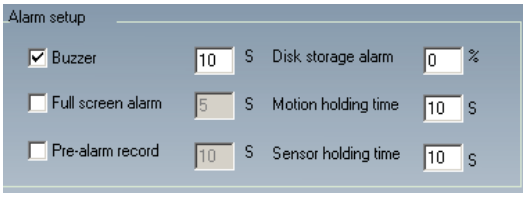


Fig 7.13 Alarm triggering configuration

Relative Explanations:

1. Buzzer

Users can select whether to open the computer buzzer if the alarms have been triggered also select how long the buzzer rings

2. Full screen alarm

Users can select whether channel will be full screen when alarm triggered. Set the full screen hold time here

3. Pre-alarm record

Users can select whether to enable alarm pre-record and also pre-record time

This option is for users to see remote live view.

4. Disk storage alarm

If the Partition free space is less than the set percent, it will stop recording or recycling, but give alarm tips according to the settings

5. Motion holding time

The continuous recording time after motion stopped

6. Sensor holding time

The continuous recording time after sensor stopped

7.4.2 Camera setup

Click  and the camera setup configuration will appear as below:

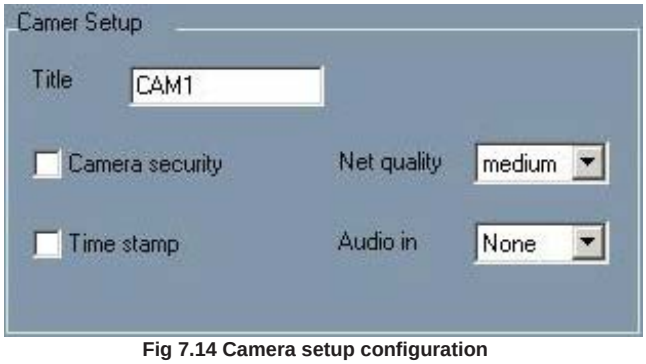


Fig 7.14 Camera setup configuration

1. Title

Channel name. Users can set the channel name from Cam1, Cam2, Cam3

and Cam4.

2. Camera security

Users are divided into two standards: normal user and super admin. By selecting this option, only administrator can see corresponding channels.

3. Time stamp

If selecting the check box, record time will be displayed on the screen when playing back the record

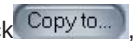
4. Net quality

There are five options to choose from: lowest, lower, medium, higher and highest. Higher picture quality is, the picture is clearer.

5. Audio in

If users select the check box, Webcam will record audio when it records video. Otherwise, it will not record audio.

Notice: The default setting is that Audio input1 matches channel1 and Audio input2 matches channel2

If click 

, users could copy the setting of this channel to any other selected channel.

7.4.3 Schedule configuration

Click the 

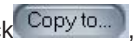
icon and enter Schedule Configuration page as below:

Fig 7.15 Schedule configuration

There have three kinds of record modes: schedule record, motion detection and Sensor alarm record. We provide users to set schedules from Sunday to Monday separately for all of the three record modes. Sensor alarm recording mode has the highest priority among others.

When users need to edit schedule for a channel, select the camera name in the left Camera group firstly.

Click  icon and brush on the weekday schedule to add time; click  icon and click on the weekday schedule to delete time.

If click 

, users could copy the setting of this channel to any other selected channel.

7.4.4 Alarm configuration

Click  icon and enter into alarm configuration as show as below:

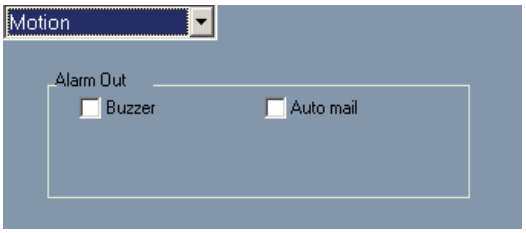


Fig 7.16 Alarm configuration

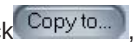
Users can set the alarm type: Motion and other. There are two alarms out options to choose from: Buzzer and Auto mail.

1. Buzzer

Enable buzzer on board for alarm

2. Auto mail

When alarm triggered, the system will send mail to users automatically.

If click 

, users could copy the setting of this channel to any other selected channel.

7.4.5 Record configuration

Click  icon and enter into record configuration interface as below:

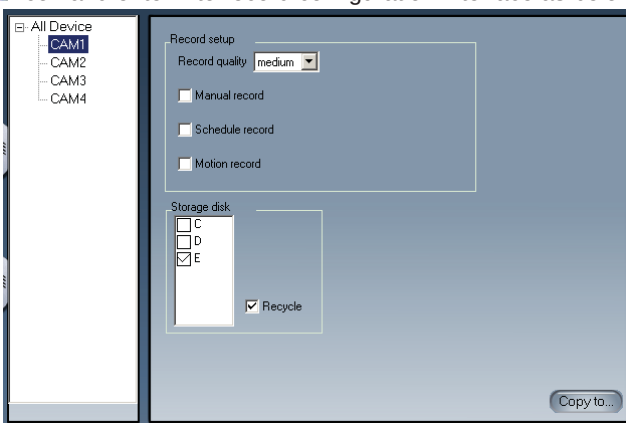


Fig 7.17 Record configuration

1. Record setup

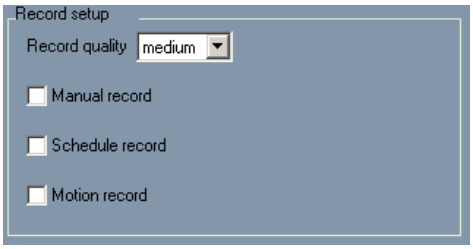


Fig 7.18 Record setup

According to different record triggering methods, users can set three kinds of record modes:

- Manual record
- Schedule record
- Motion record

Users can use multiple cameras to record, every camera works separately and record file also saves relatively.

a. Record quality

There are five modes can be selected from: lowest, lower, medium, higher and highest. Higher the record quality is, clearer the record image is.

b. Manual record

By selecting this option, the relative camera image will be recorded and saved all the time.

c. Schedule record

Schedule record option

d. Motion record

By selecting this option, users can set relative channels' record mode as motion detection.

2. Storage disk

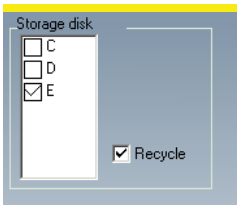


Fig 7.19 Storage disk

Users can store record file by selecting storage disk. Tick off ‘Recycle’ check box, users can set whether to continue recording to cover the earliest video file when the disc storing video files is full.

If click Copy to..., users could copy the setting of this channel to any other selected channel.

7.4.6 Motion configuration

Click  icon and access to motion configuration interface as below:

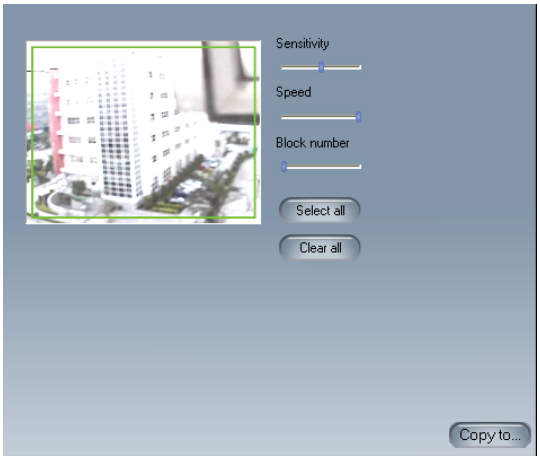


Fig 7.20 Motion configuration

Definition of the setup items:

1. Sensitivity

Users can set motion detection sensitivity here.

2. Speed

Motion detection sensitivity

3. Block number

Set grid's number

4. Select all

Select all the areas of the channel as detection area

5. Clear all

Clear all the detection areas and then users can select customized detection areas by cursor.

If click Copy to..., users could copy the setting of this channel to any other selected channel.

7.4.7 EMAIL Configuration

Click  icon and access to Email configuration interface:

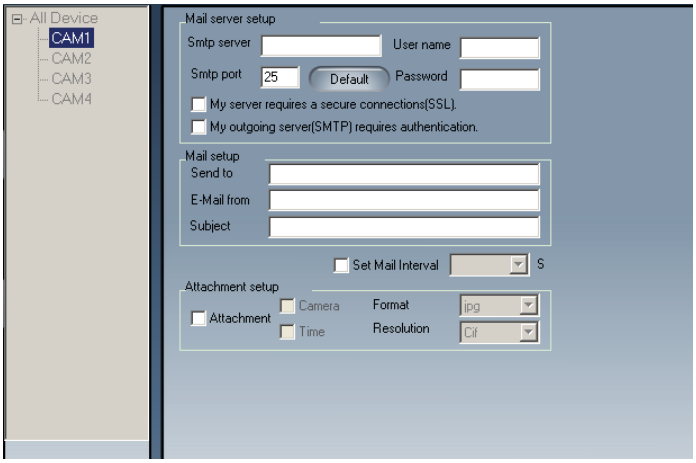


Fig 7.21 Email configuration

1. Mail server setup

Fig 7.22 Mail server setup

In this area, users can set receiver and sender's E-mail SMTP server and address. Note: the address of receiver and sender can be the same.

Relative Definitions:

Smtp server: Sender's SMTP, such as smtp.yahoo.com

User name: Sender's User Name

Smtp port: Mail server's port, the default value of mail server is25.

Password: Sender's Password

Users can select 'My server requires a secure connections' or 'My outgoing server （SMTP）requires authentication' check box according to server mail service of mail service supplier.

2. Mail setup

Fig 7.23 Mail setup

Relative Definitions:

Send to: Receiver's E-mail Address

E-Mail from: Sender's E-mail Address

Subject: E-mail Subject

Users can select 'Set Mail Internal' check box to set email send time, such as 5 seconds, 10 seconds and so on.

3. Attachment setup

Fig 7.24 Attachment setup

Enable ‘Attachment’, then the present image will be sent to appointed mailbox when an alarm triggered.

Relative Definitions:

Camera: Channel Name

Time: Display Time

Format: Image Format

Resolution: Cif and QCif

7.4.8 P.T.Z Configuration

Click  icon then enter into the P.T.Z configuration as below:

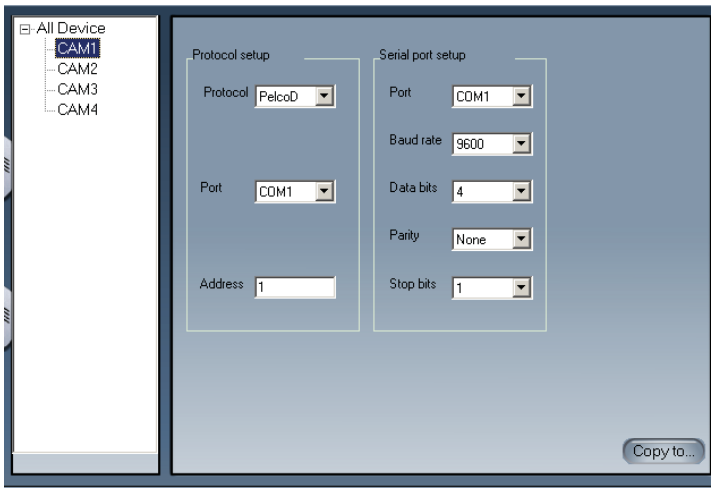


Fig 7.25 P.T.Z Configuration

1. Protocol setup

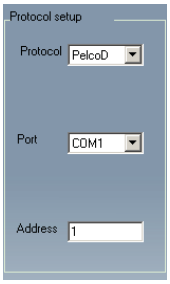


Fig 7.26 P.T.Z Protocol setup

A. Protocol

Communication protocol of P.T.Z device

B. Port

Users can set serial port number

C. Address

Communication address of P.T.Z device

2. Serial port setup

Users should firstly enable the P.T.Z control function of certain camera and select a port number in P.T.Z Protocol Setup (refer to Fig7-26), and then set corresponding parameters in the area below:

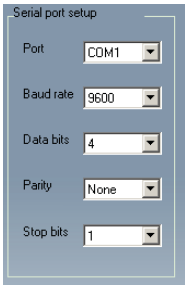


Fig 7.27 P.T.Z Serial port setup

A. Port

Users can set port number

B.Baud rate

Set P.T.Z device Baud rate, default value is 9600

C.Data bits

Default value is 8

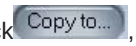
D.Parity

Odd and even parity bit, default Null

E.Stop bits

Default value is 1

Notice: Users should look into the P.T.Z device and get Baud rate, Protocol and Address firstly, and then set other values accordingly.

If click 

, users could copy the setting of this channel to any other selected channel.

7.5 Mobile Surveillance

7.5.1 Introduction to Mobile Surveillance

In MAXDVR system, the mobile surveillance can be realized by connecting the mobile phone to the system. For time being, the function is supported by Windows Mobile system and Symbian Series 60 Developer Platform 2.0 intelligent mobile phone system.

So far, the types of phones on which the function has been tested are shown as below table.

Parameter / Brand	TYPE	SYSTEM
DOPOD	Dopod 696	Windows Mobile 2003
	Dopod 818	Windows Mobile 2003
	Dopod 828+	Windows Mobile 2003
	Dopod 838 Pro(3G)	Windows Mobile 5.0
O2	O2 Xda II	Windows Mobile 2003
	O2 Xda Atom(3G)	Windows Mobile 5.0
	O2 Xda Mini	Windows Mobile 2003
NOKIA	Nokia N70	S60 OS8.1a
	Nokia N73	S60 OS9.1
	Nokia N80	S60 OS9.1
	Nokia N-Gage	S60 OS6.1
	Nokia 3230	S60 OS7.0s

Parameter / Brand	TYPE	SYSTEM
	Nokia 3250	S60 OS9.1
	Nokia 6260	S60 OS7.0s
	Nokia 6630	S60 OS8.0s
	Nokia 6680	S60 OS8.0s
	Nokia 7610	S60 OS7.0s
NOKIA	Nokia N-95	S60 OS9.2

Table 7-1 Mobile Phone of Supporting Mobile Surveillance

7.5.2 Client Configuration of Windows Mobile

Server configuration on MAXDVR needs to be set before the function on phone is activated. Please refer to Section '7.1 Remote Live Surveillance'.

Client Configuration of Symbian 60:

Step1: Firstly, enable the network access on mobile phone and then run 'Web browser after the server configuration has been done.

Fig 7.28 Open Web Brower

Step2: Input the server address in a new-built bookmark. Click this bookmark to connect to the server.

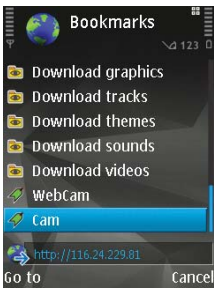


Fig 7.29 Build a bookmark

Fig 7.30 Connect to Server

Step3: Click ‘Scam_S3_080919.sis’ to start downloading and a confirmation information window will pop up after downloading is finished.

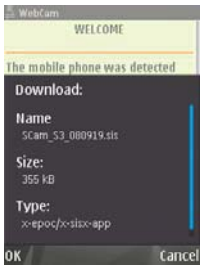


Fig 7.31 Confirmation Information Window

Step4: Click ‘OK’, the system reminds of whether to install the ‘Webcam’.

Fig 7.32 Installing Configuration Information

Step5: Click ‘Yes’ to start installing. A Scam shortcut icon appears on the system menu after the installation has been done.

Fig 7.33 Scam Shortcut icon in System Menu

Step6: Run 'Scam' by selecting the icon:

Fig 7.34 Main Layout of Scam

Step7: Enter the main menu by selecting 'Live View'.A Setting window will pop up and select 'Login Setting' to login.

Notice: In this interface, select 'Image View' users can browser and preview the snapped pictures , 'System Setting' means in case, an alarm triggered, the alarm signal will pop up automatically to users' mobile phone whenever their made other operations in the background.

Fig 7.35 Configuration Login Information

HttpPort: server-side software to set the http port number, the default port number is 80. Click 'Options' and enters into advanced setting window.

Notice: The default User name is SYSTEM without password. Users can set user name and password at the server end.

Step8: Click Options to login, the live mobile surveillance is show as below:

Fig 7.36 Log in Successfully

Step9: Return to 'Setting' interface, select 'Alarm Setting' a dialogue will appear as below, users can select items of alarm setting in needed.

Fig 7.37 Alarm Setting

Sound Alarm: Sound alarm

Note: The software is running in the background, what kind of methods (sound alarm or vibration tips) that users want to be informed when an unusual occurs in remote site.

Volume: adjust the sound

Back light: background light for Normal open

Note: By default, the mobile phone didn't do anything for 10 seconds, the back light of phone screen will be shut down in which causes great inconvenience to users for viewing site images in a long time, so open the back lights have been provided almost.

Appendix

Appendix 1: Differences among DR Series Card

Card / Item	DR3004F	DR3008F	DR3016F	DR3116	DR3216	DR5016F
Video Input	4	8	16	16	16	16
Audio In	PC Audio	PC Audio	PC Audio	PC Audio	PC Audio	16
Alarm Output	1	0	16	16	0	0
Alarm In	4	0	16	16	0	0
Relay Output	1	0	1	1	1	0
Watch Dog	N	Y	Y	Y	Y	N
Call Monitor	N	N	Y	N	Y	Y
Manual Gain	Y	Y	Y	N	N	N

Notice: by adding Alarm Card, DR5016F support 16 channels' Alarm in、4 channels Alarm Output and 1 channel Relay Output.

Appendix 2: Frequently Asked Questions

Appendix 2.1 About Installation

Appendix 2.1.1 Cannot Install the MAXDVR Driver

Possible causes:

(1) DR series capture card hasn't been installed. Before installing driver, users should install capture card hardware in the PCI slot in the

computer case.

(1) DR series capture card hasn't been installed correctly. Please unplug the card and install it again or change to another PCI slot.

(2) Not compatible with PC hardware.

Appendix 2.1.2 'Unspecified error' in the End of Installation

Possible causes as below:

(1) On English version Window XP system, by using driver below MAXDVR3.0.2, the unspecified error will appear, as the databases are not well compatible.

(2) Microsoft Windows system database has been destroyed. Reinstall windows system or try to install MAXDVR driver above MAXDVR3.1.1 to solve the problem.

(3) Relative Windows support files has been lost or been destroyed, need to reinstall window system, or try to install MAXDVR driver above MAXDVR3.1.1 to solve the problem.

Appendix 2.1.3 Can't find DR series Devices in Device Manager

Enter the Device Manager and cannot find corresponding DR series Devices, the possible cause may be as below:

(1) Windows system error. Restart computer.

(2) DR series card error. Change for a valid one.

(3) Install MAXDVR

Appendix 2.2 How to Use MAXDVR

Appendix 2.2.1 Meanings of the indicator lights

Grey— Normal state

Red—Sensor alarm

Yellow— Motion detection alarm

Blue—Video loss

Bottle Green— Manual record state

Reseda— Schedule record state

Note:

Users can refer to Fig3.6 to learn more.

Appendix 2.2.2 How does the different record format work?

Users can set more than one record modes in Record setup (refer to Fig3.5), but actually, there is only one valid record mode for recording.

The priority order of the record modes is: Sensor Alarm Record > Motion Detection Record > Manual Record > Schedule Record

Appendix 2.2.3 How to set recycling record mode on the system?

Select 'Recycle' in basic configuration, refer to Fig4.1.

Users can select multiple HDD partitions to save record files. It won't cover former files until all the partitions' available storage spaces are less than 100MB.

In case users haven't enabled recycling record mode and the partitions' storage spaces are less than 100MB, the alarm will ring and the HDD usage indicator will turn red.

Tips:

It is recommended that install MAXDVR into the partition installed with windows system (normally C:), and save record files in HDD partition D:

Appendix 2.2.4 How to set auto reboot function?

In case Microsoft Windows system continuously runs for a couple of

days, the system may become unstable, therefore it's suggested to restart the computer every few of days.

In the basic configuration (refer to Fig4.1), input Windows user name and password **(Note: not MAXDVR user name and password)**, and select time interval, then the Windows system will automatically restart according to the set time.

In case the Windows system closed abnormally, i.e. power supply is cut off, and when computer reboot next time, MAXDVR system will automatically restart, and keep the settings as before.

Tips:

Users do not need enable auto reboot function, but it's suggested to input the Windows user name and password in the relative area, therefore when meeting abnormal system exit, users don't need to input Windows and MAXDVR user names and passwords.

Appendix 2.2.5 How to quickly use the schedule record function?

Press 'Shift' or 'Ctrl' key, and draw the cursor in corresponding areas to make schedules for multiple channels.

Appendix 2.2.6 What are byte rates for different image qualities from highest to normal?

When on PAL system and the frame rate is 25 fps, bit rate for the highest image quality is about 120K Byte/s, and for the lowest image quality is about 30K Byte/s.

Appendix 2.2.7 The frame rate seems to be lower than what I set?

There is frame loss in image switch therefore the real record frame rate is about relatively lower than the theoretic value.

Appendix 2.2.8 Why I can't select more channels to backup?

Please draw the mouse in the channel selection area, or utilize Shift and Ctrl key for assistance.

Appendix 2.2.9 When should I select manual Gain Control?

In case the video signal is seriously decreasing, and the color images turn to black and white, use manual gain control may be helpful.

Appendix 2.3 How to Use Network Function

Appendix 2.3.1 How to monitor on the client-side?

First enable 'Web cameras service' in basic configuration (refer to Fig4.1).

Input the server Internet address in IE browser on the client-side, and the necessary web cam driver will be downloaded automatically, and then users need to install the driver. After access the web cam main interface, click 'login' and input user name and password to log in the system. (Refer to Chapter 7 to learn more)

Appendix 2.3.2 Why I can't download the client-side software?

The possible causes:

The client-side computer hasn't properly connected to Internet or LAN.

The server-end hasn't enabled 'web cameras service'

The default Http port is 80. It may conflict with other Web servers, for example IIS. If true, please change another port.

Windows XP SP2 will block the OCX download. You should enable 'Internet Option → Security Settings → Download unsigned ActiveX controls'.

Appendix 2.3.3 Why can't the server be configured at the

client-side?

The possible causes:

It cannot be configured at the client-side, when the server is being configured at the server-end.

Only the last configuration is valid if server different configuration is deployed simultaneously.

Appendix 2.3.4 Why I can't see the images?

The possible causes:

The VGA card is too ouDRated.

Have not installed newer DirecDRraw.

MAXDVR cannot run in Window 98 system.

Data port or command port conflicts with other network services.

The user is connected to Internet through LAN, and the network administrator hasn't enabled corresponding data port or command port.

The client-side has installed firewall software that may stop video transmission.

MPEG4 codec has not been installed properly, please download new version WebCam.

Bad network speed.

Appendix 2.3.5 What should I do if the Internet speed is quite slow?

The more channels opened, and the slower the video transmission speed, therefore try to use one channel display mode when the network speed is slow.

Tips:

There may be some surplus channels that have no video input. Switching off the channels is of help to improve transmission speed. (Refer to Basic Configuration about switching on/off channels.)

Appendix 2.3.6 Why I can't start WebCam server or RPB server?

Possible causes:

Other software is using these ports. If so, please change WebCam ports configuration or stop other software.

Appendix 2.4 Other questions

Appendix 2.4.1 Why computer display doesn't work, and I can't access window system?

The capture card may not be well installed. Unplug the card and try it again.

Note:

Please unplug the power plug of the computer, so as to avoid damaging the motherboard chip set.

Appendix 2.4.2 Why I can't find the recorded files?

HDD space is not enough.

Appendix 2.4.3 Why the screens display is unstable with dithering and water-wave images?

Possible causes:

Camera electrical power is not enough.

There is external electromagnetic disturbance, or electrostatic disturbance of camera BNC connector (It's suggested to connect ground wire to the connector).

User hasn't installed necessary VGA driver.

VGA card problem. Try reinstalling the VGA card, or changing another VGA card.

Appendix 2.4.4 Why does it delay to play back, and it's slow to close and open the driver?

Possible causes:

Windows system problem. Try to reboot the computer.

There are too many recorded files or too many fragments on the HDD, therefore it takes time to search for the files, you need to delete the files that you don't need, or need to make disk defragmenter now.

Capture card problem.

Computer hardware system is too ouDRated.

Appendix 2.4.5 Why I can't play back?

Windows media player has been damaged, or decoder hasn't been installed properly. It's suggested to reinstall the relative software system.

Computer problem, recorded files have been damaged. It's suggested to fix these files using SuperAVIFix program.

Appendix 2.4.6 Why do I see some gray blocks on time progress bar area when play back?

Possible causes:

User has deleted these recorded files.

MAXDVR has deleted recorded file when recycle option is chosen.

Recorded files can't be opened because the recording is on..

Appendix 2.4.7 Why do I see some old record sections that can't be covered when play back?

Possible causes:

You have ever selected disk partitions different from the current.

These recorded files are being played back when covering it.

Database of recorded log was damaged.

You have ever installed MAXDVR on different directories.

Appendix 3 Quick Start for Using

Before installing the PCI card, check PC requirements:

1. P III 800 MHZ

2. 256 MB RAM
3. Windows 2000 (SP4 min) or Win XP (SP1 min)
4. NVIDIA Video Card with 32 MB min or similar
5. DirectX 9.0 minimum
6. 80 GB HDD

Installation Instruction:
1. Insert the PCI card. (But do not connect the Camera yet.)
2. Launch windows
3. Windows will come up with Hardware wizard. Just click CANCEL
4. Put the installation CD in and open up MAXDVR folder run the "setup file"
5. Follow the steps and in Windows XP, it will come up with a message say this program has not passed windows logo testing, just "Continued anyway"
6. Reboot computer once it is completed.

FOR COMPLETE INTRUCTIONS, REFER TO THE MANUAL.

Once Boot up, On Desktop there will be "MAXDVR" icon. Open it.
If this program recognizes the PCI card, program will opened well. Please log in first to the program.
Once your program is opened and running, now connect the Camera.
Done.

Troubleshooting:
Q: When opening the MAXDVR program, it says "Can't find card"
A: Reboot one more time. If still same problem, click Start – Program – MAXDVR – Install and then Uninstall. Reboot computer. After reboot, go back to start-program-MAXDVR-install. Now click on INSTALL to reinstall driver. Then Reboot.
If for some reason still “cant find card”, uninstall driver again. Shut down

computer. Move PCI Card to another slot. Reboot. And CANCEL when windows detect it.
Then reinstall driver by going to start-program-MAXDVR-install.

FOR OTHER SETTINGs IN THE PROGRAM PLEASE READ THE MANUAL.

Q: How to setup the web client to monitor from Internet?

A:

- **On Main Computer where the DVR card installed:**

- Make sure the computer connected to Internet. DSL or Cable Modem preferably.
- Find out your IP address. You can go to this link to find the IP address http://lawrencegoetz.com/programs/ipinfo/
- Open up the MAXDVR program and go to basic configuration. Check and ENABLE Web Camera Service and Remote Play Back Service.
- Make Note on Data Port, Command Port and RPB port.

NOTE: IF YOU ARE CONNECTING TO INTERNET by ROUTER, YOU NEED TO configure THE SETUP OF THE ROUTER AND DO THE PORT FORWARDING. PORTS THAT NEED TO BE FORWARDED: 80, 1159, 1160 AND 1161. CHECK YOUR ROUTER MANUAL ON HOW TO SETUP THAT.

- **On Remote Client Computer:**

- Minimum Requirement for the client computer:
    1. P III 800 MHZ
    2. 256 MB RAM
    3. Windows 2000 (SP4 min) or Win XP (SP1 min)

4. NVIDIA Video Card with 32 MB min or similar
5. DirectX 9.0 minimum
6. 80 GB HDD

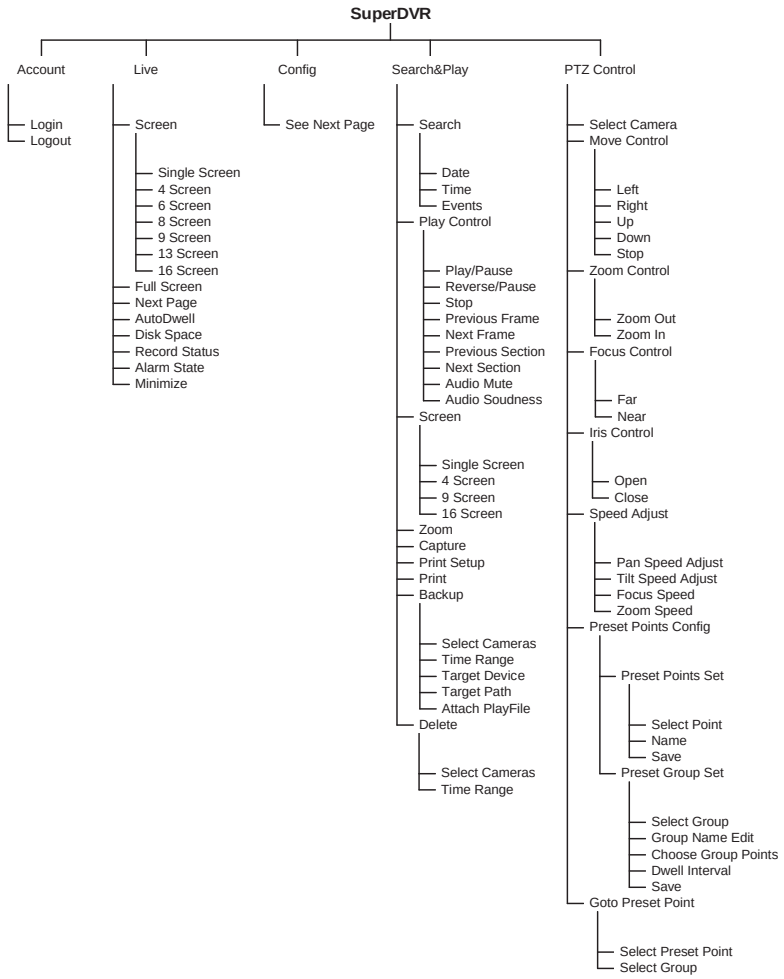
- - Open up Internet Explorer.

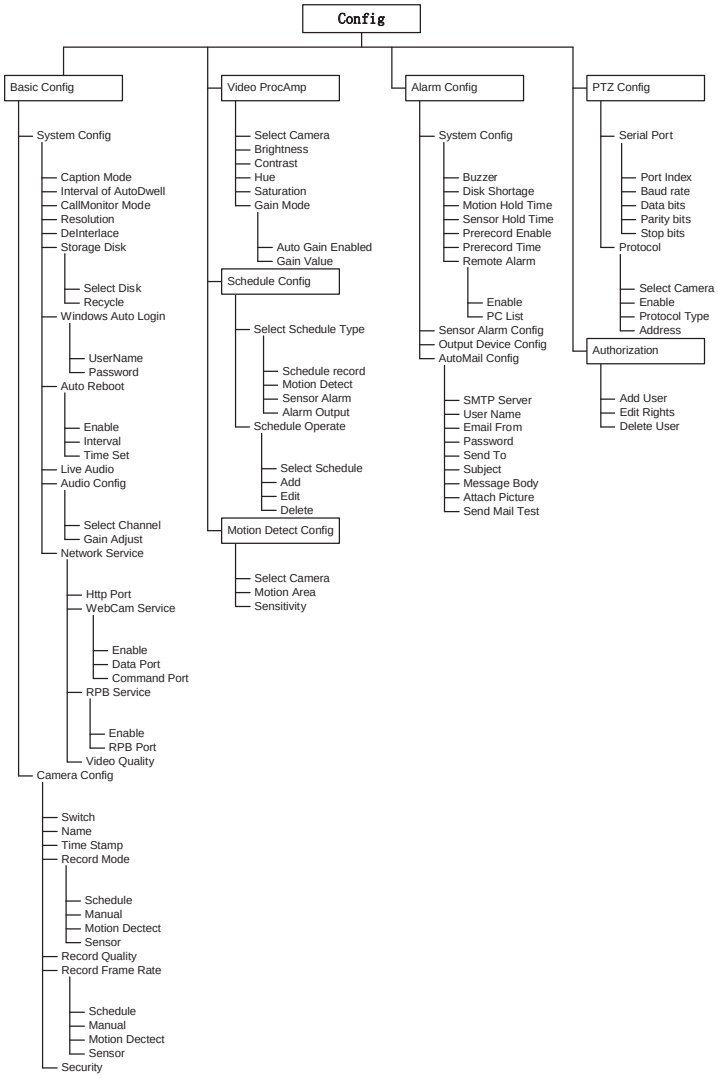
- If you are running XP with SP2 do the following: on Internet explorer, click on TOOLS and Internet Option, Security Tab, Custom Level, and “ENABLE DOWNLOAD UNSIGNED ACTIVEX CONTROLS”

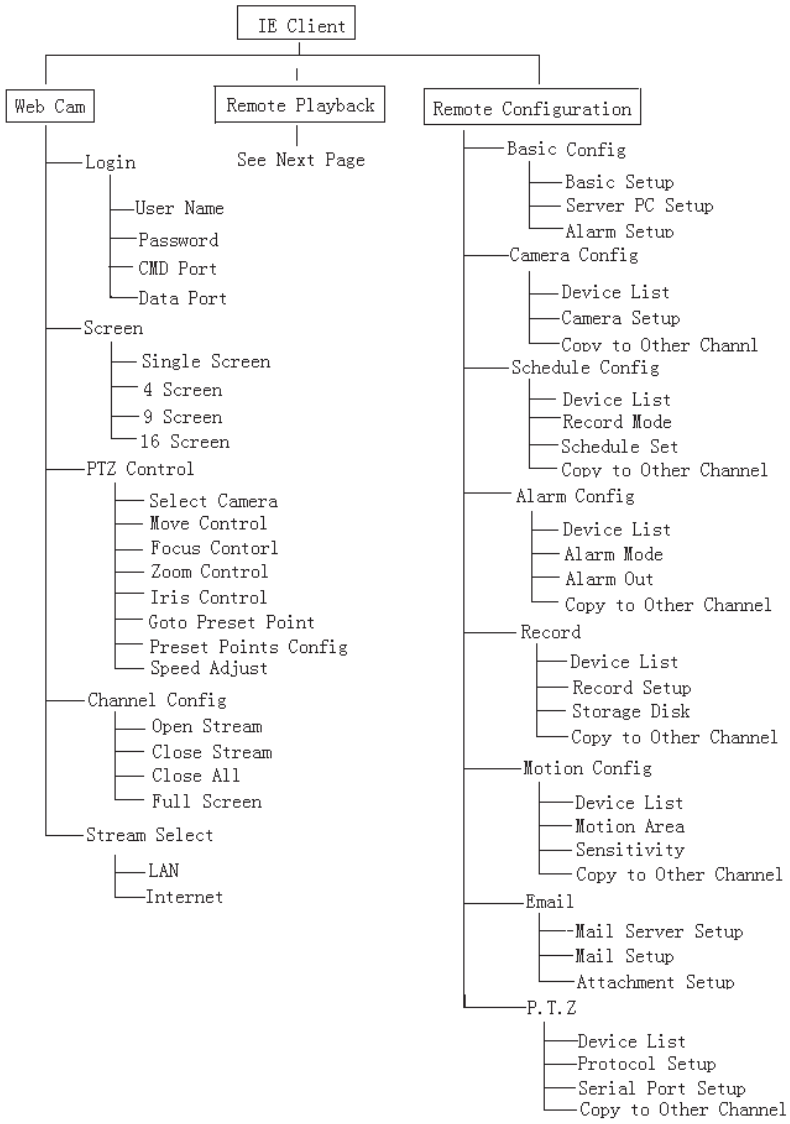
- In the address column of the Internet explorer, type in the IP address of Main Computer
- Click OK on Live Surveillance. This will download the webcam program. And then you can download Remote Playback as well.
- On Desktop now you should see WEBCAM and REMOTE PLAYBACK icon.
- Open up webcam, click on KEY symbol icon, user name: system. Password blank unless you setup a password within the main computer. Server: this the IP address of the main computer. Data port: 1159 and Command port: 1160. Click OK. Now you should be able to view the live video from main computer.
- To Play Back the VIDEO that has been recorded in Main Computer, Open up REMOTE PLAYBACK.
- Click on CONFIG. Remote server: the IP address of main computer. IP port: 1161. OK
- Click LOGIN. OK. Now you should be able to play back the recorded video from main computer.

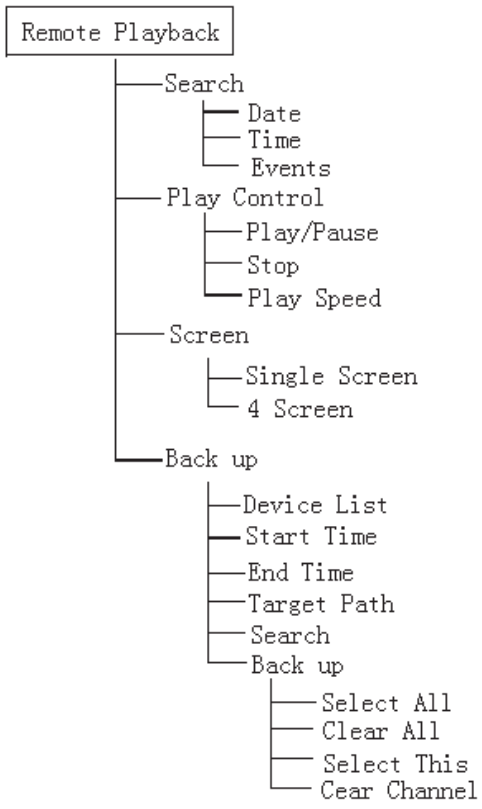
FOR MORE DETAILS INFO: READ THE MANUAL.

Appendix 4 Function Tree




Config
Basic Config
System Config
Caption Mode
Interval of AutoDwell
CallMonitor Mode
Resolution
DeInterlace
Storage Disk
Select Disk
Recycle
Windows Auto Login
UserName
Password
Auto Reboot
Enable
Interval
Time Set
Live Audio
Audio Config
Select Channel
Gain Adjust
Network Service
Http Port
WebCam Service
Enable
Data Port
Command Port
RPB Service
Enable
RPB Port
Video Quality
Camera Config
Switch
Name
Time Stamp
Record Mode
Schedule
Manual
Motion Dectect
Sensor
Record Quality
Record Frame Rate
Schedule
Manual
Motion Dectect
Sensor
Security
Video ProcAmp
Select Camera
Brightness
Contrast
Hue
Saturation
Gain Mode
Auto Gain Enabled
Gain Value
Schedule Config
Select Schedule Type
Schedule record
Motion Detect
Sensor Alarm
Alarm Output
Schedule Operate
Select Schedule
Add
Edit
Delete
Motion Detect Config
Select Camera
Motion Area
Sensitivity
Alarm Config
System Config
Buzzer
Disk Shortage
Motion Hold Time
Sensor Hold Time
Prerecord Enable
Prerecord Time
Remote Alarm
Enable
PC List
Sensor Alarm Config
Output Device Config
AutoMail Config
SMTP Server
User Name
Email From
Password
Send To
Subject
Message Body
Attach Picture
Send Mail Test
PTZ Config
Serial Port
Port Index
Baud rate
Data bits
Parity bits
Stop bits
Protocol
Select Camera
Enable
Protocol Type
Address
Authorization
Add User
Edit Rights
Delete User


IE Client
Web Cam
Remote Playback
Remote Configuration
Login
User Name
Password
CMD Port
Data Port
Screen
Single Screen
4 Screen
9 Screen
16 Screen
PTZ Control
Select Camera
Move Control
Focus Contorl
Zoom Control
Iris Control
Goto Preset Point
Preset Points Config
Speed Adjust
Channel Config
Open Stream
Close Stream
Close All
Full Screen
Stream Select
LAN
Internet
See Next Page
Basic Config
Basic Setup
Server PC Setup
Alarm Setup
Camera Config
Device List
Camera Setup
Copy to Other Channl
Schedule Config
Device List
Record Mode
Schedule Set
Copy to Other Channel
Alarm Config
Device List
Alarm Mode
Alarm Out
Copy to Other Channel
Record
Device List
Record Setup
Storage Disk
Copy to Other Channel
Motion Config
Device List
Motion Area
Sensitivity
Copy to Other Channel
Email
Mail Server Setup
Mail Setup
Attachment Setup
P.T.Z
Device List
Protocol Setup
Serial Port Setup
Copy to Other Channel


Remote Playback
Search
Date
Time
Events
Play Control
Play/Pause
Stop
Play Speed
Screen
Single Screen
4 Screen
Back up
Device List
Start Time
End Time
Target Path
Search
Back up
Select All
Clear All
Select This
Cear Channel