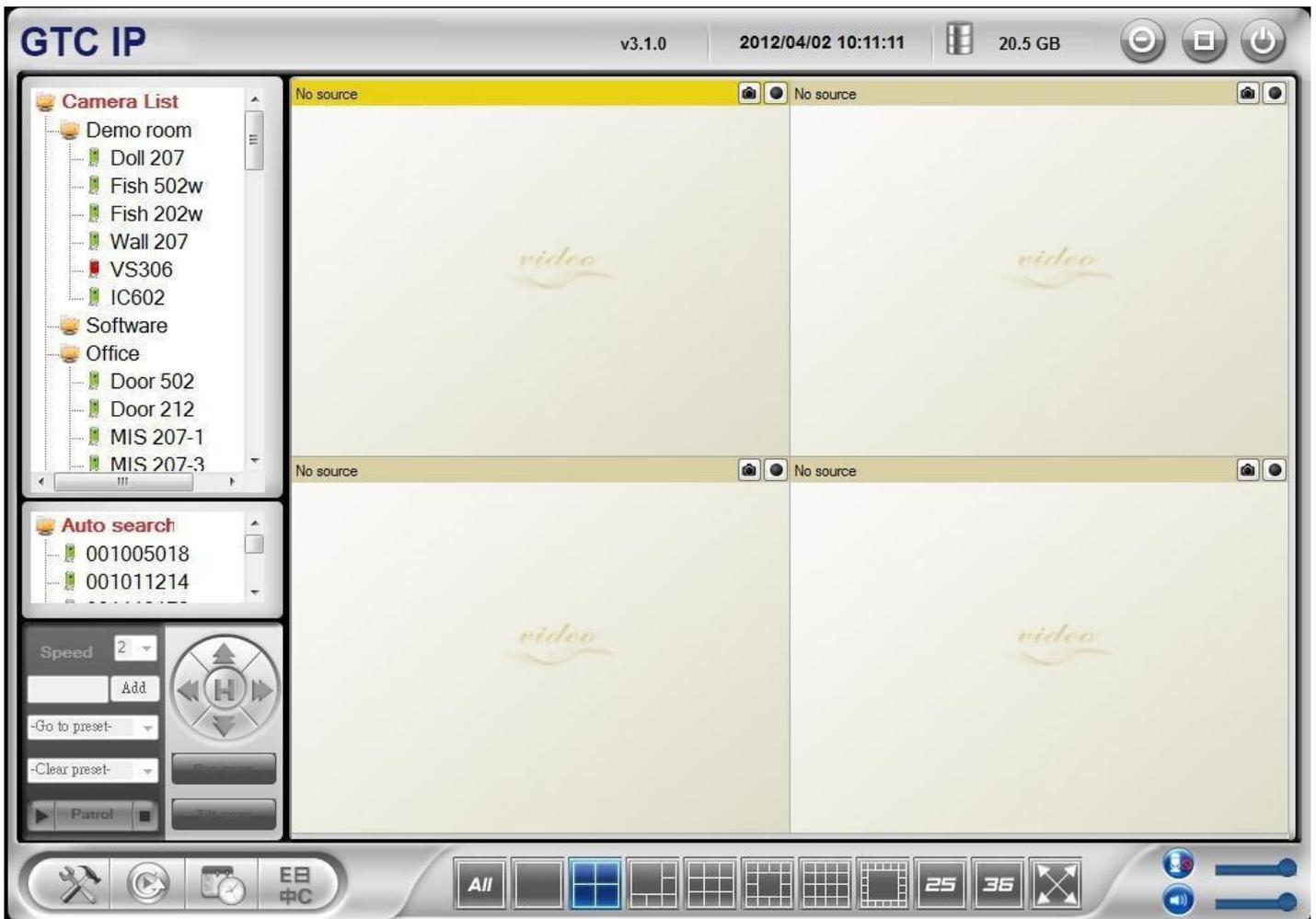


GTC IP User Manual

For Easy Connection IP Cam Series



Seeing the video from anywhere

Table of Content

INTRODUCTION	4
SYSTEM REQUIREMENT	4
GTC IP MANUAL	5
INSTALL GTC IP PROGRAM	5
STARTUP AND THE LAYOUT OF GTC IP.....	7
1. STARTUP GTC IP..	7
2. LAYOUT OF GTC IP...	7
3. DISPLAY MODE	8
MANAGING GTC IP CAMERA IP CAMERAS	8
1. NEW CAMERA	8
YOU CAN DELETE THE FOLDER.	9
2. NEW FOLDER	9
3. RENAME	9
4. DELETE	9
7. PLAY ON SELECTED WINDOW	10
5. REFRESH STATUS	10
6. CAMERA ADJUSTMENT	10
8. ID / PASSWORD SETTINGS	11
9. VIDEO SETTINGS	11
10. 3GPP SETTING	13
11. NAS PLAYBACK	14
12. SD-CARD PLAYBACK	15
13. FIRMWARE UPGRADE	16
14. DELETE	17
DISPLAYED VIDEO CONTROL	17
1. FULL WINDOW:	18
2. AUTO RECONNECT	18
3. STOP	18
4. PAUSE:	18
5. MOTION RECORDING	18
6. PROPERTIES:	18
7. SNAPSHOT & CONTINUOUS RECORDING	19
8. AUTO SEARCH	19
9. IP CAM ONLINE STATUS INDICATOR	20
10.PAN TILT PANEL FUNCTION	20
GTC IP SOFTWARE FUNCTIONS	22

1. SETTING	22
2. GTC IP PLAY	25
3. SCHEDULING	25
4. LANGUAGE	27
5. ALL FUNCTION	27
APPENDIX I: UNINSTALL GTC IP	28
APPENDIX II: PERFORMANCE INFORMATION.....	31
APPENDIX III: FREQUENT ASK QUESTION	31
GTC IP PLAY USER MANUAL	32
GTC IP PLAY- OPEN RECORD	33
GTC IP PLAY- OPEN NAS	35
GTC IP PLAY- OPEN SNAPSHOT.....	38
GTC IP PLAY FUNCTIONS	39
1. DIRECTORY:	39
2. LANGUAGE	39
4. CONVERT TO	40
PLAYBACK FUNCTION BAR	40
1. SNAPSHOT	41
2. ZOOM IN AND ZOOM OUT	41

Introduction

GTC IP is a 36 channel video management software package which is included with this Series IP Cameras. With this GTC IP software, it is just a mouse-click away to see the video of your IP Camera and surprisingly neither technical knowledge nor complex settings are required. Each IP Camera has a unique Camera ID (9 digits long) and a password for logging in to see the video.

System Requirement

1. Operation System: Windows XP SP2 and Up
2. Pentium 4 CPU 1.5GHz; 512MB & up DRAM

Note: For more than 4 cameras display, more powerful CPU and higher DRAM is needed

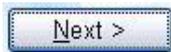
GTC IP Manual

Install GTC IP Program

Step 1. Please close other windows applications before proceeding.

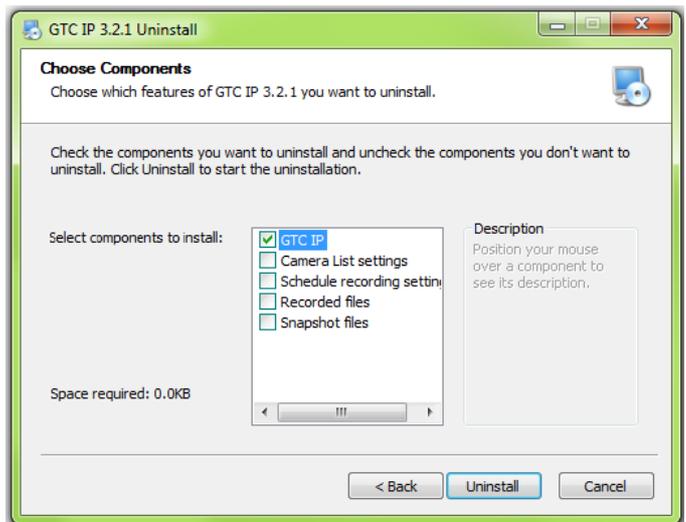
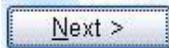
Step 2. Insert the installation CD into your CD-ROM drive and find the GTC IP Installer.exe. Double click it to start the installation process and you will see the

“Welcome” window. Click

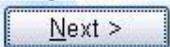


Step 3. If you are uncertain if the Framework 2.0 is already installed on your PC, please

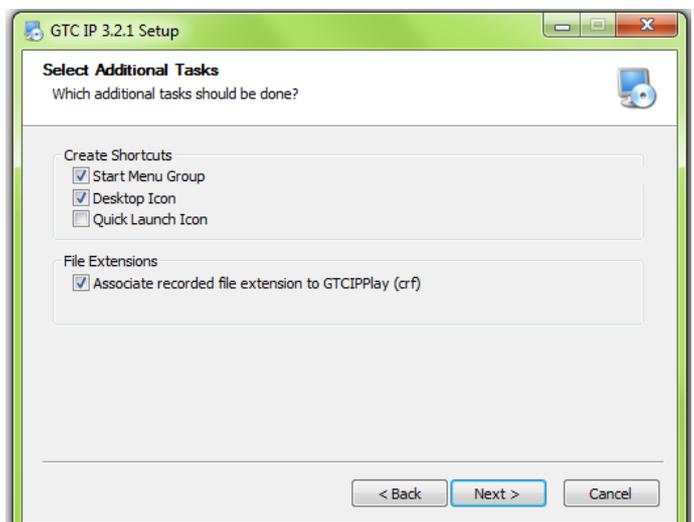
check .NET Framework 2.0. Click to proceed installation.



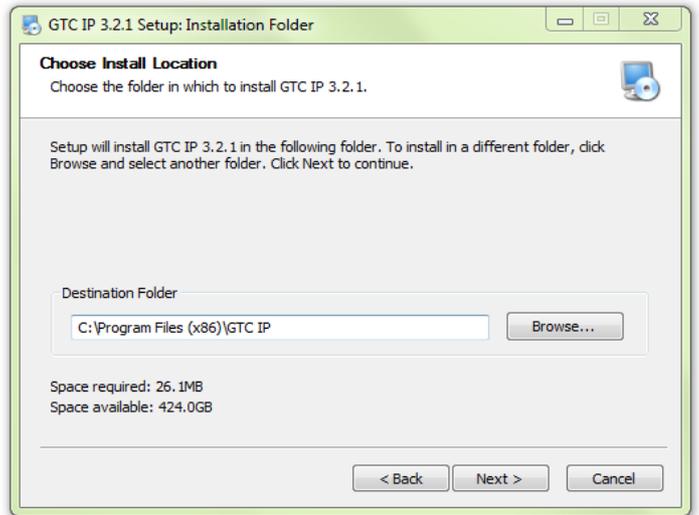
Step 4. Make a selection and click

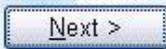


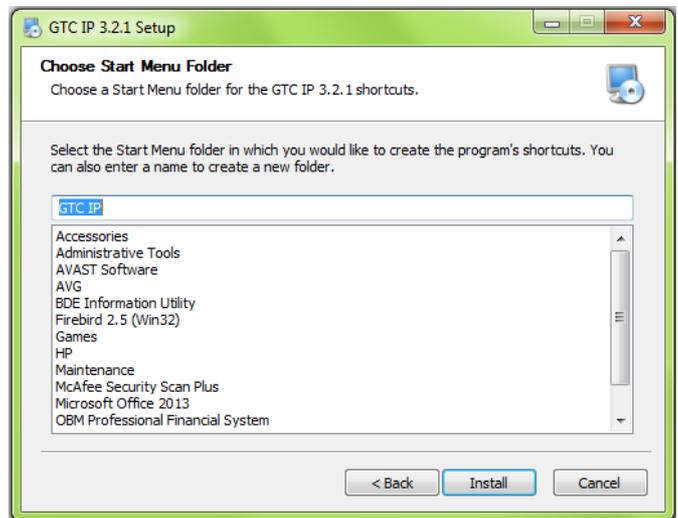
to proceed



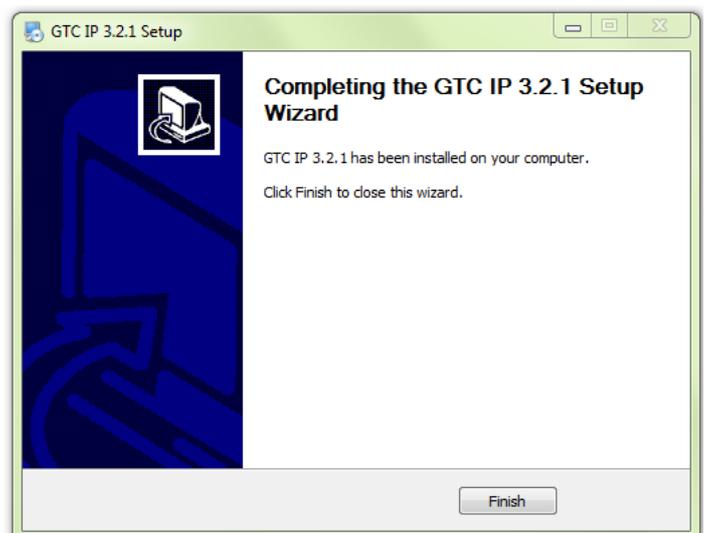
Step 5. Click  to proceed.



Step 6. click  to proceed.



Step 7 Click  to exit.
GTC IP installation now is completed.

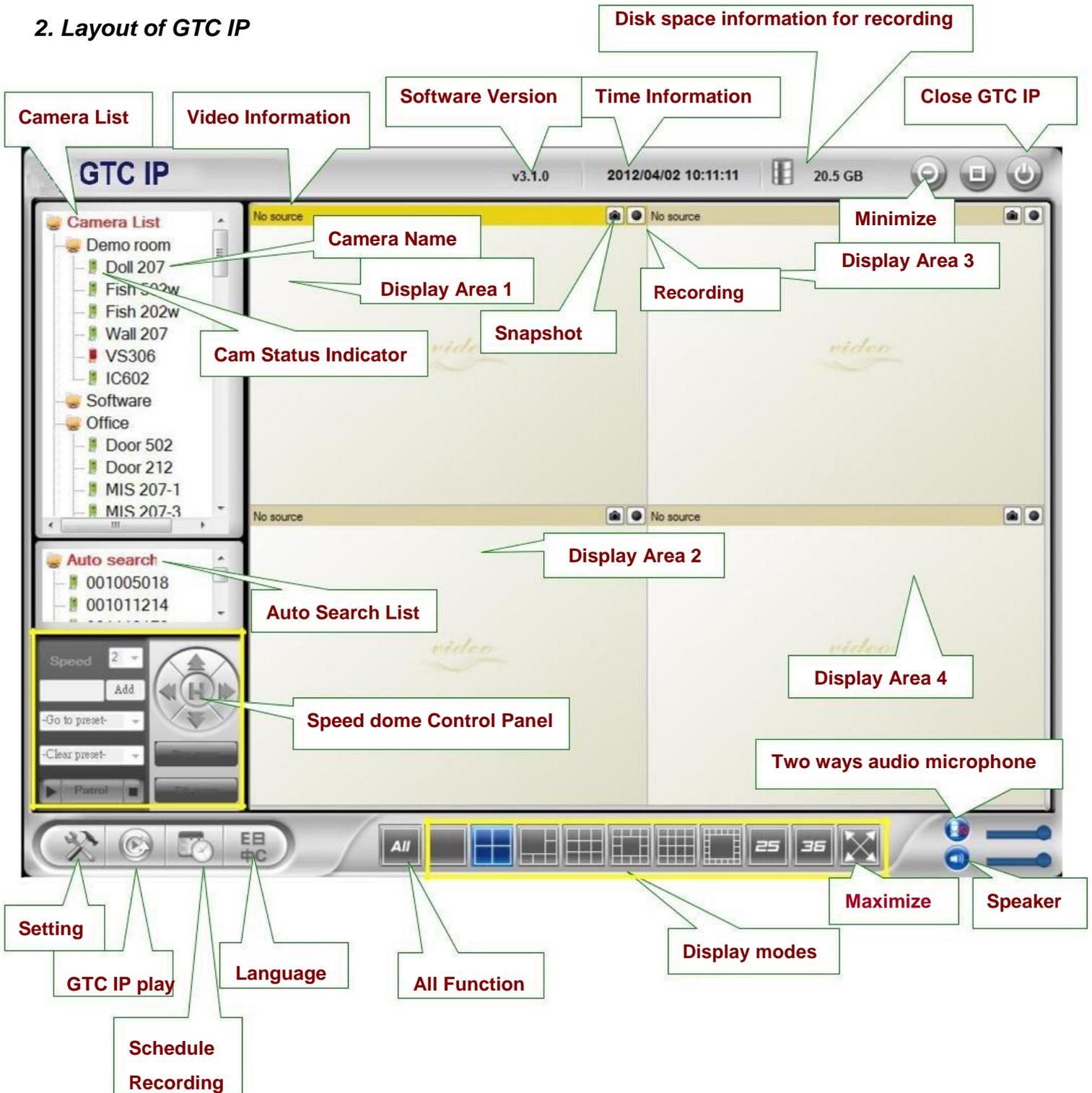


Startup and the layout of GTC IP

1. Startup GTC IP

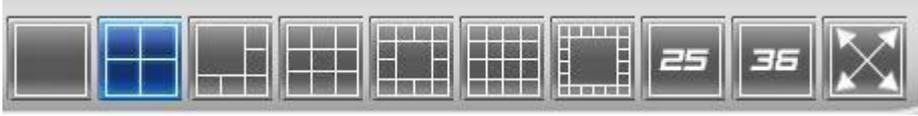
You can startup GTC IP from either Start → Programs → GTC IP or the shortcut of GTC IP on the windows desktop.

2. Layout of GTC IP



3. Display Mode

GTC IP supports 10 display modes. By pressing each mode, you can have a different live view display.



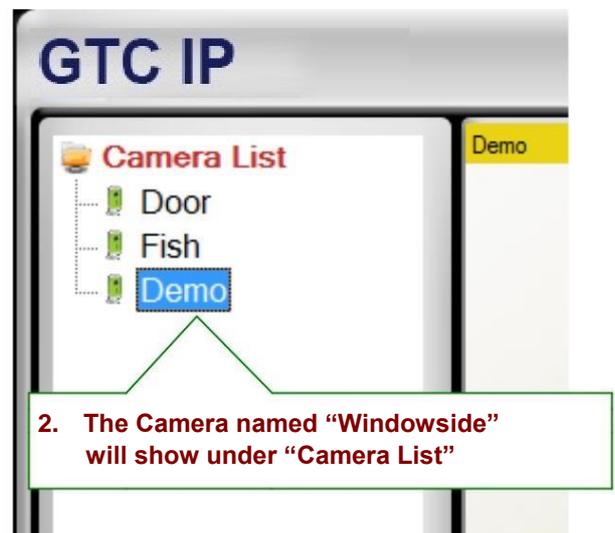
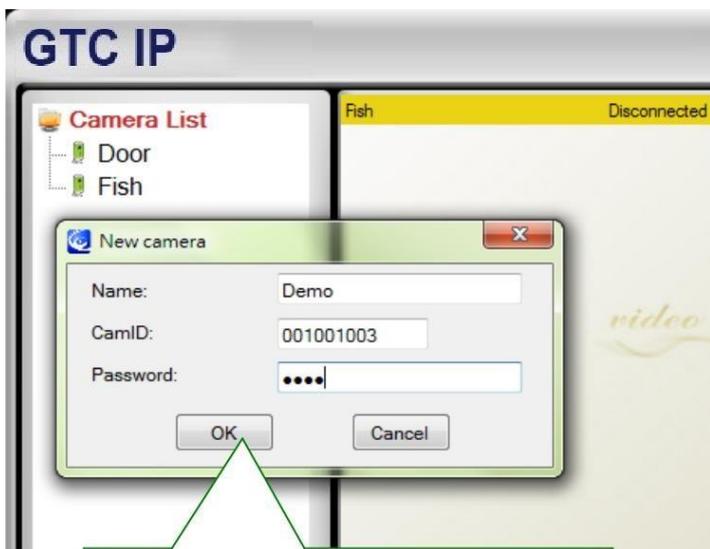
Managing GTC IP Camera IP cameras

Right click the "Camera List". You can add a new IP cam, create a new folder, rename the IP cam or the folder, and delete any IP cams or any folder.



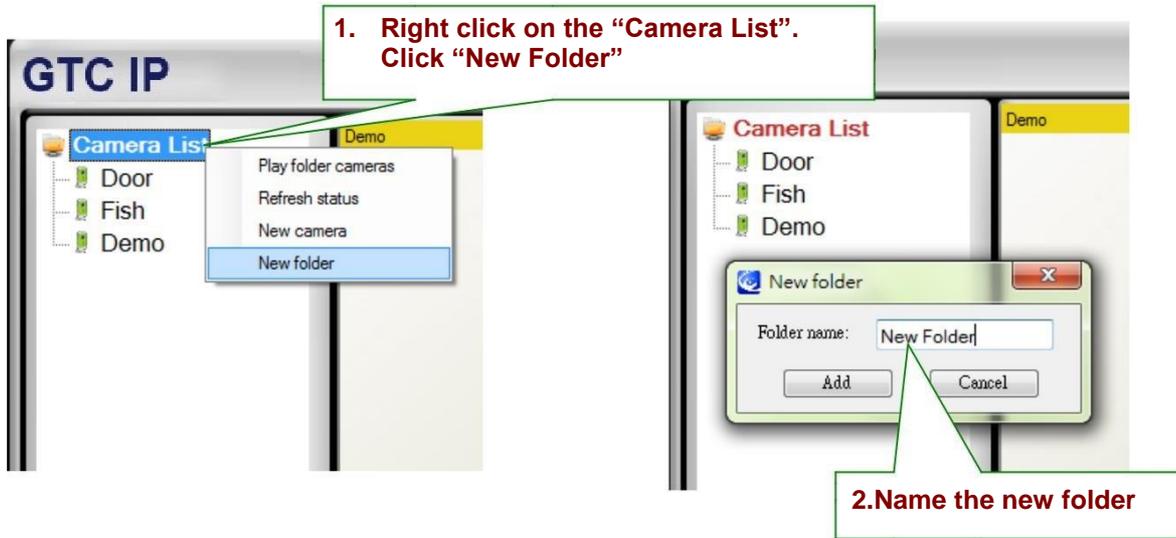
1. New Camera

Users can add a new camera to the list by entering IP cam ID and password. Users can also name the IP cam.



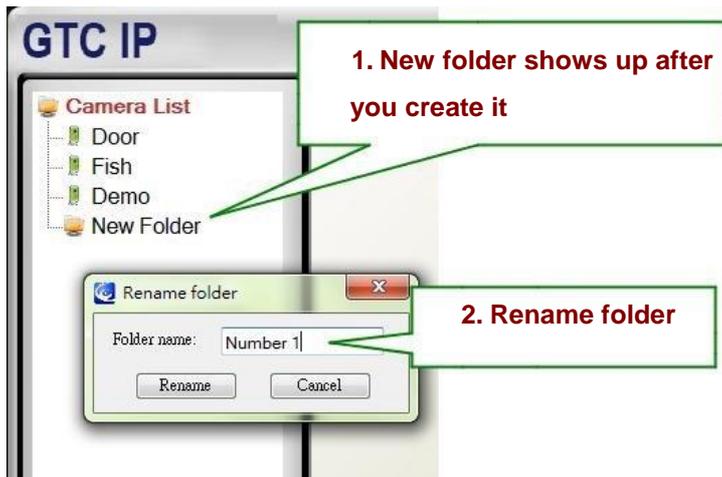
2. New Folder

Users can group IP cams by creating a new folder.



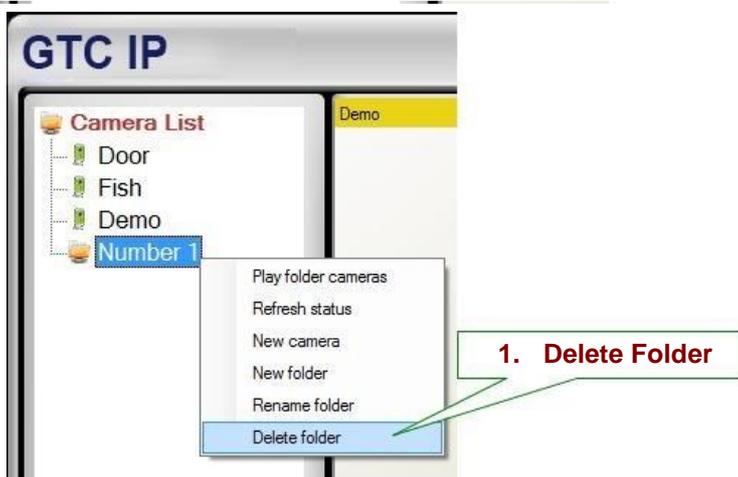
3. Rename

You can rename the folder.



4. Delete

You can delete the folder.



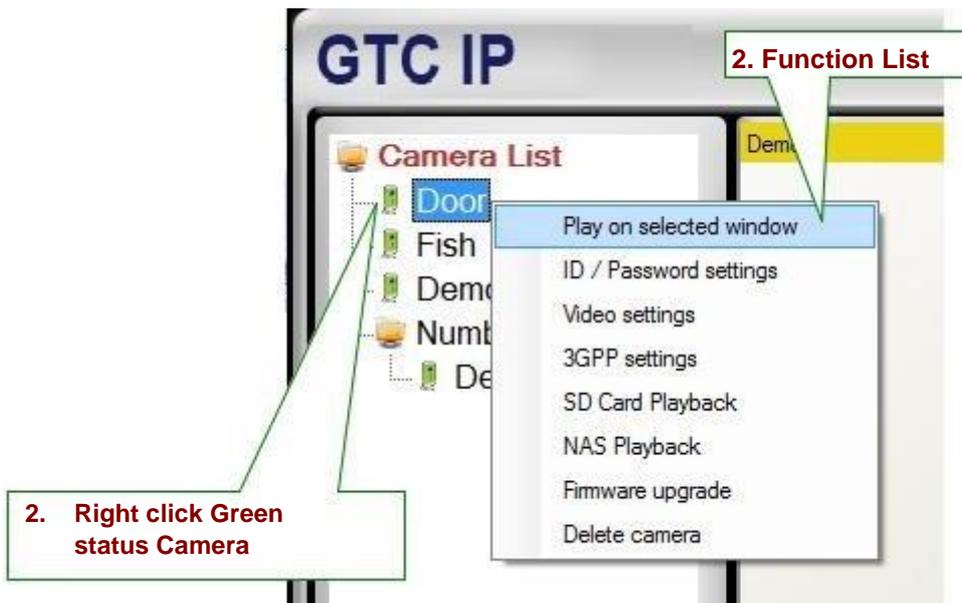
5. Refresh Status

You can click Refresh Status to update the latest connection status of cameras

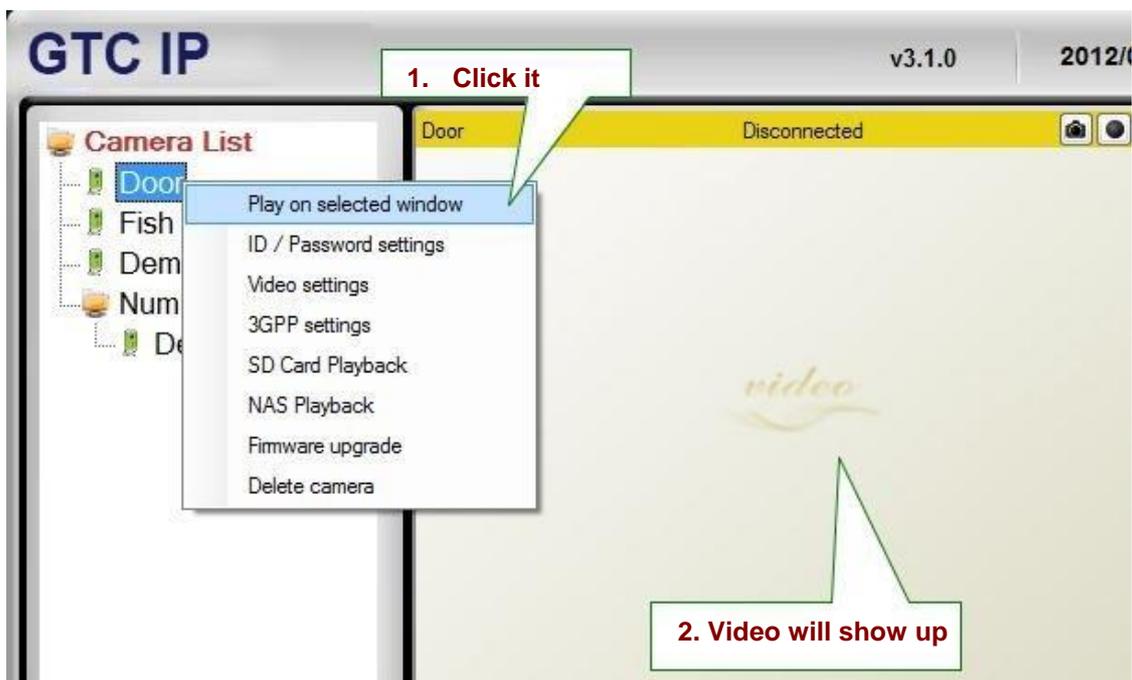
6. Camera Adjustment

By right clicking on a green light status IP cam, you can access the video display, do ID and password settings, adjust video settings, upgrade firmware, and delete from the list.

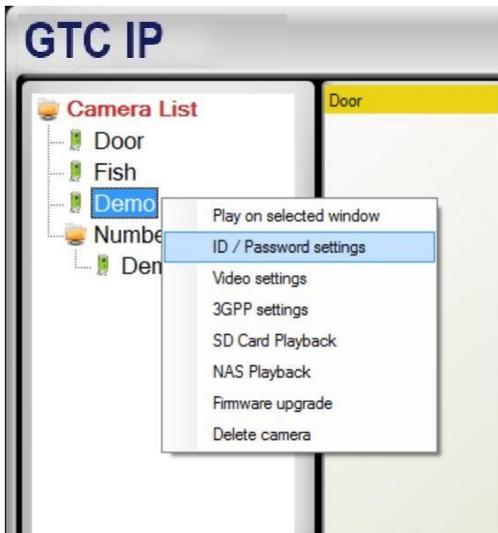
Note: Camera status must be green in order to access function list.



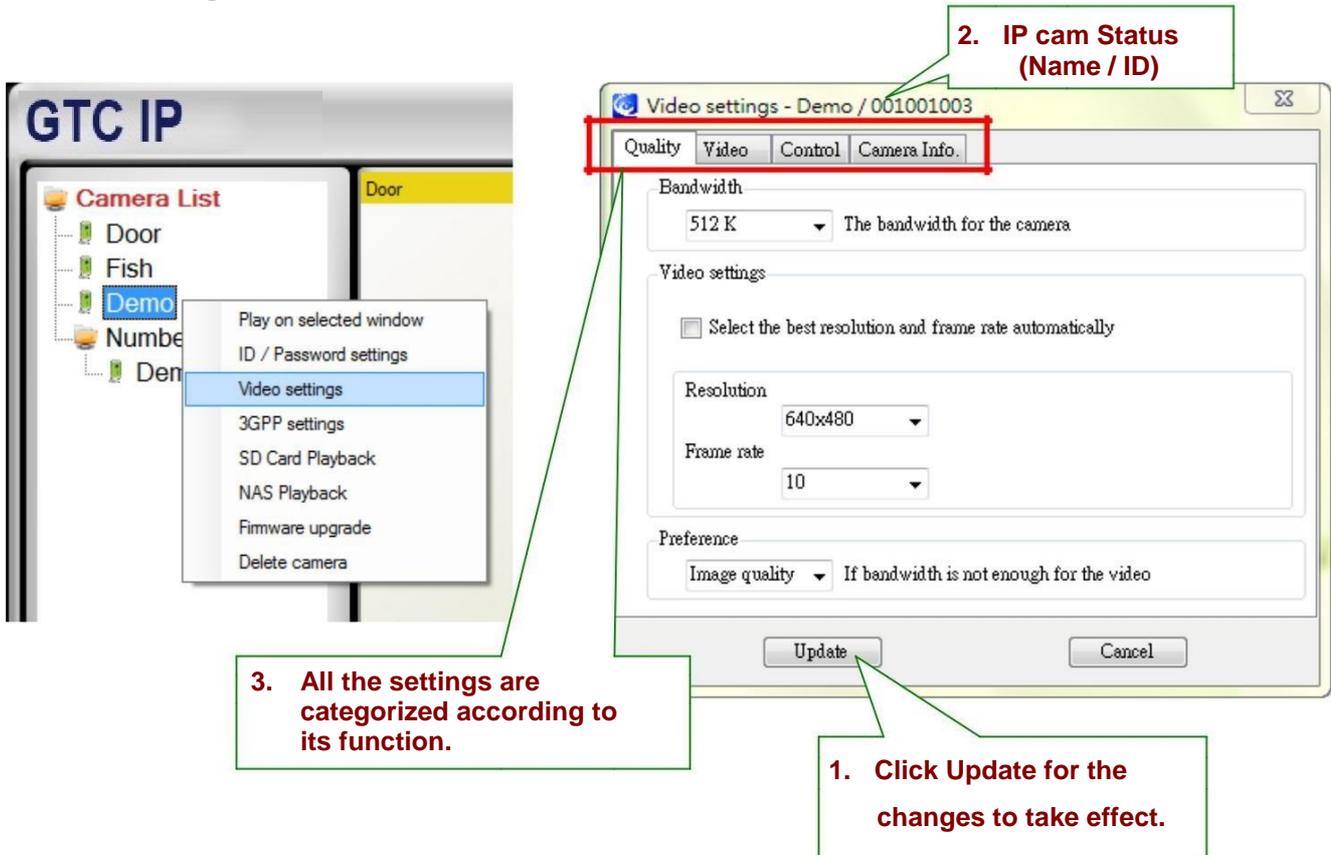
7. Play on Selected Window



8. ID / Password Settings



9. Video Settings



Quality Function Tab **Bandwidth**

Available selections are from 64K to 1.5M. Appropriate bandwidth setting must match the camera physical site internet uploading bandwidth. Higher bandwidth contributes better picture quality.

Video Setting

If you check the box of select the best resolution and frame rate automatically, the camera will automatically adjust the most suitable video setting in Resolution and Frame Rate

Resolution: higher resolution you set, bigger image you get.

Frame rate: Frame per second (1 to 30fps), higher frame rate you set, smoother motion you get.

Preference

By selecting Image Quality, the camera automatically adjusts itself for image quality as priority in case of interference with the network environment. Vice versa, by selecting the Video Motion, the camera automatically adjusts itself for video motion.

Video Function Tab

Video Color

User can set the video as colored image or black and white image.

Brightness

Control the brightness of the camera video from 1(dark) ~ 10(Bright) level

Sharpness

Control the level of sharpness and clearness of the image

Low Light Sensitivity

The level of the camera senses the low light condition.

Place

You can choose the camera installation environment in order to make camera automatically adjust for the best image quality.

OSD

On Screen Display. Enabling this function will make the camera embed the time information into the picture.

Microphone

Disable or enable the microphone. When you enable the Mic., the user who monitors the image can hear the sounds.

Video Flip

This function is only available for the Pan Tilt type of camera to flip the image.

The screenshot shows the 'Video' tab selected in a settings menu. The interface includes several sections with dropdown menus and checkboxes:

- Quality**: Video (selected), Control, Camera Info.
- Video color**: Color (selected)
- Brightness**: 5 (Medium) (selected)
- Sharpness**: (slider)
- Low light sensitivity**: Very high (selected)
- Place**: Indoor (selected)
- Light frequency**: 60 Hz (selected)
- OSD**: Enable time display on video
- Microphone**: Disabled (selected)
- Video flip**: Normal (selected)

Control Function Tab

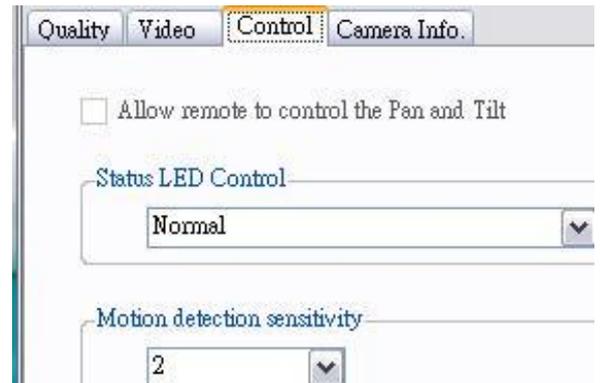
Check the box to allow user remotely controls the motors for Pan and Tilt. (Only available for the Pan/Tilt type of camera)

Status of LED Control

User can control the behavior of the status LED.

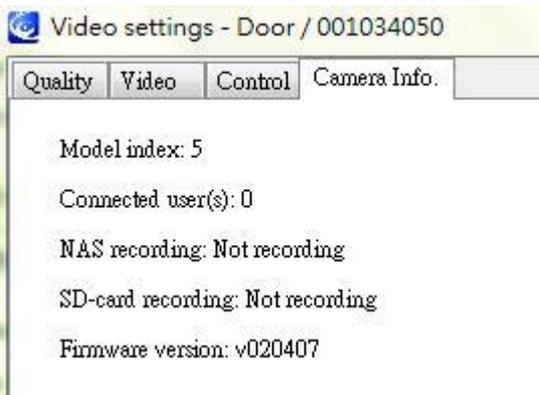
Motion Detection Sensitivity

The level of how sensitive the camera is in terms of the motion detection.

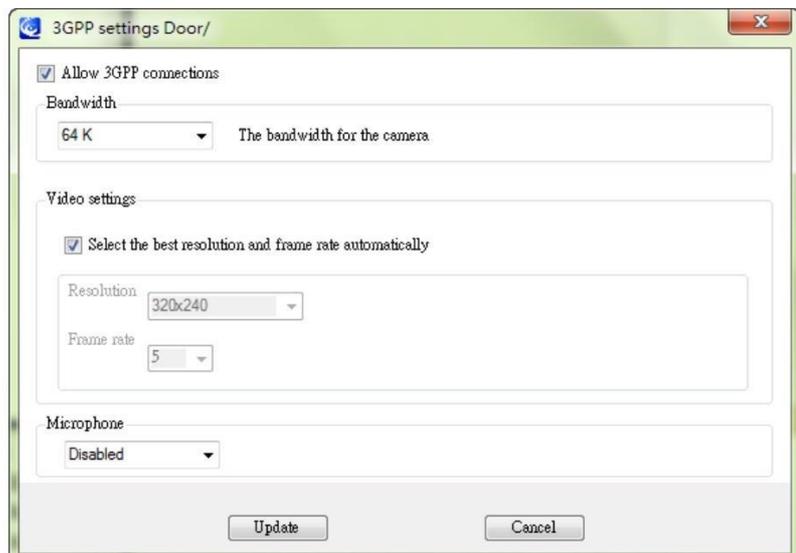
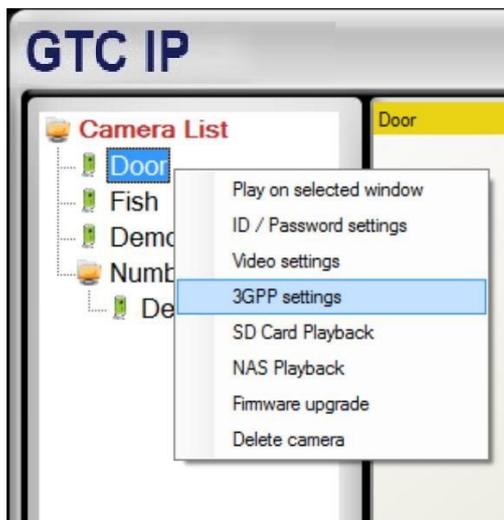


Camera info Tab

Show the IP camera information and firmware version.



10. 3GPP Setting



To allow 3GPP connections from mobile phones, user has to enable it.

Bandwidth

The bandwidth setting for 3GPP connection from 32k to 256K.

Video Setting

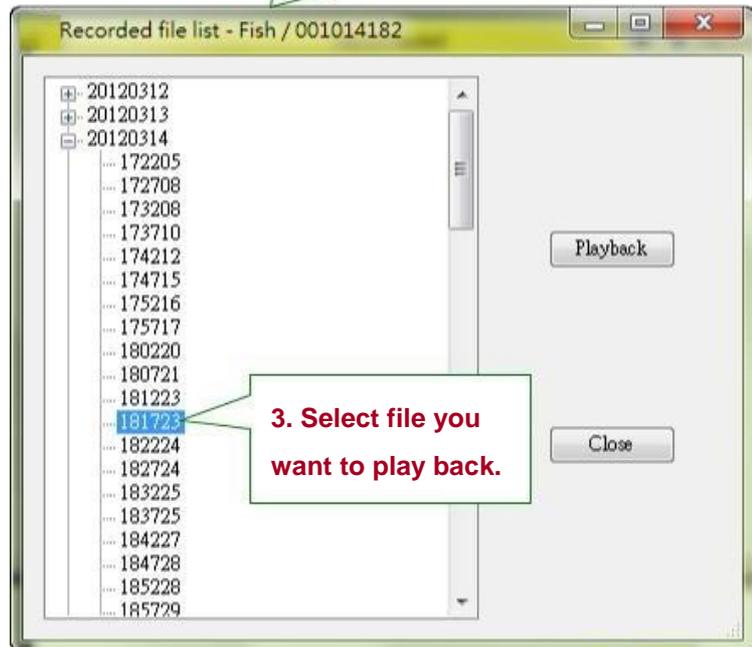
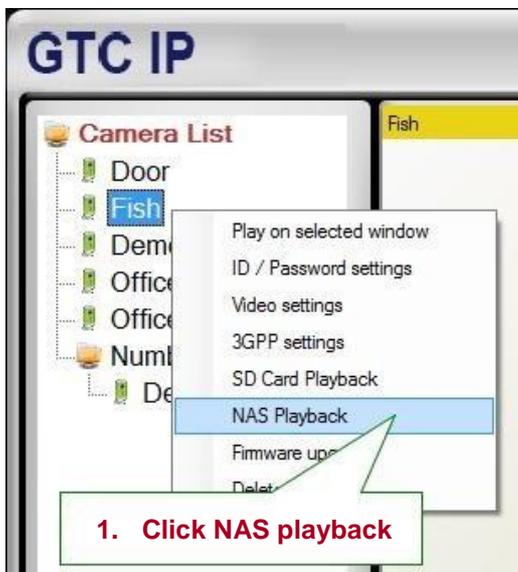
Check the box to make the camera determine the best combination of the resolution and frame rate according to the given bandwidth.

Microphone

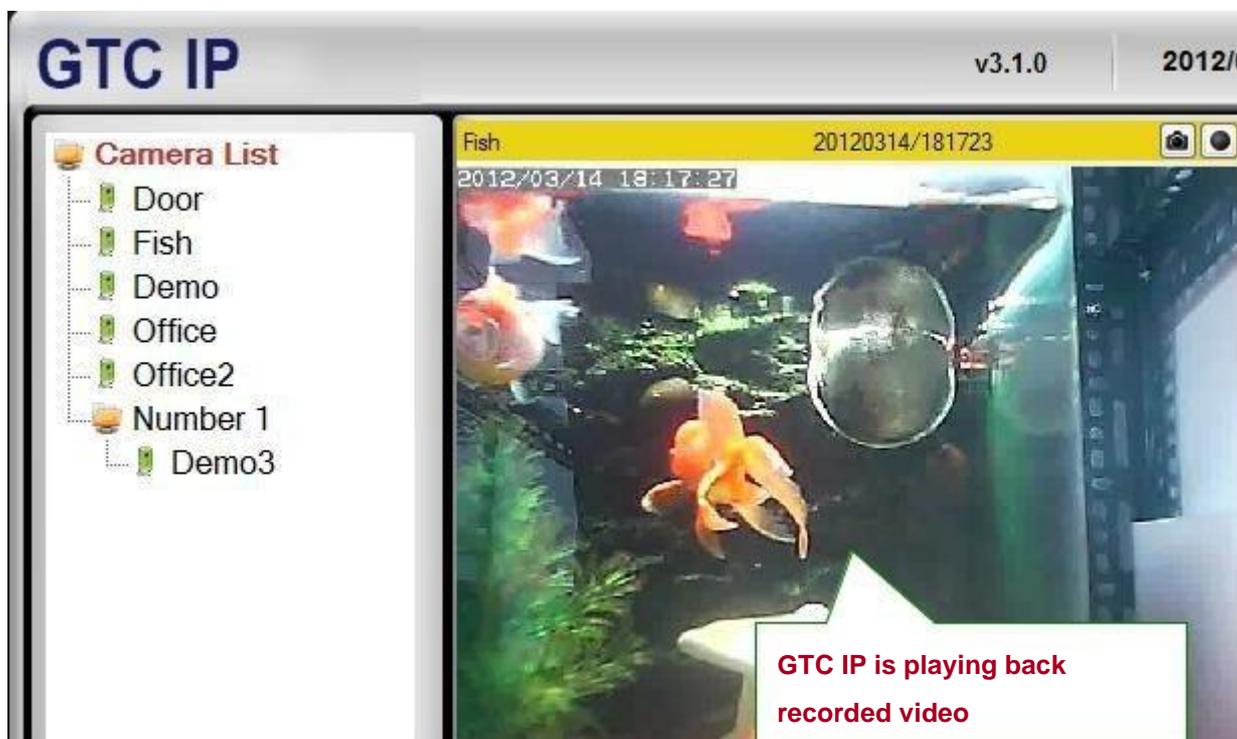
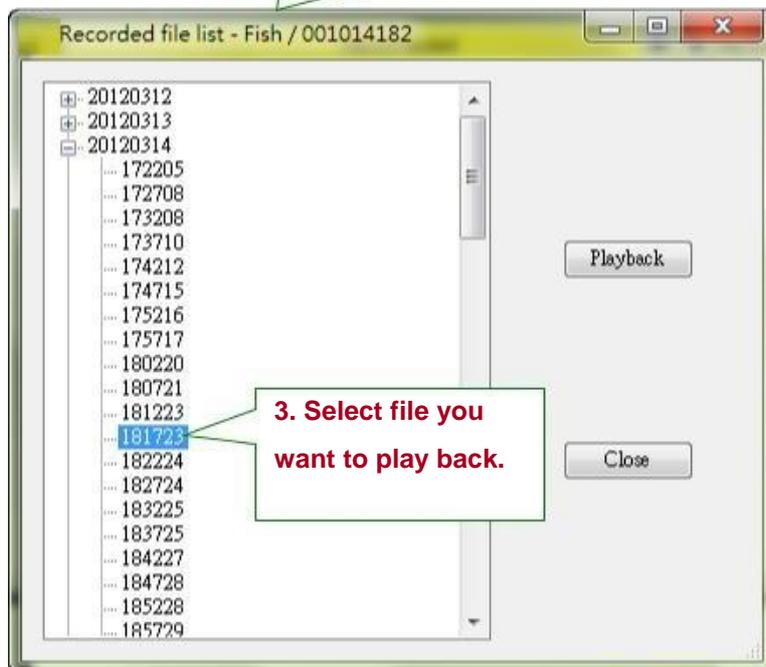
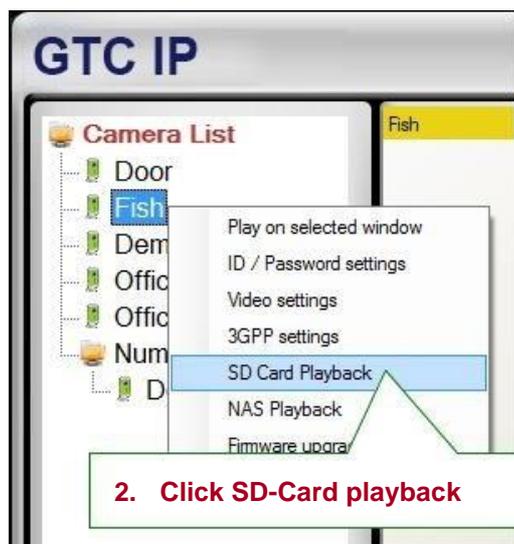
Allow user to hear sounds on the 3GPP Device

2. Window shows recorded files in NAS which selected camera records videos.

11. NAS Playback



12. SD-Card Playback

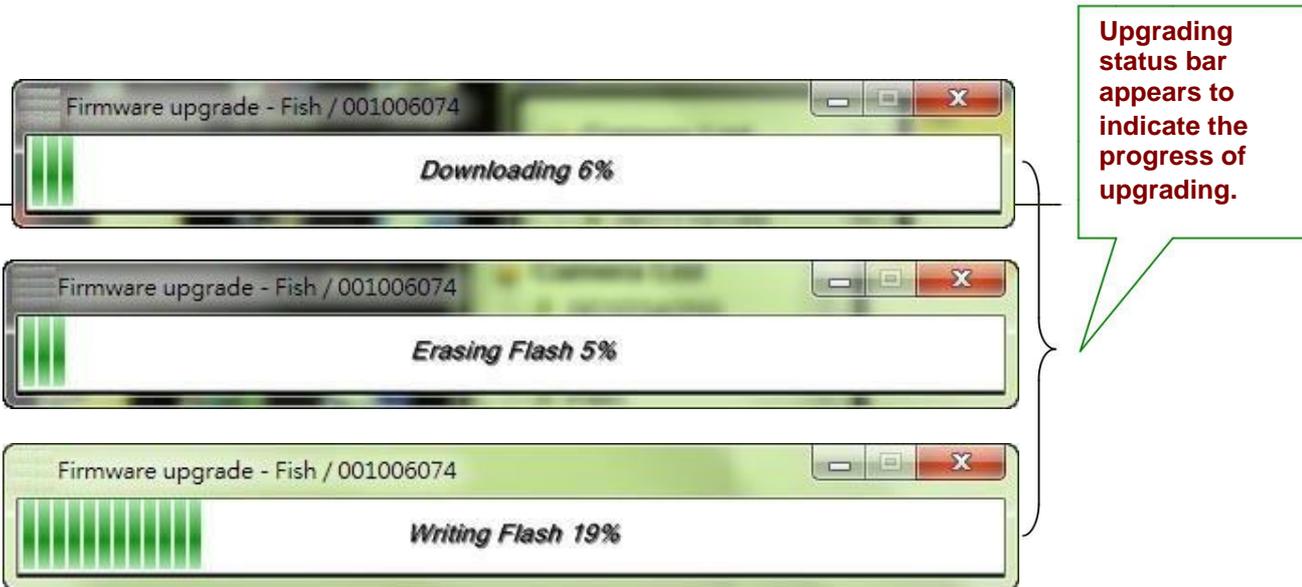
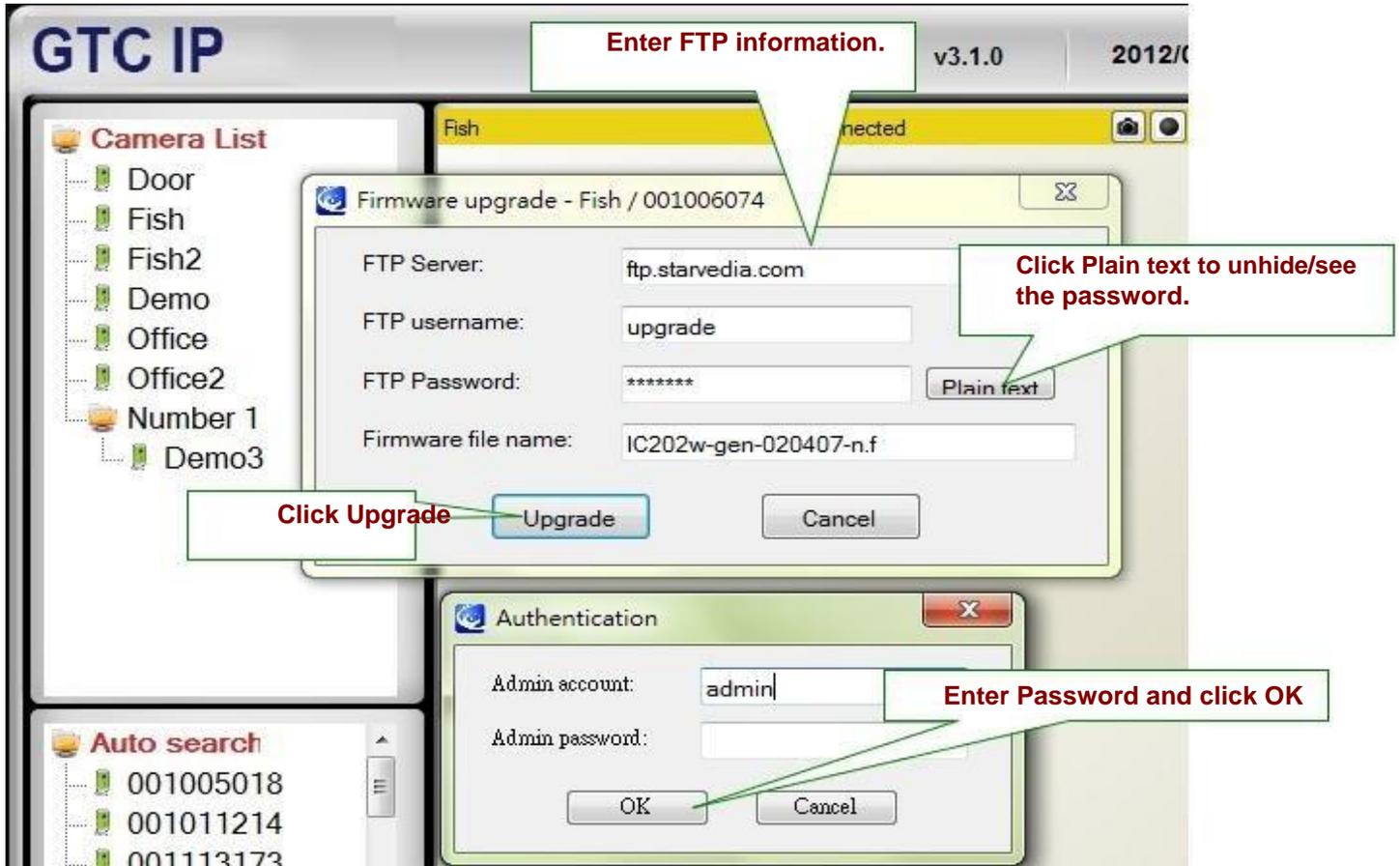


13. Firmware Upgrade

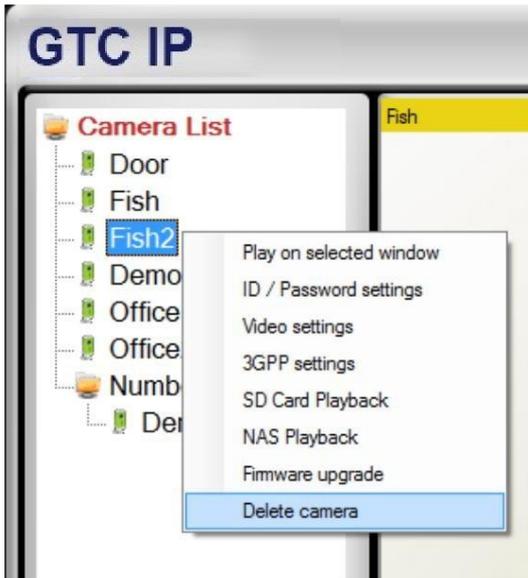
In case of new firmware is released, enter FTP server address, FTP username, firmware name, and FTP password to upgrade camera firmware.

The default password of Authentication is “**admin**”.

Note: Users can change the default Firmware Upgrade Authentication password in the Web Page Configuration. Please refer to page 34.



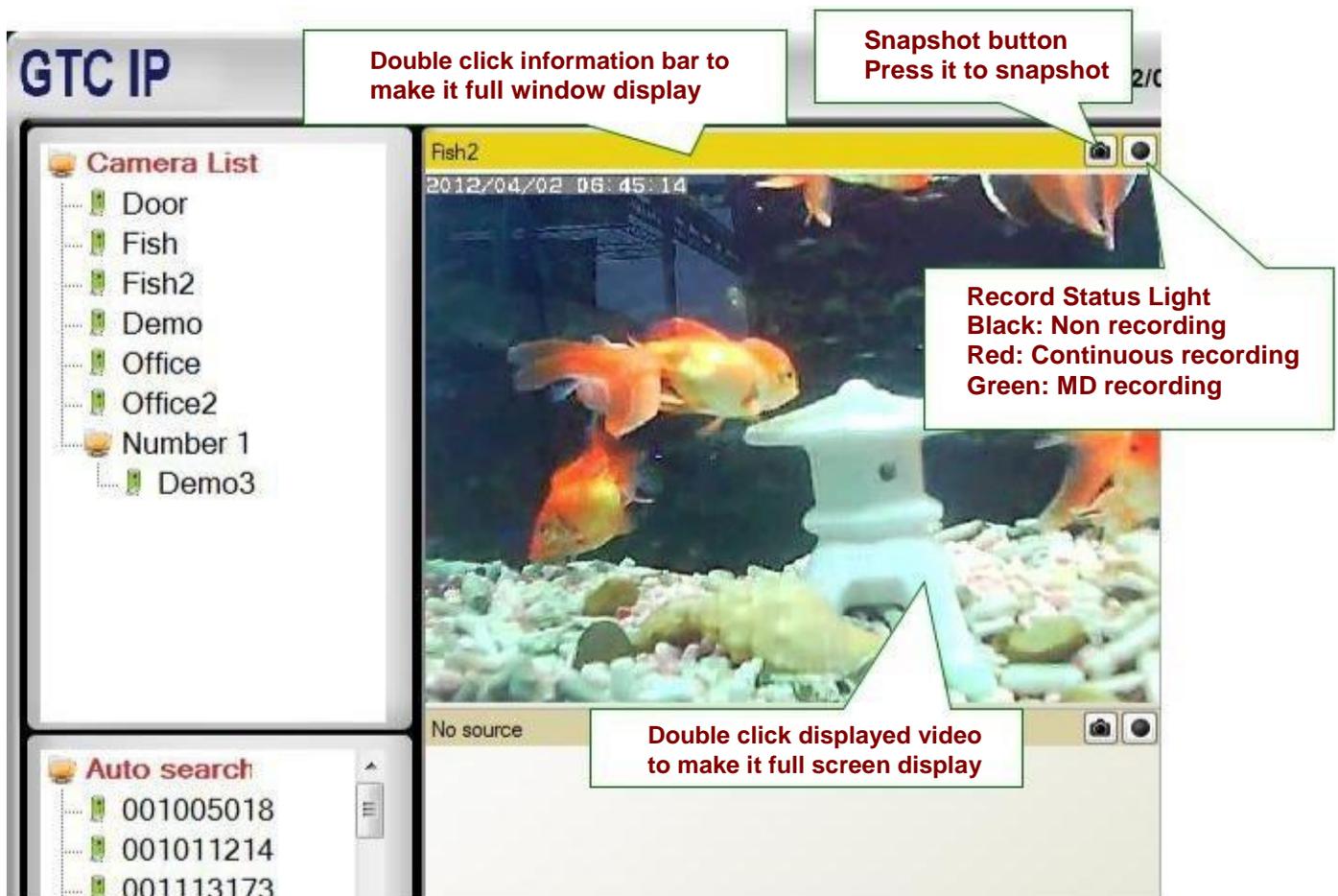
14. Delete



Delete the IP cam.

Displayed Video Control

Use mouse to select displayed window. Right click to see various functions.



1. **Full Window:** Choose it to display video in full window. Users can also double click the information bar to display in full window. Double click the displayed video to make full screen display. One more double click changes back to normal window display mode.
2. **Auto Reconnect:** Checking “Auto reconnect” option reconnects the video session automatically if the session is closed by the IP Camera, for example, the settings of the IP Cam has been changed or the Internet connection of the IP Cam has lost.
3. **Stop:** Click to stop video displaying.
4. **Pause:** Click to pause video displaying.
5. **Motion Recording:** Click to enable motion detection recording. When motion detection recording is activated, recording status turns to Green.



6. **Properties:** Show current IP cam's frame rate, consuming bandwidth, resolution, and video compression.



7. Snapshot & Continuous Recording



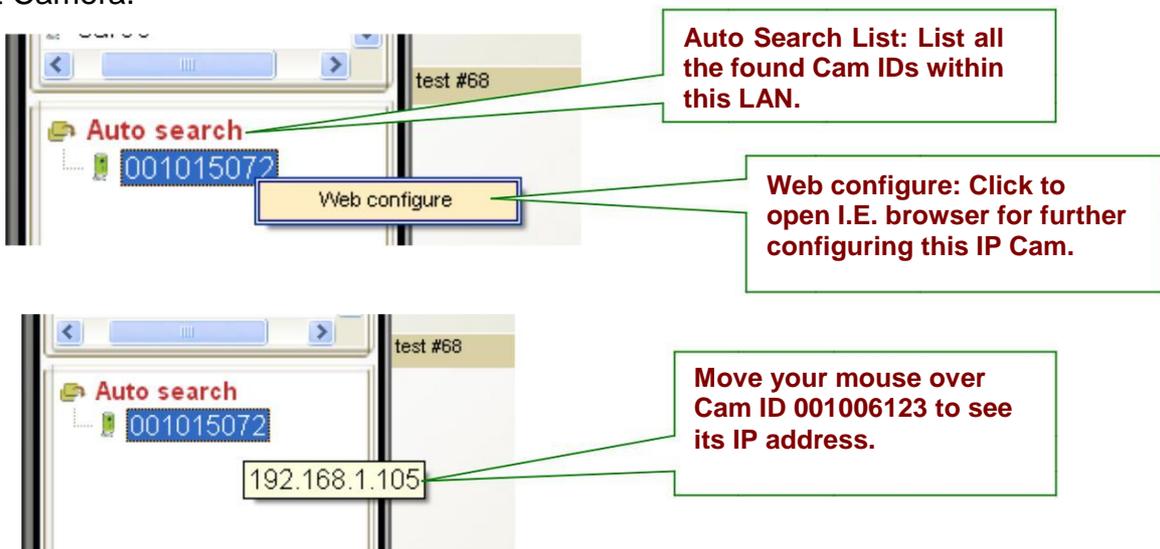
8. Auto Search



Auto search is a function that searches for all IP Cameras on your LAN (Local Area Network). At the very beginning of GTC IP startups, GTC IP automatically does the auto search.

To do auto search manually, double click on the “Auto Search” folder. GTC IP searches all available IP cams in the LAN and lists all IDs under the folder. Right click on the find Cam ID and select “Web Configuration” to access the IP cam’s web page for configuration.

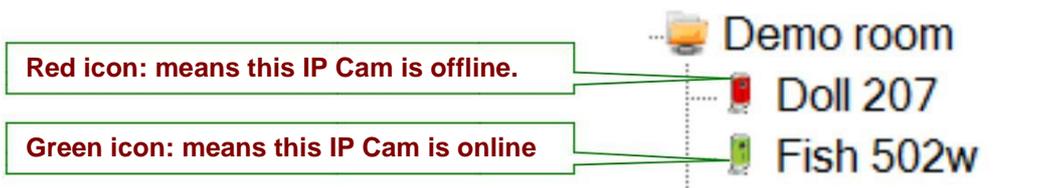
Move the mouse cursor over the Cam ID under Auto Search, you can see the IP address of that Camera.



9. IP Cam online status indicator

There is an IP Cam icon in front of the Camera Name which indicates the online status of that IP Camera.

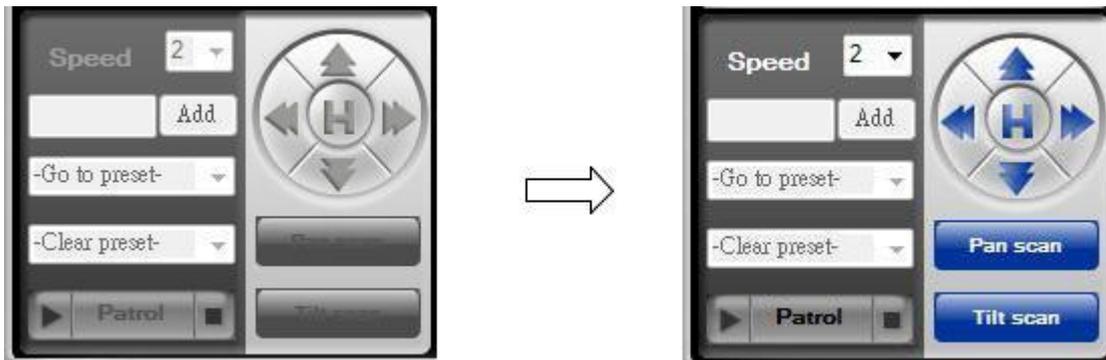
- **RED** → IP cam is off line, not connecting to internet.
- **GREEN** → IP is on connected to internet.



Note: The green icon indicates the IP Cam is online and responding, but not guarantees that the video session can be established 100%. Unfavorable Firewall setting may block the video.

10. Pan Tilt Panel Function

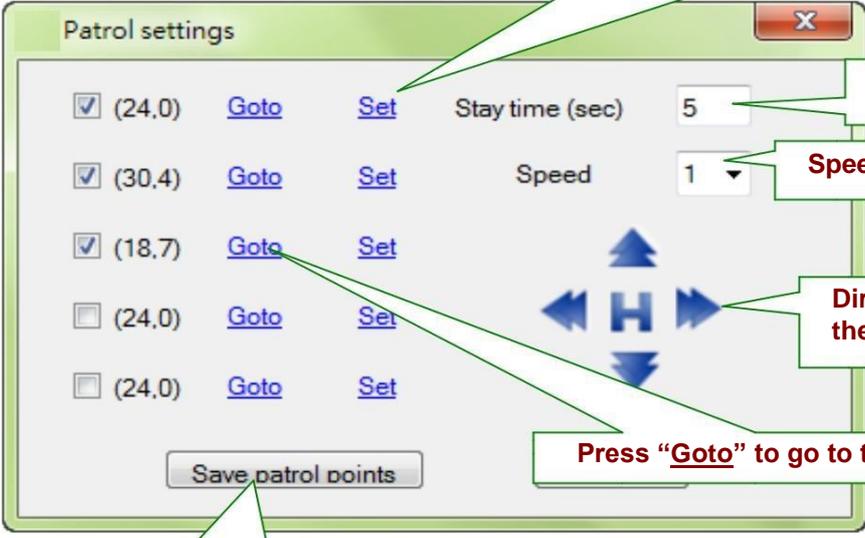
Connect to Pan Tilt Dome Camera and drag to any channel in the software, the Pan Tilt Panel will be activated as below:



- Pan Scan: make the Pan Tilt Dome move left and right
- Tilt Scan: make the Pan Tilt dome up and down
- Speed: the speed of Pan Tilt Dome has 3 level of speed (3 is the fastest, 1 is the slowest)

-  : Move Up
-  : Move Down
-  : Move Right
-  : Move Left
-  : Move Back to Home

Patrol: User can have 1 set of Patrol and 5 points for each Patrol. To set each point for the patrol, User can use the direction arrow in blue to set each point the user want to stop in a patrol. After set each point, click “set” to save each point.



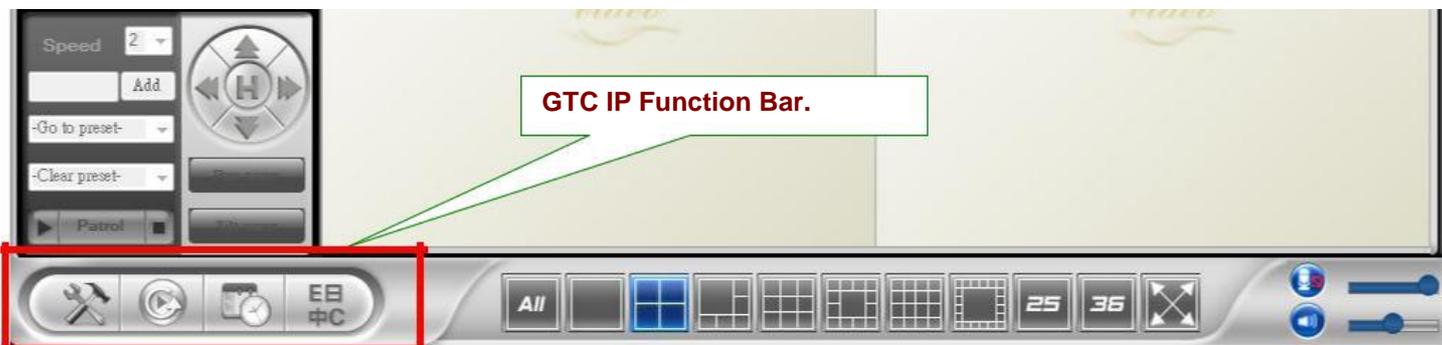
The screenshot shows a 'Patrol settings' window with a table of points and control options. Callouts provide the following instructions:

- Press “Set” after you decide the point you want to stay stop in patrol**: Points to the 'Set' button in the first row.
- The time to stay in each point**: Points to the 'Stay time (sec)' input field with the value '5'.
- Speed to move**: Points to the 'Speed' dropdown menu with the value '1'.
- Direction arrow for the Patrol point**: Points to the central navigation controls (up, down, left, right arrows and a home 'H' button).
- Press “Goto” to go to the point.**: Points to the 'Goto' button in the first row.
- After setting for each point, press saves to save these points for patrol**: Points to the 'Save patrol points' button at the bottom.

Preset: This function will be activated after any PTZ Dome connect with video server

Zoom in & out: This function will be activated after any analog PTZ Dome Camera connect to IP video server

GTC IP Software Functions

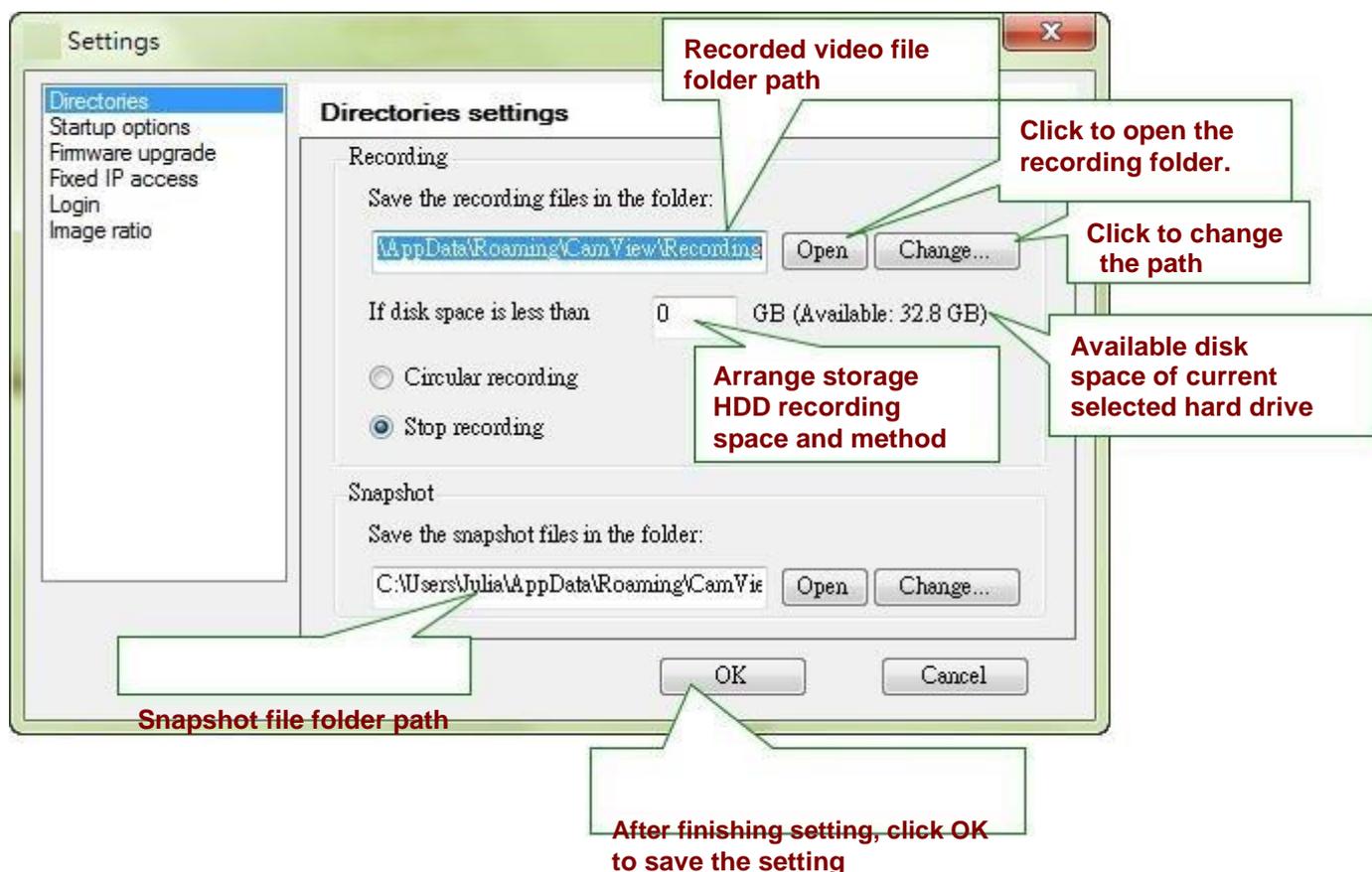


1. Setting



Click Settings and get into the Setting Function menu.

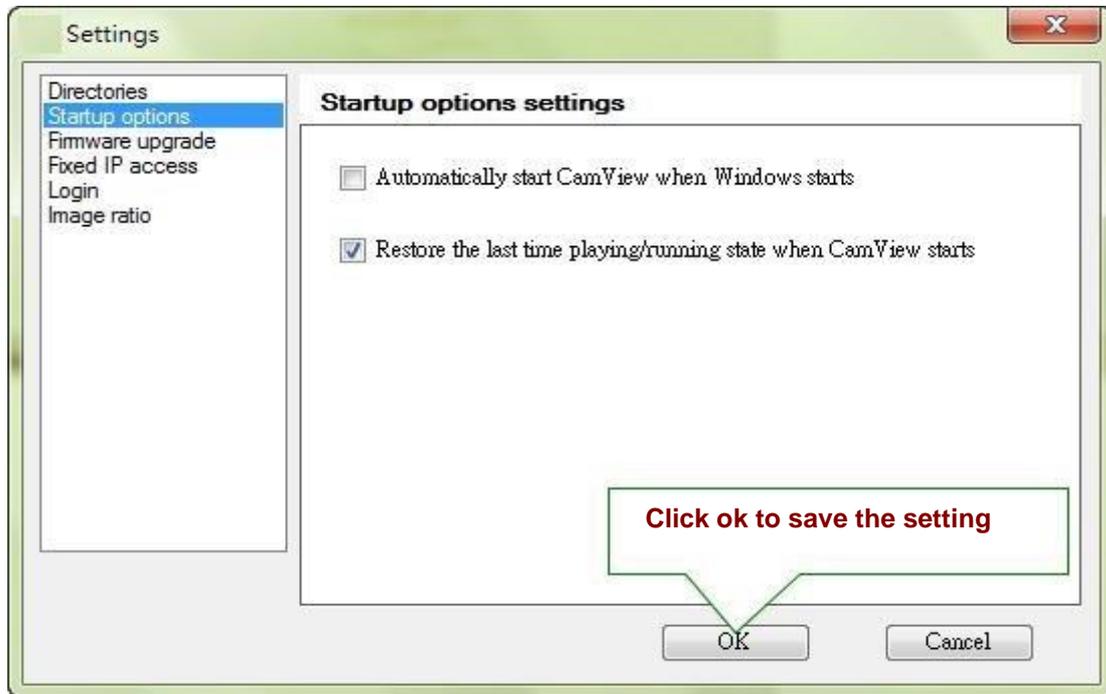
■ **Directories Settings:** to set the directory path for the Recording and Snapshot



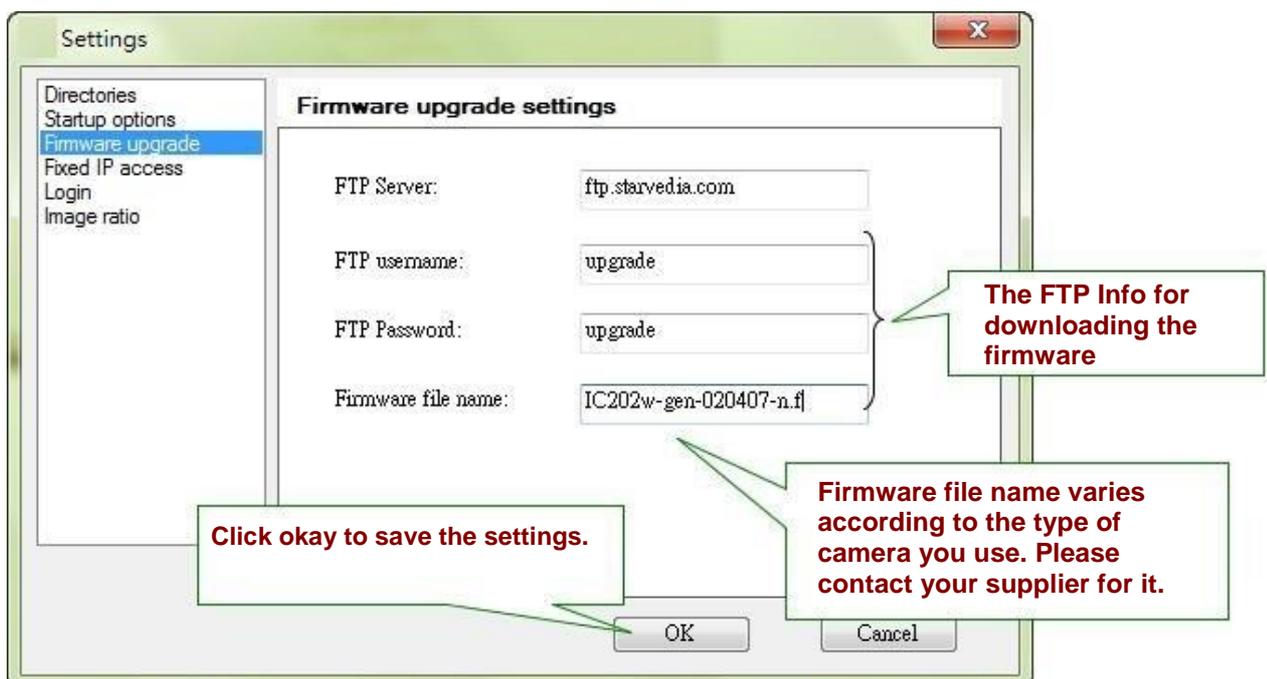
■ **Startup Options:** Determine the camera state at startup

Automatically start GTC IP when Windows starts: When Microsoft Windows starts, GTC IP will start running automatically.

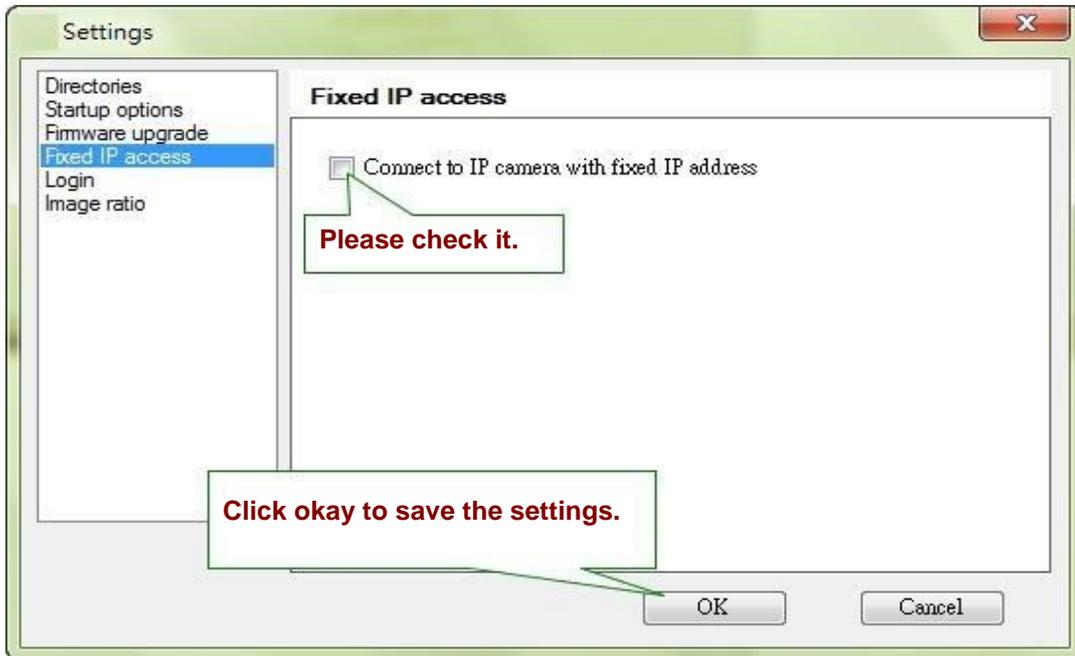
Restore the last time playing/running state: Restore the state of each video window to what it was before GTC IP closed.



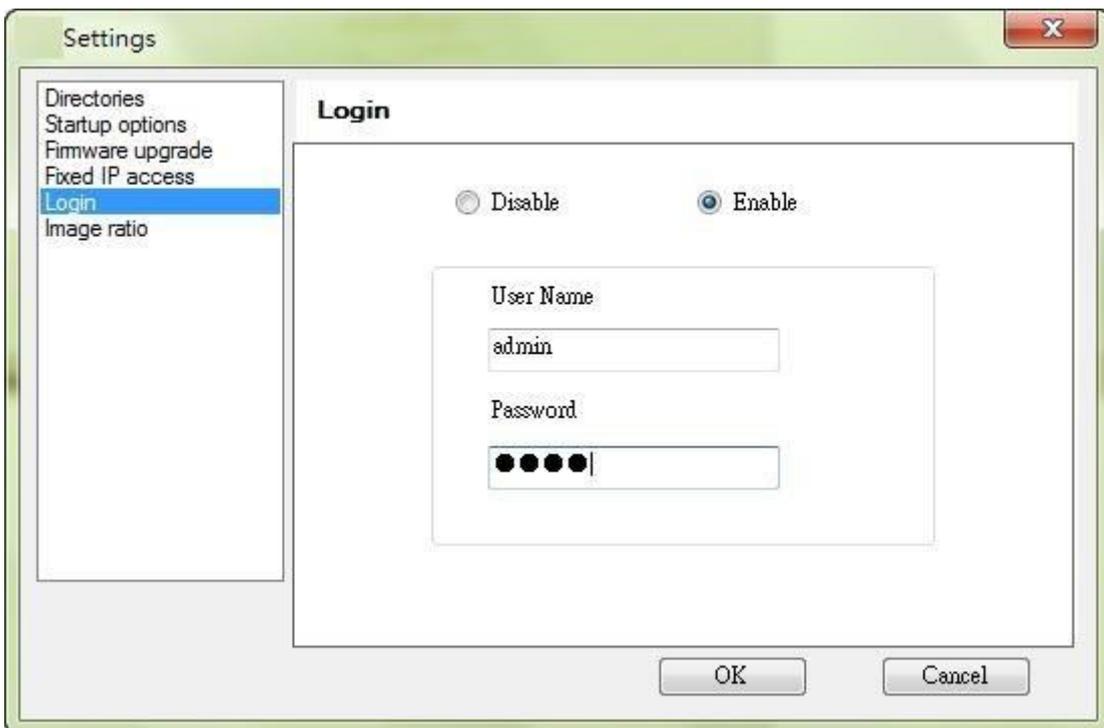
■ **Firmware Upgrade:** Here you can assign the default values for firmware upgrade. By doing so, it saves your time to enter the same information every time.



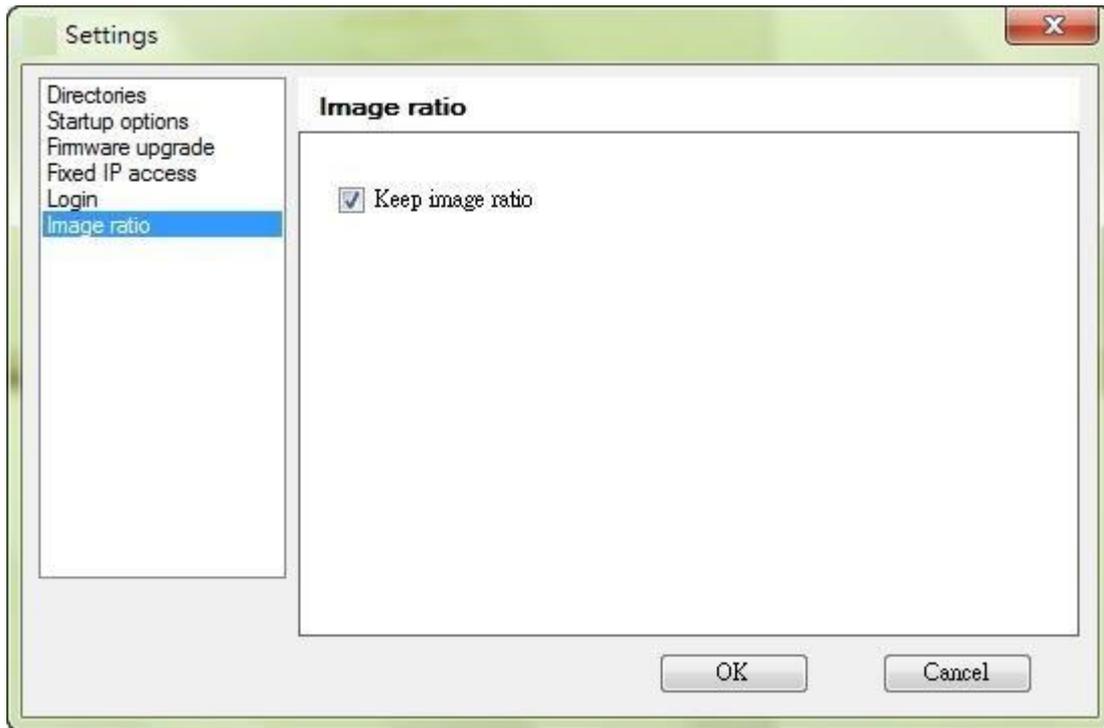
■ **Fixed IP access:** Here you can assign a fixed IP address when connect to IP Cam.



■ **Login:** Here you can enable login function to protect your GTC IP software opened from other persons.



■ **Image ratio:** Here you can enable keeping the image ratio of all the live video.



2. GTC IP Play



Click GTC IP Play to start it for playback.

3. Scheduling



Click Scheduling to configure scheduled recording/playing.

Schedule the time for each channel to be used and recorded by certain camera

■ **Camera:** The information of the camera to be connected. You can either double click on one of the listed cameras or drag the camera off the Camera field to import the settings. Of course, manually key in the Name, CamID and password is fine as well.

■ **Mode:** There are 3 modes available to choose from:

Play Only: Live view only, no recording.

Continuous recording: Keep recording 24/7 in between the date you set for start and stop

Periodic recording: Recording the period of time in a day you set.

Continuous Recording

Window number.

Enable/disable the scheduling for current window number.

The schedule mode

The start/end time (for play only/continuous recording mode)

Enter the information of the camera to be connected.

Camera List:

- 001034050
- 001119149
- 001029147
- 001154198
- 001001033
- 001001003
- 001140041
- 001225222
- 001069242
- 001006124
- 001006071
- fish_demo
- room_demo
- upon
- 001004251
- 001086226
- 001235137

Window # 1 Disable Enable

Camera Name: 001034050 CamID: 001034050 Password: *****

Mode: Play only Continuous recording Periodic recording

Play only / Continuous recording Start (Hour:Minute): 2011/02/22 08:00 Stop: 2011/02/22 18:30

Recording/Playing Conflict: Record/Play as scheduled Give up that scheduled recording/playing

Buttons: Save, Cancel

Periodic Recording

The schedule mode (Periodic recording)

The period of time for this schedule to be valid

Arrange the days of week for camera to record

Determine the priority between "current camera" and "scheduled camera"

Camera List:

- 001034050
- 001119149
- 001029147
- 001154198
- 001001033
- 001001003
- 001140041
- 001225222
- 001069242
- 001006124
- 001006071
- fish_demo
- room_demo
- upon MIS
- RD office
- RD window side
- 001225132
- 001127196
- 001004251
- 001086226
- 001235137

Window # 1 Disable Enable

Camera Name: 001034050 CamID: 001034050 Password:

Mode: Play only Continuous recording Periodic recording

Play only / Continuous recording Start (Hour:Minute): 2009/01/01 08:00 Stop: 2009/01/02 18:30

Periodic recording Time period: Forever During 2009/01/01 ~ 2009/01/02

Everyday Weekday

Recording/Playing Conflict: Record/Play as scheduled Give up that scheduled recording/playing

Buttons: Save, Cancel

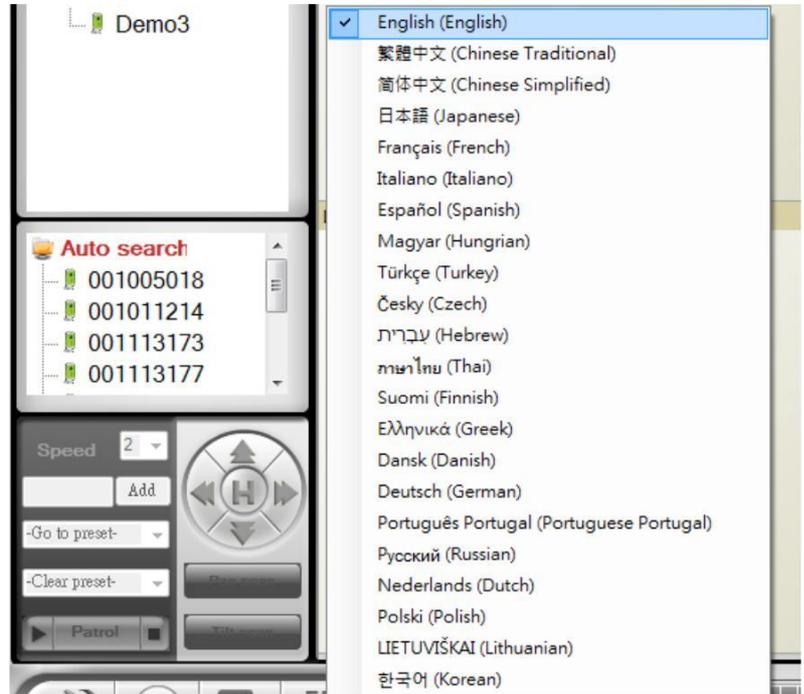
- Recording/Playing Conflict:** When the schedule time is reached, the program needs to determine either to run the scheduled camera or keep the currently used camera for this window. Choosing “Record as scheduled”, GTC IP connects to the scheduled camera. Choosing “Give up the scheduled recording”, GTC IP ignores the scheduled event and keeps the current connected video session.

4. Language

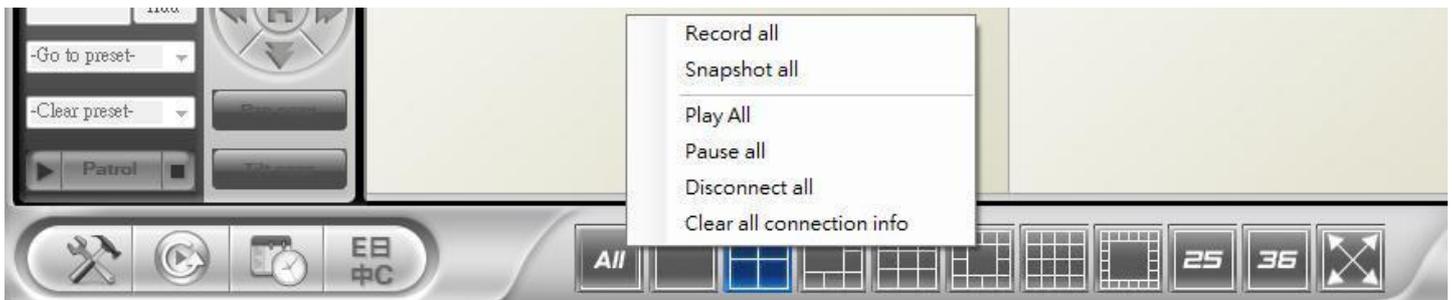


Click Language button to change the language settings.

Right now, GTC IP supports 13 languages as following: English, Chinese, Japanese, French, Italian, Spanish, Hungarian, Turkish, Czech, Hebrew, Thai, Greek, Finnish, Danish, German, Portuguese Portugal, Russian, Dutch, Polish, Lithuanian, and Korean.



5. All Function



Any of following functions applies to all the channels in current layout only.

- Record all:** start/enable recording.
- Snapshot all:** Take snapshot.
- Play all:** Start playing.
- Pause all:** Pause.
- Disconnect all:** Stop playing.
- Clear all connection info:** Clear all video information of all cameras.

Appendix I: Uninstall GTC IP

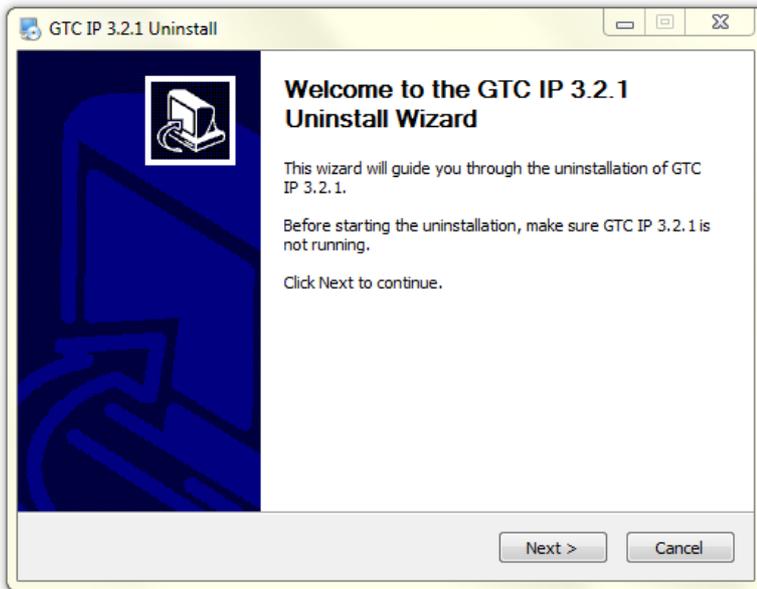
There are two ways to invoke the GTC IP uninstaller.

1. Uninstall from the start menu

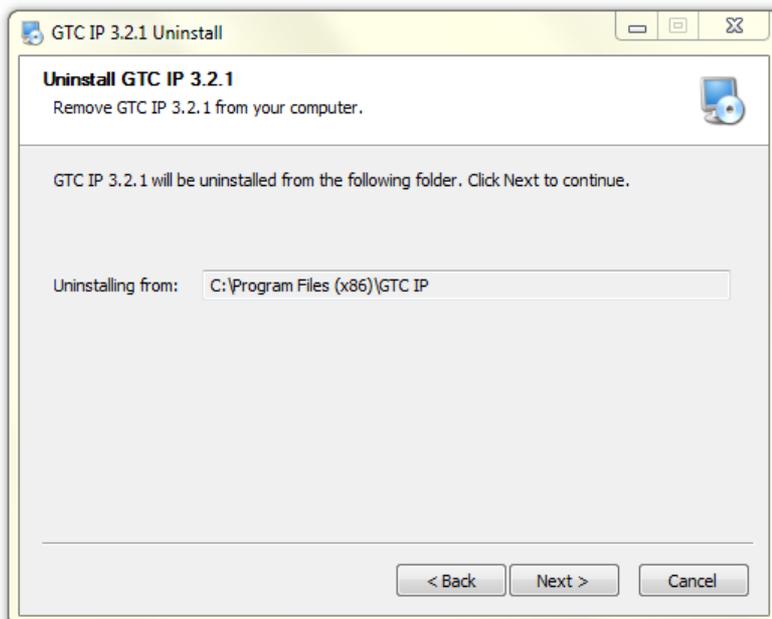
.Start → GTC IP → Uninstall GTC IP

2. Uninstall from the control panel

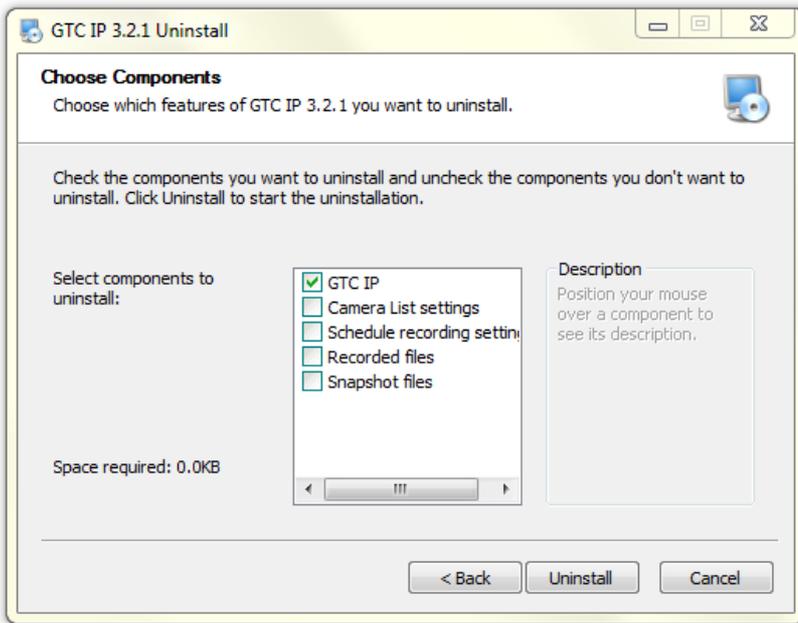
.Start → Settings → Control Panel → Add or Remove Programs
.Select GTC IP program and click "Change/Remove".



Step 1: Once the GTC IP uninstaller has been invoked, the uninstall screen shows up. Press "Next" button to move on.

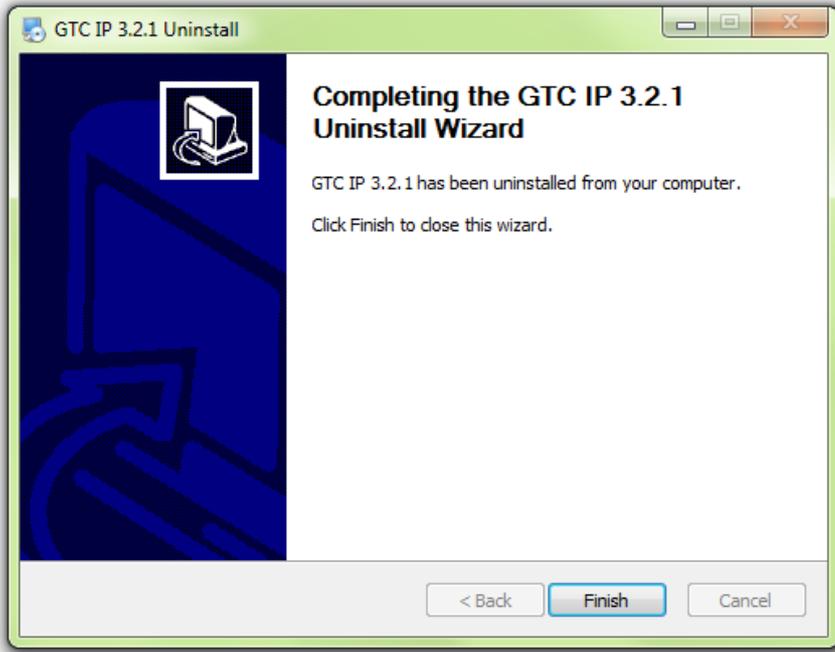


Step 2: Confirm Camera List setting and click Next.



Step 3: Confirm whether to keep or remove recording / snapshot folder.

Finish Window



Appendix II: Performance Information

1. Video Performance Information

The video quality is dependent on the video parameter settings and the network quality. If you want to have a better video quality, you will usually set higher resolution and higher frame rate. This is fine when you are viewing the video locally in the same network. But when you want to see the video remotely through the Internet, you need to know the Internet speed (bandwidth) connected to your home network. If the “Internet speed” setting of your camera is very large, but your real Internet speed (bandwidth) is relatively low, the video quality could be very bad. In some worst case, the video display could be disconnected. In order to have the best video quality, you better have broadband service from your ISP and set the “Internet speed” of the VS316m product a little lower than the real Internet speed provided by your ISP.

To notice that when multiple users are displaying the videos from the same camera at the same time, the video bandwidth times number of users will be needed for the Internet speed.

Appendix III: Frequent Ask Question

Q: *The Cam status indicator shows green icon, but I cannot view the video or change the settings.*

A: The green icon only denotes that the Cam is online and responding, not guarantees that the video session can be established one hundred percent. The reason is due to the firewall or the strict access rules of the router.

Q: *The video quality is not that good when I view it remotely via the Internet.*

A: The video quality is greatly affected by your Internet connection speed. Therefore, we recommend you to change the bandwidth settings of the Cam to a value which is smaller than the one that your ISP provides you.

Q: *Can the password for playing video be null?*

A: No. For security issue, we do not allow users to make their passwords empty for playing video.

Q: *Can I change the settings of the Cam through GTC IP?*

A: Yes, partially. You can change the resolution, frame rate, bandwidth, microphone, auto select, indoor/outdoor mode, light frequency, LED mode, sharpness, and brightness settings of the Cam through GTC IP. The rest of the settings can only be configured via the web page of the Cam.

Q. *Sometimes I failed to connect to Cam after changing the settings of the IP Cam.*

A: Cam needs some time, around 5 seconds, to re-initialize the system. Therefore, please wait 5 seconds and try to connect it again for playing the video or getting the settings. If the auto reconnection is enabled, then GTC IP will connect it for you in 5 seconds.

GTC IP Play User Manual

There are two ways to start GTC IP Play for playback the recorded files or view the snapshot files. One way is clicking the GTC IP Play button on the tool bar of GTC IP.



Another is double click on the GTC IP play shortcut on your Windows desktop.



GTC IP Play- Open Record

Open GTC IP Play and left click "Open Record".



1. Recorded video files

Show recorded files by date: yyyyymmdd on the left column.

2. Current record folder

Show directory recorded folder, and click to change directory folder.

3. Preview video

The small window on the right top will preview recorded video according to your choice on the recorded bar.

4. Name / ID of cameras

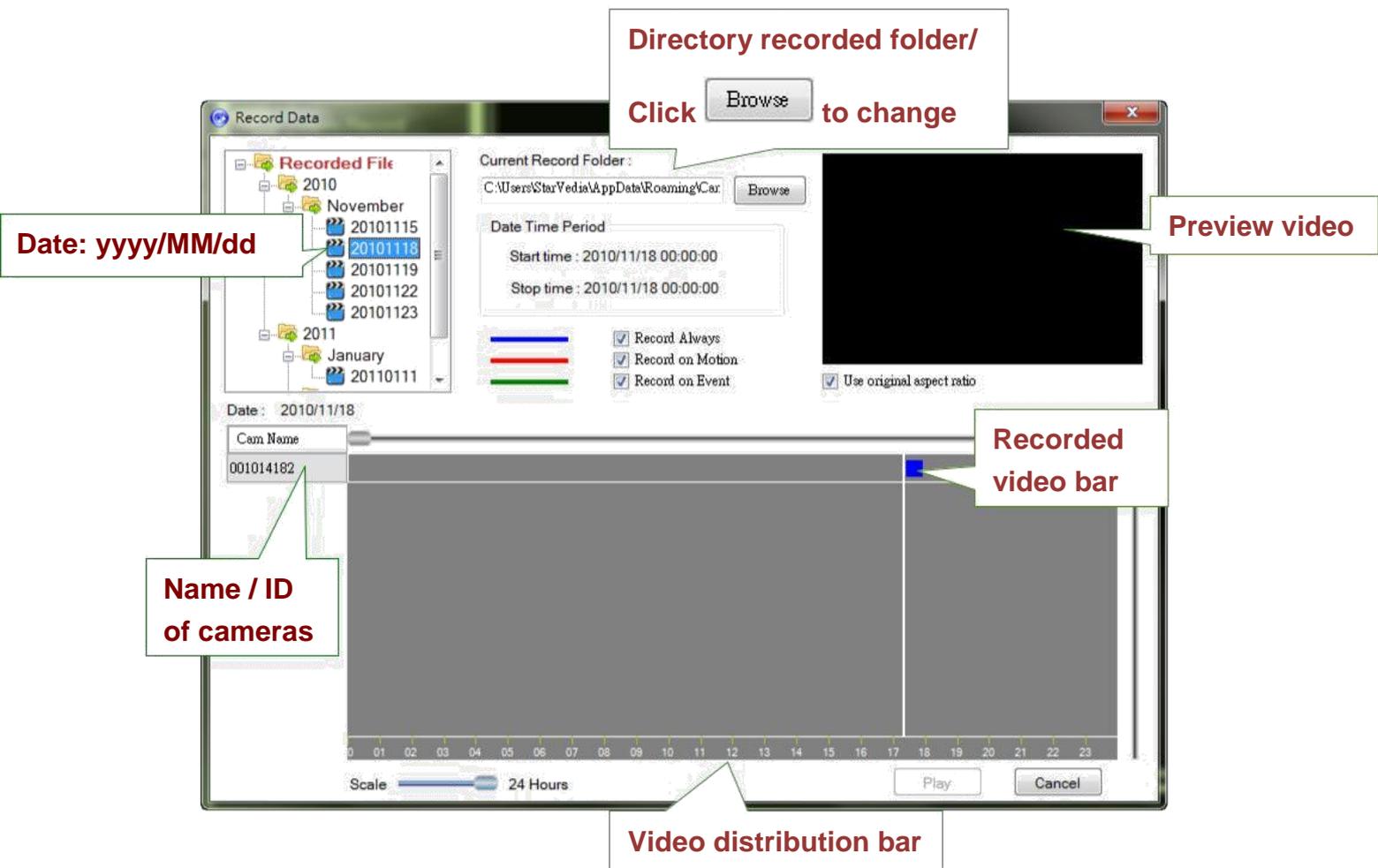
Here will show the ID of cameras which has recorded videos according to your choice on the recorded video files.

5. Video distribution figure

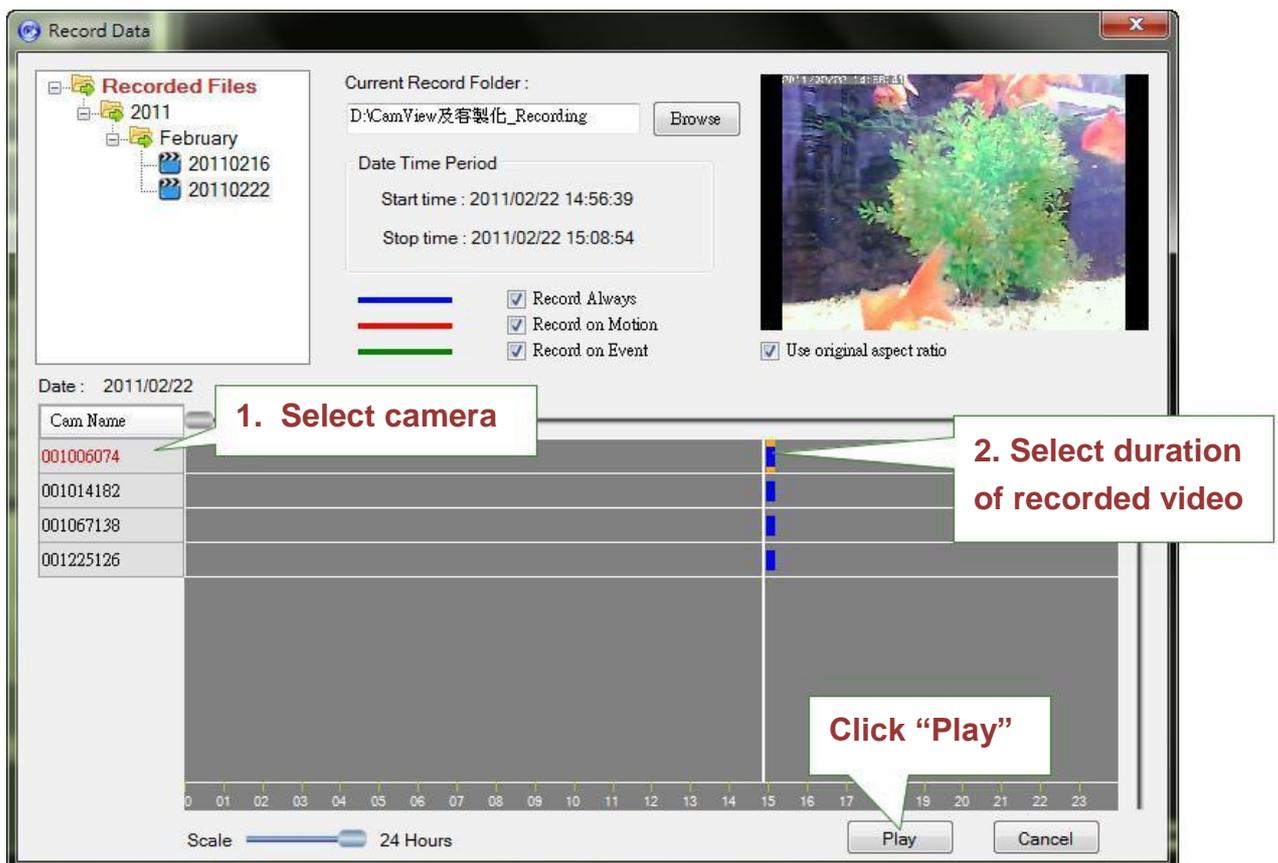
Here will show the recorded time within 24 hours, 12 hours, 6 hours, 1 hours, 15 minutes, and 1 minute.

6. Recorded video bar

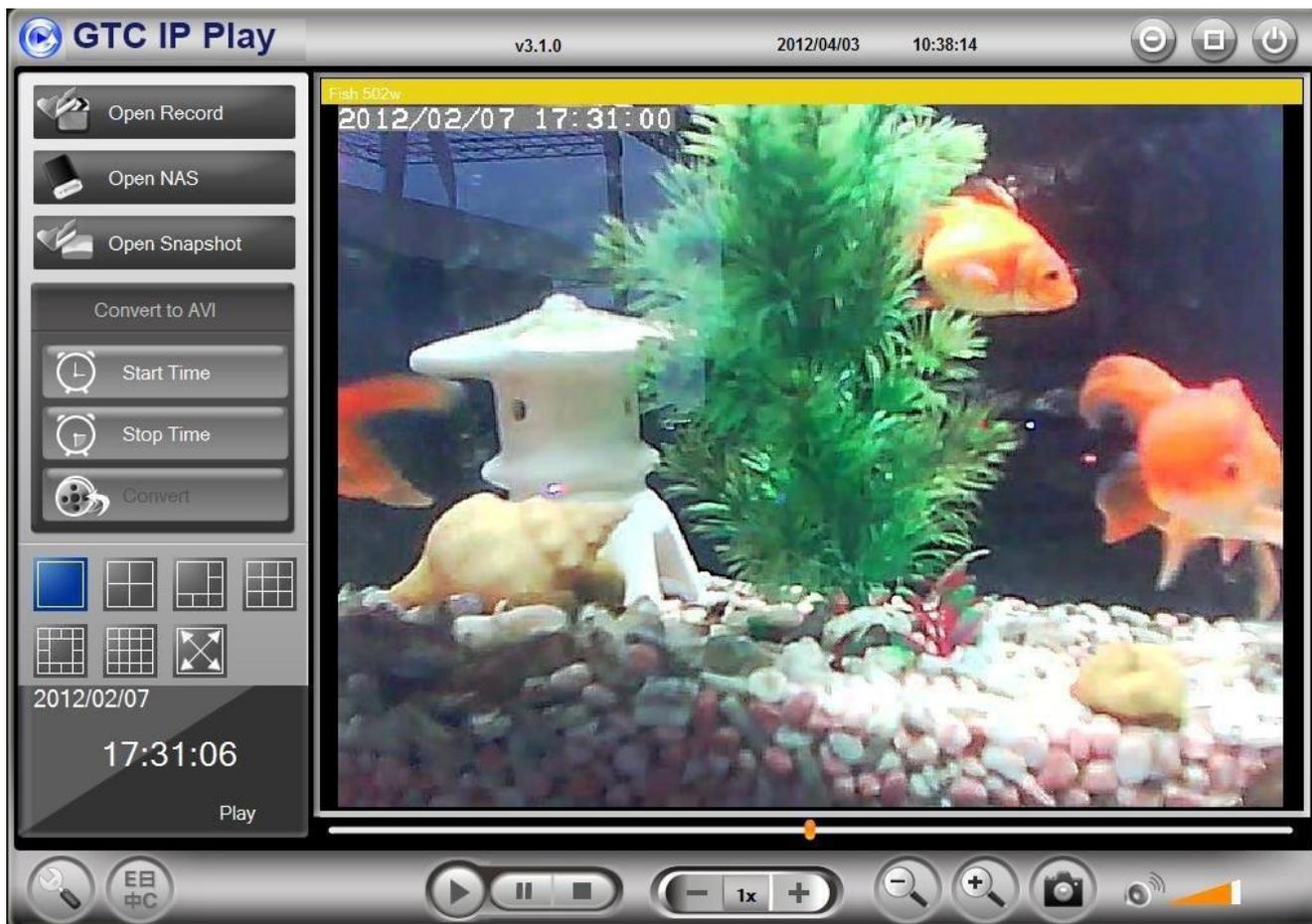
Here will show how long Cameras recorded videos. According to three color, each color represents different recording types: blue-always recording, red-motion detection recording, green-schedule recording.



After selecting camera and duration of the recorded videos, click PLAY, and then video will be played back by GTC IP Play.



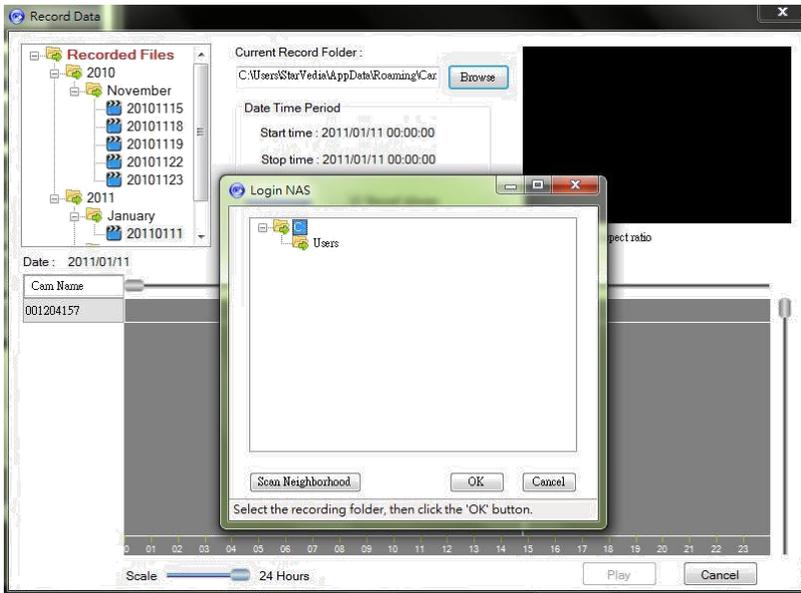
Here is the picture which GTC IP Play is play back recorded video.



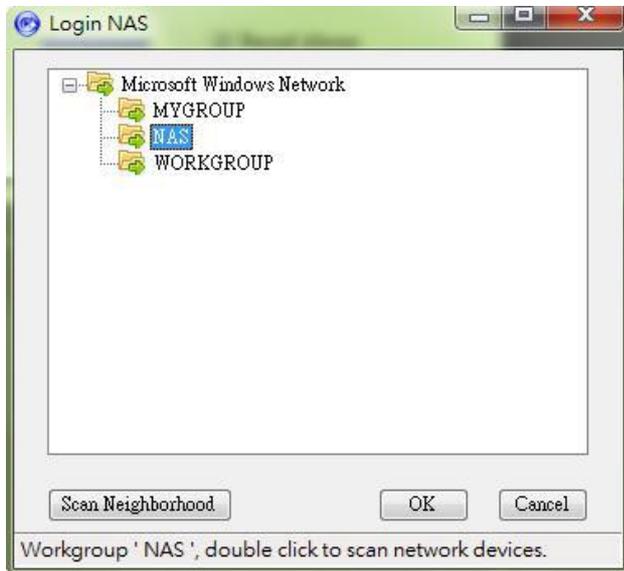
GTC IP Play- Open Nas

Open GTC IP Play and left click "Open NAS".

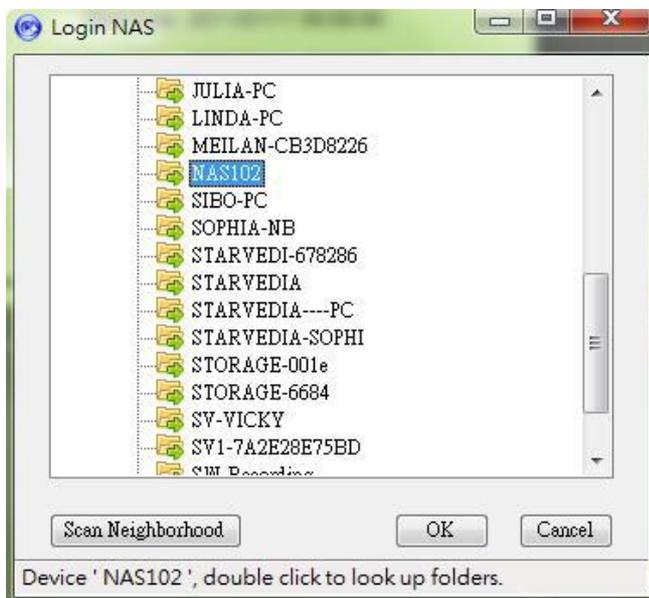




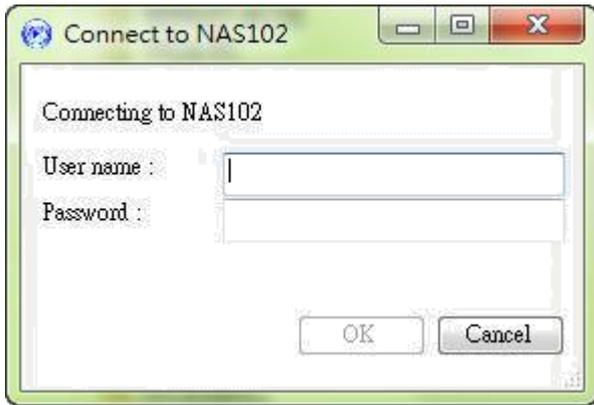
Step 1.
Click browse and scan neighborhood.



Step 2.
Select the group your NAS located in.

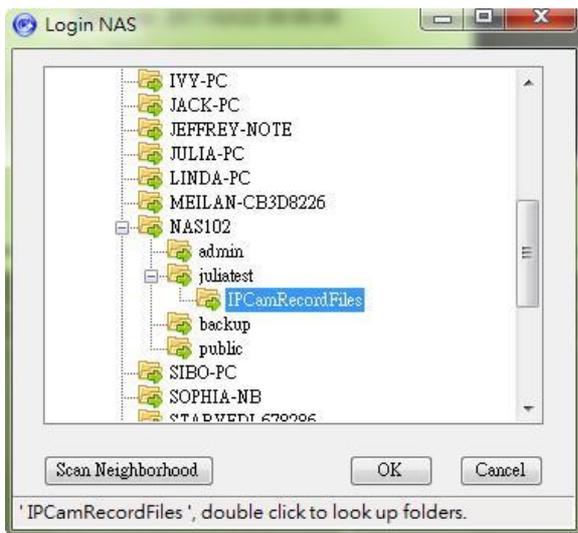


Step 3.
Select your NAS in the group and click OK.



Step 4.

Type in user name and password of selected NAS.



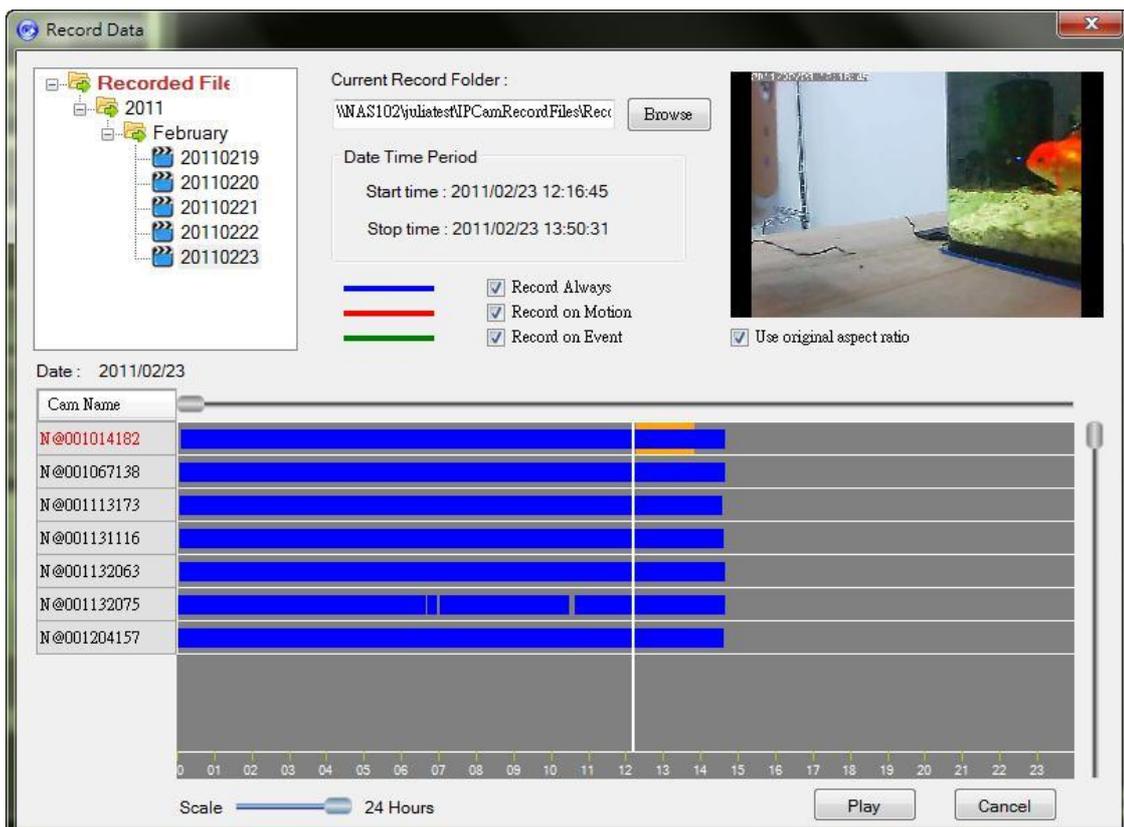
Step 5.

Select "IPCamRecordFiles" and click OK, recorded videos will show up on the video distribution figure after scan bar.



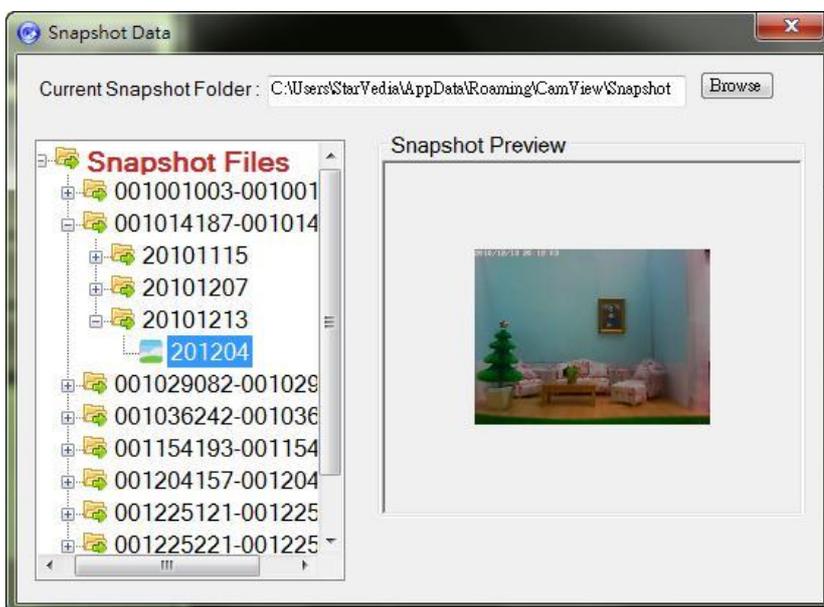
Step 5.

Here will show the recorded videos in selected NAS.



GTC IP Play- Open Snapshot

Open GTC IP Play and left click "Open Snapshot".



Step 1.

Select the snapshot files and the selected picture will preview on the right window.



Step 2.

After double left click the selected picture, it will be opened by GTC IP Play.

GTC IP Play Functions



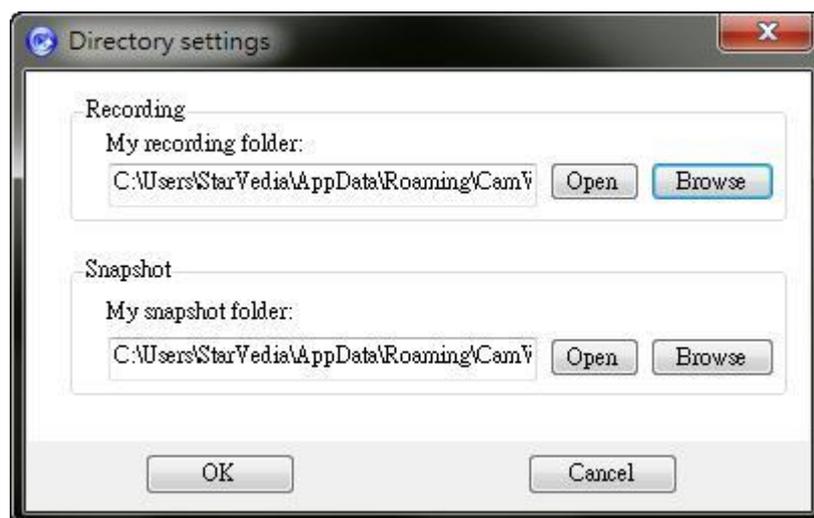
Directory

Language

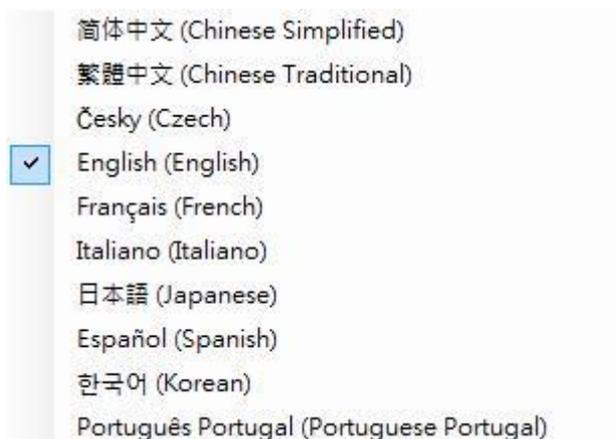
1. Directory:

Click to get into the directory settings dialog for recording and snapshot. Click “Browse” to change the settings.

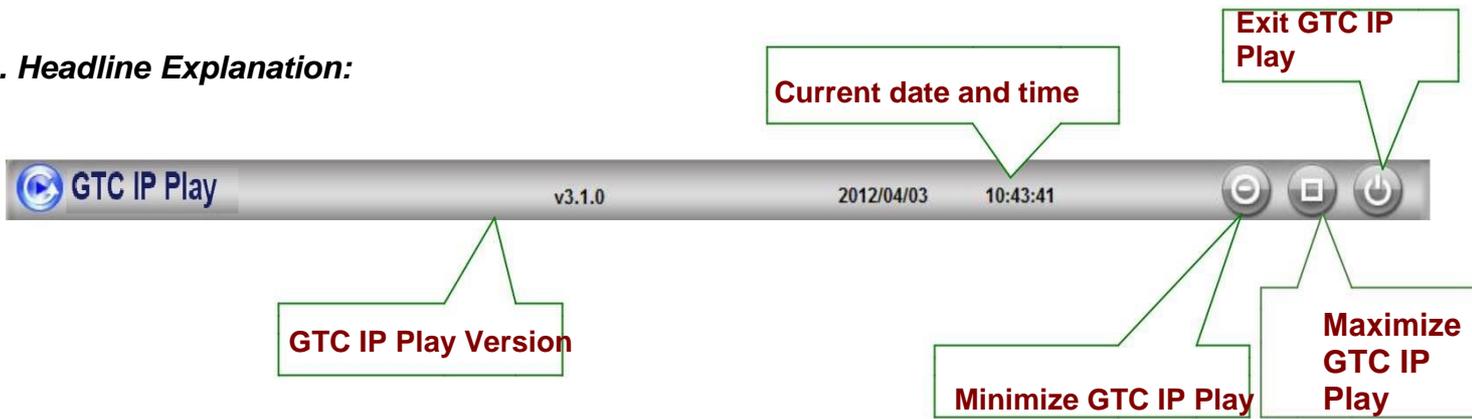
Note: To correctly find the video files and snapshots which were recorded and taken by GTC IP, we strongly suggest configuring the directories of the recorded files and snapshot files of GTC IP Play to what you have configured in GTC IP.



2. **Language:** Click to select the language you preferred.



3. **Headline Explanation:**



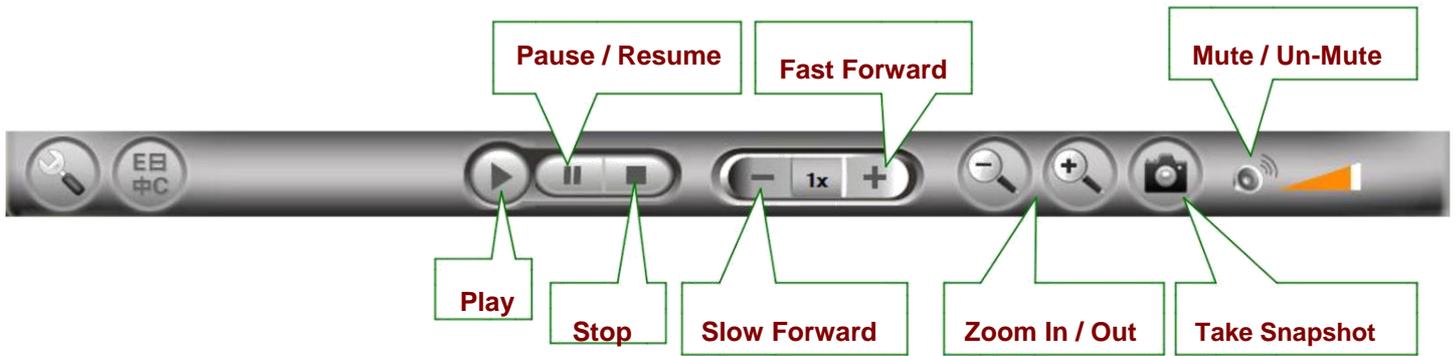
4. Convert to: “.AVI” : Transcoding to avi format is supported. When playing back recorded video, left click “Start time”. Decide how long the recorded video you want to transcode, and left click “Stop time” and select “Convert ”. Wait for a while and the transcoded file will be saved in the same folder with the original file. Select “Open folder” to browse all the files recorded in the same day from the same camera.



Playback Function Bar

To playback the recorded file, you can either double click on it or drag it to the video window directly. To view the snapshot file, simply double click on it and the snapshot will be opened by the default viewer of your computer.





1. Snapshot

 The snapshots you taken within GTC IP Play are saved in SNAPSHOT_DIRECTORY\GTC IP Play\date\.

2. Zoom in and zoom out

The maximum resolution you can zoom in to is 640x480 and the minimum resolution you can zoom out to is the original resolution of the video file. To zoom in, click . Click  to zoom out.

As mentioned earlier, snapshot is displayed by the default viewer of your computer. This gives you the ability to playback the recorded video file and view the snapshot at the same time.