INSTRUCTION MANUAL
(APPLICATION INSTRUCTIONS)

IP Network Camera
IPD-BX11
IPD-DM11
IPD-VR11

Carefully read this manual before use in order to keep these products at full capacity.

Concerning the Instruction manual (Application)

This manual explains how to configure the following cameras through Network from PC.

●IPD-BX11(Box-type IP Network Camera) without Audio, SD card slot, and DI/DO functions.

●IPD-DM11(Dome-type IP Network Camera) with Audio, SD card slot, and DI/DO functions.

●IPD-VR11(Vandal Resistant Dome-type IP Network Camera)with Audio, SD card slot, and DI/DO functions.

This manual can be downloaded from the following URL:

http://www.ikegami.co.jp/en/products/download/security.html

Concerning installation and the set-up procedure for the camera, please see the Operating procedure and Camera Installation on the Instruction Manual (Basic) is supplied with the camera.
To browse PDF files, Adobe Reader English Edition is required. Please download and install the latest edition from the Adobe Systems site.

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●Microsoft product screen shots reprinted with permission from Microsoft Corporation.

Concerning software for viewing and tool for network connection

●To see camera images, "Network Camera Viewer" software is prepared in addition.
Please contact your dealer for this software "Network Camera Viewer".

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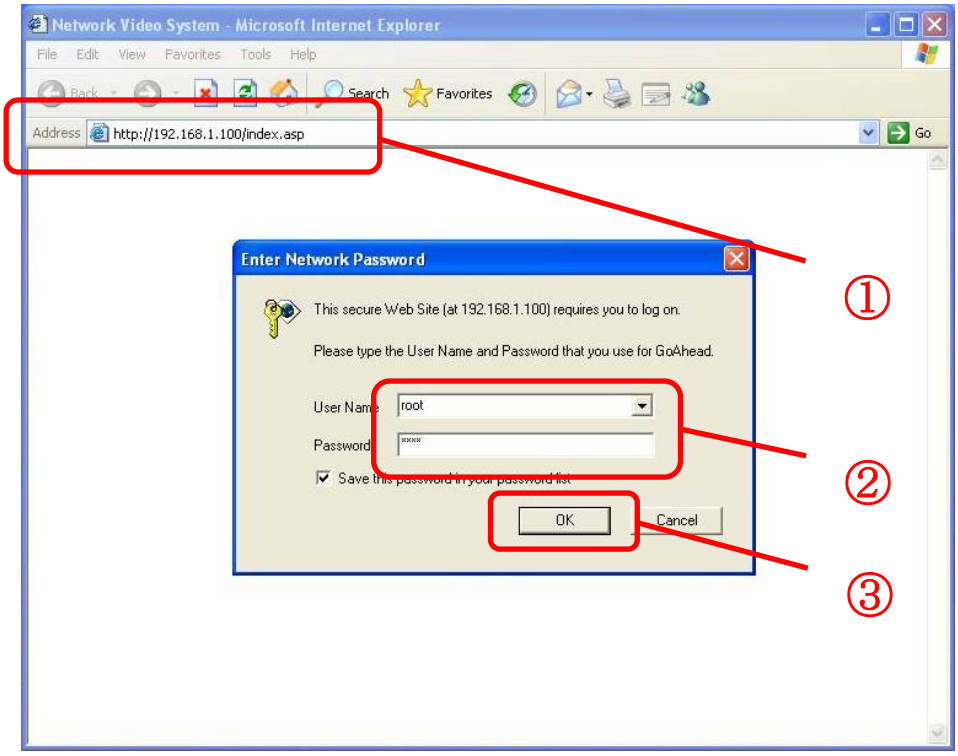
1. Camera Login and Login Screen

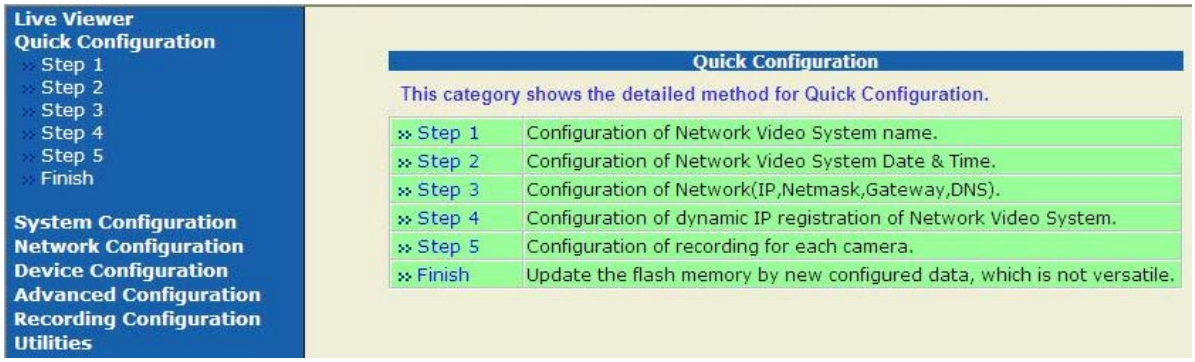


①Start Internet Explorer（IE）,input the URL of network camera as below.
Then click the Go button.
●The initial setting of the camera is http://192.168.1.100/ .

②Input the Login Name(User Name) and Password of administrator.
●The initial setting are Login Name(User Name) "**root**" and Password "**root**".

③After input Login Name(User Name) and Password, press OK button. Once logged in, the Password can be changed to new one.

Now the Configuration screen is displayed as below. The left of screen is displaying Main menu. Each Item can be clicked and showing Setup Menu with details on the left of screen.
（Below screen is e.g. for "Quick Configuration" ）



Notes：
IE Pop Up blocker should be released ,if not it may happened unable to set up the camera causing to block the setup communication.

Configuration (Set up) Screen Structure

The following table shows Configuration (Setup) menu structure hierarchy for IPD-DM11 and IPD-VR11 which have additional menu than IPD-BX11.

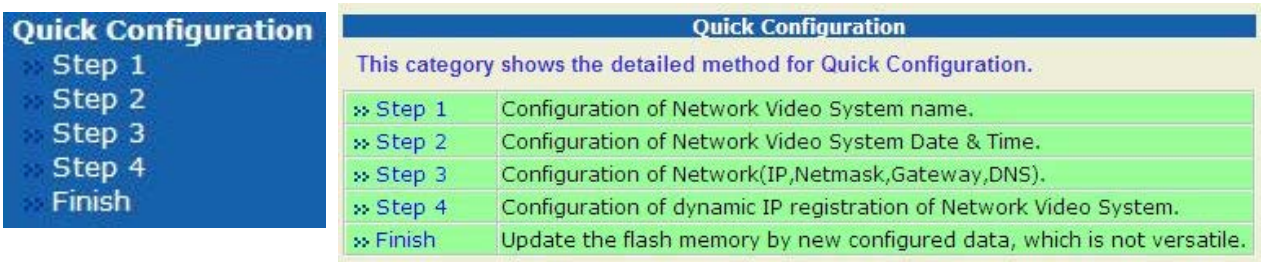
Main Menu	Setup Menu	Sub-Menu 1	Sub-Menu2
Live Viewer	なし	なし	なし
Quick configuration	Step 1	n/a	n/a
	Step 2		
	Step 3		
	Step 4		
	Step 5 (IPD-DM11,IPD-V11)		
	Finish		
System Configuration	Server Name	n/a	n/a
	Date & Time		
	Admin. Password		
	Access Control		
	User Registration		
Network Configuration	Network Configuration	n/a	n/a
	Network Ports		
	Bandwidth Control		
	View Network Status		
	NetworkStatus Notify		
	IP-CCTV DNS™		
	Port Forwarding & UPnP		
	RTP/RTSP		
	SNMP		
Device Configuration	Serial Ports	Serial Input Mode	n/a
		Serial Output Mode	
		Transparent Mode	
	Privacy Zone	n/a	n/a
	Camera & Motion	Camera Control	n/a

Main Menu	Setup Menu	Sub-Menu 1	Sub-Menu2
		Motion Detection	
		Primary Stream	
		Secondary Stream	
	DI/DO	n/a	n/a
	DI Status / DO Control	n/a	n/a
Advanced Configuration	Advanced Services	E-mail	Camera 1 Camera 2
		FTP(Buffered)	Camera 1 Camera 2
		FTP(Periodic)	Camera 1 Camera 2
		Sensor Notification	Input 1 Input 2
		Alarm Output	Output 1
Recording Configuration	SD Configuration	SD Status & Format SD Information	n/a
	Recording Configuration	Built-in Module 0	Camera 1 Camera 2
	Recording Profile	n/a	n/a
	Recording Mode		
	SD Status Report		
	Clear Recording Config.		
	Delete Recorded Data		
Utilities	Player (Displayed only IPD-DM11/IPD-VR11 with SD card)	n/a	n/a
	System Log		
	Save Configuration		
	Reboot		
	Factory Default		
	System Update		

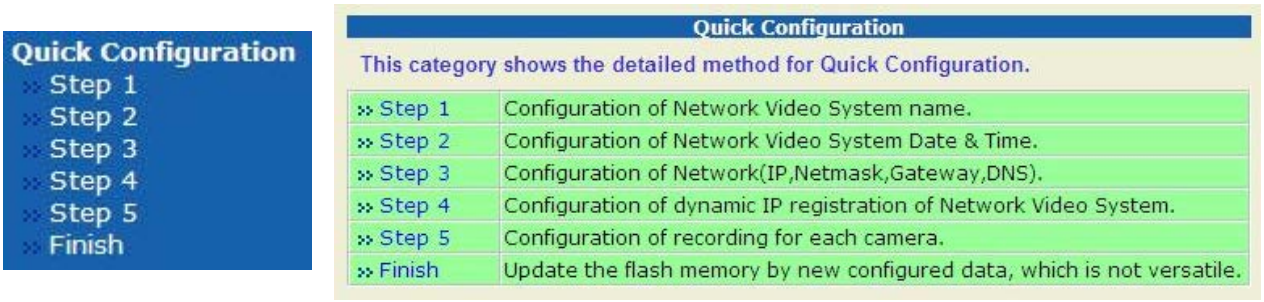
2. Quick Configuration

Quick Configuration Menu is to help the configuration for camera easily. Set up Menu Step5 is only display for IPD-DM11 and IPD-VR11.

IPD-BX11



IPD-DM11, IPD-VR11



2-1.Step 1:Server Name

Click **Step 1**, the Setup Menu for **4-1.Server Name** is displayed.

2-2.Step 2:Local Date & Time Configuration

Click **Step 2**, the Setup Menu for **4-2.Date & Time** is displayed.

2-3.Step 3:Network Configuration : Static IP

Click **Step 3**, the Setup Menu for **5-1-1.Static IP** is displayed.

2-4.Step 4:IP-CCTV DNS Setup(This function is not supported)

Click **Step 4**, the Setup Menu for **5-6.IP-CCTV DNS Setup** is displayed.

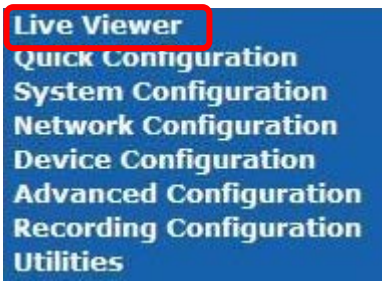
2-5.Step 5:Recording Configuration

Click **Step 5** ,the Setup Menu for **8-2.Recording Configuration** is displayed. This function is only for IPD-DM11 and IPD-VR1 . When it is connected with IPD-BX11, this menu is not displayed.

2-6.Finish:Save Configuration

Save the setup data for above each step with this menu.

3. Live Viewer



This Live Viewer enable to control the video and audio of IPD-BX11, IPD-DM11, and IPD-VR11 over the TCP/IP network on IE.

It works with cameras to display streaming live video and to record the snap shot and/or AVI for streaming video on PC.

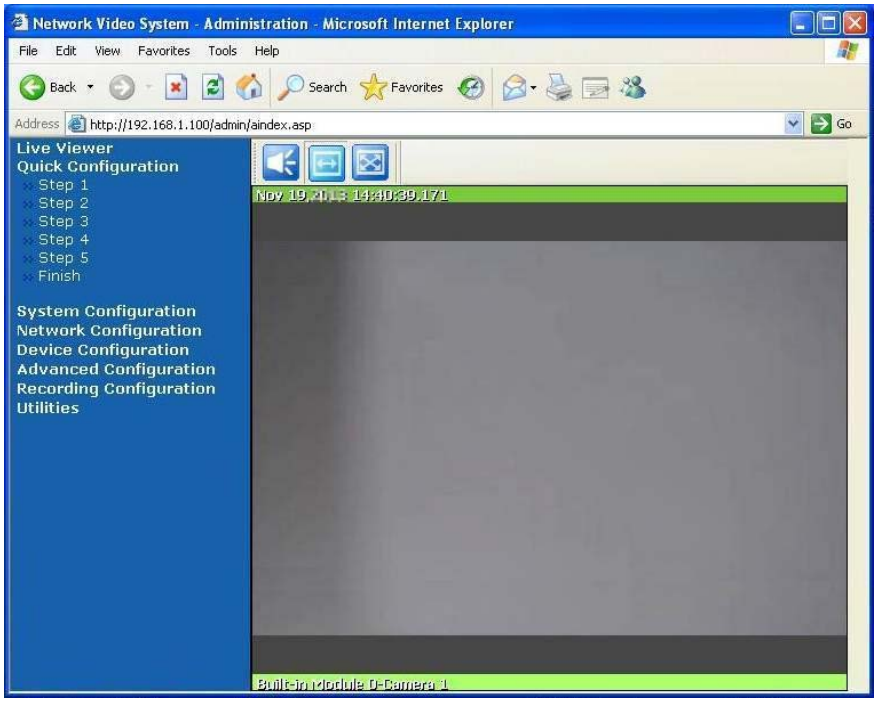
When the Micro SD card (SD card) is inserted into SD card slot of IPD-DM11 and /or IPD-VR11, it is able to record and replay to/from SD card by Live Viewer. (IPD-BX 11 has no SD card slot)

3-1. ActiveX installation

Connect to the camera on IE, click the Live Viewer on Configuration screen, then below window screen is displayed. (If confirmation window for ActiveX install is displayed, select Install)

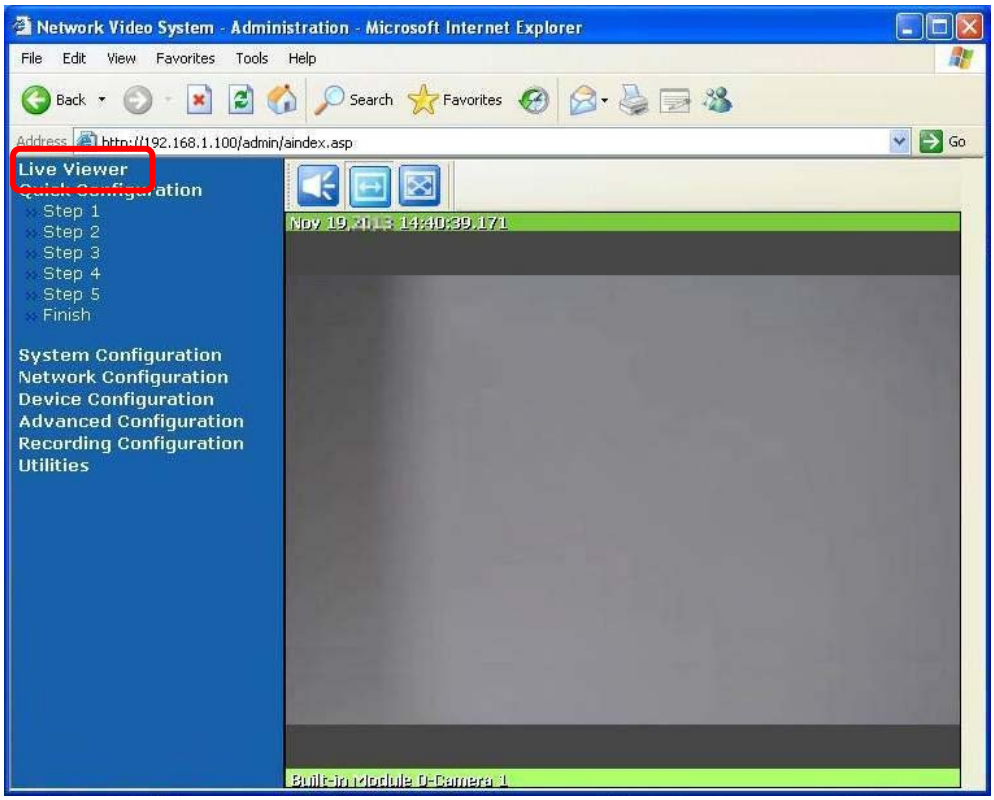
Click the OK button then Active X is automatically installing.

Finished installing ActiveX, below Live Viewer screen is displayed.



3-2.Live Viewer Screen

The ActiveX installed PC can display the Live Viewer screen by login the camera and click the Live Viewer on the Configuration Menu on Live Viewer. Also the Icons and buttons on screen are able to operate as explained below.



3-3.Video and Audio Control

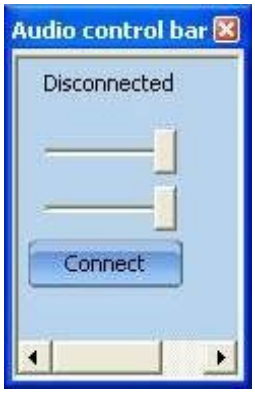
3-3-1. Video Display and Audio control (Audio function only for IPD-DM11,IPD-VR11)

Icon operation (Each Icon is shown the details by mouseover each icon)

	Display or Hide the Audio Control bar (shown below) which can control the Audio level and line on/off by click this button. This icon also displayed to connect IPD-BX11 but it is not functioned
	**Ratio Mode:** If live video is smaller than the screen, it is displayed as original size. If live video is larger than screen, it is adjusted to fit the screen with original aspect ratio by
	**Stretch Mode:** Live video is resized to fill the entire screen by click this button.

Audio control bar operation

When it is needed to use Audio for IPD-DM11,IPD-VR11, click the Connect button. The Audio volume is controlled by move the knob of Slider.(Right side is Max.) Mute ON-OFF function is shown **3-3-3.Mouse Right button click Menu 4)**. If Audio line is needed to, cut click the Disconnect button.



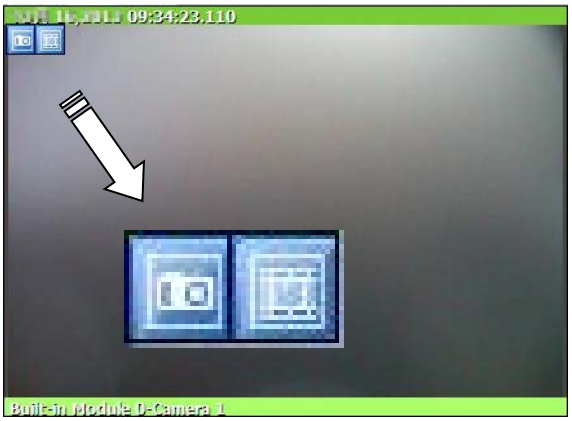
If below popup alert window is displayed by click the Connect button, refer the **6-3-1.Camera & Motion** and click the **Enable** radio button of **Audio** line.

3-3-2.Mouseover buttons

When mouseover the live video screen, control buttons displayed on left -up of live video screen as below. These control buttons displaying is different between IPD-BX11(w/o SD card slot)and IPD-DM11/IPD-VR11 (with SD card slot).

If Each button is mouseovered, the function of each button is shown on screen as below-right screen(e.g. AVI button function).

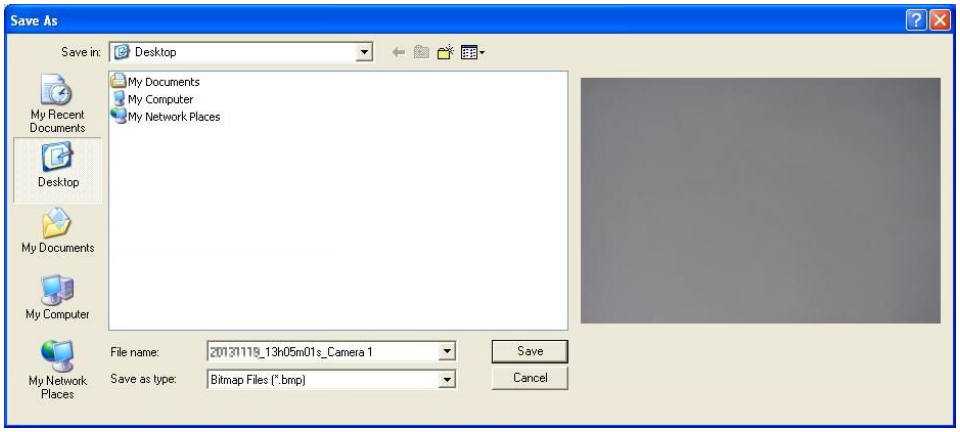
IPD-BX11



IPD-DM11/IPD-VR11

1) Snap shot button

It can be captured for currently displayed live video and saved it as image file either in JPEG or BMP format in PC. When click the Snap shot button, below saving screen is displayed with captured image.Enter the folder and file name, and click the Save button.



Note:

If live video is in MJPEG format, saved image will be JPEG file. If the live video is in MPEG -4 or H.264 format, saved image will be BMP file.

2)AVI button

It can be captured for currently displayed live video and saved it as video AVI format in PC. Select live video to save and click AVI button for saving start, and click again for saving stop. Then saving screen is displayed, enter the folder also file name, and click the Save button.

> Note:
> When you play back the saved video from H.264 format live video, it is needed the proper CODEC.

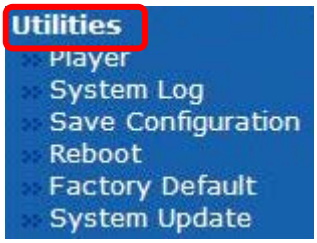
3)Force Recording (Only for IPD-DM11, IPD-VR11 with SD card)

When IPD-DM11 and/or IPD-VR11 are/is inserted SD card into SD card slot(SD card is option), live video can be recorded in the SD card by click this button. To stop recording, click again this button.

The maximum duration is 1 minute and recording will be stopped automatically after 1 minute. If it is needed to record again, click this button again.

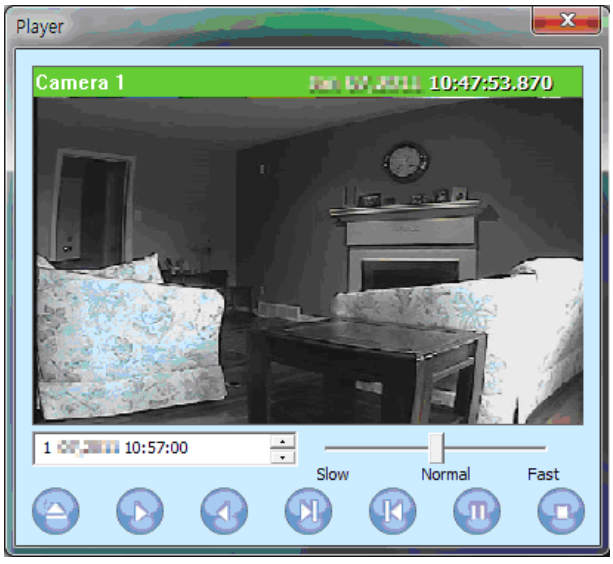
The recorded video files (Max.1 minute/file) are saved in the SD every start/stop the recording.

Also Player of Utilities menu of Configuration menu (only shown when SD card inserted) can playback above 3)recorded video files and backup it. Please refer INSTRUCTION MANUAL (PLAYER INSTRUCTION) as separate volume.

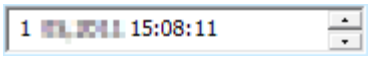
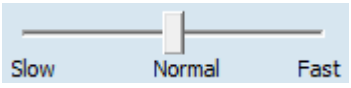


4) Instant Play back(Only for IPD-DM11, IPD-VR11 with SD card)

When IPD-DM11 and/or IPD-VR11 are/is inserted SD card into SD card slot(SD card is option),recorded video in the SD card can be done the playback by click this button. To click this button, below window will open.



Instant playback will scan the video data up to 1minute before it was execute. And scanned data will be played automatically.

	Set the beginning of video file data. Instant playback will scan 1minute after set time
	Set the playback speed.
	Start searching data
	Play
	Reverse playback
	1frame playback every click
	1frame reverse playback every click
	Pause
	Stop

3-3-3.Mouse Right button click Menu

When the right button of Mouse is clicked on the Live Viewer window, below pop-up menu will be displayed as extended menu.

1) Pause

Click Pause button to stop and resume live view video.

2)FPS(Frame/Sec)

Not supported.

3)Flip

Click this button to invert the direction of video image, if select Mirror then original image invert horizontally as mirror, and select Flip then original image flipped vertically.

4)Mute Audio(Only for IPD-DM11, IPD-VR11)

Click this button to make on and off Mute the Audio. Also please refer **3-3-1. Video Display and Audio control.**

5)Do1(Set Alarm output On/Off for only IPD-DM11,IPD-VR11)

Click this button to control relay output is On or Off for checking connected lighting, alarm products and etc.

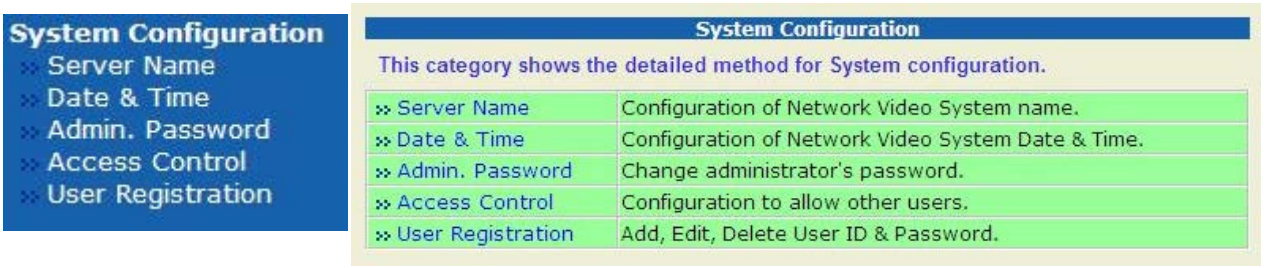
6) Navigation(Live view position navigation)

When click the Time Stamp, below saving screen is displayed with captured image attach TimeStamp. Enter the folder and file name, and click the Save button.

4. System Configuration

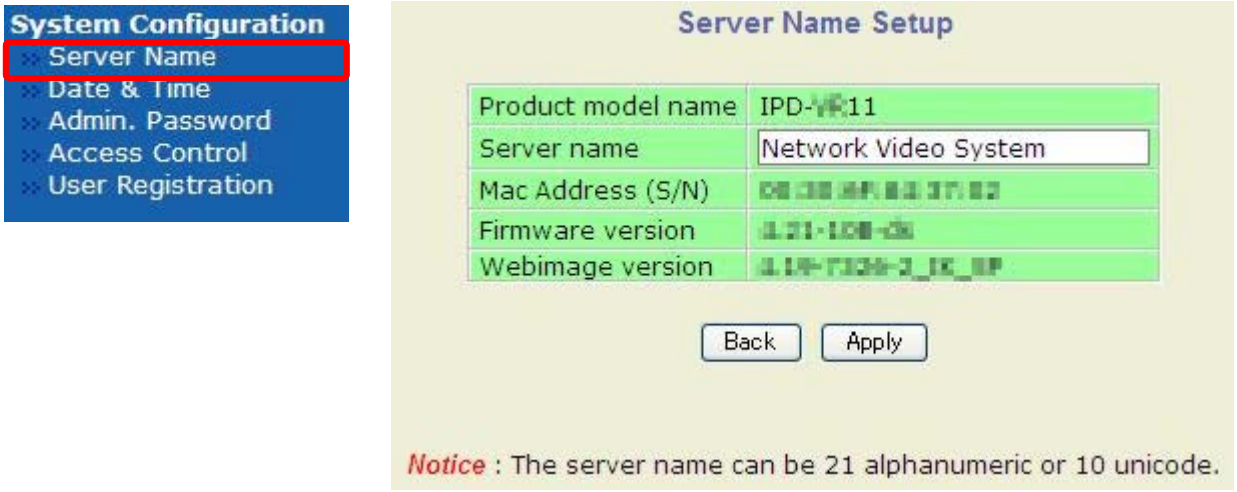
Click **System Configuration** item, the below setup menu is displayed.

It can be setup for camera system.



4-1.Server Name

Click **Server Name** item, below Server Name Setup screen is displayed (Same as Quick Configuration Step1).



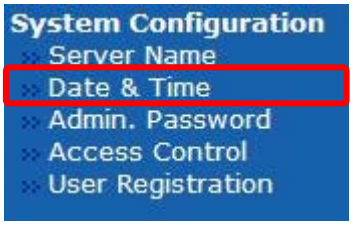
It can be changed the name on **Server name** field, but other item name/values are not allowed to change. Enter the new server name in the Server Name field which can be used up to 21 alphanumeric or up to 10 Unicode characters.

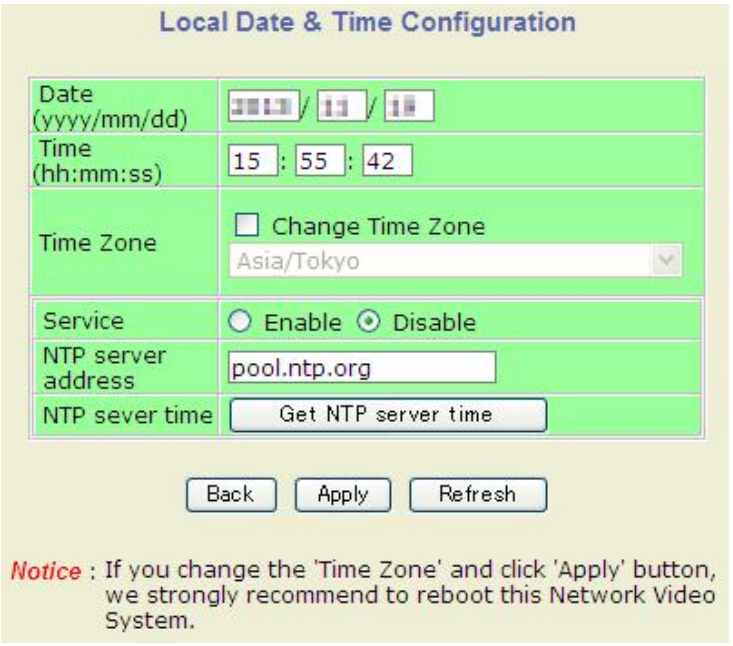
Finished the name print, click the Apply button to save the setting and it will take effect immediately.

If click Back button, new setting data will be cancelled and the setup screen will be back to previous setup screen .

4-2.Date & Time

Click **Time & Date** item ,below Local Date & Time Configuration screen is displayed(Same as **2-2.Step 2:Local Date & Time Configuration**).





Date(yyyy/mm/dd)	Set the date
Time(hh:mm:ss)	Set the Local time
Time Zone	Select and set the Time Zone for this system location.
Service	Enable:NTP Server service used Disable:NTP Server service not used
NTP server address	Set NTP Server address
NTP server time	Click button to get synchronized time from NTP server

If **Time Zone** is not corrected, tick **Change Time Zone** and select the right time zone area ,then set the date and time. For save changed date and time, click Apply button.

When it is needed exact correct time, use NTP server service and click Get NTP Server Time button.

Click Refresh button, it will be displayed the Date & Time retrieved.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen .

Note:

In order to retrieve Time and Date data from NTP server, it is needed to put address of NTP server in advance of setting up , such as above "pool.ntp.org "

4-3.Admin. Password

Click **Admin Password**, then Administrator Password can be changed on below displayed screen.

Administrator's ID	**"root" fixed , not allowed to change**
Old Password	Enter current password **(Factory default "root")**
New Password	Enter new password between 4 and 23 alphanumeric .This password is also used for Login on IE and Authentication of RTSP streaming.
Confirm Password	

After set the new password, click the Apply button to save and take into effect it.

Note:

The existing camera network connection was made up with login by old Admin Password ,thus it is lost connections for camera caused to changed password. It must be reconnected for camera with using new password login.

4-4.Access Control

Click **Access Control** item, below Access Control Configuration screen is displayed

Full Access	Any user can access the camera and use all futures without limit through RTSP Streaming.
Limited Access	Only registered users can access the camera and have limit privileges through RTSP streaming.

After set this click the Apply button to save this selection.

Note:

If this setting is not done, it is not able to enable the setting for item **4-5-1.Add System Resource Access Permission**.

4-5.User Registration(Limited Access)

Displayed on Menu, but function is not implemented

Click **User Registration** item, below User Registration setting menu screen is displayed.

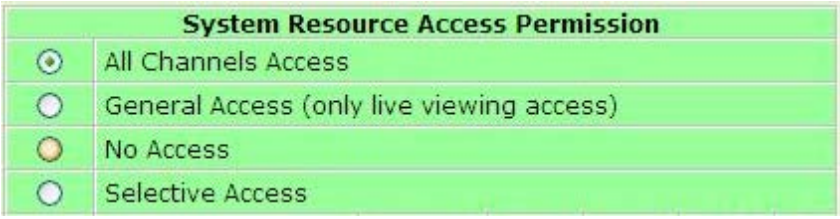
It is able to setup for Limited access User(add, edit, delete) through RTSP streaming.

4-5-1.Add

Click Add radio button, the below screen is displayed.

User ID	Enter up to 23 alphanumeric characters
Password	Enter same password between 4 and 23 alphanumeric.
Confirm Password	
Name	Enter up to 31 alphanumeric characters

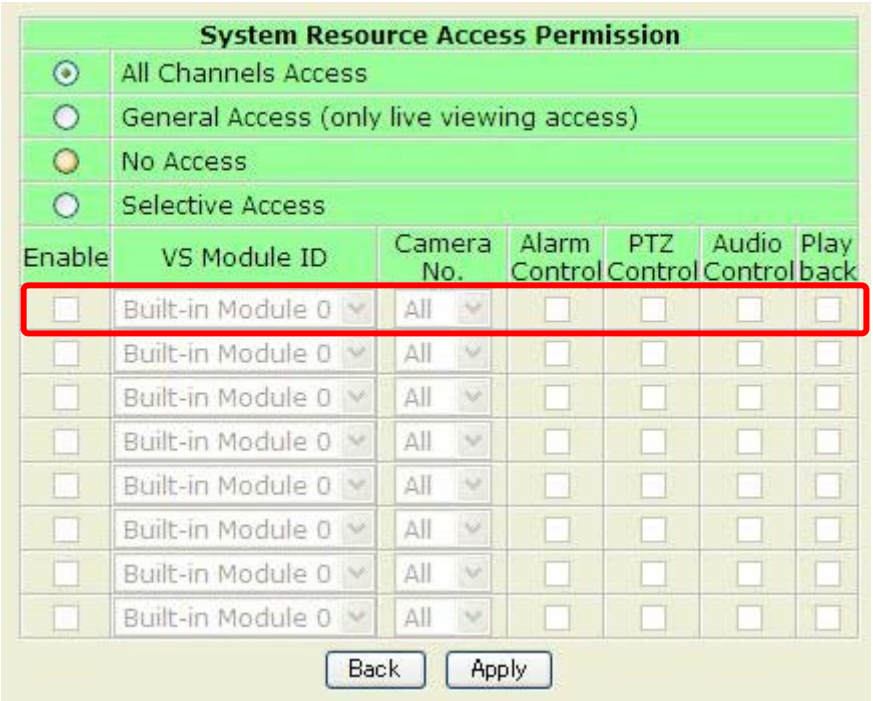
Now select one of **System Resource Access Permission** on below screen



All Channels Access	User can use all function except Administration setup page.
General Access (only live viewing access)	User can use only Live View video.
No Access	User is not permitted of any function.
Selective Access	User is allowed to use only selected functions which is setup on below screen.

Note :

The registration for user of RTSP streaming can be done on this screen, but it is unable if the Limited Access item is not selected on screen of **4-4.Access Control (Limited Access)**.



VS Module ID	Built-in Module0 is set (fixed).
Camera No	Select Access stream between Camera No.1:Primary Stream, Camera No.2 :Secondary Stream and All: Both Stream.
Alarm Control	Set the permission to access for control Alarm system part.
PTZ Control	Set the permission to access for PTZ control(Not supported)
Audio Control	Set the permission to access for Audio control(Only IPD-DM11/VR11)
Playback	Set the permission to access for Playback control of recorded video. (Only IPD-DM11 and IPD-VR11)

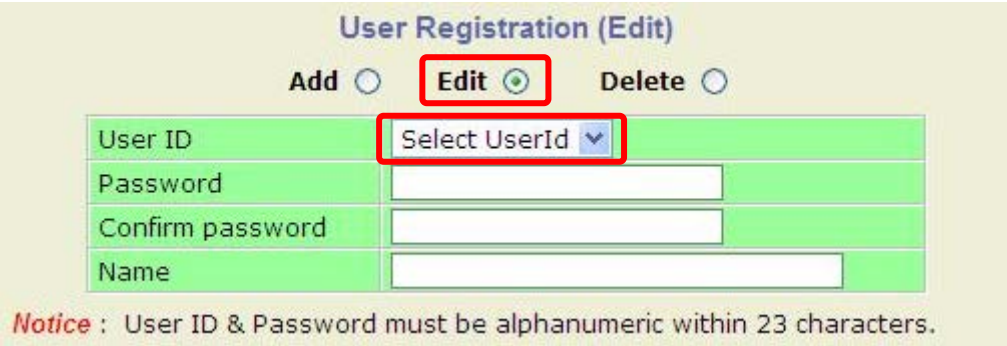
After finished above all registration process for Add, click Apply button to save the added the user. If click Back button, new setting data will be cancelled and the screen will be back to previous screen.

4-5-2.Edit

Click **Edit** radio button, the below screen is displayed.

It is able to change the User Name for RTSP streaming, Password, User ID(Access name).

This registered User ID can not be changed on this screen. If it is needed to change registered User ID, follow **4-5-3.Delete** and next **4-5-1.Add** procedure.



User ID	Select the registered User ID for editing on this filed.
Password	Enter same password between 4 and 23 alphanumeric.
Confirm Password	
Name	Enter up to 31 alphanumeric characters

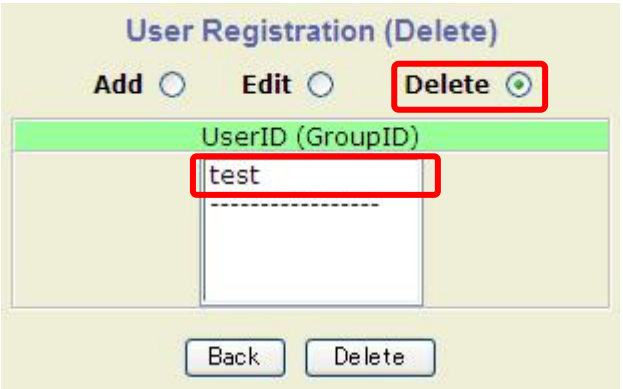
After finished above setting, click Apply button to save settings.

4-5-3.Delete

Click **Delete** radio button, the below screen is displayed.

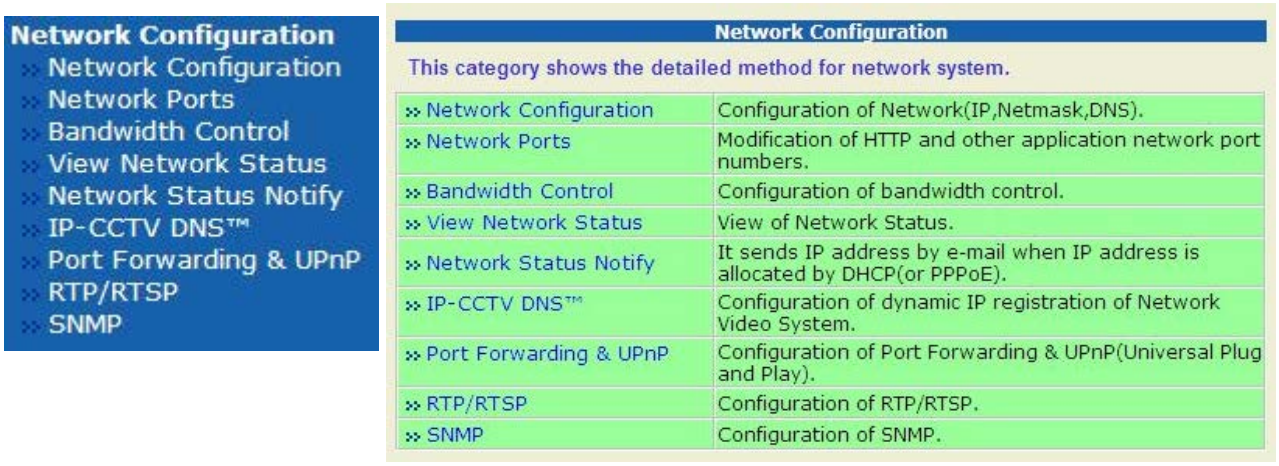
Select the User ID to delete, which is shown on the User ID list of below window.

And click the Delete button to delete the user registration.



5. Network Configuration

Click **Network Configuration** item of Configuration Menu, then below configuration screen is displayed. It is able to setup the Network conditions.



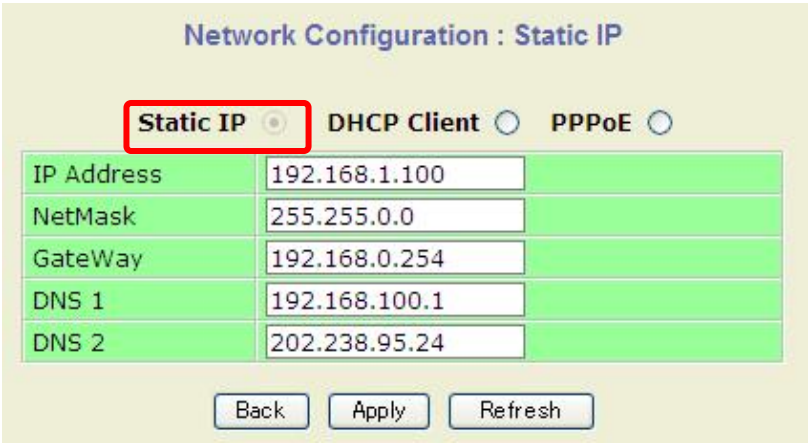
Before this setup, it should be confirmed with Network Administrator of property.

5-1.Network Configuration

Click **Network Configuration** of Setup Menu, then below **2-3.Step 3:Network Configuration : Static IP** screen is displayed.

5-1-1.Static IP

Click **Static IP** radio button, the below screen is displayed.



Input the IP Address , NetMask, GeteWay, DNS 1, DNS 2.

After input I P address, click the Apply button.

Then the pop-up window to close the Browser is displayed, close the Browser and start automatically the rebooting which is taking 1minite to 2minutes.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

If click Refresh button, recent registered IP address in camera will be displayed.

5-1-2.DHCP Client

When it is needed to get automatically IP address from exist DHCP server in the network, click the **DHCP Client** radio button, and click the Apply button.

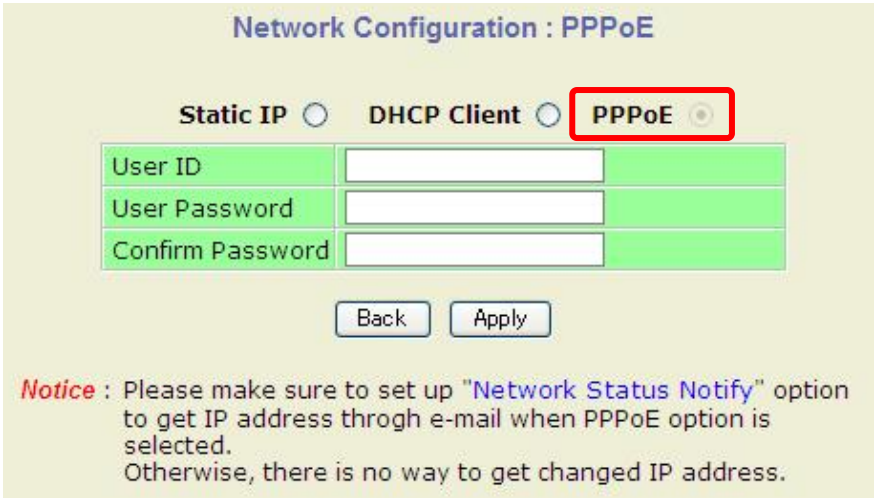
Note:

Above **Network Status Notify** function is not supported. But it is only explained on **5-5.Network Status Notification**.

5-1-3.PPPoE

This function is not supported

PPPoE is used to connect IP camera to PPPoE Modem provided ISP. It is needed the verification ,ID and Password. After setup, click Apply button to save settings.



Note:

Above **Network Status Notify** function is not supported. But it is only explained on **5-5.Network Status Notification**.

5-2.Network Ports

Click **Network Ports**, then below setup screen is displayed.

This setting is for HTTP port number which is used to connect Client PC and IP camera(Web page).

It can be assigned between 80 and 6553 and default value is 80.

After setup, click Apply button to save settings.

Note:

If the HTTP port number is changed than default 80, the connected URL should be attached new Port number as below example

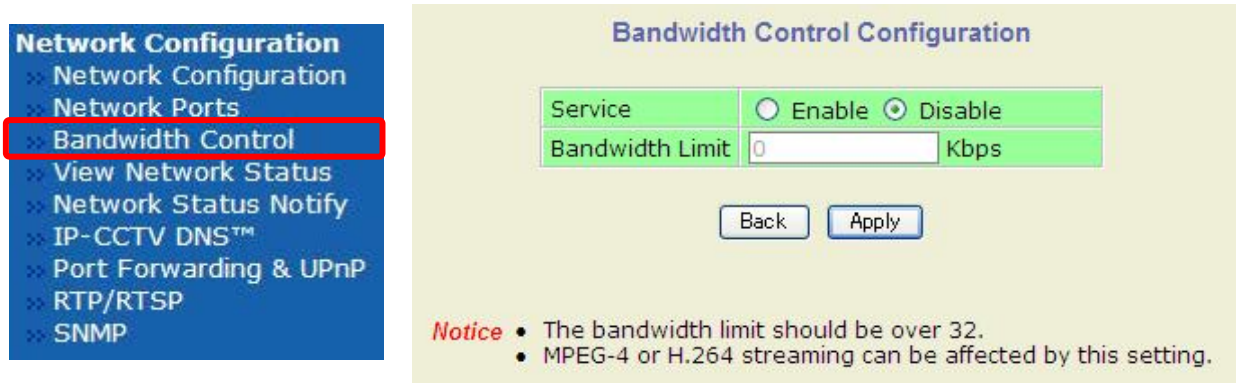
http:// [IP Address of camera] : [HTTP PORT NUMBER] /

Camera Address [192.168.1.100] and new port number is [8080]

The URL should be http://192.168.1.100:8080/

5-3.Bandwidth Control

Click **Bandwidth**, then below setup screen is displayed.



This setting is for maximum limit data size of transferring on network. If the data size is exceeded this setting limit, part of data will be randomly lost. If multiple users try to access camera streaming, the users streaming share this setup limited data size each other.

Note:

○In H.264.it is recommended to use CBR and frame rate control instead of Bandwidth control.

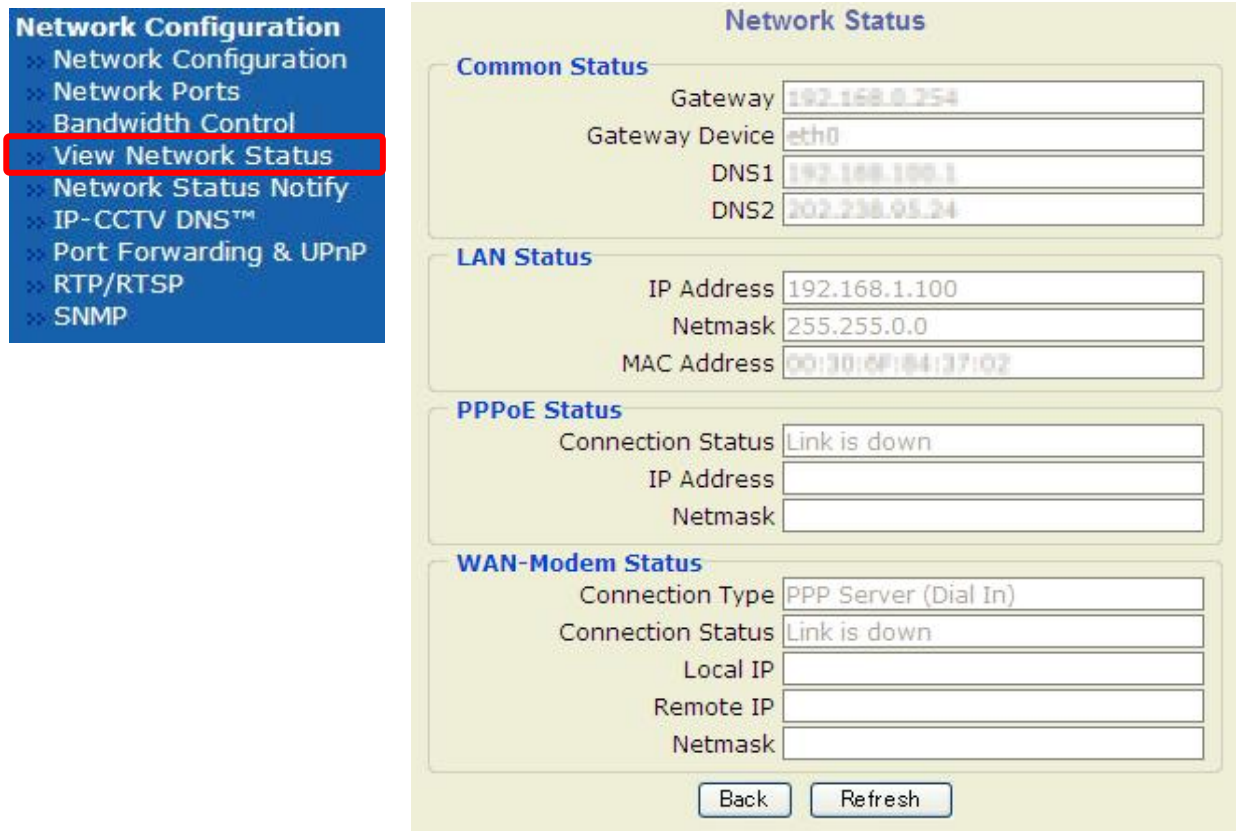
○This bandwidth control works fairly well in M-JPEG video transmission.

○This bandwidth control can manage and limit the exceeded limit data size of camera, it drops any camera control data packet also, thus it may slow down to access IP camera.

5-4.View Network Status

Click **View Network Status** item, below Network Status view screen is displayed.

This view screen shows the network status information at present.



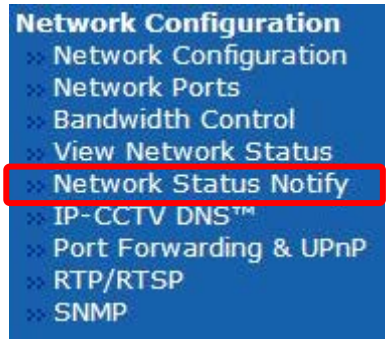
When click the Refresh button, the status data will be set as newest data.

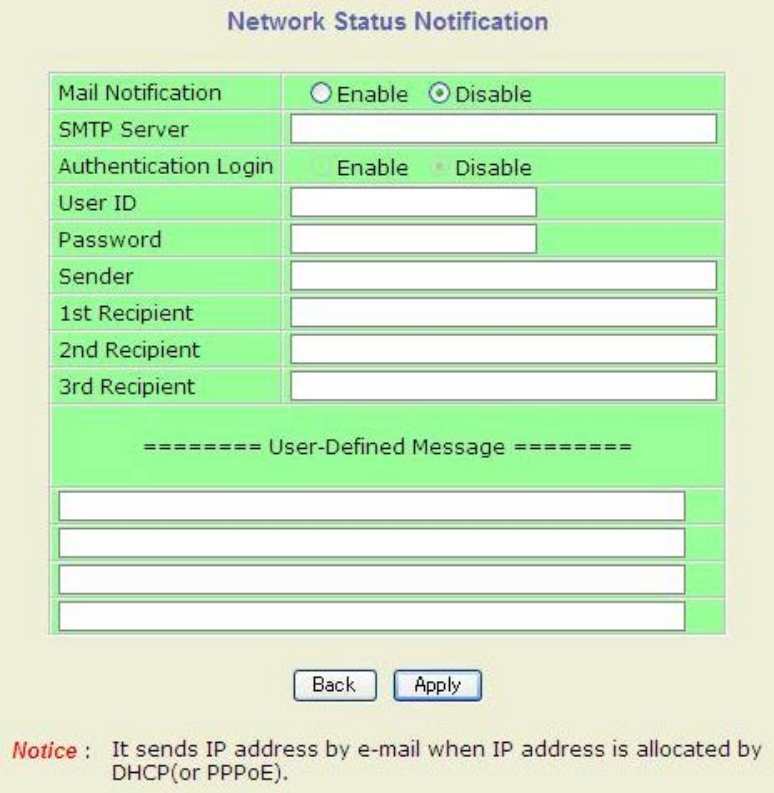
If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

5-5.Network Status Notification

This function is not supported

Click **Network Status Notification** item, below menu and screen is displayed.





If any changes happen for network status, it is sent the update network status information to registered email address. This function will work under DHCP or PPPoE.

After finished above setting, click Apply button to save settings.

The working conditions of this function are as follows

○**5-6.IP-CCTV DNS Setup** has been done.

○**5-1-2.DHCP Client** Setup has been done, and the camera has been given new IP address.

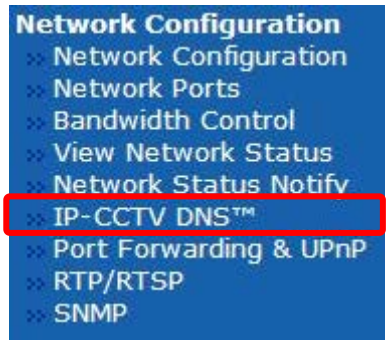
○**5-1-3.PPPoE** Setup has been done, and the camera has been given new IP address by ISP or PPP server.

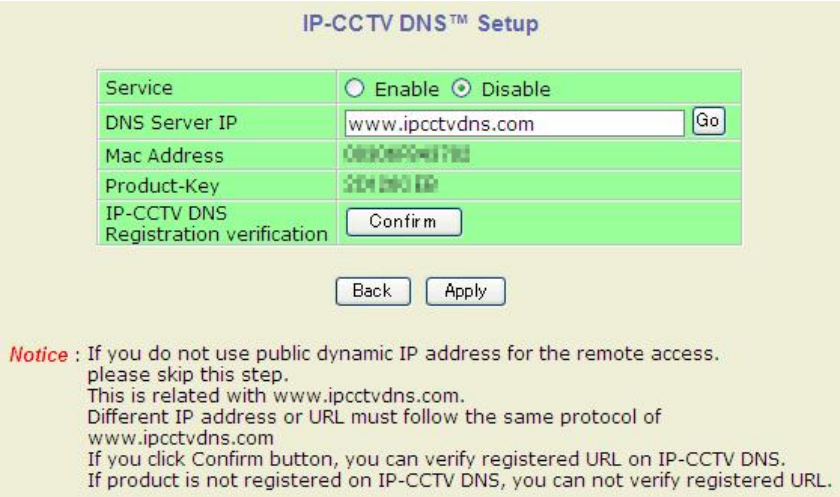
Mail Notification	Enable : Send email Disable : Do not send email
SMTP Server	SMTP Sever Address for email service
Authentication Login	Enable : User ID and Password are required Disable : Not required
User ID	User ID for SMPT server
Password	Password for SMPT Server
Sender	Email Address of Sender
1st～ 3rd Recipient	Email Address of Recipients(up to 3 persons)
User Defined Message	Message is included in Notification email

5-6.IP-CCTV DNS Setup

This function is not supported

Click **IP- CCTV DNS** item on the Menu, below Setup screen is displayed.





IP-CCTV DNS service provides a static & public domain name to help users' access IP camera even through their IP address is changed or they are used in local network. To use IP-CCTV DNS, users have to create ID from IP-CCTV DNS server（http://www.ipcctvdns.com）,and register the camera with MAC address and Product Key.

Finished the above registration, click the Enable radio button on Service item of above screen.

Then click the Apply button, it can be display the registered information on screen.

After check this registration information, click Confirm button.

Note:

○When this function is not used, it should not be setup.

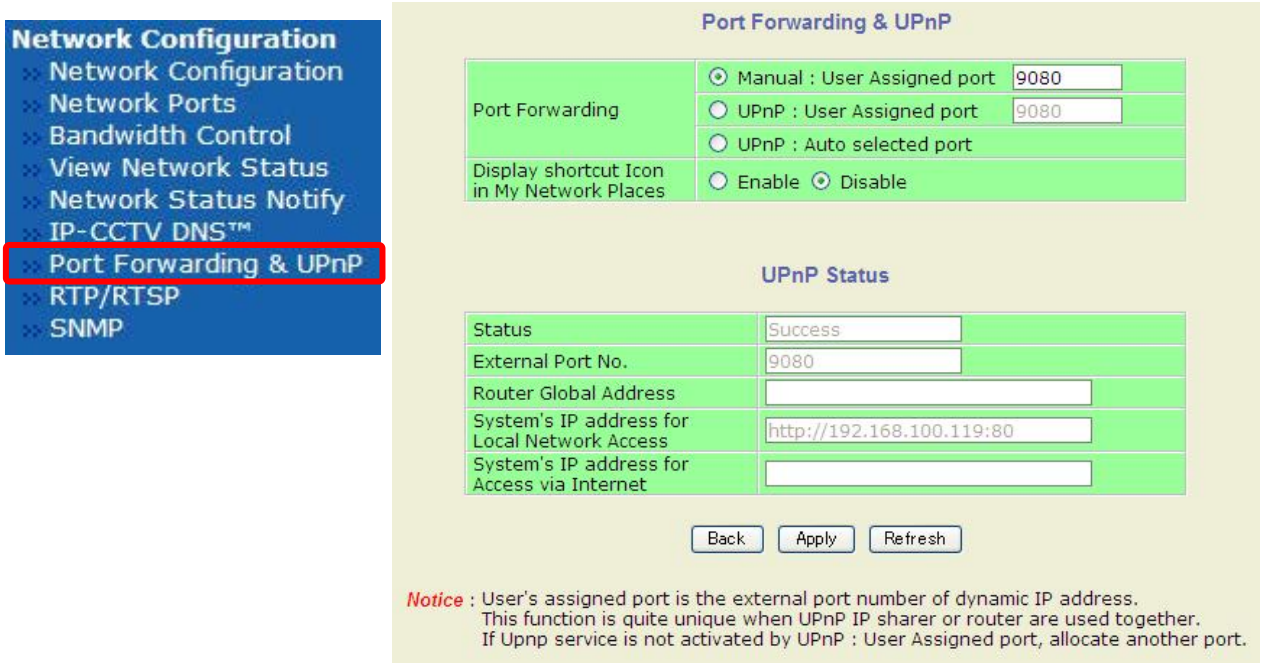
○The provided domain name is able to check by Confirm button.

○The registered information is not shown without provided ID (Resister the Mac address, and Product Key)

5-7.Port Forwarding & UpnP

This function is not supported

Click **Port Forwarding & UPnP** item on the Menu, below setup screen is displayed.



Port Forwarding is to assign a certain network port to a network product, which users can access from outside of Local area network. It can be configured from router.

There are 3 options in Port Forwarding UPnP.

○Manual:User Assigned Port

To use when users can access network router(hub) and manually assign available network port to camera.

○UPnP: User Assigned Port

To use when users need to configure the camera Port Forwarding menu of network hub with user-assigned network port. If it fails, try to change user-assigned port.

○UPnP: Auto Selected Port

To use when users need to assign automatically the port for camera and router in the network.

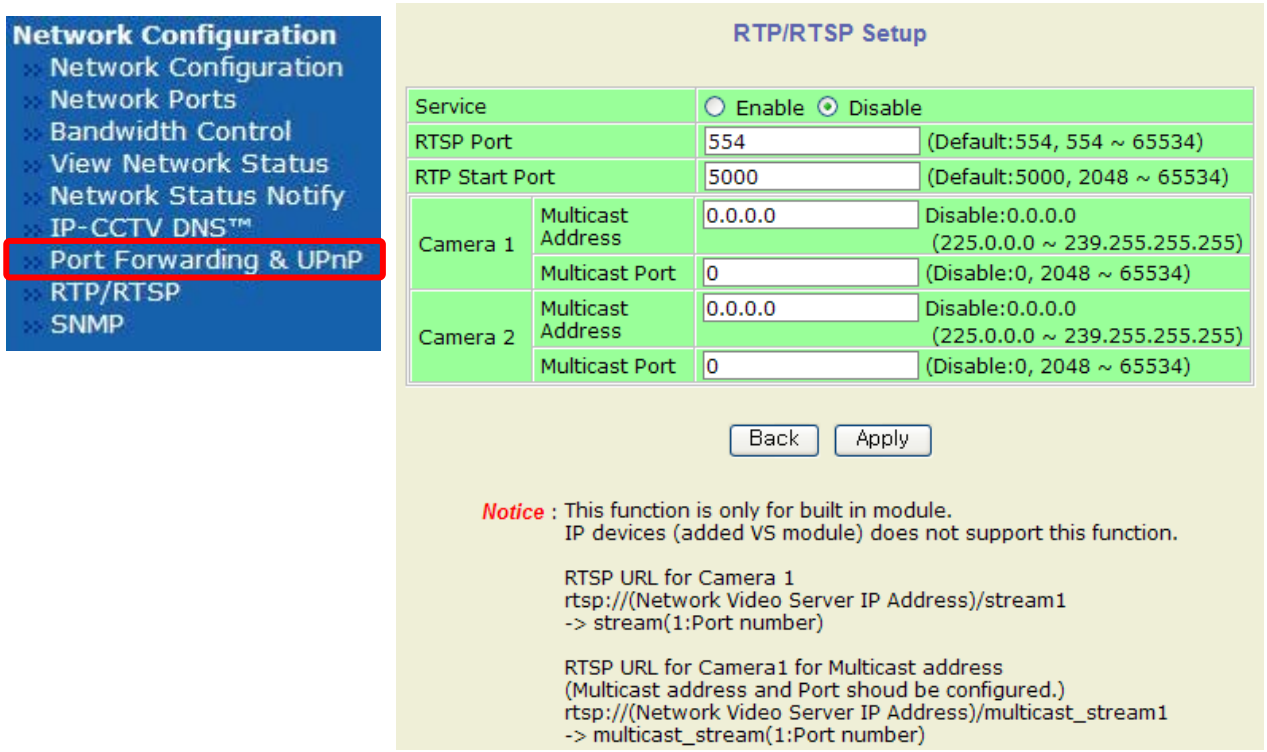
After finished above setting, click Apply button to save. When click the Refresh button, the status data will be set as newest data. If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

Note:

When the router is supporting UPnP Port Forwarding, then there is limit for maximum UPnP devices. If it is properly configured, the results "Success" will be shown on **UPnP Status**.

5-8.RTP/RTSP

Click **RTP/RTSP** item on the Menu, below setup screen is displayed.



The RTP/RTSP for camera video streaming and audio streaming(only IPD-DM11,IPD-VR11) are able to set on this screen.

Service	Enable:Start RTSP service Disable:Stop RTSP service To use ONVIF protocol, RTP/RTSP must be set Enable
RTSP Port	Recommended default number 554. If it is needed to change port number, enter the number as below. e.g.） port number 445　　rtsp://192.168.100:445/stream1
RTP StartPort	Set the starting number of port for video transfer. When video transfer connection is made by each time, the port number also increases.
Multicast Address	Set the address for multicast video transfer. The multicast address"0.0.0.0"is for stopping multicast.
Multicast Port	Port number for viewing the video stream with multicast address.

After finished above setup, click Apply button to save settings.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen

The video streaming for camera can be set as below example.

This example is explained based on camera default IP address 192.168.1.100.

Unicast Address

Primary Stream	rtsp://192.168.1.100/stream1
Secondary Stream	rtsp://192.168.1.100/stream2

Multicast Address

Primary Stream	rtsp://192.168.100/multicast_stream1
Secondary Stream	rtsp://192.168.100/multicast_stream2

5-9.SNMP

Click **SNMP** item on the Menu, below setup screen is displayed.

It can be monitored and configured the network status of connected network products. SNMP V1 and V2 are supported over MIB2(Management Information Base),but few functions are not supported.

SNMP V1/V2	Enable:Start SNMP service Disable:Stop SNMP service
Trap	Enable:Start SNMP Trap service Disable:Stop SNMP Trap service.
Destination IP Address	Set the IP address for product to receive SNMP Trap message.
Trap Community	Key value used in SNMP Trap e.g.) public
Available Traps	Cold Start:When SNMP start. Authentication Failure:When key value of SNMP query is wrong.

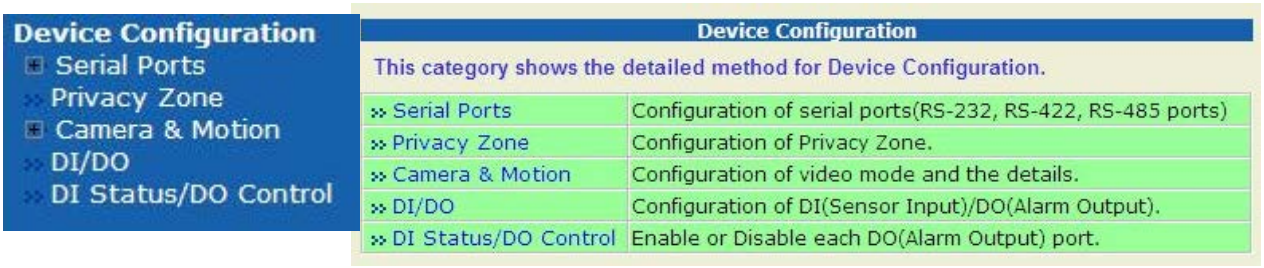
After finished above setup, click Apply button to save settings.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen.

6. Device Configuration

Click **Device Configuration** item on Menu, below setup screen is displayed.

It can be setup privacy zone, camera, motion detection, Sensor Input, Alarm Output etc.



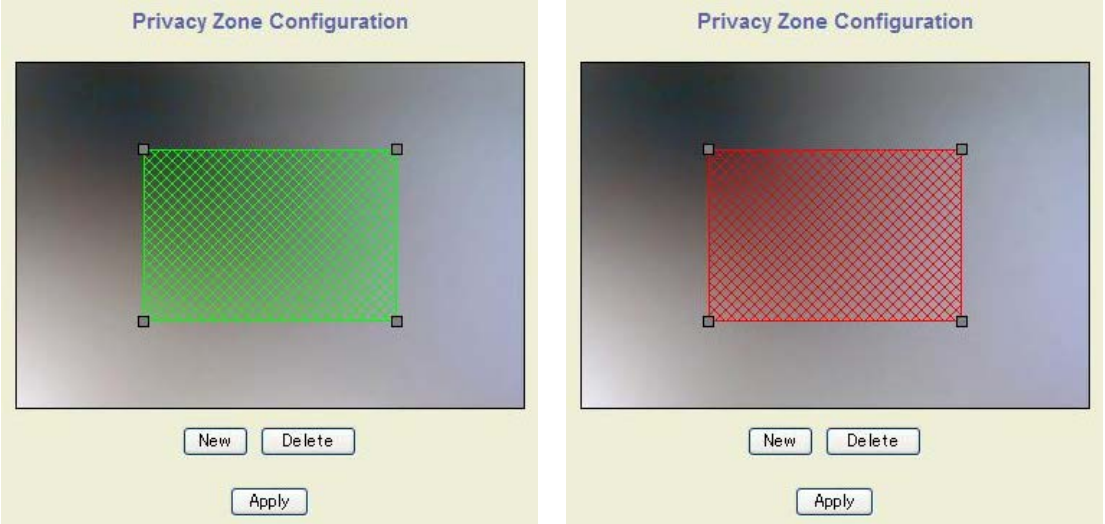
6-1.Serial Ports

Displayed on Menu, but function is not implemented

6-2.Privacy Zone

Click **Privacy Zone** item on Menu, blow setup screen is displayed.

It can be set privacy zone if certain part of screen needs to unmonitored.

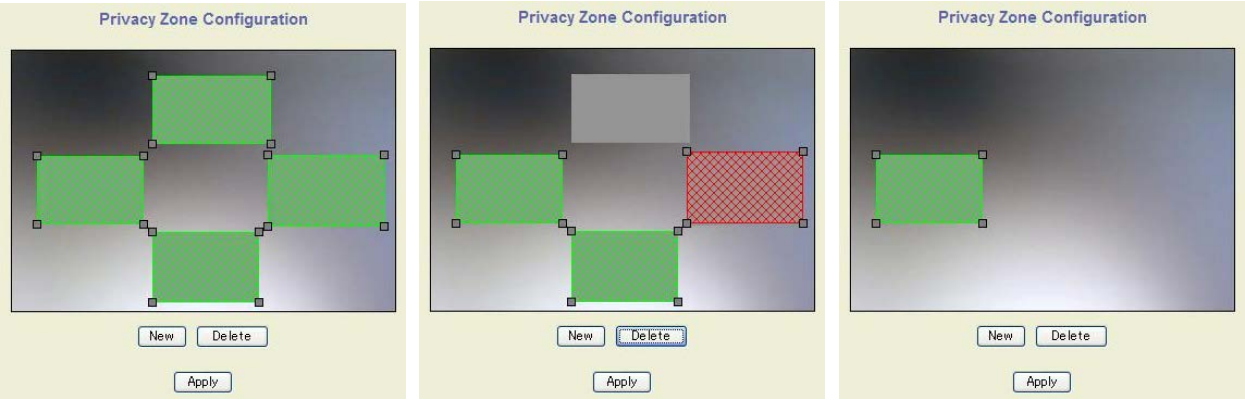


6-2-1.Add Privacy Zone

Privacy zone is marked with a rectangular shape as above screen display. When click the New button, red-colored box will pop up and it can be changed size and location by Mouse.

Finished the setup this box(zone),click the Apply button, then box is made to green-color and finish the setting for this box(zone).

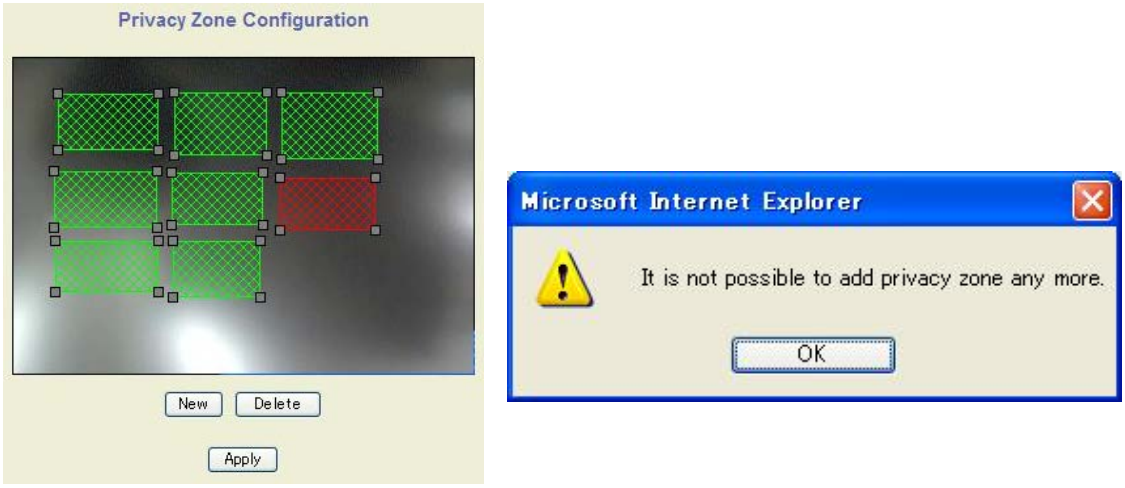
6-2-2.Delete Privacy Zone



Click the box(zone) which is needed to delete, then green-colored box is changed red-colored.

Click Delete button, and red-colored-box is changed gray-colored box. Click Apply button, then it is deleted.

6-2-2.Delete Privacy Zone



It can be defined 8 privacy zones maximum. If it is tried to set over 8 zones, above message is pop up on screen.

6-3.Camera & Motion

It can setup the stream video format, data on the video data,Encoding speed, audio control (only IPD-DM11,IPD-VR11), Video quality, motion detection and etc.

2 formats of Streaming video as below.

H.264 against M-JPEG:It provides much higher compression, but it is having dropped frames in video data under not very good network condition. It can be set P-frame number independently from I frames,

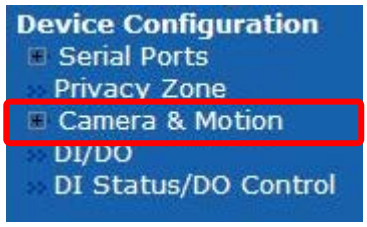
M-JPEG against H.264:It is required higher compression network bandwidth, but the higher quality still image can be provided.

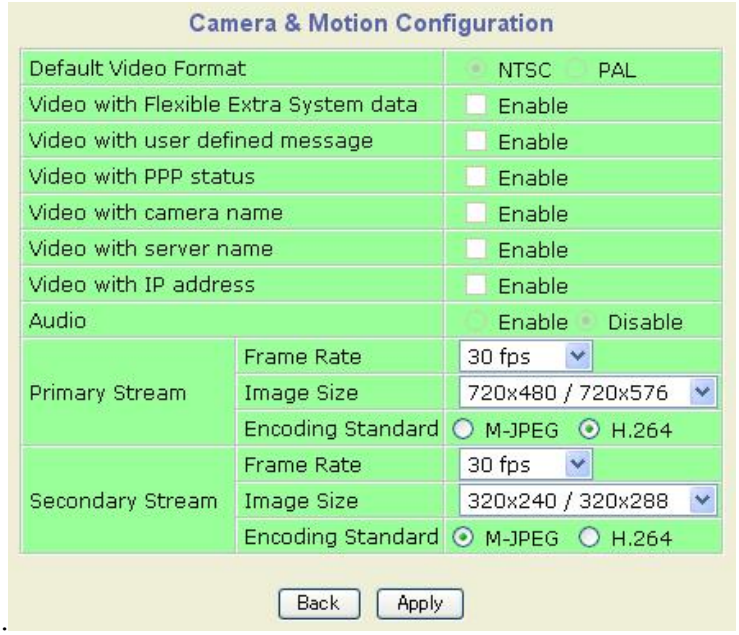
Note:

The most parameters of Secondary Stream are dependent on Primary Stream parameter value.

6-3-1.Camera & Motion

Click **Camera & Motion** on Menu, below configuration for camera menu is displayed





Default Video Format	Select NTSC or PAL Video System for camera video
Video with Flexible Extra System data	Video with Flexible Extra data is sent from COM port (This function is not implemented)
Video with user defined message	User defined message with Video data is sent (This function is not supported)
Video with PPP status	PPP(Configuration status)data with Video data is sent (This function is not supported)
Video with camera name	Camera name with Video data is sent (This function is not supported)
Video with server name	Sever address with Video data is sent (This function is not supported)
Video with IP address	IP address with Video data is sent (This function is not supported)
Audio	Audio function is to be used(Applies Primary stream of IPD-DM11, IPD-VR11 only),it can be streamed to PC and Audio out from PC speaker.
Frame Rate	Set the frame numbers for Primary Stream, the Secondary Stream numbers shall be under the Primary Stream fame numbers. (setting value:1fps, 2 fps, 3 fps, 5 fps, 10 fps, 15 fps, 30 fps)
Image Size	Select the encode size for Primary Stream and Secondary Stream (setting value:160x112/160x144, 320x240/320x288, 640x480/640x576,704x480/704x576, 720x480/720x576)
Encoding Standard	Select the compression method either M-JPEG or H.264 for Primary Stream and Secondary Stream.

After finished above setup, click Apply button to save settings.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen.

6-3-2.Camera Control

Click **Camera Control** item on the Menu, the below camera control button is displayed with camera streaming live video window.

Click the Menu Enter button on camera control, then SETUP MENU for camera is displayed on live video window. It is able to setup DAY/NIGHT AGC ,AWB and etc., for camera with operating Up・Down・Left・Right and Enter buttons.

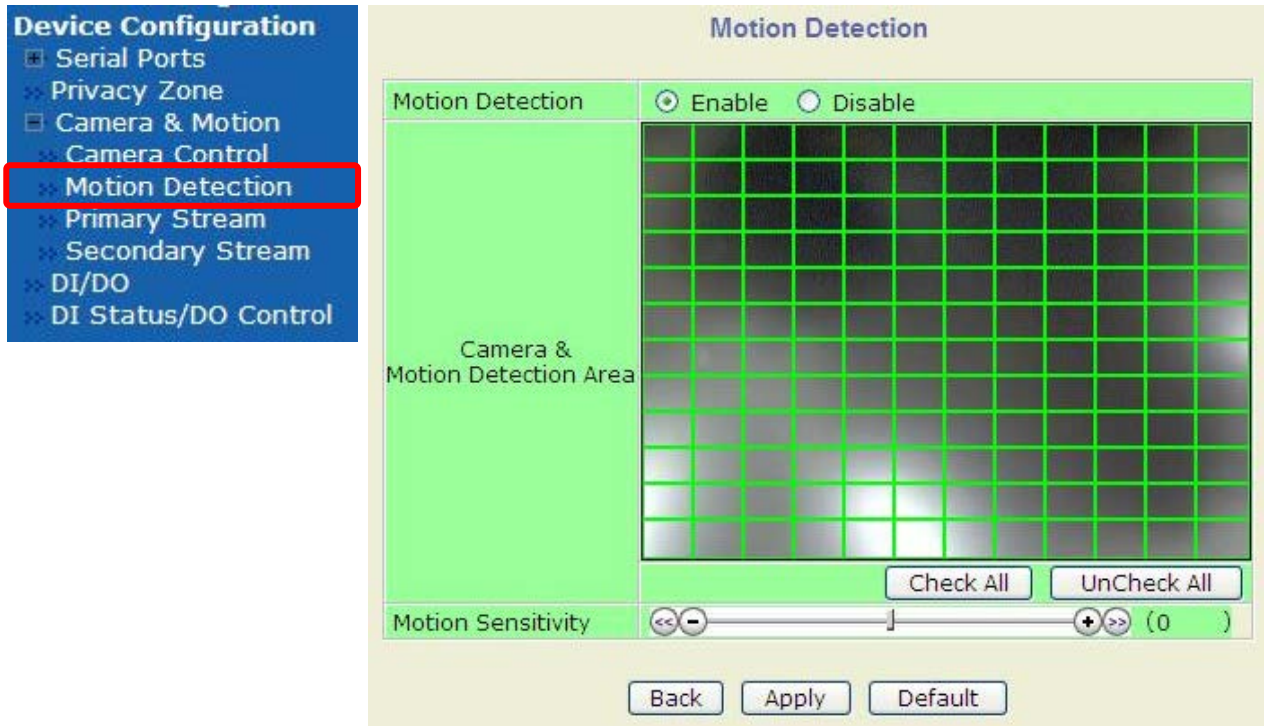
The details of this camera setup is shown on INSTRUCTION MANUAL (BASIC)which is attached in camera package.

Note:

For re-entering after exiting Camera setup menu (OSD), it should be to click Menu Enter button after 2 seconds from exiting setup menu.

6-3-3.Motion Detection

Click **Motion Detection** item on Menu, below setup screen is displayed.



This Motion Detection function is worked on only Primary Stream of camera..

It can be defined the motion detection area from 12 x 12 divided areas of screen as above by clicking each divided area.

Motion Detection	Enable:Effect motion detection function. Disable:Stop motion detection function.
Check All	Effect all area for motion detection with one click this button.
UnCheck All	No effect all area for motion detection with one click this button.
Motion Sensitivity	Set the sensitivity of motion defined in Motion Detection area. Select between－100 and 100. The high value is more sensitive.

After finished above setting, click Apply button to save.

When click the Default button, the setting will be set previous setting data.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

6-3-4.PrimaryStream と SecondaryStream

Click either **Primary Stream** or **Secondary Stream** item on Menu, below setup screen is displayed.

H.264(VBR Mode)

H.264(CBR Mode)

M-JPEG

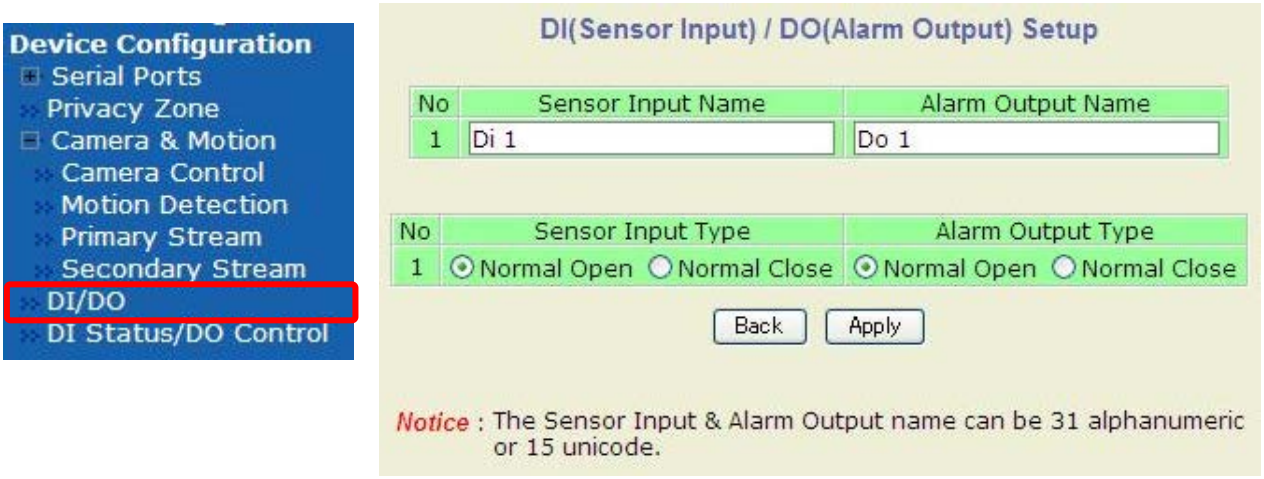
Factory default setting is H.264 for Primary Stream, M-JPEG for Secondary Stream.

Camera Name	Print in Camera name Enter up to 21 alphanumeric characters or up to 10 Unicode.
Rate Control Mode	**H.264 VBR(Variable Bit Rate)Mode** Video is encoded with selected image quality and GOP. Bit rate is different each encoded video frame.
	H.264 CBR(Constant Bit Rate)Mode Video is encoded with selected Bit rate and GOP. Bit rate is constant each encoded video frame, but encoded video quality is not stable related camera captured image.
Image Quality	**H.264 VBR(Variable Bit Rate)Mode and M-JPEG** Select between Low Compression / Highest / High / Normal / Low / Lowest . Low Compression side is realized high quality streaming video, but it is required higher Bandwidth. Lowest side is required lower Bandwidth, but it is given decreased quality image
Bit Rate Control	**H.264 CBR(Constant Bit Rate)Mode** Select the bit rate between 10Mbps from 32Kbps。
GOP Structure	Set the I frame distance between 1 to 64. This is filled with P-frames.

After finished above setting, click Apply button to save. When click the Default button, the setting will be set previous setting data. If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

6-4.DI (Sensor Input) / DO (Alarm Output)

Click **DI/DO** item on Menu, below Setup screen is displayed.



It can be set Sensor input and Alarm Output.

Sensor Input Name	Print in Sensor name Enter up to 31 alphanumeric characters or up to 15 Unicode.
Alarm Output Name	Print in Alarm name Enter up to 31 alphanumeric characters or up to 15 Unicode.
Sensor Input Type	Select Normal Open: Normal is OPEN, and goes Closed when triggered by an event. Select Normal Close: Normal is CLOSE, and goes opened when triggered by an event.
Alarm Output Type	Select Normal Open: Normal is OPEN for relayed output, and closed when triggered by event. an event. Select Normal Close: Normal is CLOSE for relayed output, and opened when triggered by an event.

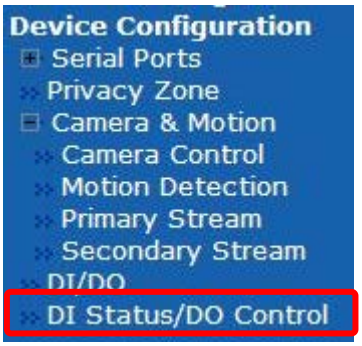
After finished above setting, click Apply button to save settings.

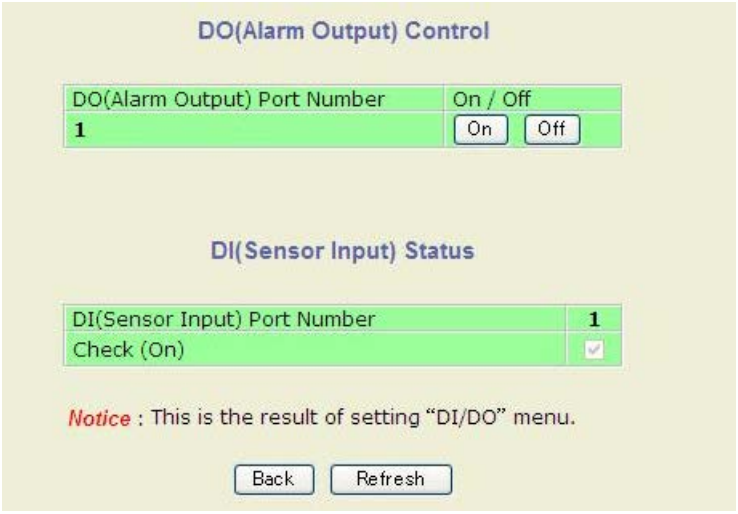
If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

> Note:
> Make sure type of the sensor and use it correctly to the type.
> If a Sensor Input is not used, it must be set Normal Open Type to avoid a false input.

6-5. DI(Sensor Input) Status / DO(Alarm Output) Control

Click DI Status/DO Control item on Menu, below.





○DO(Alarm Output) Control

It can simulate the Alarm output as triggered by event.

When click the On button and the relay output is closed, click Off button and the relay output is opened.

○DI(Sensor Input) Status

It can confirm the Input Status from Sensor.

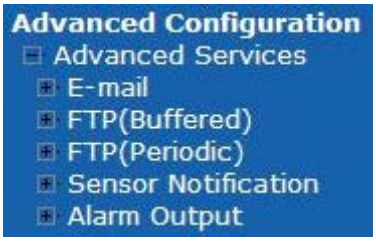
Through above DO Control click On or Off button, then if the Check mark is on Check(On) field, it means DI/DO is worked completely. If not, it means DI/DO is not worked.

It should be confirmed the setting for DI/DO.

When click the Refresh button, the status data will be reset and waiting next click for On or Off button.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

7.Advanced Configuration



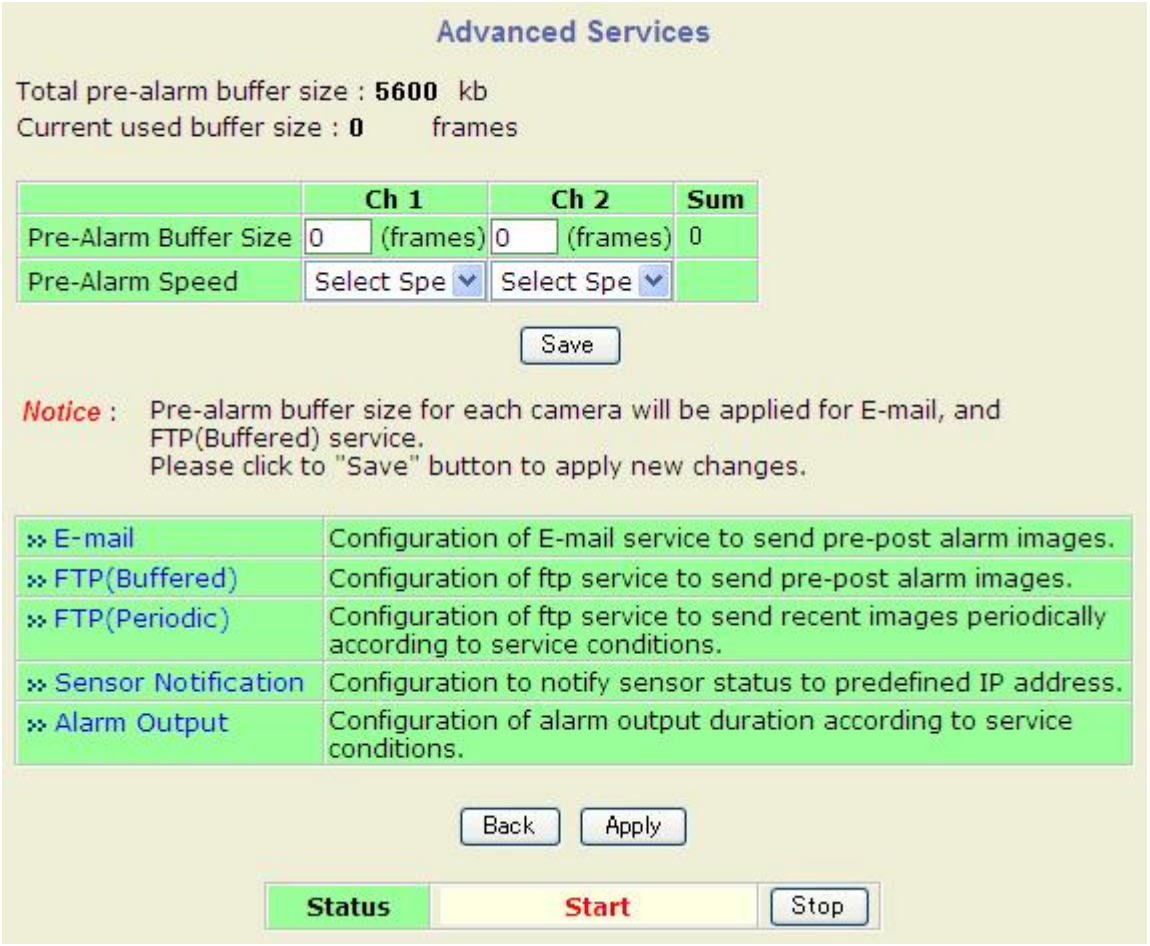
In **Advanced Configuration** menu, it can be set the service of E-mail, FTP, Sensor Notification, Alarm Output.

Click **Advanced Configuration** item on Menu, below sub menu is displayed

7-1.Advanced Services

Pre-Alarm buffer size and buffering speed can be defined here.

Click **Advance Services** on Menu, the below setup screen is displayed.



Pre-Alarm Buffer Size	Set the buffer size of Pre-Alarm which is storing image before event in unit frame. Each Channel can be set different numbers of frame which are 10frames maximum in total.
Pre-Alarm Speed	Set the buffering speed between 0.1f/s to 10.0f/s, and Fastest. Each Cannel can be set different speeds.

After finished above setting, click Apply button to save setting data.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

7-2.E-mail

E-mail configuration is set up here for Alarm in case any event occurs.

7-2-1.E-mail（E-mail Service Configuration）

Click **E-mail** item, below setup screen is displayed.

This function is worked in M-JPEG compression mode for image.

Camera1,Camera2	Click here, **7-2-2.Camera （E-mail Service Setup for Each Channel)** setup screen on next page is displayed also. (Camera1:Primary Stream, Camera2:Secondary Stream)
Service	Enable:To use this E-mail service Disable:Not to use this E-mail service.
SMTP server address	Enter SMTP server address for sending email.
Authentication Login	Select **Enable** if SMPT server requires ID and Password.
User ID	Enter User ID to log in SMPT server.
Password	Enter Password to log in SMPT server.
Sender	Enter the email address of the sender.
1st～3rd Recipient	Enter the recipient s email address up to 3 persons.

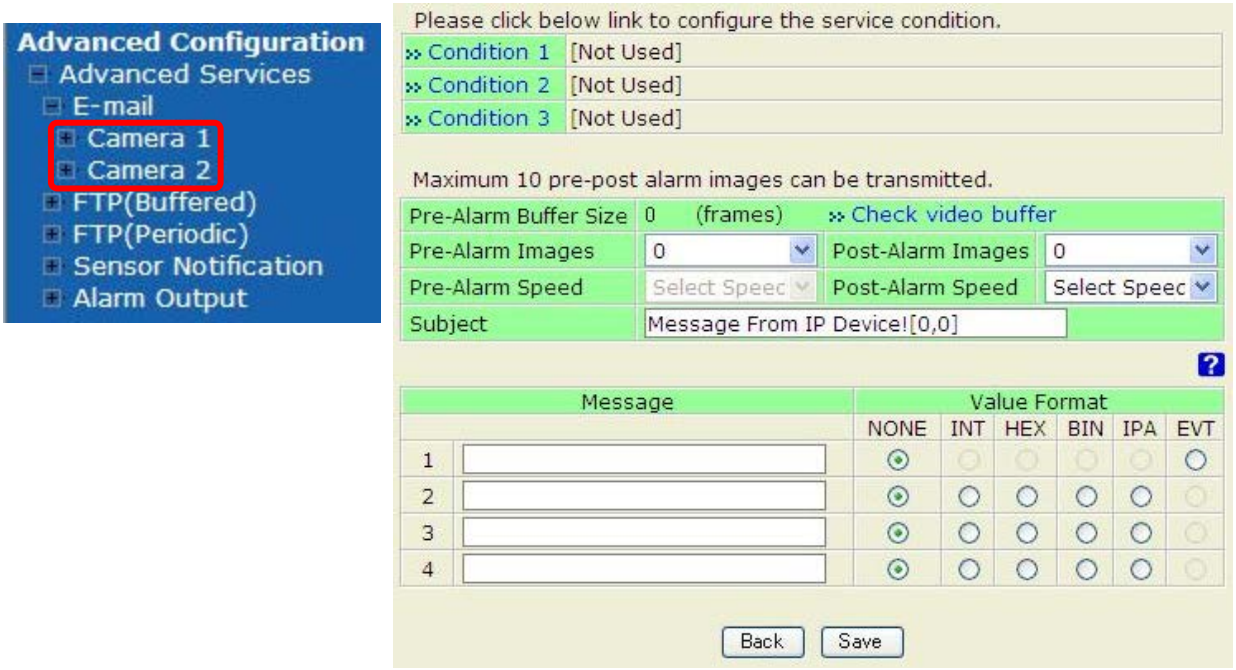
After finished above setting, click Save button to apply setting data.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

7-2-2.Camera（E-mail Service Setup for Each Channel）

Click **Camera 1** or **Camera 2** item on Menu, below setup screen is displayed.

For each camera, the following Condition1-3, Post-Alarm Buffer Size and Speed, text message and display style can be setup/Configured.



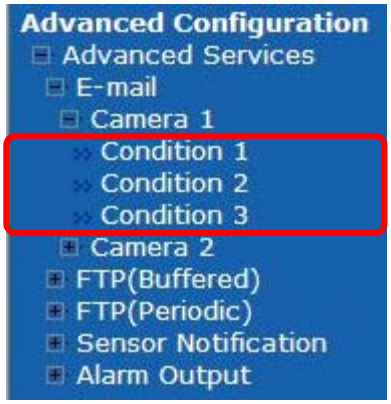
Condition1 ～Condition3	Select the Condition for Email service to be activated. Click here, then **7-2-3.Condition** setup screen is displayed.
Pre-Alarm Buffer Size	The Buffer size assigned for Pre-Alarm.
Check Video buffer	Click this to link to **7-1.Advanced Services** for buffer setup on page。
Pre-Alarm Images	Set the (size) numbers of image frames to store before Alarm.
Post-Alarm Images	Set the (size) numbers of image frames to store after Alarm between 0 and 10.
Pre-Alarm Speed	This field shows the speed which is setup with **7-1.Advanced Services Pre-Alarm Speed.**
Post-Alarm Speed	Set the recording speed for Post alarm images between 0.1f/s to 10.0f/s, and Fastest.
Subject	Subject of the E-mail message to send.
1～4	Contents line 1 to line 4 in the E-mail message.
Value Format	Select the format for the Event or DI data to E-mail. NONE:Don't Send INT:Decimal HEX:Hexadecimal BIN:Binary IPA:IP Address EVT:Name of Event

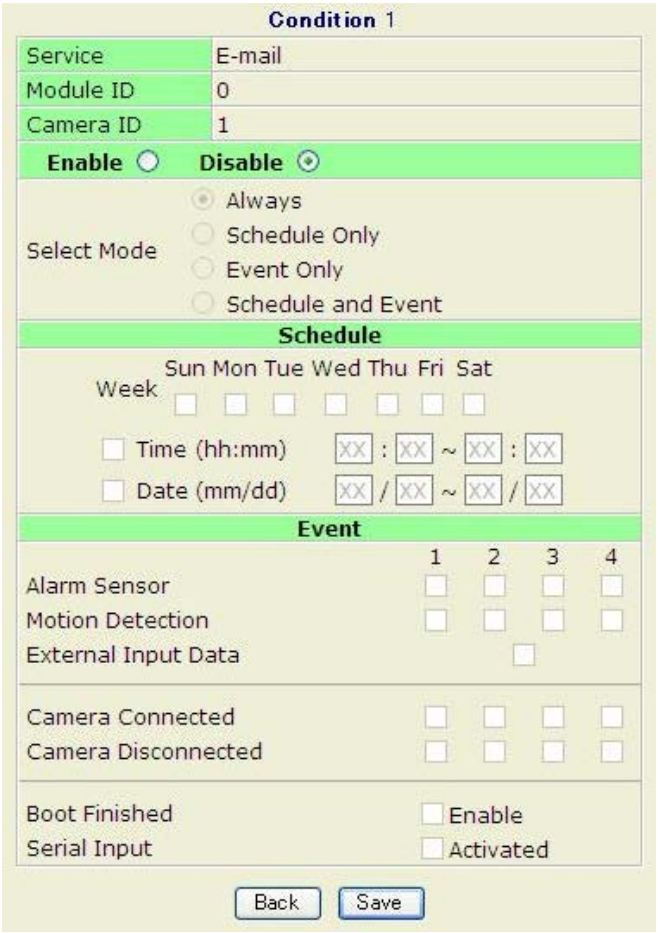
After finished above setting, click Save button to apply setting data.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

7-2-3.Condition

Click the **Condition 1~3** on the Menu, below setup screen is displayed. The setup procedure of Event and Schedule shall be referred **8-2-2. Condition 1**.





Service	This shows what service is for this condition.
Module ID	Module ID for current setup (Fixed 0)
Camera ID	Camera ID for current setup.
Enable / Disable	Enable:To use this condition Disable:Not to use this condition
Always	This condition applies all the time. (Schedule or Event is not usable)
Schedule Only	Use Week, Time and Date in Condition parameter. If none of weekdays is set , it is activated every day.
Event Only	It is activated only any of the following events occurs. (Sensor, Motion Detection, Sever Booting)
Schedule & Event	It is activated above Schedule and Event conditions.

After finished above setting, click Save button to apply the setting data.

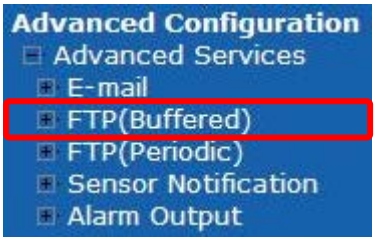
If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

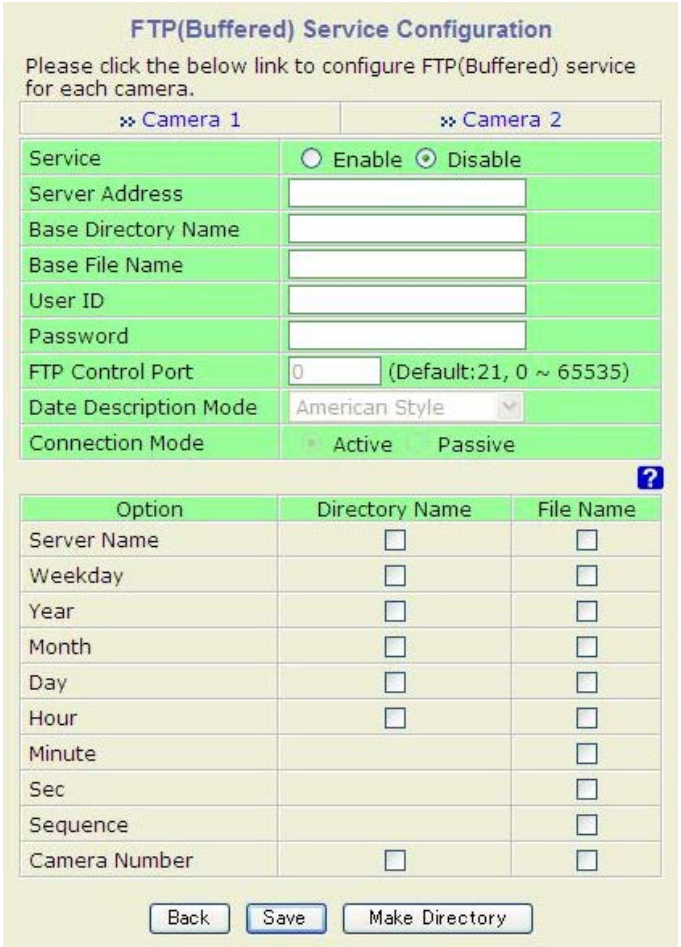
7-3.FTP(Buffered)

It is able to setup the FTP(Buffered) parameter at Event occurred.

7-3-1.FTP(Buffered)

Click **FTP(Buffered)** item on Menu, below setup screen is displayed. This function is worked in M-JPEG





Camera1, Camera2	Setup screen for **7-3-2.Camera(FTP Service Configuration)** is displayed. (Camera1:Primary Stream, Camera2:Secondary Stream)
Service	Enable:To use FTP(Buffered)service Disable:Not to use FTP(Buffered) service
Server Address	Enter FPT Server Address.
Base Directory Name	The base directory name in FTP server where the data will be uploaded. It should be made the directory in FTP server before to use this service.
Base File Name	The base file name of the data to be uploaded in FTP server.
User ID	Enter User ID to log in to FTP server.
Password	Enter the Password to log in to FTP server.
FTP Control Port	Set the Port number for FTP server (Normally 21 is used)
Date Description Mode	Select Date display style. e.g.) ISO Standard (YYYYMMDD)
Connection Mode	Select connection mode for FTP server either Active or Passive.

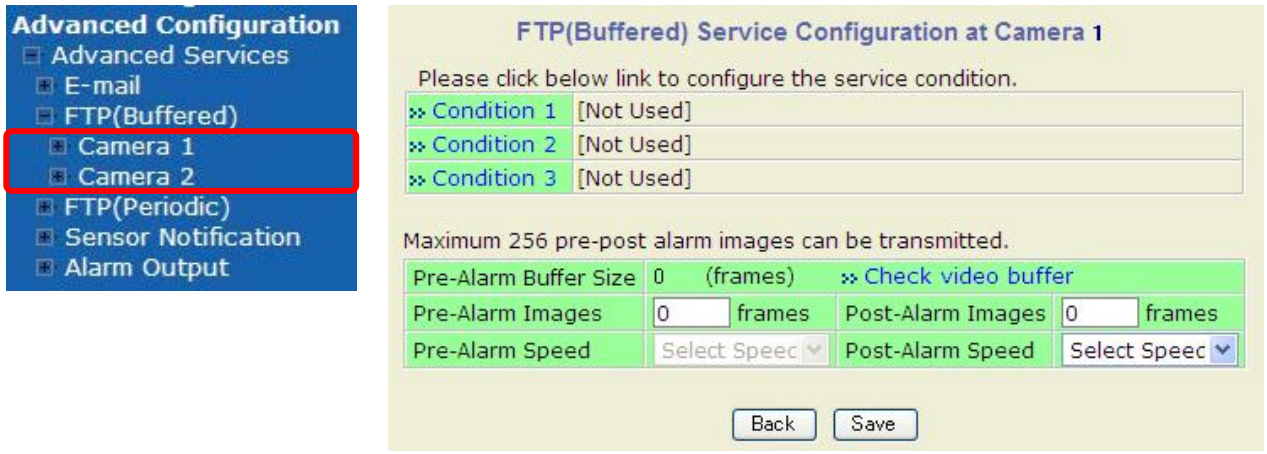
Server Name, Weekday, Month, Day Hour, Minute, Sec	Directory Name box checked:New directory is created for each Option item. File Name box checked:New file is created for each Option.
Sequence	File Name box checked:New file is created starting from 0, with increment of 1
Camera Number	Directory Name box checked:New directory name is created with camera number. File Name box checked:New file is created with camera number.

To create a directory with shown above ,click Make Directory button After finished above setting, click Save button to apply the setting data and continue to next page.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

7-3-2.Camera(FTP Service Configuration)

Click **Camera1, Camera2** item on the Menu, below setup screen is displayed.



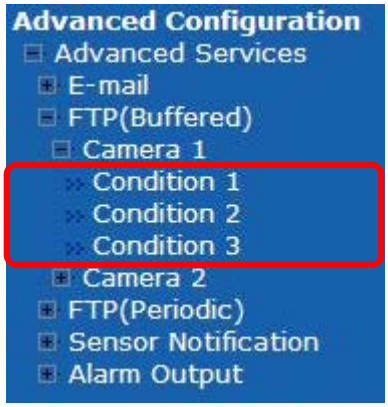
Condition1~ Condition 3	Select the Condition for FTP(Buffered) Service to be activated. Click here, then **7-3-3.Condition** setup screen is displayed.
Pre-Alarm Buffer Size	The Buffer size assigned for Pre-Alarm.
Check Video buffer	Link to **7-1.Advanced Services** , for setup video buffer screen.
Pre-Alarm Images	The number of image frames to store before Alarm.
Post-Alarm Images	The number of image frames to store after Alarm.
Pre-Alarm Speed	This field shows stored speed which has been set on **7-1.Advanced Services Pre-Alarm Speed**.
Post-Alarm Speed	Set the buffering speed between 0.1f/s to 10.0f/s, and Fastest. Each Cannel can be set different speeds.

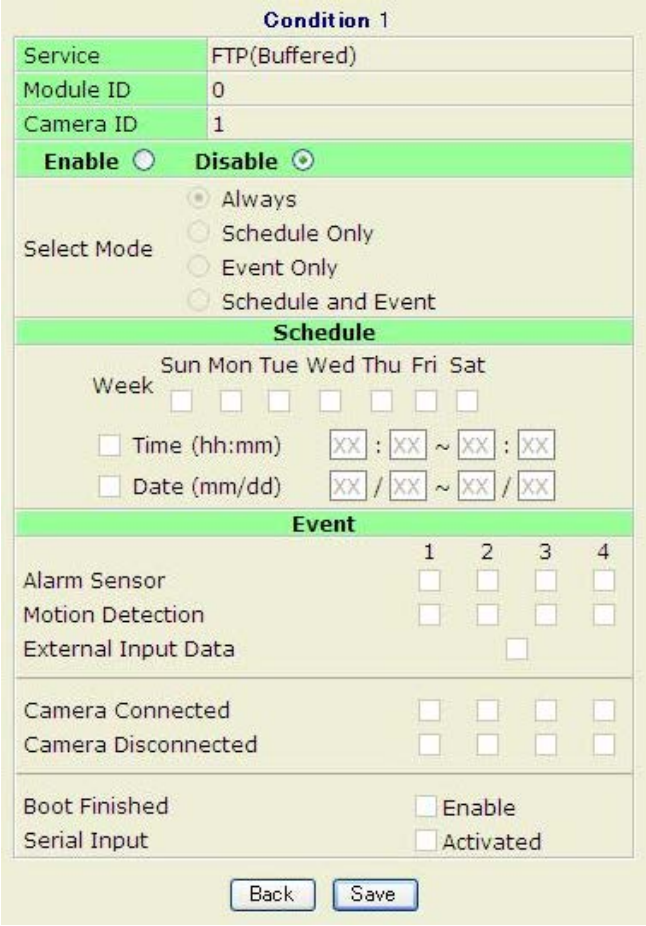
After finished above setting, click Save button to apply the setting data.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

7-3-3.Condition

Click **Condition 1～3** on Menu, below setup screen is displayed. The setup procedure of Event and Schedule details shall be referred**8-2-2. Condition 1**.





Service	This shows what service is for this condition.
Module ID	Module ID for current setup (Fixed 0)
Camera ID	Camera ID for current setup.
Enable / Disable	Enable:To use this condition Disable:Not to use this condition
Always	This condition applies all the time. (Schedule or Event is not usable)
Schedule Only	Use Week, Time and Date in Condition parameter. If none of weekdays is set, it is activated every day.
Event Only	It is activated only any of the following events occurs. (Sensor, Motion Detection, Sever Booting)
Schedule & Event	It is activated above Schedule and Event conditions.

After finished above setting, click Save button to apply the setting data.

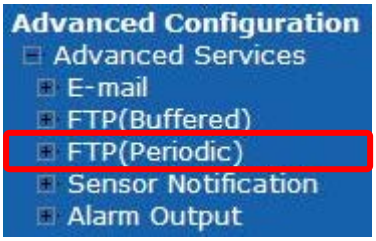
If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

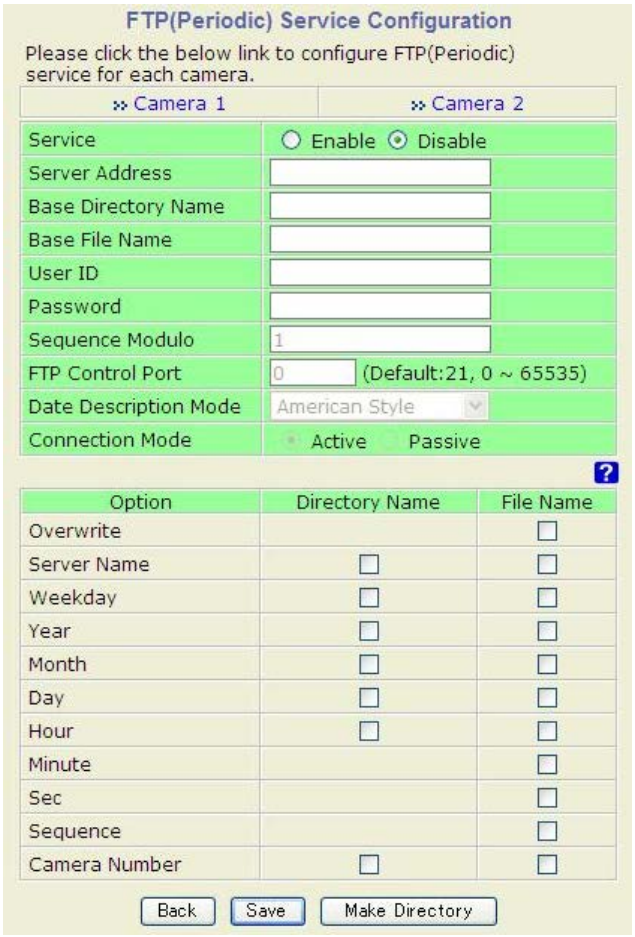
7-4.FTP(Periodic)

It is able to setup the FTP(Periodic) parameter at Event occurred.

7-4-1.FTP(Periodic)

Click **FTP(Periodic)** item on Menu, below setup screen is displayed. This function is worked in M-JPEG compression mode for image only.





Camera1-Camera2	Setup screen for **7-4-2.Camera （FTP Service Configuration）** is displayed.(Camera1:Primary Stream, Camera2:Secondary Stream)
Service	Enable:To use FTP(Periodic) service Disable:Not to use FTP(Periodic) service
Server Address	Enter FPT Server Address.
Base Directory Name	The base directory name in FTP server where the data will be uploaded. It should be made the directory in FTP server before to use this.
Base File Name	The base file name of the data to be uploaded in FTP server.
User ID	Enter User ID to log in to FTP server.
Password	Enter the Password to log in to FTP server.
Sequence Modulo	Maximum number used in sequential file name.
FTP Control Port	Set the Port number for FTP server (Normally 21 is used)
Date Description Mode	Select Date display style. e.g.) ISO Standard (YYYYMMDD)

Connection Mode	Select connection mode for FTP server either Active or Passive.
Overwrite	File Name box checked:New file overwrites on existing file with same file name.
Server Name, Weekday, Month, Day Hour, Minute, Sec	Directory Name box checked:New directory is created for each Option item. File Name box checked:New file is created for each Option.
Sequence	File Name box checked:New file is created starting from 0, with increment of 1.
Camera Number	Directory Name box checked:New directory name is created with camera number. File Name box checked:New file is created with camera number.

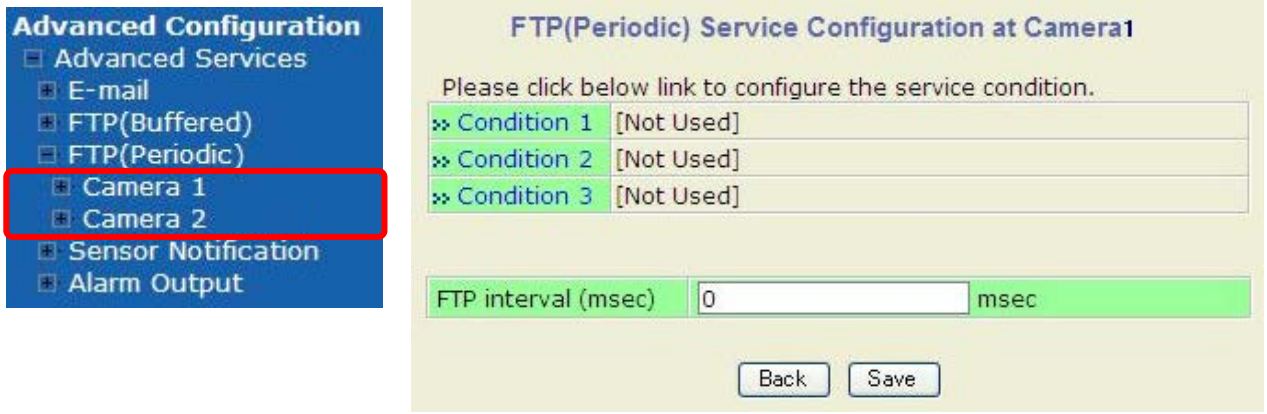
To create a directory with shown above, click Make Directory button.

After finished above setting, click Save button to apply the setting data and continue to next page.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

7-4-2.Camera（FTP Service Configuration）

Click **Camera1, Camera2** item on the Menu, below setup screen is displayed



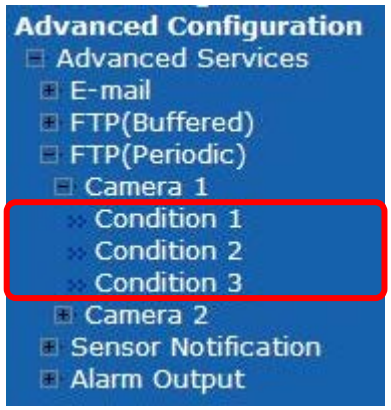
Condition1～ Condition3	Select the Condition for FTP(Buffered) Service to be activated. Click here, then **7-4-3.Condition** setup screen is displayed.
FTP interval(msec)	Set interval time for image upload to FTP server in unit 10msec. If it is set number lower than 10, the FTP interval time becomes 0 msec and FTP service is executed without any time interval.

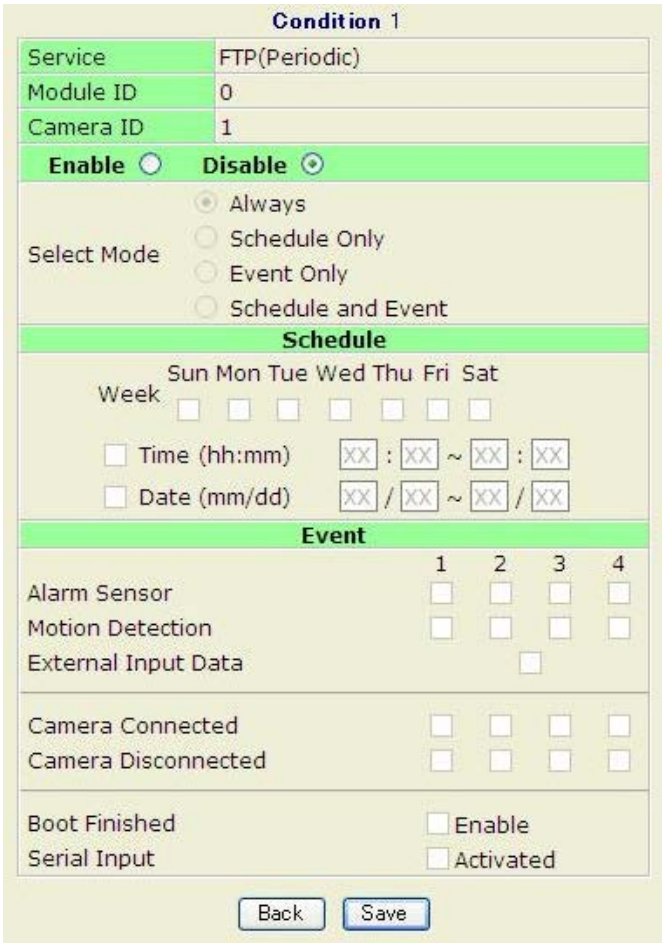
After finished above setting, click Save button to save.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

7-4-3.Condition

Click **Condition 1～3** on Menu, below setup screen is displayed. The setup procedure of Event and Schedule details shall be referred **8-2-2. Condition 1**.





Service	This shows what service is for this condition.
Module ID	Module ID for current setup. (Fixed 0)
Camera ID	Camera ID for current setup.
Enable / Disable	Enable:To use this condition Disable:Not to use this condition
Always	This condition applies all the time. (Schedule or Event is not usable)
Schedule Only	Use Week, Time and Date in Condition parameter. If none of weekdays is set, it is activated every day.
Event Only	It is activated only any of the following events occurs. (Sensor, Motion Detection, Sever Booting)
Schedule & Event	It is activated above Schedule and Event conditions.

After finished above setting, click Save button to apply the setting data.

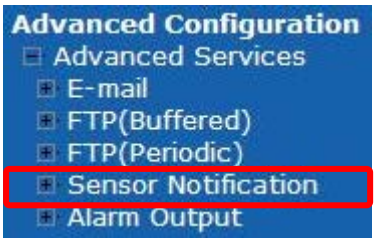
If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

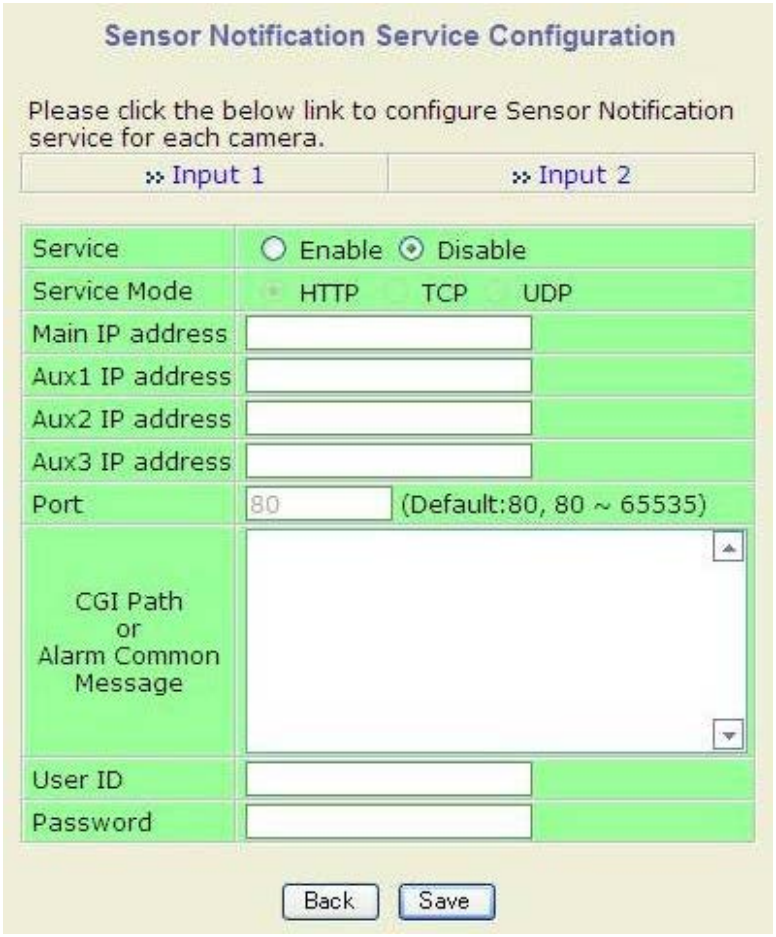
7-5.Sensor Notification

It is possible to setup the Sensor Notification parameters.

7-5-1.Sensor Notification

Click **Sensor Notification** item on Menu, below setup screen is displayed.





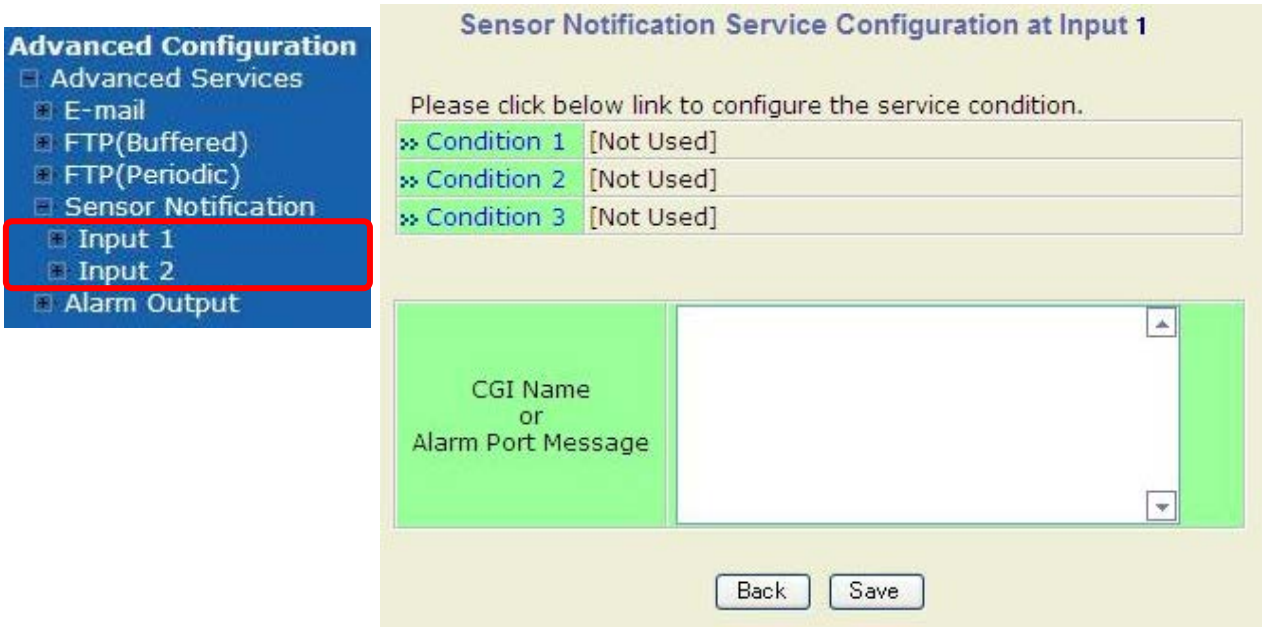
Input 1, Input 2	Setup screen for **7-5-2.Input** is dispalyed.
Service	Enable:To use Sensor Notification service Disable:Not to use Sensor Notification service
Service Mode	Select network mode for CGI between HTTP,TCP and UDP.
Main IP address	Enter IP address to use in CGI or other functions.
Aux1 ~ Aux 3 IP address	Enter 3 more addresses to use in CGI or other functions.
Port	Enter the port number for CGI or other functions. Default: 80
CGI Path or Alarm Common Message	Enter the CGI Path or message for other functions.
User ID	Enter User ID to log in.
Password	Enter the Password to log in.

After finished above setting, click Save button to apply the setting data.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

7-5-2.Input

Click **Input1, Input2** on Menu, below screen is displayed.



Condition1～ Condition3	Link to setup screen of **7-5-3.Condition** is dispalyed. It is able to setup for Input of Sensor Notification service condition.
CGI Name or Alarm Port Message	Enter the contents of CGI or Alarm Port Message when it is used.

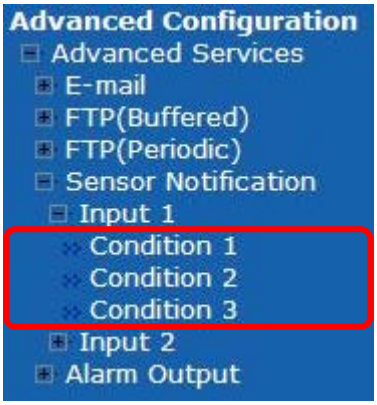
After finished above setting, click Save button to apply the setting data.

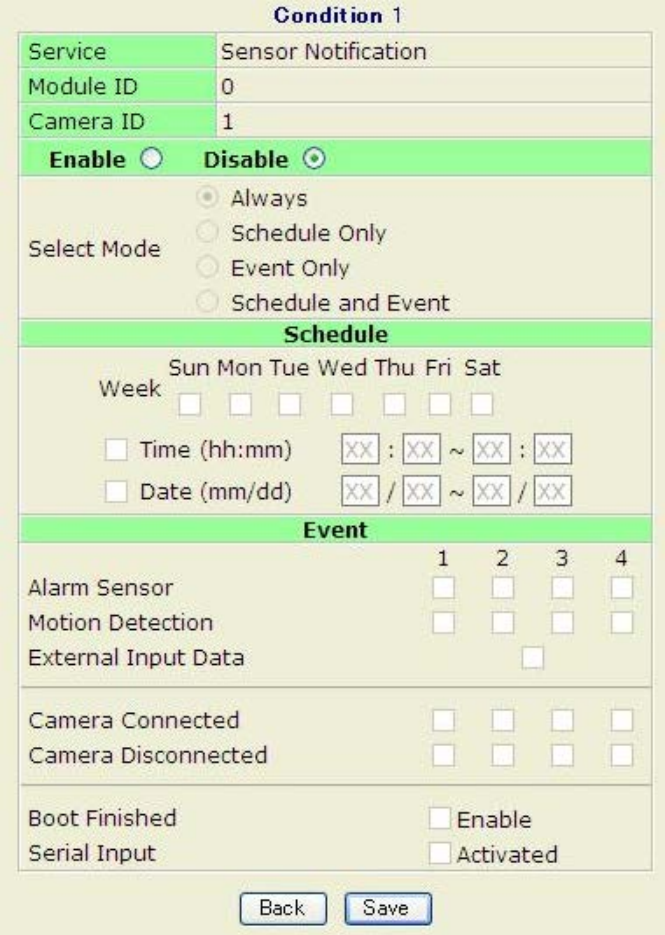
If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

7-5-3.Condition

Click **Condition 1～3** on Menu, below setup screen is displayed.

The setup procedure of Event and Schedule details shall be referred **8-2-2. Condition 1**.





Service	This shows what service is for this condition.
Module ID	Module ID for current setup (Fixed 0)
Camera ID	Camera ID for current setup.
Enable / Disable	Enable:To use this condition. Disable:Not to use this condition.
Always	This condition applies all the time. (Schedule or Event is not usable)
Schedule Only	Use Week, Time and Date in Condition parameter. If none of weekdays is set, it is activated every day.
Event Only	It is activated only any of the following events occurs. (Sensor, Motion Detection, Sever Booting)
Schedule & Event	It is activated above Schedule and Event conditions.

After finished above setting, click Save button to apply the setting data.

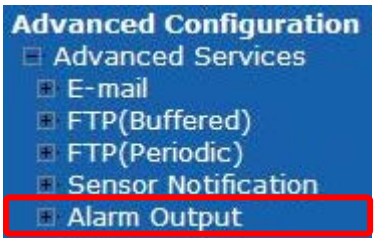
If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

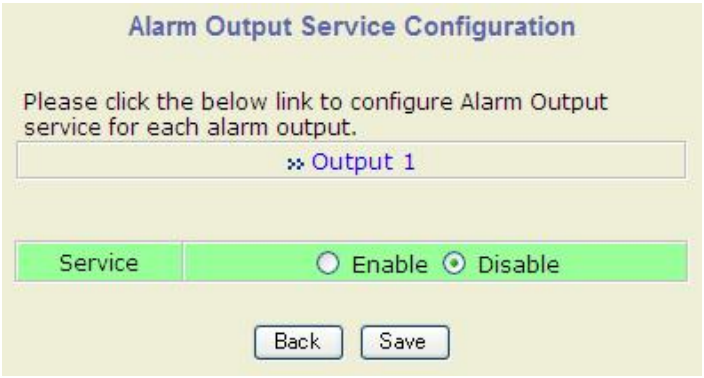
7-6.Alarm Output

It is able to setup the Alarm Output Service.

7-6-1.Alarm Output

Click **Alarm Output** item on Menu, below setup screen is displayed.





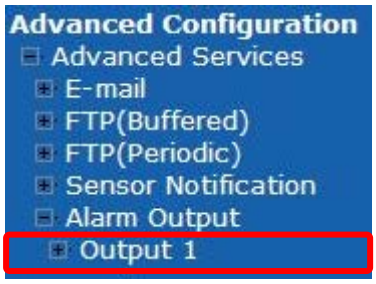
Output 1	Link to setup screen of **7-6-2.Output.**
Service	Enable : To use Alarm Output Service Disable : Not to use Alarm Output Service

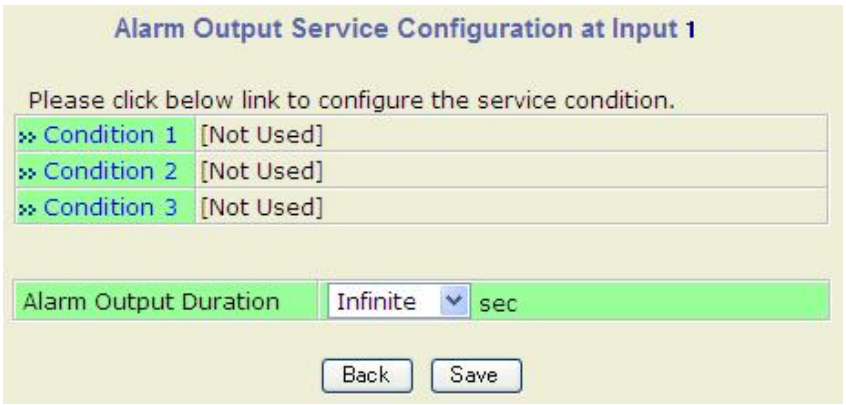
After finished above setting, click Save button to apply the setting data.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

7-6-2.Output

Click **Output1** item on Menu, below screen is displayed.





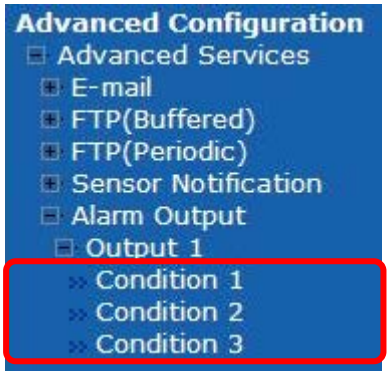
Condition1～ Condition3	Link to Setup screen for **7-6-3.Condition.**
Alarm Output Duration	Set the hold time for Alarm trigger between 1 to 30, and Infinite. If Infinite is set, Alarm is kept till cancel operating.

After finished above setting, click Save button to apply the setting data.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

7-6-3.Condition

Click **Condition 1～3** on Menu, below setup screen is displayed. The setup procedure of Event and Schedule details shall be referred **8-2-2. Condition 1**.



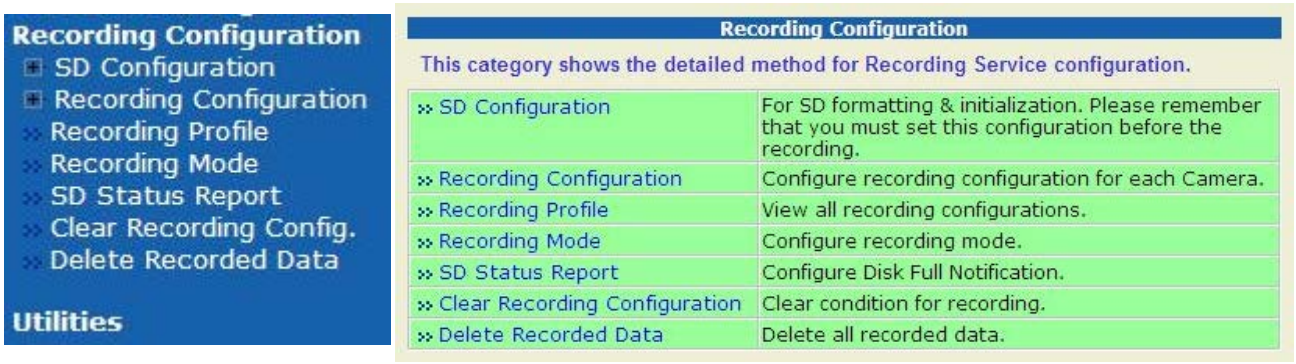
Service	This shows what service is for this condition.
Module ID	Module ID for current setup (Fixed 0)
Camera ID	Camera ID for current setup.
Enable / Disable	Enable:To use this condition Disable:Not to use this condition
Always	This condition applies all the time. (Schedule or Event is not usable)
Schedule Only	Use Week, Time and Date in Condition parameter. If none of weekdays is set, it is activated every day.
Event Only	It is activated only any of the following events occurs. (Sensor, Motion Detection, Sever Booting)
Schedule & Event	It is activated above Schedule and Event conditions.

After finished above setting, click Save button to apply the setting data.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

8.Recording Configuration

IPD-DM11, IPD-VR11 have the slot for Micro SD card (SD card),which is supported 1GB to 32Gb. If the SD card is in slot, it can be recorded the Video and Audio of camera IPD-DM11, IPD-VR11. Click Recording Configuration item on Menu, the below screen is displayed.



SD Configuration	The SD card information is shown on Screen. To do Formatting and initializing the SD card in the camera SD slot.
Recording Configuration	Set the Recording conditions for each camera.
Recording Profile	Display the Recording conditions which have been setup.
Recording Mode	Select recoding mode when SD card capacity becomes full of video data.
SD Status Report	Set the Notifications for SD full, SD capacity, SD Error.
Clear Recording Config	Clear settings for Recording configuration which had been made.
Deleat Recorded Data	Delete the recorded Image data.

8-1.SD Configuration

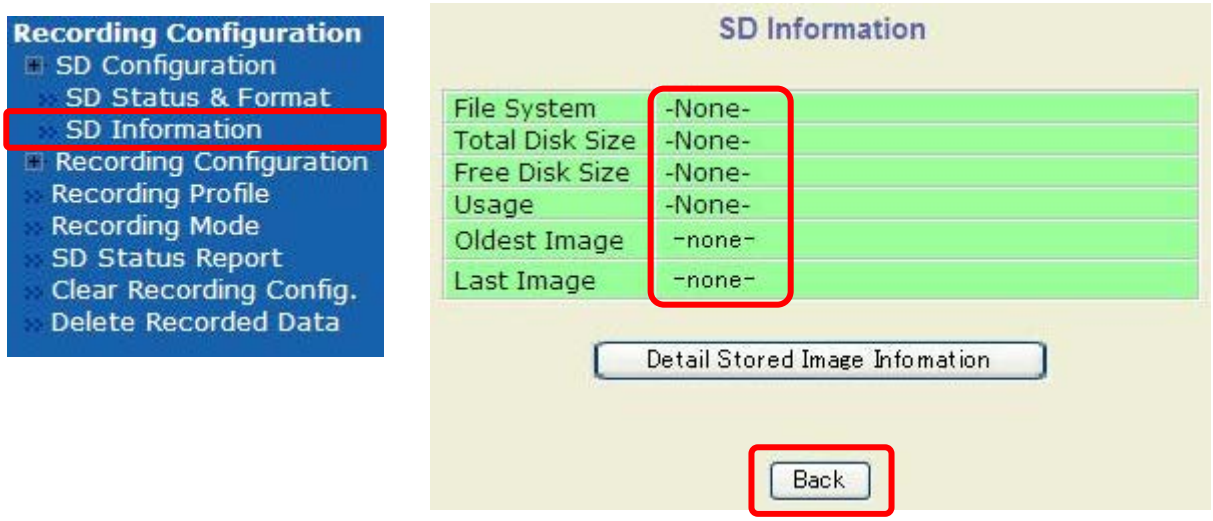
If SD card is needed to insert the camera, it should be turned off the power of the camera before insert SD card.

Note:

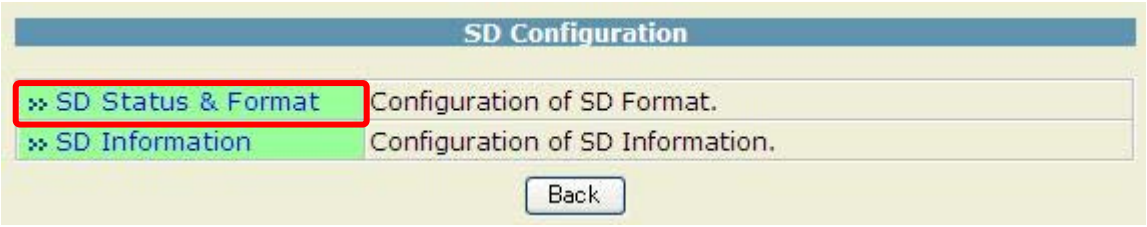
○Be sure to turn off the power of camera before insert the SD card, If not the SD card may become defect.

○Always check the recommended type of SD card, non-conformed SD card can cause abnormal work of the System.

After inserted the SD card, turn on the power of camera, login the camera with IE.
Click **SD Information** item on Menu, below screen is displayed.



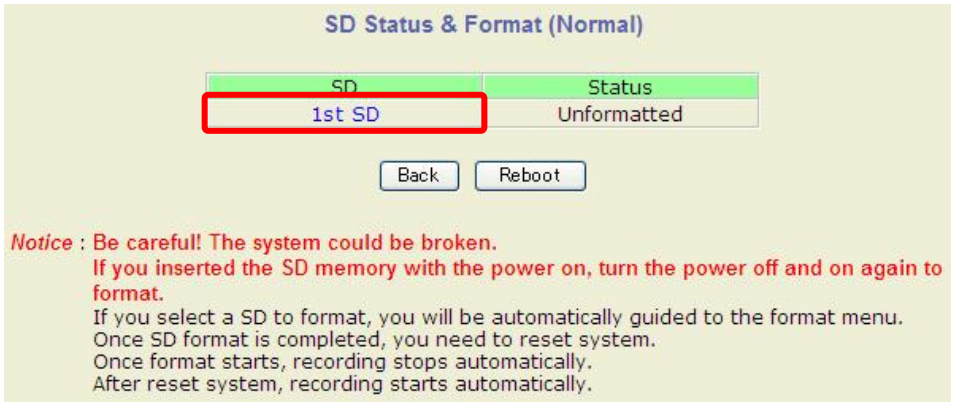
If entire SD information is shown as **-None-** , it means the SD card is not formatted. In that case, click Back button and click **SD Status & Format** item on followed screen displayed.



Now the below screen is displayed which is showing the list of available SD card.

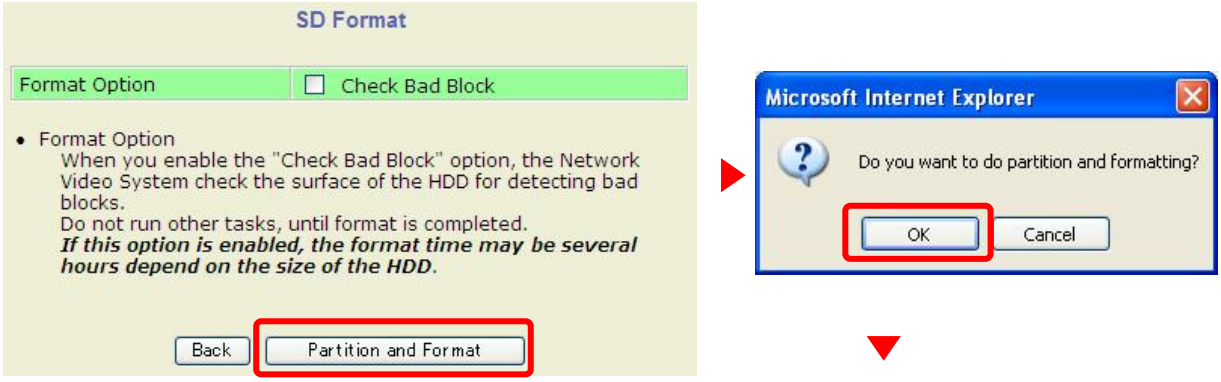
Unformatted:The SD card is not formatted.

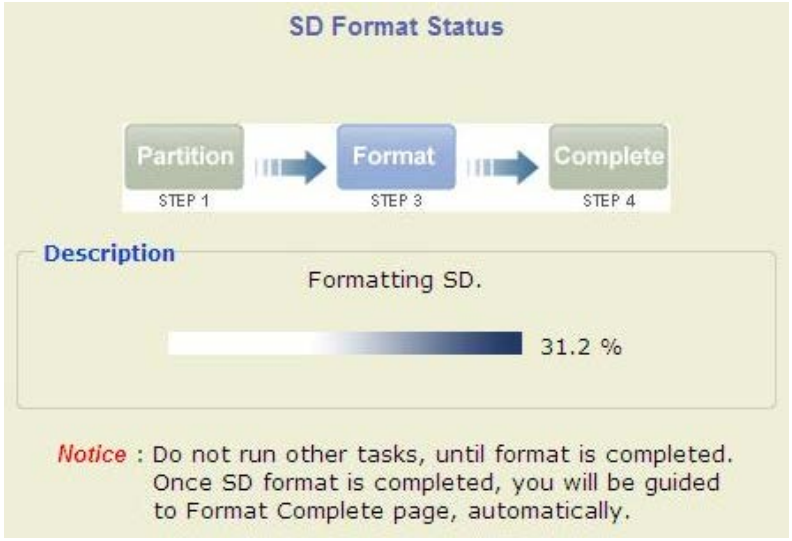
Formatted :The SD card is formatted.



To perform the auto formatting for unformatted SD card on above screen, click **1st SD** item.
After finished the formatting, it is needed to reboot the camera.

Then below widow is displayed. Click Partition and Format button, pop up window to confirm the formatting. Click OK button then the formatting is proceed, and it is shown blow SD Format Status screen, **Check Bad Block** of Format Option is able to check the damaged bad block of SD card. If select this option, the formatting time may be several hours depend on the size of SD card.



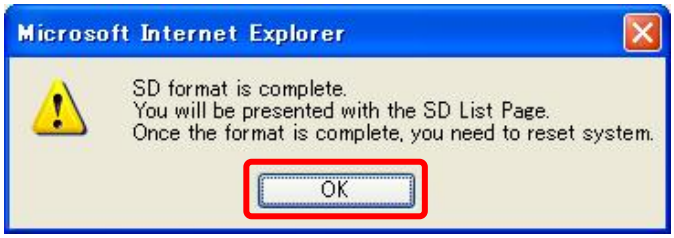


Note:

If the formatting program is terminated during the format process by causing Power is stopped e.g., the SD card may be damaged.

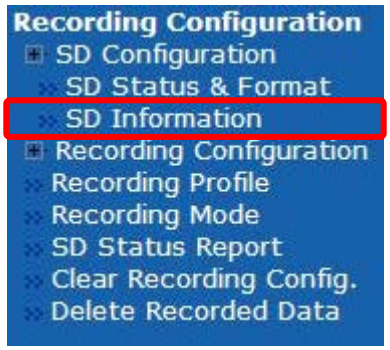
To avoid this problem, make sure to close the program in right way /manner and check the SD card for formatting result.

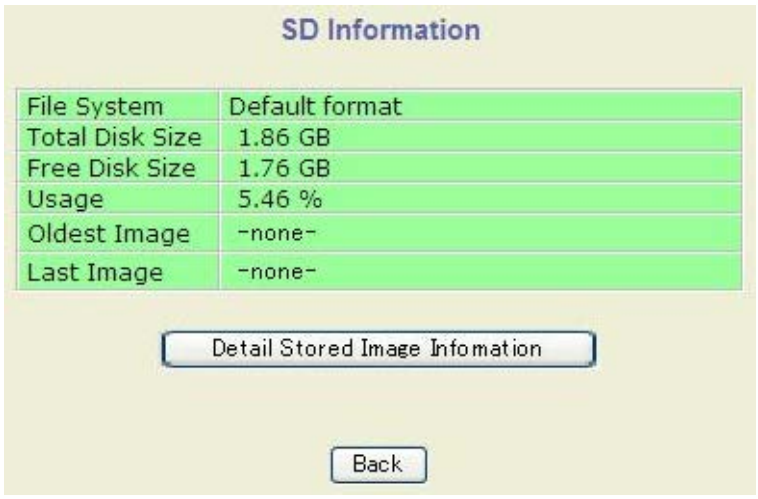
After formatting is finished, below window is pop up for informing it. Click OK button.



SD Status & Format screen is displayed, it is able to show the 1st SD is formatted.
After confirm this Formatted status, click the Reboot button to restart the camera.
This rebooting takes 1 to 2minutes.

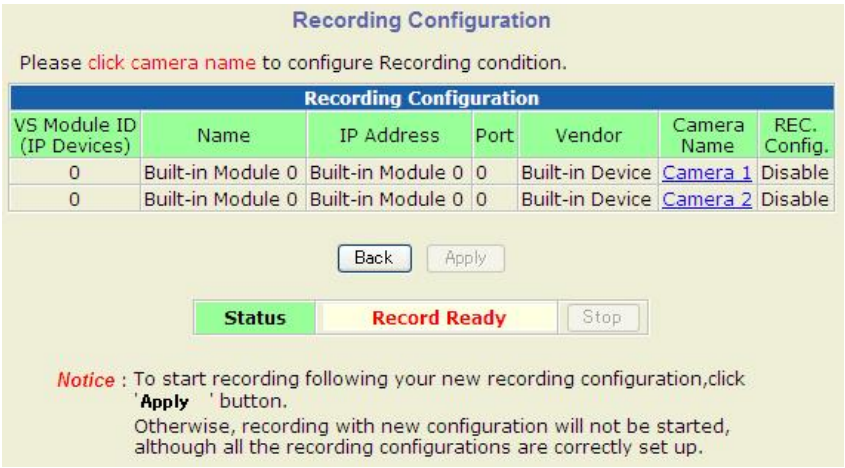
After rebooted the camera, login the camera with IE. And click **SD Information** item on Menu, it is able to show the SD card formatted result on displayed screen as below.
(The below screen shows SD card 2GB e.g.)





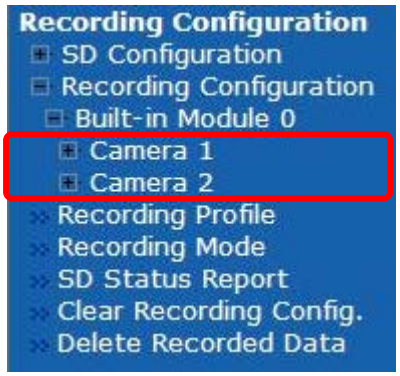
8-2.Recording Configuration

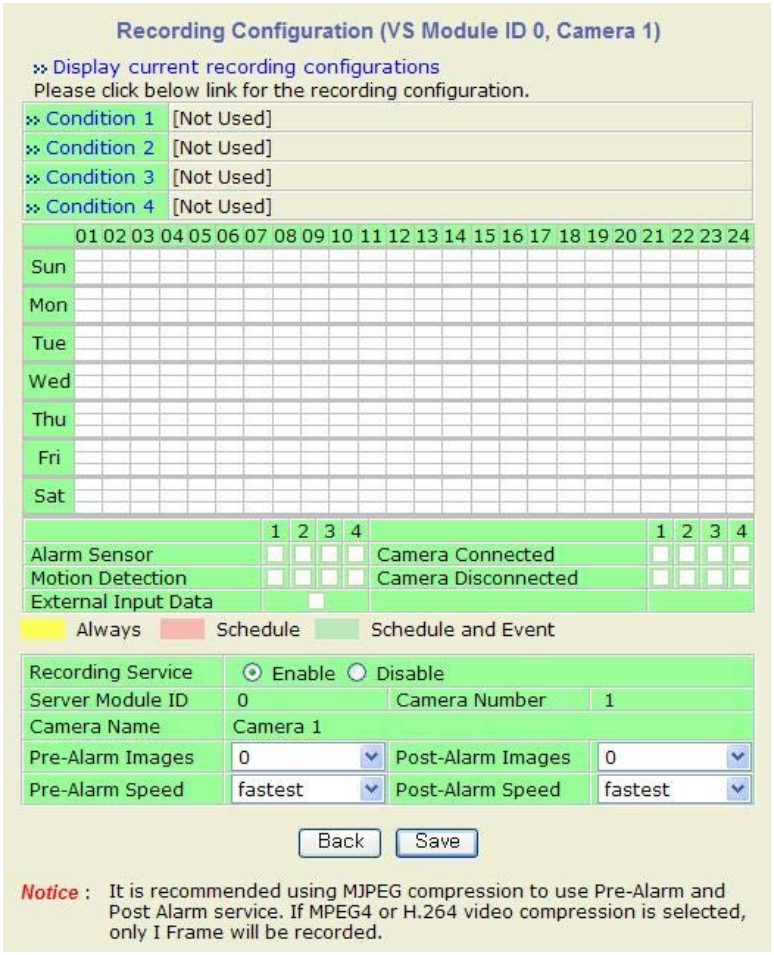
Camera1 (Primary Stream) and Camera2 (Secondary Stream) can be setup for recording option which are included Motion detection recording,24hour continuous recording, event-driven recording, and etc. (**2-5.Step 5:Recording Configuration** is displayed same screen)



8-2-1.Camera

Click **Camera1, Camera2** item on Menu, below setup screen is displayed.





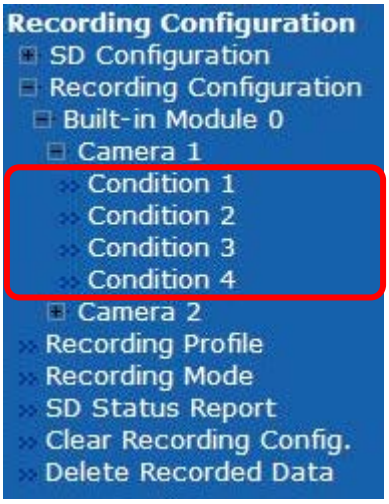
Condition 1~4	Set up screen is displayed as **8-2-2. Condition 1**.
Recording condition tablefor 24hours weekly	Graphic displays recording condition (Always, Schedule, Schedule & Event) on table of time and days of week.
Recording Service	Enable:To use this record function. Disable:Not to use this record function.
Server Module ID	Fixed 0
Camera Number	1:Camera1 Primary Stream. 2:Camera1 Secondary Stream.
Camera Name	It shows entered Camera name Up to 31 alphanumeric characters or up to 15 Unicode.
Pre-Alarm Images	Set the image frames up to 5 frames to record before Event occurs. Valid only for set Event mode recoding.
Pre-Alarm Speed	Set the recording speed before Event between 0.1f/s to 10.0f/s, and Fastest. Valid only for set Always or Schedule mode recording.
Post-Alarm Images	Set the image frames up to 5 frames to record after Event. Valid only for set Event mode recoding.
Post-Recording Speed	Set the recording speed after Event between 0.1f/s to 10.0f/s, and Fastest. Valid only for set Event mode recording.

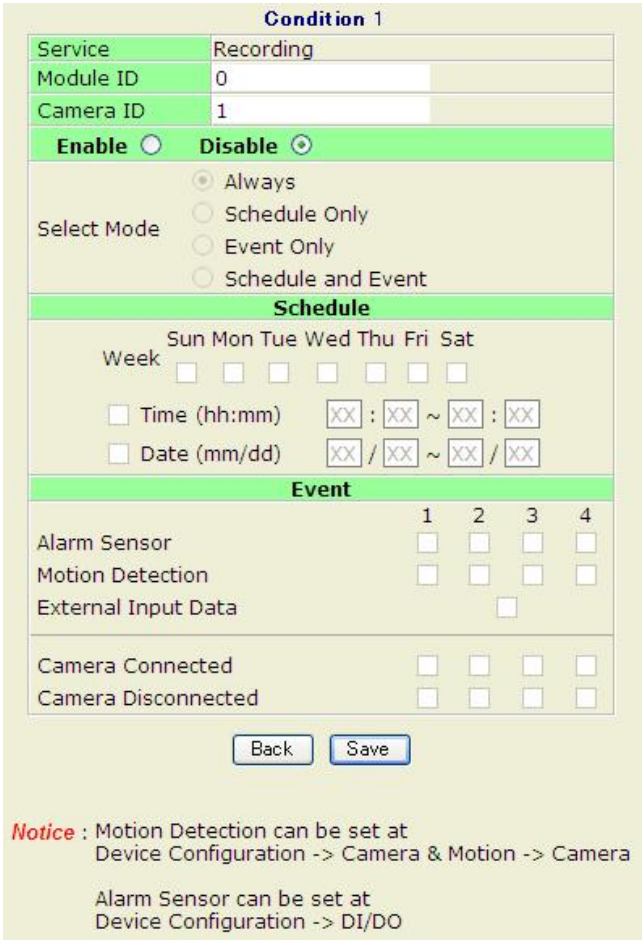
Follow the above screen and set up the recoding speed, camera name Pre-Alarm and Post Alarm images . After set up them properly, click Save button to save settings.

Pre-Alarm and Post Alarm images are recommended M-JPEG. If it is selected H.264, only I frame is recorded. Each Camera1, Camera2 can be set different Condition 1～4 .

All the conditions are checked and worked by OR logic, so it will start recording when at least one of the conditions it meets.

8-2-2. Condition 1





Caution :

○**Event** : Alarm Sensor details can be set by **6-4.DI (Sensor Input) / DO (Alarm Output)**.

○**Event** : Motion Detection details can be set by **6-3-3.Motion Detection**.

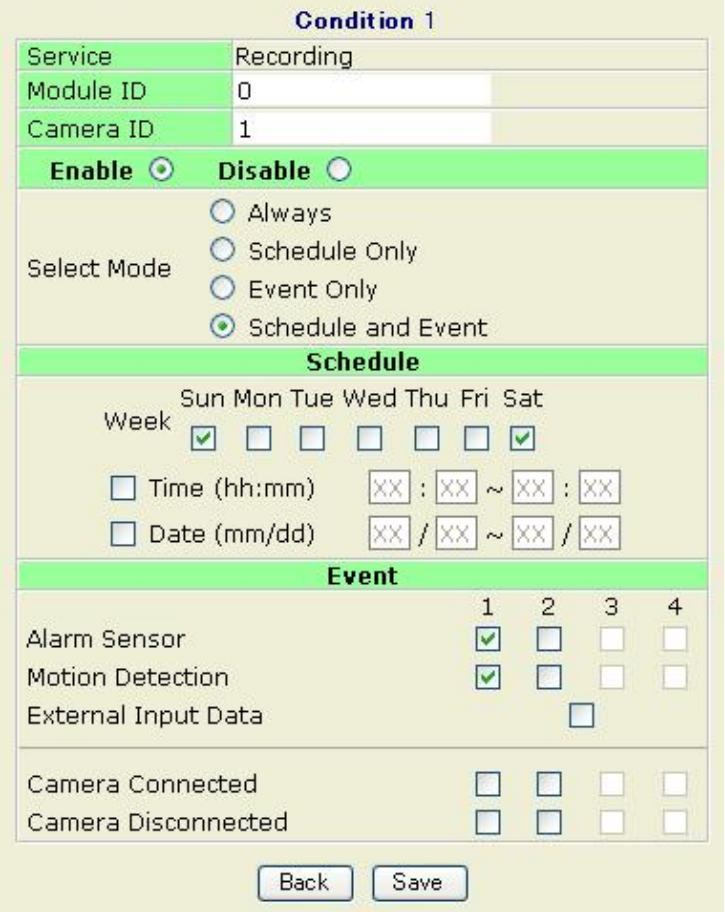
○**Event** : Number 1,2 are referred Stream number or motion detection.

If the number box is checked, it means Event recording had been set with this number for Sensor/Motion detect. If two number boxes are checked together, the recording is enabled only when two Sensor/Motion detect are activated.

○If it is used Motion Detection for Event , the detection area and Enable should be set by **6-3-3.Motion Detection**.

Service		This shows what service is for this condition.
Module ID		Module ID for current setup. (Fixed 0)
Camera ID		Camera ID for current setup.
Enable / Disable		Enable:To use this condition Disable:Not to use this condition
Select Mode	Always	Recording is enabled all the time. It is not able to set Schedule and Event .mode.
	Schedule Only	Recording is done by setup schedule.
	Event Only	Recording is controlled by Event setting condition. (e.g. Sensor Input, Motion Detection)
	Schedule and Event	Recording is controlled by both Schedule and Event.
Schedule	Week	Set the day of week for Recording. If Week is not set, it is taken all week.
	Time	Set the Time of day for Recording. If Time is not set, it is taken 24 hours day.
	Date	Set the date(month/day) for Recording. If Date is not set, it is taken all the months.
Event	Alarm Sensor	Each of 1,2 refers to the Stream number, and checked when Event driven recording is selected. If two sensors are checked together, recording is enabled only when two sensors are activated. (IPD-BX11,IPD-DM11,IPD-VR11 are functioned with Alarm Sensor number 1 and 2 only)
	Motion Detection	Each of 1,2 refers to the Stream number, and checked when Motion Detection recording is selected. If two sensors are checked together, recording is enabled only when two sensors are activated. (IPD-BX11,IPD-DM11,IPD-VR11 are functioned with Sensor number 1 and 2 only) When this function is need to use, before it should be set up the **6-3-3.Motion Detection**.
	Camera Connected	No functioned for IPD-BX11,IPD-DM11,IPD-VR11)
	Camera Disconnected	No functioned for IPD-BX11,IPD-DM11,IPD-VR11)

Below is explanation for setup done screens e.g.



○ **Condition1:** The recording is done by every Saturday and Sunday of week. And it is controlled Schedule setup contents and Event occurred.

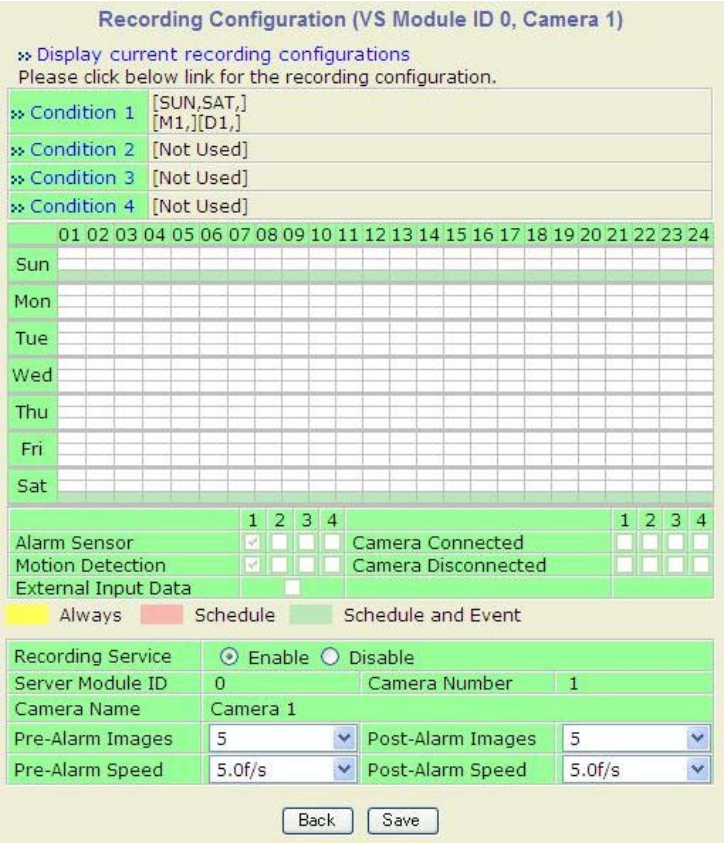
○ **Time(hh:mm):** In this case, not setup it, this means all day 24hours scheduled.

○ **Week (Days)):** In this case, not setup it, this means all week scheduled.

○ **Date (mm/dd)** In this case, not setup it, this means all months scheduled.

○ When it is clicked Save button, then below Recording Configuration Screen is displayed. It can be confirmed the setup results of Recording Condition.

○ If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.



○ When it is clicked Save button on above **Condition1**, Recording Configuration Screen is displayed as right screen.

○ **Condition1:** This field shows ,SUN,SAT schedule recording, and M1(Motion Detect 1), D1(Alarm Sensor 1) Event recording setting.
Also this setting condition is shown graphically on table of 24hours/Weekly.

○ when it is needed to record, to select **Enable** radio button of **Recording Service**. If not, select **Disable** redio button.

○ **Pre-Alarm** and **Post-Alarm** fields can be set recording conditions for before and after of Event.
The detail is referred to **8-2-3.Pre-Alarm & Post-Alarm Configuration Example.**

After finished above setting, click Save button to apply the setting data and below screen is displayed.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen display

The recording status is shown on **Status** field of above screen. If the video is already being recorded, the **Status** is displaying **Recording** as above.

If new recording condition are setup properly and the video is not being recorded at the moment, it is needed to click the Record button to start recording.

When the conditions is meet the setup value in recording condition, the video is recorded to the SD card.

Note:

The Stop button as above screen is displayed in Recording Status.

When it is needed to stop the recording, click the Stop button.

Then recording is stopped and Stop button is changed to Record button for waiting record start operation.

8-2-3.Pre-Alarm & Post-Alarm Configuration Example

Setup e.g. 1) Condition1:Select Mode is set either **Always** or **Schedule**

Pre-Alarm Images	5	Post-Alarm Images	5
Pre- Alarm Speed	1 fps	Post- Alarm Speed	10fps

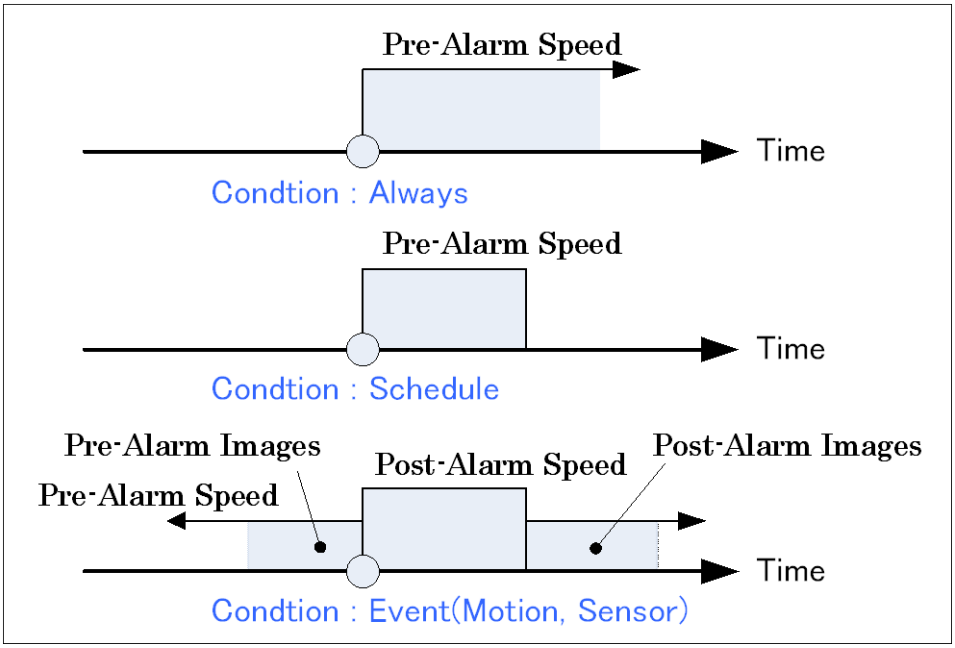
Under this mode, Pre-Alarm Speed is effected, then the recording speed is 1fps.
Other setting values for Items are not affected.

Setup e.g. 2) Condition1:Select Mode is **Event Only**(Motion,Sensor)

Pre-Alarm Images	5	Post-Alarm Images	5
Pre- Alarm Speed	1 fps	Post- Alarm Speed	10fps

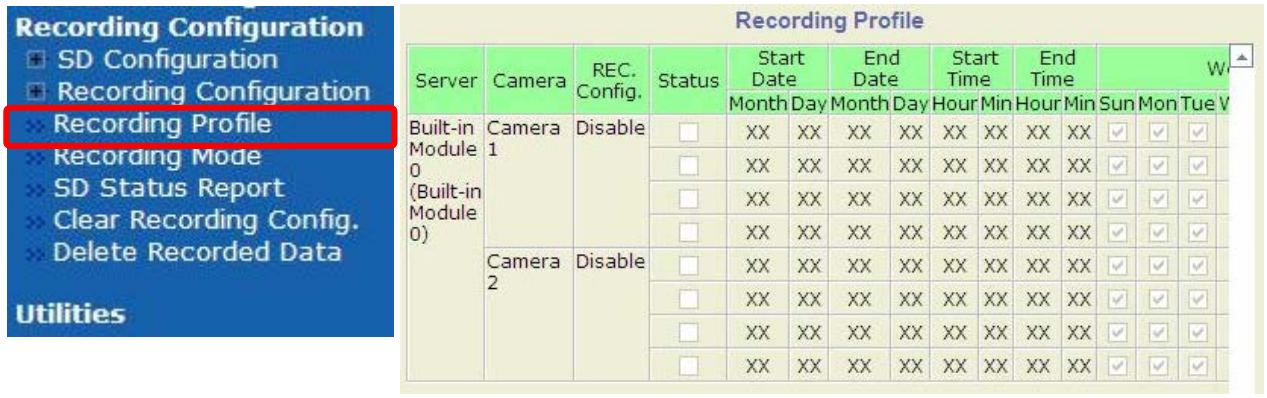
Under this mode, **Pre-Alarm Speed** / **Post-Alarm Speed** and **Pre-Alarm Images** / **Post-Alarm Images** are effected. Then Pre-Alarm recording is done by 1fps recording speed and 5 frames. This means Pre-Alarm recording time is 5seconds.
Also Post-Alarm recording is done by 10fps recording speed and 5 frames. This means Post-Alarm recording time is 0.5 second.

The above recording working status shown below as graphic.
If there are two recording conditions setup, it can start recording when at least one condition is met.



8-3.Recording Profile

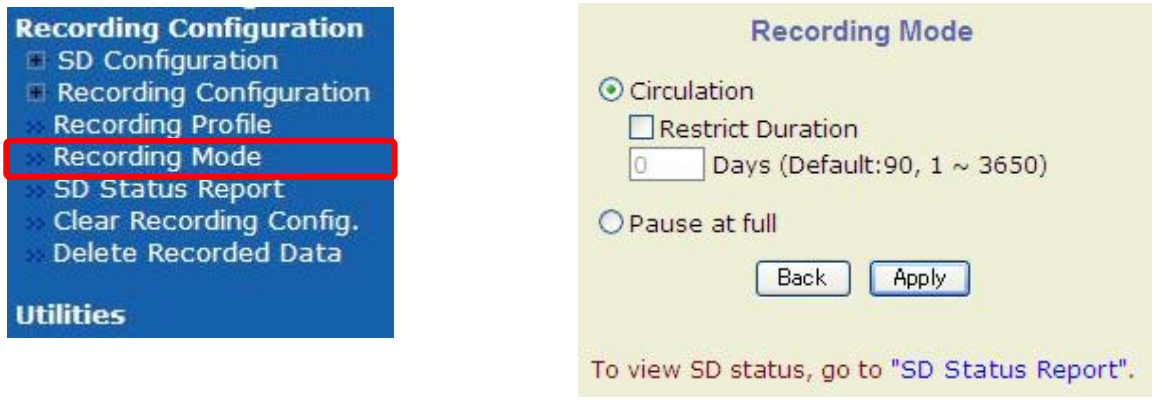
Click **Recording Profile** item on Menu, blow screen is displayed. It can be confirmed and checked the setting for record condition of camera.



8-4.Recording Mode

Click **Recording Mode** item on Menu, below screen is displayed.

It can be selected the action either Circulation or Pause at full in case of the SD card capacity is full by recorded video data during the recording.



○**Circulation:**To overwrite the new recording data on oldest record data.
The oldest file (630MB) on the SD card is deleted when it is full of recorded data, and made space.

○**Pause at full**:To stop the recording, when the SD card is full of recorded data, and display STOP Status information on screen.

○The base file size for recorded video is 630MB in SD card.

Circulation Colum

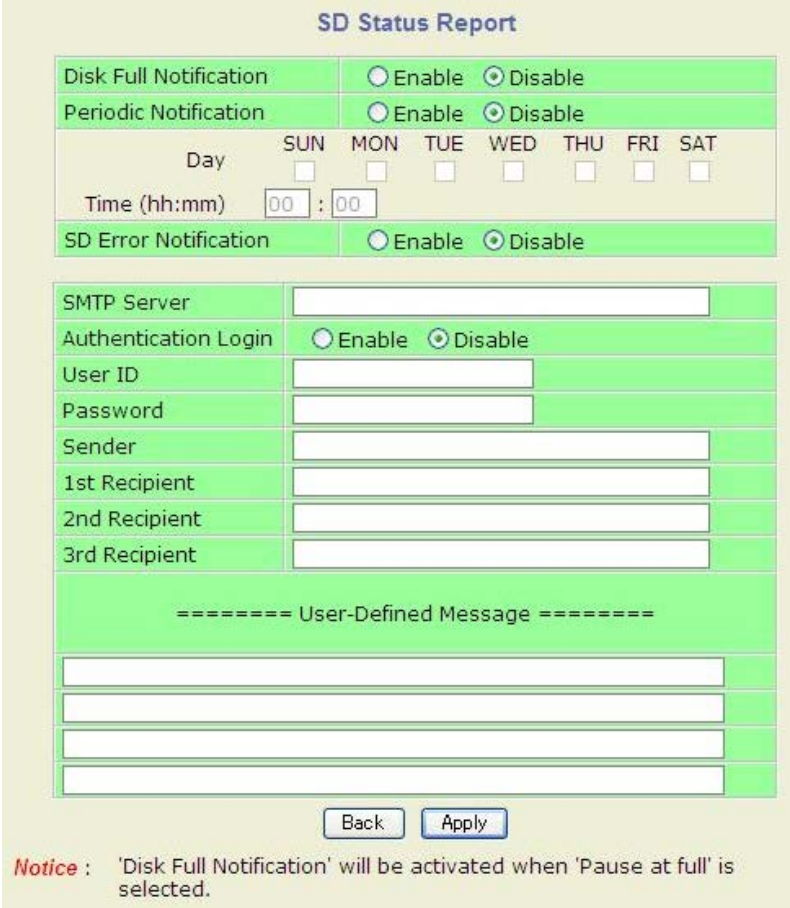
If check the box of **Restrict Duration**, the Days setting field is enabled to enter numbers of Days. The default is 90 days and it can be changed between 1 and 3650. For instance, if it is set 3 days, only the video data since the 3days ago will be kept in SD card, and rest space can be overwritten.

Pause at full

The SD capacity information can be sent by E-mail to setting address, so it can be to know before the SD card is full by this Email receiver. (Refer **8-5.SD Status Report**)

8-5.SD Status Report

Click **SD Status Report** item on Menu, below screen is displayed.



It can be sent the capacity information of SD card by E-mail, through this setting.

It is useful in case of selected **Pause at full** of setting **8-4.Recording Mode**.

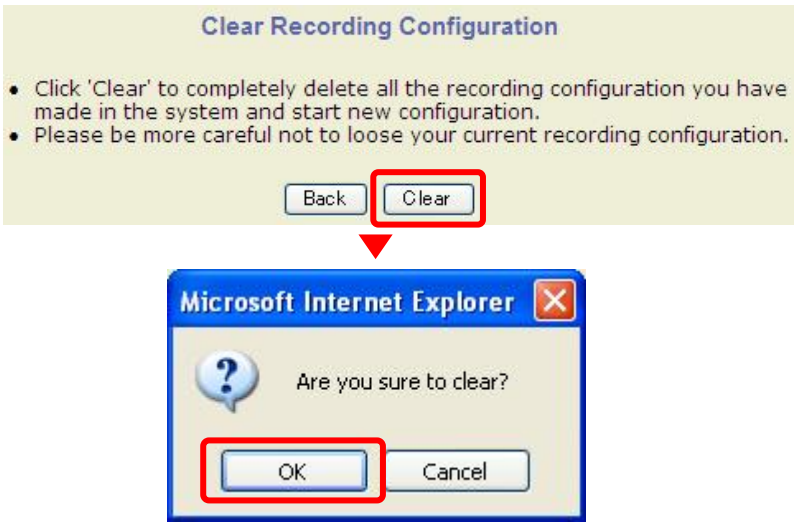
Disk Full Notification	Select **Enable** to use this function.
Periodic Notification	Select **Enable** if it is needed to receive the SD capacity information on selected Day of week and Time.
Day & Time	Set the Day of week and Time to receive the Notification by email.
SD Error Notification	Select **Enable** if it is needed to receive Notification of SD Error.
SMTP Server	Enter IP address of SMTP server for email service.
Authentication Login	Select **Enable** if SMTP server requires ID and Password.
User ID	Enter User ID to login SMTP server.
Password	Enter Password to login SMPT server.
Sender	Enter the email address of the sender.
1st～3rd Recipient	Enter the recipient s email address up to 3 persons.
User Defined Message	Enter the contents of the message to add in the notification, if it is needed.

After finished above setting, click Apply button to save.

If click Back button, new setting data will be cancelled and the screen will be back to previous screen display.

8-6.Clear Recording Config

Click **Clear Recording Config** item on Menu, below window is displayed.

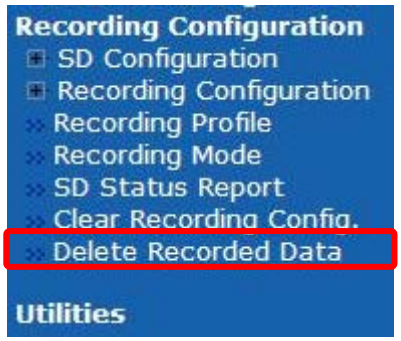


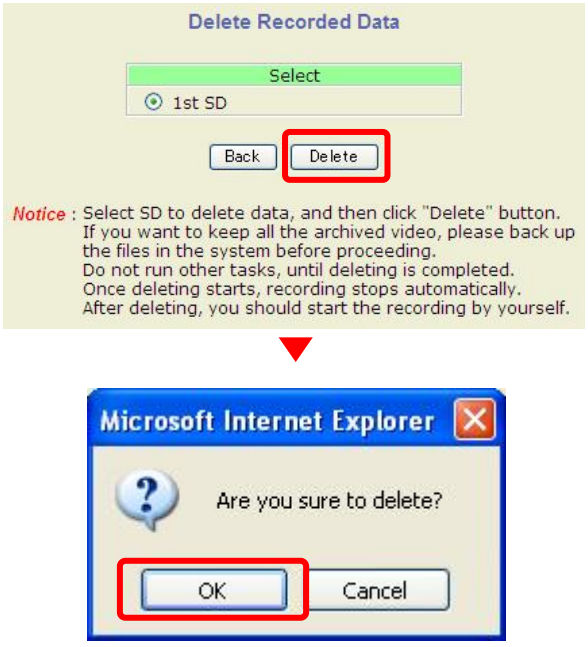
Click Clear button on above window. Then pop-up confirmation window is displayed, click OK button to clear all Recording Configuration data in camera.

This function is useful to clear the configuration for multiple cameras at once.

8-7.Delete Recorded Data

Click **Delete Recorded Data** item on Menu, below window displayed.





It can be deleted all stored video data by this function.

Select SD card radio button to be delete and click Delete button on above window.

Then pop-up confirmation window is displayed, click OK button to delete all stored video data in SD card of camera.

9. Utilities

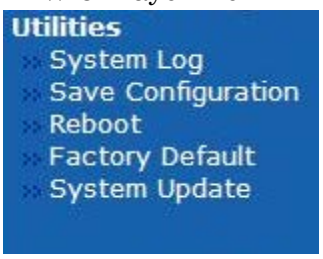
This function has useful common setting Items and checking Items.

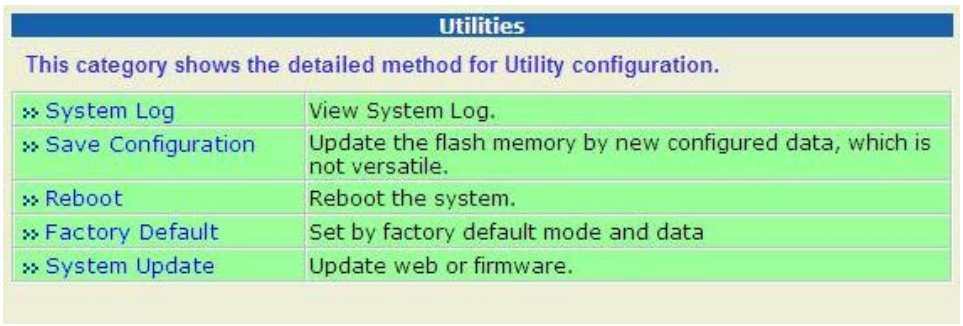
System Log, **Save Configuration**, **Reboot**, **Factory**, **Default**, **System**, **Update**

Also it has Player on Utilities menu (only shown when SD card is inserted to SD slot of IPD-DM11&IPD-VR11) can playback recorded video files in SD card and backup it.

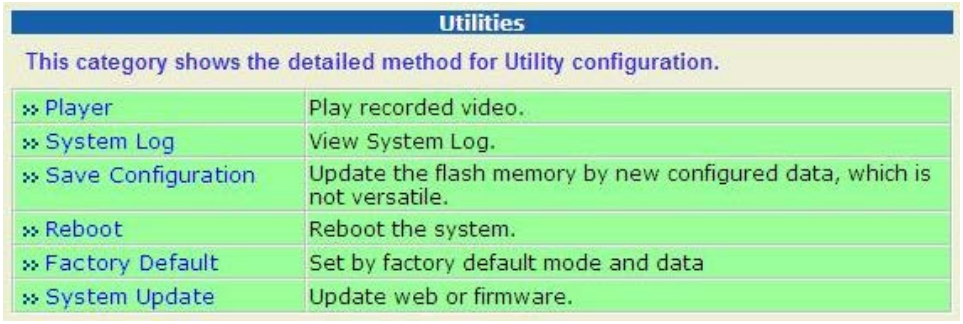
Please refer INSTRUCTION MANUAL(PLAYER INSTRUCTION) as separate volume.

W/O Player Menu





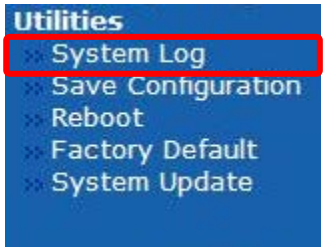
With Player Menu

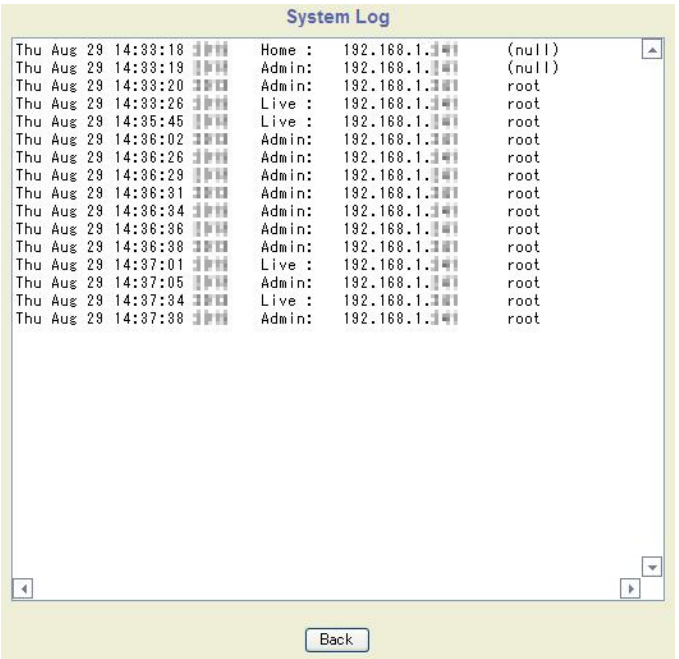


9-1.System Log

Click **System Log** item on Menu, below login list is displayed on screen.

The displayed items of login list are follows for each line Day of Week, Month, Day, Hour:Minute:Second, Year Category, IP Address, User ID.

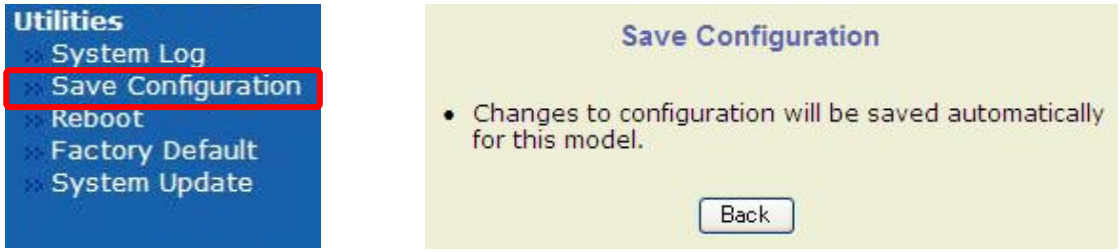




9-2.Save Configuration

Click **Save Configuration** on Menu, below widow is displayed. (Not used this function)

Seme as **2-6.Finish:Save Configuration**

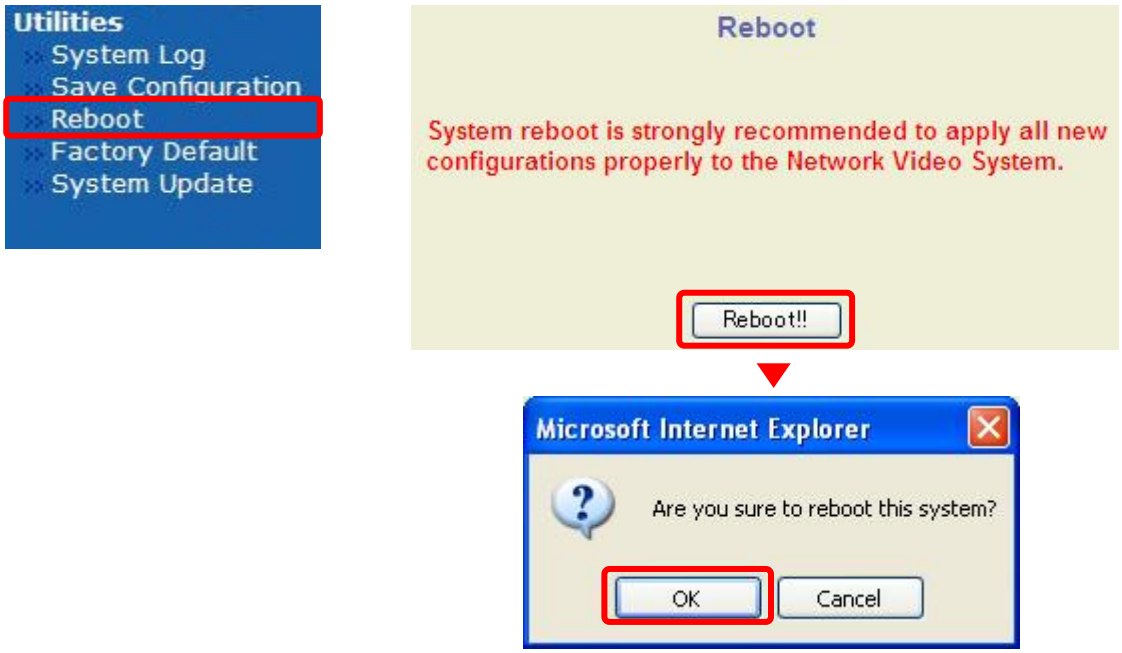


The Configuration data(setup data) for IPD-BX11 / IPD-DM11 / IPD-VR11 camera is saved by each configuration(setup) step with Save button, thus this function is not used for these cameras.

If click Back button, the window screen will be back to previous screen display.

9-3.Reboot

Click **Reboot** item on Menu, below widow is displayed.



It is recommended to reboot the camera after configuration (setup) changed and saved for camera.

To reboot , click Reboot button on displayed window, and click OK button on pop-up confirmation window as above to start the rebooting.

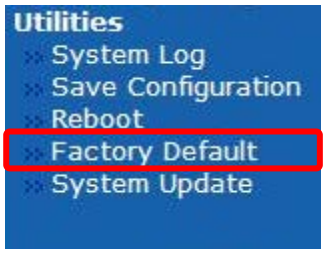
Then next pop-up window is displayed, it is only to confirm closing of web browser for connected camera.

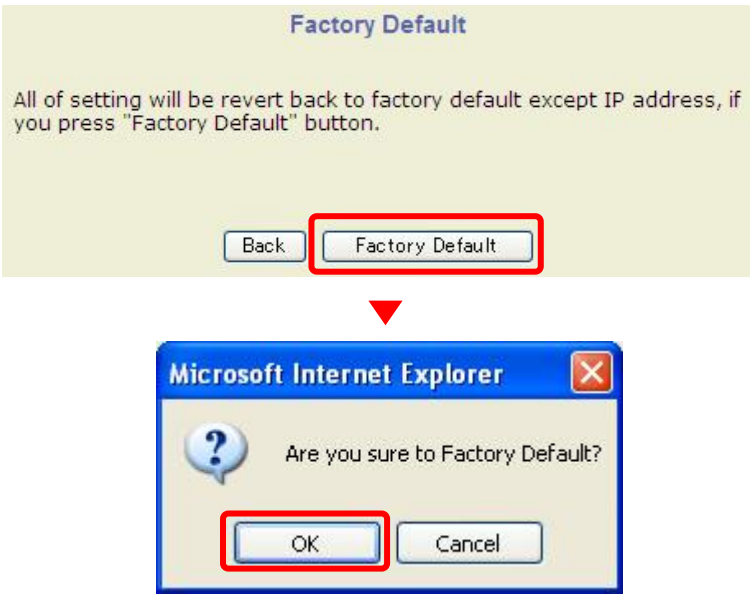
If it is clicked Cancel button, the web browser is still opened, but it can be not access the camera until the rebooting is finished.

This rebooting takes about 1 to 2 minutes.

9-4.Factory Default

Click Factory Default item on Menu, below window is displayed.



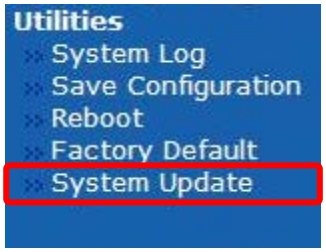


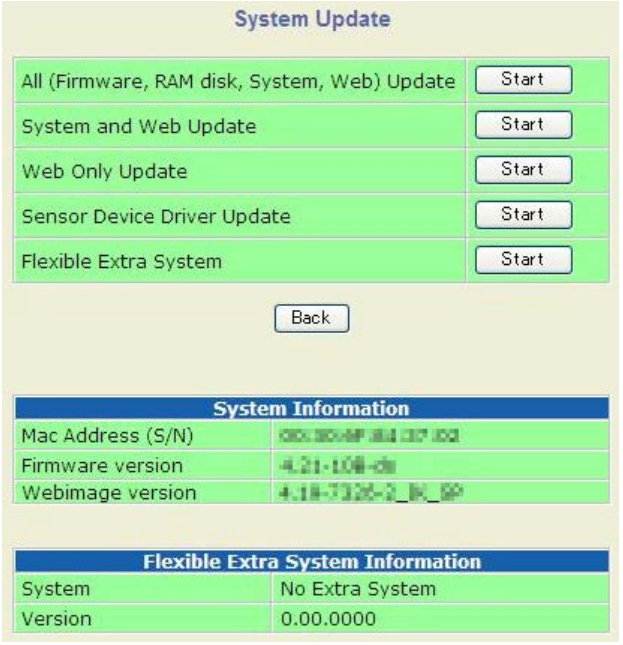
All configuration(setup)data is restored with factory default data except IP address of camera.

Click Factory Default button on above window. Next click OK button on pop-up window for confirmation. Then camera configuration(setup) data is back to factory default except IP address. If it is clicked Cancel button, the window will be back to previous screen display.

9-5.System Update

Click **System Update** item on Menu, below screen is displayed





Note:

○The camera might be in trouble if this update work is not correctly done. Please ensure to read carefully below instructions and to take proper procedure step by step.

○For latest Update file , refer to the dealer directory.

○Do not power off during Update work.

9-5-1.All(Firmware, RAM disk, System, Web) Update

【Step 1】

Click the Start button on the line of **All(Firmware, RAM disk, System, Web) Update**.

And the confirmation pop-up window is displayed. Click OK button on it, then start the update work by followed screen display.

If click Cancel button, the window will be back to previous screen display.

【Step 2】
Firmware Upload

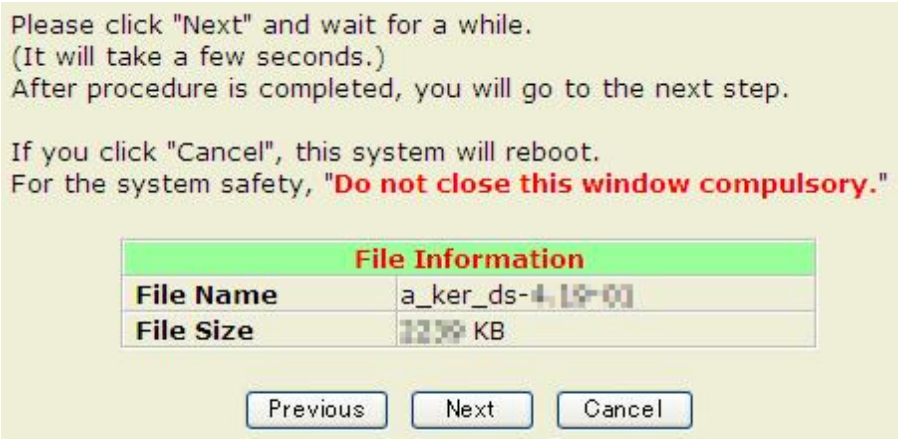
Click Browse button, it can be found and selected the firmware image file **"a_ker_ds"** in PC.

Once the firmware image file is selected, click Next button to proceed.

If click Skip button, it is skipped current file Update (skip to STEP4 shown).

> Note:
> ○If the Pop-up window is not display on PC, it should be disabled pop-up blocker for IE

【Step 3】
Firmware Confirm



It can be checked file name and size of selected Update firmware image file.

After checked the file, click Next button then this file **"a_ker_ds"** is uploaded in camera and proceeded next step. If click Previous button, this screen is backed Step 2 screen

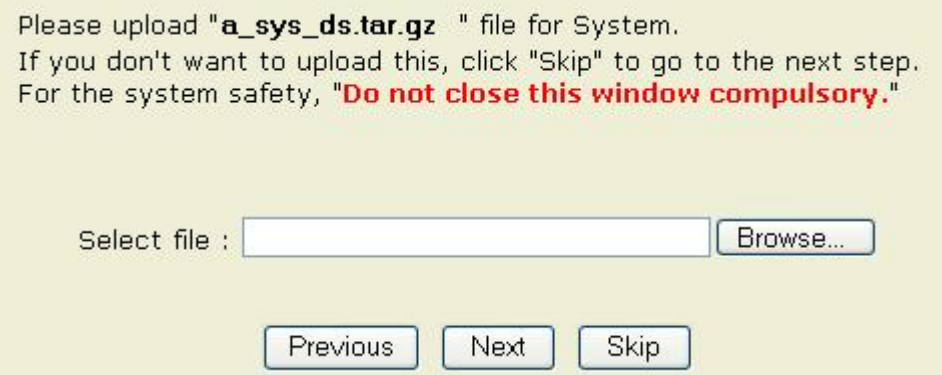
If it is needed to stop the Update procedure, click Cancel button.

The camera is rebooted automatically with previous firmware.

The below **Step4**, **Step5** and **Step6** proceeding follow same step as **Step2** and **Step3** above.

【Step 4】
RAM disck
File Upload

【Step 5】
System
File Upload



【Step 6】
Web
File Upload

【Step 7】

Upload finished

After all ("Firmware", "RAM disk", "System", "Web")Upload(included Skip proceed) is finished, above confirmation screen is displayed.

When this all Upload proceeding is all right, click Next button to execute the Update processing which is shown next displayed window.

If this all Upload proceeding has is not all right, click Factory Default button to back the Update file version which had been done by Factory. It will back Factory default except IP address.

【Step 8】

Update finished

After all Update processing is done, above window is displayed.

Click the Reboot button to reboot the camera.

9-5-2.System and Web Update

This function is not supported

To proceed the Update, go through same steps from **Step 5** to **Step 8** of **9-5-1.All(Firmware, RAM disk, System, Web)** Update.

9-5-3.Web Only Update

This function is not supported

To proceed the Update, go through same steps from **Step6** to **Step8** of **9-5-1.All(Firmware, RAM disk, System, Web) Update**.

9-5-4.Sensor Device Driver Update

Displayed on Menu, but function is not implemented

9-5-5.Flexible Extra system

Displayed on Menu, but function is not implemented

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