✓ **On**: If authentication is necessary for sending e-mail, select one of the authentication methods from the followings.

SMTP: Select if SMTP authentication is necessary for sending e-mail.

POP Before SMTP: Select when POP before SMTP authentication is necessary for sending e-mail.

- **Recipient E-mail Address**: Type the recipient e-Mail address using up to 64 characters. You can specify up to three recipient E-mail addresses.
- **Administrator E-mail Address**: Type the Administrator e-mail address using up to 64 characters. This address is used for replying mail and sending system messages from the SMTP server.
- **Test**: After setting the SMPT server information, you can tick the **test** key to test if the connection between IP CAM and the SMPT server works.

➢ **Overwrite:** Select On to disable capacity warning and overwrite your memory card when free space is not enough.

➢ **File manager:** Click "**Execute"** to manage your memory card.

Folder	File name	Size
IPCamera001BFE03353A/		
Alarm/		
Backup/		
Period/		

7.4.2 Alarm sending

Set to transmit the snapshot or video clip file with connection to the alarm detection by the external sensor input or by the built-in motion detection function. Select **On** to send the file to memory card location linked with the alarm detection.
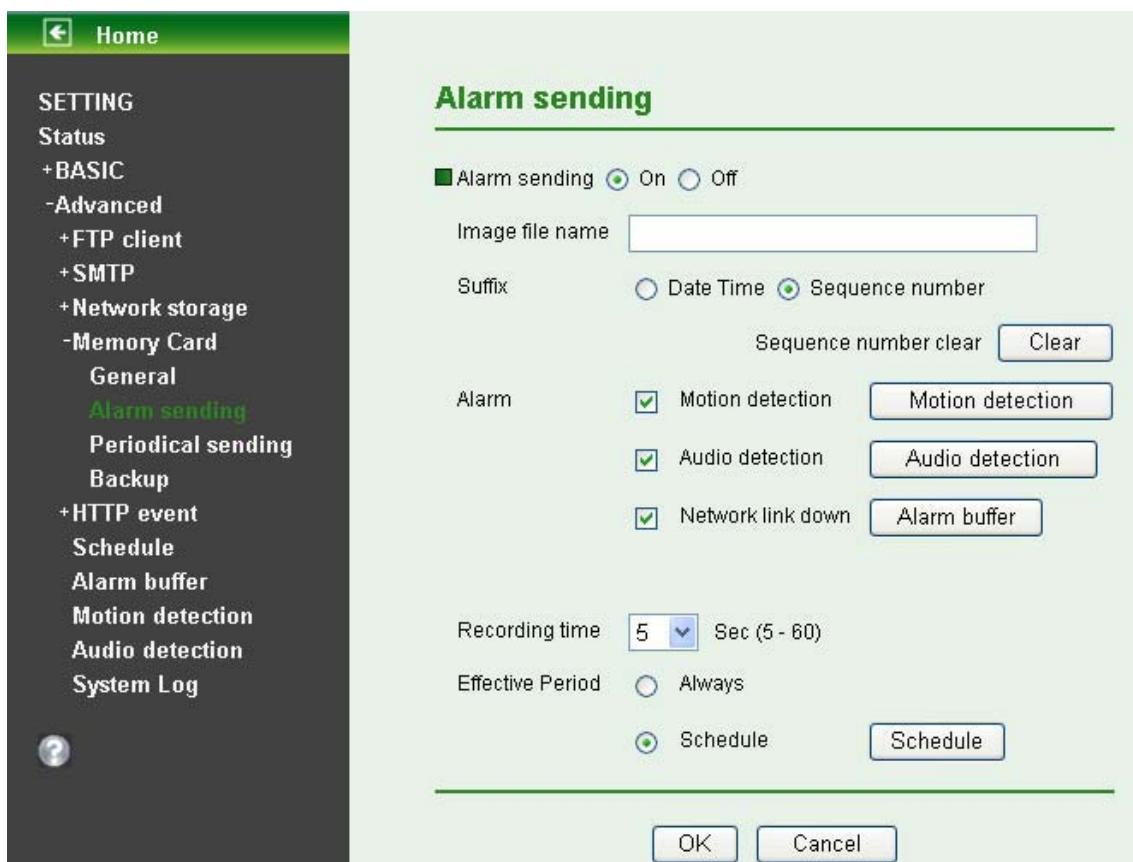
➢ **Alarm Sending**: Select **On** to set to send files with connection to the alarm detection to memory card.

➢ **Image File Name**: Type the file name you want to assign to the file to attach a mail. You can use up to 10 alphanumeric, - (hyphen) and _ (underscore) for naming.

➢ **Suffix**: Select a suffix to add to the file name

- **Date & time**: The date & time suffix is added to the Image file name. The date & time suffix consists of lower two-digits of year (2 digits), month (2 digits), date (2 digits), hour (2 digits), minute (2 digits) and second (2 digits), and consecutive number (2 digits), thus 14-digit number is added to the file name.

- **Sequence number**: A **consecutive** number is added to the Image file name.

- **Sequence number clear**: Click **Clear** and the suffix of the sequence number returns to 1.

➢ **Alarm:**

- **Motion Detection**: Click it on for using **Motion Detection** function as a sensor. You can set motion detection function at the motion detection function screen.

  ☞ **Note:**

  You can set motion detection at motion detection screen. (Please go "**Setting → Advanced → Motion Detection → Setting**")

- **Audio Detection**: Click it on for using **Audio Detection** function as a sensor. You can set audio detection function at the audio detection function screen.

  ☞ **Note:**

  You can set audio detection at audio detection screen. (Please go "**Setting → Advanced →Audio Detection → Setting**")

- **Network Link Down:** Click it on to receive a video clip while network link down. It's for recording video file in the IP CAM before and after disconnected network.

  ☞ **Note:**

  You can set alarm buffer at alarm buffer screen. (Please go "**Setting → Advanced → Alarm Buffer → Setting**")

➢ **Effective Period**: Set the period when the periodical sending is effective.

- **Always**: The periodical sending is always effective.

- **Schedule**: You can specify the period when the periodical sending is effective in the Schedule setting in the other section.

  ☞ **Note:**

  You can set schedule function at schedule screen. (Please go "**Setting → Advanced → Schedule → Setting**")

7.4.3 Periodical sending

Select **On**, you can set to send an image file to memory card periodically.
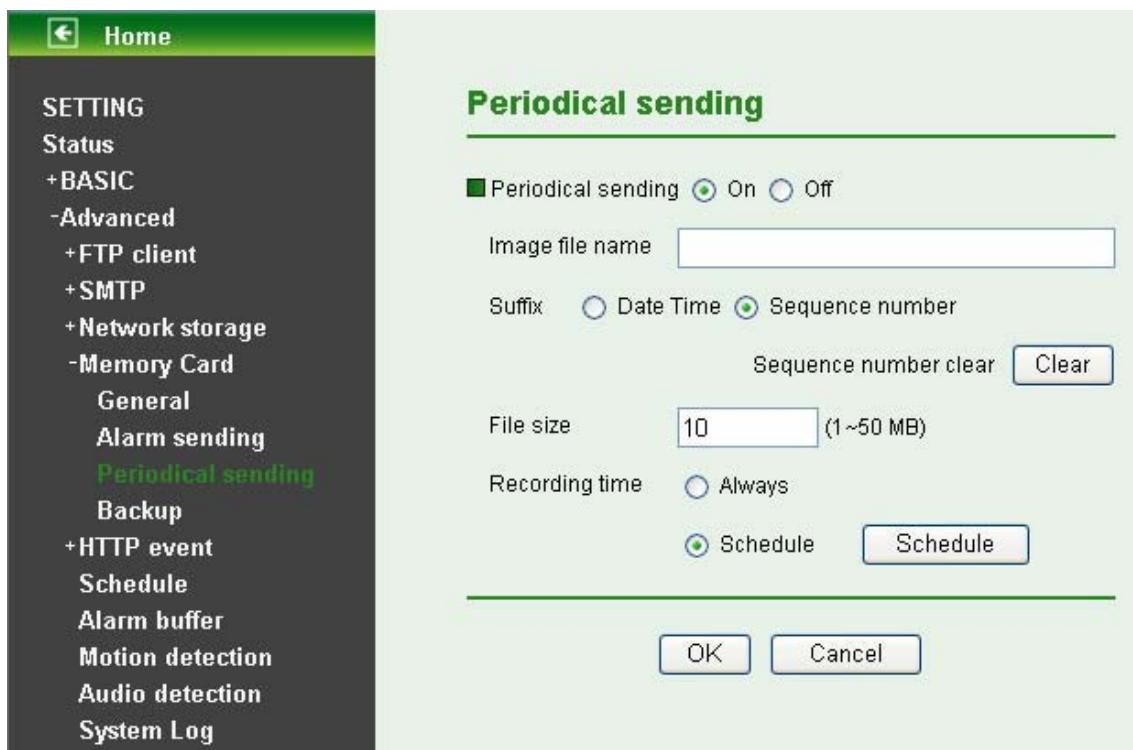
➢ **Image File Name**: Type the file name of the image sent by SMTP up to 10 alphanumeric characters, - (hyphen) and _ (under score).

➢ **Suffix**: Select a suffix to be added to the file name sent by SMTP.

- **Date & time**: The date & time suffix is added to the Image file name. The date & time suffix consists of lower two-digits of year (2 digits), month (2 digits), date (2 digits), hour (2 digits), minute (2 digits) and second (2 digits), and consecutive number (2 digits), thus 14-digit number is added to the file name.

- **Sequence number**: A consecutive number is added to the Image file name.

- **Sequence number clear**: Click **Clear** and the suffix of the sequence number returns to 1.

➢ **File Size**: The file size of image or video clip transmitted to the network storage location can't over 50MB.

➢ **Recording Time:** Set the period when the periodical recording is effective.

- **Always**: The periodical recording is always effective.

- **Schedule**: You can specify the period when the periodical recording is effective in the Schedule setting in the other section.

☞ **Note:**

You can set schedule function at schedule screen. (Please go "**Setting → Advanced → Schedule → Setting**")

7.4.4 Backup

The Backup feature can save images to memory card when FTP server or network storage is shut down.
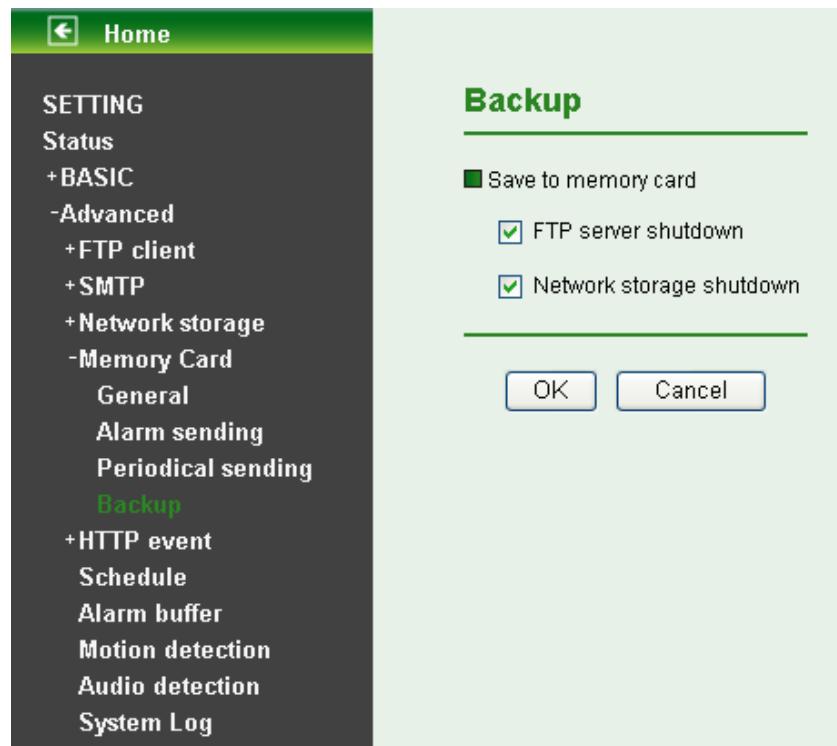
> **FTP server shutdown**: Backup files to memory card when FTP server is shut down.
> **Network storage shutdown**: Backup images to memory card when network storage is shut down.

7.5 HTTP event

Use this menu to set up for capturing and sending images to an HTTP server. By using HTTP client function, you can send the image file and audio file which has been shot and recorded linked with the built-in motion detection function to HTTP server. HTTP client setting menu is composed of two items, **General** and **Alarm sending**.
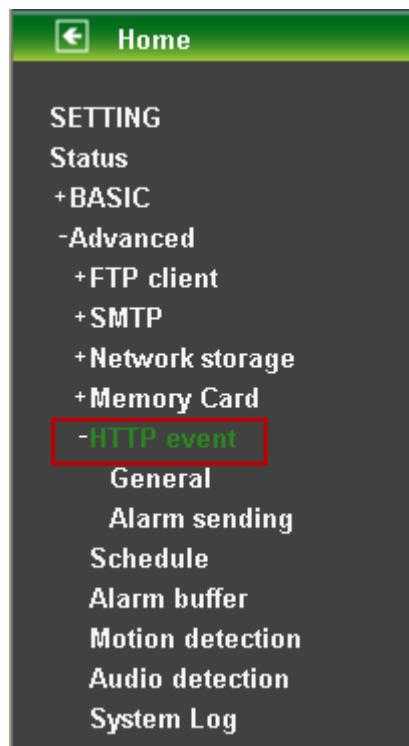
7.5.1 General

Select **On** when you use the HTTP function. The common setting options are displayed below. Select **Off,** if you do not wish to use the HTTP function.
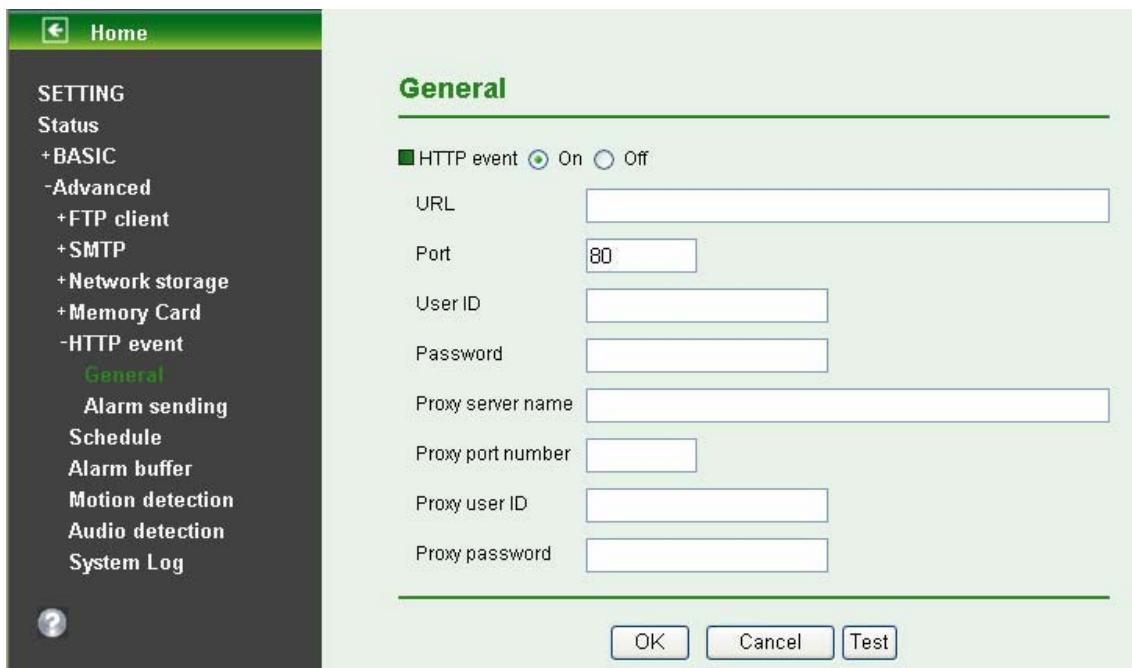
➢ **HTTP event**: Set up the HTTP server URL, port, User ID, Password and Proxy Server settings.
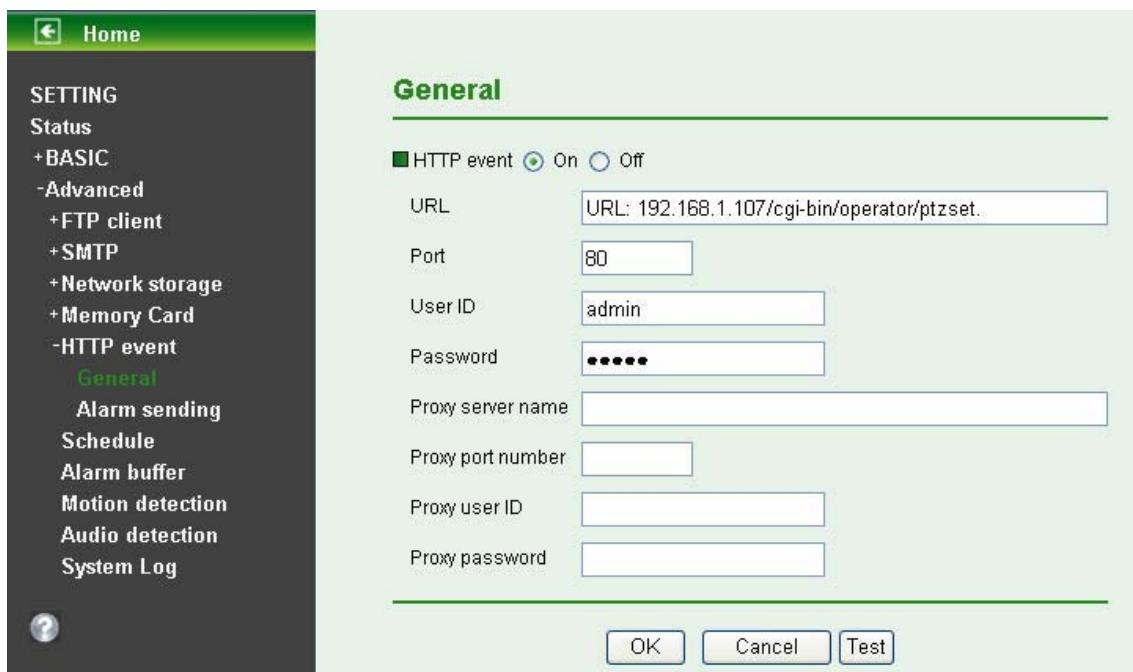
For example: URL: 192.168.1.107/cgi-bin/operator/ptzset.

☞ Note:

1. The setting of URL should be the same as CGI.

2. The example above is for reference only. For more details, please refer to SDK in the subdirectory of the IP Camera product on our website http://www.tp-link.com.

7.5.2 Alarm sending

Set to send the mail with connection to the alarm detection by the built-in motion detection function. Select **On** to send the image and audio file to HTTP server linked with the alarm detection.
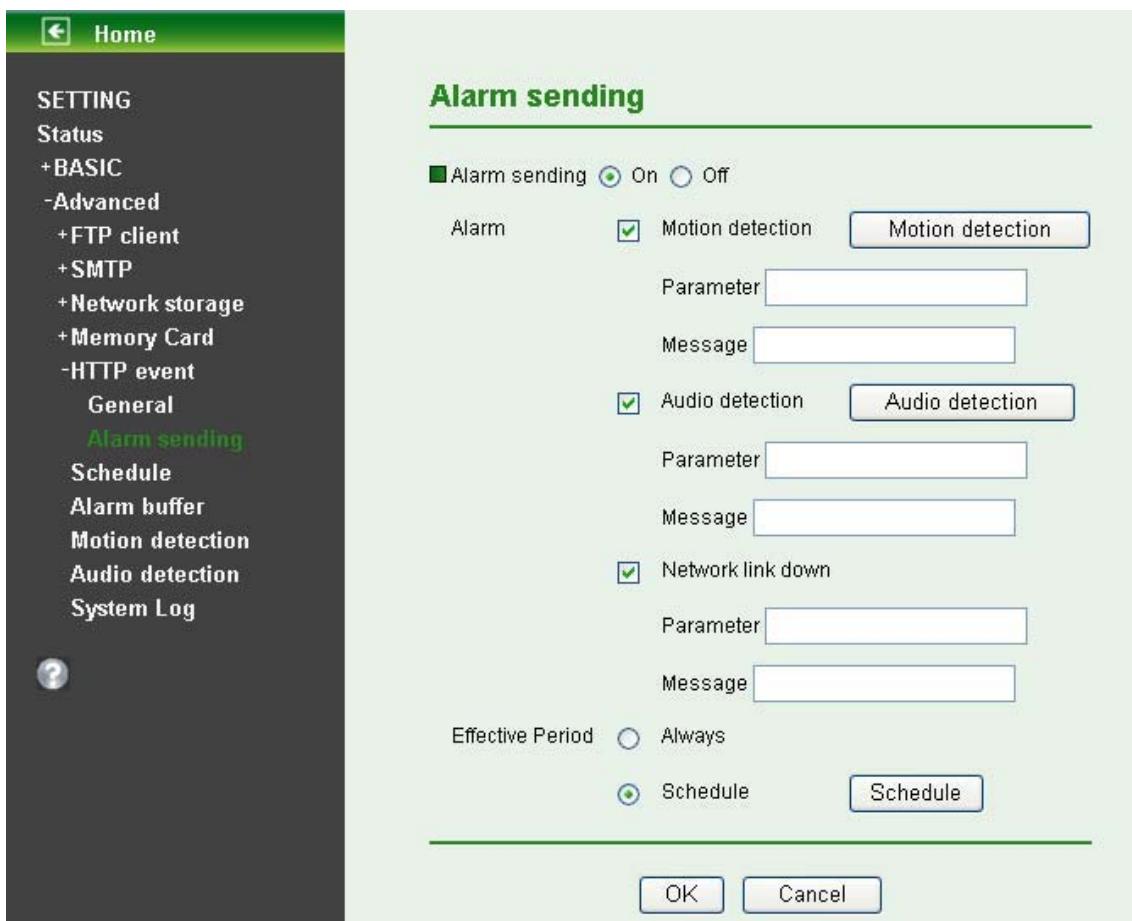
Alarm sending: Select **On** to set to send mail with connection to the alarm detection.

➢ **Alarm**

● **Motion Detection**: Click it for using Motion Detection function as a sensor. You can set motion detection function on the **motion detection function page**.

☞ **Note:**

You can set motion detection on **motion detection page**. (Please go to "**Setting** → **Advanced** →**Motion detection** → **Setting**") Motion Detection works only when the MPEG4 function is On.
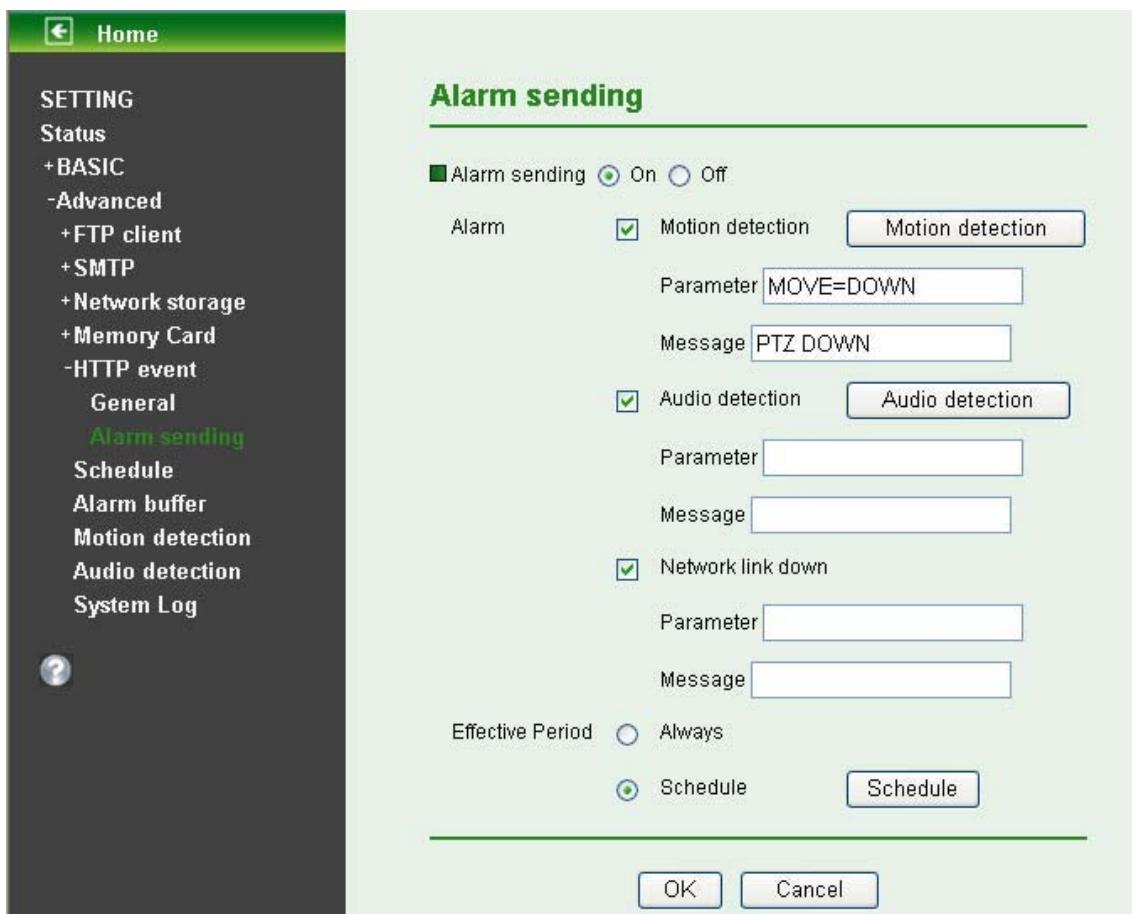
- **Parameter**: the parameter of CGI (defined in **Setting → Advanced → HTTP event → General → URL**) is from your target device. For example, move=down.
- **Message**: message will show up in the form of Message = PTZ down. If your target device didn't support the parameter of message, you can't see the message. So you can just take the message as a note. For example: PTZ down.
- **Audio detection**: Click it for using Audio Detection function as a sensor. You can set audio detection function on the **audio detection function page**.
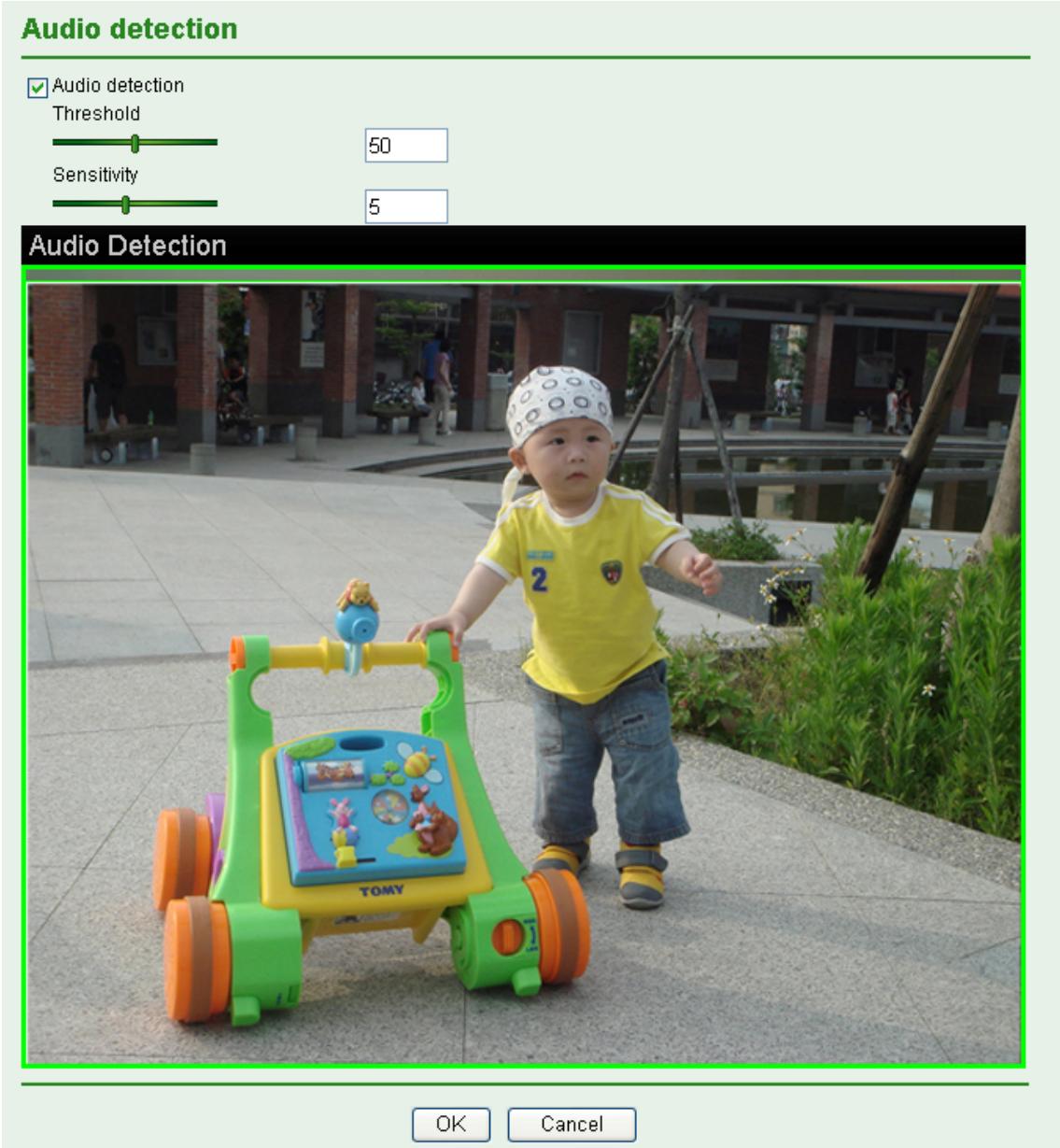
- **Parameter**: the parameter of CGI (defined in **Setting → Advanced → HTTP event → General → URL**) is from your target device. For example, move=down.
- **Message**: message will show up in the form of Message = PTZ down. If your target device didn't support the parameter of message, you can't see the message. So you can just take the message as a note. For example: PTZ down.

➢ **Effective period**: Set the period when the periodical sending is effective.

- **Always**: The periodical sending is always effective.
- **Schedule**: You can specify the period when the periodical sending is effective in the Schedule setting in the other section.

☞ **Note:**

You can set schedule function on **Schedule page**. (Please go to "**Setting → Advanced → Schedule → Setting**")

7.6 Schedule

Click **Schedule** on the **Advanced** mode menu, the Schedule setting menu appears. This is the same

menu as the setting menu which is displayed when you click **Schedule** to set Effective period and Schedule in **FTP** client, e-Mail (**SMTP**), Record, and Alarm out setting menu setting menu.
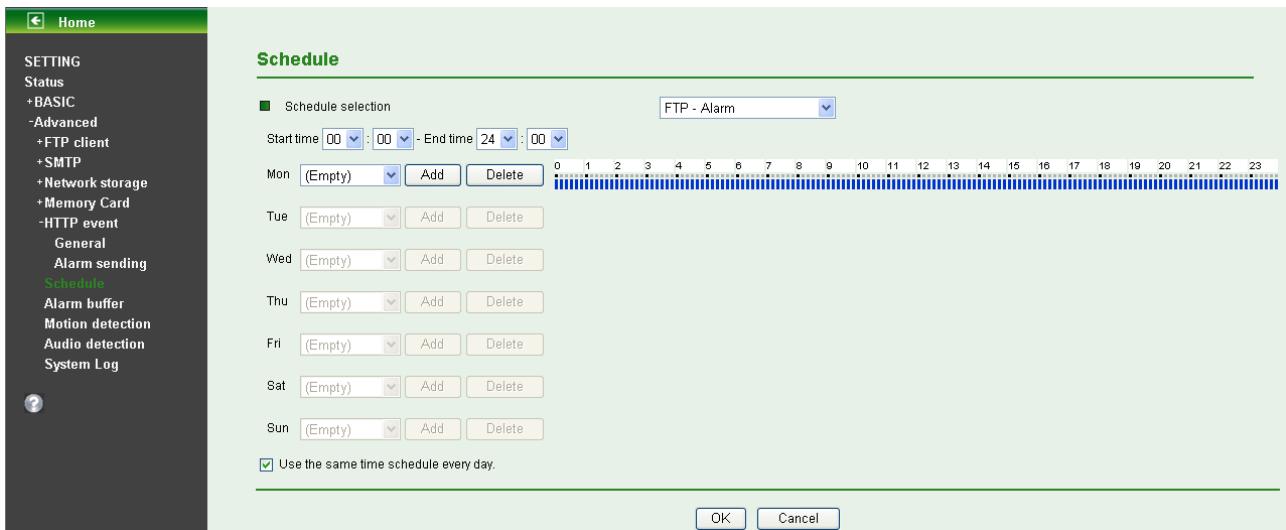
➢ **Schedule Selection**: Select the list box to specify the schedule you want to set.

● FTP -Alarm / FTP – Periodical / E-mail (SMTP) -Alarm / E-mail (SMTP) –Periodical / Record –Alarm / Record –Periodical / Memory Card – Alarm / Memory Card – Periodical / HTTP event - Alarm

➢ **Mon (Monday) to Sun (Sunday)**: The time period on the right of the checked day is the effective period of the schedule.

➢ **Start Time, End Time**: Specify the **Start Time** and the **End Time**.

➢ **Use the same time schedule every day:** When this is checked, the **Start Time** and **End Time** set to **Mon** (Monday) are applied to all days. In this case, the **Start Time** and **End Time** of the other days than **Mon** (Monday) cannot be input.

7.7 Alarm Buffer

When you click **Alarm Buffer** on the Advanced mode menu, the Alarm buffer setting menu appears. You can set in this menu to enable alarm buffer function connected with **FTP Client, SMTP, and Network Storage.**

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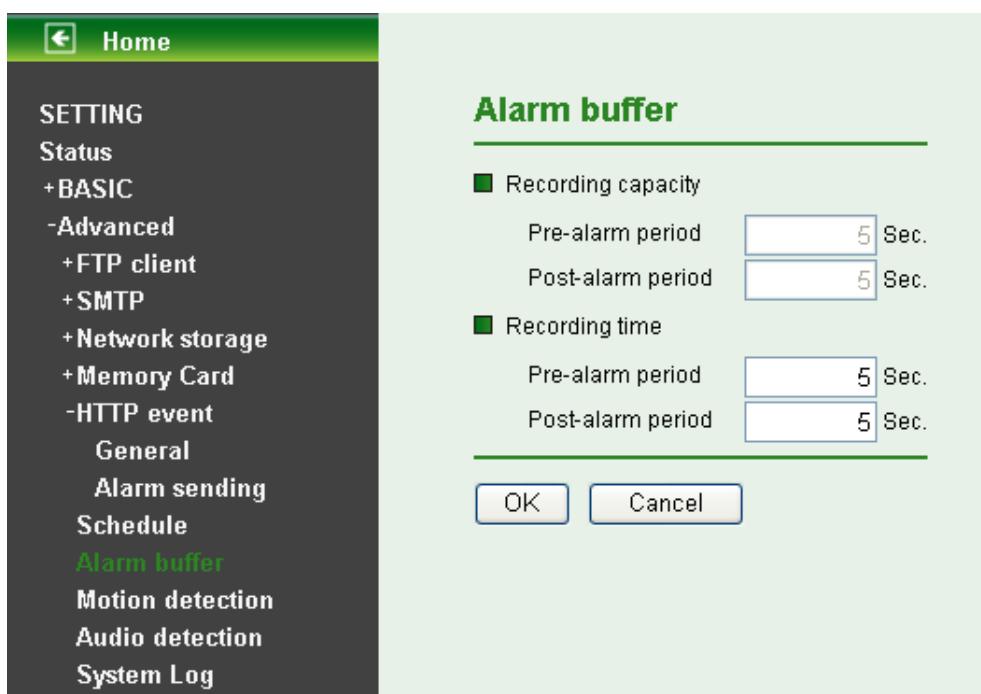
Use alarm buffer function for recording audio and video file in the IP Camera before and after disconnected network. After re-connecting, these files will transmit to **FTP client, SMTP,** and **Network storage.** You can set the pre-alarm and post-alarm period up to 5 seconds in Alarm Buffer function screen.

7.8 Motion Detection

There are three Motion Detection functions as sensors to set for different detecting zones. Each one has Threshold and Sensitivity inputs which you can adjust to specific zone sequentially. Motion Detection function can support to **FTP Client, SMTP, and Network Storage**.
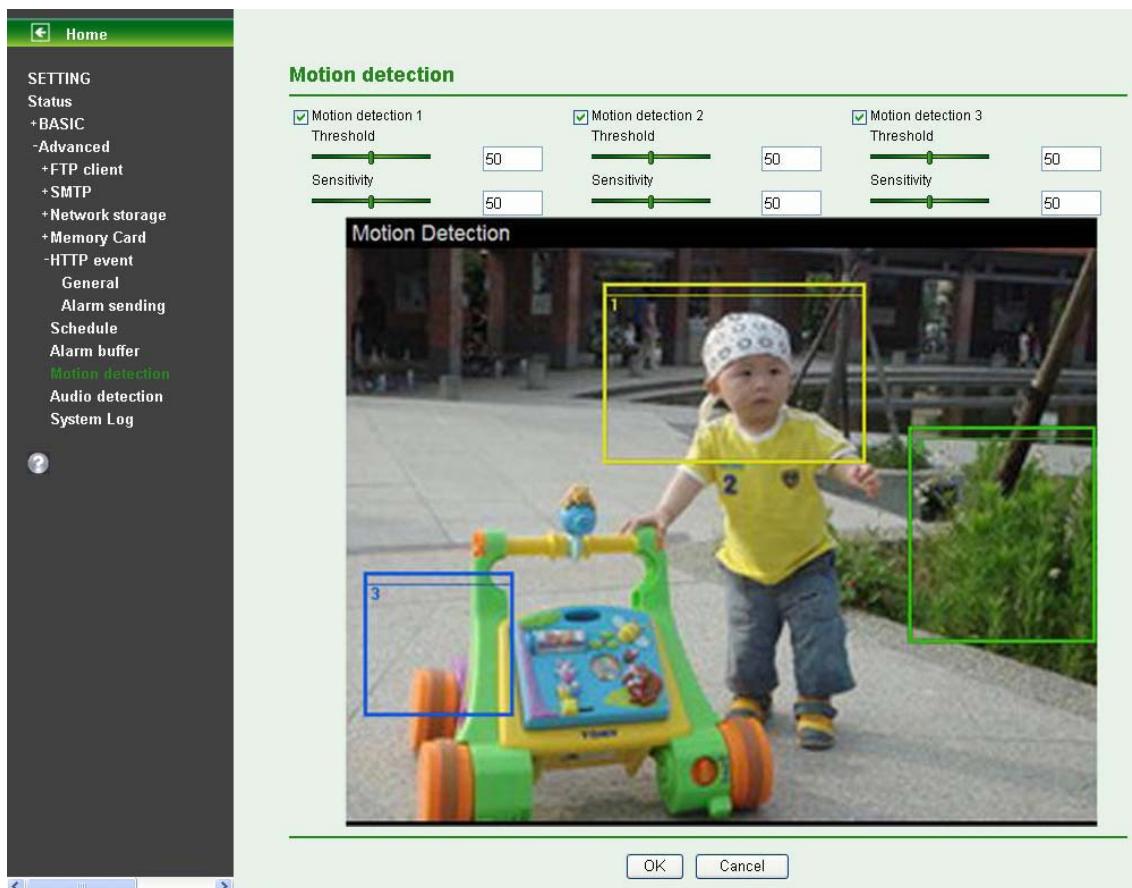
➢ **Threshold**: It means the extent which the alarm will be triggered. The default value is 50 and the value range is 0~100. The larger the value, the higher the threshold.

➢ **Sensitivity:** It means that how often the sensor will scan the image different. The higher sensitivity it is and the more frequently it scans. The default value is 50 and the value range is 0~100. The larger the value, the higher the sensitivity.

- **Motion Detection 1**: Click it on for using **Motion Detection 1** function as a sensor. You can adjust and move the detecting zone by using mouse.

- **Motion Detection 2**: Click it on for using **Motion Detection 2** function as a sensor. You can adjust and move the detecting zone by using mouse.

- **Motion Detection 3**: Click it on for using **Motion Detection 3** function as a sensor. You can adjust and move the detecting zone by using mouse.

7.9 Audio Detection

The **Audio detection** has Threshold and Sensitivity inputs which you can adjust sequentially. Audio Detection function can support to **FTP Client, SMTP, Network Storage, and HTTP Event**.
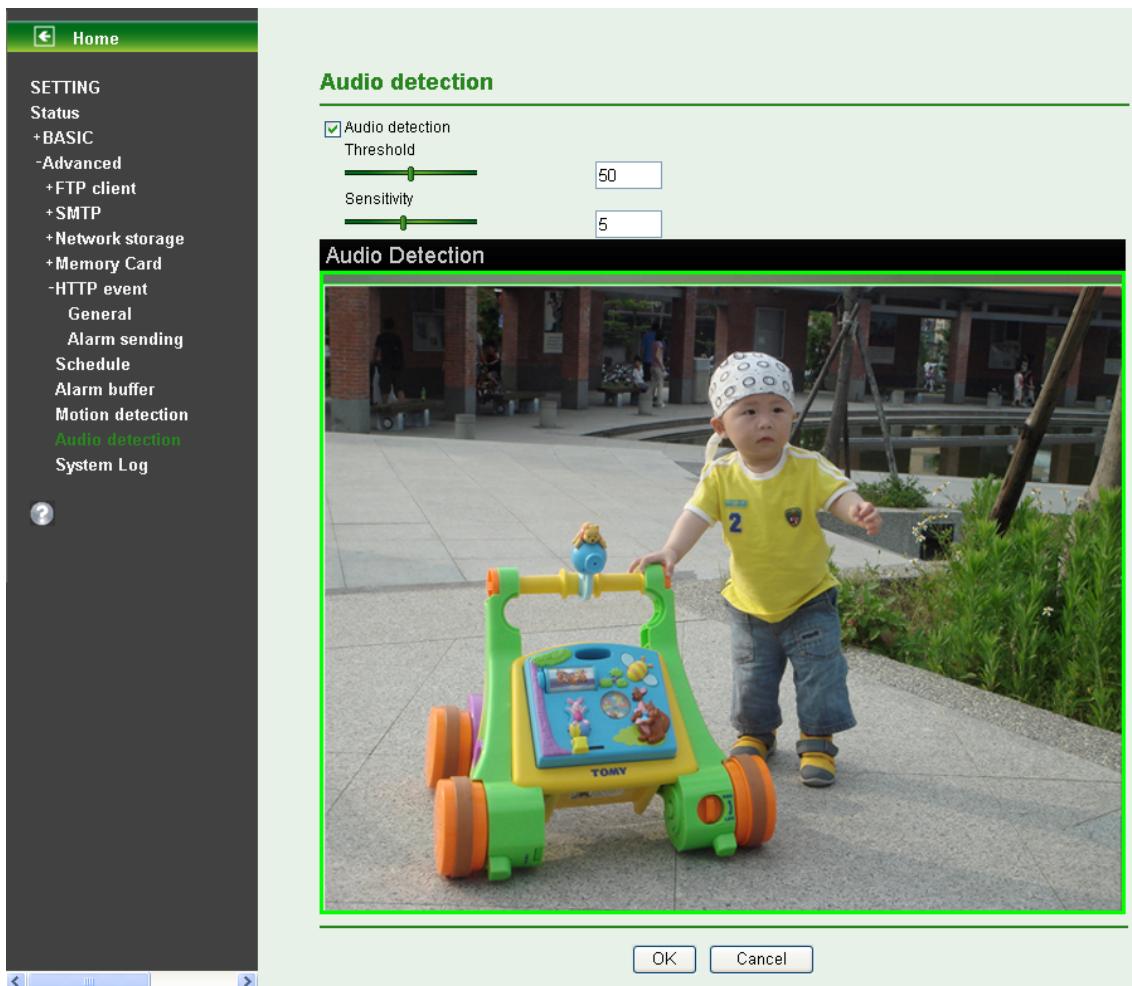
Click it on for using **Audio Detection** function as a sensor. You can set audio detection function at the audio detection function screen.

➢ **Threshold**: It means the extent which the alarm will be triggered. The default value is 50 and the value range is 0~100. The larger the value, the higher the threshold.

➢ **Sensitivity**: It means that how often the sensor will scan the image different. The higher sensitivity it is and the more frequently it scans. The default value is 5 and the value range is 1~10. The larger the value, the higher the sensitivity.

7.10 System Log

The System Log function allows users to review any changes and events happened. The system starts logging automatically after started.
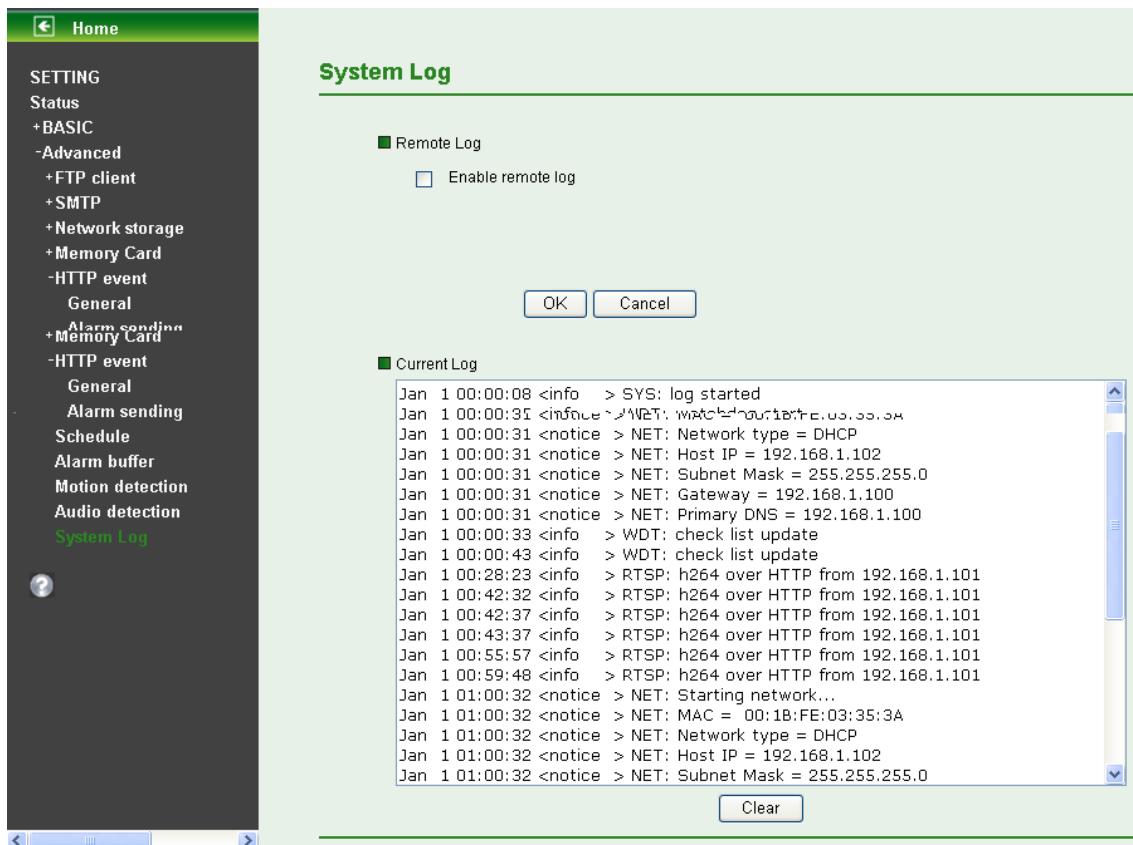
➢ **Enable Remote Log**: Enables user to send the log data to a specified log server.

Appendix

A. Frame-rate and Bitrate Table – Help to set IP Camera with your network environment to access Internet.

Base on your network upload environment to choose the suitable Image-Quality setting. For example, if the network environment is ADSL 256Kb (upload) / 2Mb (download), the most fluent Image-Quality needs to set up under 256Kb situation.

A.1 Mega Mode

A.1.1. H.264 @ 15fps / kbps

Quality	1280*1024	1280*720	640*480	320*240
Excellent	1500	1200	180	50
Detailed	400	250	100	30
Good	250	100	80	20
Standard	100	60	50	15
Medium	80	50	40	10

A.1.2. H.264 @ 10fps / kbps

Quality	1280*1024	1280*720	640*480	320*240
Excellent	1000	800	120	30
Detailed	280	100	70	20
Good	170	70	55	15
Standard	70	40	30	10
Medium	55	30	20	8

A.1.3. H.264 / kbps, fps

Image-Size	Bitrate Setting	Frame-Rate Setting	Current Bitrate	Current Frame-Rate
1280*1024	6144	15	6300	15
1280*1024	6144	10	6300	10
1280*1024	2048	15	2200	15
1280*1024	2048	10	2200	10
1280*1024	512	15	550	15
1280*1024	512	10	550	10
1280*720	6144	15	6300	15
1280*720	6144	10	6300	10
1280*720	2048	15	2200	15
1280*720	2048	10	2200	10
1280*720	512	15	550	15
1280*720	512	10	550	10
640*480	6144	15	6300	15
640*480	6144	10	6300	10
640*480	2048	15	2200	15
640*480	2048	10	2200	10
640*480	512	15	550	15
640*480	512	10	550	15
320*240	6144	15	5100	15

320*240	6144	10	**3600**	**10**
320*240	2048	15	**2200**	**15**
320*240	2048	10	**2200**	**10**
320*240	512	15	**550**	**15**
320*240	512	10	**550**	**10**

A.1.4. MPEG 4@ 15fps / kbps

Quality	1280*1024	1280*720	640*480	320*240
Excellent	**2700**	**2000**	**300**	**100**
Detailed	**1100**	**800**	**200**	**80**
Good	**500**	**350**	**150**	**60**
Standard	**350**	**250**	**100**	**40**
Medium	**300**	**200**	**80**	**35**

A.1.5. MPEG4@ 10fps / kbps

Quality	1280*1024	1280*720	640*480	320*240
Excellent	**1800**	**1400**	**200**	**80**
Detailed	**800**	**550**	**120**	**60**
Good	**350**	**250**	**100**	**40**
Standard	**250**	**180**	**80**	**30**
Medium	**200**	**140**	**60**	**25**

A.1.6. MPEG4 / kbps, fps

Image-Size	Quality Setting	Frame-Rate Setting	Current Bitrate	Current Frame-Rate
1280*1024	6144	15	**5500**	**13**
1280*1024	6144	10	**6300**	**10**
1280*1024	2048	15	**2200**	**15**
1280*1024	2048	10	**2200**	**10**
1280*1024	512	15	**550**	**15**
1280*1024	512	10	**550**	**10**
1280*720	6144	15	**6300**	**15**
1280*720	6144	10	**6300**	**10**
1280*720	2048	15	**2200**	**15**
1280*720	2048	10	**2200**	**10**
1280*720	512	15	**550**	**15**
1280*720	512	10	**550**	**10**
640*480	6144	15	**6300**	**15**
640*480	6144	10	**6300**	**10**
640*480	2048	15	**2200**	**15**
640*480	2048	10	**2200**	**10**
640*480	512	15	**550**	**15**
640*480	512	10	**550**	**10**
320*240	6144	15	**2200**	**15**
320*240	6144	10	**1800**	**10**
320*240	2048	15	**2200**	**15**
320*240	2048	10	**1800**	**10**
320*240	512	15	**550**	**15**
320*240	512	10	**550**	**10**

A.1.7. MJPEG @ 15fps / kbps

Quality	1280*1024	1280*720	640*480	320*240
Excellent	22000	16000	6000	2200
Detailed	12000	7000	3000	1200
Good	7000	5000	2500	1000
Standard	5500	4000	2000	800
Medium	4000	3000	1200	500

A.1.8. MJPEG@ 10fps / kbps

Quality	1280*1024	1280*720	640*480	320*240
Excellent	15000	11000	4000	1500
Detailed	8000	5000	2000	800
Good	5000	3500	1800	700
Standard	4000	3000	1500	600
Medium	3000	2000	800	350

A.1.9. MJPEG / kbps, fps

Image-Size	Quality Setting	Frame-Rate Setting	Current Bitrate	Current Frame-Rate
1280*1024	Excellent	15	22000	15
1280*1024	Excellent	10	15000	10
1280*1024	Good	15	7000	15
1280*1024	Good	10	5000	10
1280*1024	Medium	15	4000	15
1280*1024	Medium	10	3000	10
1280*720	Excellent	15	16000	15
1280*720	Excellent	10	11000	10
1280*720	Good	15	5000	15
1280*720	Good	10	3500	10
1280*720	Medium	15	3000	15
1280*720	Medium	10	2000	10
640*480	Excellent	15	6000	15
640*480	Excellent	10	4000	10
640*480	Good	15	2500	15
640*480	Good	10	1800	10
640*480	Medium	15	1200	15
640*480	Medium	10	800	10
320*240	Excellent	15	2200	15
320*240	Excellent	10	1500	10
320*240	Good	15	1000	15
320*240	Good	10	700	10
320*240	Medium	15	500	15
320*240	Medium	10	350	10

A.2 VGA Mode

A.2.1 H.264 @ 30fps / kbps

Quality	640*480	320*240
Excellent	**600**	**60**
Detailed	**120**	**40**
Good	**60**	**30**
Standard	**50**	**25**
Medium	**40**	**20**

A.2.2 H.264@15 fps / kbps

Quality	640*480	320*240
Excellent	**400**	**40**
Detailed	**80**	**30**
Good	**40**	**25**
Standard	**30**	**20**
Medium	**25**	**15**

A.2.3 H.264 / kbps, fps

Image-Size	Bitrate Setting	Frame-Rate Setting	Current Bitrate	Current Frame-Rate
640*480	6144	30	**6300**	**30**
640*480	6144	15	**6300**	**15**
640*480	2048	30	**2200**	**30**
640*480	2048	15	**2200**	**15**
640*480	512	30	**550**	**30**
640*480	512	15	**550**	**15**
320*240	6144	30	**6300**	**30**
320*240	6144	15	**5500**	**15**
320*240	2048	30	**2200**	**30**
320*240	2048	15	**2200**	**15**
320*240	512	30	**550**	**30**
320*240	512	15	**550**	**15**

A.2.4 MPEG4 @ 30fps / kbps

Quality	640*480	320*240
Excellent	**1000**	**120**
Detailed	**400**	**80**
Good	**200**	**60**
Standard	**150**	**50**
Medium	**120**	**40**

A.2.5 MPEG4@ 15fps / kbps

Quality	640*480	320*240
Excellent	**600**	**80**
Detailed	**250**	**50**
Good	**150**	**40**
Standard	**100**	**30**
Medium	**80**	**20**

A.2.6 MPEG4 / kbps, fps

Image-Size	Bitrate Setting	Frame-Rate Setting	Current Bitrate	Current Frame-Rate
640*480	6144	30	**6300**	**30**
640*480	6144	15	**6300**	**15**
640*480	2048	30	**2200**	**30**
640*480	2048	15	**2200**	**15**
640*480	512	30	**550**	**30**
640*480	512	15	**550**	**15**
320*240	6144	30	**5100**	**30**
320*240	6144	15	**2800**	**15**
320*240	2048	30	**2200**	**30**
320*240	2048	15	**2200**	**15**
320*240	512	30	**550**	**30**
320*240	512	15	**550**	**15**

A.2.7 MJPEG @ 30fps / kbps

Quality	640*480	320*240
Excellent	**13000**	**4500**
Detailed	**6500**	**2500**
Good	**5000**	**2000**
Standard	**4000**	**1600**
Medium	**2500**	**1000**

A.2.8 MJPEG@ 15fps / kbps

Quality	640*480	320*240
Excellent	**7000**	**2500**
Detailed	**3500**	**1500**
Good	**2800**	**1200**
Standard	**2100**	**1000**
Medium	**1400**	**700**

A.2.9 MJPEG / kbps, fps

Image-Size	Bitrate Setting	Frame-Rate Setting	Current Bitrate	Current Frame-Rate
640*480	Excellent	30	**13000**	**30**
640*480	Excellent	15	**7000**	**15**
640*480	Good	30	**5000**	**30**
640*480	Good	15	**2800**	**15**
640*480	Medium	30	**2500**	**30**
640*480	Medium	15	**1400**	**15**
320*240	Excellent	30	**4500**	**30**
320*240	Excellent	15	**2500**	**15**
320*240	Good	30	**2000**	**30**
320*240	Good	15	**1200**	**15**
320*240	Medium	30	**1000**	**30**
320*240	Medium	15	**700**	**15**

B. Storage Requirement Table - Help to set Recording Storage System.

Please refer to the following table to find out the capability for recording into your hard disk.

B.1 Mega Mode

B.1.1 H.264 Storage Requirement GB / channel / day @ 15fps

Quality	1280*1024	1280*720	640*480	320*240
Excellent	50	45	10	4.2
Detailed	16.6	13	8.3	2.5
Good	13	8.3	6.7	1.7
Standard	8.3	5	4.2	1.3
Medium	6.7	4.2	3.4	1

B.1.2 H.264 Storage Requirement GB / channel / day @ 10fps

Quality	1280*1024	1280*720	640*480	320*240
Excellent	45	22.5	6.7	2.5
Detailed	12.5	8.3	5.9	1.7
Good	8.3	5.9	4.6	1.3
Standard	5.9	3.4	2.5	1.3
Medium	4.5	2.5	2.1	0.7

B.1.3 MPEG4 Storage Requirement GB / channel / day

Image-Size	Bitrate Setting	Frame-Rate Setting	Storage Requirement
1280*1024	6144	15	522.9
1280*1024	6144	10	522.9
1280*1024	2048	15	182.6
1280*1024	2048	10	182.6
1280*1024	512	15	45.7
1280*1024	512	10	45.7
1280*720	6144	15	522.9
1280*720	6144	10	522.9
1280*720	2048	15	182.6
1280*720	2048	10	182.6
1280*720	512	15	45.7
1280*720	512	10	45.7
640*480	6144	15	522.9
640*480	6144	10	522.9
640*480	2048	15	182.6
640*480	2048	10	182.6
640*480	512	15	45.7
640*480	512	10	45.7
320*240	6144	15	423.3
320*240	6144	10	298.8
320*240	2048	15	182.6
320*240	2048	10	182.6
320*240	512	15	45.7
320*240	512	10	45.7

B.1.4 MPEG4 Storage Requirement GB / channel / day @ 15fps

Quality	1280*1024	1280*720	640*480	320*240
Excellent	133	83	25	8.3
Detailed	58.1	42	17	6.7
Good	42	25	12.5	5
Standard	30	21	8.3	3.4
Medium	25	17	6.7	3

B.1.5 MPEG4 Storage Requirement GB / channel / day @ 10fps

Quality	1280*1024	1280*720	640*480	320*240
Excellent	92	58.1	17	6.7
Detailed	42	30	10	5
Good	30	17	8.3	3.4
Standard	21	12.5	6.7	2.5
Medium	17	10	5	2

B.1.6 MPEG4 Storage Requirement GB / channel / day

Image-Size	Quality Setting	Frame-Rate Setting	Storage Requirement
1280*1024	6144	15	431.6
1280*1024	6144	10	522.9
1280*1024	2048	15	182.6
1280*1024	2048	10	182.6
1280*1024	512	15	45.7
1280*1024	512	10	45.7
1280*720	6144	15	522.9
1280*720	6144	10	522.9
1280*720	2048	15	182.6
1280*720	2048	10	182.6
1280*720	512	15	45.7
1280*720	512	10	45.7
640*480	6144	15	522.9
640*480	6144	10	522.9
640*480	2048	15	182.6
640*480	2048	10	182.6
640*480	512	15	45.7
640*480	512	10	45.7
320*240	6144	15	182.6
320*240	6144	10	149.4
320*240	2048	15	182.6
320*240	2048	10	149.4
320*240	512	15	45.7
320*240	512	10	45.7

B.2 VGA Mode

B.2.1. H.264 Storage Requirement GB / channel / day @ 30fps

Quality	640*480	320*240
Excellent	21	5
Detailed	10	3.4
Good	5	2.5

Standard	**4.2**	**2.1**
Medium	**3.4**	**1.7**

B.2.2. H.264 Storage Requirement GB / channel / day @ 15fps

Quality	640*480	320*240
Excellent	**12.5**	**3.4**
Detailed	**6.7**	**2.5**
Good	**3.4**	**2.1**
Standard	**2.5**	**1.7**
Medium	**2.1**	**1.3**

B.2.3. H.264 Storage Requirement GB / channel / day

Image-Size	Bitrate Setting	Frame-Rate Setting	Current Bitrate	Storage Requirement
640*480	6144	30	**6300**	**522.9**
640*480	6144	15	**6300**	**522.9**
640*480	2048	30	**2200**	**182.6**
640*480	2048	15	**2200**	**182.6**
640*480	512	30	**550**	**45.7**
640*480	512	15	**550**	**45.7**
320*240	6144	30	**6300**	**522.9**
320*240	6144	15	**5500**	**456.5**
320*240	2048	30	**2200**	**182.6**
320*240	2048	15	**2200**	**182.6**
320*240	512	30	**550**	**45.7**
320*240	512	15	**550**	**45.7**

B.2.4. MPEG4 Storage Requirement GB / channel / day @ 30fps

Quality	640*480	320*240
Excellent	**50**	**10**
Detailed	**25**	**6.7**
Good	**16.7**	**5**
Standard	**12.5**	**4.2**
Medium	**10**	**3.4**

B.2.5. MPEG4 Storage Requirement GB / channel / day @ 15fps

Quality	640*480	320*240
Excellent	**33.2**	**6.7**
Detailed	**16.7**	**4.2**
Good	**12.5**	**3.4**
Standard	**8.3**	**2.5**
Medium	**6.7**	**1.7**

B.2.6. MJPEG Storage Requirement GB / channel / day

Image-Size	Bitrate Setting	Frame-Rate Setting	Current Bitrate	Storage Requirement
640*480	6144	30	**6300**	**522.9**
640*480	6144	15	**6300**	**522.9**
640*480	2048	30	**2200**	**182.6**

640*480	2048	15	**2200**	**182.6**
640*480	512	30	**550**	**45.7**
640*480	512	15	**550**	**45.7**
320*240	6144	30	**5100**	**423.3**
320*240	6144	15	**2800**	**232.4**
320*240	2048	30	**2200**	**182.6**
320*240	2048	15	**2200**	**182.6**
320*240	512	30	**550**	**45.7**
320*240	512	15	**550**	**45.7**

C. System Requirement – Help to setup System

C.1. 16 Channel IP Camera with CIF Performance

Equipment Configuration

Software:	MainConsole Version 2.6.4 Professional
CPU:	Intel Core 2 Quad Q6600 @ 2400 MHz
Memory:	1024 MB (2 x 512 DDR2-SDRAM)
Ethernet:	Marvell Yukon 88E8052 PCI-E ASF Gigabit Ethernet Controller
Hard Disk:	ST3250620A (250 GB)
Graphic card:	ATI Technologies Inc Radeon X1300 Series
Operating System:	Windows XP Professional SP2

Results from Test with a Resolution of 352×240

320x240	**Quality**	**Frame Rate**	**CPU Load**	**Bandwidth**
16 IP camera	Good	20	65%	40~50 Mbps
16 IP camera	Excellent	20	67%	40~50 Mbps

C.2. 16 Channel IP Camera with D1 Performance

Equipment Configuration

Software:	MainConsole Version 2.6.4 Professional
CPU:	AMD Athlon 64*2 @3600+MHz
Memory:	2048 MB (2 x 1024 DDR2-SDRAM)
Ethernet:	VIA Rhine II Fast Ethernet Adapter
Hard Disk:	ST3250620A (250 GB)
Graphic card:	ATI Technologies Inc EAX1600 Series
Operating System:	Windows XP Professional SP2 x64

Results from Test with a Resolution of 704×480 CCD IPCamera

704x480	Quality	Frame Rate	CPU Load	Bandwidth
16 IP camera	Excellent	30	95%	15~20 Mbps

Results from Test with a Resolution of 640×480 CMOS IPCamera

640x480	Quality	Frame Rate	CPU Load	Bandwidth
16 IP camera	Excellent	30	95%	10~15 Mbps

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the R&TTE Directive 1999/5/EC:

| Clause	Description
EN 60950-1: 2006+A11: 2009+A1:2010	Safety of Information Technology Equipment
EN 62311:2008	Generic standard to demonstrate the compliance of electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields (0 Hz - 300 GHz)
EN 300 328 V1.7.1:2006	Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using wide band modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive
EN 301 489-17 V2.1.1: **2009&** **489-1 V1.8.1 2008**	Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment

This device is a 2.4 GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries, except in France and Italy where restrictive use applies.

In Italy the end-user should apply for a license at the national spectrum authorities in order to obtain authorization to use the device for setting up outdoor radio links and/or for supplying public access to telecommunications and/or network services.

This device may not be used for setting up outdoor radio links in France and in some areas the RF output power may be limited to 10 mW EIRP in the frequency range of 2454 – 2483.5 MHz. For detailed information the end-user should contact the national spectrum authority in France.

Česky [Czech]	*[Jméno výrobce]* tímto prohlašuje, že tento *[typ zařízení]* je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Dansk [Danish]	Undertegnede *[fabrikantens navn]* erklærer herved, at følgende udstyr *[udstyrets typebetegnelse]* overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
Deutsch [German]	Hiermit erklärt *[Name des Herstellers]*, dass sich das Gerät *[Gerätetyp]* in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Eesti [Estonian]	Käesolevaga kinnitab *[tootja nimi = name of manufacturer]* seadme *[seadme tüüp = type of equipment]* vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
English	Hereby, *[name of manufacturer]*, declares that this *[type of equipment]* is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Español [Spanish]	Por medio de la presente *[nombre del fabricante]* declara que el *[clase de equipo]* cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ *[name of manufacturer]* ΔΗΛΩΝΕΙ ΟΤΙ *[type of equipment]* ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
Français [French]	Par la présente *[nom du fabricant]* déclare que l'appareil *[type d'appareil]* est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Italiano [Italian]	Con la presente *[nome del costruttore]* dichiara che questo *[tipo di apparecchio]* è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo *[name of manufacturer / izgatavotāja nosaukums]* deklarē, ka *[type of equipment / iekārtas tips]* atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo *[manufacturer name]* deklaruoja, kad šis *[equipment type]* atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Nederlands [Dutch]	Hierbij verklaart *[naam van de fabrikant]* dat het toestel *[type van toestel]* in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
Malti [Maltese]	Hawnhekk, *[isem tal-manifattur]*, jiddikjara li dan *[il-mudel tal-prodott]* jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
Magyar [Hungarian]	Alulírott, *[gyártó neve]* nyilatkozom, hogy a *[... típus]* megfelel a vonatkozó alapvetõ követelményeknek és az 1999/5/EC irányelv egyéb elõírásainak.
Polski [Polish]	Niniejszym *[nazwa producenta]* oświadcza, że *[nazwa wyrobu]* jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Português [Portuguese]	*[Nome do fabricante]* declara que este *[tipo de equipamento]* está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Slovensko [Slovenian]	*[Ime proizvajalca]* izjavlja, da je ta *[tip opreme]* v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]	*[Meno výrobcu]* týmto vyhlasuje, že *[typ zariadenia]* spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Suomi [Finnish]	*[Valmistaja = manufacturer]* vakuuttaa täten että *[type of equipment = laitteen tyyppimerkintä]* tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.

sv Svenska [Swedish]	Härmed intygar *[företag]* att denna *[utrustningstyp]* står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.   These limits are designed to provide reasonable protection against harmful interference in a residential installation.   This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.   However, there is no guarantee that interference will not occur in a particular installation.   If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

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

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

（2） this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.