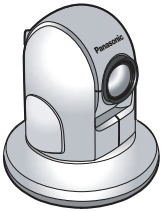


Panasonic®

Operating Instructions

Network Camera

Indoor Use Only

Model No. **BB-HCM381A** (AC Adaptor Type)
BB-HCE481A (PoE Type)

Please read this manual before using, and save this manual for future reference.
Panasonic Network Camera Website: http://www.panasonic.com/netcam

Main Features

[illegible]

IPv6[*1] Network Camera

[illegible]

PoE (Power over Ethernet) Supported[*2] (For Only BB-HCE481A [PoE Type])

[illegible]

Audio 2-way Communication[*3] (Walkie-talkie Type)

[illegible]

Note

[illegible]

---

*1 [illegible]

*2 [illegible]

*3 [illegible]

*4 [illegible]

Motion Detection

Better Image Quality

Remote Pan/Tilt/Zoom/Focus

Click to Center .....

Preset Position 20

Output Control .....

Video Output

SD Memory Card*1 Recording

*1

Enhanced Multi-Camera Page

DynamicDNS Service Support

Multi-Language Display

Abbreviations

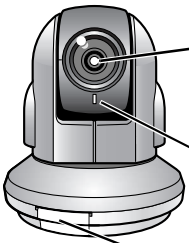
Trademarks

Table of Contents

1 Camera Monitoring

1.1 BB-HCM381A Feature Locations

1.1.1 Front View



Auto Focus/Zoom Lens

: 5 (3/16)

: 1 (3 3)

Indicator

153).

SD Memory Card Cover

140).

Indicator Display

	*1	
	*2	
		( )
		(2-)
		*3

*1

*2

*3 3 4 -

1.1.2 Rear View

External I/O
(164)

DC IN jack

Ethernet (LAN) port

Audio/Video termin
(

1.1.3 B

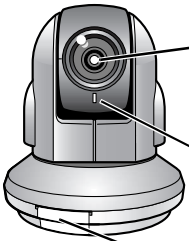
D
SB
(

Hole for

(

1.2 BB-HCE481A Feature Locations

1.2.1 Front View



Auto Focus/Zoom Lens

: 5 (3/16)

: 1 (3 3)

Indicator

153).

SD Memory Card Cover

140).

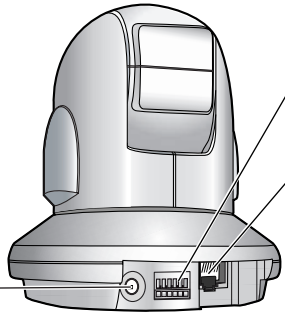
Indicator Display

		( )
		(2-)
		● *2 ● *2

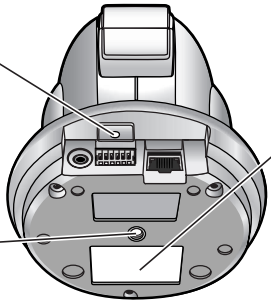
*1

*2 5 6 -

1.2.2 Rear View



1.2.3 Bottom View



1.3 How to Turn on the Camera

(- 381 k) (- 481 k) (- 381 k) (- 481 k)

BB-HCM381A

–

–

BB-HCE481A[*1]

–

–

[*1] - 481 k

1.4 Accessing the Camera

1. [illegible]

2. [illegible] "**http://IPv4 Address (or URL):Port Number**" [illegible]

– [illegible] 80 ([illegible]), [illegible] 50 [illegible]

– [illegible] 6 [illegible] 15 [illegible] 16, [illegible]

[illegible] "**http://(IPv6-registered URL):Port Number**" [illegible]

– [illegible] 9 [illegible]

[illegible] ://192.168.0.253:50000 **(in IPv4)**

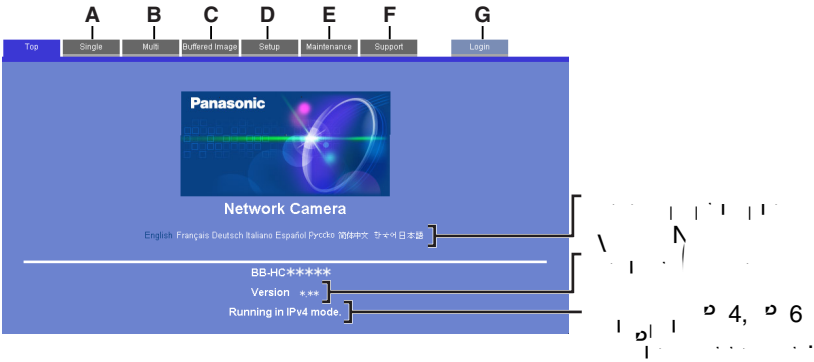
[illegible] ://✳✳✳✳✳. [illegible] :50000 **(in IPv6)**

3. [illegible]

Note

– [illegible] :

4.



A	(17)	**B**	- (36)
C	(38)	**D**	(45)
E	(154)	**F**	(163)
G	(92)		

Note

–

–

5.

1.4.1 To Access the Camera in IPv6

[illegible] 6.

- **PC Requirements**
  Operating System: [illegible] 1
  Web Browser: [illegible] 6.0
- **An IPv6 Router**
- **An IPv6 Connection Service**
  [illegible] 6, [illegible] 4/ 6 [illegible] 6 [illegible] 4 [illegible] 6- [illegible]

IPv6 Domain Name Service

[illegible] 6 [illegible] 70) [illegible] 6 [illegible]

What is IPv6?

– 6 [illegible] 6".
– 6 [illegible]
– 6 [illegible] 4, [illegible] 2 [illegible]
– [illegible] ([illegible]) [illegible] 6, [illegible] 6, [illegible] !
– [illegible] **http://www.ipv6.org/**.

Setting up the IPv6 Router, your PC, and the Camera

Setting up the IPv6 Router

[illegible] 6 [illegible] **http://panasonic.co.jp/pcc/products/en/netwkcam/** [illegible]

Setting up your PC

1. [illegible]
   – [illegible]
2. [illegible] 6 [illegible].
   – [illegible]

Note

– [illegible] 1 [illegible]
– [illegible] 2, [illegible]

3. [illegible].
   – [illegible] 6 [illegible] 6 [illegible]

Setting up the Camera

[illegible] 6 [illegible] 53. [illegible] 6, [illegible] 6 [illegible]

Confirming that You Can Access the Camera

[illegible] ([illegible] 13).

1.5 Viewing the Single Camera page

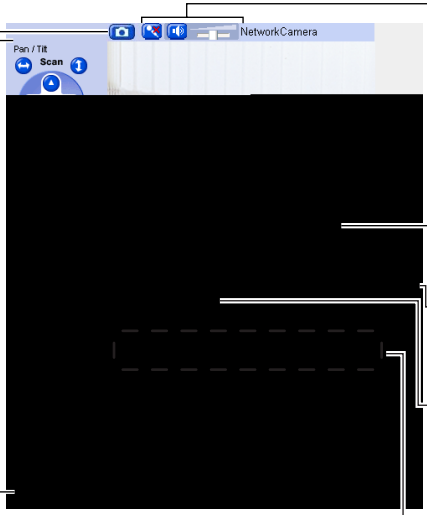
1. [illegible] ([illegible] 13).

–

2. [illegible]

– [illegible] ([illegible] 19).

– [illegible] 20 [illegible] 2.



Capture Image Button ([illegible] 22)

Operation Bar ([illegible] 23)

Audio Control Bar (Talk Button, Listen Button and Adjustment Bar) ([illegible] 34)

Click to Center ([illegible] 21)

Click the URL in case of no audio.

Displaying to operate with IPv4, IPv6, or IPsec.

Banner (optional) ([illegible] 20)

3. [illegible]

Note

– [illegible]

– [illegible] ([illegible] 23).

– [illegible]

– [illegible] ([illegible]), [illegible] 30 [illegible] 31 [illegible] 30 [illegible]

– [illegible] ([illegible] 93).

– [illegible]

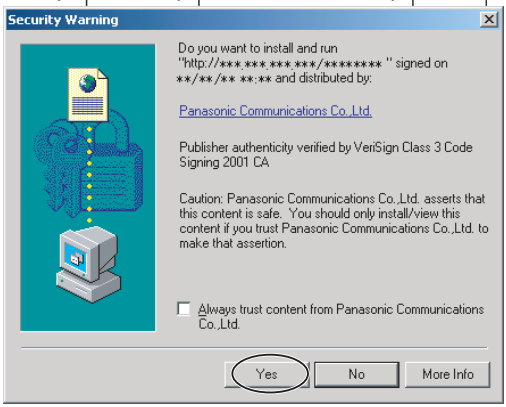
– [illegible] ([illegible] 80). [illegible] ([illegible] 80).

– [illegible]

Error Message	Cause and Remedy
[illegible]	[illegible] ([illegible] 150).
[illegible]	[illegible] 30 [illegible]

Security Warning window

( ) 2000



If you cannot install ActiveX Controls or you cannot see the video using the Internet Explorer

–

(1)
(2)

–

(1)
(2)
(3)

–

://

Note

–

–

–

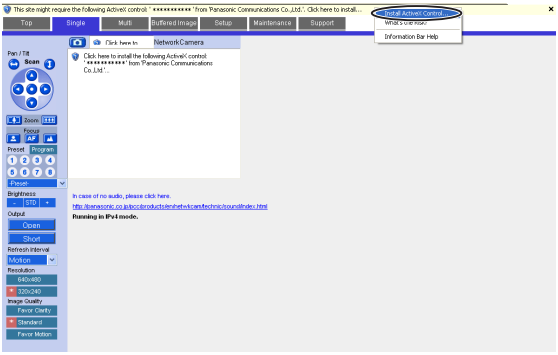
(186).

–

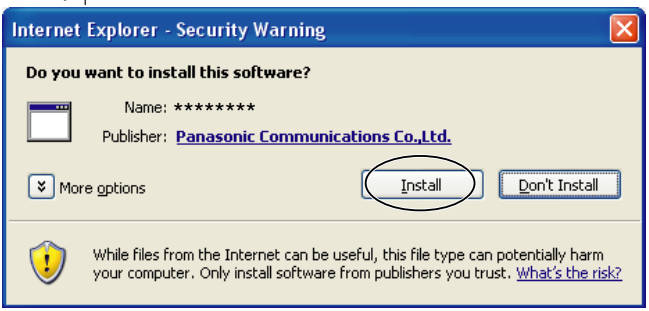
:

Security Warning window on Microsoft Windows XP Service Pack 2

1.



2.

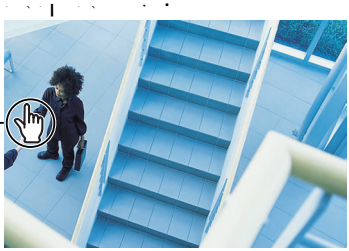


1.5.1 Displaying the Banner

145).

1.5.2 Auto Centering the Image (Click to Center)

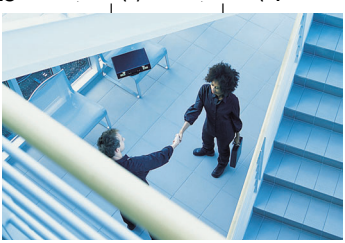
1.



2.

–

– 25



Note

– 23).

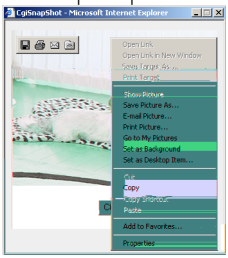
–

– 93),

1.5.3 Capturing a Still Image

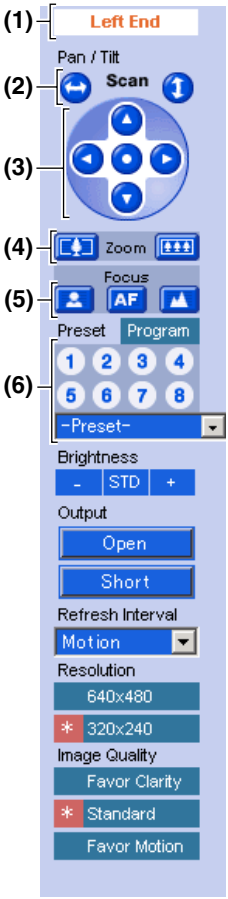
1.
2.

3.



4.
5.

1.5.4 Using the Operation Bar



(1) End Display and Preset Display:

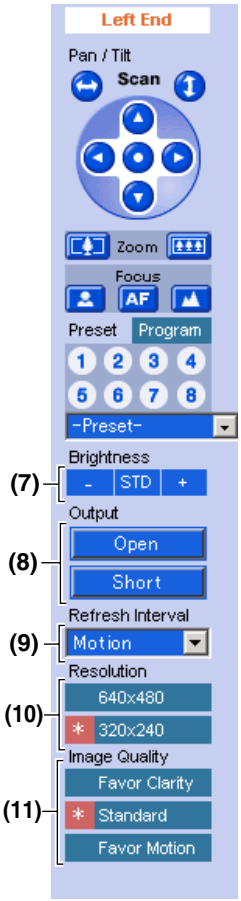
(2) Pan Scan/Tilt Scan:

(3) Pan/Tilt/Home Position:

(4) Zoom Buttons:

(5) Focus Buttons:

(6) Home Position, Alarm Position, Preset Position:



(7) Brightness: 9 ( ). - +

(8) Output Control: /

(9) Refresh Interval: (60-)

(10) Resolution: 640 480 320 240 ( )

(11) Image Quality:

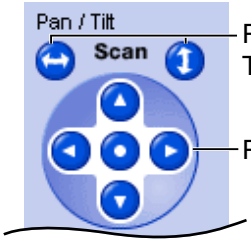
– ( )

–

–

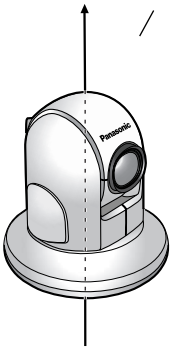
Pan/Tilt Operation

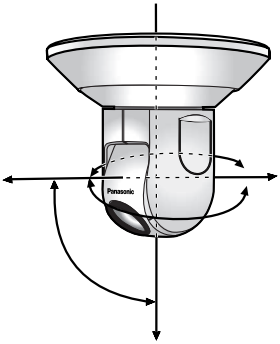
-175 +175 -120 0
0 +90



Pan Scan/
Tilt Scan

Pan/Tilt





Note

–

Note

- (93). , 10
- [illegible]
- [illegible]
- [illegible]
- [illegible]

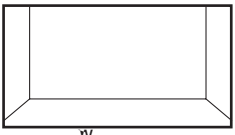
1.5.6 Automatic and Manual Focusing

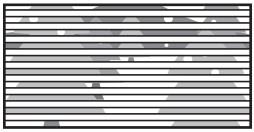
[illegible] 40 [illegible]

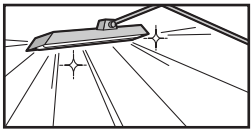
Note

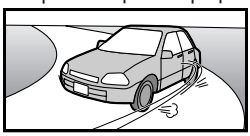
– [illegible]

The objects that are difficult to focus on by AF button









– [illegible] " (80).

– [illegible] 1 (3 3) [illegible] " (80).

– [illegible]

– [illegible]

– [illegible] (93). [illegible] 10 [illegible]

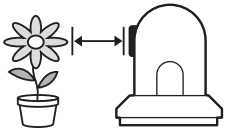
Minimum object distance

During maximum zoom in (Tele)

1 (3 3)

During maximum zoom out (Wide)

5 (3/16)

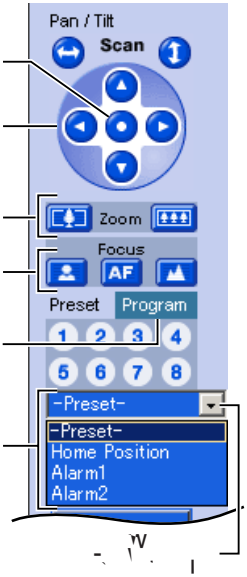


1.5.7 Setting Home Position/Alarm Position/Preset Position

Registering Home Position/Alarm Position

2 (107) (119),

1.
2.
3.
4.
5.
6.



Registering a Preset Position

20
(33).

–

–

1.

–

2.

3.

4.

5. (1 8)
(1 20)

" " 1.
(1
8),
– 15
– (
190)
, &, < >

6.

– " !"

1 8

Note

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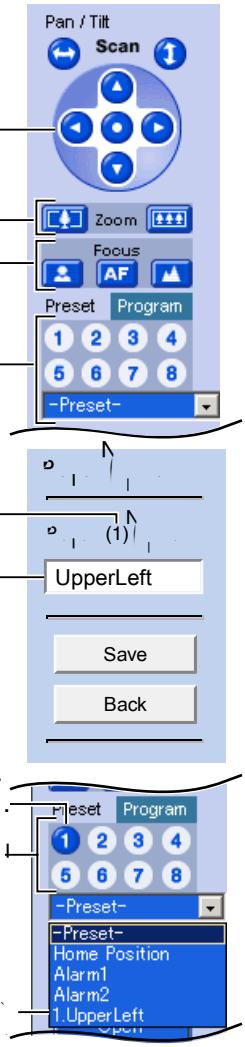
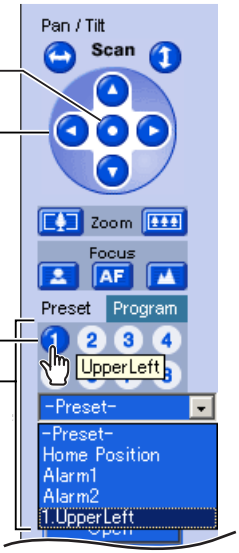


Viewing the Image

1.



Changing or Deleting the Settings

1.

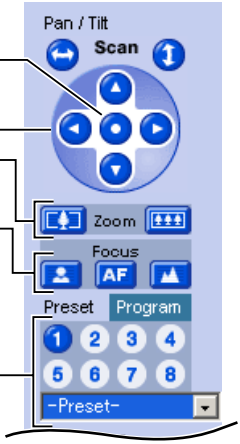
–

2. 5

3.

4.

5. (1 8) (1 20).



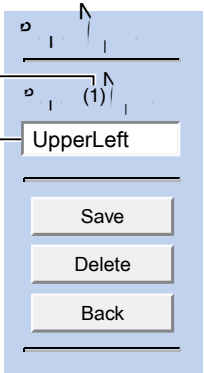
Note

– 1 8

6. (1)

–

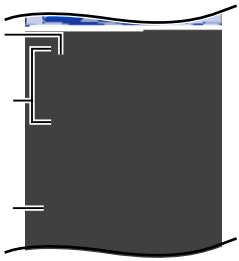
–



Note

–

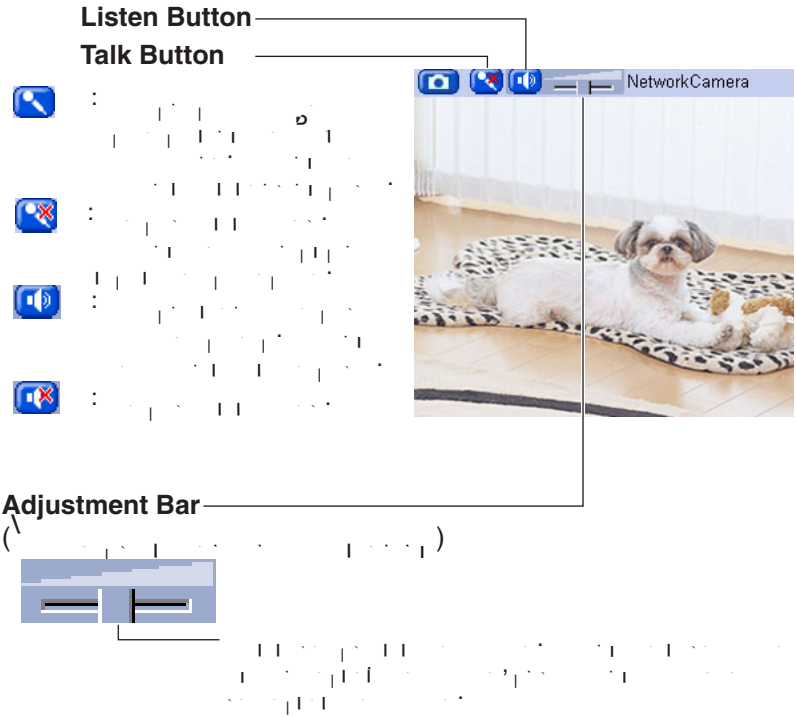
1 8



1.6 Listening to Camera Audio and Talking through the Camera

1. [illegible] ([illegible] 13).
2. [illegible]
3. [illegible] ([illegible]) [illegible]

Audio Feature



Note

- [illegible]
- [illegible] 10 [illegible] 48 [illegible] 53). [illegible]
- [illegible] 86). [illegible]
- [illegible]
- [illegible]
- [illegible] 48 [illegible] 53).

1.7 Viewing the Multi-Camera page

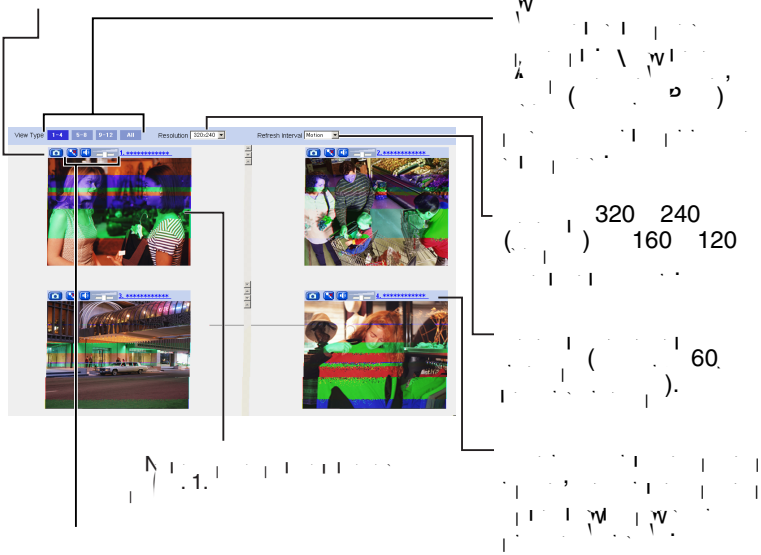
(148).

1. (13).

2.

12

Capture Image Button (22)



Audio Control Bar (Talk button, Listen button and Adjustment Bar)
(34)

3.

Note

- 160 120
- 640 480-
- ( ),
- (51 56).
- (93).
- 4 - 3 4

When an image is not displayed on the Multi-Camera page

- (. 192.168.0.253) . (11 -).
- - (148).
- (186).

When setting [Do not permit access from guest users] or [Permit access from guest users (mobile only)] on the Security: Administrator page

- .
- -

Using the zoom feature on the Multi-Camera page

- 10 (26).
- (1.0 10.0)
- .

1.8 Viewing the Buffered Image page

(97, 107, 119).

Note

–

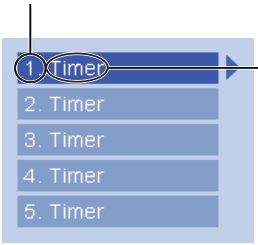
1. (13).

–

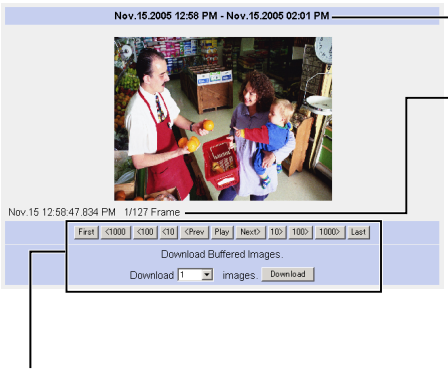
2.

3.

(97, 107, 119).



4.



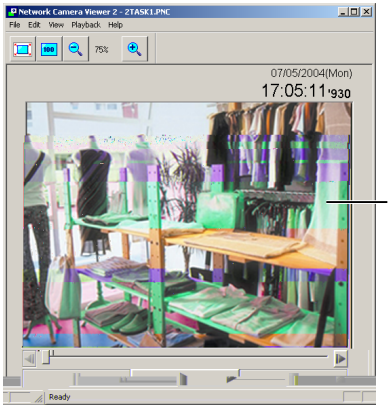
[Play]:

[<Prev] or [Next>]:

[First], [<1000], [<100], [<10] or [10>], [100>], [1000>], [Last]:

10 , 100 1000

[Download]



Using the zoom feature on the Buffered Image page

- [illegible] 10 [illegible] 26).
- [illegible] (1.0 10.0) [illegible]
- [illegible]

Note

- [illegible]
- [illegible]
- [illegible] ( ) [illegible]
- [illegible] 320 240 125 (3 5 3 40 .) 191 192 [illegible]

1.8.1 Deleting Buffered Images

[illegible] (97, 107, 119).

Note

- [illegible]
- [illegible] / / (97, 107, 119).

1.9 Viewing Still Images on Your Cell Phone

"http://IP address (or URL):Port Number/Mobile"

– 80 ( ),

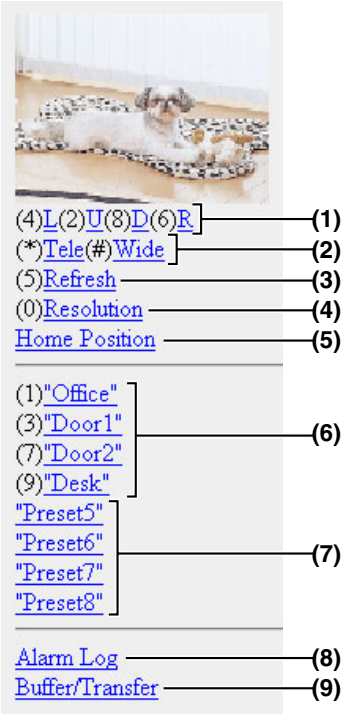
://✳✳✳.✳✳✳.✳✳✳.✳✳✳:50000/

(✳✳✳✳✳. . :50000/)

–

–

–



(1) 2, 4, 6 8

(2) * #

(3) 5

(4) 160 120 0 320 240.

(5)

(6) 1, 3, 7 9

(7) 5 20

(8) 50 (43).

(9) (44).

Alarm Log Info.
Displays Up to 50 Logs in order of time.

Control Page —(10)

New Logs:3 —(11)
10/22 19:15 A1 R
10/22 18:40 A2 F —(12)
10/22 18:15 MD

Control Page —(13)

(10)

(11)

(12)

Display	Operation	Signal
A1 R	Alarm1	Rising: GND to Open (High)
A2 F	Alarm2	Falling: Open (High) to GND
MD	Motion Detection	-

(13)

Note

– 93),

– 2

1. **http:// IP address(or URL):Port Number/MobileH** .
   (＊＊＊＊＊. . :50000/)
2. **http:// IP address(or URL):Port Number/MobileX** .
   (＊＊＊＊＊. . :50000/)

– (4)_(2)_(8)_(6)_ (＊)____ (#)____ "(4) " → (2)_(8)_(6)_ (＊)____ (#)____

– 80,

http://panasonic.co.jp/pcc/products/en/netwkcam/

– (

)

–

1.9.1 Enabling or Disabling the Buffer/Transfer on your Cell Phone

1. [illegible]
2. [illegible]
3. [illegible]

[illegible] (1).

Buffer/Transfer

No.Status Trigger

(1) OFF Timer
(2) OFF Timer
(3) OFF Timer
(4) OFF Timer
(5) OFF Timer

Control Page

4. [illegible]

Buffer/Transfer

The 1st setting will be changed to ON.
If you press [Save], all buffered images are deleted.

Save Cancel

No.(1)
Status:OFF -> ON
Trigger:Timer
Su Mo Tu We Th Fr Sa
Active:Always
No Transfer, No Memory Overwrite
Notify :-

2 Using the Camera's Basic Features

2.1 Setup Page of the Camera

1. [illegible] ([illegible] 13).

– [illegible]

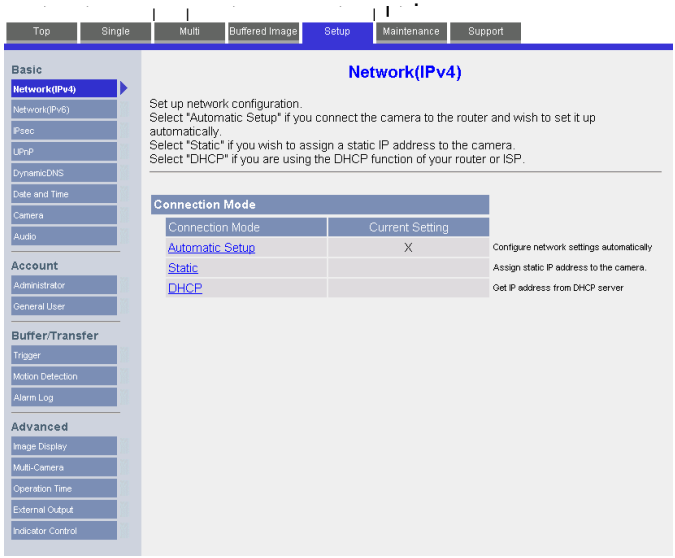
Note

– [illegible]

– [illegible]

– [illegible]

2. [illegible]



Basic

(1) Network (IPv4) 4 (48).

(2) Network (IPv6) 6

(15) Multi-Camera*1 [illegible] 12 [illegible] 148).

(16) Operation Time [illegible] 150).

(17) External Output [illegible] / [illegible] 152).

(18) Indicator Control [illegible] 153).

*1 [illegible]

2.2 Connecting the Camera to Your IPv4 Network

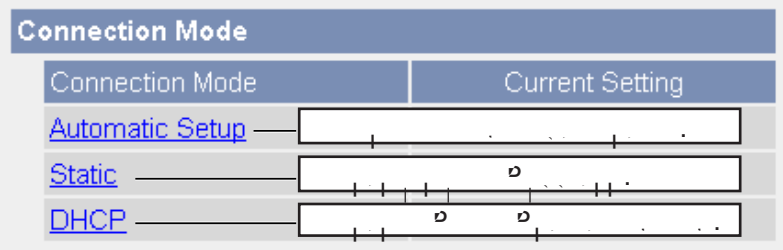
[illegible] 4.

– [illegible] ([illegible])

– [illegible]

– [illegible]

1. [illegible] ([illegible] 4) [illegible]
2. [illegible]



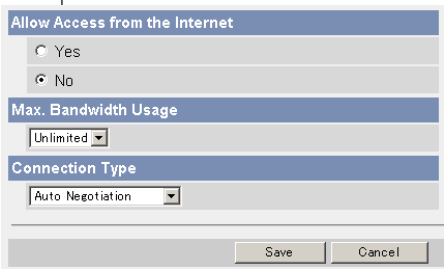
– [illegible]

3. [illegible]

Automatic Setup

[illegible] ([illegible]) [illegible]

80 [illegible] 50000 50050.



– [illegible]

DHCP Setup

Network Configuration from Setup Program
☑ Enable
Internet Connection
Port No. 80
Host Name
Default Gateway
Default Gateway
DNS
DNS Server 1
DNS Server 2
Max. Bandwidth Usage
Unlimited
Connection Type
Auto Negotiation
Save Cancel

Static Setup

Network Configuration from Setup Program
☑ Enable
Internet Connection
Port No. 80
IP Address 192.168.0.253
Subnet Mask 255.255.255.0
Default Gateway
Default Gateway
DNS
DNS Server 1
DNS Server 2
Max. Bandwidth Usage
Unlimited
Connection Type
Auto Negotiation
Save Cancel

–

4.

–

–

New settings are saved.

New settings are saved. Please restart the camera.

Note:(1)All the buffered images will be erased when restarted.
(2)Please use Setup Program to find out the camera on your network when you select "Automatic Setup" or "DHCP".

Restart

Note

– (155).

5.

–

–

Note

– (180).

Setting	Description
[illegible]	[illegible] 80 [illegible] 50000 [illegible] 50050. [illegible]
[illegible]	[illegible]
[illegible]	[illegible] 80. [illegible] 68 "2.7.2 [illegible] 4 [illegible]"). [illegible]: 20 [illegible] 21, [illegible]: 23, [illegible]: 25, [illegible]: 53, [illegible]3: 110, [illegible]: 443, [illegible]: 4000 [illegible]: 6661 [illegible] 6667. [illegible] 1 [illegible] 65535. [illegible] 80. [illegible]
[illegible]	[illegible] 179). [illegible] 4 [illegible] (0 [illegible] 255) [illegible] 3 [illegible] "192.168.0.253". [illegible] "0.0.0.0" [illegible] "255.255.255.255" [illegible]

Setting	Description
( )	190). , " , , & , < >
*1 (/)	4 (0 255) 3 "192.168.0.253". "0.0.0.0" "255.255.255.255"
*1 (/)	4 (0 255) 3 "192.168.0.253". "0.0.0.0" "255.255.255.255"
	0.1 4 6. **Note** 160 120 : 3.5 (28) 320 240 : 10 (80) 640 480 : 18 (144)

Setting	Description
[illegible]	[illegible] 9 [illegible] 4 [illegible] 6.

*1 [illegible]

2.3 Connecting the Camera to Your IPv6 Network

–

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Note

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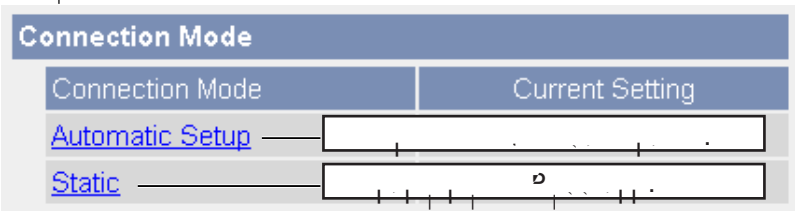
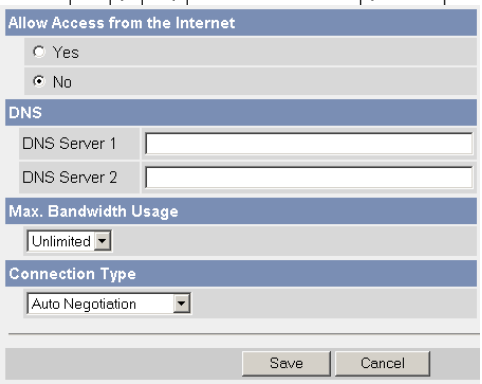
1. (6)
2.



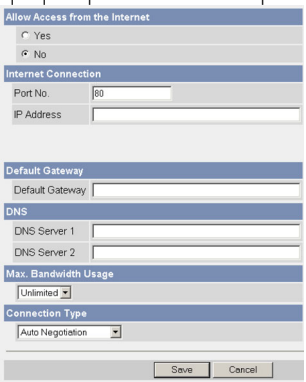
3.

Automatic Setup



–

Static Setup



–

4.

–

–

Note

– (155).

5.

–

Note

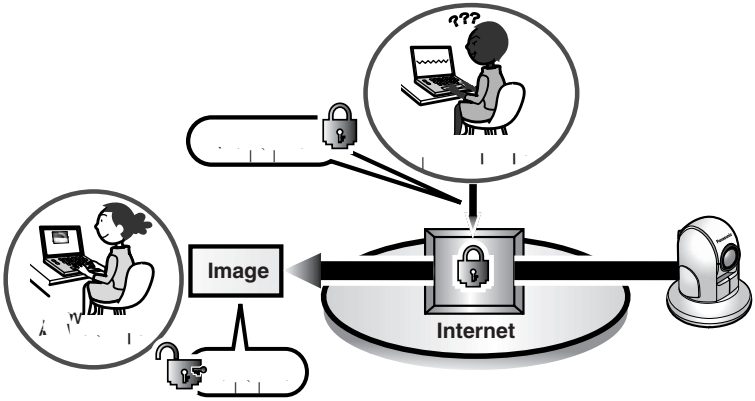
– (180). (155) 4.

–

Setting	Description
[illegible]	[illegible] 6
[illegible] ( )	80. [illegible] [illegible]: 20 21, [illegible]: 23, [illegible]: 25, [illegible]: 53, [illegible]3: 110, [illegible]: 443, [illegible]: 4000 [illegible]: 6661 6667. [illegible] 1 65535. [illegible] 80. [illegible]
[illegible] ( )	[illegible] 6 8 [illegible] 0 [illegible] "::". (. 2001:2:3:4::5)
[illegible] ( )	[illegible] 6 [illegible] 6 8 [illegible] 0 [illegible] "::". (. 2001:2:3:4::5)
[illegible]	[illegible] 6 [illegible] 6 8 [illegible] 0 [illegible] "::". (. 2001:2:3:4::5)

Setting	Description
[illegible]	[illegible] 0.1 [illegible] 4 [illegible] 6. **Note** [illegible] 160 120 : [illegible] 3.5 (28) 320 240 : [illegible] 10 (80) 640 480 : [illegible] 18 (144)
[illegible]	[illegible] 9 [illegible] 4 [illegible] 6.

2.4 What is IPsec?



Camera's IPsec Features

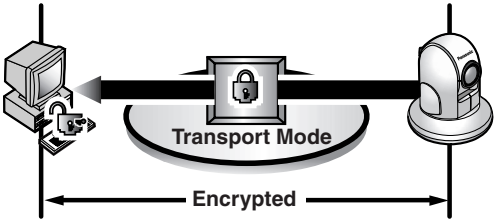
4 6.

Item	Supported Feature
1	1 : *1 2 : : - , 3 - , - (128, 192, 256) : - 5, - -1
	( )*2 : - , 3 - , - (128, 192, 256) : - 5-96, - -1-96

*1
*2 ( ).

IPsec Mode Selection

Transport Mode (IPv4 Only)



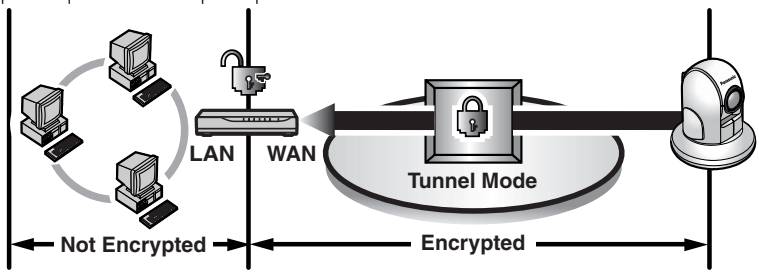
Item	Supported Feature
	6.0 **Note** **http://panasonic.co.jp/pcc/products/en/netwkcam/**

Tunnel Mode (IPv4/IPv6)

[illegible]

Note

– [illegible]



[illegible]

Item	Supported Feature
[illegible]	[illegible] 2000, [illegible] 98 ([illegible] 4) [illegible] 1 ([illegible] 6) [illegible] 6.0
[illegible]	[illegible] ([illegible] 4) [illegible] [illegible] 4/[illegible] 6 - [illegible] 6 [illegible] 4 ([illegible] 6) [illegible] **Note** – [illegible] **http://panasonic.co.jp/pcc/products/en/netwkcam/** [illegible]
[illegible]	[illegible] ([illegible] 4) [illegible] [illegible] 4/[illegible] 6 - [illegible] 6 [illegible] 4 ([illegible] 6) [illegible]

2.5 Encrypting the Camera Image in Transport Mode

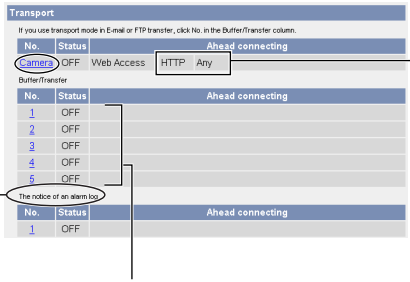
Note

–

1.

2. **Camera**

– **No.** /



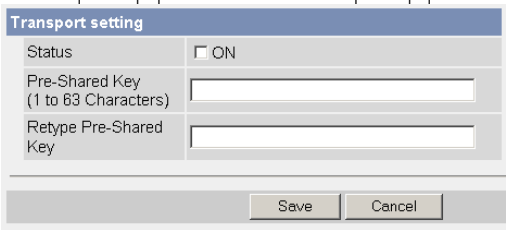
(137)

(131).

Note

– 1, 2

3.

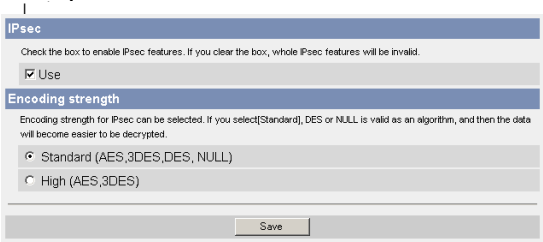


Setting	Description
[illegible]	[illegible]
[illegible]	[illegible] 190). [illegible] , " , , & , < [illegible] > [illegible] **Note** [illegible]

4. [illegible]

5. [illegible]

6. [illegible]



Setting	Description
[illegible]	[illegible]
[illegible]	[illegible]

7.

8. 58.

–

9. (13).

–

Note

–

–

24

–

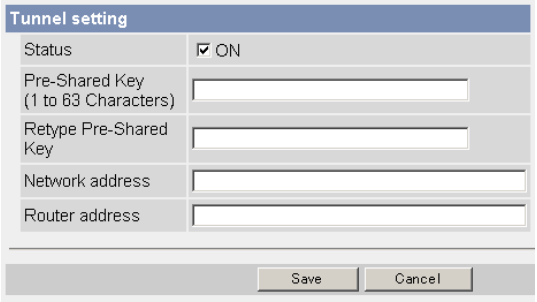
http://panasonic.co.jp/pcc/products/en/netwkcam/

2.6 Encrypting the Camera Image in Tunnel Mode

Note

1.
2. **Add**

3.



Setting	Description

Setting	Description
[illegible]	[illegible] 190). [illegible] , " , , & , < > [illegible] **Note** [illegible]
[illegible]	[illegible] " [illegible] / [illegible] " [illegible]
[illegible]	[illegible] **Note** – [illegible] 6 [illegible] – [illegible]

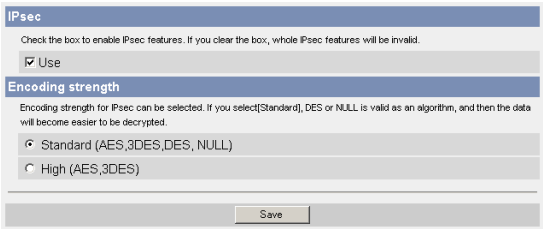
4. [illegible]

– [illegible]

5. [illegible]

– [illegible]

6. [illegible]



Setting	Description
[illegible]	[illegible]
[illegible]	[illegible]

7. [illegible]

8. [illegible]

IKE Items		Settings
[illegible] 1	[illegible]	[illegible]
		[illegible]
		[illegible] *1 [illegible]
	[illegible]	[illegible] 1 2.
	[illegible]	[illegible] - , 3 - [illegible] - (128, 192, 256 [illegible]). ([illegible].)
	[illegible]	[illegible] - 5, [illegible] - [illegible]-1
		[illegible] 28800 [illegible] ([illegible].)
[illegible] 2	[illegible]	[illegible]
	[illegible]	[illegible] , - 1 - 2.
	[illegible]	[illegible] - , 3 - , [illegible] - (128, 192, 256 [illegible]) [illegible]. ([illegible].)
	[illegible]	[illegible] - 5-96, [illegible] - [illegible]-1-96
		[illegible] 28800 [illegible] ([illegible].)

*1 [illegible]

– [illegible]

Items	Settings
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

9. [illegible] ([illegible] 13).

– [illegible]

Note

– [illegible]

– [illegible] 24 [illegible]

– [illegible] **http://panasonic.co.jp/pcc/products/en/netwkcam/** [illegible]

2.7 Using UPnP™ (Universal Plug and Play)

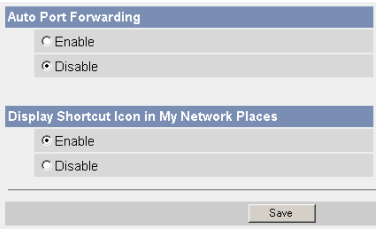
[illegible] http://panasonic.co.jp/pcc/products/en/netwkcam/ [illegible]

Note

– [illegible] 6. [illegible] 4.

1. [illegible]

2. [illegible]



Setting	Description
[illegible]	– [illegible] **Note** – [illegible] (50).
[illegible]	– [illegible] **Note** – [illegible] (189).

3. [illegible]

– [illegible]

– [illegible]

4.

–

2.7.1 Connecting the Camera to a Router that Supports UPnP™ (IPv4 Only)

Note

– http://panasonic.co.jp/pcc/products/en/netwkcam/

–

2.7.2 Connecting the Camera to a Router that Does Not Support UPnP™ (IPv4 Only)

1. (4)

(1) (13).

(2)

(3)

–

Note

–

(4)

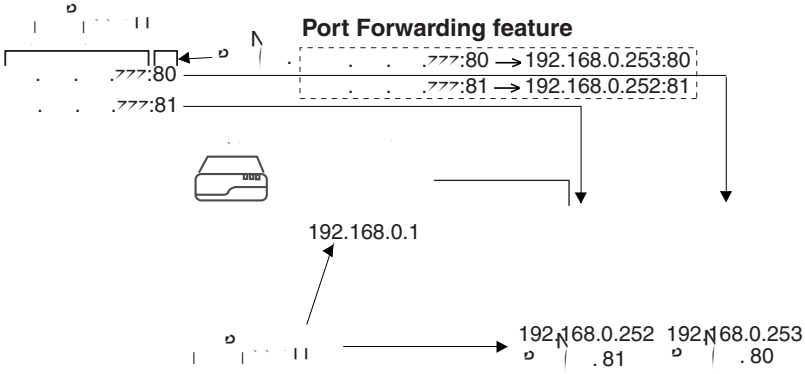
(5)

2. *1

1-(3),

3.

Port Forwarding feature[*1] (IPv4 Only)



Note

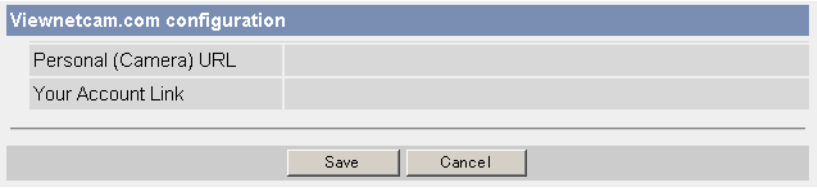
– [illegible]

*1 [illegible]

2.8 Registering with the DynamicDNS Service

[illegible] **http://www.viewnetcam.com**

3.



–

Setting	Description
	–
	–

4.

–

–

5.

–

6. **Your Account Link**.

–

Note

–

(1)
(2)

–

–

7.

8. 13).

Note

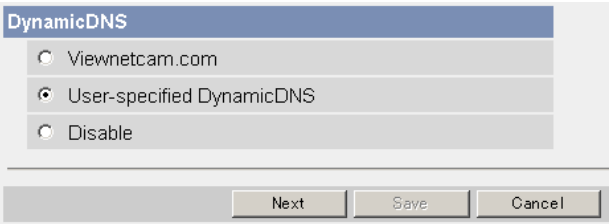
- 30
- ( )

Confirming Internet access

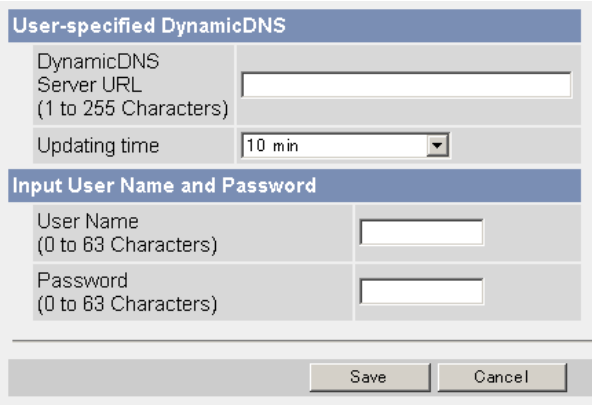
- 13)
- 41)

When you select [User-specified DynamicDNS]

2.



3.



Setting	Description
*1	255 ://".
*2	63
*2	63

*1
*2

4.

5.

Note

Confirming Internet access

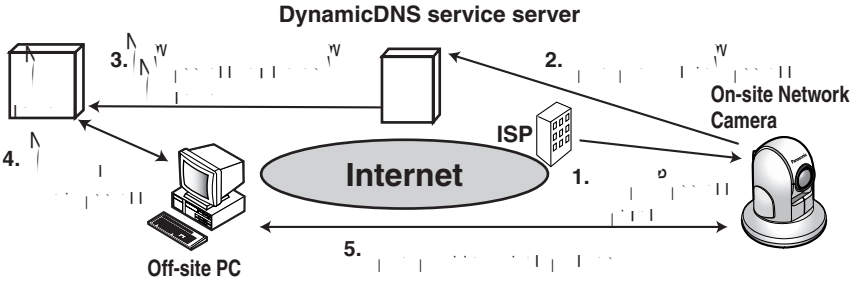
[illegible]

- [illegible] (13)
- [illegible] (41)

2.8.1 DynamicDNS Service (IPv4/IPv6)

What are the advantages of DynamicDNS service?

How the DynamicDNS service works



1.

2.

3.

4. [illegible]

5. [illegible]

Note

- [illegible]
- [illegible]
- [illegible] 80, [illegible] :

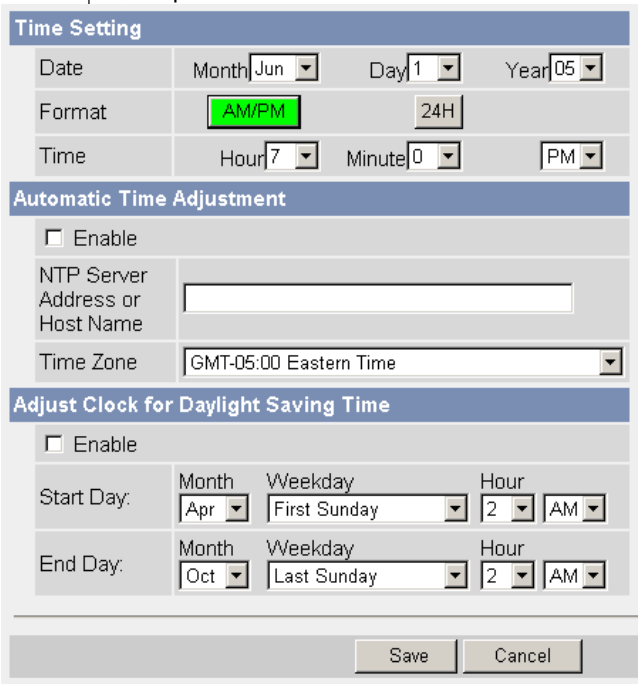
  80: **http://(Cameraname).viewnetcam.com**

  : **http://(Cameraname).viewnetcam.com:Port Number**

2.9 Setting the Date and Time

Note

1.
2.



Setting	Description
[illegible]	[illegible] (/ 24). [illegible] 24 .
[illegible]	[illegible] ( ) [illegible] 4, 4 (0 255) 3 "192.168.0.253". "0.0.0.0" "255.255.255.255" 6, 8 0 "::". (. 2001:2:3:4::5) (1 255). [illegible] **Note** [illegible] 1 [illegible]
[illegible]	[illegible] **Note** [illegible]

3. [illegible]

– [illegible]

– [illegible]

4.

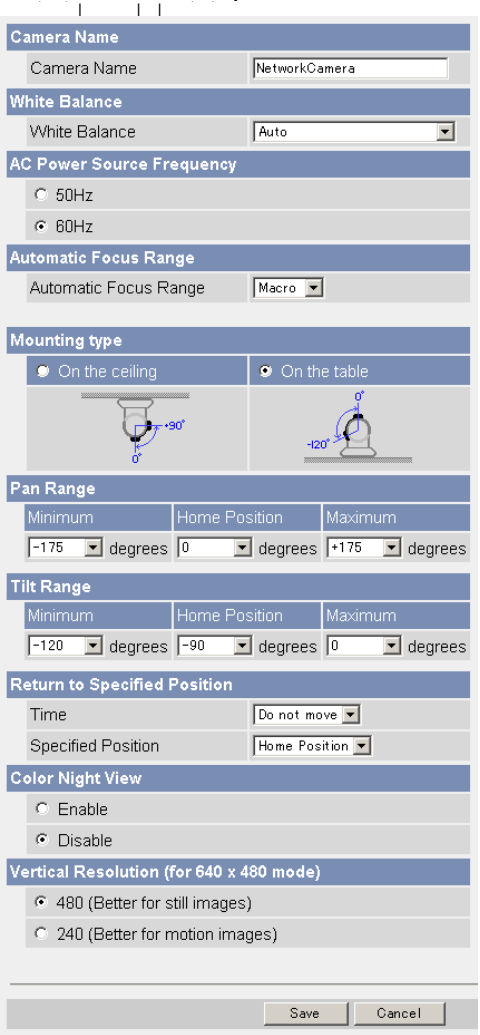
–

Note

–

2.10 Changing Camera Settings

1.
2.



Setting	Description
[illegible]	[illegible] 190) [illegible] (1 15 [illegible] 1- [illegible] 1 7 [illegible] 2- [illegible]). [illegible] & , < , [illegible] > [illegible]
[illegible]	[illegible] (2800 [illegible]) [illegible] (3600 [illegible]) [illegible] (4000 [illegible]) [illegible] (6000 [illegible]) [illegible] **Note** [illegible]
[illegible]	[illegible] 50 [illegible] 60 [illegible] ([illegible])
[illegible]	[illegible] 1 (3 [illegible] 3 [illegible]) [illegible] 1 (3 [illegible] 3 [illegible]) [illegible]
[illegible]	[illegible] 0 [illegible] +90 [illegible] -120 [illegible] 0 [illegible]

Setting	Description
*1	, -175 +175 *2 , -175 +175 , -175 +175 ≦ ≦ **Note**
*1	, 0 +90 *2 , 0 +90 , 0 +90
	, -120 0 *2 , -120 0 , -120 0 ≦ ≦ **Note**

[illegible]

Note

[illegible]

[illegible]

[illegible]

[illegible]

Note

[illegible]

[illegible]

*1 [illegible] 84 [illegible]

3. [illegible]

– [illegible]

– [illegible]

4. [illegible]

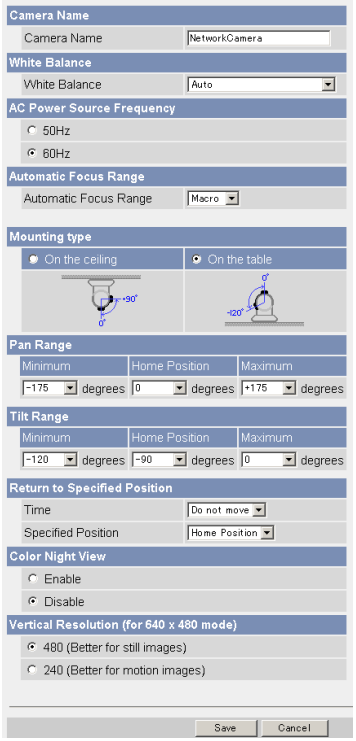
– [illegible]

Specifying the Pan/Tilt Range

1. [illegible] ([illegible] 13), [illegible]

2. [illegible] ([illegible] 80).

3. [illegible]



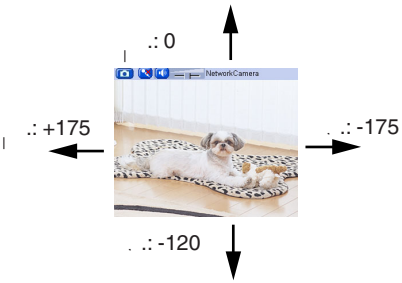
4. [illegible]

– [illegible]

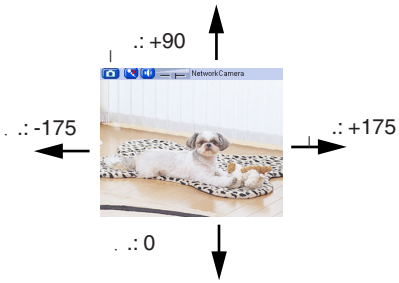
Note

–

When the camera is mounted on a table



When the camera is mounted on a ceiling

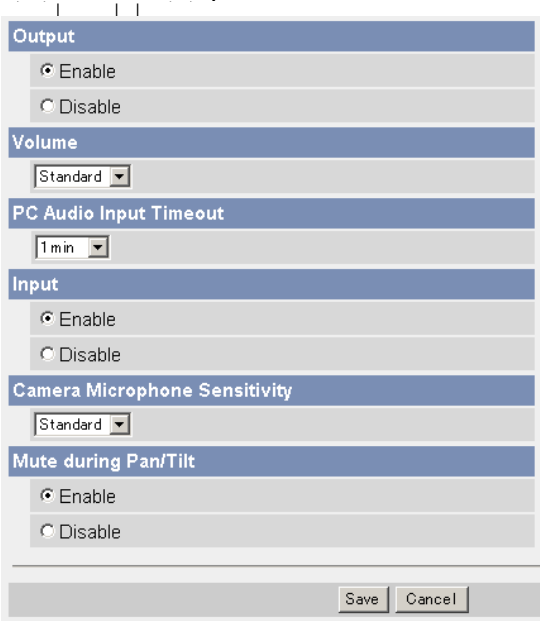


5.

–

2.11 Adjusting Audio

1.
2.



Setting	Description
	. (1 60)
	( )

Setting	Description
[illegible]	[illegible]

3. [illegible]

– [illegible]

– [illegible]

4. [illegible]

– [illegible]

3 Registering Users

3.1 Changing the Authentication Setting and Administrator User Name and Password

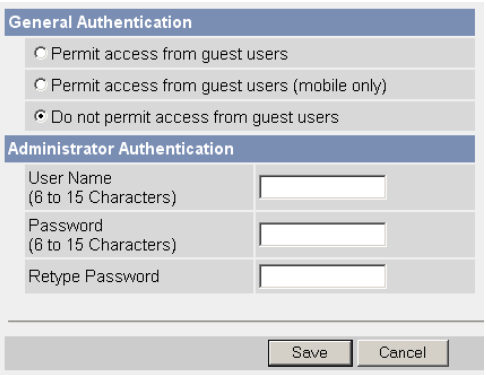
Note

- [illegible]
- [illegible]
- [illegible]

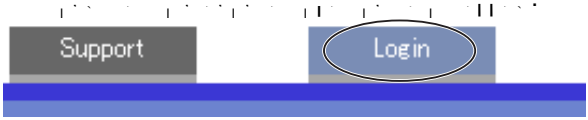
IMPORTANT

- [illegible]

1. [illegible]
2. [illegible]



– [illegible]

Setting	Description
[illegible]	[illegible] 3 [illegible] ( ), [illegible] **Note** – [illegible] (92), [illegible]  [illegible]

Setting	Description
[illegible]	[illegible] (6 15 [illegible]): [illegible] [illegible] (6 15 [illegible]): [illegible] **Note** [illegible] [illegible] [illegible] ([illegible] 190). [illegible] ", , & , < , > [illegible]

Note

- [illegible]
- [illegible]
- [illegible]

3. [illegible]

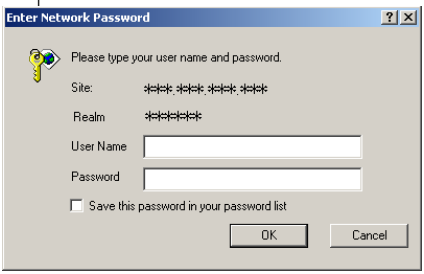
- [illegible]
- [illegible]

4. [illegible]

- [illegible]

Note

- [illegible]



Administrator/General Users/Guest Users

Items	Administrator	General Users	Guest Users	Guest Users (mobile only)
	1	50		
		(93).	(93).	

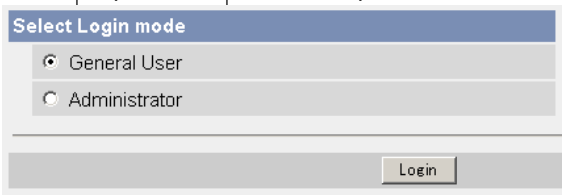
Note

– ( ) : (88)

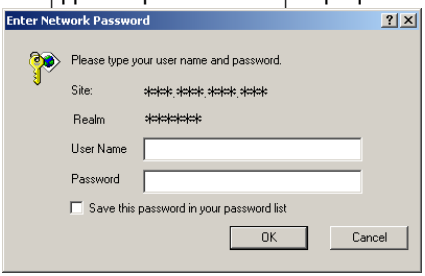
3.2 Logging in to the Camera

1.

2.



Note



3.

3.3 Creating, Modifying or Deleting General Users

50

( )

Note

–

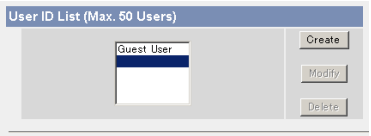
1.

2.

–

–

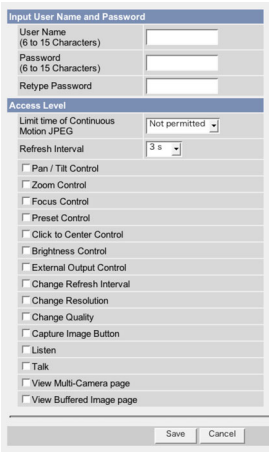
( )

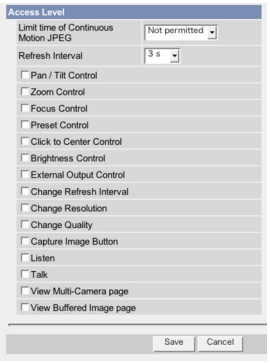


–

–

3.





Setting	Description
	50
	(6 15): (6 15): **Note** 190). , ", , &, <, >

Setting	Description
[illegible]	[illegible]

4. [illegible]

– [illegible]

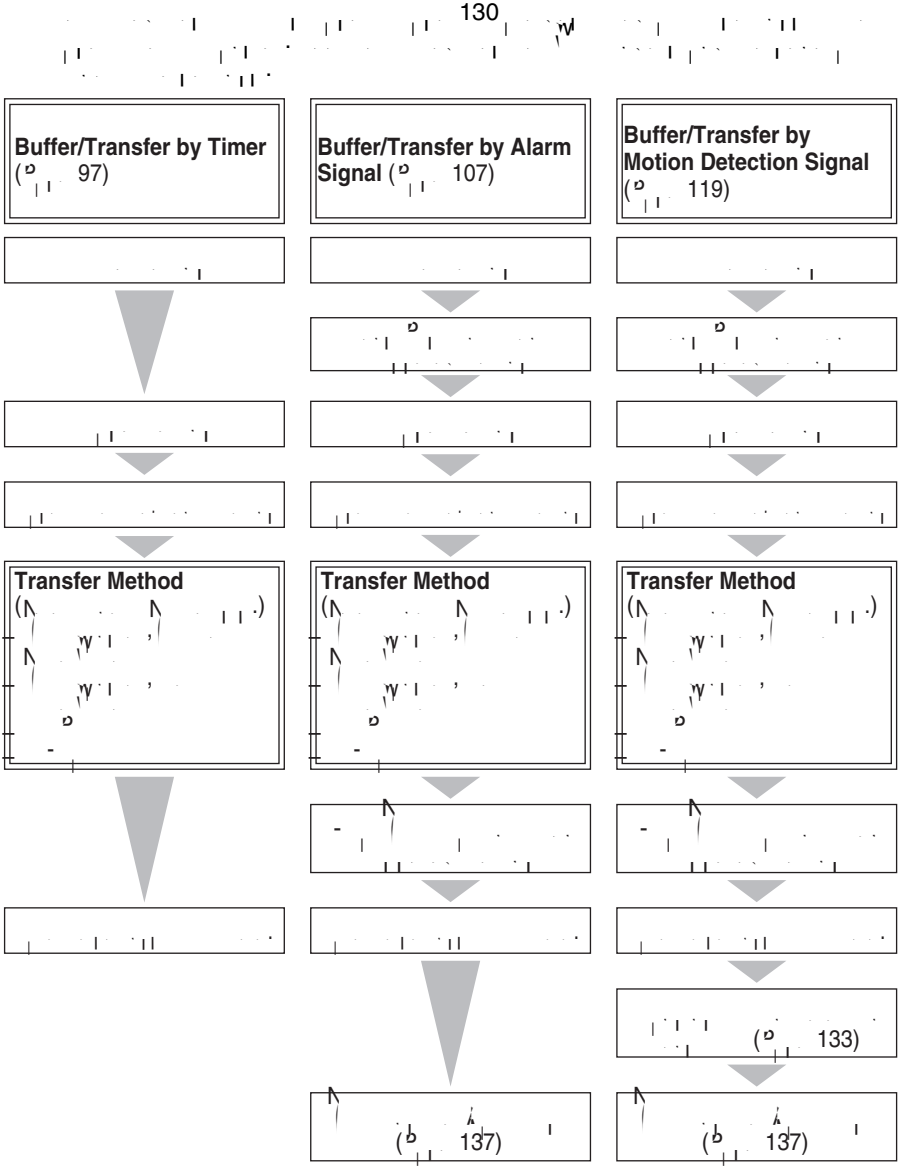
– [illegible]

5. [illegible]

– [illegible]

4 Buffering or Transferring Images

4.1 Procedures of Buffering or Transferring Images



4.2 Buffering or Transferring Images by Timer

Note

1.
2. No.

Trigger

No	Status	Trigger	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Active Time of Trigger	Transfer Method	Notify
1	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
2	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
3	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
4	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
5	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-

3. >.

Trigger Setting

☑ Enable Image Buffer/Transfer

Trigger Timer

Delete Buffered Images

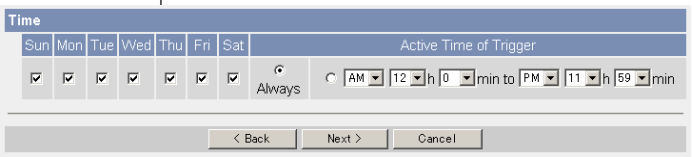
Next > Save Cancel

Note

Setting	Description

Setting	Description
[illegible]	[illegible] 1 2 [illegible]

4. [illegible] >.



Note

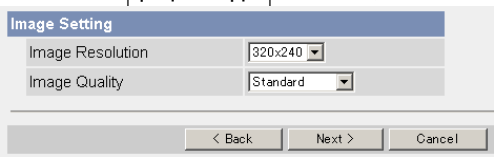
[illegible] (77).

– [illegible]

– [illegible]

Setting	Description
[illegible]	[illegible]
[illegible]	[illegible]

5. [illegible] >.



– [illegible]

– [illegible]

Setting	Description
–	(640 480, 320 240 ( ) 160 120) /
–	

Note

– 640 480

6.

– <

– w

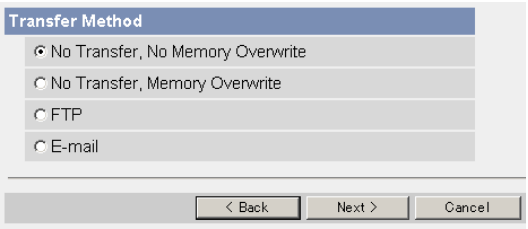
Note

– w

– 1 , 1

Setting	Description
–	

7. [illegible] >.



– [illegible] <

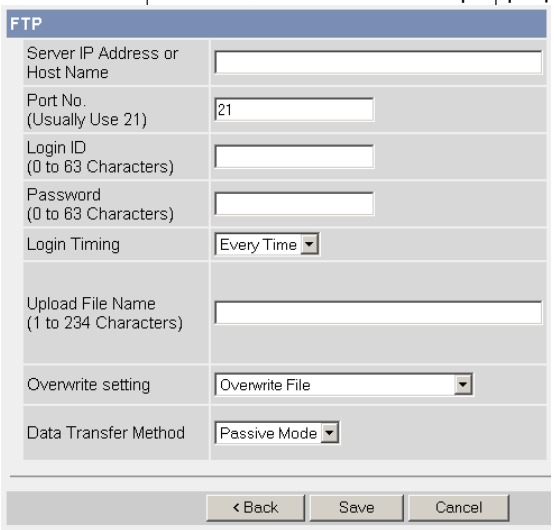
– [illegible]

Note

– [illegible] (48 [illegible] 53).

Setting	Description
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible] (101).
[illegible]	[illegible] (103).

When you set [FTP] for Transfer Method

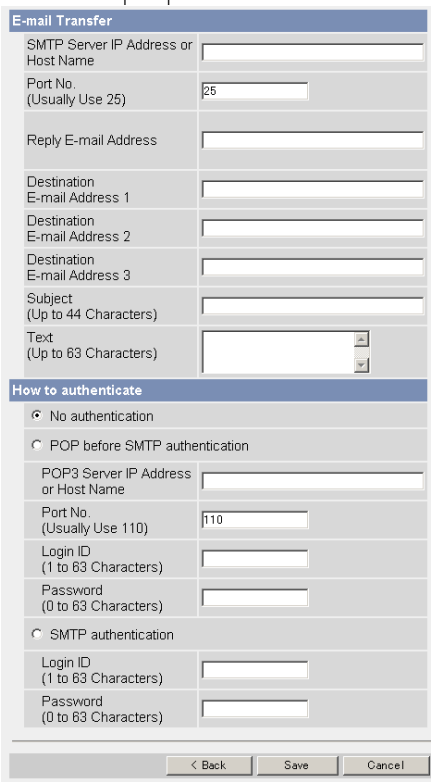


Setting	Description
*1	4 (0 255) 3 "192.168.0.253". "0.0.0.0" "255.255.255.255" (1 255). 6
	(1 65535). 21.
*2	(0 63).
*2	(0 63).
	1
*1	1 234 " " ( )

Setting	Description
[illegible]	[illegible] 20050101093020500. "9 30 20 500 1, 2005". [illegible]
[illegible]	[illegible]

*1 [illegible] , " , , & , < > [illegible]
*2 [illegible]

When you set [E-mail] for Transfer Method



Note

(24-

:20050101093020500".

"9 30 20 500 1, 2005".

Setting	Description
*1	4 (0 255) 3 "192.168.0.253". "0.0.0.0" "255.255.255.255" (1 255). 6
	(1 65535). 25.
*2	
*2 1 3	(3).
*2	(190) (0 44 1- 0 22 2-).
*2	(190) (0 63 1- 0 31 2-).

Setting	Description
	POP server authentication may be required by your ISP. In that case, set POP before SMTP authentication.

*1 , " , , & , < > .
*2 " .

8. [illegible]
   - [illegible]
   - [illegible]
9. [illegible]
   - [illegible]

Note

- [illegible]
- [illegible]

4.3 Buffering or Transferring Images by Alarm Signal

Note

– [illegible]

– [illegible] 164).

1. [illegible]
2. [illegible] **No.** [illegible]

Trigger

No.	Status	Trigger	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Active Time of Trigger	Transfer Method	Notify
1	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
2	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
3	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
4	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
5	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-

3. [illegible] 1 2 [illegible] ( ). [illegible] ( ) [illegible] > .

Trigger Setting

☑ Enable Image Buffer/Transfer

Trigger: Alarm1

Alarm enable condition: Rising: GND to Open (High).

Delete Buffered Images

Next > | Save | Cancel

– [illegible]

– [illegible]

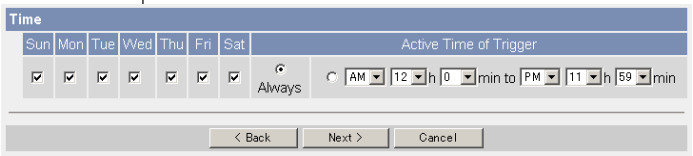
– [illegible]

Note

– [illegible]

Setting	Description
[illegible]	[illegible]
[illegible]	[illegible] 1 2 [illegible]
[illegible]	[illegible] 1 2 [illegible] 1 2 - [illegible] 164)

4. [illegible] > .



– [illegible] <

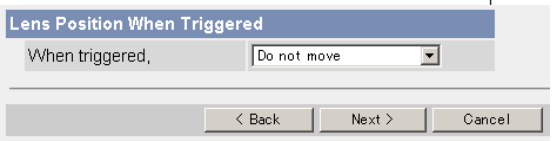
– [illegible]

Note

– [illegible] 77).

Setting	Description
[illegible]	[illegible]
[illegible]	[illegible]

5. [illegible] >.



– [illegible] <

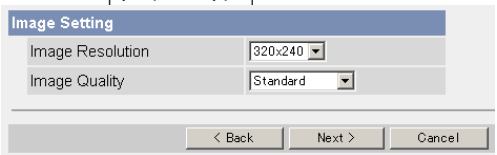
– [illegible]

Note

– [illegible]

Setting	Description
[illegible]	– [illegible] (30) [illegible] 1. 20 (31) [illegible]

6. [illegible] >.



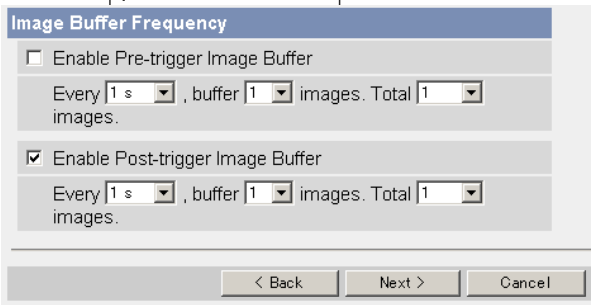
– [illegible] <

– [illegible]

Setting	Description
[illegible]	– [illegible] (640 480, 320 240 ( ) 160 120) [illegible] / [illegible]

Setting	Description
[illegible]	[illegible] **Note** 640 480 [illegible]

7. [illegible] >.



– [illegible] <
– [illegible]

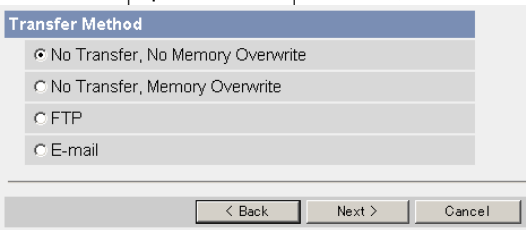
Note

– [illegible]
– 1 [illegible] 1 [illegible]

Setting	Description
[illegible]	[illegible] [illegible] (191) [illegible]

Setting	Description
[illegible]	[illegible] 191) [illegible]

8. [illegible] >.



– [illegible] <

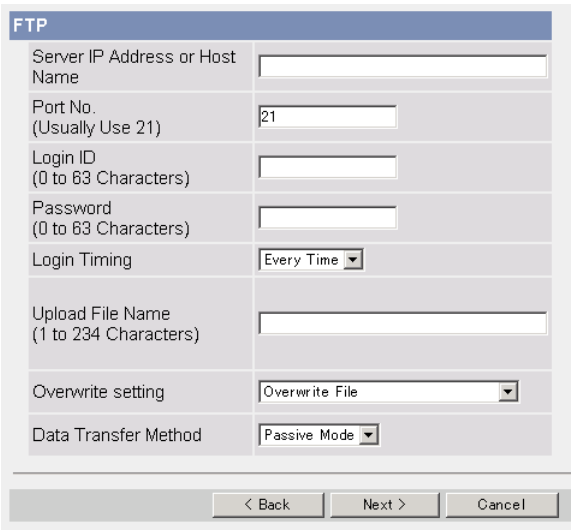
– [illegible]

Note

– [illegible] 48 53).

Setting	Description
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible] 112).
[illegible]	[illegible] 114).

When you set [FTP] for Transfer Method



Setting	Description
*1	4 (0 255) 3 "192.168.0.253". "0.0.0.0" "255.255.255.255" (1 255). 6
	(1 65535). 21.
*2	(0 63).
*2	(0 63).
	1
*1	1 234 ( )

Setting	Description
[illegible]	[illegible] 20050101093020500. [illegible] 9 30 20 500 [illegible] 1, 2005 . [illegible]
[illegible]	[illegible]

*1 [illegible] , " , , & , < [illegible] > [illegible]
*2 [illegible] " [illegible]

When you set [E-mail] for Transfer Method

[illegible]

E-mail Transfer	
SMTP Server IP Address or Host Name	
Port No. (Usually Use 25)	25
Reply E-mail Address	
Destination E-mail Address 1	
Destination E-mail Address 2	
Destination E-mail Address 3	
Subject (Up to 44 Characters)	
Text (Up to 63 Characters)	
How to authenticate	
◉ No authentication	
○ POP before SMTP authentication	
POP3 Server IP Address or Host Name	
Port No. (Usually Use 110)	110
Login ID (1 to 63 Characters)	
Password (0 to 63 Characters)	
○ SMTP authentication	
Login ID (1 to 63 Characters)	
Password (0 to 63 Characters)	

< Back | Next > | Cancel

– [illegible]

– [illegible]

Note

– [illegible] ([illegible])

– [illegible] (24- [illegible]) [illegible]

[illegible] :20050101093020500". [illegible] "9 30 20 500 [illegible] 1, 2005". [illegible]

Setting	Description
*1	4 (0 255) 3 "192.168.0.253". "0.0.0.0" "255.255.255.255" (1 255). 6
	(1 65535). 25.
*2	
*2 1 3	(3).
*2	(190) (0 44 1- 0 22 2-).
*2	(190) (0 63 1- 0 31 2-).

Setting	Description
	POP server authentication may be required by your ISP. In that case, set POP before SMTP authentication.

*1 , " , , & , < > .
*2 " .

9. [illegible]

– [illegible] 115 116.

Setting	Description
[illegible]	– [illegible]
[illegible]	– [illegible] (3 [illegible]

10. [illegible]

– [illegible]

– [illegible]

11. [illegible]

– [illegible]

Note

– [illegible] 1 [illegible]

– [illegible] 3 [illegible] 6 [illegible]

4.4 Buffering or Transferring Images by Motion Detection Signal

Note

– 133).

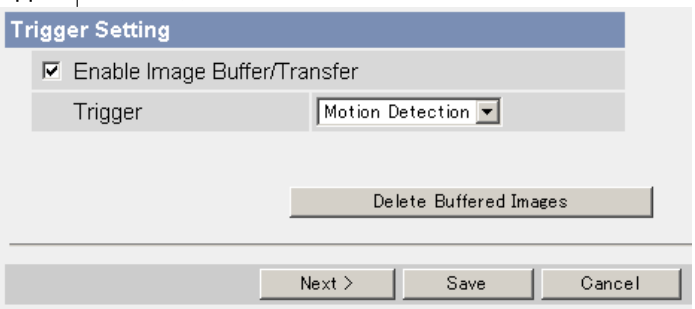
1.

2. **No.**

Trigger

No.	Status	Trigger	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Active Time of Trigger	Transfer Method	Notify
1	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
2	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
3	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
4	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
5	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-

3.



–

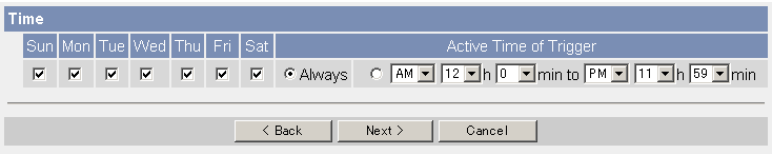
- [illegible]
- [illegible]

Note

- [illegible]

Setting	Description
[illegible]	[illegible]
[illegible]	[illegible] 1 2 [illegible]

4. [illegible] > .



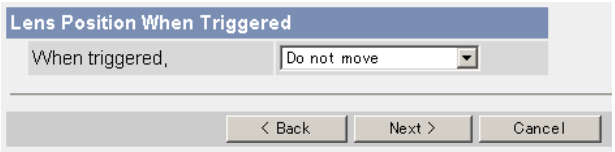
- [illegible] <
- [illegible]

Note

- [illegible] (77).

Setting	Description
[illegible]	[illegible]
[illegible]	[illegible]

5. [illegible] >.



– [illegible] <

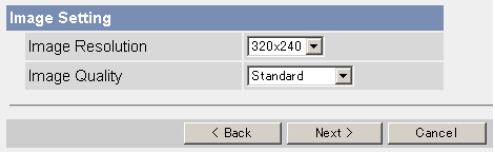
– [illegible]

Note

– [illegible]

Setting	Description
[illegible]	– [illegible] (30) [illegible] 1. 20 ([illegible] 31) [illegible]

6. [illegible] >.



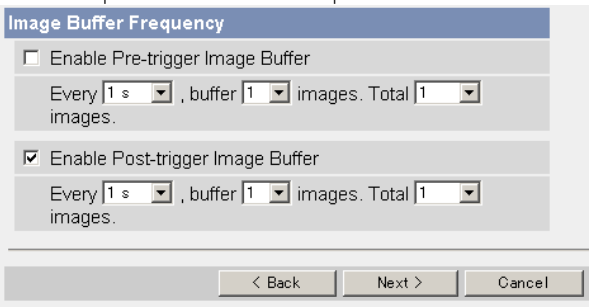
– [illegible] <

– [illegible]

Setting	Description
[illegible]	– [illegible] (640 480, 320 240 ( ) 160 120) / [illegible]

Setting	Description
[illegible]	[illegible] **Note** 640 480 [illegible]

7. [illegible] >.



– [illegible] <
– [illegible]

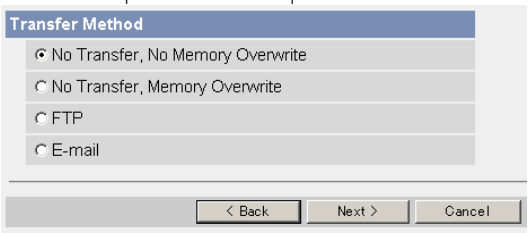
Note

– [illegible]
– 1 , 1 [illegible]

Setting	Description
[illegible]	[illegible] [illegible] (191) [illegible]

Setting	Description
[illegible]	[illegible] 191) [illegible]

8. [illegible] >.



– [illegible] <

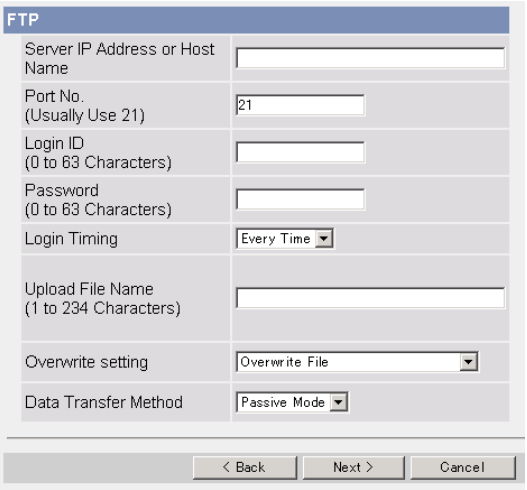
– [illegible]

Note

– [illegible] 48 53).

Setting	Description
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible] 124).
[illegible]	[illegible] 126).

When you set [FTP] for Transfer Method



Setting	Description
*1	4 (0 255) 3 "192.168.0.253". "0.0.0.0" "255.255.255.255" (1 255). 6
	(1 65535). 21.
*2	(0 63).
*2	(0 63).
	1
*1	1 234 " " ( )

Setting	Description
[illegible]	[illegible] 20050101093020500. "9 30 20 500 1, 2005". [illegible]
[illegible]	[illegible]

*1 [illegible] , " , , & , < [illegible] >
*2 [illegible]

When you set [E-mail] for Transfer Method

[illegible]

E-mail Transfer	
SMTP Server IP Address or Host Name	
Port No. (Usually Use 25)	25
Reply E-mail Address	
Destination E-mail Address 1	
Destination E-mail Address 2	
Destination E-mail Address 3	
Subject (Up to 44 Characters)	
Text (Up to 63 Characters)	
How to authenticate	
◉ No authentication	
○ POP before SMTP authentication	
POP3 Server IP Address or Host Name	
Port No. (Usually Use 110)	110
Login ID (1 to 63 Characters)	
Password (0 to 63 Characters)	
○ SMTP authentication	
Login ID (1 to 63 Characters)	
Password (0 to 63 Characters)	

< Back | Next > | Cancel

– [illegible]
– [illegible]

Note

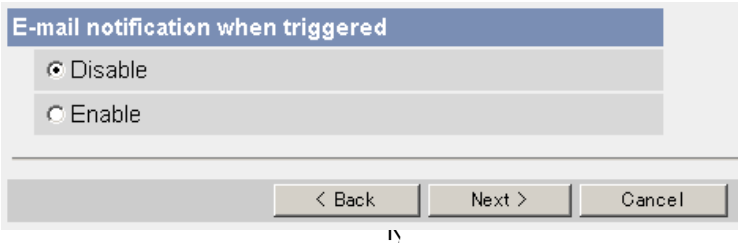
– [illegible] ([illegible])
– [illegible] (24- [illegible]) [illegible] :20050101093020500". [illegible] "9 30 20 500 [illegible] 1, 2005". [illegible]

Setting	Description
*1	4 (0 255) 3 "192.168.0.253". "0.0.0.0" "255.255.255.255" (1 255). 6
	(1 65535). 25.
*2	
*2 1 3	(3).
*2	(190) (0 44 1- 0 22 2-).
*2	(190) (0 63 1- 0 31 2-).

Setting	Description
	POP server authentication may be required by your ISP. In that case, set POP before SMTP authentication.

*1 , " , , & , < > .
*2 " .

9. [illegible]



– [illegible] 127, 128.

Setting	Description
[illegible]	– [illegible]
[illegible]	– [illegible] (3 [illegible]) [illegible]

10. [illegible]

– [illegible]

– [illegible]

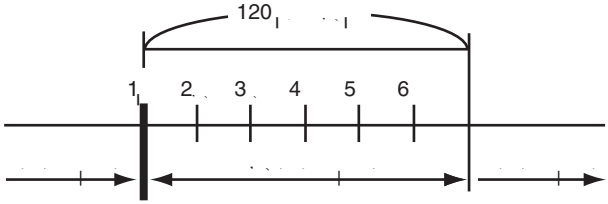
11. [illegible]

– [illegible]

Note

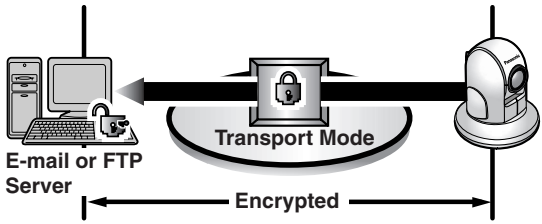
– [illegible] 1 [illegible]

– [illegible] 3 [illegible] 6 [illegible]



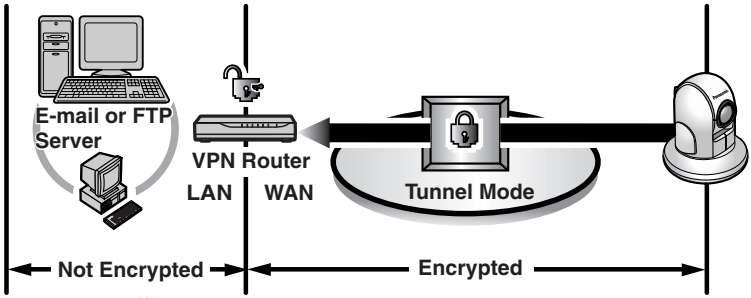
[illegible]

4.5 Transferring Camera Images in Transport Mode



Item	Supported Feature

4.6 Transferring Camera Images in Tunnel Mode

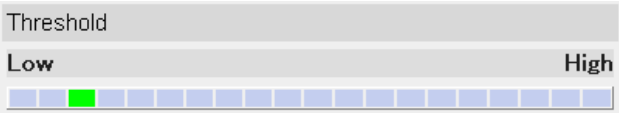


Item	Supported Feature
	: (IPv4)
	: "IPv4/IPv6 - " "IPv6 IPv4 " (IPv6)
	: (IPv4)
	: "IPv4/IPv6 - " "IPv6 IPv4 " (IPv6)

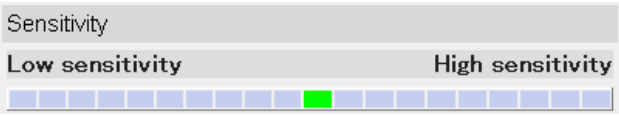
63 -

4.7 Setting the Motion Detection

1.
2.



3.



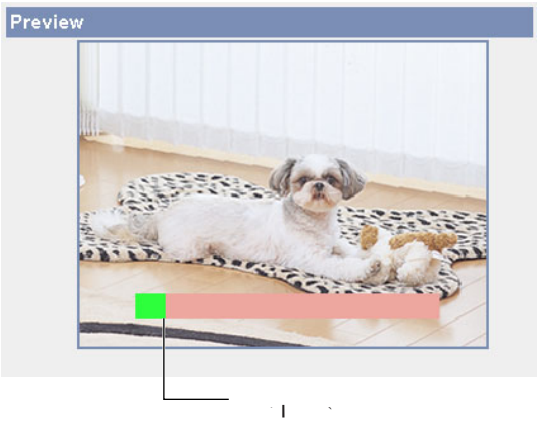
4.
5.

Setting	Description

Note

Preview

–
–
–
– (21).

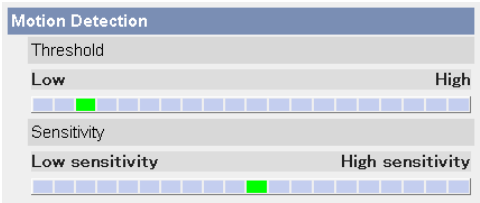


Note

–

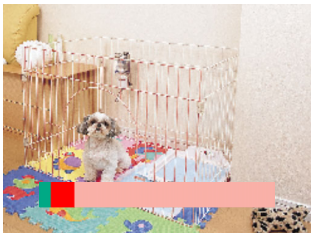
What is “threshold”?

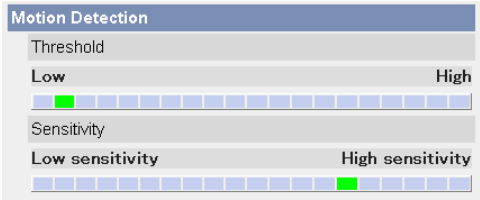
What is “sensitivity”?



Note

–





Note

–

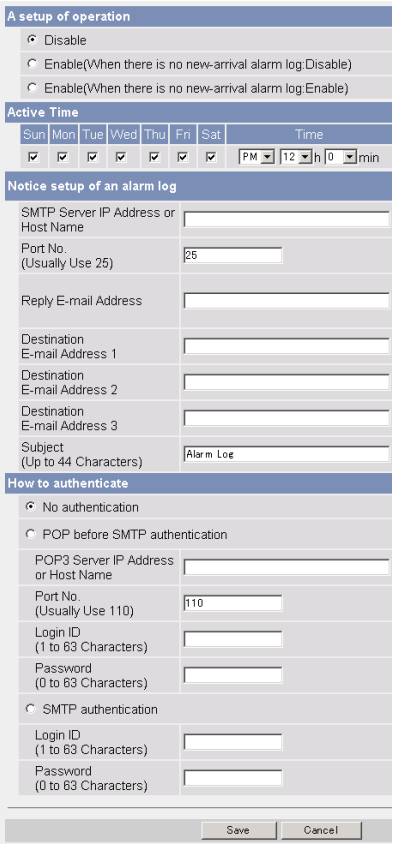
4.8 Setting Alarm Log Notification

1, 2

1.

– 1, 2

2.



3.

–

4.

Note

- 0.
- ( )

Setting	Description
*1	4 (0 255) 3 "192.168.0.253". "0.0.0.0" "255.255.255.255" (1 255). 6
	(1 65535). 25.
*2	
*2 1 3	(3).
*2	(190) (0 44 1- 0 22 2-).

Setting	Description
	POP server authentication may be required by your ISP. In that case, set POP before SMTP authentication.

*1 , " , , & , < > .
*2 " .

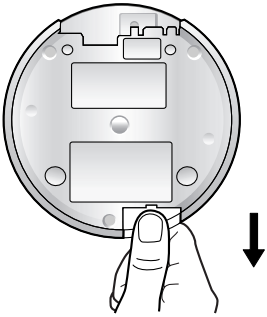
4.9 Using the SD Memory Card

Note

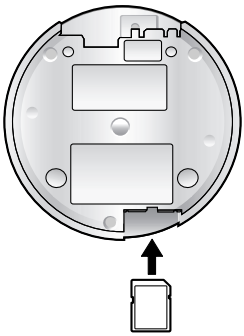
– (142)

–

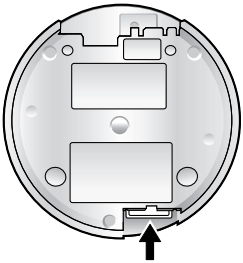
1.



2.



3. [illegible]



Note

– [illegible]

– [illegible] (.)

– [illegible]

4. [illegible]

4.9.1 Format the SD Memory Card

Note

–

1.
2.
3.

Trigger

No	Status	Trigger	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Active Time of Trigger	Transfer Method	Notify
1	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
2	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
3	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
4	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
5	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-

SD memory card

To format the SD memory card or stop SD recording, click the desired button below.
To stop SD recording, click the SD video recording stop button.

Format | SD video recording stop

4.

–

5.

–

4.9.2 Start the SD Memory Recording

Note

–
–
–

1.
2.

Trigger

No.	Status	Trigger	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Active Time of Trigger	Transfer Method	Notify
1	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
2	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
3	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
4	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
5	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-

SD memory card

To format the SD memory card or start SD recording, click the desired button below.
To start SD recording, click the SD video recording start button.

Format | SD video recording start

3. "TV"
–
4.
–

Note

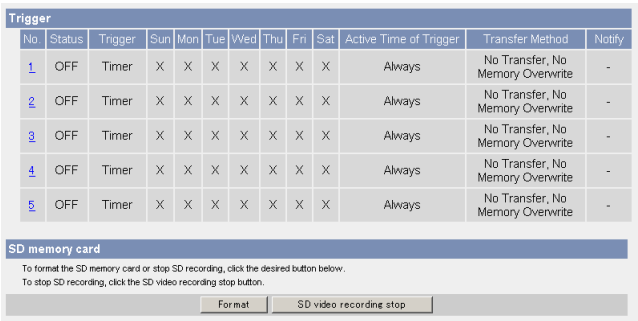
–

4.9.3 Stop the SD Memory Recording

Note

1.

2.



Trigger

No	Status	Trigger	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Active Time of Trigger	Transfer Method	Notify
1	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
2	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
3	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
4	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
5	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-

SD memory card

To format the SD memory card or stop SD recording, click the desired button below.
To stop SD recording, click the SD video recording stop button.

Format | SD video recording stop

3.

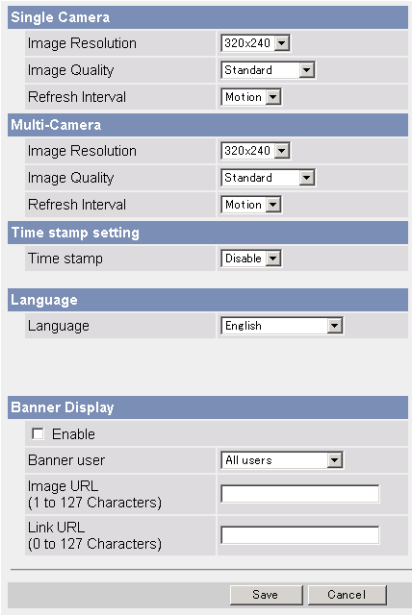
4.

Note

5 Using Other Features

5.1 Changing Initial Settings on the Single Camera page or the Multi-Camera page

1.
2.



–

Setting	Description
	640 480 ( ) 320 240 ( ) 160 120 ( )
	3 , 5 , 10 , 30 , 60
	Note – – 24
	Note – –

Setting	Description
[illegible]	[illegible]
[illegible] *1	[illegible] (1 127 [illegible])
[illegible] *1	[illegible] (0 127 [illegible])

*1 [illegible], ", , , & , < , [illegible] > [illegible]

3. [illegible]

– [illegible]

– [illegible] "[illegible]!"

4. [illegible]

– [illegible]

5.2 Configuring Multiple Cameras

[illegible] 12 [illegible] 1 [illegible]

1. [illegible]
2. **Add**.

No.	Display	IP Address or Host Name	Port No.	Camera Name
1	On	selfcamera	--	********
Add				

Note

– [illegible]

– [illegible]

Change Camera Order

From No. 1 To No. 1 Move

3. [illegible]

Add Camera

Display	☑ On
IP Address or Host Name	
Port No. (1 to 65535)	
Camera Name (1 to 15 characters)	
Clicking this link, enters this camera's settings.	

Save Cancel

– [illegible]

– [illegible]

Setting	Description
[illegible] *1 *2	[illegible]

*1 [illegible] 4, [illegible] 4 [illegible] (0 255) [illegible] 3 [illegible] "192.168.0.253". [illegible] "0.0.0.0" [illegible] "255.255.255.255" [illegible] 6, [illegible]

*2 [illegible] ([illegible] 190). [illegible] , " , , # ,

Note

- [illegible]
- [illegible] ([illegible])

4. [illegible]

- [illegible]
- [illegible]

5.3 Specifying Operation Time

Note

–

–

1.

2. **No.**

Operation Time

No.	Status	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Operation Time
1	Disable	X	X	X	X	X	X	X	Always
2	Disable	X	X	X	X	X	X	X	Always
3	Disable	X	X	X	X	X	X	X	Always
4	Disable	X	X	X	X	X	X	X	Always
5	Disable	X	X	X	X	X	X	X	Always
6	Disable	X	X	X	X	X	X	X	Always
7	Disable	X	X	X	X	X	X	X	Always

Note

– 1 7

3.

Operation Time

Enable	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Operation Time
☐	☑	☑	☑	☑	☑	☑	☑	◉ Always ○ AM 12 h 0 min to AM 12 h 0 min

Save Cancel

–

Setting	Description
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

4. [illegible]

- [illegible]
- [illegible]

About Operation Time

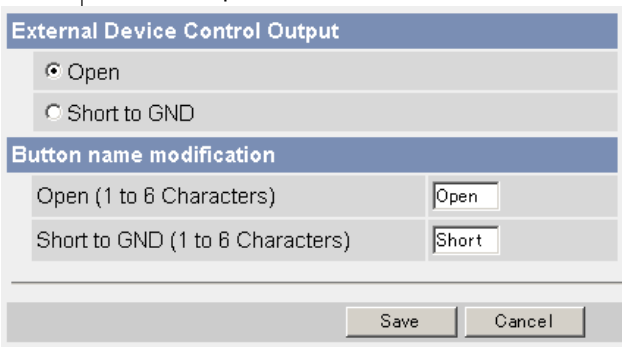
[illegible]

No.	Status	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Operation Time
1	Enable	X	X		X	X	X	X	Always
2	Enable	X		X	X	X	X	X	Always

5.4 Controlling External Output

1.

2.



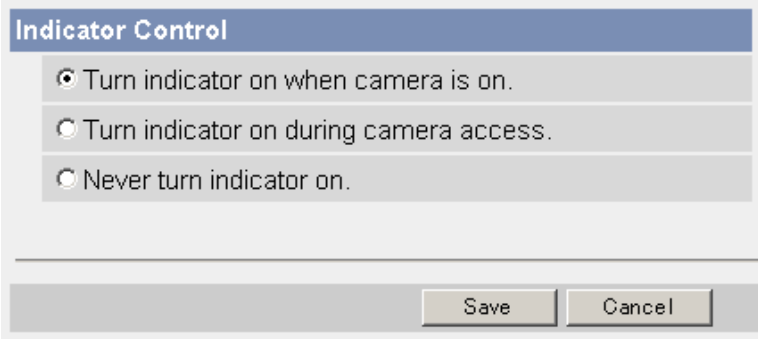
Setting	Description

3.

5.5 Changing the Indicator Display

–
–
–

1.
2.



–
(8 - 381 10 - 481).
–
–
–

Note

–

3.

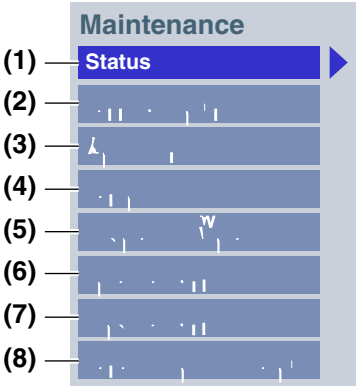
–
–

4.

–

6 Camera Maintenance

6.1 Maintenance page



Maintenance		
(1)	**Status**	[illegible] 155).
(2)	**Session Status**	[illegible] 155).
(3)	**Alarm Log**	[illegible] 156).
(4)	**Restart**	[illegible] 157).
(5)	**Update Firmware**	[illegible] 158).
(6)	**Save Settings**	[illegible] 160).
(7)	**Load Settings**	[illegible] 161).
(8)	**Reset to Factory Default**	[illegible] 162).

6.1.1 Confirming the Status

Version

Displays Hardware/Firmware Version.

Model	**********
Firmware(Boot)	*.**
Firmware(Application)	*.**

Note

– **http://panasonic.co.jp/pcc/products/en/netwkcam/**

6.1.2 Confirming Session Status

Number of Sessions

Show number of motion and audio sessions.

Div	Max Sessions	Now Sessions
Motion	30	1
Audio	10	1

List of Sessions

Display max 40 tables connecting now.

		User

6.1.3 Confirming Alarm Logs

50

1.

2.

		New Alarm Logs
		3
Date	Sensor Type	Signal Type
2005/ 5/19 13:24:32	Motion Detection	-----
2005/ 5/19 13:22:53	Alarm2	Fall
2005/ 5/19 13:21:36	Alarm1	Rise

Note

–

Item	Description
	1, 2,
	(1, 2,)
	1 2.

6.1.4 Restarting the Camera

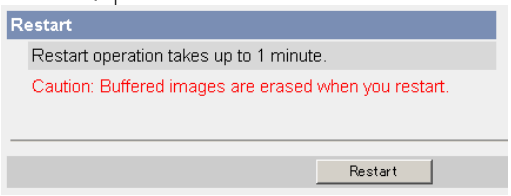
Note

– TV

– ,

1.

2.



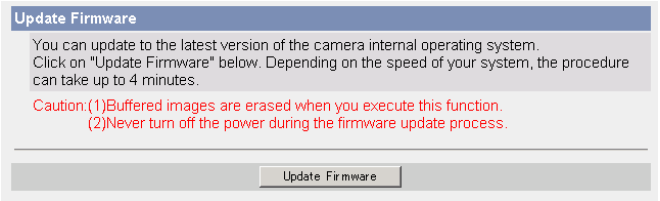
– 1 TV

6.1.5 Updating the Camera Firmware

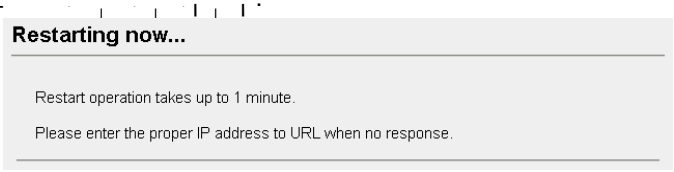
Note

-
-
-
-

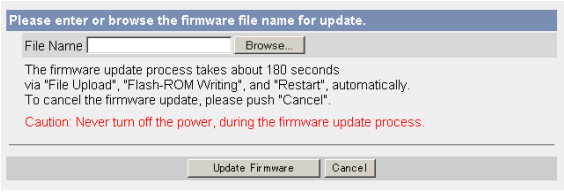
1. http://panasonic.co.jp/pcc/products/en/netwkcam/,
2.
3.



-



- 1



4. [illegible]

– [illegible]

5. [illegible]

– [illegible]

6. [illegible]

– [illegible]

– [illegible]

Updating firmware.

Please wait about 160 seconds.

Caution: Never turn off the power, during the firmware update process.

– [illegible]

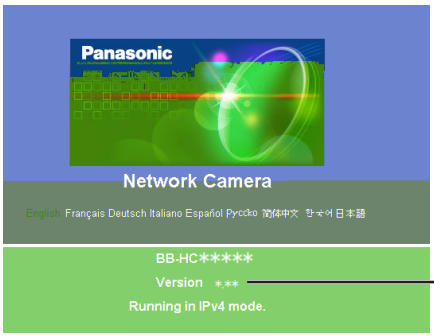
Restarting now...

Restart operation takes up to 1 minute.

Please enter the proper IP address to URL when no response.

– [illegible] 1 [illegible]

7. [illegible]



– [illegible]

6.1.6 Creating the Configuration File

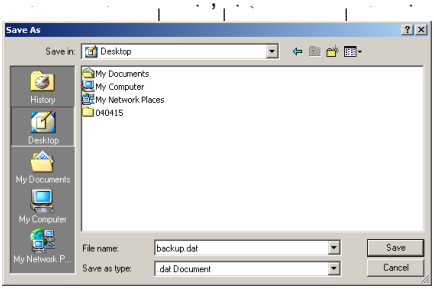
(161).

Note

–

1.
2.

3.
4.



–

Note

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(.)

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6.1.7 Loading Settings from a Configuration File

Note

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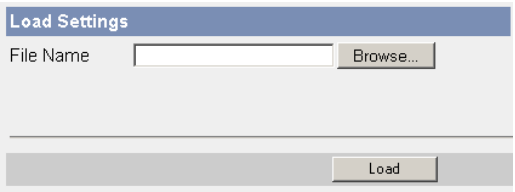
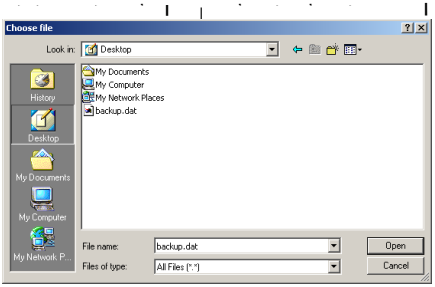
–

1.

2.



3.



–

4.

5.

–

6.1.8 Resetting the Camera to Factory Default

[illegible]

1. [illegible]
2. [illegible]

Reset To Factory Default

The Reset to Factory Default operation takes about 1 minute.
This feature will be executed and all camera settings reset to factory default directly after the Execute button is clicked.

Caution: (1) Buffered images are erased when you execute this function.
(2) Never turn off the power during the Reset to Factory Default.
(3) All the network settings will be initialized, and must be reconfigured again.

Execute

- [illegible] 10 [illegible]
- [illegible] ([illegible] .) [illegible]
- [illegible]

Note

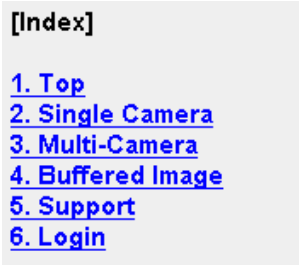
- [illegible] 24- [illegible] 77. [illegible] 167 [illegible] 177 [illegible]
- [illegible]
- [illegible] ([illegible] 166). [illegible]
- [illegible]
- [illegible]
- [illegible] 1 [illegible]

6.2 Support page

Support		
(1)	Help	[illegible] (TV).
(2)	Product Information	[illegible] TV [illegible] (TV).
(3)	Support Information	[illegible] TV [illegible] (TV).

6.2.1 The Help page

[illegible] TV [illegible] TV [illegible]



6.2.2 Product Information

[illegible] TV [illegible] TV [illegible]

Note

– [illegible] TV [illegible]

6.2.3 Support Information

[illegible] TV [illegible] TV [illegible]

Note

– [illegible] TV [illegible]

6.3 External I/O

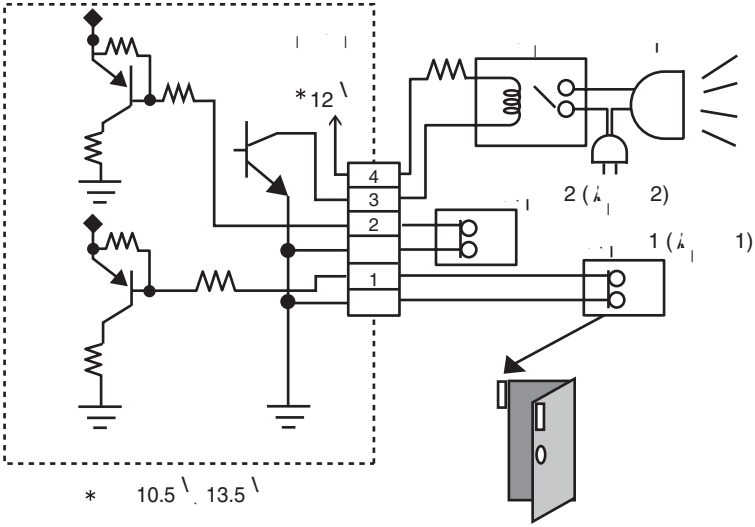
Explanation of the External I/O

Pin	Features
1	1
2	2
3	152). 4. (4).
4	10.5 13.5 100

Note

– / (/) 152.

Circuit Diagram Example

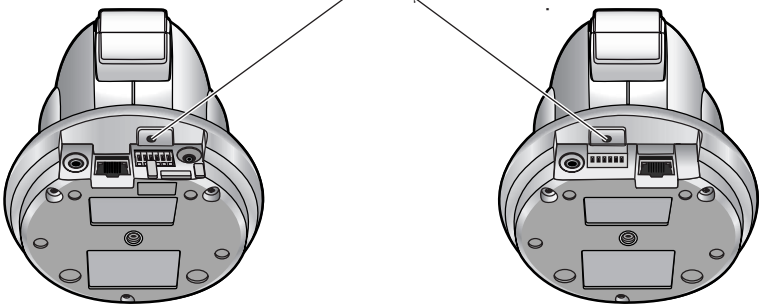


CAUTION

- **The external I/O is not capable of connecting directly to devices that require large amounts of current. In some cases, a custom interface circuit (customer-provided) may have to be used. Serious damage to the camera may result if a device that exceeds its electrical capability is connected to the external I/O (see page 164).**
- **Low voltage/current circuits and high voltage/current circuits are used in the camera circuit. All wiring should be performed by a qualified electrician. Incorrect wiring could damage the camera and cause a fatal electric shock.**

7 Other Information

7.1 FACTORY DEFAULT RESET Button



BB-HCM381A **BB-HCE481A**

– 1

– 5

Note

– 24- 77.

– 167

– 1

7.2 Default Setting List

Basic

Items		Default	Required	Note
(4)			-	
			-	-
	( )		-	-
	( )	80	-	20, 21, 25 110 *2
	( )	192.168.0. 253		*1
	( )	255.255. 255.0		*1
	( )		)	0 63 *4
	( )			*1
	1 2 ( )			*1
	( )		-	0.1, 0.2, 0.3, 0.5, 1
			-	100 100 10 10

Items		Default	Required	Note
(6)			-	
			-	-
	( )	80	-	20, 21, 25 110*2
	( )			*1
	( )			*1
	1 2			*1
	( )		-	0.1, 0.2, 0.3, 0.5, 1
			-	100 100 10 10
			-	-
		(3 ,)	-	
			-	-
			-	-
			-	-
			-	-

Items		Default	Required	Note
			-	
				1 255 *8
		10		/10, 30( ), 1, 3, 6, 12, 24( )
				0 63
				0 63
		/ᴅ	-	/ᴅ /24
				-
				1 255 *4
		-05:00	-	-
			-	-
		, 2 ,	-	-
		, 2 ,	-	-

Items		Default	Required	Note
				1 15 *6
			-	/ / ( )/ ( )/ /
		60	-	50 , 60
			-	,
			-	,
	( )	-175	-	-175 +175 ,
	( )	0	-	-175 +175 ,
	( )	+175	-	-175 +175 ,
	( ) ( )		-	-
	( )	-120	-	-120 0 ,
	( )	-90	-	-120 0 ,
	( )	0	-	-120 0 ,

Items		Default	Required	Note
	( )	-	-	-
	( )	0	-	0 +90
	( )	+90	-	0 +90
	( )	+90	-	0 +90
	( )		-	10, 20, 30 ( ), 1, 5, 10, 30 ( ), 1
	( )		-	. 1, 2/
			-	-
	(640 480)	480	-	480, 240
			-	-
			-	/ /
		1	-	1, 2, 3, 5, 10, 20, 30, 60 ( )
			-	-
			-	/ /
	/		-	-

Account

Items		Default	Required	Note
			-	-
				6 15 *3
				6 15 *3
				6 15 *3
			-	-
				6 15 *3
				6 15 *3
				6 15 *3
			-	, 10, 30 ( ), 1, 5, 10, 30, 60 ( )
		3	-	3, 5, 10, 30, 60 ( )
			-	-

Buffer/Transfer

Items		Default	Required	Note
			-	-
			-	1/ 2/
			-	-
	( )	320 240	-	160 120, 320 240, 640 480
			-	
		1	-	1 30
			-	-
			1, 2	-
			-	-
			-	-

Items		Default	Required	Note
			1, 2	
				, 1 12 ( ), 0/10/20/30/ 40/50 ( )
		12 0		-
				-
	( )	25		*2
	( )	110		*2
				-
			-	

Advanced

Items		Default	Required	Note
		320 240	-	320 240 640 480
			-	
			-	3, 5, 10, 30, 60 ( )
	-	320 240	-	160 120 320 240
	-		-	
	-			3, 5, 10, 30, 60 ( )
			-	
			-	
				-
			-	
			-	0 127 *4
			-	1 127 *4

Items		Default	Required	Note
-	-	.1	-	-
			-	-
			-	*1 *5 1 255
		- -	-	20, 21, 25 110 *2
		- 381 - 481	-	1 15 *7
		.1 .1	-	.1 .12
			-	-
			-	/
		/	-	-
			-	-

*1 4, 4 (0 255) 3 , "192.168.0.253". "0.0.0.0" "255.255.255.255"
6, 8 ":" 0 "::" (. 2001:2:3:4::5)

*2 1 65535.

*3 (190). , " , & , < , > :

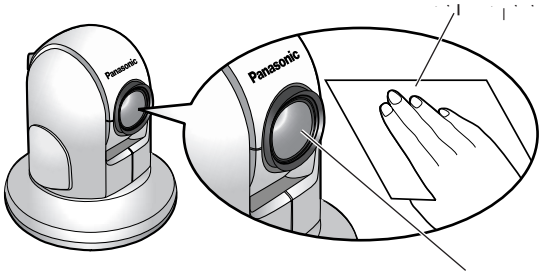
*4 (190). , " , & , < , >

*5 (190). , " , # , & , % , = , + , , < , >

*6 (190) (1 15 1- 1 7 2-). , " , & , < , >

*7 (190) (1 15
1- 1 7 2-).
, & , % , = , + , , < , > .
*8 " :

7.3 Cleaning



Note

–

–

7.4 Setting an IP Address on Your PC

1.

– 2000,

2.

3.

– 98 ,

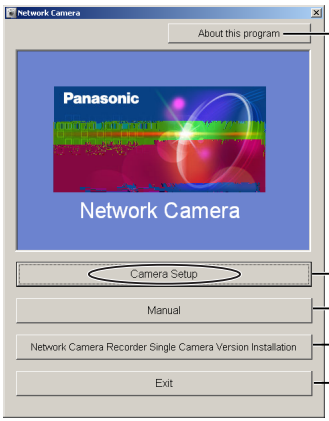
Local IP Address

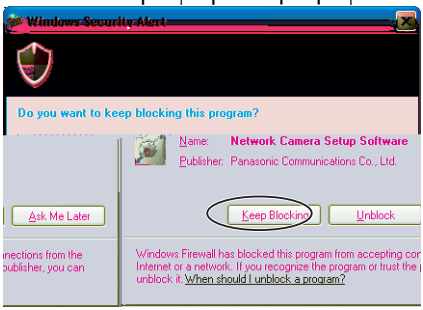
7.5 Using Setup Program

Finding the camera

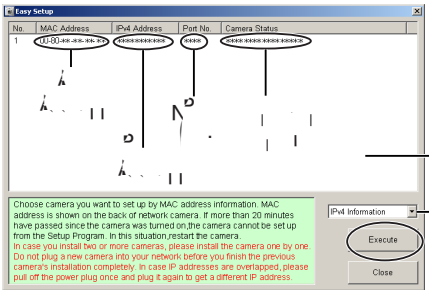
1.

2.

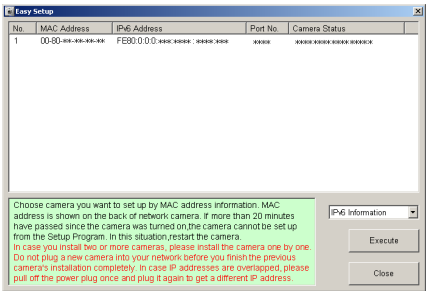




IPv4 Information



IPv6 Information



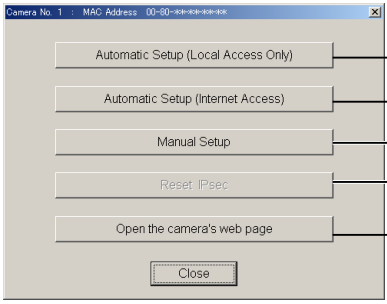
Note

183

Automatic Setup (Local or Internet Access) or Manual Setup

1. 181.

2.



45).

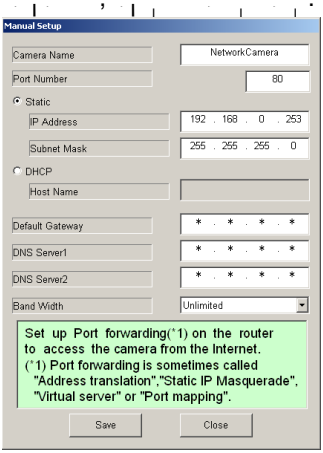
Note

–

Manual Setup window

50 52.

– 20



– [illegible]

3. [illegible]

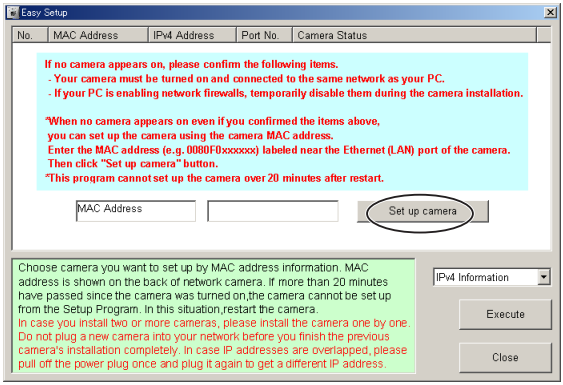
Setting up the Camera Using the MAC Address on the Setup Program

[illegible]

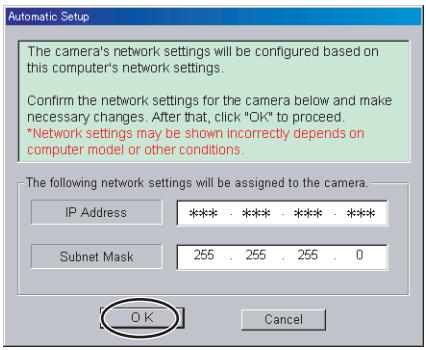
1. [illegible]

Note

– [illegible] 9 - 381 [illegible] 11 - 481 [illegible]).

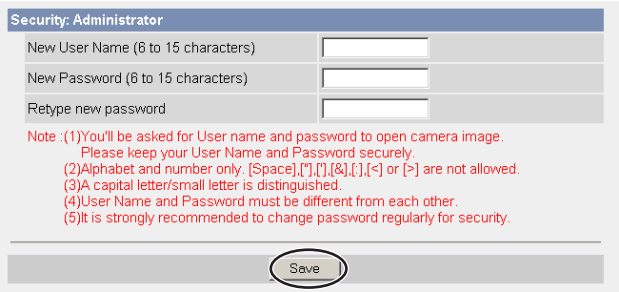


2. [illegible]

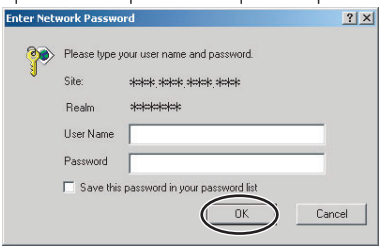


– [illegible]

3.



4.

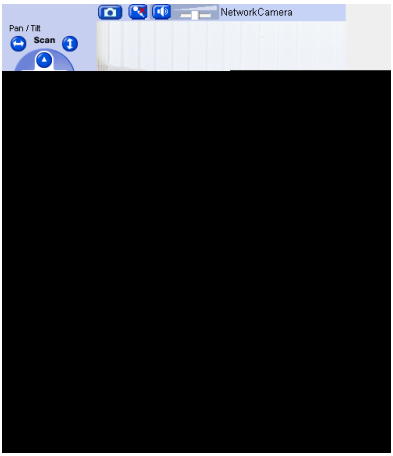


5.

– 19).

– 20

2.



Note

– 17

–

- **When you are using a router that supports UPnP™**

  1. (67)

  2. (70)

  3. (13). 10

- **When you are using a router that does not support UPnP™**

  68.

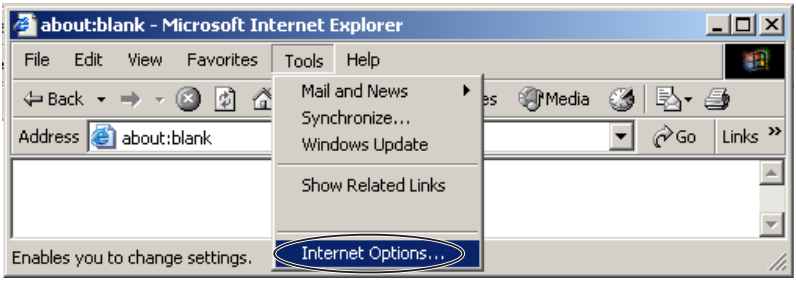
7.6 Setting Your PC

7.6.1 Setting Proxy Server Settings on a Web Browser

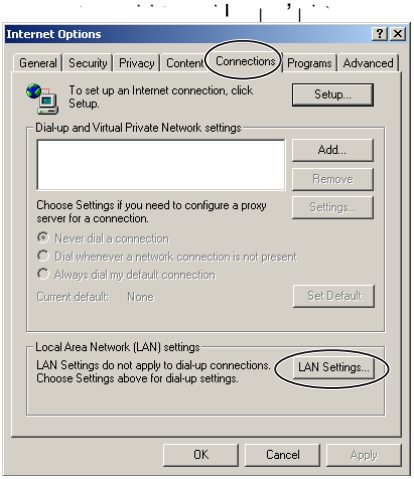
Note

How to Set Proxy Server Settings

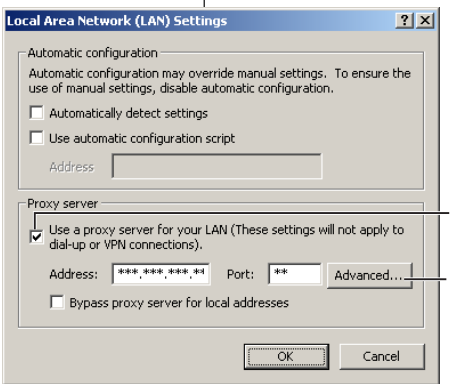
1. . (6.0.)
2. → ...



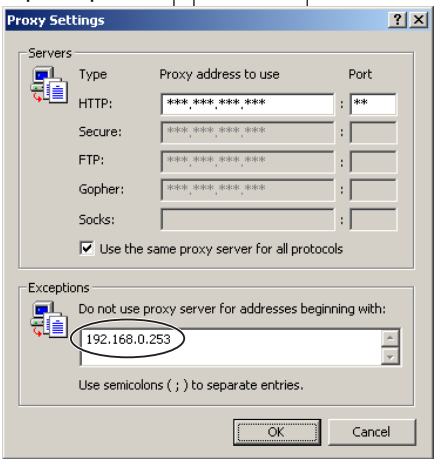
3.



4.



5. [illegible] (IP: 192.168.0.253)



6. [illegible]

Note

– [illegible]

7.6.2 Setting UPnP™ to Display Camera Shortcut in My

7.7 ASCII Character Table

ASCII Character Table					
( )	0				
!	1				
"	2				
#	3				
$	4				
%	5				
&	6				
	7				
(	8				
)	9				
*	:				
+	;				
,	<				
-	=				
.	>				
/	?				

7.8 File Size and Number of Buffered Images

Note

–

Resolution	Items	Capture	Favor Clarity	Standard	Favor Motion	Mobile Phone*1
640 480 ( )		60	50	33	20	-
		-	40	60	100	-
320 240 ( )		30	25	16	8	8
		-	80	125	250	250
160 120 ( )		10	7	5	3	3
		-	290	400	675	675

*1

The maximum number of Buffer/Transfer images

5

E.g.

320 240
125
3
40

7.9 Number of Images on the SD Memory Card

_ 2 : D- 02
_ 1 : D- 01
_ 512 : D- 512
_ 256 : D- 256
_ 128 : D- 128
_ 64 : D- 064

Resolution/ Image Quality		2 GB	1 GB	512 MB
160		620,000	300,000	157,000
120		370,000	180,000	94,000
( )		260,000	130,000	67,000
320		230,000	110,000	58,000
240		115,000	58,000	29,000
( )		70,000	37,000	18,000
640		90,000	47,000	23,000
480		55,000	28,000	14,000
( )		35,000	18,000	9,000

Resolution/ Image Quality		256 MB	128 MB	64 MB
160		78,000	39,000	19,000
120		47,000	23,000	11,000
( )		33,000	16,000	8,000
320		29,000	14,000	7,000
240		14,000	7,000	3,000
( )		9,000	4,000	2,000
640		11,000	5,000	2,000
480		7,000	3,000	1,000
( )		4,000	2,000	1,000

7.10 Specifications

Network Camera

Items	Specifications
	12 , 42 (21 , 2)
/	: -175 +175 ,
	: -120 0 ( )/
	0 +90 ( )
	1/4- ( ), 380,000
	( )

Other Specifications

Items	Specifications
*3	. 12 / (640 480) . 30 / (320 240 160 120)
	4/ 6 - 4: 3, 6: 3, 6,
	( )
( )	-
	- , 3 - , -
-	- 5, - -1
	,
	*4,
	10 - /100 - -45 1
	/ /
/	2 1
( )	140 (5 1/2) 123 (4 13/16) 123 (4 13/16)
	BB-HCM381A: 640 g (1.41 .) ( ) **BB-HCE481A:** 650 g (1.43 .) ( )

Items	Specifications
[illegible]	**BB-HCM381A:** [illegible] : [illegible] 100 240 [illegible], 50/60 [illegible] 12 [illegible], 1 [illegible] [illegible] : [illegible] 12 **BB-HCE481A:** [illegible] : 48 [illegible] 802.3 - [illegible] [illegible] : [illegible] 11
[illegible]	[illegible] ±15 [illegible]
[illegible]	[illegible] : 0 (+32) +40 (+104) [illegible] : 0 (+32) +50 (+122)
[illegible]	[illegible] : 20 % 80 % ([illegible]) [illegible] : 20 % 80 % ([illegible])

*1 [illegible]

*2 [illegible]

*3 [illegible]

*4 [illegible] (- 5) [illegible]

Index

T

U

V

Z

For product service

- [illegible]
- [illegible]-800-272-7033
- [illegible]

When you ship the product

- [illegible]
- [illegible]

_____

_____

- [illegible]
- [illegible]

[illegible]

Panasonic Consumer Electronics Company,
Division of Panasonic Corporation of North America
One Panasonic Way, Secaucus, New Jersey 07094

Panasonic Puerto Rico, Inc.
San Gabriel Industrial Park, Ave. 65 de Infantería, Km. 9.5,
Carolina, Puerto Rico 00985

PQQX15037ZA [illegible] 1105 0