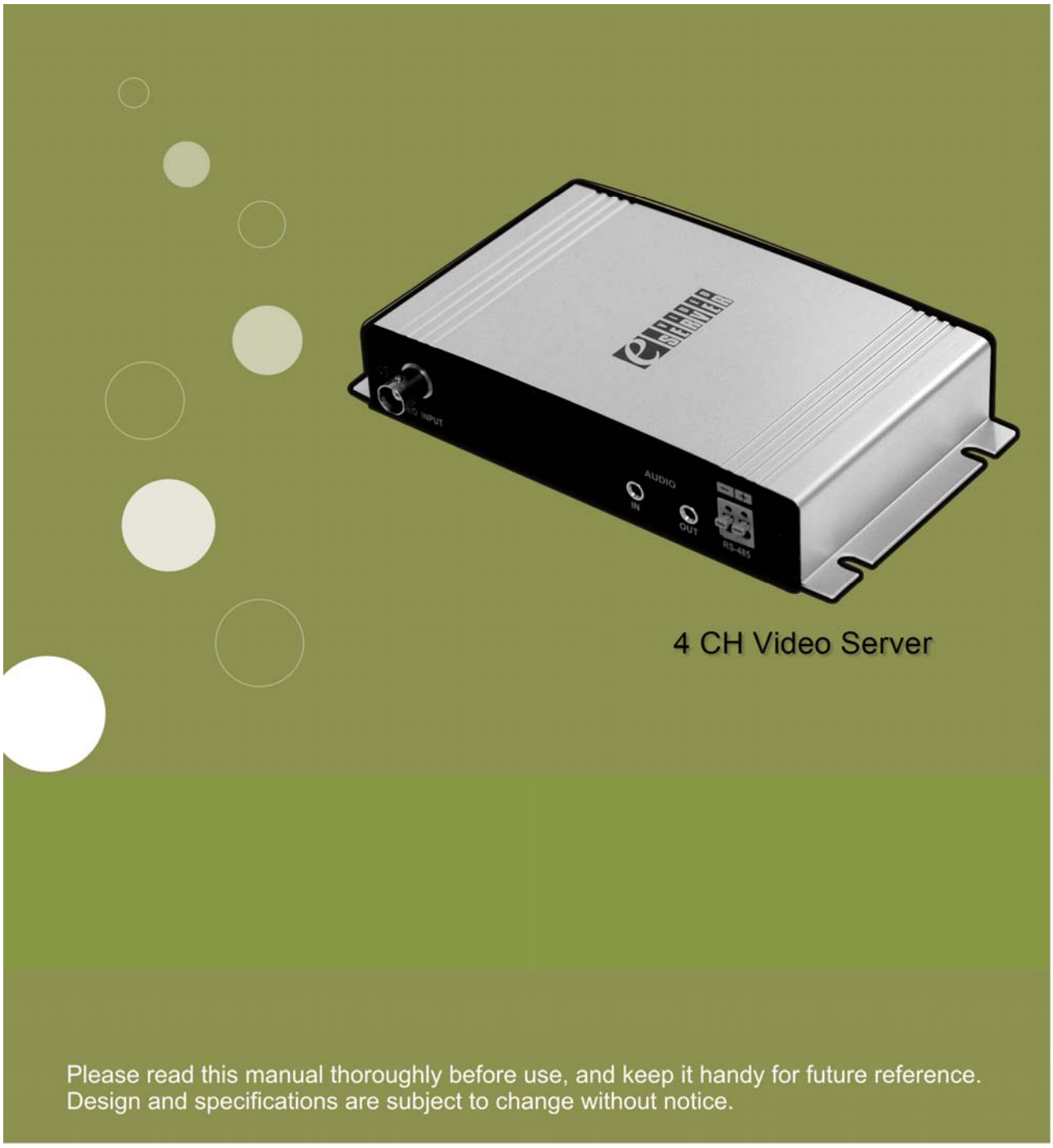
INSTRUCTION MANUAL

Network Video Server 4CH



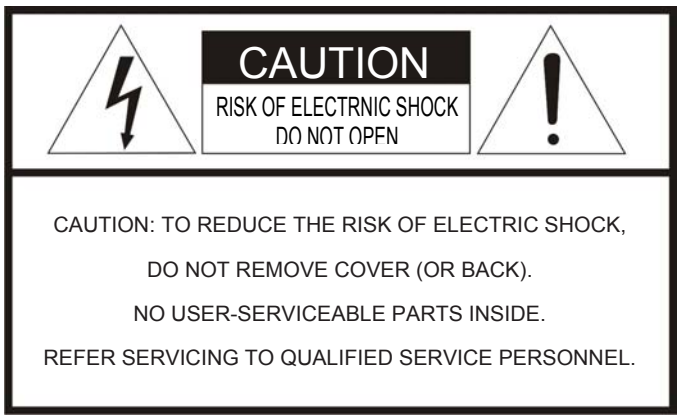
Please read this manual thoroughly before use, and keep it handy for future reference.
Design and specifications are subject to change without notice.

www.algoritmsb.ru

WARNINGS AND CAUTIONS:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT INSERT ANY METALLIC OBJECTS THROUGH THE VENTILATION GRILLS OR OTHER OPENINGS ON THE EQUIPMENT.

CAUTION



EXPLANATION OF GRAPHICAL SYMBOLS

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

PRECAUTIONS

Safety ---------- Installation ----------

Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by the qualified personnel before operating it any further.

Unplug the unit from the wall oulet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials(curtains, draperies) that may block the ventilation holes.

Height and vertical linearity controls located at the rear panel are for special adjustments by qualified personnel only.

Do not install the unit in an extremely hot or humid place or in a place subject to excessive dust, mechanical vibration.

The unit is not designed to be waterproof.
Exposure to rain or water may damage the unit.

Cleaning ----------

Clean the unit with a slightly damp soft cloth.
Use a mild household detergent. Never use strong solvents such as thinner or benzene as they might damage the finish of the unit.

Retain the original carton and packing materials for safe transport of this unit in the future.

www.algoritmsb.ru

FCC COMPLIANCE STATEMENT

FCC INFORMATION: THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS A DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES. THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT. THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS. OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.

CAUTION: CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

THIS CLASS A DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003.
CET APPAREIL NUMÉRIQUE DE LA CLASSE A EST CONFORME À LA NORME NMB-003 DU CANADA.

CE COMPLIANCE STATEMENT

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

www.algoritmsb.ru

IMPORTANT SAFEGUARDS

1. READ INSTRUCTIONS -- All the safety and operating instructions should be read before the appliance is operated.

2. RETAIN INSTRUCTIONS -- The safety and operating instructions should be retained for future reference.

3. CLEANING -- Unplug video monitor or equipment from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

4. ATTACHMENTS -- Do not use attachments not recommended by the video monitor or equipment manufacturer as they may result in the risk of fire, electric shock or injury to persons.

5. WATER AND MOISTURE -- Do not use video monitor or equipment near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool or the like.

6. ACCESSORIES -- Do not place video monitor or equipment on an unstable cart, stand or table. The video monitor or equipment may fall causing serious injury to a child or adult and serious damage to the equipment. Wall or shelf mounting should follow the manufacturer's instructions and should use a mounting kit approved by the manufacturer.

6A. Video monitor or equipment and cart combinations should be moved with care. Quick stops, excessive force and uneven surfaces may cause the equipment and cart combination to overturn.

7. VENTILATION -- Slots and openings in the cabinet at the back or bottom are provided for ventilation and to ensure reliable operation of the video monitor or equipment and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the video monitor or equipment on a bed, sofa, rug, or other similar surface. Video monitor or equipment should never be placed near or over a radiator or heat register. Video monitor or equipment should not be placed in a built-in installation such as a bookcase unless proper ventilation is provided.

8. POWER SOURCES -- Video monitor or equipment should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your video monitor or equipment dealer or local power company. For video monitor or equipment designed to operate from battery power refer to the operating instructions.

9. GROUNDING OR POLARIZATION -- This video monitor may be equipped with a polarized alternating - current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug. Alternate Warnings - This video monitor is equipped with a three-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety

www.algoritmsb.ru

feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.

10. POWER CORDS -- Do not allow anything to rest on the power cord. Do not locate video monitor or equipment where the cord will be abused by persons walking on it.

11. HEED WARNINGS -- Follow all instructions marked on the video monitor or equipment.

12. LIGHTNING -- For added protection for video monitor or equipment during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightning and power-line surges.

13. OVERLOADING --Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

14. OBJECT AND LIQUID ENTRY -- Never push objects of any kind into video monitor or equipment through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

15. SERVICING -- Do not attempt to service video monitor or equipment yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

16. DAMAGE REQUIRING SERVICE -- Unplug video monitor or equipment from the wall outlet and refer servicing to qualified service personnel under the following conditions:
    A. When the power-supply cord or the plug has been damaged.
    B. If liquid has spilled or objects have fallen into the video product.
    C. If the video product has been exposed to rain or water.
    D. If the video product does not operate normally by following the operating instructions, adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.
    E. If the video product has been dropped, or the cabinet damaged.
    F. When the video product exhibits a distinct change in performance -- this indicates a need for service.

17. REPLACEMENT PARTS -- When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

18. SAFETY CHECK -- Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks to determine that the video product is in proper operating condition.

19. FIELD INSTALLATION -- This installation should be made by a qualified service person and should conform to all local codes.

www.algoritmsb.ru

TABLE OF CONTENTS

1. Product Introduction 1

1.1 Components 1

1.2 NETWORK VIDEO SERVER'S External View and Port Description 1

1.2.1 Front View 1

1.2.2 Back View 2

1.2.3 Side View 2

1.2.4 Top View 3

2. NETWORK VIDEO SERVER Installation 4

2.1 Installation Order 4

2.2 Network Connection 4

2.2.1 NETWORK VIDEO SERVER IP Assignment 4

3. Operation by Web Browser 6

3.1 Connecting the NETWORK VIDEO SERVER by Web Browser 6

3.2 Real-Time Monitoring 6

3.3.1 Video Setting 8

3.3.2 Live View Setting 11

3.3.3 Audio Setting 14

3.3.4 Alarm Setting 15

3.3.5 PTZ Setting 21

3.3.6 System Setting 25

3.4 Help 37

4. Appendix 38

4.1 Troubleshooting 38

www.algoritmsb.ru

4.2 Preventive Maintenance 38

4.3 Product Specifications 39

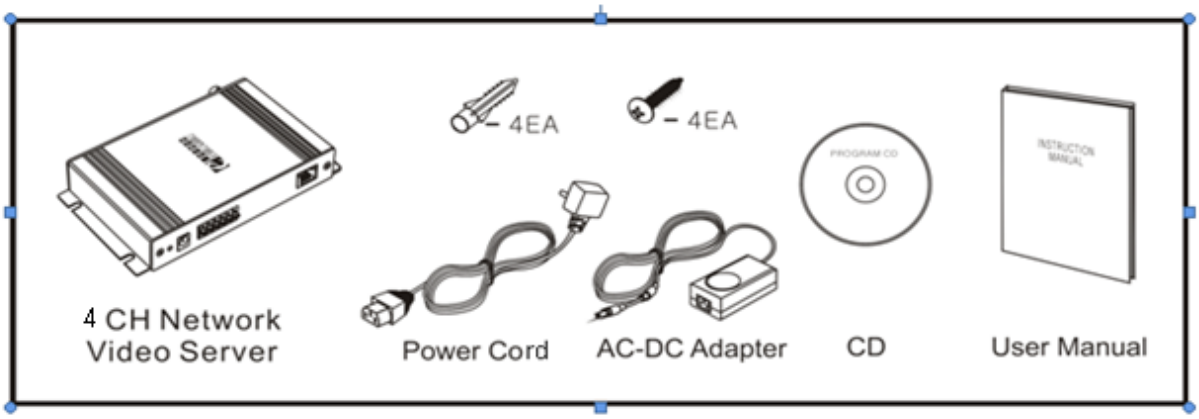
www.algoritmsb.ru

1. Product Introduction

The Network Video Server supports the network service for an existing analog camera. An analog image entered can be monitored on a real-time screen regardless of distances and locations. By using its dedicated program, many users are able to have an access to the Network Video Server at once or a single user can monitor various Video Servers at the same time. It also enables users to play, store and retrieve a monitoring image by using a PC. All the settings and real-time monitoring screens are also provided through an access to the web.

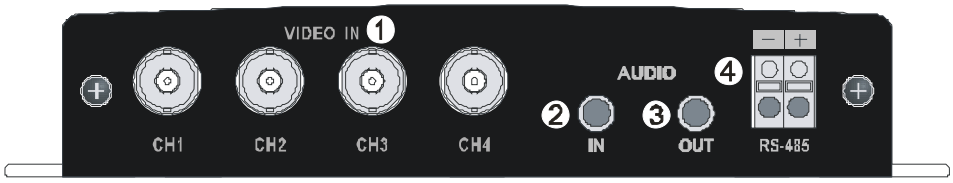
1.1 Components

Network Video Server 4CH body, Power Code, AC-DC Adaptor, Screw, Install CD-ROM, and Quick Installation Guide.



1.2 NETWORK VIDEO SERVER'S External View and Port Description

1.2.1 Front View



① Analog Camera Input BNC Connector

Connect the analog camera to the video input of the Network Video Server. Connect a general camera of PAL/NTSC type. For more information on analog camera installation, please consult with an installer.

②③ External Microphone and Speaker

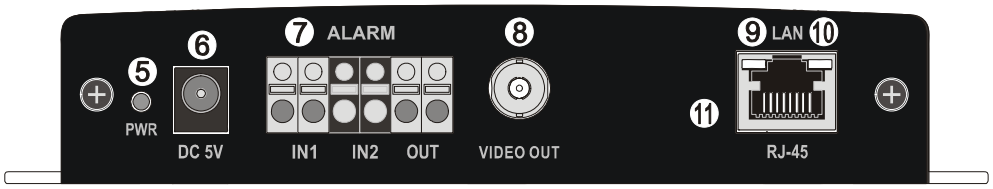
The Network Video Server enables users to send and receive a voice through the input/output module. Use it after connecting the port to the microphone and speaker, which have an amplifier function.

④ RS-485 Connector for PTZ Camera Control

One RS-485 is offered for controlling the PTZ camera.

www.algoritmsb.ru

1.2.2 Back View



⑤ Power Indicator

⑥ Power Connector

The Network Video Server requires a stable power supply for normal operation. It uses an adapter of the DC 5V / 4A specifications. It is recommended to use with an uninterruptible power supply (UPS).

⑦ Alarm Input / Output

Users can control the alarm systems like a siren, an alarm and a warning light through two alarm inputs. For technical support necessary to use the alarm function, please contact the installer

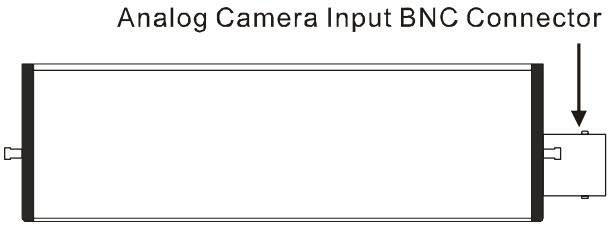
⑧ Analog Camera Output BNC Connector

⑨ LAN Operation Check LED

⑩ LAN Connection Check LED

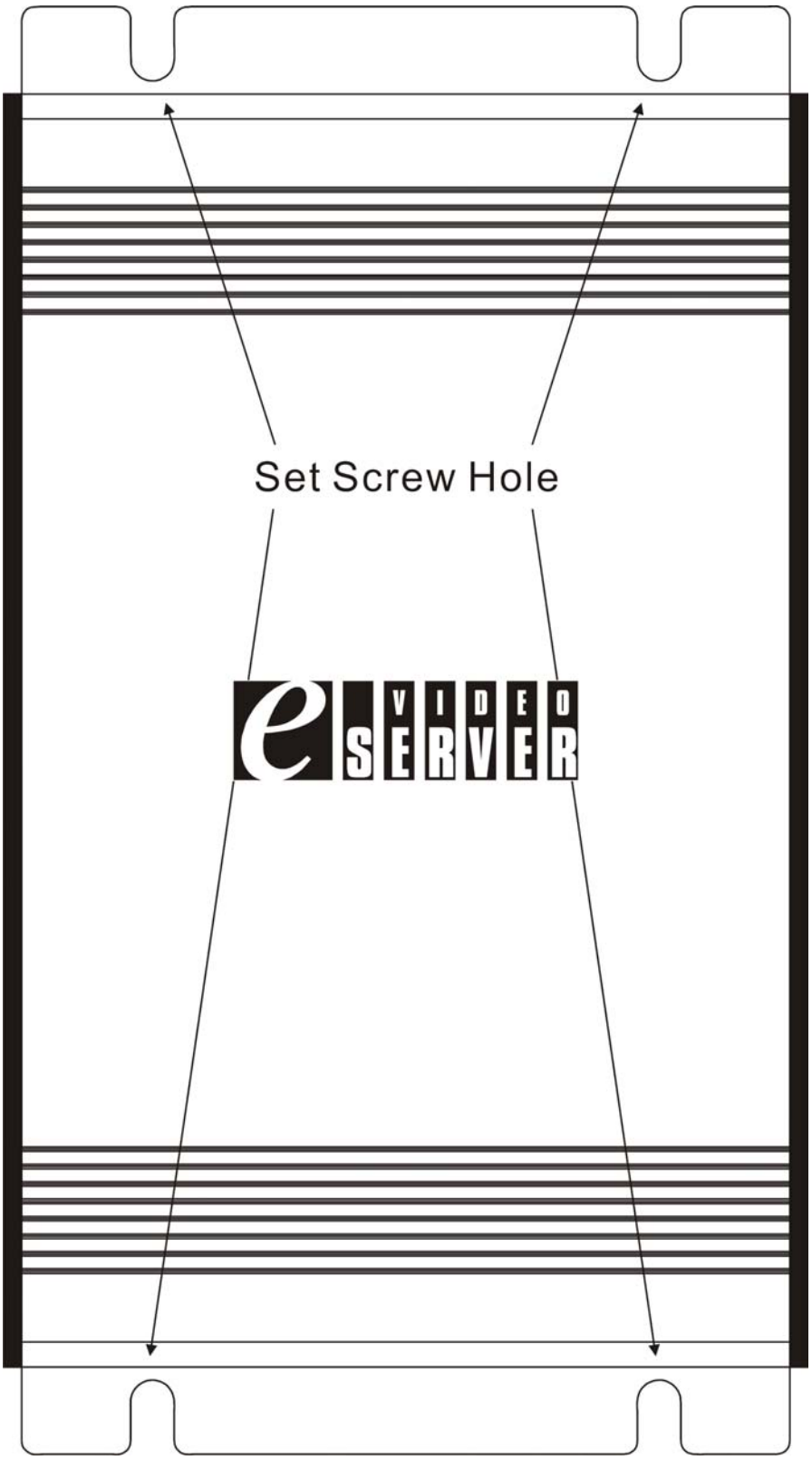
⑪ RJ-45 Connector

1.2.3 Side View



www.algoritmsb.ru

1.2.4 Top View



www.algoritmsb.ru

2. NETWORK VIDEO SERVER Installation

2.1 Installation Order

For the operation of the Network Video Server, it is necessary to connect a network cable for data transmission, power connection from supplied power adapter and connect a general analog camera. Depending on operation methods, it is possible to connect an alarm cable or audio cable additionally. For its fixation on different locations, please consult with an installer.

2.2 Network Connection

The Network Video Server supports the operation through the network. Therefore, it is necessary to connect a standard RJ-45 cable to it. Generally a cross-over cable is used for directly connection to PC, while a direct cable is used for connection to a hub.

2.2.1 NETWORK VIDEO SERVER IP Assignment

When a camera, Encoder or Decoder is first connected to the network it has no IP address. So, it is necessary to allocate an IP address to the device with the “Smart Manager” utility on the CD.

OPERATION

1. Connect network camera / device to the network and power up.
2. Open the program folder installed with the provided CD and execute “SmartManager”. The box in Figure 1 will be displayed, after a short while any cameras connected to the network will be displayed in the list.

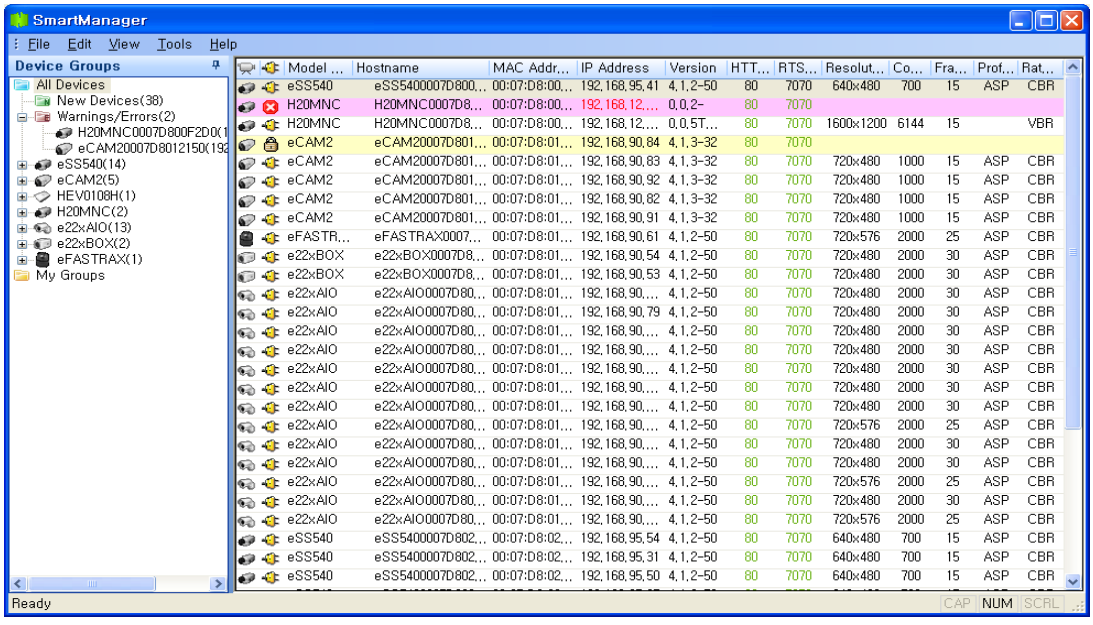


Figure 1

www.algoritmsb.ru

Icon Description for Camera Connection Status

: Available for connection to the camera

: Loading settings information of video after connecting the camera.

: Connectable to the camera but fixed security settings (password)

: Unavailable for connection to the camera (PC can not access relevant IP Address)

Assign IP

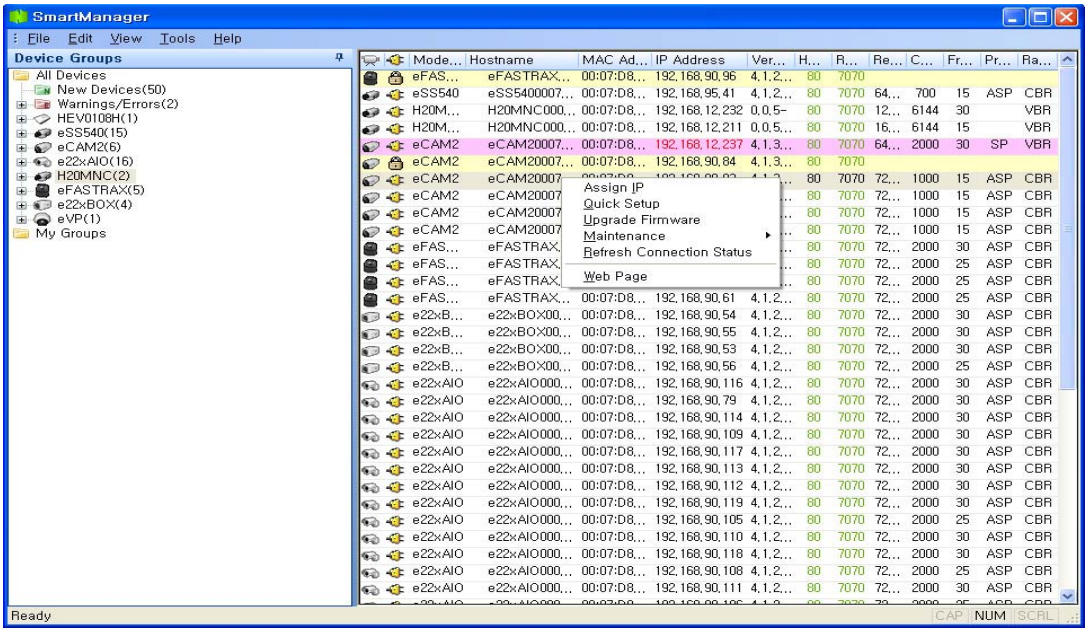


Figure 2

1. Select network device and click the mouse right button and click the ‘Assign IP’ menu.
2. Figure 3 will be displayed.
3. Enter the required IP address.

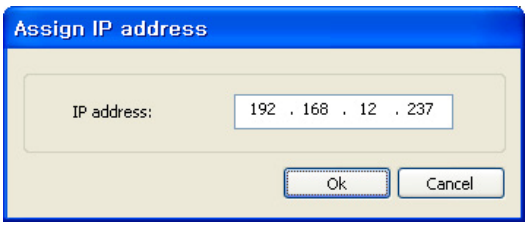


Figure 3

● Refer to Smart Manger_v1.0 manual for detailed information

www.algoritmsb.ru

3. Operation by Web Browser

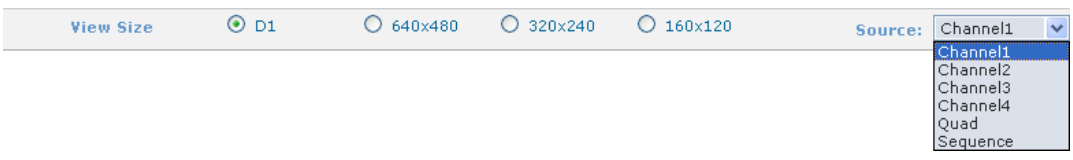
3.1 Connecting the NETWORK VIDEO SERVER by Web Browser

●Execute the Web Browser on the PC.
●Enter the Network Video Server address on the address window of the Web Brower and execute it.
Ex) http://192.168.30.220/
(If the Network Video Server has no IP address or its IP address is wrong, users will fail to connect the Network Video Server. In this case, users will have to connect the Network Video Server by the Web Browser after entering the IP address with the SmartSetup.)
●Refer to '2.2.1 NETWORK VIDEO SERVER IP Assignment' section for detailed information.
●If a security window for the ActiveX Controller installation appears, press the Confirm and install it.
●If it is not connected in the Internet, from the CD-ROM install the ActiveX Controller by manual operation.

3.2 Real-Time Monitoring

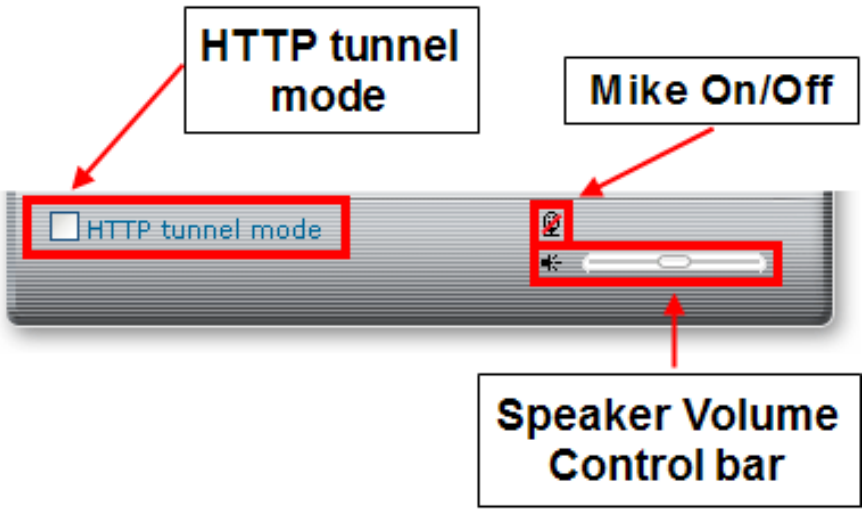
Supports 4 individual channels and Quad screen, and an automatic conversion screen, along with 4 types of screen size each. Gives support to 4 types of screen size covering D1, VGA, CIF, and QCIF, among which users can select and monitor the most reasonable size. Please, adjust the mode in accordance with your PC specifications and monitoring purposes.

If you change screen mode to "Quad", you can watch the 4 input cameras on a single screen. When you set the screen mode to "Sequence", a total of 5 screens including 4 respective channel and Quad screen are displayed. For more detailed settings, please see "3.3.2 Live View Setting – Sequence Mode".



www.algoritmsb.ru

In case of real-time monitoring with the Web Browser, one Network Video Server will be connected to just one Web Browser. However, this case is not suitable for monitoring various screens at the same time. If users are to monitor various images at the same time, please refer to the eVideoClient



□HTTP tunnel mode

When the screen is not indicated, check. (Notice: "unicast mode" only it is applied.)
If users are to control the volume of a microphone and speaker connected to a user PC, they should adjust the user PC volume regardless of the microphone and speaker volume control set in Network Video Server.

www.algoritmsb.ru

3.3 NETWORK VIDEO SERVER Setting

The Network Video Server setting is divided into video, audio, alarm, PTZ and system settings. And the detailed screen will be provided for each setting.

3.3.1 Video Setting

For image settings, there are 6 divisions: Channel1, Channel2, Channel3, Channel4, Quad, and Sequence

Channel Setting

Setting method for Channel1 to Channel 4 are the same.

.

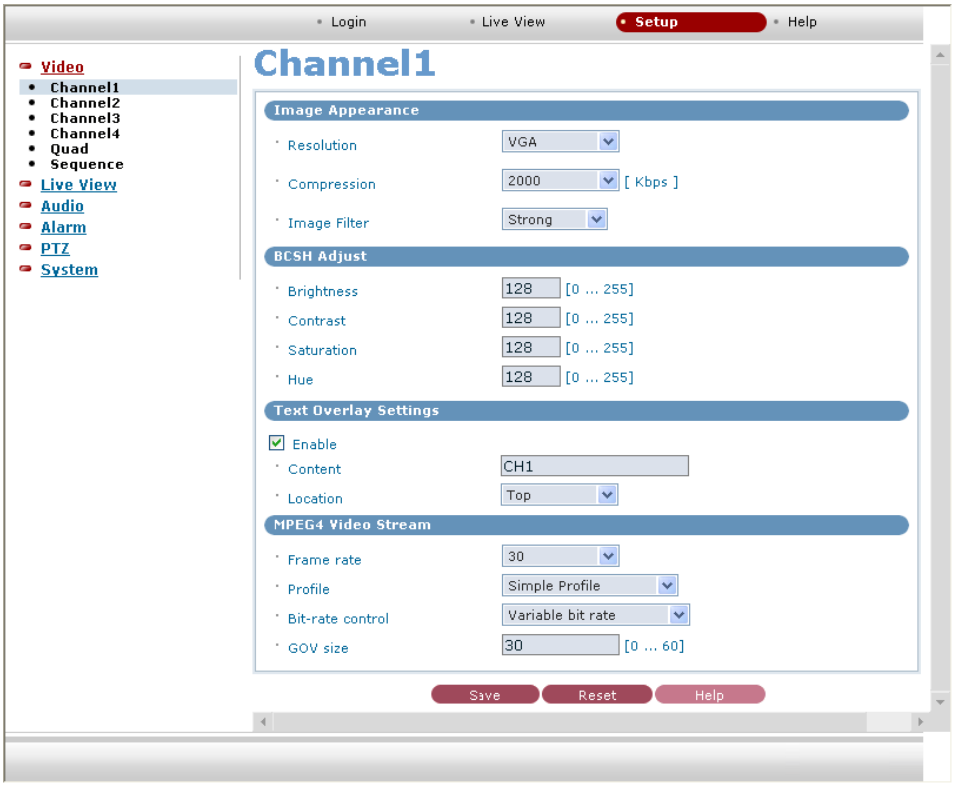


Image Appearance

Resolution
It enables users to determine a basic screen size when having an access through the Web Browser or PC program.
The screen size control comes in four modes like D1, 640 X 480, 320 X 240, and 160 X 128. Users can reset the selected screen size anytime while monitoring the screen on a real-time basis.

Compression
When it is necessary to adjust a smooth transmission status according to network situations, users can increase the compressibility to carry out the network transmission stably. On the other hand, when it is necessary to maintain a detailed monitoring screen by enhancing the image quality, users

www.algoritmsb.ru

can do so by decreasing the compressibility. In ease case, please adjust this function according to the network status and monitoring purposes. The default is 2000(Kbps).

Image filter

The image filter control enables users to reinforce the image quality in a strong or weak way. The default is "disabled". This function is to reduce a noise under the low illumination for a better image quality.

BCSH Adjust

Brightness

The screen brightness can be adjusted from 0 to 255 stages, and the default is 128. The brightness may differ depending on the equipment and PC monitor status.

Contrast

The screen contrast can be adjusted from 0 to 127 stages, and the default is 73. The contrast may differ depending on the equipment and PC monitor status.

Saturation

The screen saturation can be adjusted from 0 to 127 stages, and the default is 64. The saturation may differ depending on the equipment and PC monitor status.

Hue

The screen hue can be adjusted from 0 to 255 stages, and the basic value is 128. The hue may differ depending on the equipment and PC monitor status.

Text Overlay Settings

Allows On Screen Display of title etc.

□ **Enable**

Tick for the use of Text Overlay function.

Content

Enter characters for Text Overlay.

Location

Appoint a location for character reflection.

MPEG4 Video Stream

Frame rate

Upon the real-time play, users should select a frame refresh rate per second. If the rate is high, the image will become smooth. On the other hand, if the rate is low, the image will not be natural but it can reduce a network load.

Profile

SP (Simple Profile) is mostly aimed for use in situations where low bit rate and low resolution are mandated by other conditions of the applications, like network bandwidth, device size etc.

ASP (Advanced Simple Profile) 's notable technical features relative to the Simple Profile, which is roughly similar to H.263, including "MPEG"-style quantization, interlaced video, B pictures (also known as B Frames), Quarter Pixel motion compensation (Qpel), Global motion compensation (GMC)

Bit-rate control

Constant bit rate (CBR): constant bit rate encoding means that the rate at which a codec's output data should be consumed is constant. CBR is useful for streaming multimedia content on limited

www.algoritmsb.ru

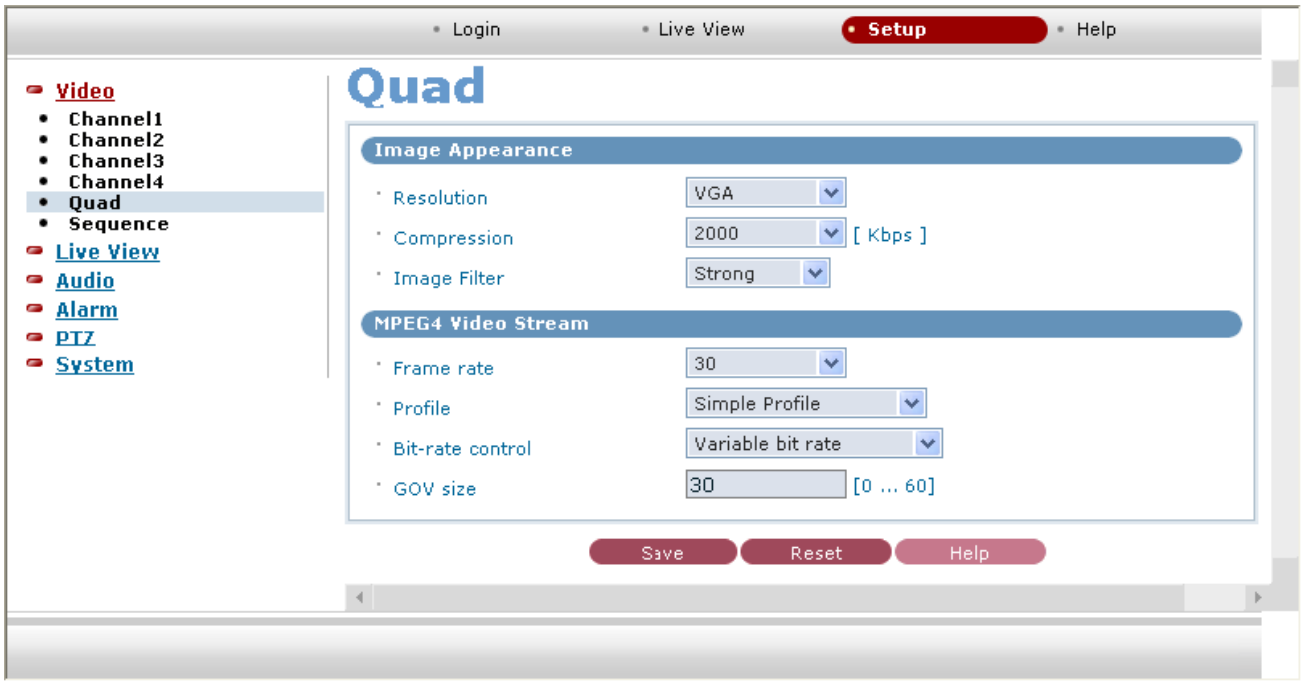
capacity channels since it is the maximum bit rate that matters, not the average, so CBR would be used to take advantage of all of the capacity. CBR would not be the optimal choice for storage as it would not allocate enough data for complex sections (resulting in degraded quality) while wasting data on simple sections.

Variable bit rate (VBR): The advantages of VBR are that it produces a better quality-to-space ratio compared to a CBR file of the same size. The bits available are used more flexibly to encode the sound or video data more accurately, with fewer bits used in less demanding passages and more bits used in difficult-to-encode passages.

GOV size

Enter the GOV (group of VOP) size. If users want to have a high quality of fast image one by one, please decrease the value. For the purpose of general monitoring, please do not change a basic value. Such act may cause a problem to the system performance. For the details of GOV setting, please contact the service center.

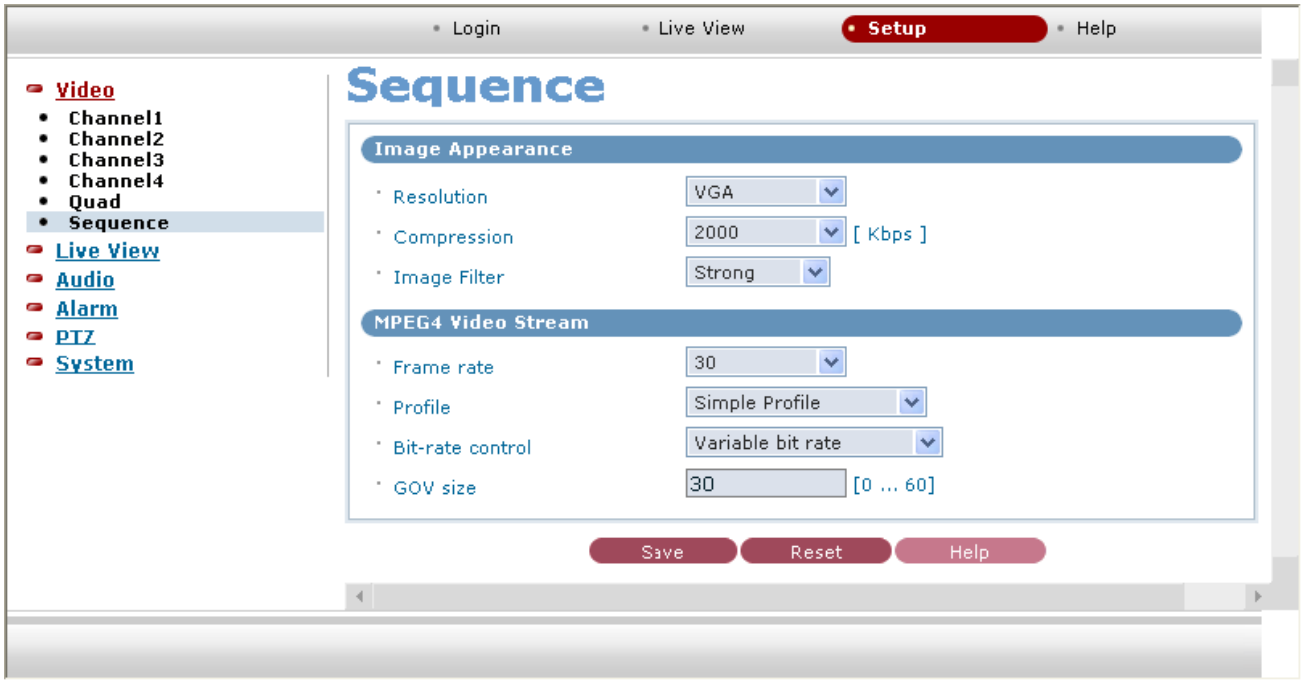
Quad Setting



Quad Mode allows 4 input images to be displayed on a single screen. These are set in the same way as the single channel video settings.

www.algoritmsb.ru

Sequence Setting



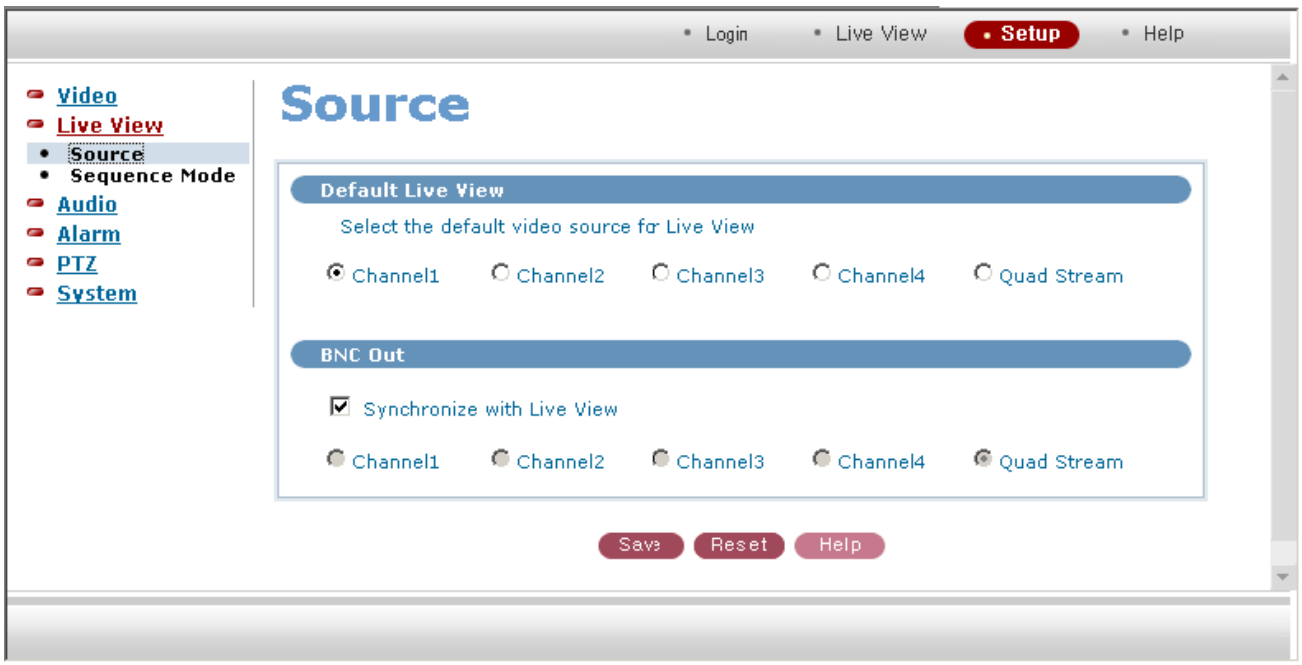
Sequence Mode shows 4 input images as an automatic sequential switching. These are set in the same way as the single channel video settings.

.

3.3.2 Live View Setting

Source Setting

Set the channel by web browser-based connection and the allocated channel to BNC Out.



www.algoritmsb.ru

Default Live View

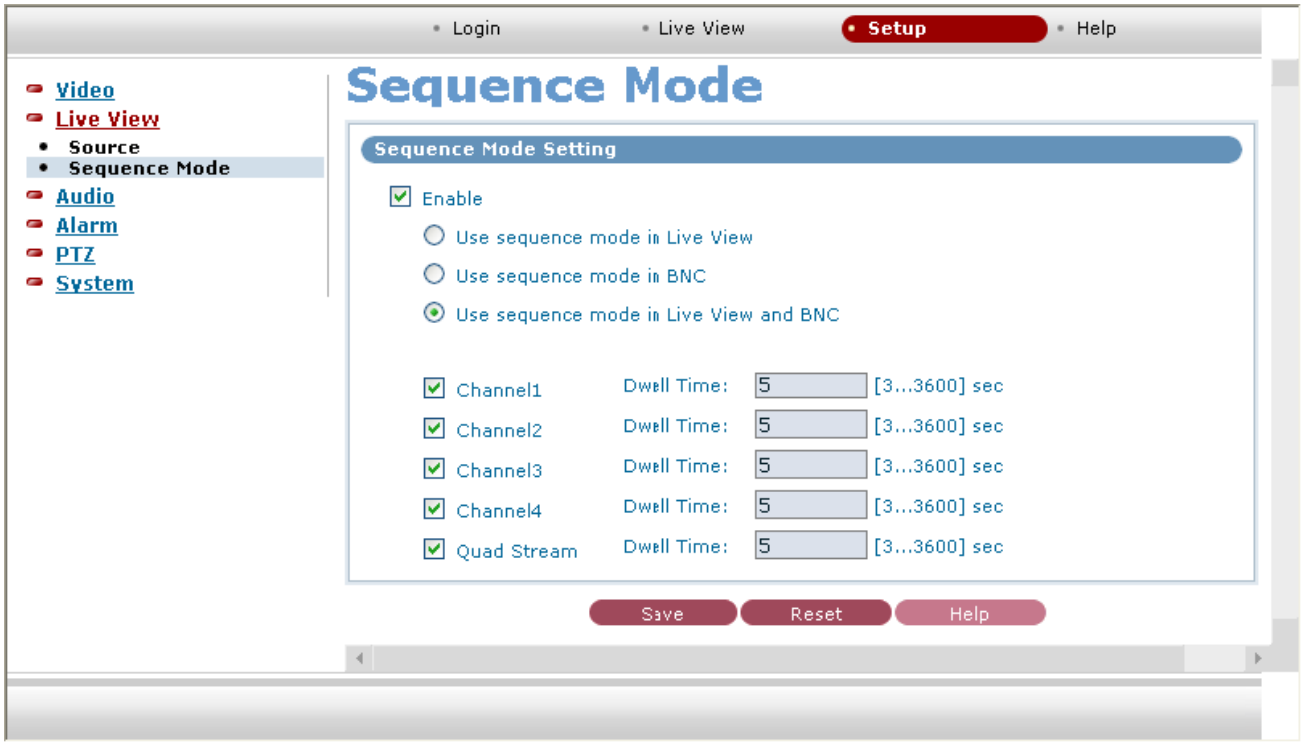
Set the channel by web browser-based connection. You can select one among the 5: Channel 1, Channel 2, Channel 3, Channel 4, and Quad Stream. The chosen screen is seen on the control screen as a basic one. Screen modification is possible even during the control operation.

BNC Out

Either a single camera image or a quad view of all 4 inputs can be selected to the BNC output.

BNC out Sequence Setting

A sequence of all or any of the 4 inputs can be set up to be displayed via the BNC output or for the live view when connected via the network.



Sequence Mode Setting

□ **Enable:** Allow checking at time of an automatic screen switching function in operation.

⦿ Use sequence mode in Live View
Make it possible to see the automatic screen switching on the control screen.
⦿ Use sequence mode in BNC
Allow the automatic screen switching to be seen on BNC Out screen.
⦿ Use sequence mode in Live View and BNC Out
Allow the automatic screen switching to be seen on the control screen and BNC Out screen.

www.algoritmsb.ru

□ **Channel1~4, Quad Stream**

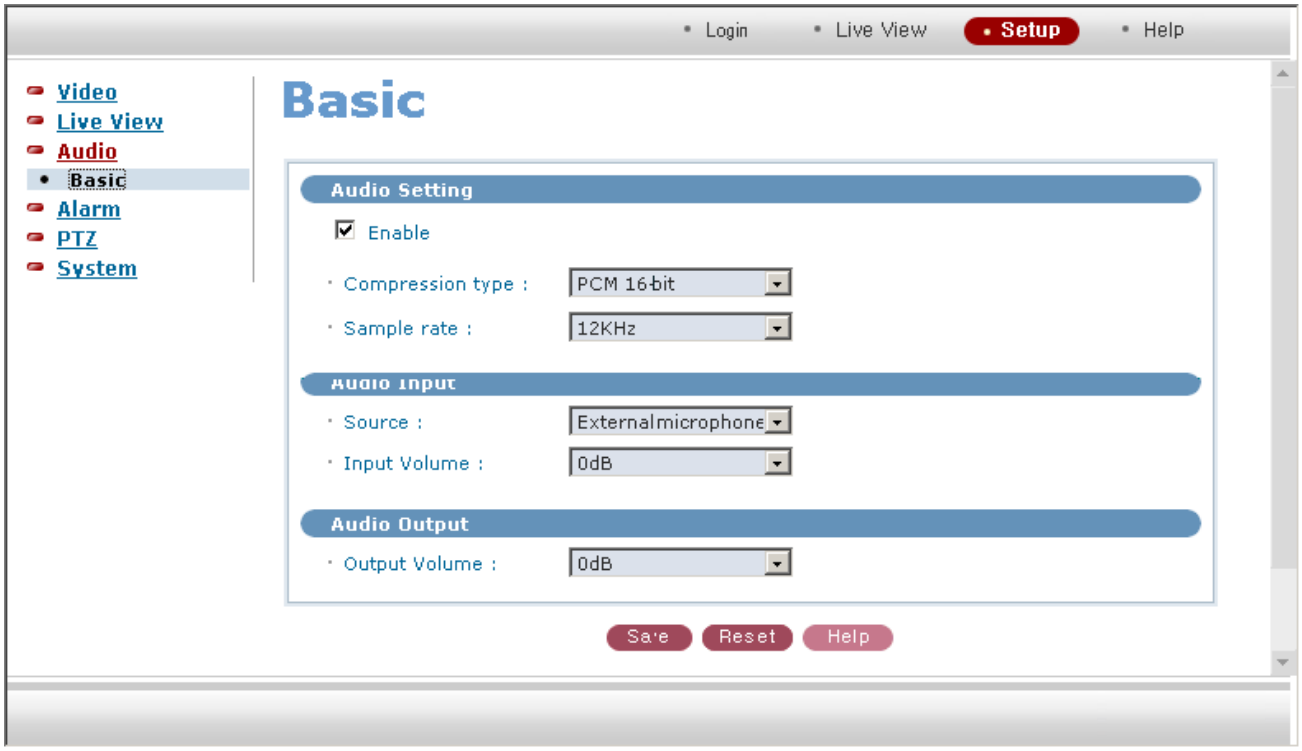
Each of the 4 channels and Quad screen can be selected to be included on the switching list.

www.algoritmsb.ru

3.3.3 Audio Setting

Basic Setting

Users can use a microphone and speaker by using the audio function.



Audio Setting

□ Enable: Checks to activate the Audio function.

Compression type

Users can increase a transmission rate or enhance a tone quality by selecting an audio compression mode. The PCM 16-bit implements the best tone quality, while the PCM 8-bit corresponds to that of radio sound.

Sample rate

If a sample rate is low, the tone quality will go down but the transmission rate will go up. If a sample rate is high, the tone quality will be better, but the transmission rate will drop. Please, adjust its rate in accordance with a network status or purposes.

Audio Input

Source

Users can select either MIC input or LINE input, but cannot use both at once.

Input Volume

Users can control the input volume by adjusting the microphone volume.

Audio Output

Output Volume

Users can control the output volume of the speaker connected to the Network Video Server.

www.algoritmsb.ru

3.3.4 Alarm Setting

This function enables user to configure the alarm input/output settings and event settings.

Motion Setup

Motion Detection is processed by splitting the screen into 64 areas. Each area can be selected by clicking with the mouse, and green point shown in the selected area. Green dots are active (will detect motion) clear blocks are inactive (will not detect motion)

Applicable to each of the 4 channels and Quad screen.

Motion Detection Setting

□ **Enable:** Checks this item when using the motion information.

-Sensitivity

Sets up the sensitivity of a motion. This item has a value between 10 ~ 255. Lower value means high sensitivity so that a motion event will be triggered with less movement.

www.algoritmsb.ru

-Motion dwell time

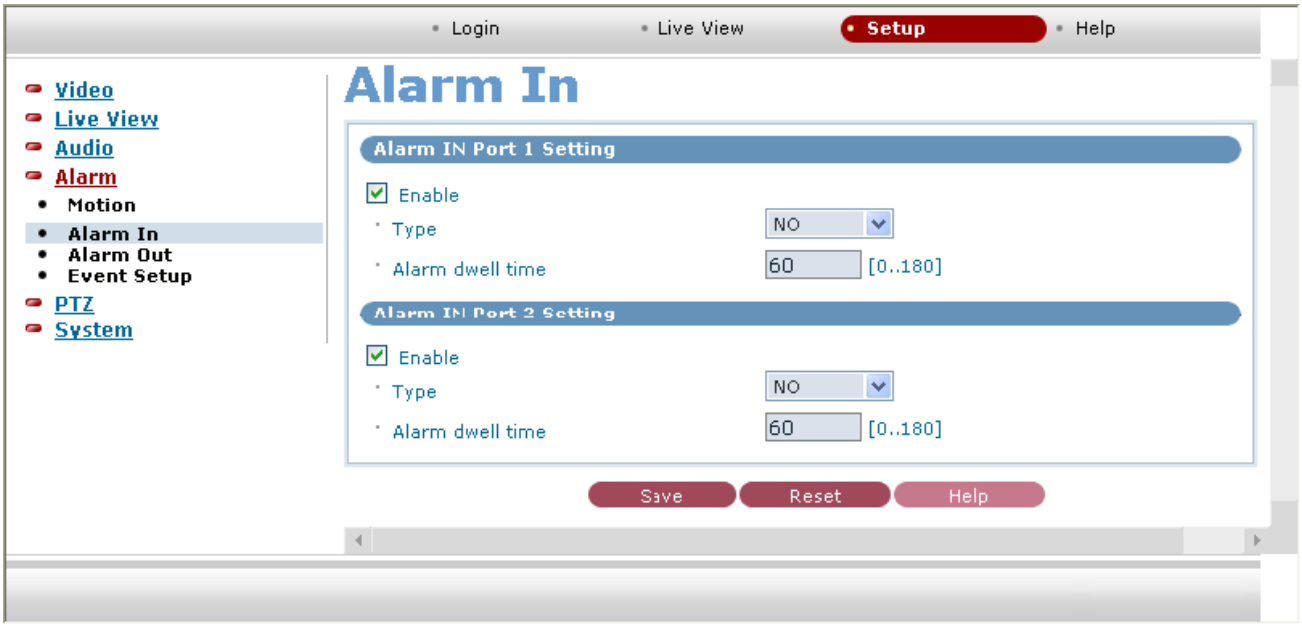
Sets up the event duration time when a motion occurs. This item can have a value between 0 ~ 6 seconds. When an event occurs, the motion icon at upper right of the screen blinks for the specified period.

-Enable down FPS

This feature decreases frame rate to 1 FPS when no motion event occurs, while operates with the frame rate set in this item when a motion event occurs.

Alarm In Setting

This function enables users to conduct the alarm input/output setting.



Alarm IN Port 1 and 2 Setting

□ **Enable:** Tick to activate the 'Alarm In Port 1' and Alarm In Port 2' function.

Type

Select the operation mode of the Alarm Input 1.
Select either 'N.O.(Normal Close)' or 'N.C.(Normal Open)'

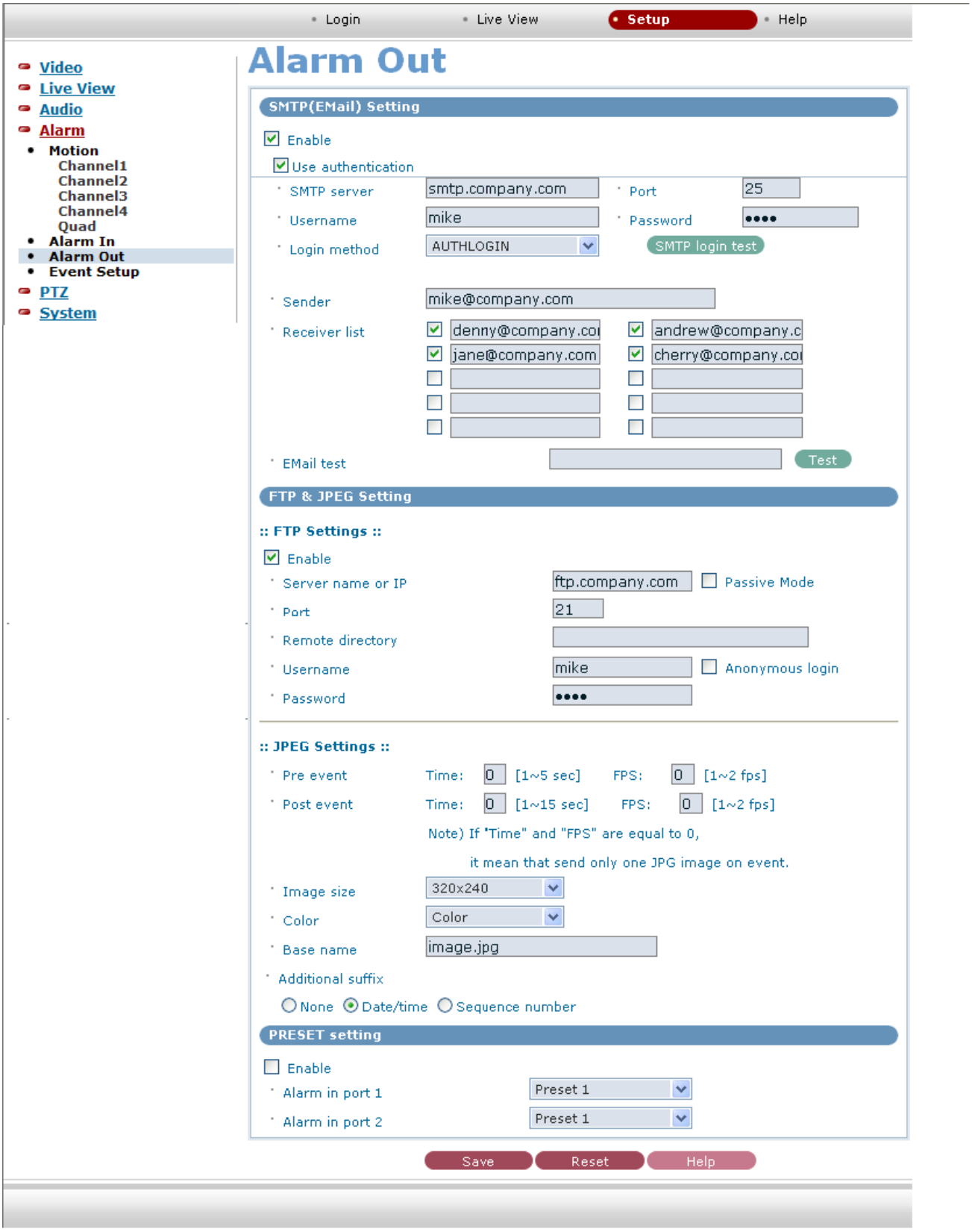
Alarm dwelling time [0~180]

Designate a running time for alarm occurrence. Select one out of 0 to 180 seconds.

www.algoritmsb.ru

Alarm Out Setting

Upon the alarm occurrence, this function enables users to receive a mailing or FTP service to the mail address designated by users.



www.algoritmsb.ru

SMTP (e-mail) Setting

□ **Enable:** Checks to activate the SMTP (e-mail) function.
Use authentication: If your mail server requires authentication, check the box for Use authentication and enter the necessary information.
SMTP server: SMTP server name or IP address.
Port: SMTP server port number. Default SMTP port is 25.
Username: SMTP user ID (name)
Password: SMTP user password.
Login method: SMTP server authentication method
SMTP login test: Test log in to SMTP server.
Sender: Enter an e-mail address to send a mail.
Receiver list: Enter up to 10 e-mail addresses to receive a mail.
E-Mail test: Enter an e-mail address to test for sending a mail.
Test button: Test for sending a mail with a value entered.

FTP & JPEG Setting

FTP Settings

□ **Enable:** Checks to activate the FTP function.
Server name or IP: Enters the FTP IP address or host name to be received.
Port: Enters the port number of FTP to be received.
Remote directory: Enters the location for saving the file of FTP to be received.
Username: Enters the user's account when connecting to FTP.
Password: Enters the user password for connecting to FTP.

JPEG Settings

Sets up the creation condition, screen size, color and name of JPEG file to be sent to FTP.

Pre event: Creates the JPEG file of chapter 1~5 for 1~2 seconds before the event is generated.
Post event: Creates the JPEG file of chapter 1~15 for 1~2 seconds after the event is generated.
Image size: Selects the size of JPEG file to be created among 160X120 and 320X240.
Color: Selects the color or B&W of JPEG file to be created.
Base Name: Write in the basic name of file to be created.

Except for the basic name, It is possible to add supplementary names for discriminating multiple files.

Additional suffix: Selects one among date, time and the number of sequence created.

⊙**None:** Do not add supplementary name.
⊙**Date Time:** Add the date and time when the file was created behind the basic name.
⊙**Sequence number:** Add the number in sequence of file creation behind the basic name.

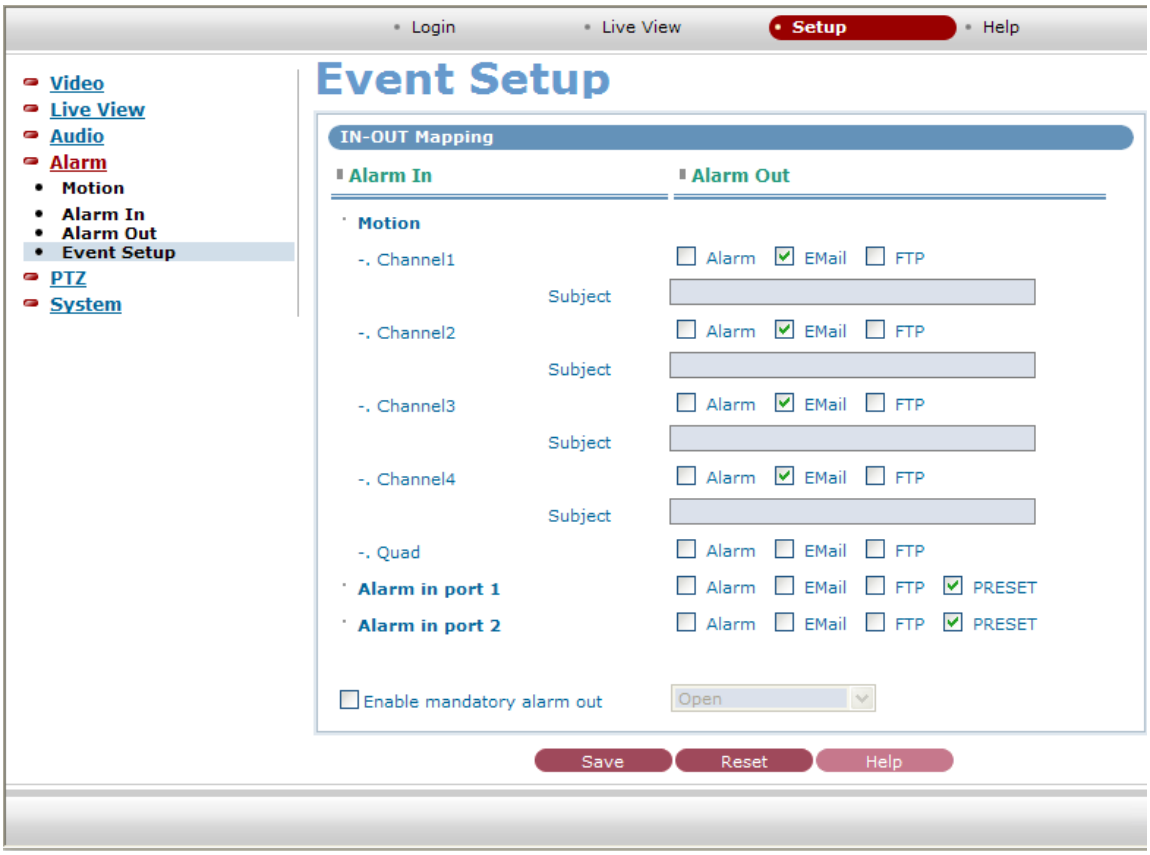
www.algoritmsb.ru

PRESET Setting

□ **Enable:** Checks to activate the PRESET function.
Alarm Input port 1: Alarm Input 1 about PRESET number to select.
Alarm Input port 2: Alarm Input 2 about PRESET number to select.

Event Setup

Alarm inputs can be generated via motion detection or either of the two physical alarm inputs on the Encoder. These events can be used to control the alarm out options, which include: the Alarm output port; sending of e-mails; sending of images to FTP servers; and sending domes to preset positions.



IN-OUT Mapping

When alarms are generated through motion detection the Alarm Out function can be set to send e-mails to defined users or images to an FTP site

Alarm IN

Alarm IN via either Motion, Alarm in port 1 or Alarm in port 2.

Alarm OUT

Alarm: Closes the Alarm OUT port when the Alarm IN is activated.
E-mail: Sends an email. You can input the subject on email.

www.algoritmsb.ru

FTP: Sends the captured picture to an FTP site.
PRESET: Sends a PTZ dome to a Preset on an alarm event.
□**Enable mandatory alarm out:** Enable alarm control to open/close contact.

www.algoritmsb.ru

3.3.5 PTZ Setting

Basic

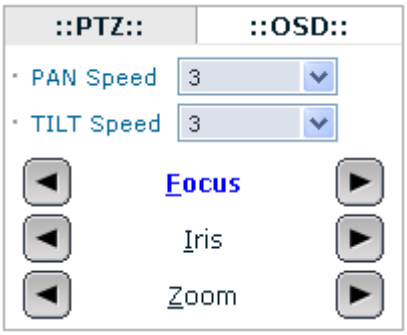
Control

Left or Right button: Go into the sub-menu items. Execute the command (exit). Change value. Navigate through the menu items.
Up or Down button: Navigate through the menu items.

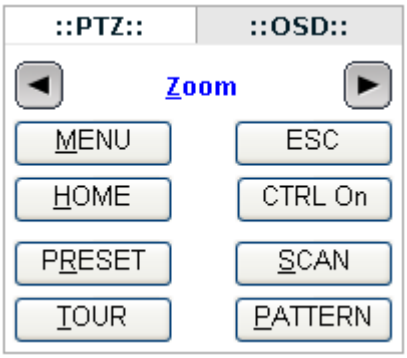
When mouse in the red area click, It moves with the direction.

www.algoritmsb.ru

-PTZ



PAN / TILT Speed: It sets a speed when adjusting the PTZ Camera. The higher a value is, the faster a speed will be.
Focus: Overrides auto focus. Moving the Zoom handle reactivates Auto Focus mode.
Iris: Overrides auto iris. Moving the joystick reactivates Auto Iris mode.
Zoom: Zoom control.



OSD

Zoom: Change value. Enter editing title.
MENU: Enters programming menu.
ESC: Cancels current inputs. Exits from currently running functions or menu, error status, etc
HOME: Immediately calls Home function. Deletes selected value or function in programming mode
CTRL On: Control function.
Ex) CTRL + Up, Down, Right, Left Button >> Operated turbo mode.
PRESET: Pressing 'PRESET' will bring up the preset programming menu.
SCAN: Pressing 'SCAN' will bring up the Auto Scan programming menu.
TOUR: Pressing 'TOUR' button will bring up the tour programming menu directly.
PATTERN: Pressing 'PATTERN' button will bring up the pattern programming menu directly.

www.algoritmsb.ru

PTZ Setting

□ **Enable:** Checks to activate the PTZ function.
Protocol: If a PTZ Camera is to be installed with a Fastrax keyboard controller, select 'HITRON – Fastrax IIE' protocol. Consult service personnel if a PTZ Camera is installed with device other than a keyboard controller.
Device ID: Setting PTZ Camera Address (ID)

Com Port Setting

Baud Rate: Setting PTZ Camera Baud Rate. (Default 9600 bps)
Data Bits: Setting PTZ Camera Data Bits. (Default None)
Parity Bits: Setting PTZ Camera Parity Bits. (Default 8 bits)
Stop Bits: Setting PTZ Camera Stop Bits. (Default 1 bit)

ETC Setting

Preset: Save preset. Recall preset.
Auto Scan: Calls Auto panning function.
Tour: Recalls programmed presets or functions sequentially.
Pattern: Repeats the selected pattern of the current PTZ Camera.

www.algoritmsb.ru

It will be able to control with the keyboard.

-Keyboard Short Cut Key

Keyboard Key Label (PC Keyboard)	Function (Fastrax Control Keyboard)
←	Pan left
→	Pan right
↑	Tilt up
↓	Tilt down
Shift + →	Pan speed level up
Shift + ←	Pan speed level down
Shift + ↑	Pan speed level up
Shift + ↓	Pan speed level down
Shift + '1'	PTZ mode
Shift + '2'	OSD mode
f	Focus mode - Page up (far focus) - Page down (near focus)
i	Iris mode -Page up (open iris) -Page down (close iris)
z	Zoom mode -Page up (zoon in) -Page down (zoom out)
m	MENU
ESC	ESC
h, HOME	HOME
Ctrl	CTRL
r	PRST
s	SCAN
t	TOUR
p	PTRN

www.algoritmsb.ru

3.3.6 System Setting

Users Setting

This Network Video Server's Authority Policy

1. Anonymous User Access Permit Mode

This mode enables any anonymous users to have an access to the Network Video Server to monitor and set it.

2. Anonymous User Access Denial Mode

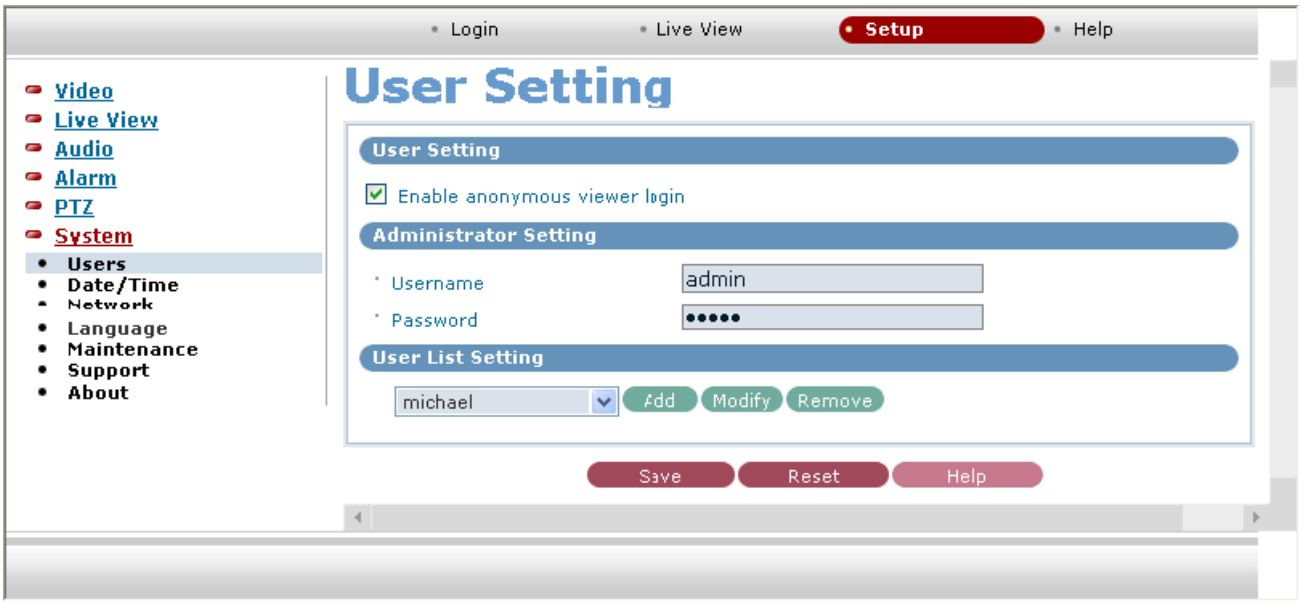
Upon selecting this mode, the Network Video Server operates in two authority groups. And it also requires a log-in process when users are to have an access to the Network Video Server to change a screen monitoring or setting.

1) Administrator Authority Group (admin)

It enables administrators to change the screen monitoring and setting of the Network Video Server. In addition, this authority allows only one user to have an access to the Network Video Server at once.

2) General User Authority Group (user)

It enables users to simply use a screen monitoring function. It disables users to change the Network Video Server setting but allows them to have a multiple access at the same time.



www.algoritmsb.ru

User setting

□ **Enable anonymous viewer login:** Check it when users do not want to use the Network Video Server without the user account.

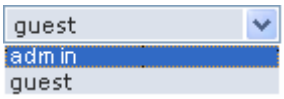
When using the user account, users have to try log-in at every access.

Administrator Setting

User name: Enter a user name for the administrator use.

Password: Enter the password for the administrator use.

User List Setting



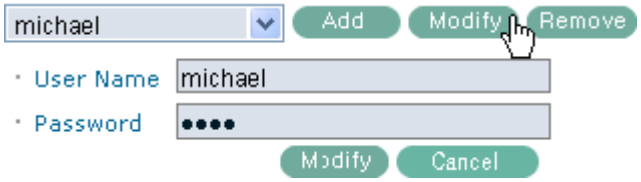
Show a registered user account.

Add User

Enter a user name and password to be added, and register them by pressing the “Add” button.

www.algoritmsb.ru

Modify User Information

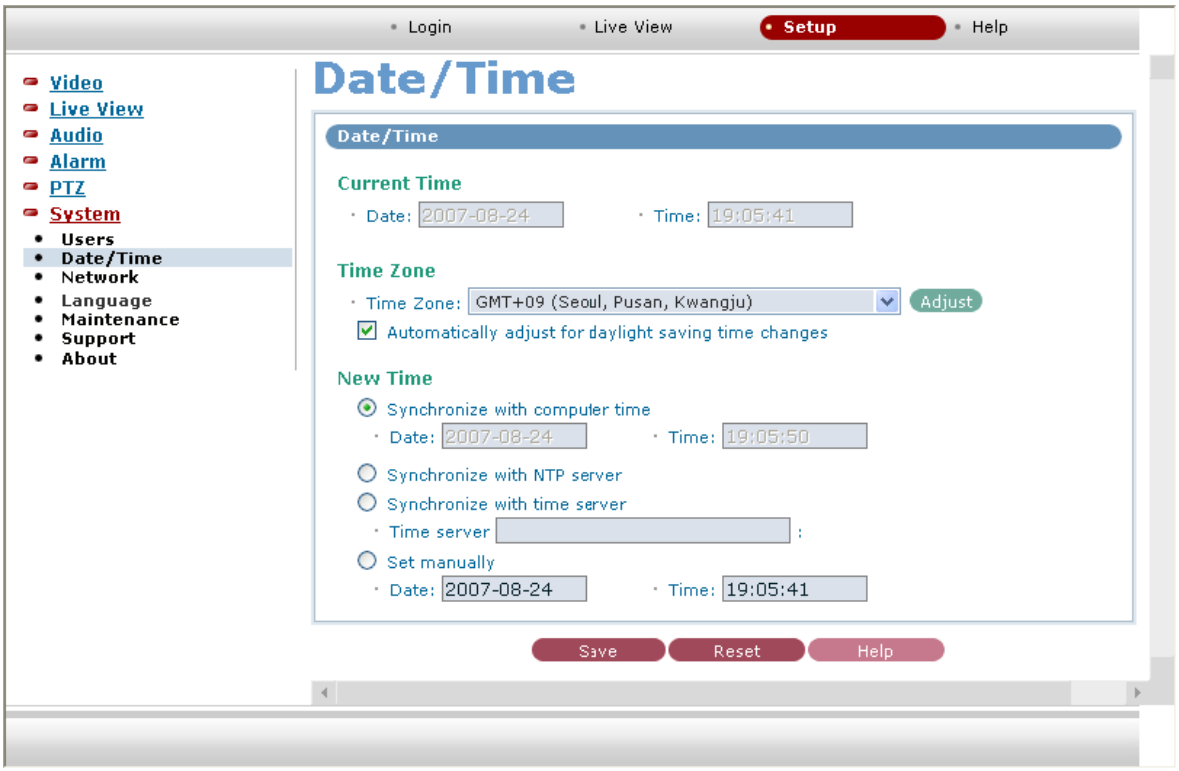


After selecting a user to be corrected and changing its name and password, press the ‘modify’ button to reflect the corrected information.

Delete User Account

After selecting a user to be deleted, delete it by pressing the “Remove” button.

Date & Time Setting



Date & Time

Current Time

Indicate a current time.

•**Date:** Indicate a current day, month, and year.
•**Time:** Indicate a current hour, minute, and second.

www.algoritmsb.ru

Time zone

•**Time Zone:** Select a time zone to be used.
□ Automatically adjust for daylight saving time changes: Check it if users are to apply the Summer Time.

New Time

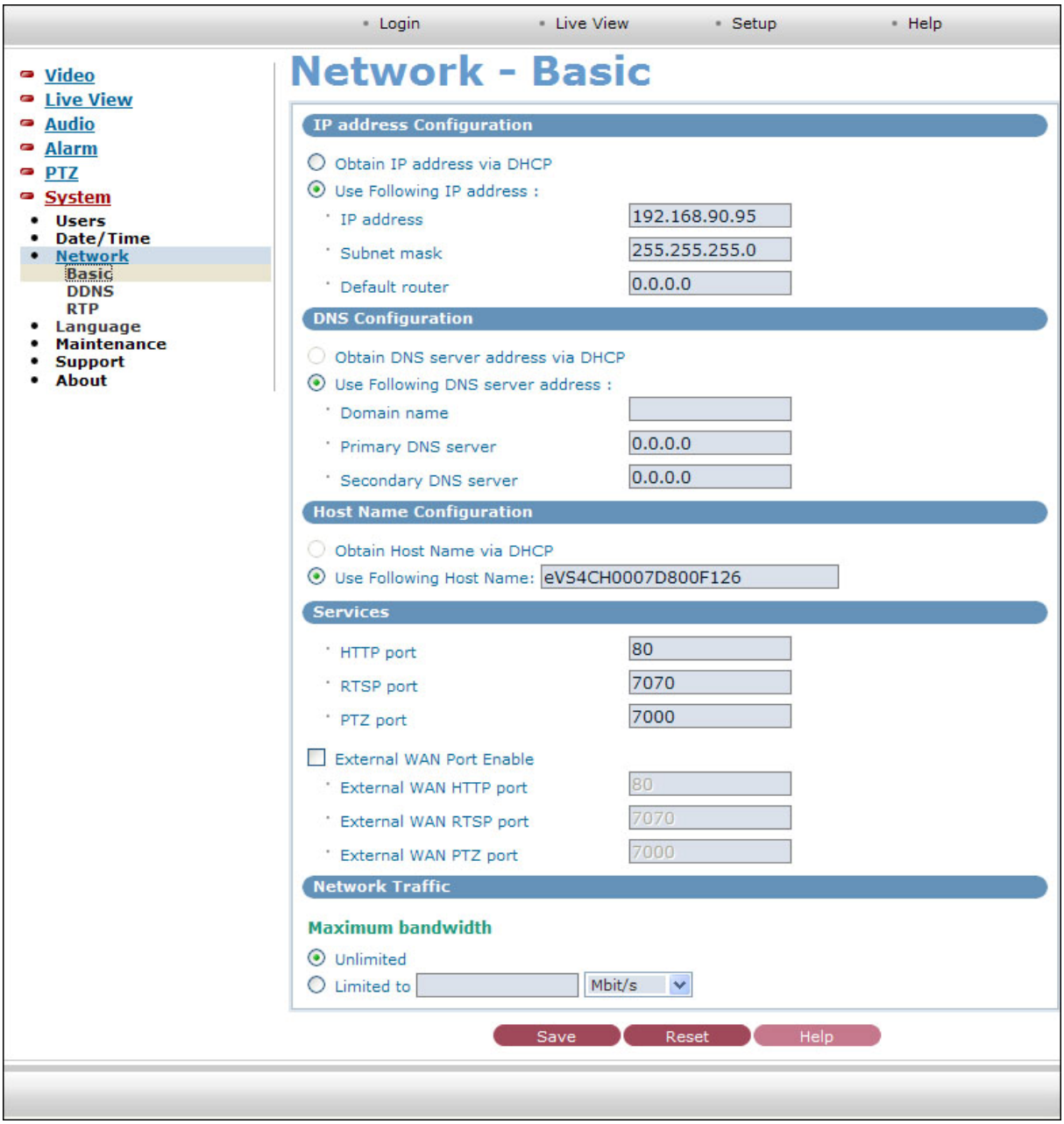
⊙**Synchronize with computer time:** Synchronize the time with that of a current user computer.
⊙**Synchronize with NTP server:** Synchronize the time with that of the NTP server.
Receive the time information from the NTP (RFC2030) server.
⊙**Synchronize with date server:** Enter the Time Server address to be synchronized. Receive the time information from the Time Server that complies with the Time protocol (RFC868).
⊙**Set manually:** Users enter a current time directly.
•***Date:*** Enter a current day, month, and year.
•***Time:*** Enter a current hour, minute, and second.

www.algoritmsb.ru

Network Setting

Setting in regard to network can be executed. Settings for IP, DNS, Host Name, Port, and Network traffic can be established, along with setting for DDNS and RTP.

Basic Setting



Basic settings for IP, DNS, Host Name, and Port are possible, and possibly works as a adjustment role in reducing the overload of network bandwidth in use, by applying Network traffic capability.

IP address Configuration

⊙**Obtain IP address via DHCP:** Obtain an IP through the DHCP automatically.
⊙**Use Following IP address:** Users enter a Network Video Server IP directly.

www.algoritmsb.ru

DNS Configuration

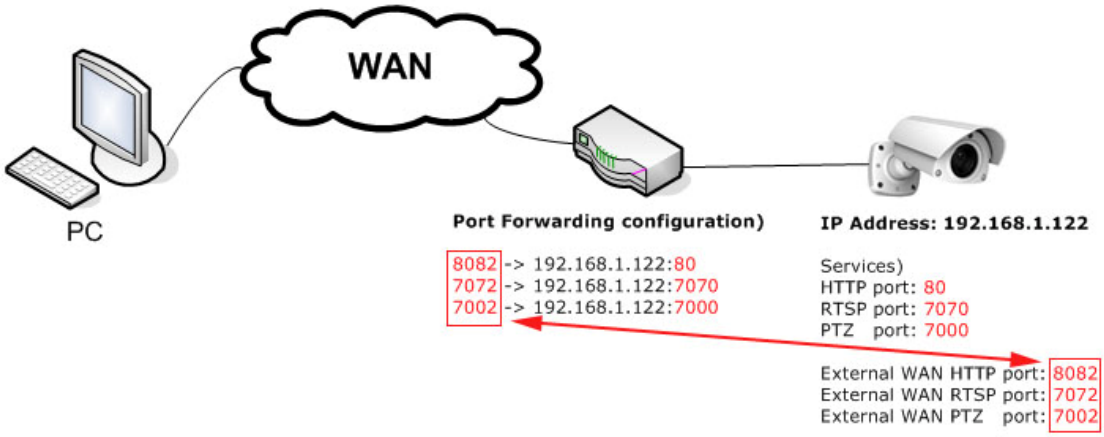
⊙**Obtain DNS server address via DHCP:** Obtain the DNS information through the DHCP.
⊙**Use Following DNS server address:** Users enter the DNS information directly.
•***Domain name:*** Enter a domain name to be used.
•***Primary DNS server:*** Enter the first domain name server.
•***Secondary DNS server:*** Enter the second domain name server address.

Host Name Configuration

⊙**Obtain Host Name via DHCP:** Obtain a Network Video Server name from the DHCP automatically.
⊙**Use Following Host Name:** Users enter a Network Video Server name directly.

Services

•**HTTP port:** Enter a port to receive a service through the HTTP.
Default Port Number is '80'.
•**RTSP port:** Enter a port to receive a service through the RTSP.
Default Port Number is '7070'.
•**PTZ port**: Enter a port to control the Pan/Tilt/Zoom.
Default Port Number is '7000'.
•**External WAN port**: In case of connecting a camera(or video server) from a remote site with Port Forwarding function in IP Sharing device, enter port number that set in 'Port Forwarding'
*Please see the below. Our network cameras use a RTSP port number to forward a video. If you access through the port forwarding configuration, a video cannot be shown when a port number didn't set following a port forwarding number in a Active X on the Web browser. If you enable 'External WAN Port' by clicking a check box, you can match a number like below. Then this function works properly.



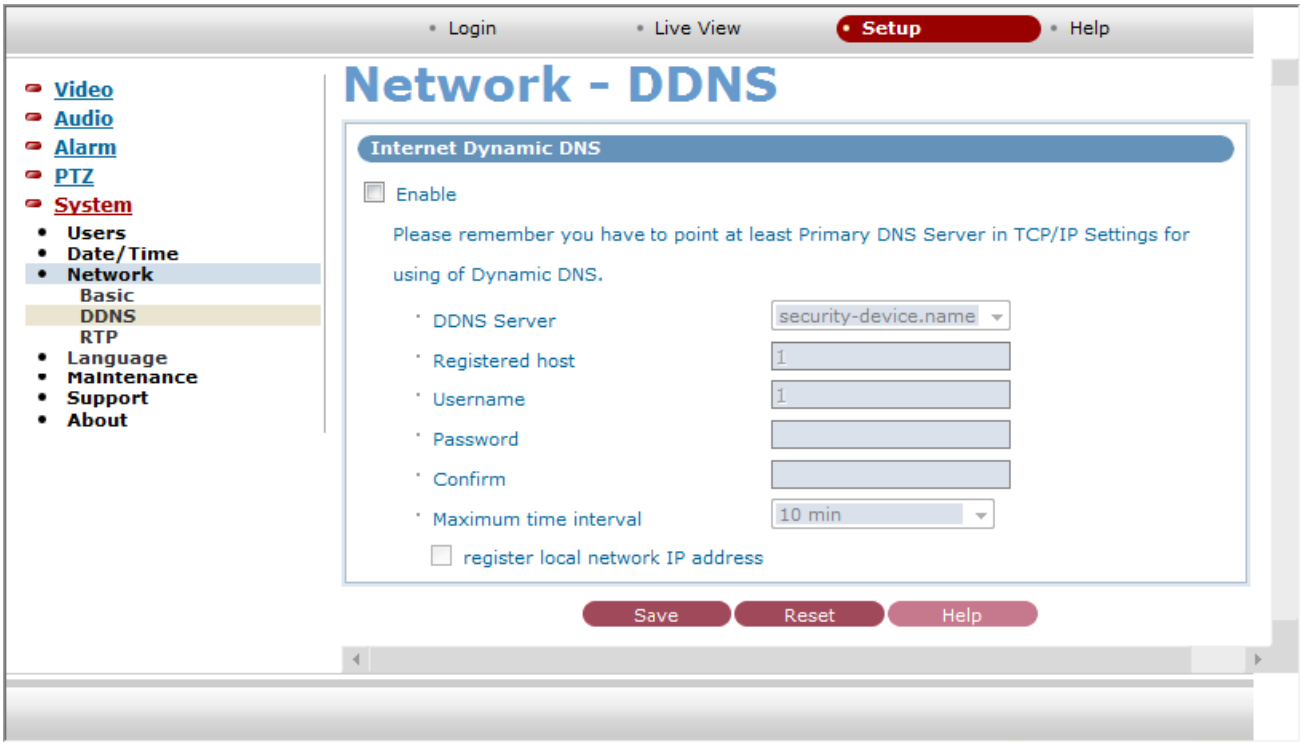
Network traffic - Maximum bandwidth

Set a limitation on user network resources by designating the maximum bandwidth.

•**Unlimited:** Selected if not influenced by a network-related program or equipment without a limitation on the network bandwidth.
•**Limited to:** In case of sharing other network programs or equipment, it is possible to set a limitation on the maximum bandwidth in the unit of Mbit/s or kbit/s.

www.algoritmsb.ru

DDNS Setting

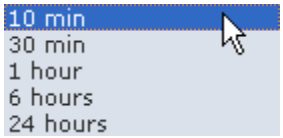


Internet Dynamic DNS

When using the high-speed Internet with the telephone or cable network, users can operate the Network Video Server even on the floating IP environment in which IPs are changed at every access.

Users should receive an account and password by visiting a DDNS service like http://www.dyndns.com/.

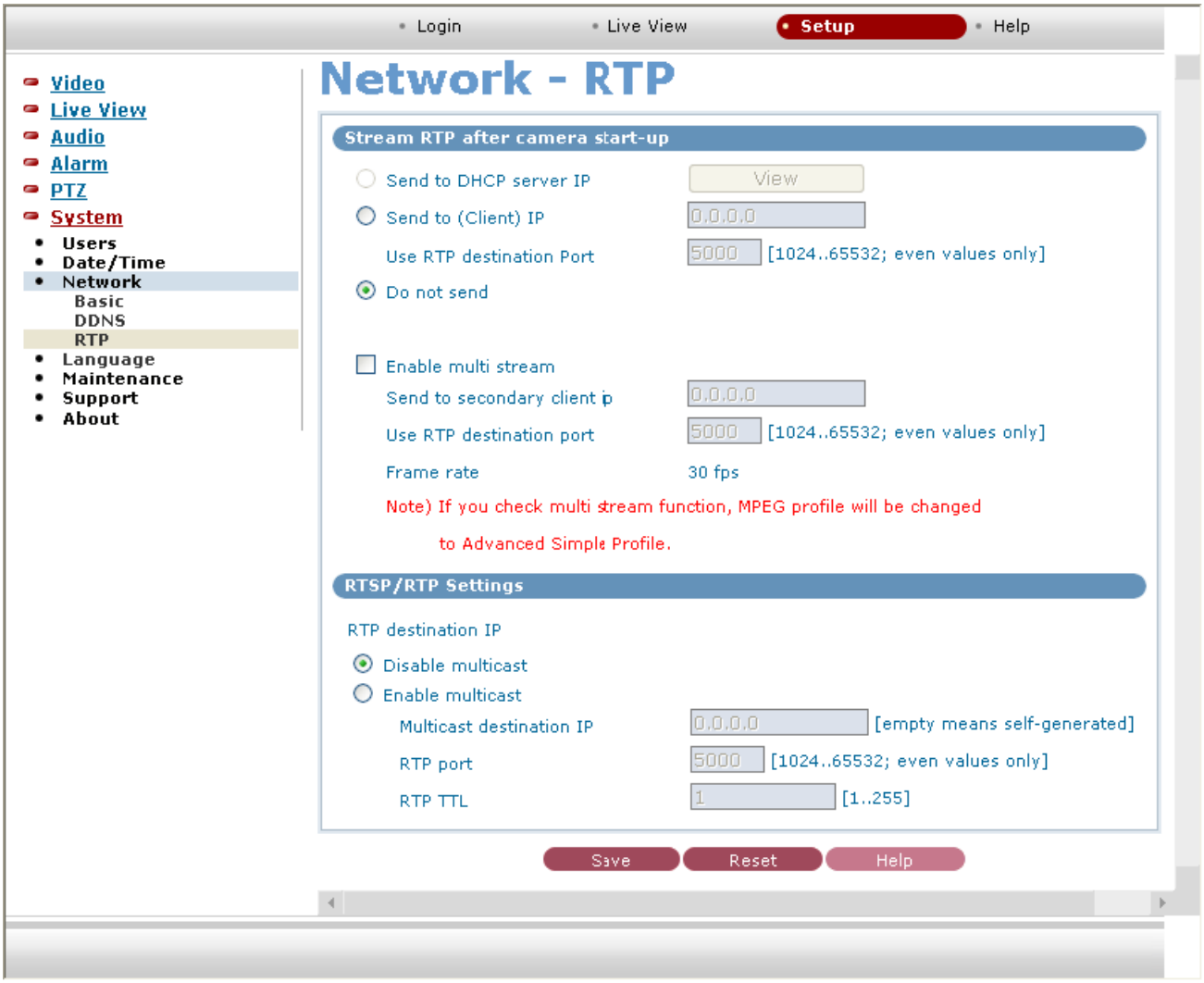
□ **Enable:** Check to get DDNS service to be available.
•**DDNS Server**: Select the DDNS server.
•**Registered host:** Enter an address of the DDNS server.
•**Username:** Enter an ID to access to the DDNS server.
•**Password:** Enter a password to be used for accessing the DDNS server.
•**Confirm:** Enter a password again to confirm it.
•**Maximum time interval:** Set a time interval to synchronize with the DDNS server.



□ **Register local network IP address:** Register a Network Video Server IP address to the DDNS server.

www.algoritmsb.ru

RTP Setting



Have a setting for sending and receiving an audio or video on a real-time basis.

Stream RTP after camera start-up

Enter a destination IP and Port to send video and audio data automatically through the RTP while the Network Camera has booting.

⊙**Send to DHCP server IP:** Send movie data to the DHCP server.
⊙**Send to (Client) IP:** Send movie data to other certain destination addresses.
Use RTP destination Port: Available from 1024 to 65532, and the default is 5000.
⊙**Do not send:** Do not send a stream to RTP client until it is requested from a client
□ **Enable multi stream:** Check it to send data for the purpose of saving them into an external extension storage right after the Network Video Server operates.
-Send to secondary client IP: Enter an IP address of the external extension storage.

www.algoritmsb.ru

-Use RTP destination port: Enter a Port number of the external extension storage.
The Port number to be used is [1024 ~ 65532].
-Frame rate: Indicate a frame rate that is sent to the external extension storage when the multi stream works.

Once the multi stream function is checked, the MPEG profile setting will be changed to the Advanced Simple Profile.

RTSP/RTP settings

This function is for sending Video and Audio to Multicast group.

RTP destination IP

⊙**Disable Multicast:** Do not use the multicast.
⊙**Enable Multicast:** Use the multicast.

Multicast destination IP: Enter an IP between 224.0.0.0 and 239.255.255.255. Although it is empty, an IP will be entered automatically.
RTP port: Enter a value between 1024 and 65532.
RTP TTL: Enter a value between 1 and 255. If a network status is smooth, enter a lower value. On the other hand, if a network status is poor, enter a higher value. When there are many Network Video Servers or users, a higher value may cause a heavy load to the network. For a detailed setting, please consult with a network manager.

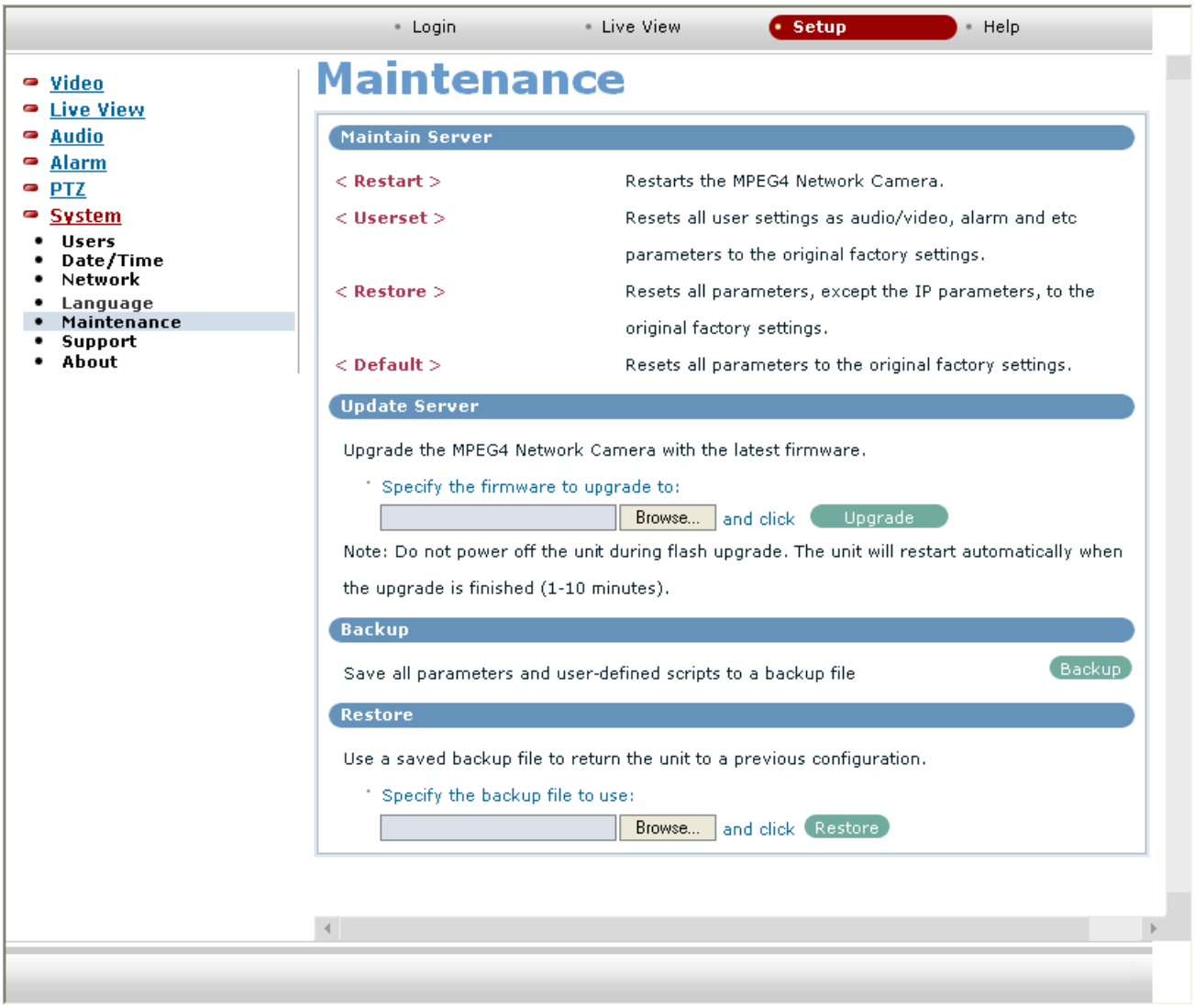
Language

Language Setting

It will be able to select a user language. The type of language it will be able to select is the English, the French, the German, the Spanish and the Italian.

www.algoritmsb.ru

Maintenance



Maintain Server

< Restart > Restart the Network Video Server.
< Userset > Initialize a user setting value of audio/video, alarm, etc.
< Restore > Restore all the values except a network-related setting to a basic value.
< Default > Restore all the setting values to a basic value.

Upgrade Server

Carry out the upgrade by importing an upgrade file and pressing the ‘Upgrade’ button. During the upgrade, do not turn off the power of the Video Server. And try an access again after waiting five minutes or longer.

Backup

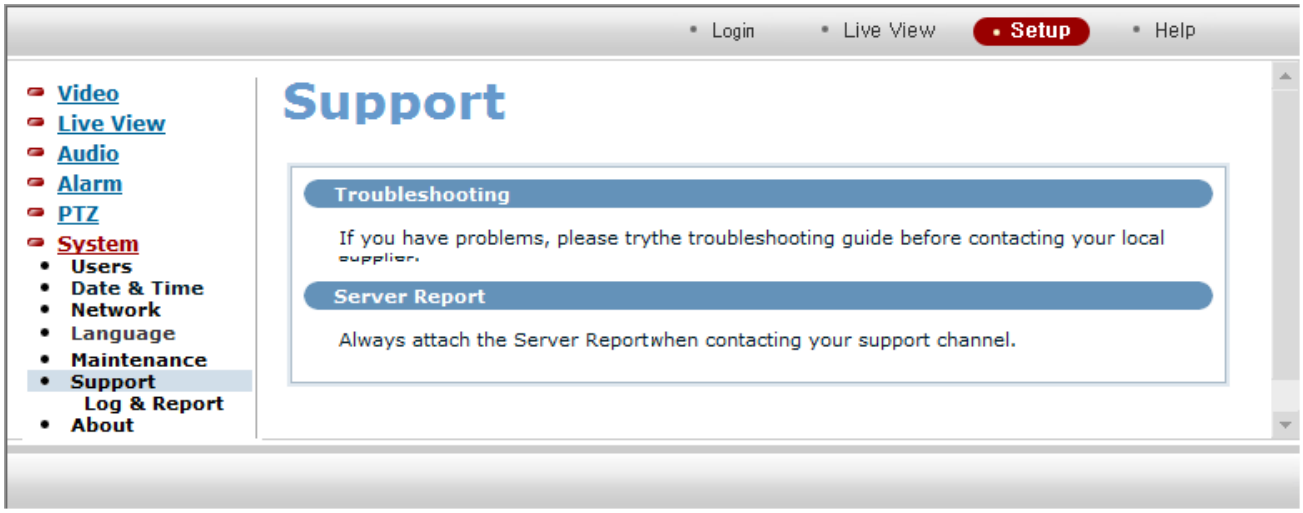
Save a setting value that users enter to the Network Video Server, to a user PC.

www.algoritmsb.ru

Restore

Import and apply a setting value saved to a user PC.

Program Support Information



Troubleshooting

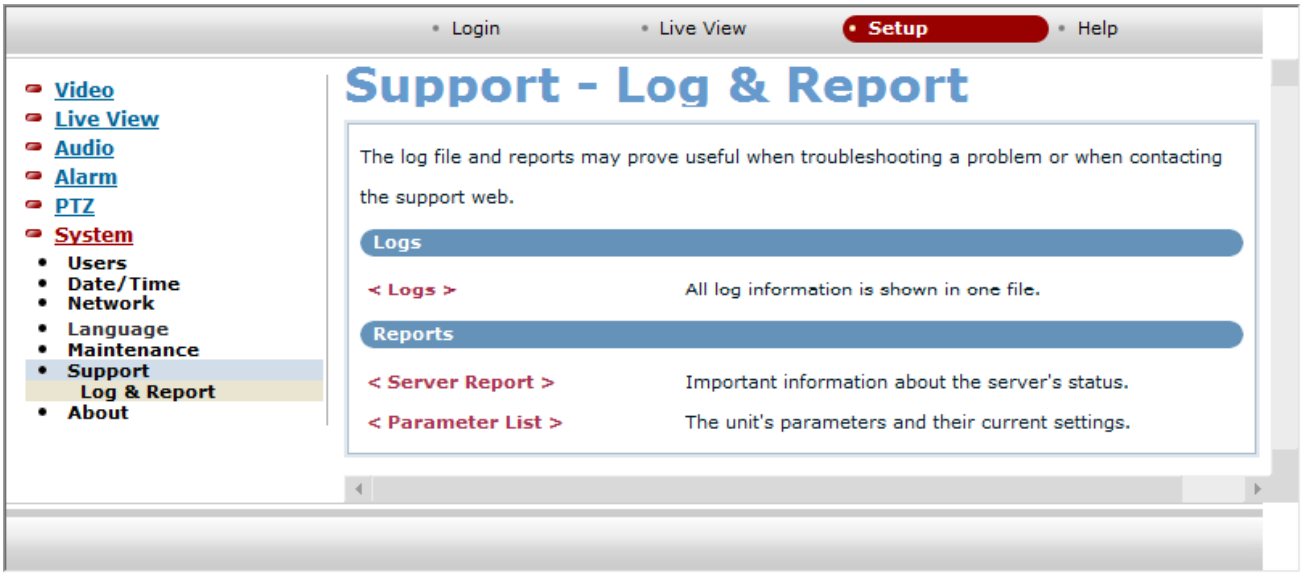
When problems occur during operation, please consult with an installer.

Server Report

If its support is requested, please attach a server report.

Log & Report

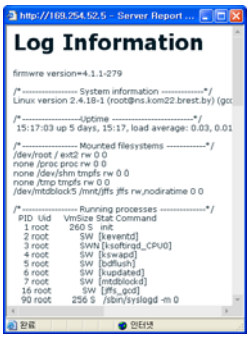
Users can check the system log and server report.



www.algoritmsb.ru

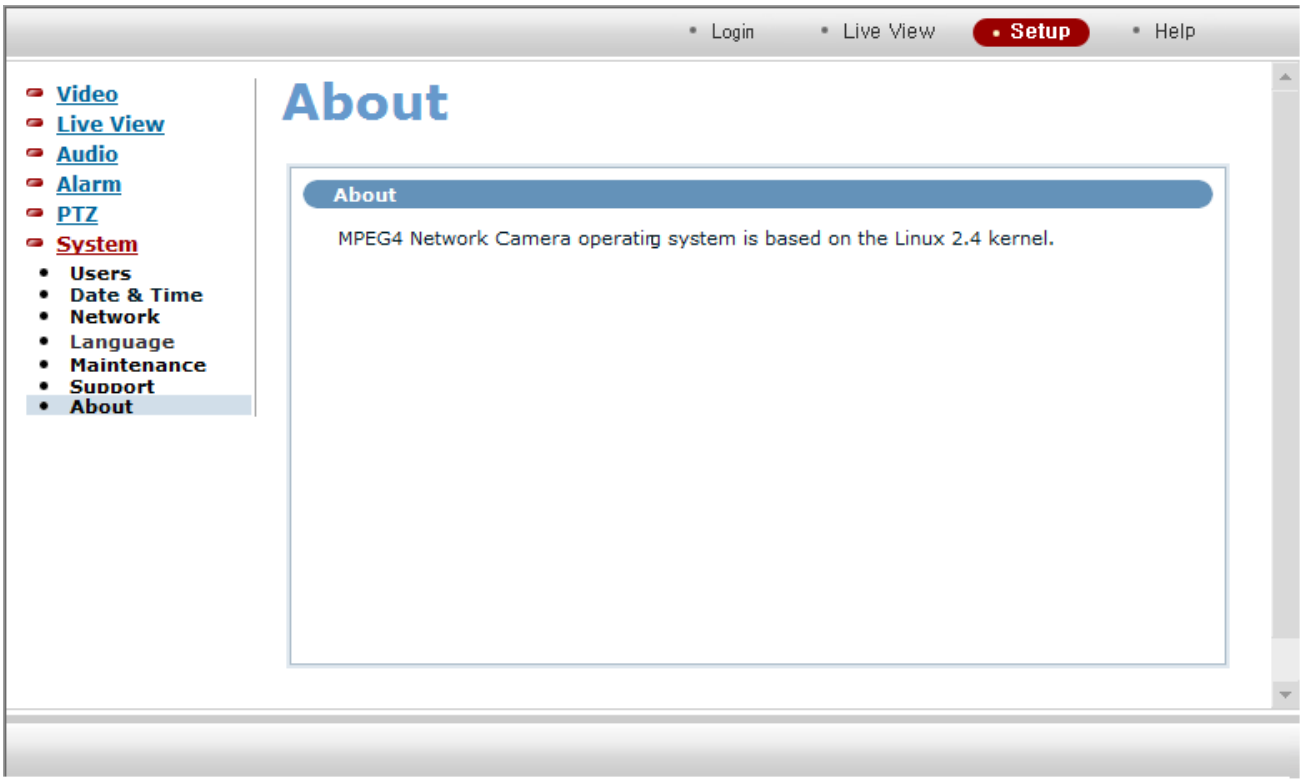
Logs *Reports*

Logs Server Reports Parameter List



Users can check the log for Network Video Server operation by clicking the < Logs >.	Users can check a server report by clicking the < Server Report >.	Users can check a parameter by clicking the < Parameter List >.

Program Information

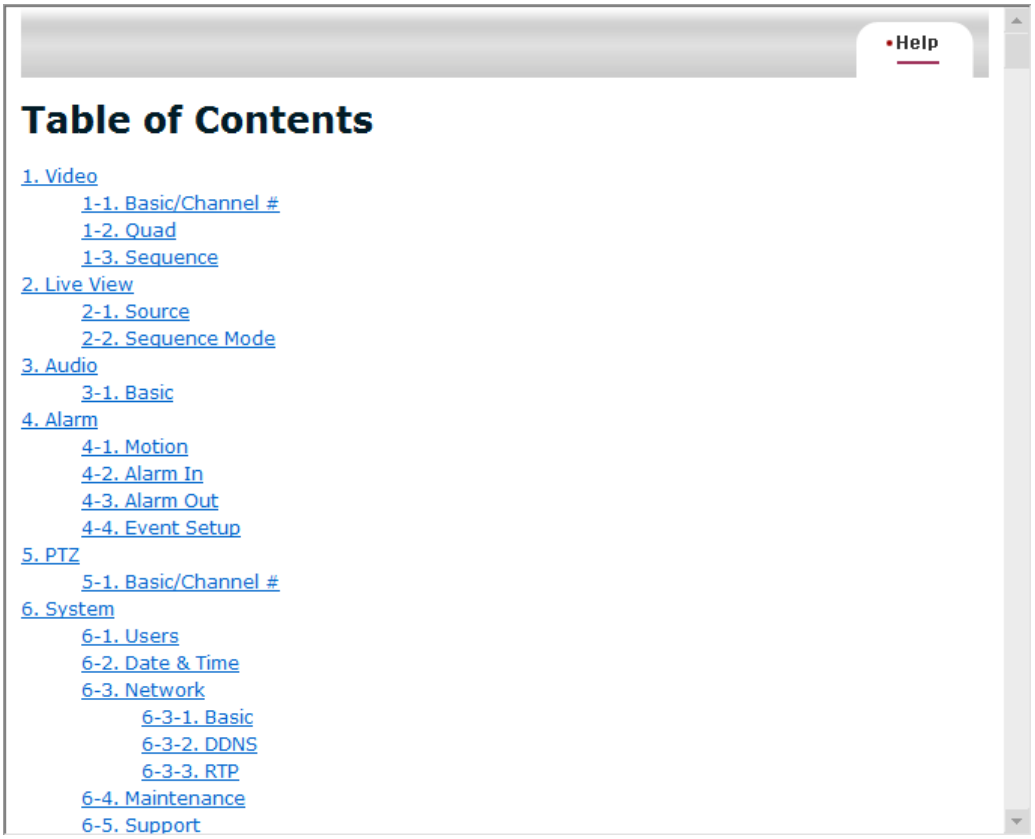


The following website will provide the support information for the Network Video Server system information and operation

www.algoritmsb.ru

3.4 Help

The Help information window will be provided as a popup window so that users can open and read it without a need for log-in. It will offer a description on setting and Help page by which users can manipulate the Video Server without a reference to the manual.



www.algoritmsb.ru

4. Appendix

4.1 Troubleshooting

If problems occur, verify the installation of the Network Video Server 1CH with the instructions in this manual and with other operating equipment. Isolate the problem to the specific piece of equipment in the system and refer to the equipment manual for further information.

PROBLEM	AREA TO CHECK
No video	Verify that power is connected to all pieces of equipment in the system. Verify that the power switches are in the ON position. Check the video connections. (see page 6)
Poor video quality.	Check that the BNC connectors are inserted properly. Check the voltage level of the Network Video Server 1CH. Cable for video is shielded.
Camera number does not match the number on PC Program or Web browser.	Check the camera ID of the 1CH Video Server. Check PTZ setting on the PC Program and Web browser.
Frame rate decrease.	Change current value more lower resolution, compression rate and frame rate.
A connection is cut-off at short intervals.	Check network traffic and contact with network administrator.

4.2 Preventive Maintenance

Preventive maintenance allows detection and correction of minor that faults before they become serious and cause equipment failure.

Every three-month, perform the following maintenance.

1. Inspect all connection cables for deterioration or other damage.
2. Clean components with a clean damp cloth.
3. Verify that all the mounting hardware is secure.

www.algoritmsb.ru

4.3 Product Specifications

Video

Resolution	D1 (NTSC : 720 X 480, PAL : 720 X 576) VGA (NTSC : 640 X 480, PAL : 640 X 480) CIF (NTSC : 352 X 240, PAL : 352 X 288) QCIF (NTSC : 160 X 112, PAL : 176 X 144)
Frame rate	Max 30 fps @ D1 resolution
Video compression	MPEG4 SP and ASP
Compression option	Variable bit rate / constant bit rate
Input	BNC(4ea)
Output	RJ-45(1ea)

Audio

Codec	PCM 16/8-bit, Full duplex
Mic in	External mic in (ø 3.5 mm Jack 1ea)
Speaker out	External speaker out (ø 3.5 mm Jack 1ea)

Alarm

Alarm in	2 inputs
Alarm out	1 output (relay)
Motion detection	Adjustable with size, position, sensitivity and time
Alarm message transmission	e-mail, FTP, preset

Network

Protocols	UDP / TCP/IP / DHCP / HTTP / RTP / RTSP / SMTP / DDNS
Interface	Ethernet 10Base-T/100Base-TX
Connector	RJ-45, UTP Cable
RS-485	1ea(PTZ control)

System Requirements for Web Browser

Operation System	Microsoft Windows 2000/XP
CPU	Intel Pentium IV 2.0GHz or higher
Memory	512MB or more
VGA	1024 X 768, 32bit color DirectX 9.0c or higher
HDD	80GB or higher
Web browser	Microsoft Internet Explorer version 6.0

Power

Power supply	5VDC, 5.0W

Time

Real-Time Clock (RTC)	0.01 sec / 0.1 sec / 1 sec, minutes, hours, day, date, month, year and century

Other

Operating Temperature	0˚C ~ +45˚C
Size	165W * 30H * 97D (mm)
Weight	310g

www.algoritmsb.ru

INSTRUCTION MANUAL

4CH Video Server

PRINTED IN KOREA

E

www.algoritmsb.ru