

The LINKSYS logo is positioned in the top right corner of the page. It consists of the word "LINKSYS" in a bold, white, sans-serif font, followed by a small trademark symbol (TM). The background of the entire page is a solid blue color with decorative white wavy lines on the left and bottom edges.

User Guide

Linksys SMB-Series Cameras

LCAD03FLN

LCAD03VLNOD

LCAB03VLNOD

LCAM0336OD

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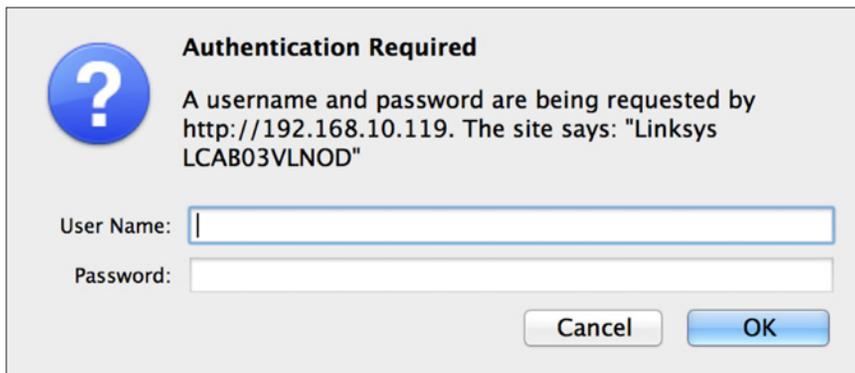
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How to Access Web Configuration

To access the camera's live view, open a Web browser and enter the IP address of the camera. The login window will pop up requesting a user name and password. The default user name and password are "admin" and "admin." For accounts other than the administrator's account, remember the password for future convenience.

NOTE:

If you don't have a DHCP server in the network, the default Camera IP address is 192.168.1.254.



The image shows a dialog box titled "Authentication Required" with a question mark icon. The text inside reads: "A username and password are being requested by http://192.168.10.119. The site says: 'Linksys LCAB03VLNOD'". Below the text are two input fields: "User Name:" and "Password:". At the bottom right are "Cancel" and "OK" buttons.

Authentication Required

A username and password are being requested by
http://192.168.10.119. The site says: "Linksys
LCAB03VLNOD"

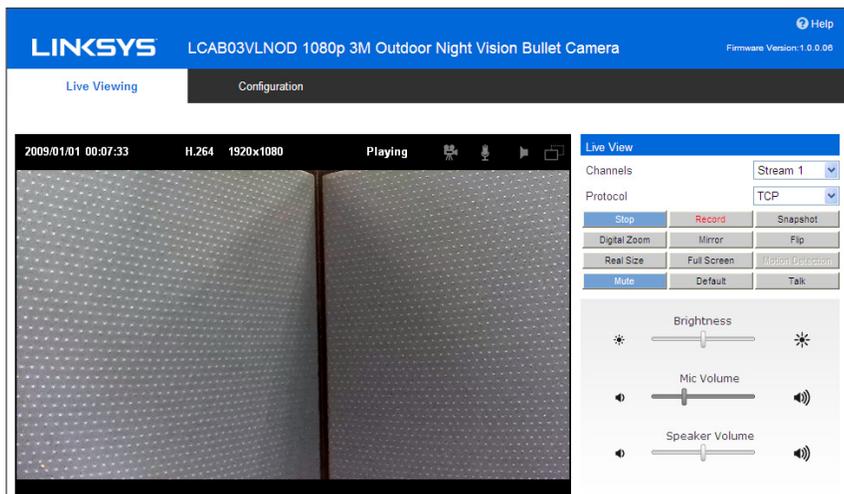
User Name:

Password:

Cancel OK

Live Viewing

Live Viewing is the default page that opens when you access the camera. Live video is displayed directly in the browser window.



Channels

The network camera offers simultaneous dual stream for optimized quality and bandwidth. Go to Configuration → Camera/Video/Audio → Video to configure the codec compression and video resolution or refer to the video configuration page.

Protocol

HTTP - This unicast method can be used to traverse firewalls. Firewalls are commonly configured to allow the HTTP protocol, thus allowing RTP to be tunneled.

TCP - This protocol guarantees the complete delivery of streaming data and provides better video quality. The downside of using this protocol is that the quality of its real-time effect is less than that of the UDP protocol.

UDP - This protocol allows for more real-time audio and video streams. However, network packets may be lost due to network burst traffic and images may be broken. The UDP connection time-sensitive responses are more important than video quality.

NOTE:

Camera Control Panel is only available when you are using Windows Internet Explorer.

Camera Control Panel - Icons

-  /  **Recording** on/off - displays the status of the recording video.
-  /  **MIC** on/off - displays the status of the microphone volume.
-  /  **Speaker** on/off - displays the status of the speaker.
-  /  **MD** on/off - displays the status of Motion Detection.

Camera Control Panel - Buttons

Play or **Stop** - play or stop the video.

Recording - record video to a computer.

Snapshot - capture and save still images.

Digital Zoom - enable the zoom operation.

Mirror - horizontally reflect the live video display.

Flip - vertically reflect the live video display.

Real Size - toggle between real size and normal mode.

Full Screen - enable full screen mode; press the Esc key to return to normal mode.

Motion Detection - enable the motion detection alert function.

Mute - turn off the sound.

Default - restore default settings.

Talk - transmit audio through the camera using the computer microphone.

Brightness - Drag the slider bar to adjust the image brightness level.

Mic Volume - Drag the slider bar to adjust the volume of the camera microphone.

Speaker Volume - Drag the slider bar to adjust the camera speaker volume.

Configuration

Click the Configuration tab on the main page to change the camera settings.

NOTE:

Only administrators can access the Configuration tab.

Camera Settings

Camera Settings

Profile - Up to five profiles can be created for different lighting environments. Day and night are default profiles. You can create up to three additional profiles. Select a profile from the drop-down menu or select different icons to change profile settings.

Brightness - Drag the bar to adjust the image brightness level from -5 to +5.

Contrast - Drag the bar to adjust the image contrast level from -5 to +5.

Sharpness - Drag the bar to adjust the image sharpness level from -5 to +5.

Saturation - Drag the bar to adjust the image saturation level from -5 to +5.

Exposure Control

Auto - The camera will automatically control exposure.

Manual - Control exposure yourself.

Advanced AE Setting

Flicker-Free - Eliminates flicker.

Environment - Select outdoor or indoor mode.

AE Speed - Automatically control exposure speed.

De-Noise - Set on range from 1 to 3, with 3 giving the best video resolution. Set to auto to have camera automatically filter the frame-to-frame defects.

Mirror and Flip

Mirror - Enable to horizontally reflect the display of the live video.

Flip - Enable to vertically reflect the display of the live video.

IR Cut (Only available with models with a IR-Cut) - Deactivate or activate the IR cut filter.

Color Effect - Select color or black-and-white video streams.

White Balance - Adjusts for different types of lighting to capture accurate colors.

WDR (Wide Dynamic Range) - In a scene with extremely bright and dark areas or in backlit situations where a person is in front of a bright window, a typical camera would produce an image where objects in the dark areas would hardly be visible. Wide dynamic range solves this by applying techniques such as using different exposures for different objects in a scene to enable objects in both bright and dark areas to be visible.

Profile Management

You can schedule profiles to change at specific times, or when lighting conditions change.

Always - Use a single profile selected from the drop-down menu.

Day & Night - Schedule separate profiles for day and night. Select profiles from the drop-down menus.

Schedule - Schedule specific time periods for different profiles.

Digital Inputs (Only available with models with a DI/DO) - Profiles will be managed by an external sensor. Select profiles from the drop down menu. Profiles will change according to different trigger voltage levels.

Video Settings

The network camera offers two separate streams for different viewing options.

Wide Angle View - Captures a greater view angle.

Stream

Video Codec - Three choices of video codec standards for real-time viewing: H.264, MPEG-4 and MJPEG.

Video Resolution - Choose the best resolution recording settings.

Frame Rate - Set a higher frame rate for smoother video quality.

Bitrate Mode - Select Variable Bitrate to manually configure the bitrate. Select Constant Mode to have the bitrate set by the video codec. Set the bitrate higher for better quality

Quality - Video quality can be set in the range from Level 1 to Level 6, with Level 6 producing the best image quality.

Recording Stream - Select the stream you like to record when a scheduled event occurs.

Video Overlay

VIDEO OVERLAY

Timestamp Position Left-Top ▼

Format ▼

Text

Position Left-Top ▼

Text

Timestamp - To display the date and time on the screen during live view, check the Position check box to enable the timestamp function and select the display position from the drop-down menu.

Text - To make a note about the camera, check the Position box to Enable and select the display position from the drop-down menu. Enter a description in the text box.

NOTE:

The video overlay only applies to Stream 1.

RTSP Server

RTSP SERVER

RTSP Server

Authentication ▼

RTSP Mode ▼

To utilize RTSP authentication, you must first set a password for the camera. RTSP (Real-Time Streaming Protocol) controls the delivery of streaming media. By default the port number is 554.

Authentication - Depending on the network security requirements, the camera provides two types of authentication for streaming via RTSP: NONE and DIGEST.

If DIGEST authentication is selected, user credentials are encrypted using MD5 algorithm, thus providing better protection against unauthorized access.

RTCP Mode

Without SR - RTCP without SR (Sender Report) is the default option. Audio and video received from the network camera are played immediately and independent of each other.

RTCP with SR - RTCP with SR allows synchronization between video and audio during live viewing. Choose this option if audio and video become unsynchronized.

Audio Settings

The administrator can set up two separate streams for different viewing devices. The administrator can enable or disable the audio function on either stream. If audio is enabled, select the Audio codec from the drop-down menu.

Audio Settings

BASIC SETTINGS

Stream 1 Audio Codec ▼

Stream 2 Audio Codec ▼

Stream 3 Audio Codec ▼

ADVANCED SETTINGS

Camera Speaker Volume ▼

Echo Cancellation

Advanced Settings

Camera Speaker - If the speaker is enabled, select the volume from the drop-down menu.

Echo Cancellation Enabled - Enable to avoid an echo.

Privacy Mask Control

Privacy Mask - Remotely disables live view and recording. Configure the privacy windows for up to three individual windows or for the full screen.

PRIVACY MASK

Full Screen	<input type="checkbox"/>
Enable Window 1	<input type="checkbox"/>
Enable Window 2	<input type="checkbox"/>
Enable Window 3	<input type="checkbox"/>

Preset Point

NOTE:

(Only available with models with a RS485 interface) – Preset Point only works if a pan-tilt scanner is connected to the camera's RS485 interface. This feature can ONLY be displayed correctly on Internet Explorer.

Preset Point Settings

Enter a position name

Set as Home

Preset Positions

Return to home when idel min

A preset position is a pre-defined camera view that can be used to quickly move the camera view to a specific location.

How to create a preset position

1. Use the Pan, Tilt and Zoom (PTZ) controls to steer the camera view to the required position.
2. Enter a position name and click Add.
3. The camera position and focus settings will be saved as a preset position.

NOTE:

A total of sixteen preset positions can be set.

Preset positions can be accessed at any time by selecting the position's name from the Preset Positions drop-down list. Set a Home position, which is readily accessible by clicking the Home in the PTZ panel.

NOTE:

The name of the preset point set as Home will have (H) added; for example, Gate (H).

The camera can be configured to return to the Home position when the camera has been idle for a specified length of time. Select the desired length of time (in minutes) from the drop-down menu and click Apply. Setting the time to zero prevents the camera from automatically returning to the Home position.

Patrol Setting

NOTE:

(Only available with models with a RS485 interface) – Patrol Setting only works if a pan-tilt scanner is connected to the camera's RS485 interface. This feature can ONLY be displayed correctly on Internet Explorer.

Patrol Setting

Description	Running
	<input type="button" value="Add"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Start/Stop"/>

The camera can be set to patrol a group of preset points. For each patrol group, the user can configure the preset point order, movement speed, and viewing duration.

How to create a patrol group

1. Click **Add** to create a new patrol group.
2. Enter description for this new patrol group.
3. Use the right arrow buttons to add preset positions into the group.
4. Use up and down arrow buttons to change the order of preset positions in the group.
5. You can specify movement speed, viewing duration for each preset position in the group.
6. Click **Apply**.
7. To start a patrol group, click **Start** in the patrol group list.

NOTE:

A total of sixteen preset points can be assigned to a patrol group, and a total of four patrol groups can be assigned to a network camera.

Pan-Tilt Scanner

NOTE:

(Only available with models with a RS485 interface) – Pan-Tilt Scanner only works if it is connected to the camera's RS485 interface. This feature can ONLY be displayed correctly on Internet Explorer.

Pan-Tilt Scanner

SETTINGS

Enable

Baud Rate

Protocol

Camera ID

Enabled - Click check box.

Baud Rate/Protocol - Baud rate and protocol values of the video server must be set to match the baud rate and protocol values of the scanner. See the scanner user manual for the baud rate and protocol configuration details

Camera ID - Enter a camera or scanner ID.

Network Settings

There are several ways to setup the camera over the Internet: (1) obtain an available dynamic IP address assigned by a DHCP server, (2) use a static IP, or use PPPoE (Point-to-point over Ethernet). Select the desired setup mode from the IP settings drop-down menu.

Network Settings

ETHERNET SETTINGS

Mode

1. **DHCP** - The camera will automatically obtain an available dynamic IP address from the DHCP server each time it connects to the LAN.
2. **Static IP** - Select this option to manually assign a static IP address to the camera. Enter the static IP address, Subnet Mask, Default Gateway, Primary and Secondary DNS provided by the ISP.
3. **PPPoE** (Point-to-point over Ethernet) - Use this mode if connecting to the Internet through a DSL Line. To utilize this feature, it requires an account provided by an Internet Service Provider. Enter the user name and password provided by the ISP.

Discovery

Discovery

SETTINGS

Device Name

UPnP Discovery

Bonjour Discovery

UPnP Discovery - Universal Plug and Play (UPnP) simplifies the process of adding a camera to a local area network. Once connected to a LAN, the camera will automatically appear on the intranet.

Bonjour Discovery - Click the check box if you would like the camera to be discovered by Bonjour.

DDNS (DYNAMIC DOMAIN NAME SERVICE)

DDNS links a domain name to an IP address, allowing users to easily access their camera even with a changing Internet IP address. Before utilizing this function, please apply an account from one of these DDNS providers - DynDNS or TZO.

DDNS
DYNDNS
Enable
Username
Password
Hostname
TZO
Enable
Email Address
TZO Password
Domain Name

DynDNS - Obtain an account from the DynDNS website (<http://dyn.com>). When an account has been created, enter the username, password and hostname.

TZO - Obtain an account from the TZO website (<http://tzodns.com>). When an account has been created, enter the email address, password and domain name.

HTTP/HTTPS

HTTP/HTTPS
HTTP
Enable
Port
HTTPS
Enable
Port

HTTP (HyperText Transfer Protocol) - This protocol allows for TCP quality without having to open specific ports for streaming. Users inside a firewall can utilize this protocol to allow streaming data through.

HTTPS (Hypertext Transfer Protocol over SSL) - This protocol allows authentication and encrypted communication over SSL (Secure Socket Layer). It helps protect streaming data transmission over the Internet on a higher security level than HTTP.

Multicast

Multicast sends a video stream to the multicast group address and allows multiple clients to acquire the stream at the same time by requesting a copy from the multicast group address. This effectively saves Internet bandwidth. The RTSP (Real-Time Streaming Protocol) controls the delivery of streaming media.

Multicast

SETTINGS

Stream 1

Enable

Multicast Address

Port

Stream 2

Enable

Multicast Address

Port

Stream 3

Enable

Multicast Address

Port

How to enable the multicast stream

1. Click *Enable*.
2. The default value for multicast address and port are 234.1.2.3 and 10000.
3. Use a different port number for different streams. It is recommended to use the default values.

NOTE:

Using the IP address of the network camera enables access to the video.

Example: rtsp://192.168.1.1/channel1

QoS

Differentiated Services Code Point (DSCP) is a field in an IP packet that enables different levels of service to be assigned to network traffic.

QoS

QOS DSCP SETTINGS

Video/Audio DSCP

Video/Audio DSCP - Select a DSCP value.

Event Settings

Event Settings

EVENT LIST

Enable	Name	Event Type	Action
<input type="checkbox"/>			

NOTIFICATION SETTINGS

Enable

Name

Scheduled Event Always Schedule Recurrence Pattern

Event

Action

Save Stream to

Send Snapshot to

Send HTTP Notification

Send to Email

Send UDP Notification to IP address

Port

Send Multicast Notification to IP address

Port

How to create an event

1. Click **Add**.
2. Click *Enable*.
3. Enter an event name.
4. Set an event schedule to define when the event is activated.
5. Select an event type that will be used to trigger the event.

NOTE:

The Motion Detection, Digital Input and Audio Detection settings can be configured in camera Web configuration.

6. Select an action for the camera to perform when an event occurs.
7. Click **Apply**. The new event will appear on the event list above.

How to configure motion detection

1. Select <Window1>, <Window2>, or <Window3> to adjust the motion detection window.
2. Use the mouse to resize or move the motion detection window.
3. Adjust the sensitivity level. Lower sensitivity levels will result in more activity needed to trigger an event.
4. Adjust the threshold to change the threshold level. The higher the threshold, the larger objects need to be to trigger an event.
5. The chart below the Live View window indicates the activity level of the Motion Detection window. When motion is detected by the camera and exceeds the defined threshold, a red bar will appear.
6. Click **Apply**.

Digital Input

This feature allows the camera to receive input from an external device through DI/DO socket.

NOTE:

This feature is only available with models with a DI/DO interface.

Digital Input

SETTINGS

Digital Input Low (Current status : High)

Digital Input - Set a triggering voltage level. This option should be selected according to the capability of your external device.

Audio Detection

Schedule an event to be triggered if there is a change in the sound level of a monitored area. Audio detection can be used to measure change in the ambient voice. Select the sensitivity from the drop-down menu.

Audio Detection

SETTINGS

Sensitivity 30 %

Current Detected Value: 10 %

Sensitivity - Adjust the sensitivity of the sound level from 10 - 100%. The default sensitivity is 50%.

Current Detected Value - Display the current sound level.

FTP Settings

File Transfer Protocol (FTP) is used as an application component to automatically transfer files for program internal functions.

The screenshot shows the 'FTP Settings' configuration window. It has a title bar 'FTP Settings' and a sub-section 'SETTINGS'. The settings include: 'Server Selection' (dropdown menu set to 'Primary FTP Server'), 'FTP Address' (dropdown menu set to 'IP Address' followed by four input boxes containing '0'), 'FTP Port' (input box containing '21'), 'Account Name' (empty input box), 'Account Password' (empty input box), and 'FTP Path' (empty input box). At the bottom right, there are three buttons: 'Test', 'Apply', and 'Cancel'.

How to configure FTP settings

1. Select Primary FTP Server from the Server Selection drop down menu to send media files to an FTP server when an event is triggered.
2. Enter the FTP IP address or hostname.
3. By default, the FTP port server is set to 21.
4. Enter the account name, password and FTP Path.
5. Click **Apply**.

Email Settings

The screenshot shows the 'Email Settings' configuration window. It has a title bar 'Email Settings' and a sub-section 'SETTINGS'. The settings include: 'Server Selection' (dropdown menu set to 'Primary Email Server'), 'SMTP Server' (empty input box), 'SMTP Port' (input box containing '25'), 'Authentication' (dropdown menu set to 'LOGIN'), 'Email Account' (empty input box), and 'Email Password' (empty input box). At the bottom right, there are three buttons: 'Test', 'Apply', and 'Cancel'.

How to configure email settings

1. Select Primary Email Server from the Server Selection drop down menu to send media files to an email server when an event is triggered.
2. SMTP Server - Enter the server host name of the email server.
3. SMTP Port - Enter the port number of the email server; by default, the SMTP port is set to 25.
4. Authentication - Select the authentication type from the drop-down menu.
5. Email Account - Enter the user name of the email account if necessary.
6. Email Password - Enter the password of the email account if necessary.
7. Click **Apply**.

Samba Settings

Select this option to send media files via a network neighborhood when an event is triggered.

Samba Settings

SETTINGS

Server Address 0 . 0 . 0 . 0

Username

Password

Workgroup

Shared Folder

How to configure Samba settings

1. Enter the IP address of the Samba server.
2. Enter the username of the Samba server.
3. Enter the password of the Samba server.
4. Enter the workgroup of the Samba server.
5. Enter the shared folder of the Samba server.
6. Click **Apply**.

HTTP Settings

This section allows you to configure your HTTP notification when an event is triggered.

HTTP Settings

SETTINGS

URL

Message

Username

Password

URL - Specify the URL to send a HTTP notification. The URL is normally written as `http://IP_address/ notification.cgi?parameter`.

Example #1

URL: `http://192.168.1.30/xxxx.cgi`

Message: `name1=value1&name2=vlaue2`

Result: `http://192.168.1.1/xxxx.cgi? name1=value1&name2=vlaue2`

Example #2

`http://192.168.1.30/notification.cgi?event=MD&camera=LCAM0336OD`

Message - Enter the message notification that will be sent when an event is triggered.

Username - Please enter username if it is required.

Password - Please enter password if it is required.

Digital Output (DO)

The DO socket allows the network camera to send output to an external device.

NOTE:

This feature is only available with models that have a DI/DO interface.

Digital Output

SETTINGS

Digital Output Grounded Duration sec (Current status : High)

Apply
Cancel

Digital Output - Select the option according to the specification of your external device.

Duration - While executing the DO notification action, the network camera drives voltage on the connected DO wire to the triggering voltage level for X number of seconds. The connected external device will then be triggered for X number of seconds.

Audio Clip

Audio clips can be played when an event occurs.

NOTE:

This feature is only available with models that have 2-Way audio streaming capability.

Audio Clip

AUDIO CLIP LIST

File Name	Control
123.wav	Play Stop Delete Export

IMPORT

Please select a file to import Browse.. Import

AUDIO RECORDING SETTINGS

File Name

Duration 5 sec

Audio Recording

Play - Play the audio clip.

Stop - Stop playing the audio clip.

Delete - Delete an audio clip.

Export - Export the audio clip to a local hard drive or network disk.

How to Import an audio clip

1. Click **Browse** to import a file from a local hard drive or network disk.
2. Select the file and click **Import**.

NOTE:

The camera can only play audio clips that are saved as .wav files with G.711 u-law encoding in 8000 Hz sampling rate.

How to record a new audio clip with the camera's microphone

1. Enter a file name.
2. Enter the number of seconds to record.
3. Click Audio Recording to record the new audio clip.
4. The new audio clip will appear on the audio clip list.

Video Clip

This function is used to determine when video clips will be recorded and stored after an event is triggered.

Video Clip

SETTINGS

Pre-Alarm Buffer sec (0-10)

Post-Alarm Buffer sec (0-30)

Maximum Buffer Size Kbytes (128-6144)

Pre-Alarm Buffer - Images can be stored internally on the server from the time immediately preceding the trigger. Enter the desired length of time.

Post-Alarm Buffer - Images can be stored internally on the server from the time immediately following the trigger. Enter the desired length of time.

Maximum buffer size - Specify the maximum file size allowed.

Storage Management

Storage Management is used to view all the recorded files on the Micro-SD/SDHC card.

Storage Management

LOCAL STORAGE INFORMATION

Item	SD Card
Total Capacity	0KB
Used Space	0KB
Available Space	0KB
Memory Card Management	<input type="button" value="Reload"/>
Automatic Recycle	<input checked="" type="checkbox"/>
Offline Record	<input type="checkbox"/>

Item - Type of memory card.

Total Capacity - Storage capacity of memory card.

Used Space - Used space on memory card.

Available Space - Free space on memory card.

Memory Card Management -Click Reload to reload the memory card.

Automatic Recycle - When remaining available space is less than 100MB older files will be overwritten so recording can continue.

Offline Record - Enable if you would like the camera to continue recording to the memory card if the camera temporarily disconnects from a network video recorder.

User Management

This section explains how to enable password protection and create multiple accounts.

User Management

PRIVILEGE SETTINGS

	Username	Password	Re-confirm Password	Privilege	Configuration
1	admin	•••••	•••••	Administrator	  
2	viewer	•••••	•••••	Viewer	  
3	viewer	•••••	•••••	Remote Viewer	  
4	<input type="text"/>	<input type="password"/>	<input type="password"/>	Viewer	  
5	<input type="text"/>	<input type="password"/>	<input type="password"/>	Viewer	  
6	<input type="text"/>	<input type="password"/>	<input type="password"/>	Viewer	  
7	<input type="text"/>	<input type="password"/>	<input type="password"/>	Viewer	  
8	<input type="text"/>	<input type="password"/>	<input type="password"/>	Viewer	  
9	<input type="text"/>	<input type="password"/>	<input type="password"/>	Viewer	  
10	<input type="text"/>	<input type="password"/>	<input type="password"/>	Viewer	  

Enter the new user's name, password and confirm password. Administrators can add up to 10 user accounts. Select the privilege level for the new user account from the drop-down list.

Click **Delete**  or **Update**  to delete or modify a user's account.

Privilege levels can be assigned as:

- **Administrator** - User has access to view and change the Configuration page. Users with administrator privilege can change other user's access rights and delete user accounts.
- **Viewer** - User can only access the main page for live viewing.
- **Remote Viewer** - User can only access the main page for live viewing using TCP protocol.

Access Control

You can restrict camera access based on IP address.

Access Control

IP FILTER

Enable IP Filter
 Allow Access List
 Deny Access List

From . . . To . . .

How to configure the IP Filter

1. To enable Access Control, click check box of Enable IP Filter.
2. Select Allow Access or Deny Access options.
3. Enter IP address range and click **Add to List**.
4. Click **Apply**.

Firmware Upgrade

Upgrading the camera firmware takes a few minutes to complete.

Firmware Upgrade

UPGRADE DEVICE

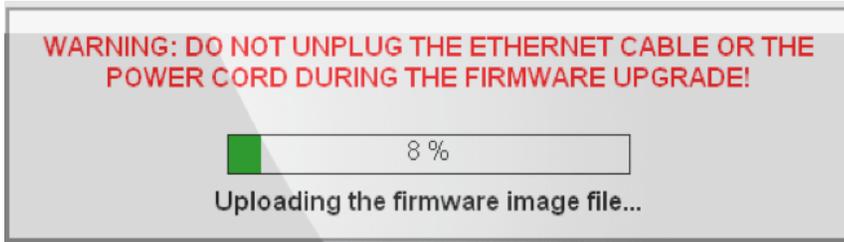
Please select a file to upgrade No file selected.

Click **Browse...** to find the firmware file. Click **Upgrade**. The camera will begin upgrading and will reboot automatically when the upgrade is finished.

NOTE:

Do not power off the camera or disconnect the Ethernet cable during the upgrade.

The following message will show during the firmware upgrading process.



Back Up and Restore

Export/import the configuration files of the network camera.



NOTE:

This features is required Windows Internet Explore to work properly.

Export - Click **Export** to pop up a dialog to indicate the location and file to export.

Import - Click **Import** to import the configuration file back into the network camera.

Reset to Default

Restore the camera to default factory settings.



Click the check box if you don't want *Data and Time settings* or *IP settings* to be restored to default.

Reboot

The camera will take about one minute to reboot.



System

This page displays the system's log in chronological order. The system log is stored in the camera's buffer area and will be overwritten when the buffer area is full.

System Log

SYSTEM LOG

```
LOG_NOTICE-WebServer :User [admin] logged in to [web server], Thu Jan 1 19:02:42 2009
LOG_NOTICE-WebServer :User [admin] logged in to [web server], Thu Jan 1 18:36:57 2009
LOG_WARNING-udhpcp :Failed to contact DHCP server [0.0.0.0], Thu Jan 1 18:20:38 2009
LOG_INFO-stream :Channel [1] stopped streaming to host [192.168.1.100], Thu Jan 1 18:16:20 2009
LOG_INFO-stream :Channel [1] started streaming to host [192.168.1.100], Thu Jan 1 17:59:46 2009
LOG_INFO-stream :Channel [1] stopped streaming to host [192.168.1.100], Thu Jan 1 17:37:56 2009
LOG_INFO-stream :Channel [1] started streaming to host [192.168.1.100], Thu Jan 1 17:30:01 2009
LOG_INFO-stream :Channel [1] stopped streaming to host [192.168.1.100], Thu Jan 1 17:29:53 2009
LOG_INFO-stream :Channel [1] started streaming to host [192.168.1.100], Thu Jan 1 17:29:40 2009
LOG_NOTICE-WebServer :User [admin] logged in to [web server], Thu Jan 1 17:29:30 2009
LOG_WARNING-udhpcp :Failed to contact DHCP server [0.0.0.0], Thu Jan 1 03:49:00 2009
LOG_INFO-stream :Channel [1] stopped streaming to host [192.168.1.100], Thu Jan 1 03:46:33 2009
LOG_INFO-stream :Channel [1] started streaming to host [192.168.1.100], Thu Jan 1 03:40:00 2009
LOG_INFO-stream :Channel [1] stopped streaming to host [192.168.1.100], Thu Jan 1 03:20:35 2009
LOG_INFO-stream :Channel [1] started streaming to host [192.168.1.100], Thu Jan 1 03:07:30 2009
LOG_INFO-stream :Channel [1] stopped streaming to host [192.168.1.100], Thu Jan 1 03:07:25 2009
LOG_INFO-stream :Channel [1] started streaming to host [192.168.1.100], Thu Jan 1 03:07:24 2009
LOG_NOTICE-WebServer :User [admin] logged in to [web server], Thu Jan 1 03:07:12 2009
LOG_INFO-stream :Channel [1] stopped streaming to host [192.168.1.100], Thu Jan 1 01:12:57 2009
LOG_INFO-stream :Channel [1] started streaming to host [192.168.1.100], Thu Jan 1 01:01:57 2009
LOG_ERR-WebServer :Access authentication to web server by user [admin] failed, Thu Jan 1 01:01:47 2009
LOG_ERR-WebServer :Access authentication to web server by user [admin] failed, Thu Jan 1 01:01:47 2009
LOG_ERR-WebServer :Access authentication to web server by user [admin] failed, Thu Jan 1 01:01:47 2009
LOG_INFO-stream :Channel [1] stopped streaming to host [192.168.1.100], Thu Jan 1 00:13:07 2009
LOG_INFO-stream :Channel [1] started streaming to host [192.168.1.100], Thu Jan 1 00:05:30 2009
LOG_NOTICE-WebServer :User [admin] logged in to [web server], Thu Jan 1 00:01:25 2009
LOG_NOTICE-WebServer :User [admin] logged in to [web server], Thu Jan 1 00:01:12 2009
```

Retrieve
Save to File

Click **Retrieve** to retrieve the log or click **Save to file** to save the system log into your local PC.

Date and Time

Date and Time

TIME SYNCHRONIZATION

Mode Set Manually Synchronize with NTP server

Date / / (yyyy/mm/dd)

Time : : (hh:mm:ss)

Clone from PC Clone (Current Time: 2014/2/7 11:48:55)

TIME ZONE

Time Zone

Country

Offset Hours: min:

DAYLIGHT SAVING TIME

Daylight Saving Disable Enable

Type

Start Date Month: Day:

End Date Month: Day:

Apply
Cancel

Mode - Manually enter the date and time or synchronize with NTP server automatically.

Date/Time/Clone from PC - If you select Set Manually, enter correct date and time in the fields or select Clone to synchronize the date and time on your computers.

Time Zone - Select the local time zone from drop-down menu.

Daylight Saving - Enable this option to automatically update for Daylight Saving Time.

Save File Folder

You can specify a location where you like video recording and snapshot of the live viewing to be stored.

NOTE:

This feature can only work with Internet Explorer browser.

Save File Folder

RECORDING FOLDER PATH

Path

SNAPSHOT FOLDER PATH

Path

Recording Folder Path Click **Browse...** to select a path to store video recording data.

Snapshot Folder Path Click **Browse...** to select a path to store snapshot file.

LED Indicators

The power LED is located inside the camera and can be turned on and off. Click check box to turn off the LED.

Device Information

This section displays camera current status and configuration information.

Device Information

SYSTEM INFORMATION

LAN MAC Address	00:22:F4:CE:59:E4
Firmware Version	1.0.1.03
Device Name	LCAM0336OD-59e4

NETWORK SETTINGS - IPv4

IP Setting Type	DHCP
IP Address	192.168.168.170
Subnet Mask	255.255.255.0
Default Gateway	192.168.168.1
Primary DNS	99.99.99.53
Secondary DNS	99.99.99.153

NETWORK SETTINGS - IPv6

IP Address	fe80::222:14ff:fece:59e4/64
Default Gateway	
Primary DNS	
Secondary DNS	

NETWORK SERVICES

Discovery	Enabled
DynDNS	Disabled
TZO	Disabled

VIDEO/AUDIO SETTINGS

Stream 1		
Video Codec		H264
Video Resolution		2032x1536
Video Frame Rate		20 fps
Video Quality		3
Audio Codec		G.711
Multicast IP		N/A
Stream 2		
Video Codec		H264
Video Resolution		N/A
Video Frame Rate		15 fps
Video Quality		6 (Best)
Audio Codec		G.711
Multicast IP		N/A
Stream 3		
Video Codec		H264
Video Resolution		336x240
Video Frame Rate		15 fps
Video Quality		6 (Best)
Audio Codec		G.711
Multicast IP		N/A

System Information - Displays basic system information such as MAC address, Firmware version and Device Name.

Network Settings IPv4/IPv6 - Displays current network status.

Network Services - Displays network services information.

Video/Audio Settings - Displays camera video and audio configuration settings.

VMS Compatibility

Set your video management system format using ONVIF standards to ensure interoperability between products regardless of manufacturer.

VMS Compatibility
ONVIF
WS-Security
Core Specification 1.0 ▾
GetStreamUriResponse Synchronization ▾

WS-Security - Enable/disable WS-Security.

Core Specification - Select an ONVIF version.

GetStreamUriResponse - Select a setting.

Specifications

Model No.: LCAD03FLN

Image

Sensor: 5 Megapixel CMOS

Maximum Image Resolution: 2048 x 1536, 3MP

Video

Maximum Frame Rate: 18 fps@2048x1536, 30 fps@1920x1080, 30 fps@1280x720

Image Compression: H.264/MJPEG/MPEG4

Bitrate Control: Variable Bitrate and Constant Bitrate

Lens

Fixed/Vari-focal: Fixed Lens

Iris Control: Fixed Iris

Focal Length: $f = 4\text{mm}$

Focal Ratio: F1.6

Viewing Angle: Horizontal: 62°, Vertical: 34°

Minimum Illumination: 0 lux (IR On, B/W), 0.5 lux (IR Off, Color)

IR Illuminator

Mechanical IR-Cut: Y

Infrared LED: 12 pcs

Wavelength: 850nm

Distance (IR Distance): 15m

Audio

Compression: G.711/AMR

Audio Streaming: 2-Way Audio

Audio Input: Y

Audio Output: Y

Compliance Information

FCC/IC Class A and CE Class A

Interface

100Base-T Ethernet, DI/DO and SD/SDHC Card Slot

Power Supply

Power over Ethernet: IEEE 802.3af

Maximum Power Consumption: < 6W

Environment

Operating Temperature: 0°C ~ 50°C

Operating Humidity: 10% to 80% Relative Humidity and Non-Condensing

Storage Temperature: -20°C to 60°C

Storage Humidity: 5% to 90% Non-Condensing

Dimensions

Unit Weight: 0.58kg

Model No.: LCAD03VLNOD

Image

Sensor: 5 Megapixel CMOS

Maximum Image Resolution: 2048 x 1536, 3MP

Video

Maximum Frame Rate: 18 fps@2048x1536, 30 fps@1920x1080, 30 fps@1280x720

Image Compression: H.264/MJPEG/MPEG4

Bitrate Control: Variable Bitrate and Constant Bitrate

Lens

Fixed/Vari-focal: Vari-focal Lens

Iris Control: Auto Iris

Focal Length: $f = 3.3 \sim 10.5\text{mm}$

Focal Ratio: F1.4

Viewing Angle: Horizontal: $26^\circ \sim 70^\circ$, Vertical: $20^\circ \sim 51^\circ$

Minimum Illumination: 0 lux (IR On, B/W), 0.5 lux (IR Off, Color)

IR Illuminator

Mechanical IR-Cut: Y

Infrared LED: 12 pcs

Wavelength: 850nm

Distance (IR Distance): 15m

Audio

Compression: G.711/AMR

Audio Streaming: 2-Way Audio

Audio Input: Y

Audio Output: Y

Compliance Information

FCC/IC Class A, CE Class A, IP67-Rated and IK10-Rated

Interface

100Base-T Ethernet, DI/DO and SD/SDHC Card Slot

Power Supply

Power over Ethernet: IEEE 802.3af

Maximum Power Consumption: < 6W

Environment

Operating Temperature: $-40^\circ\text{C} \sim 50^\circ\text{C}$

Operating Humidity: 10% to 80% Relative Humidity and Non-Condensing

Storage Temperature: -20°C to 60°C

Storage Humidity: 5% to 90% Non-Condensing

Dimensions

Unit Weight: 0.90kg

Model No.: LCAB03VLNOD

Image

Sensor: 5 Megapixel CMOS

Maximum Image Resolution: 2048 x 1536, 3MP

Video

Maximum Frame Rate: 18 fps@2048x1536, 30 fps@1920x1080, 30 fps@1280x720

Image Compression: H.264/MJPEG/MPEG4

Bitrate Control: Variable Bitrate and Constant Bitrate

Lens

Fixed/Vari-focal: Vari-focal Lens

Iris Control: Auto Iris

Focal Length: $f = 3.3 \sim 10.5\text{mm}$

Focal Ratio: F1.4

Viewing Angle: Horizontal: $26^\circ \sim 70^\circ$, Vertical: $20^\circ \sim 51^\circ$

Minimum Illumination: 0 lux (IR On, B/W), 0.5 lux (IR Off, Color)

IR Illuminator

Mechanical IR-Cut: Y

Infrared LED: 24 pcs

Wavelength: 850nm

Distance (IR Distance): 25m

Audio

Compression: G.711/AMR

Audio Streaming: 2-Way Audio

Audio Input: Y

Audio Output: Y

Compliance Information

FCC/IC Class A, CE Class A, IP67-Rated and Vandal Resistant

Interface

100Base-T Ethernet, DI/DO, SD/SDHC Card Slot, Analog Video Output and RS-485 for Scanners Pan-tilts.

Power Supply

Power over Ethernet: IEEE 802.3af

Maximum Power Consumption: < 7W

Environment

Operating Temperature: $-40^\circ\text{C} \sim 50^\circ\text{C}$

Operating Humidity: 10% to 80% Relative Humidity and Non-Condensing

Storage Temperature: -20°C to 60°C

Storage Humidity: 5% to 90% Non-Condensing

Dimensions

Unit Weight: 1.10kg

Model No.: LCAB03VLNOD

Image

Sensor: 3 Megapixel Sony CMOS

Maximum Image Resolution: 2048 x 1536, 3MP

Video

Maximum Frame Rate: 20 fps@2048x1536, 30 fps@1920x1080, 30 fps@1280x720

Image Compression: H.264/MJPEG/MPEG4

Bitrate Control: Variable Bitrate and Constant Bitrate

Lens

Fixed/Vari-focal: ImmerVision 360° Panomorph Lens

Focal Length: $f = 0.98 \sim 1.02$ mm

Focal Ratio: F2.0

Viewing Angle: Horizontal: 182°, Vertical: 182°

Minimum Illumination: 0.1 lux (B/W), 0.5 lux (Color)

Audio

Compression: G.711/AMR

Audio Streaming: 1-Way

Built-in Microphone: Y

Compliance Information

FCC/IC Class A, CE Class A, IP67-Rated and IK10-Rated

Interface

100Base-T Ethernet and SD/SDHC Card Slot

Power Supply

Power over Ethernet: IEEE 802.3af

Maximum Power Consumption: < 6W

Environment

Operating Temperature: -40°C ~ 50°C

Operating Humidity: 10% to 80% Relative Humidity and Non-Condensing

Storage Temperature: -20°C to 60°C

Storage Humidity: 5% to 90% Non-Condensing

Dimensions

Unit Weight: 0.40kg

NOTES

- For regulatory, warranty, and safety information, see the enclosed CD or go to Linksys.com/business
- Documentation is subject to change without notice.

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