



CM7000 Outdoor Camera

User Manual

1308235 Rev.B



Federal Communications Commission Statement

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

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Reprinted from the Code of Federal Regulations #47, part 15.193, 1993. Washington DC: Office of the Federal Register, National Archives and Records Administration, U.S. Government Printing Office.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. THE UNIT MUST NOT BE EXPOSED TO DRIPPING OR SPLASHING WATER.

CAUTION: DO NOT OPEN THE UNIT. DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE INSTALLATION AND TROUBLESHOOTING INSTRUCTIONS. REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL.

CAUTION: THIS DEVICE MUST BE INSTALLED AND USED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AS DESCRIBED IN THE USER DOCUMENTATION THAT COMES WITH THE PRODUCT.

WARNING: POSTPONE INSTALLATION UNTIL THERE IS NO RISK OF THUNDERSTORM OR LIGHTNING ACTIVITY IN THE AREA.

When using this device, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

- Read all of the instructions {listed here and/or in the user manual} before you operate this equipment.
- Give particular attention to all safety precautions.
- Retain the instructions for future reference.
- Comply with all warning and caution statements in the instructions.
- Observe all warning and caution symbols that are affixed to this equipment.
- Comply with all instructions that accompany this equipment.
- Avoid using this product during an electrical storm. There may be a risk of electric shock from lightning. It is recommended that the customer install an AC surge protector in the AC outlet to which this device is connected. This is to avoid damaging the equipment by local lightning strikes and other electrical surges.
- Operate this product only from the type of power source indicated on the product's marking label.
- If you are not sure of the type of power supplied to your home, consult your dealer or local power company.
- Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in safe operating condition.

Installation of this product must be in accordance with national wiring codes and conform to local regulations.

Wipe the unit with a clean, dry cloth. Never use cleaning fluid or similar chemicals. Do not spray cleaners directly on the unit or use forced air to remove dust.

Keep the device away from excessive heat and humidity and keep the device free from vibration and dust.



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Equipment Package Contents

The CM7000 package contains:

- CM7000 IP Camera
- Wall Plate
- Installation Sheet

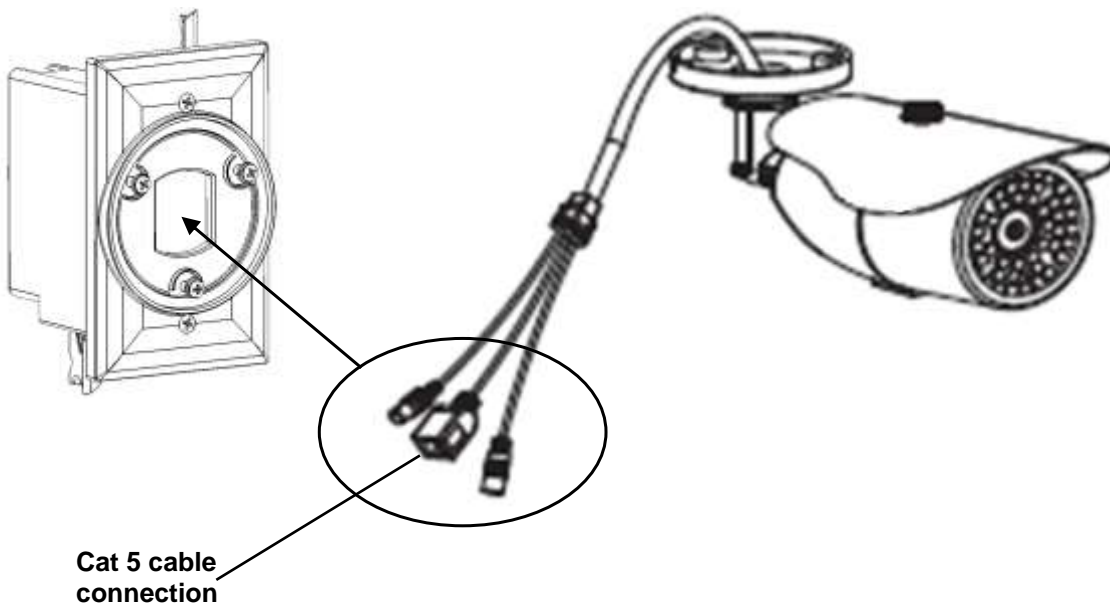


Installing the CM7000

Run Cat 5 cable from enclosure mounted device supplying power over Ethernet (PoE) to single gang box at intended camera location. The Legrand DA2400 and DA1458 are suitable PoE products.

Attach Cat 5 cable with Ethernet PoE to Camera cable RJ45 jack and feed Camera cables through hole in supplied Wallplate, and mount Wallplate to single gang box using rubber gasket.

Attach Camera to Wallplate using 3 provided screws and position camera for use.



CM7000 SPECIFICATIONS

Video Compression	H.264, MJPEG
Image Sensor Resolution	1/3", 1.2 Megapixel Progressive Scan CMOS, 1280H x 960V
Image Sensor Sensitivity	Day/Night Mode (exceptional low noise level, low light sensitivity) Shutter: 1/10000 – 1/30 second
Focal Length	3.6mm
Aperture	F1.8
Field Angle (FOV)	100.2°(D) x 77°(H) x 54°(V)
IR Cut Filter	Yes, Mechanical
Day & Night Mode	IR LED covering up to 10 meter
Minimum Illumination	0.05 Lux; 0 Lux with IR LED On
Responsivity	5.48V/Lux-sec (550nm)
Supported Maximum Video Resolution and Frame Rate	1280x960 (25fps) 1280x720 (30fps)
Video Bit Rate	32 Kbps ~ 8 Mbps, Multi-rate for Preview & Recording
Embedded Analytics	Motion Detection (up to 16 target areas)
Pre-/post-alarm Buffer	8MB
Snapshots	Triggered upon events, Send via email/FTP
Network Protocol	TCP/UDP/IP, RTP/RTCP, RTSP, DHCP, DDNS, HTTP, HTTPS, SMTP, FTP, NTP, UPnP, Bonjour
SIP/VoIP Support	Yes
Power over Ethernet (PoE)	IEEE 802.3af, Class 0
External Cable Connection	Network: RJ45, 10M/100M Auto-Sensing Audio In from external mic - 3.5mm Audio Out to external amplified speaker – 3.5mm Power Input
Dimensions (D x L)	94mm (D) x 230mm (L)
Weight	0.52kg
Temperature / Humidity	Operating: -20°C ~ 45°C (-4°F ~ 113°F) 10 ~ 90%, RH(non-condensing) Storage: -30°C ~ 60°C (-22°F ~ 140°F)
Non-PoE Power Requirement	12VDC/1A; Input: 100–240VAC, 50–60Hz
Casing	IP66 Compliant Weather-Proof Metal Case
Compliance	FCC Part 15, Subpart B Class B; EN 55022 Class B, EN 61000-3-2, EN 61000-3-3, EN 55024, EN 60950-1; C-tick AS/NZS CISPR 22, CISPR 24; IP66

MINIMUM RECOMMENDED COMPUTER SYSTEM REQUIREMENT

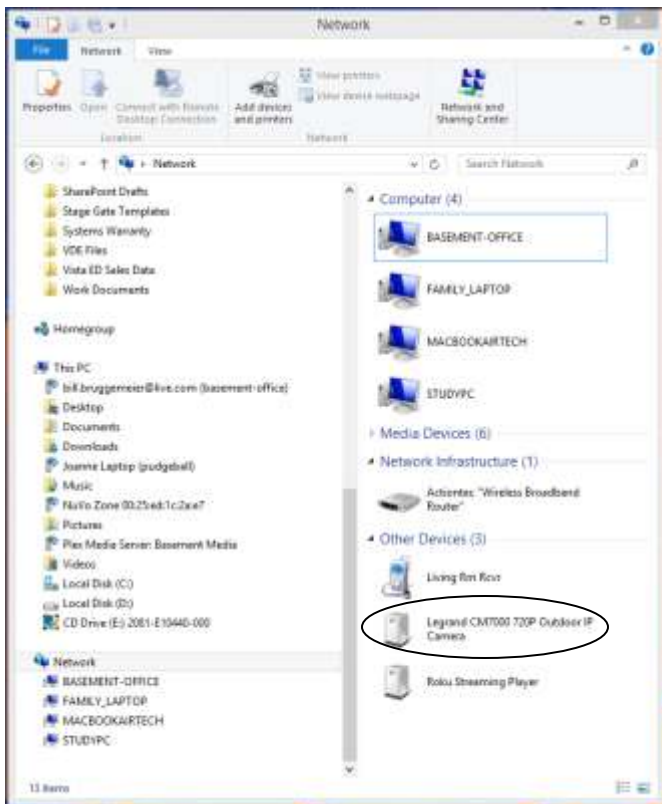
To configure the CM7000, you must have a computer, PC recommended. The minimum recommended PC system requirement listed below:

- Windows 2000, XP, Windows Vista, Windows 7 (32bit or 64bit)
- CPU: Intel Pentium 4 or higher, 2 GHz
- RAM: 1 GB (4 GB recommended for larger systems)
- Support for DirectX 8.0 and above.

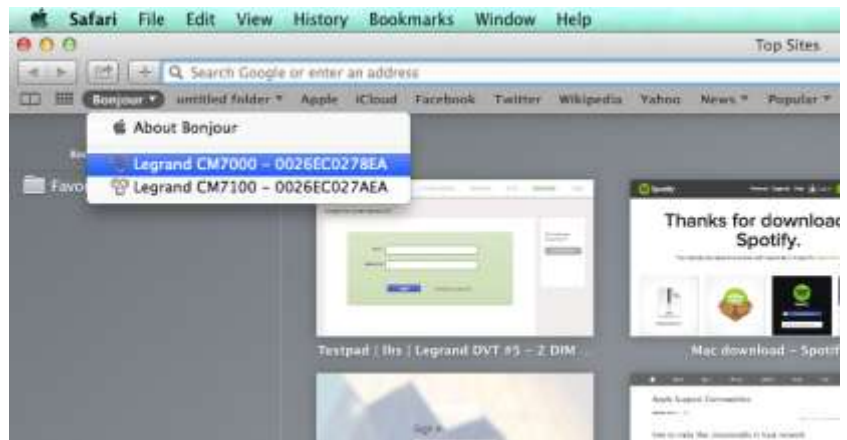
Connect the Camera to network with DHCP server (Recommended)

The CM7000 by default is enabled as a DHCP client, it will automatically get an IP address from the network (router) with DHCP server running.

PC: The Camera supports UPnP and the camera can be found in the Network and Sharing Center



Mac: The Camera supports Bonjour and the camera can be found in the Bonjour list in Safari



If you do not see Bonjour in your Safari folder list.

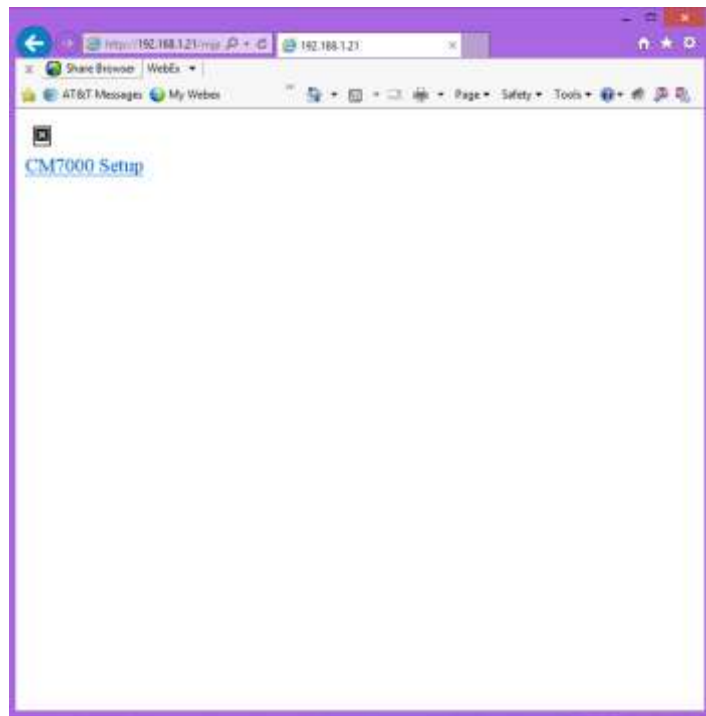
1. Select Safari:Preferences:Advanced
2. Check both boxes next to Bonjour setting

Alternately, the user can find the IP address assigned to the camera from the router's DHCP server log or client list or by using an IP sniffer.

The camera interface is defaulted to show the image on as many devices as possible (Mobile: iOS, Android & Desktop: Windows & Mac) therefore what you see next depends on the device you are viewing it on and the browser you use.

Click on the camera you wish to view and the default web browser will open.

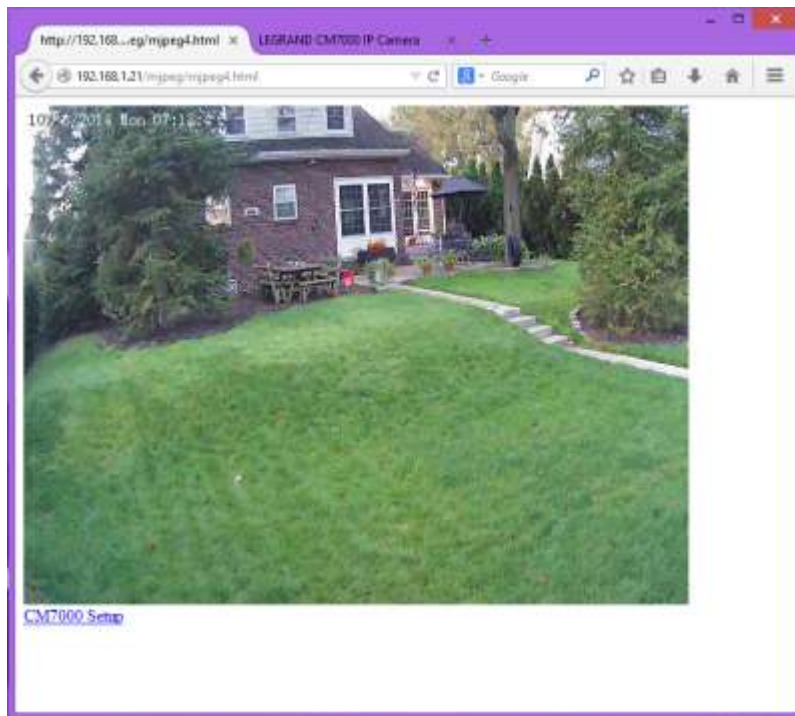
Internet Explorer Browser



Internet Explorer does not natively support viewing mjpeg files.

1. If using Internet Explorer change the address to ((Camera IP Address)/index.html)
2. Internet Explorer may ask for plug-in if ActiveX is not installed, otherwise it will go to Home page and start to show the video captured by the camera (by default the camera is enabled for anonymous access) see **Figure 1**.
3. Click the “Configuration” icon (middle one at lower left, looks like tools) and the browser will ask for credentials to authorize configuration.
4. Enter the administrator user name and password to access the Web Configuration Interface, the default user name and password are both set to **admin**.
5. Proceed to the Basic Settings explanation section.

Firefox Browser



Firefox, Chrome & Safari will give you an image similar to above

1. Click the “CM7000 Setup” icon (lower left) and the browser will ask for credentials to authorize configuration.
2. Enter the administrator user name and password to access the Web Configuration Interface, the default user name and password are both set to **admin**.
3. Proceed to the Basic Settings explanation section.

Internet Explorer: CM7000 Home Web Page (IP Address/index.html)

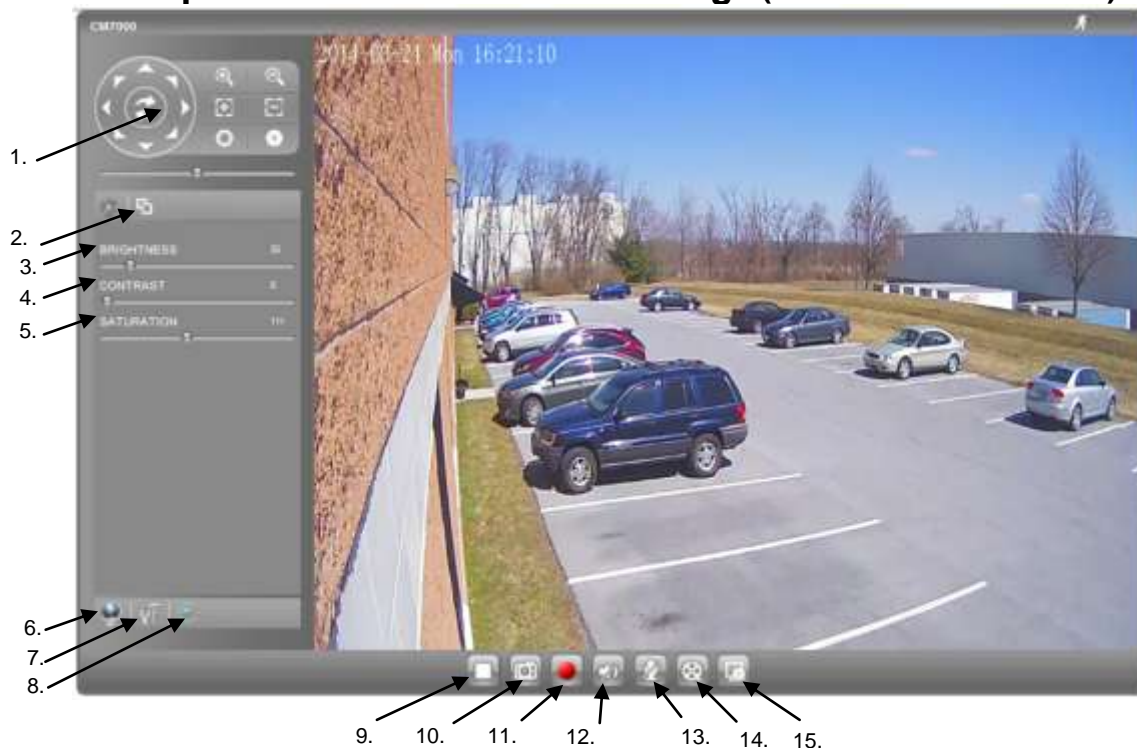


Figure 1: Home Page of the CM7000

- | | |
|--|--|
| 1. Control Console (and other buttons): | Not Applicable for this camera. |
| 2. Real Size/Window Size: | Click to change from real image size to window image size. |
| 3. BRIGHTNESS: | Slide to adjust the image or video brightness. |
| 4. CONTRAST: | Slide to adjust the image or video contrast. |
| 5. SATURATION: | Slide to adjust the image or video saturation. |
| 6. Language: | Click to switch webpage language.
(Currently supported: Chinese, English and Russian) |
| 7. Configuration: | Click to enter "Configuration Page" to configure parameters |
| 8. Default Video Parameters: | Click to return to viewable video parameters. |
| 9. Play/Stop: | Start/Stop playing the video stream at embedded webpage. |
| 10. Capture (Snapshot): | Click to capture and save a snapshot of current video frame displayed.
Default directory: C:\Capture |
| 11. Record: | Click to Start/Stop record of current video stream into a file.
Default directory: C:\Record |
| 12. Sound On/Off: | Toggle to listen/stop the sound from camera microphone. |
| 13. Talk: | Toggle to talk to camera speaker. |
| 14. Playback: | Playback recorded video files |
| 15. Local Configuration: | Click to configure the file path of snapshot and recorded video files.
Also adjust the video delay or smoothness. |

NOTE:

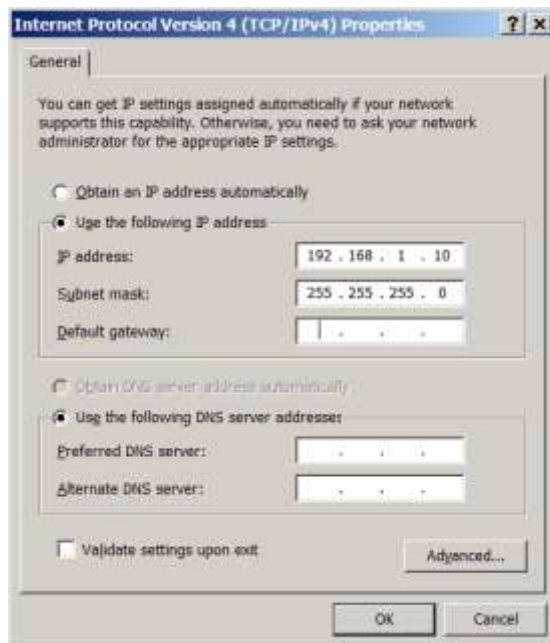
If you click on the "Configuration" button (7. above), a pop up will ask you for a user name and password. The default is admin for the user name and admin for the password. The following pages take you through Configuration options.

Connect to the Camera using Static IP

If no DHCP server is in the network, or the camera does not get IP from DHCP server (router), the user can connect the camera to a computer directly, using static IP to configure the camera.

The default IP, if no DHCP server; or DHCP offer time out (3 minutes), is **192.168.1.168**

1. Connect the computer via an Ethernet cable directly to the IP camera CM7000.
2. Configure the computer using Static IP: 192.168.1.XXX (1<XXX<255, but NOT 168) and configure the “Subnet mask” to “255.255.255.0”. Leave the “Default Gateway” to “Blank” like below:



3. Power on the CM7000.
4. Start the IE or Firefox browser when the network connection is up.
5. Enter 192.168.1.168/index.html in the address bar of the browser.
6. The browser will ask for plug-in or ActiveX if not installed, otherwise it will get to Home page and start to show the video captured by the camera (by default the camera enabled anonymous access), see **Figure 1**.
7. Click the “Configuration” icon (middle one at lower left, looks like tools) and the browser will ask credentials to authorize configuration.
8. Enter the administrator user name and password to access the Web Configuration Interface, the default user name and password are both set to **admin**.
9. Proceed to the Basic Settings explanation section.

Basic Settings Explanation

System Settings Page

The screenshot shows the 'CM7000 Administration Interface' with a sidebar menu on the left containing: Home, Basic Settings, System, Video & Audio, CMOS Settings, Networking, DDNS, SIP, Status, and Advanced Settings. The 'System' section is active. The main content area is divided into three sections: 'Current System Time' showing Date: 2014-03-24 and Time: 11:00:20; 'Set the System Time' with a Time Zone dropdown set to 'GMT-05 (New York, Toronto, Washington DC)', an 'Enable NTP Server' checkbox checked, an NTP Server text field with 'time.nist.gov', and four radio buttons: 'Update via NTP Server', 'Synchronize with Local Computer', 'Set the Time Manually', and 'Keep Current Date and Time' (which is selected); and 'OSD Date Format' with a dropdown set to 'YYYY-MM-DD'. Each section has a 'Save' button below it. At the bottom, the 'Device Setting' section has a 'Device Name' text field with 'CM7000' and a 'Save' button.

Figure 2: System Settings Page

- **Current System Time:** Displays current date and time of the system
- **Set the System Time:** Configure the time of the system.
 - Time Zone: Select your time zone from the pull down menu
 - Update via NTP Server: Synchronize time using NTP protocol with a Time Server over the Internet cloud (*)
 - Synchronize with Local Computer: Synchronize time with a local computer
 - Set the Time Manually: Manually input the time
 - Keep Current D/T: Select to use current displayed time
- **OSD Date Format:** Pull down to select date format displayed on video screen

NOTE:

-  button has to be clicked to save all the changes made to the device.

Video & Audio Settings Page

The screenshot displays the 'CM7000 Administration Interface' with a sidebar menu on the left. The sidebar includes links for Home, Basic Settings, System, Video & Audio, CMOS Settings, Networking, DDNS, SIP, Status, and Advanced Settings. The 'Video & Audio' section is currently selected. The main content area is divided into several sections: 'On Screen Display(OSD)' with fields for OSD Text, OSD Position (set to 'Top'), Display Time (checked), and Display Text; a 'Save' button; 'Video Settings' containing 'Primary Stream Settings' (Preferred Video Codec: H264, Profile: High Profile, Resolution: 1280*960 (4:3), Bit Rate: 2048 kbps, Maximum Frame Rate: 25 fps, Bit Rate Control: CBR selected, I-frame Interval: 30) and 'Secondary Stream Settings' (Preferred Video Codec: MJPEG, Resolution: 480*272 (16:9), Maximum Frame Rate: 25 fps); 'Audio Settings' with Preferred Audio Codec: PCMA, Microphone Volume (slider at 3), and Speaker Volume (slider at 6); and 'Light Condition' with radio buttons for Outdoor, Indoor (50Hz Power Frequency) (selected), and Indoor (60Hz Power Frequency). A final 'Save' button is at the bottom.

legrand CM7000 Administration Interface

Home
Basic Settings
System
Video & Audio
CMOS Settings
Networking
DDNS
SIP
Status
Advanced Settings

On Screen Display(OSD)

OSD Text:

OSD Position:

Display Time: ☒

Display Text: ☐

Save

Video Settings

Primary Stream Settings

Preferred Video Codec:

Profile:

Resolution:

Bit Rate: kbps

Maximum Frame Rate: fps

Bit Rate Control: ☒ CBR ☐ VBR

I-frame Interval: Frame(1-100)

Secondary Stream Settings

Preferred Video Codec:

Resolution:

Maximum Frame Rate: fps

Audio Settings

Preferred Audio Codec:

Microphone Volume:

Speaker Volume:

Light Condition

Light Condition: ☐ Outdoor ☒ Indoor (50Hz Power Frequency) ☐ Indoor (60Hz Power Frequency)

Save

Figure 3: Video & Audio Settings Page

- **On Screen Display (OSD):** Displays time stamp and text on the video screen.
 - OSD Text screen: Input text (to identify the camera) shown on the screen.
 - OSD Position: Show the OSD in either top or bottom position on screen.
 - Display Time: When checked, time stamp will display on video screen
 - Display Text: When checked, input text will display on video screen.

- **Primary Stream Settings:**
 - Preferred Video Codec: MJPEG and H.264 supported, H.264 recommended.
 - Profile: H.264 profile selection. Default is "Main Profile."
 - Resolution: The video resolution in pixels used in video of camera
 - Bit Rate: Video bit rate used
 - Maximum Frame Rate: Maximum frame rate used.
 - Bit Rate Control: Constant bit rate, or variable bit rate
 - Image Quality: Image quality used when Variable Bit Rate used
 - I-frame Interval: I-frame interval

- **Secondary Stream Settings:** *Same as primary stream.*

- **Audio Settings:**
 - Preferred Audio Codec: PCMU, PCMA, AAC supported.
 - Microphone Volume: Slide to adjust microphone gain.
 - Speaker Volume: Slide to adjust the speaker volume.
 - Light Condition: Select correct local power frequency to avoid video flicking effect under fluorescence light condition. Default is Outdoor.

NOTE:

- *H.264 is the high resolution Codec, while MJPEG is the Codec used automatically for remote smartphone viewing.*
- *If MJPEG selected, reduce max. frame rate to min. value to save bandwidth and get better image*

CMOS Settings Page

This page allows user to adjust the CMOS parameters:

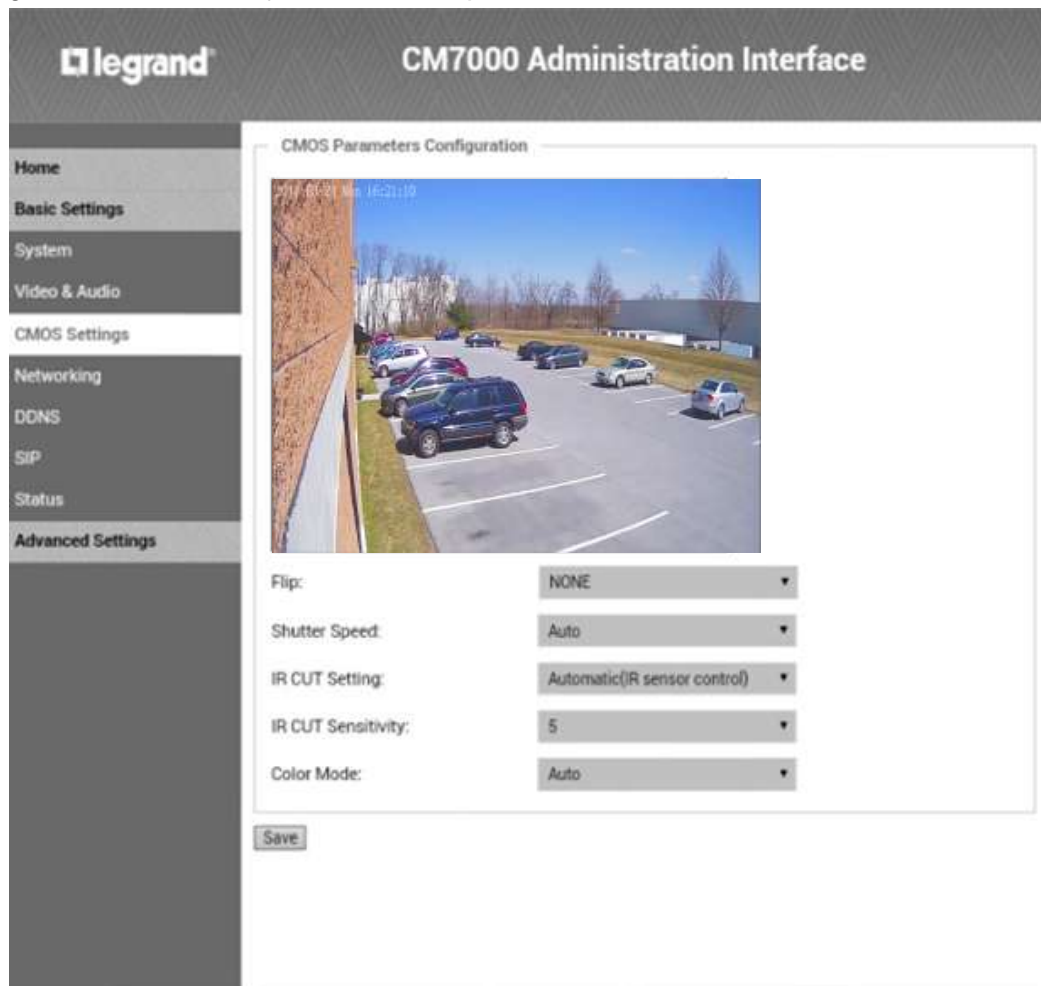


Figure 4: CMOS Settings Page

- **Flip:** Pull down to choose video flip: vertically or horizontal or both.
- **Shutter Speed:** Camera Shutter Speed. There are 10 options, with Auto, 1/30, 1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/5000 and 1/10000
- **IR CUT Setting:** Manual or Automatic (IR Sensor controlled mechanical IR CUT)
- **IR CUT Sensitivity:** Sensitivity of IR CUT to be triggered; 5 levels total.
- **Color Mode:** Camera Color Mode: Color, Black/White, Auto (Default).

NOTE:

- *Auto option recommended for Shutter Speed, IR LED Setting, IR CUT Setting and Color Mode.*

Networking Settings Page

The screenshot shows the Legrand CM7000 Administration Interface. On the left is a navigation menu with the following items: Home, Basic Settings, System, Video & Audio, CMOS Settings, Networking (highlighted), DDNS, SIP, Status, and Advanced Settings. The main content area is titled 'Networking' and contains three sections: 'IP Address Configuration' with radio buttons for 'Dynamically Assigned via DHCP' (selected) and 'Statically Configured as:'; 'DNS Configuration' with radio buttons for 'Obtain DNS Server Address Automatically' (selected) and 'Use the Following DNS Server Address:'; and a 'Port' section with a label 'HTTP Port:' and a text input field containing the value '80'. A 'Save' button is located at the bottom left of the main content area.

Figure 5: Networking Setting Page

- **IP Address Configuration:**
 - Dynamically Associated via DHCP: Default setting, DHCP server assigns IP to camera.
 - Statically Configured as: Enter Static IP address manually
- **DNS Configuration:** Obtained automatically or entered manually.
- **HTTP:** Web access TCP port, default 80.

NOTE:

- If the camera is behind a SOHO router with port forwarding configured for remote access, static IP has to be used to avoid IP address changes after a router reboot.
- TCP ports above 5000 are suggested if port forwarding HTTP remote access, as some ISPs block port 80 inbound traffic. For example, change the default HTTP port from 80 to 8088, to make sure the port forwarding is not likely to be blocked.
- In addition to the HTTP port, an RTSP port may also required for port forwarding, in order for remote party viewing the H.264 video.
- If changing the default port from TCP 80 to port "A", then the RTSP port should be "2000+A". Both TCP port "A" and "2000+A" should be configured for port forwarding in the router. For example, the HTTP port changed to 8088, the RTSP port should be 10088, both 8088 and 10088 should be configured for port forwarding in order for remote camera video access.

DDNS Settings Page

legrand CM7000 Administration Interface

Dynamic DNS Settings

DDNS Active: ☐

DDNS ISP Type: dyndns.org ▼

Self-Define DDNS Address:

Site Name:

DDNS Account:

DDNS Password:

STUN Server:

Save

Figure 6: DDNS Setting Page

- **DDNS Active:** Click to enable DDNS.
- **DDNS ISP Type:** Select DDNS service provider from the pull-down menu list
- **Self-Define DDNS Address:** Input the self-defined DDNS address
- **Site Name:** DDNS site name
- **DDNS Account:** DDNS account name
- **DDNS Password:** DDNS password
- **STUN Server:** Stun server FQDN or IP. If the DDNS device is behind a non-symmetric router, the STUN server can help to penetrate & resolve NAT issue.

SIP Settings Page

The CM7000 be configured as SIP endpoint to call out when alarm triggered; or allow permitted numbers to call in to check the video.

The screenshot displays the 'CM7000 Administration Interface' with a sidebar menu on the left containing: Home, Basic Settings, System, Video & Audio, CMOS Settings, Networking, DDNS, SIP, Status, and Advanced Settings. The 'SIP' option is selected. The main content area is titled 'General Phone Settings' and includes a status bar showing 'Registered: Offline' and 'Unregister On Reboot: [checkbox]'. Below this is the 'SIP Settings' section with various configuration fields: Account Name, SIP Server, Outbound Proxy, SIP User ID, Authenticate ID, TEL URI (with radio buttons for Disabled, User+phone, and Enabled), Authenticate Password, STUN Server, Stream (dropdown menu set to Secondary), Preferred Vocoder (dropdown menu set to PCMU), Register Expiration(Second) (3600), Local SIP Port (5060), Local RTP Port (5004), Auto On-Hook Timer (300), Disable Audio in SIP Call, Enable Keep Alive, Accept Direct IP Call (checked), Enable White List Number Filter, Enable two-way Audio Warning Mode (checked), SIP Proxy Compatibility Mode, SIP Transport (radio buttons for UDP, TCP, and TLS/TCP), SIP TLS Certificate (with a Delete button), SIP TLS Private Key (with a Delete button), SIP TLS Private Key Password, and Self-defined Warning Audio (with Upload and Delete buttons). A 'Save' button is located at the bottom of the settings section. Below the settings is a 'Phone List' table with columns for Phone Number, Remark Name, and Remove, and an 'Add...' button. At the bottom is a 'White List' section with a Phone Number input field, a Remove button, and an 'Add...' button.

Figure 7: SIP Setting Page

- **Registered:** SIP registration status.
Display “Online” in Green, “Offline” in Red.
- **Unregister on Reboot:** If checked, camera reboot will unbind all registration in same SIP account.
- **Account Name:** SIP account name
- **SIP Server:** FQDN or IP of SIP server from VoIP ISP
- **Outbound Proxy:** IP or FQDN of Outbound proxy server, helps penetrate NAT/Firewall
- **SIP User ID:** SIP username, or telephone number from ITSP
- **Authenticate ID:** Authenticate ID used by SIP proxy
- **Authenticate Password:** Authenticate password used by SIP proxy
- **STUN Server:** STUN server used to resolve NAT.
- **Stream:** Which stream used for SIP call.
- **Preferred Vocoder:** Audio codec used for SIP call.
- **Registration Expiration:** Registration expiration time, default 3600 seconds
- **Local SIP Port:** Local SIP port, default 5060
- **Local RTP Port:** Local RTP port for media, default 5004
- **Auto On-hook Timer:** Auto On Hook timer, default 300 seconds
- **Disable Audio in SIP Call:** Checked to disable audio for SIP call.
- **Enable Keep Alive:** Checked to enable, help NAT resolution
- **Accept Direct IP Call:** Check to accept peer-to-peer IP call.
- **Enable White List Number Filter:** Check to allow only white list number to call in
- **Enable two-way Audio Warning:** Check to enable two-way audio warning.
- **SIP Proxy Compatibility Mode:** Check to enable more proxy compatibility with cost of bandwidth
- **Self-define Warning Audio:** Upload self-defined warning message audio (follow the format)
- **Phone List/Phone Number:** Caller or call receiver number when alarm call triggered.
- **White List/Phone Number:** Phone numbers allowed to call into the camera.

Status Page

The screenshot displays the Legrand CM7000 Administration Interface. On the left is a navigation menu with options: Home, Basic Settings, System, Video & Audio, CMOS Settings, Networking, DDNS, SIP, Status, and Advanced Settings. The 'Status' option is selected. The main content area is divided into four sections:

- System Statistics:**
 - Product Model: CM7000
 - Hardware Version: V1.0A
 - Part Number: 9671004610A
 - Bootloader Version: 1.0.2.60
 - Core Version: 1.0.2.60
 - Base Version: 1.0.2.60
 - Firmware Version: 1.0.2.60
 - System Up Time Since: 25 minutes
- Network Status:**
 - MAC Address: 00:08:82:27:F9:F9
 - LAN IP Address: 192.168.40.100
 - LAN Subnet Mask: 255.255.255.0
 - LAN Default Gateway: 192.168.40.254
 - DDNS Status: Disabled
 - SIP Registered: Offline (in red text)
- IR CUT Status:**
 - IR CUT Status: Daytime (with a small icon)
- Camera Type:**
 - Camera Type: Aptina, AR0130 Pixels 1280*960

Figure 8: Status Page

NOTE:

- When SIP account registered, the status will display “Online” in Green.
- When SIP account unregistered, the status will display “Offline” in Red, as shown.

Advanced Settings Explanation

User Management Page

legrand[®] CM7000 Administration Interface

Home
Basic Settings
Advanced Settings
User Management
Maintenance
SMTP
FTP
Alarm Server
Periodic Snapshot
Motion Detection
Syslog

Manage User

Existing User Name: --Add New User--
User Name:
User Password:
Confirm User Password:
Privilege: Administrator

Add
Update
Delete

Manage Anonymous Viewing

Allow Anonymous Viewing: ☒

Save

Figure 9: User Management Page

- **Existing User Name:** Allows you to revise existing user or add new user
- **User Name:** The name of user need to be revised
- **User Password:** New password or revise password
- **Confirm User Password:** Re-enter the new password for verification
- **Privilege:** Choose user privilege
- **Allow Anonymous Viewing:** When checked, no security is used. Any person can view the camera if they know the IP or FQDN of the camera, but can NOT change anything, view ONLY.

Maintenance Page

legrand CM7000 Administration Interface

Home
Basic Settings
Advanced Settings
User Management
Maintenance
SMTP
FTP
Alarm Server
Periodic Snapshot
Motion Detection
Syslog

Restart the Device

Restart the Device.

Restart

Restore the Device

Reset Settings, except IP Address, to Factory Default.

Restore

Firmware Upgrade and Provisioning

Upgrade via: HTTP

Firmware Server Path: hsfirmware.legrand.us

Config Server Path:

XML Config File Password: *****

Automatic Upgrade Interval(Minutes): 10080

DHCP Option 66 Override Server: ☒

3CX Auto Provisioning: ☒

Automatic Upgrade: ☒

Save

Figure 10: Maintenance Page

- **Restart:** When clicked, the camera will reboot or restart
- **Restore:** When clicked, will reset to factory default, wiping out all configurations (except IP address)
- **Upgrade via:** Upgrade firmware via TFTP, HTTP or HTTPS
- **Firmware Server Path:** Server path holding the firmware
- **Config Server Path:** Server path holding the configuration file (auto provisioning)
- **XML ConfigFile Password:** Password to encrypt XML based configuration file
- **Automatic Upgrade Interval (Min.):** Time interval for automatic upgrade, default 10080
- **Automatic Upgrade:** Check to enable automatic firmware upgrade and Provisioning (XML based only).

SMTP Settings Page (Email Alarm)

Figure 11: SMTP Settings Page

- **Enable SMTP:** When checked, email client is enabled.
- **SMTP Server:** SMTP Email Server IP or Domain Name
- **SMTP Server Port:** Port number used by server to send email
- **From Email address:** The email address alarm is sending from, usually client email ID
- **To E-Mail address:** The email address to receive the alarmed email, total 3 included.
- **User Name:** Email client User ID
- **Password:** Email client password
- **SSL:** Check if the SMTP email server requires SSL
- **Email Subject:** Customizable email subject for user convenience
- **Email Content:** Customizable email body for user convenience

NOTE:

- Click “Save” to save the email configuration information.
- Click “Test” after configuration, if setting is correct, a test email will send out and “Test successful!” yellow bar will display

FTP Settings Page (Upload Alarm)

legrand[®] CM7000 Administration Interface

Home
Basic Settings
Advanced Settings
User Management
Maintenance
SMTP
FTP
Alarm Server
Periodic Snapshot
Motion Detection
Syslog

FTP Settings

Enable FTP: ☐

FTP Server:

FTP Server Port:

User Name:

Password:

Path:

Valid DNS server is required for hostname.

Save Test

Figure 12: FTP Settings Page

- **Enable FTP:** When checked, built-in FTP client is enabled.
- **FTP Server:** IP or Domain name of FTP site or server
- **FTP Server Port:** TCP port for FTP server, default port number 21
- **User Name:** FTP server User ID
- **Password:** FTP server user password
- **Path:** Path in the server where upload files are stored.

NOTE:

- Click “Save” to save the FTP configuration information.
- Click “Test” after configuration, if setting is correct, a test FTP operation will be performed and “Test successful!” yellow bar will display if the operation is successful.

Alarm Server Settings Page (Upload Alarm to supported VMS or HTTP Server)

The screenshot displays the Legrand CM7000 Administration Interface. On the left is a vertical navigation menu with the following items: Home, Basic Settings, Advanced Settings, User Management, Maintenance, SMTP, FTP, Alarm Server (highlighted), Periodic Snapshot, Motion Detection, and Syslog. The main content area is titled 'Alarm HTTP Server Settings' and contains four input fields: 'Server Name:', 'URL:', 'User Name:', and 'Password:'. Each field has a corresponding text input box. The 'URL' field includes a small circular icon with an 'i' on its right side. Below the input fields is a 'Save' button.

Figure 13: Alarm HTTP Server Settings Page

- **Server Name:** The name of HTTP server or VMS system
- **URL:** URL of the Server
- **User Name:** User ID from that Server
- **Password:** Password for that User ID

Periodic Snapshot

The screenshot shows the Legrand CM7000 Administration Interface. On the left is a navigation menu with the following items: Home, Basic Settings, Advanced Settings, User Management, Maintenance, SMTP, FTP, Alarm Server, Periodic Snapshot (highlighted), Motion Detection, and Syslog. The main content area is titled 'Periodic Snapshot Settings' and contains three checkboxes: 'Enable Periodic Snapshot' (with a text field set to '1' and 'minutes'), 'FTP Upload', and 'SMTP Upload'. A 'Save' button is located below these options.

Figure 14: Period Snapshots Page

- **Enable Periodic Snapshot:** Enable and set trigger interval for snapshot
- **FTP Upload:** If checked, enables FTP upload for periodic snapshot
- **SMTP Upload:** If checked, enables SMTP upload for periodic snapshot

Motion Detection Configuration Page (Set Alarm)

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CM7000 Administration Interface

Home

Basic Settings

Advanced Settings

User Management

Maintenance

SMTP

FTP

Alarm Server

Periodic Snapshot


Motion Detection

Syslog

Motion Detection Region Settings

16:21:19

16:21:19



Motion detection will be disabled if both primary and secondary codec are set to MJPEG

☒ Enable Motion Detection

☒ Show Motion Detection Regions

0

 Select a Region

0

 Sensitivity

Save

Edit

Remove

Save

Motion Detection Configuration

Auto

 Minimum Interval of Valid Motion Detection(s)

1

 Minimum Interval of New Motion Detection Event(s)

Save

Alarm Action

☒ Record Video From Pre Alarm Up to

10

 seconds to After Alarm Up to

30

 seconds

☐ Voice Alarm to SIP Phone

☒ Upload to Alarm Center

☐ Upload to Alarm HTTP Server

☐ Record Video and Upload to FTP Server

☒ Email and FTP upload JPEG

Pre Alarm Up to

0

 seconds to After Alarm Up to

0

 seconds

Save

+

 Motion Detection Time Schedule

Figure 15-1: Motion Detection Configuration Page

- **Enable Motion Detection:** When checked, motion detection enabled.
- **Show Motion Detection Regions:** When checked, motion detection region with number will be displayed as a white rectangle in the screen. When “Edit” clicked, the rectangle will become Red.
- **Select a Region:** Pull down to select and configure alarm region, 16 alarm regions available, from 0 to 15.
- **Sensitivity:** Select configured alarm region number, input a number for sensitivity to trigger the alarm, 100 is the maximum sensitivity value.

Alarm Action:

- **Record Video From.....** Allows user to configure how long pre/post alarm trigger moment, the video will be captured.
- **Voice Alarm to SIP Phone:** When checked and SIP proxy configured and IPCam registered, SIP alarm call will be made to pre-configured number.
- **Upload to Alarm Center:** When checked, the alarm video will be transferred to Alarm Center.
- **Upload to Alarm HTTP Server** When checked, alarm sent to Alarm HTTP Server. Third Party Server can be used via GS HTTP API
- **Record Video and Upload...:** When checked and FTP server configured, the recorded video sent to the configured FTP server.
- **Email and FTP upload JPEG:** When checked, snapshots of trigger moment will be emailed to pre-configured email account and also uploaded to FTP server if configured.

Motion Detection Time Schedule:

This page allows user to configure Motion Detection Operation Schedule:

Region ID	Date	Start Time	End Time	
0	Everyday	00:00	08:00	Add
0	Everyday	20:00	23:59	<input checked="" type="checkbox"/>
0	Everyday	00:00	08:00	<input checked="" type="checkbox"/>
				<input checked="" type="checkbox"/> Un-Check All Delete

Figure 15-2: Motion Detection Schedule Configuration Page

- **As shown in Figure 15-2, user can configure the Motion Detection Region with related Start and Stop time to control the motion detection operation.**

Syslog Settings Page (Troubleshooting)

The screenshot shows the Legrand CM7000 Administration Interface. The top header features the Legrand logo and the title 'CM7000 Administration Interface'. On the left is a vertical navigation menu with the following items: Home, Basic Settings, Advanced Settings, User Management, Maintenance, SMTP, FTP, Alarm Server, Periodic Snapshot, Motion Detection, and Syslog. The 'Syslog' item is currently selected and highlighted. The main content area is titled 'SysLog Settings' and contains two configuration fields: 'Syslog Server:' with an empty text input field, and 'Syslog Level:' with a dropdown menu currently set to 'None'. A 'Save' button is located below these fields.

Figure 16: Syslog Settings Page

- **Syslog Server:** Syslog server IP or Domain Name
- **Syslog Level:** Level of syslog message sent to the syslog server:
None, Debug, Info, Warning, Error.

IP Camera FAQ

1. What is the default IP address of the CM7000 or CM7100

The default IP configuration is DHCP.

2. Why can't I view the live video stream in Microsoft Internet Explorer?

Please double check whether the IE add-on was installed correctly.

Once you log into the CM7xxx web interface, Internet Explorer will indicate that this website wants to install an add-on. Please install this add-on when prompted by IE.

3. Why can't I access the CM7xxx web configuration interface?

Q 1: Is your internet service down?

A 1: Connect a PC to the internet to test the connection.

Q 2: Are the PC and the camera in different subnets?

A 2: Check the subnet mask and default gateway of the camera and PC.

Q 3: Is there a conflict with another IP address? A 3: Try to change the IP address of the camera.

Q 4: Has the HTTP port been changed?

A 4: Contact the administrator of the device for more information.

4. The CM7xxx web configuration page is not displayed correctly in IE8 ?

In IE8, Compatibility View might need to be enabled for the CM7xxx web configuration page to load properly. To enable compatibility view, open IE8, click *Tools, Compatibility View Setting*, and add the CM7xxx web configuration pages to the Compatibility View.

5. Why does IE indicate to install a new Video Viewer add-on after a firmware upgrade? The add-on was properly installed before the firmware upgrade process.

New firmware will often upgrade the add-on as well. To watch the live video stream, you must install the newest version of the add-on.

6. How do you watch secondary video stream?

Login to the home page of the CM7xxx web GUI, click Play to watch the video stream. To watch a secondary video stream, right click on the video, and select *Secondary Stream* on the pop-up menu. Try reinstalling the CM7xxx Viewer add-on for IE if you cannot see the video stream.

7. Why is audio missing from the recorded video when an alarm triggered?

To confirm to outdoor standard of IP66, the CM7000 does NOT have a microphone installed although it has the interface in its PCB board.

8. What is DDNS? Is it important for IP camera product to have DDNS support?

DDNS is an acronym for Dynamic Domain Name Service. It is important to choose an IP network camera that has DDNS support for dynamic IP addresses. Chances are that the network has a dynamic IP address (which changes with every log on). A DDNS service makes sure that the camera's IP address always matches up to the current server address. DDNS also allows a website to be linked to the IP camera that is constantly updated with the correct information and has a reliable feed.

9. Why is Windows Media Player unable to play the recorded video files?

The CM7xxx uses the H.264 video codec. Windows Media Player may lack the proper H.264 decoder to play the recorded video. Please download the Microsoft FFDSHOW H.264 decoder from <http://sourceforge.net/projects/ffdshow-tryout/> and install it.

10. How to use a cell phone to watch the CM7xxx video stream?

You must set the video resolution to QCIF to watch the CM7xxx video stream from a cell phone. Make sure to set the bit rate to 64kbps to ensure the best video quality.

11. What Smartphone application should I use to view the video?

There are free application and paid version application for this, like: IP Cam Viewer.

12. Port forwarding

Two ports must be forwarded on your router to watch video from a GXV3672HD_FHD that is located on a private network from a PC in a public network. The web port (HTTP) and the RTSP port. Please make note that the RTSP port number changes according to the web port. If the web port is 80, then the RTSP port is 554. If the web port is not 80, then the RTSP port equals the web port +2000. For example, if the web port is 88, then the RTSP port will be 2088.