## REVISION HISTORY

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<th>Version</th>
<th>Author</th>
<th>Description</th>
<th>Date</th>
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<tr>
<td>3.00.04</td>
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<td></td>
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1、System Requirements

a. IP CAM Requirements
Imagia Module Firmware Version：Module 2.0.5
Stardot
LEX-8200-8/16
HA-8160/4125

b. System Requirement
1：Terminal Server :
OS：Windows system：Windows 2000 and Windows XP above
Memory：DDR 2048 MB above
Hard disk：Refer to the chart below ( by parameters of number of channel and recording time )

<table>
<thead>
<tr>
<th>ID</th>
<th>Number of channel</th>
<th>Hard Disk Capacity (GB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1*2 = 2</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>4*2 = 8</td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>9*2 = 18</td>
</tr>
<tr>
<td>4</td>
<td>16</td>
<td>16*2 = 32</td>
</tr>
<tr>
<td>5</td>
<td>64</td>
<td>64*2 = 128</td>
</tr>
</tbody>
</table>

Calculation
Hard Disk Capacity：number of channel * 2(GB)
Hard Disk overwrite：When destination Hard disk is full capacity, the first five recording data will be deleted and to overwrite recording into Hard disk

2：client terminal :
OS：Windows system：Windows 2000 and Windows XP、Windows VISTA、Windows 7
Memory：DDR 2048 MB above
Hard disk：
Display resolution：1024 x 768 above
2. **PC Server**  
   a. **Interface instruction**  

1. **Login Interface**  
   Double click the CMS-Server Program to execute it and then get into Login interface shown as below:

   ![Login Interface](image)

   - **User Name**: self-assigned name to login
   - **Password**: self-assigned password to login
   - **Remember Password**: Recording User’s last Login-information
   - **Auto Login**: Directly auto login to Main Window with correct Username and password for next execution of the CMS-Server Program when this item is selected.

   **Note**: As first time execution, the default value for User Name: admin / Password: None

2. **Main Window**
To login to Main Window with correct Username and password as shown above

(1) Tool Bar
There are seven control option in Tool Bar:
1: Start/Stop Record 2: User Set  3: Recording path 4: System set 5: Camera List
6: EMap  7: Log system

(2) Group list
ALL IPCAM connected to PC Server will be listed by group in Tree, and setting, adding and modifying group, could be made in this list.

(3) Camera List
ALL IPCAM added to PC Server’s Multi Window database (MultiWindow.mdb) will be listed b, and setting of every details of each camera could be made in this list.

(4) Search Camera
ALL IPCAM available in LAN will be listed, and setting, adding and modifying group, could be made in this list, furthermore, be added into data base with correct user name and password.

(5) Status Information
Display transmitting status of IPCAM, as well as its information: channel number, IP Address, frame
rate, Streaming and present time

b. Tool Bar

1. System Set

Select in Tool Bar to get into interface shown as below

```
System Set

New Camera Set

- Add new camera when connect successful

Default Username: admin
Default Password: 

Max Window: 16
Language: English
Port: 10001

- Auto Record All
- Auto Login
- Auto to run when the windows OS starting

OK  Cancel
```

1: Add new camera when connect successful:
Auto connecting to new searched IPCAM with default username and password when enable this function, and its IP address would be added into database, that simplifying the operation.

4: Max Window: Select the maximum amount of IPCAM (1, 4, 9, 16, 25, 36, 49, 64, 81, 100)

5: Language: Select the language

6: Port: Set the port of the server terminal for internet connection, default value: 10001

7: Auto record all: All the IPCAM in database will auto-recording when enable this function.

8: Auto Login: Auto-login when enable this function with correct user name and password

9: Auto to run when the windows OS starting:
auto execute after windows OS starting when enable this function

2. User Set

select in Tool Bar to get into interface shown as below

1. Add: type new username and password and then "add" to create a new account
2. Modify: Select one account and then "modify" to fix all parameters under its permission
3. Operate Group: permission of users could be modified in this column by group.

3. IP Cameras List

In this list, double click upon selected IPCAM to get into its setting interface.

3.1 Add Camera & Modify Camera
Click Add Camera & Modify Camera both are led to one interface as shown below
1: Address : Type IP Address of new IPCAM to add it to list
2: Port : IP CAM’s port
3: Camera Type : Select the Camera’s type accordingly, such as HA-64X, StarDot and etc..
4: Channel : Self-assign the name of each IP CAM
5: User name : Set User name of IPCAM
6: Password : Set Password of IPCAM
7: Group : Self-assign the group for each IP CAM
8: MAC Address : MAC Address
9: Connect Test : With correct username and password, Live display will show on the right after click “connect test”, and then “OK” to add it into database when the connection succeeded.
10: Camera Set : Set IPCAM, refer to next index for details
11: Motion Set : Set motion detect

3.2 Camera Setting
3.2.1 Status
You can see the camera, OCX and other basic information from the camera setting as shown below:
1. All IPcams
   When “Yes”, all set will be to all camera in database, instead of setting individually, to save
time from setting.

2. Camera Type
   Television system of cameras shown as PAL-Camera or NTSC-Camera

3. Firmware Version
   The current firmware version. Please check this information to make sure whether the system should
   be updated or not. In general, update to latest firmware can fix the system bug and provide more
   functions if available.

4. OCX Version
   The current ActiveX version. OCX goes along with the Multi Window installation, so update is
   unnecessary as usual.

5. OCX Path
   The installation path of the ActiveX.

3.2.2 AV Setting
In this interface, you may set the Audio / Video of each IPCAM, such as Resolution, CBR, Limited frame
rate and etc., as shown below:

2. Video Config:
   2.1 Resolution
   Options as D1, CIF, VGA, QVGA.
   2.2 CBR
   CBR file fixed the amount of output data per time segment, to keep away from internet jammed with limited band; transmitting image quality go down as CBR value is set lower
   2.3 Limited Frame Rate (fps)
   Frame rate transmitting per second is defined by the internet connection speed. Higher value brings smoother picture performance.
   2.4 Compression
   Image compression rate-the less value brings the higher image quality and the larger data transmission.
   2.5 P/I Ratio (P frame : I frame)
   As P/I value gets less, that image quality be higher, yet transmitting load rising.

3. Audio Config
Enable IP Camera Audio to record its audio; enable PC Audio to play audio from IP Camera.

3.2.3 Network Setting
In this interface, you may set the network condition of each IPCAM, such as IP Address and etc., as shown below:

Obtain IP Address via DHCP: Obtain IP Address via DHCP
Use the following IP Address: Self-assign the IP Address of each device and related setting
HTTP Port: HTTP Port of selected IPCAM, default value: 80

3.2.4 PPPoE Setting
In this interface, you may set the PPPoE of each IPCAM, as shown below:

Obtain IP Address via DHCP: Obtain IP Address via DHCP
Use the following IP Address: Self-assign the IP Address of each device and related setting
HTTP Port: HTTP Port of selected IPCAM, default value: 80
1: PPPoE Config

Enable PPPoE: it needs user-name and password from ISP (Internet Service Provider) when enable PPPoE, and dynamic IP is provided and changed accordingly by the "Email Notification when IP is Changed".

2: Status

Every information of IP Address, DNS, Connection State and etc. from ISP is listed after internet connection succeeded.

3.2.5 DDNS (Dynamic Domain Name Service)

Set DDNS Service in this option. Please kindly register to complimentary DDNS Server in the list we offered for DDNS Service; DDNS Server not in our list is not available. Please refer to related website for more details. For example, as DynDNS, as shown as below:
DDNS Config
Choose (DDNS) server: Choose DDNS Server, offered as: Dyndns, PeanutHull and Perfecteyes
DDNS Account: Self-assign the domain name, such as: test.dyndns.org
Username: Self-assign the Username
Password: Self-assign the Password
Status: Display connecting status to DDNS server
Manual Update: When connecting failed, click “Manual Update” to announce the IP Address of your IPCAM to DDNS Server.

3.2.6 SMTP Config
Set SMTP of selected IPCAM in the interface as shown below:

```
SMTP Config
Mail Server
192.168.1.123
From E-mail address
test@test.com.tw
To E-mail address
user@test.com.tw
Authorization
☑ Yes ☐ No
Username
test
Password
****
```

SMTP Config
In PPPoE mode, please renew the IP when it is changed and noticed by E-mail; and please refer to the fig. above to set SMTP server for picture sending when alarm triggered, entering your E-Mail information accordingly.

3.2.7 FTP Config
Set FTP of selected IPCAM in the interface as shown below:
Please ensure the correction of FTP Config for the function of recording to FTP when alarm triggered.

3.2.8 Record By Schedule

Set Scheduled Recording of selected IPCAM in the interface as shown below:

- **Record Type**: set as No Record, manual Record, record by Schedule
- **Schedule**: Scheduled by self-assignment in this option
- **Duration**: Set recording time when alarm triggered

FTP Path

Please ensure the correct FTP Config for the function of recording to FTP.
Note: Default value of IPCAM, StarDot is manual record, and that of HA-640X No record, please set record path for HA-64X to record in locale terminal.

3.2.9 PTZ Config

Set PTZ of selected IPCAM in the interface as shown below:

![PTZ Config Interface]

1、PTZ Config
Protocol : Set the Protocol of the PTZ; supports PELCO-P, PELCO-D
Baud Rate : Set the Baud Rate of the PTZ.
Address : Set the PTZ address from 0 to 255.
Type : Set the Model Number of the PTZ
PTZ Direction: Please set the PTZ direction while the PTZ camera is in the opposite direction.

3.2.10 Motion Set

Set Motion Detect for selected IPCAM in “Add Camera & Modify Camera”, select Motion Set to get into interface shown as below:

![Motion Set Interface]
Motion Detection Enable:
Please select detect area for when Motion Detect enabled; there are options of alarm mail sending and recording in FTP server, as well as "motion record" scheduled in Multi Window when Motion Detect triggered.

c. Record Path
1. Record Path
Click 📋 in tool bar and get into interface as shown below; multi-recording path is available as second path would be executed when full capacity by first path

![Record Path Interface]

2. Record Set
Default value is "No Record" as first execute program, click 📎 in tool bar to record all IPCAM in data base of PC server, and fig. changes to 📎; also select "auto record all" in "System Set" to record automatically.

Fig. 📎 means IPCAM in recording; and fig. 📎 IPCAM "No Record"
d. All IPCAMS
1. Add Group
Self-classify all IPCAM into groups and set user’s permission to self-assign groups visible for certain user.
To add new group shows in Fig. right
And then get into interface as below to enter new group name:
Right click upon certain group name to add, delete, and modify selected group as shown below

Groups will be automatically added in the list of database when finish of adding; and could be self-classified.

P.S. : group named “New” is default value and means failed in connection; group named “Added” also default value yet means succeeded in connection

2. IP Camera List

To set and manage each IPCam in database, but the set of each IPCam itself will be remained; all set-up be saved in database of Multi Window only. Whenever every modification of each IPCAM finished, click to make it valid
Click **Re-scan The Network** to search all IPCAM in LAN. Searched IPCAM will be added into the database automatically with correct user name and password when “Add new camera when connect successful” selected.

e. **EMap**
select in Tool Bar to get into interface shown as below:

For this function, map file needs to be added as JPEG file, up to three layers from main-layer to sub-layer.

1. **Add and modify E-map**

   The tool bar as shown below:

   Select to add EMap and get into interface shown as below:

   ![Add Child Map Window](image)
Right click upon the Selected map in Tree to modify and delete the map.
Live EMap, Modify EMap: modify the resource and file name of map; Delete EMap: delete map file, and the camera in this map as well.

2. EMap Set

The tool bar as shown below

Icon instruction (from left to right):
- E-Map Ratio
- (from left to right) Zoom out, zoom in, move, Cursor, Original Size, Fit Screen, Modify, Add, Back to last layer
Names of E-Maps by layer

Note: the ratio is the selected area by cursor to the main frame

3. Monitor Spot Set

Put IPCAM upon Maps to matched position when maps-adding finished. Select IPCAM in Tree and draw it to the certain area of selected map; also you may draw Group as well to selected map, yet the changement needs to be made in group as shown below:

Left: "added" means Group; and its sub-tree means IPCAM.
Right: numbers show the layer of maps.

f. Log system

record every operation information: user name, operated camera, motion detect triggered and etc. as shown below:

Save as.: to back up log
Clean: clear all in log away
g. About Multi Window 3.0

Related information of program Multi Window

Click MultiWindow in the top on right in Main Window

Exit: Right Click and “Exit” shown as

And the click “Exit” to close after confirmation of username and password as shown below
3、 Client Server  
  a. Login MultiWindow  

Execute Client Server Program “CMS-Client.exe” to get into interface as shown below:

![Login MultiWindow](image)

Server Address: IP Address of PC server (Default value: 127.0.0.1)
Server Port: Server Port of PC server, Default value 10001
UserName: enter valid UserName; its addition and modification be set in PC Server
PassWord: enter correct Pass Word
Remember Password: no need of Pass Word entering for next login
Auto Login: Auto Login
OK: OK
Cancel: Cancel

Note: Instruction of Multi-Server Connection will be later
b. **Live monitor**

After succeeded in connection, then comes the interface shown as below:

<table>
<thead>
<tr>
<th>(1) Exit program</th>
<th>(6) Information of IP Address, Frame rate and etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Live monitor</td>
<td>(7) PTZ Control</td>
</tr>
<tr>
<td>(3) Display Mode</td>
<td>(8) IPCam list</td>
</tr>
<tr>
<td>(4) Tool Bar</td>
<td>(9) Log, Move log</td>
</tr>
<tr>
<td>(5) Information of Time, channel number</td>
<td></td>
</tr>
</tbody>
</table>

1. Exit program, minimize, full screen and exit (window)
   - ![Exit program](image1)
   - ![Full Screen](image2)
   - ![Minimize window](image3)

2. Live monitor, drawing Cursor to change the position of each channel; with right click, it will be shown as below:
Start to Live View : Start / stop Live view
Snapshot : make picture of certain channel
Auto Flip : Enable auto switch of channel, to adjust the interval in “System Set”

3. Display Mode: there are options of 1 ch, 4 ch, 9 ch, 16 ch, 25 ch, 36 ch, 49 ch, 64 ch (It depends on the ability of PC to select the options for the smoothness of display)

4. Tool Bar

System Set
Click to get into “System Set”, there are options of” Setting “, “Move log” and “Language” as shown below:

![System Set window](image)
1. Option

(1) Auto Flip
   Its interval is adjustable, and function be disable when interval set to “0”
   Start economization mode:
   When displayed in Auto Flip Mode, decoding will be made only for present channel to save system resource.

(2) Return to original state’s window style:
   When Stay idle too long, system will be back to default display to save its resource from decoding; and function be disable when interval set to “0”

(3) Return to original state’s window style after motion happened
   after motion happened, it will Return to original state’s window style as reminder; and its duration is adjustable, and function be disable when duration set to “0”

(4) Snapshot Path: path to save pictures

(5) EMap Alarm
   after motion happened, Icon of triggered IPCAM will remain flash; and its duration is adjustable, and function be disable when duration set to “0”

2. Move Log

Move-log that self-assigned will be shown on the right top
Max Windows Show: number of channel to display

Save current liveview status
Click to save current live view status and the split of connecting IPCAM self-assigned and it as shown as below:
enter a file name and save, then options of live view be added

![Save Current Liveview Status]

Multi-server connection
click to get into list of Server

![Add PC Server]

Enter Server (IP) Address and server (port) and then “Add” to Connect to Several Server simultaneously, and see all of belonging IPCAM
Playback

Please press this button to enter the playback system as shown below. Refer to its operation later.

Emap

Click to get into Emap from PC Server

Note:
Except “Add and modify E-map”, all operation is the same as that of PC Server, such as Zoom in / out and etc..
Group Broadcast

Click to get into Group Broadcast as shown below:

Add IPCAM from present list
Delete IPCAM from present list
Start: Broadcasting to selected IPCAM
Cancel: Cancel Broadcasting and back to main window

Note: it supports only when audio function of IPCAM / Video Server be available

5. Information of Time, channel number
Information, such as Time and channel number of selected channel
CH  Number of selected channel
CT  Present time

6. Information of IP Address, Frame rate and etc.
   Information, such as IP Address, Frame rate and etc. of selected channel

   IP Address: IP Address of selected channel
   FrameRate, BitRate: Current FrameRate, BitRate of selected channel

7. PTZ control

   Icon Instruction:
   
   - : Zoom OUT
   + : Zoom IN

   - : Focus -
   + : Focus +

   ↑ : Tilt
↓ : Down
← : Left
→ : Right
■ : Stop PTZ Control

Save present camera position
Clean present saved position
Enable / disable tour function
Select from saved position

8. IP Cam List

After succeeded in connecting to server, all IPCAM will be listed

Surveillance could be displayed by IPCAM in list, as well as by group with right click upon group name and then “Play Group“
9. Logo · Move Log

Move Log set in “System Set” will be shown as below:

![MultiWindow](image)

- **c. PlayBack**
  - In the tool bar of Main Window, click ![playback icon] to playback interface as shown below:

  ![Playback Interface](image)

<table>
<thead>
<tr>
<th>(1) Logo Info.</th>
<th>(4) Tool Bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) IP CAM List</td>
<td>(5) time to playback</td>
</tr>
<tr>
<td>(3) date of recording data</td>
<td>(6) Playback Display</td>
</tr>
</tbody>
</table>
1. Logo Info.
2. IP CAM List

All IPCAM of PC server is listed, selecting IPCAM or drawing selected IPCAM to play window on left to playback directly
※ For HA-64X Series, it plays back data from DVR, by selecting data list with right click and “Play Server File” to playback data from Server

3. Date of recording data & time to playback

Date of recording data of selected IPCAM is shown in red as below, Different data type will be shown by colors in time table

Instruction:
Red: recording time
Green: interval between recordings
White: no recording data

4. Tool Bar

Items in first row from left: 1. replay 2. Pause 3. Stop
4.1 Back up

Channel : Channel to Back-up
Type : File type to Back-up:
1. AV/AVS File
   (Normally be AV file, and AVS file is reserved file for StarDot)
2. avi File
Start Time : Start Timeo Back-up
End Time : End Timeo Back-up
Path : Path o Back-up

4.2 Synchronous /Not Synchronous Play back

Synchronous Play back : After playback for a while, difference between 4 ch will be shown, and then system will slow down the faster channel Synchronous Play back

Not Synchronous Play back : Each 4 ch be self-playback

4.3 Renew loading to server

Renew loading to server

6. Playback Display

UP TO 4 Channel playback simultaneous.