



ACTi IP Utility

Version 3.5.32



Table of Contents

| | |
|--|-----------|
| Start IP utility..... | 3 |
| IP Utility Device List..... | 4 |
| User Interface | 4 |
| Device List..... | 12 |
| Camera Profile Upload Filtering | 16 |
| Limitations..... | 17 |

Start IP utility



To start IP Utility, double-click the “IP Utility” program icon.

As the program starts, IP Utility will run an initial search to find all devices on the network. It will display a message stating ‘Searching Device... Please Wait’. The search time usually takes about 10-15 seconds, but may take up to two minutes. Please have patience and wait for the search.



Figure 1 IP Utility is searching for available devices

After the search is done, the Device List screen will appear.

IP Utility Device List

User Interface

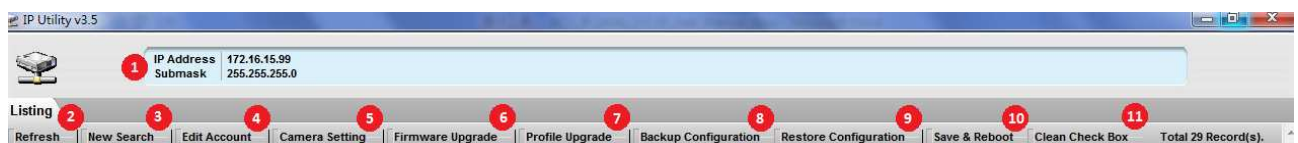


| Action | # | Hostname | LAN IP | WAN IP | Chn ID | Http Port | MAC Address | FirmwareVersion | Router Version | Camera Profile | Model | SerialNumber | Account | Password | Status |
|--------|----|----------|--------|-------------------------------|--------|-----------|-------------------|---------------------|---------------------|----------------------|-----------------------------|---------------------|---------|----------|--------|
| | 1 | ACTI | | 172.16.15.106 | 1 | 80 | 00:0F:7C:03:50:B1 | A1D-220-V3.10.22-AC | N/A | MT9M131-RB0_V080731A | ACM5611-Megapixel IP Camera | ACM5611-09H-X-00592 | | | |
| | 2 | ACTI | | 172.16.15.126 | 1 | 80 | 00:0F:7C:12:34:56 | A1D-310-V4.08.99-AC | N/A | SonyIT1-TB0_V100407A | XXXXXXX-Mega IP Camera | XXXXXXX-XXX-X-XXXXX | | | |
| | 3 | ACTI | | 172.16.15.137 | 1 | 80 | 00:0F:7C:4D:2F:1B | A1D-220-V3.99.13-AC | AGD-R2N-V2.07.03-AC | ADV7180-R00_V071030A | ACD2400-16-CH Video Server | ACD2400-10E-X-4D2F1 | | | |
| | 19 | ACTI | | 172.16.15.140 | 1 | 80 | 00:0F:7C:00:00:01 | XXX-XXX-V0.00.01-AC | N/A | Unknown Profile | TCM4300-Video Server | TCM4300-XXX-X-XXXXX | | | |
| | 20 | ACTI | | 172.16.15.60 | 1 | 80 | 00:0F:7C:81:A1:A2 | A1D-310-V4.06.08-AC | N/A | MT9M131-TB4_V090701A | TCM4301-Mega IP Cube Ca | TCM4301-00123456789 | | | |
| | 21 | ACTI | | 172.16.15.62 | 1 | 80 | 00:0F:7C:02:FB:47 | A1D-220-V3.13.03-AC | N/A | MT9M131-RB1_V090930A | ACM5611-Mega IP Camera | ACM5611-09F-X-00878 | | | |
| | 22 | ACTI | | 172.16.15.63 | 1 | 80 | 00:0F:7C:00:99:03 | A1D-220-V3.12.13-AC | N/A | ADV7180-R00_V080415A | ACD2100-Video Server | ACD2100-SKYTER00000 | | | |
| | 23 | HOST_OEM | | 172.16.15.65 | 1 | 80 | 00:0F:7C:06:AA:F7 | A1D-311-V5.99.0A-AC | N/A | N/A | TCDxxxx-Quad Server | TCDxxxx-07A-X-00057 | | | |
| | 24 | ACTI | | 172.16.15.67 | 1 | 80 | 00:0F:7C:1A:2B:3F | A1D-220-V3.12.13-AC | N/A | MT9M131-RA0_V091014A | ACM4200-Mega IP Cube Camera | ACM4200-10A-X-12390 | | | |
| | 25 | ACTI | | 172.16.15.75 | 1 | 80 | 00:0F:7C:AC:43:65 | A1D-220-V3.99.13-AC | N/A | ADV7180-R00_V071030A | ACD2100-Video Server | ACD2100-07A-X-09091 | | | |
| | 26 | ACTI | | 172.16.15.77 | 1 | 80 | 00:0F:7C:1E:2E:3E | A1D-220-V3.99.13-AC | A4D-R2N-V2.07.03-AC | ADV7180-R00_V071030A | ACD2200-4-CH Video Server | ACD2200-10E-X-1E2E3 | | | |
| | 29 | ACTI | | 172.16.15.92 | 1 | 80 | 00:0F:7C:25:23:45 | A1D-220-V3.99.13-AC | N/A | ADV7180-R00_V071030A | ACD2100-Video Server | ACD2100-10X-X-23523 | | | |

Figure 2 Device List

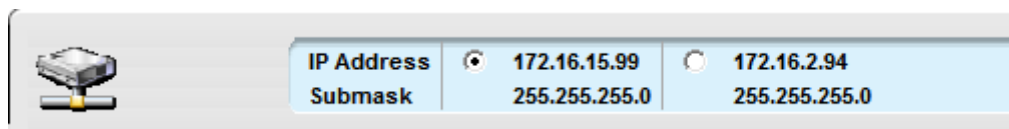
The User Interface of IP Utility can be divided into the **Menu Bar** and the **Device List** sections.

Menu Bar



1 Computer Network Settings: These are the currently available network connections from this PC. IP Utility will use all available networks to search for devices.

If there are multiple network interface in the PC, the IP Utility will show the network interfaces which it detected here. The following figure illustrates the two network interfaces are detected.



The radio button shows on the page. The IP Utility use the first detected network interface to search the cameras. The cameras could not be found if they are not in the same physical network as this first detected network interface. User could change target network interface and do the device search again.

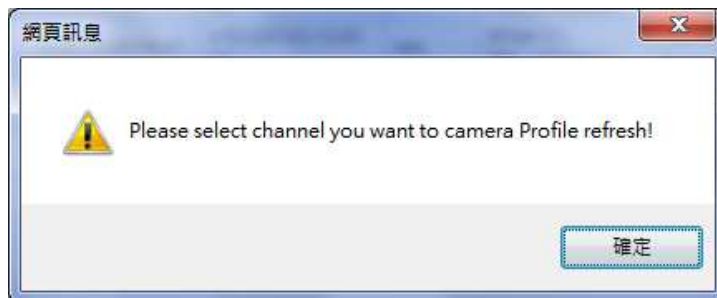
2 Refresh: During the device search period, the IP Utility will try to get the camera information like camera profile ID by using the default account name and password. If the camera account name and password are not correct, the IP Utility fails to read them. For example, the "Authentication failed" will be shown on the Camera Profile field. As the correct account and password are typed

into the Account and Password fields for the camera (refer to Edit Account below), the camera information like camera profile ID could be read back by click this tab (Refresh). The IP Utility will NOT perform device search in this action.

The error message will be pup-up when IP Utility could not move forwards to execute the refresh function. The refresh action will be stopped when an error occurs. The error message describes the first error of refresh.

No Channel Selected

At least one camera has to be selected before refresh. The following figure illustrates the error of no selected channel.



Authentication Failed

The following figure shows the pop-up error message of authentication error.



The NO.1 means the account name or password is not correct for the camera in the first column of device list (Device No. is 1) in device search window. Refer to the Device No. (#) section.

Please Input Account

The account filed is empty in the selected channel. We don't show the device No. here because this channel could be found easily.



Please Input Password

It is similar to the messing account name case.



- 3 **New Search:** Re-do the device search. All records in the previous device search including the camera account settings in the IP Utility will be lost. This will take from 15 seconds to 2 minutes.
- 4 **Edit Account:** Display a page to set account and password. Check the boxes in front of the devices you wish to apply this account, and the Account / Password text boxes will be automatically filled with this. This is a handy function when you need to setup many devices from IP utility and do not want to type the same password into each and every one.
- 5 **Camera Setting:** This will allow you to log into the selected device and change Serial Port and Date/Time settings.
If there is more than one camera were checked, these camera serial port and date/time settings will be updated by this function.
- 6 **Firmware Upgrade:** Use this function to upgrade device firmware. You should first check the checkboxes before the devices you wish to update, and enter Account / Password for every device. Clicking this will display a warning message, reminding you to NOT reboot or power off during upgrade.



Please follow this warning, as powering off at the wrong time may damage the device. Click OK to proceed to the upgrade screen.

There are two types of video encoder firmware upload. In PlatformW and PlatformA devices, the firmware image includes firmware image binary and MD5 files. In the firmware image upload, users have to pick the correct firmware binary file and MD5 file.

In PlatformT, PlatformK and future firmware, only firmware image binary file is needed. User just needs to pick up the correct firmware binary file for upload.

The IP Utility should show the firmware image upload page differently based on the platform

firmware. Before show the firmware upload page, users have to pick up the target devices for upload. Then, IP Utility could get the platform firmware information from the firmware version. So, it is able to show correct firmware upload page associated with platform firmware.

- PlatformA and PlatformW firmware upload

The following figure illustrates the firmware image upload page in the IP Utility.



| Note | Status |
|---|----------------------------------|
| The firmware upgrade process will take about 2 to 5 minutes, depends on the number of channels you are upgrading at the same time. Please check the device network light. | 1. LED Flush: Save firmware now. |
| | 2. LED OFF: System reboot. |
| | 3. LED ON: System reboot finish. |

- PlatformT firmware upload

The following figure illustrates the firmware image upload page in the IP Utility.



| Note | Status |
|---|----------------------------------|
| The firmware upgrade process will take about 2 to 5 minutes, depends on the number of channels you are upgrading at the same time. Please check the device network light. | 1. LED Flush: Save firmware now. |
| | 2. LED OFF: System reboot. |
| | 3. LED ON: System reboot finish. |

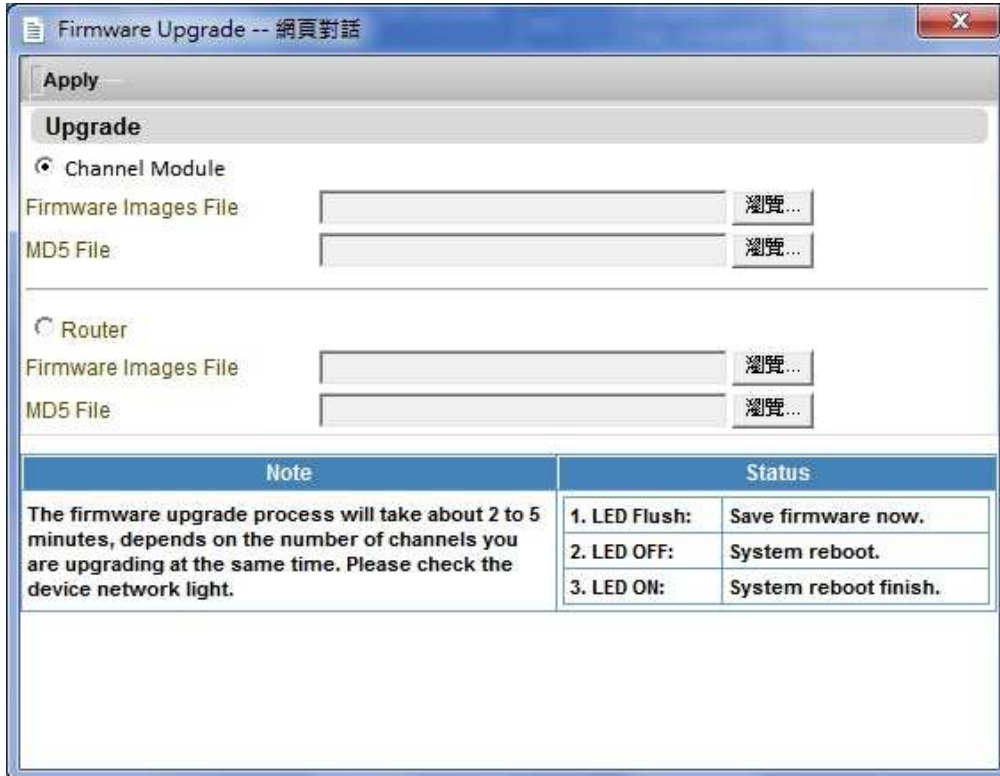
- Multiple Channel video encoder firmware upload

There are two firmware images in the multiple channel video encoder. One is the Router firmware and the other one is channel module firmware.

The router firmware image includes the firmware binary file and MD5 files. The files in the channel module firmware depend on the platform of channel module.

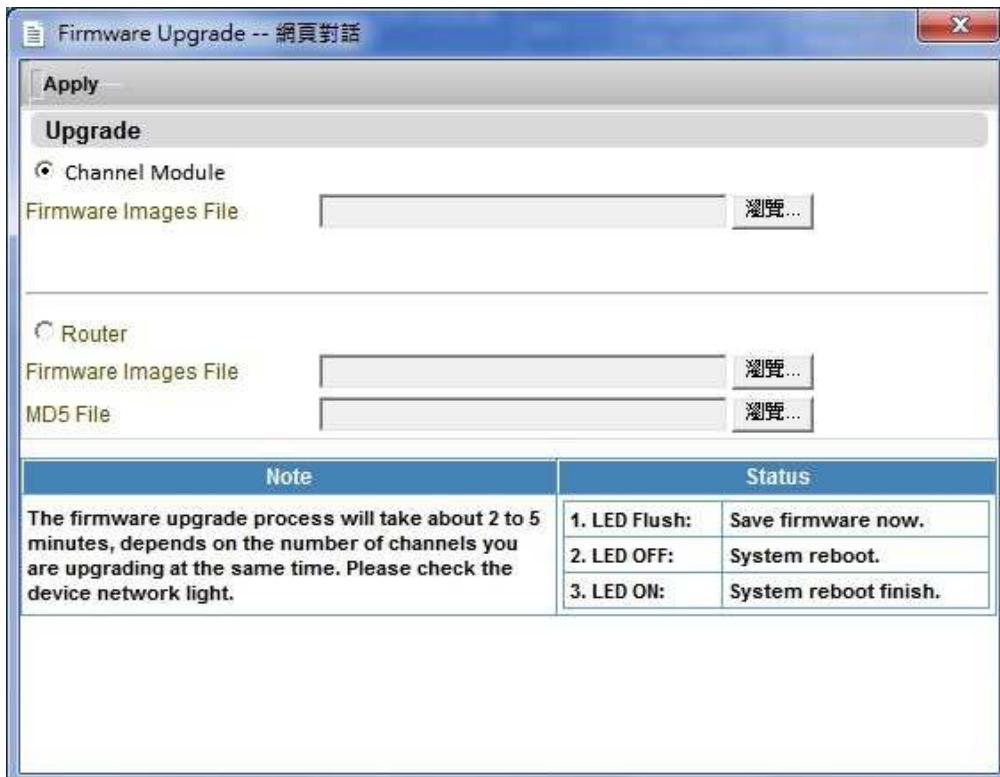
IP Utility 3.5.32

With PlatformW and PlatformA channel module, two files, firmware binary file and MD5 file, are needed to upload the firmware image. The following figure illustrates the firmware image upload page in the IP Utility.



| Note | Status |
|---|----------------------------------|
| The firmware upgrade process will take about 2 to 5 minutes, depends on the number of channels you are upgrading at the same time. Please check the device network light. | 1. LED Flush: Save firmware now. |
| | 2. LED OFF: System reboot. |
| | 3. LED ON: System reboot finish. |

With PlatformT channel module, one file, firmware binary file, is needed only.



| Note | Status |
|---|----------------------------------|
| The firmware upgrade process will take about 2 to 5 minutes, depends on the number of channels you are upgrading at the same time. Please check the device network light. | 1. LED Flush: Save firmware now. |
| | 2. LED OFF: System reboot. |
| | 3. LED ON: System reboot finish. |

You may upgrade two kinds of firmware. One is called **Channel Module**, which means

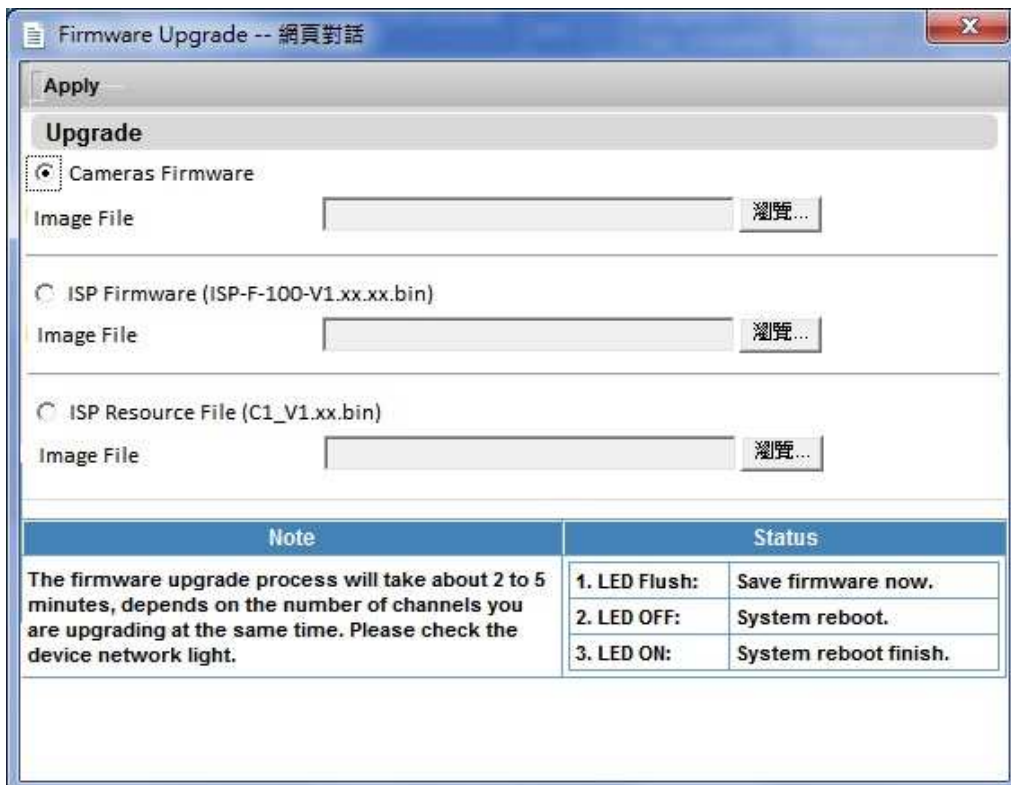
Video Encoder Channels. The other type is the **Router**. This is the “System” firmware in multiple channel video encoders. When upgrading multiple channel video encoders, please always upgrade channel module firmware first, and upgrade Router firmware afterwards. In multiple channel video encoders, the firmware version in router and channel module firmware might be bound together. That means the channel module firmware version might depend on the router firmware version. So, IP Utility treats channel module is different from the general camera or single channel video encoder even they have same encoder H/W platform. It does not allow to have firmware, profile upgrade to channel modules and cameras at the same time.

- PlatformK firmware and ISP firmware upload

In PlatformK camera, the ISP is the very important component to handle video quality. The ISP firmware and ISP resource data might need to upload to the ISP for improving the camera video quality.

The ISP image upload is only available in the PlatformK cameras. When the PlatformK firmware image upload page was show, the default checked radio button is firmware image upload. Users could check the ISP firmware or ISP resource upload in case.

Note that the device will reboot automatically after an image upload completes. The following figure illustrates the firmware image upload page for PlatformK cameras.



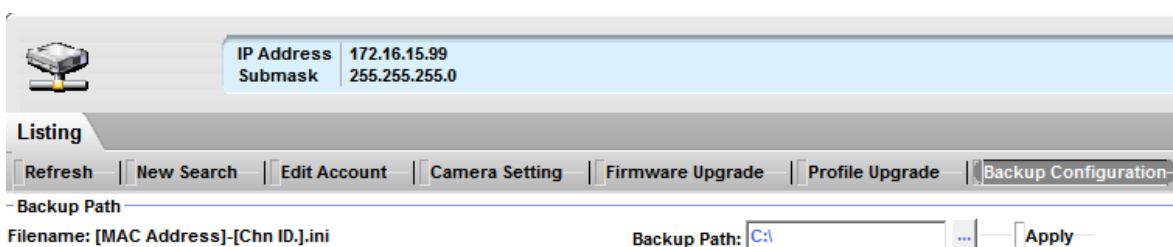
| Note | Status |
|---|----------------------------------|
| The firmware upgrade process will take about 2 to 5 minutes, depends on the number of channels you are upgrading at the same time. Please check the device network light. | 1. LED Flush: Save firmware now. |
| | 2. LED OFF: System reboot. |
| | 3. LED ON: System reboot finish. |

- 7 Profile Upgrade:** This will display a dialog window that asks you to select a profile pack file to use.




After you've selected the proper file, click apply to proceed. The profile pack contains necessary profiles for all devices, and will automatically match the proper profile to each device. This means there's no need to choose a different profile for each device anymore. The device will perform save and reboot after the upgrade of camera profile.

8 Backup Configuration This will display a section right above the device lists.



This will show the backup path for the configuration file. The default backup path is C:\. The

backup path could not be set directly in the "Backup Path:" text field. You need to click  to select the path for the backup configuration files. The configuration file will be saved to this path. The file name will be based upon the MAC address and the Channel ID. For regular IP cameras the file name would be MAC address, with "-0" attached to the end. For the 2nd channel in a multi-channel video server, the backup file name will look something like: 000F7C011FBB-2.ini

9 Restore Configuration This will display a dialog box for you to select the file to restore. Click "apply" when you wish to proceed. Please note that configurations backed up with older version of IP Utility may only be restored to the same devices with this version of IP utility (3.5.25). ***For configurations backed up with this version of IP Utility, you may restore the settings to multiple devices at once, but only to devices of the same family.*** For example, you may back up settings from one MPEG4/MJPEG CMOS camera and restore it to another type of MPEG4/MJPEG CMOS camera. For some models, you can restore the settings only to multiple devices of the same model number. NTSC / PAL devices of the same model number also count as different product families, and you cannot restore settings across the family line. Please only check boxes in front of devices of the same type before clicking restore configuration. When restoring to individual video server channels, expand the channels to select the individual video server so that it shows the "-" sign. When restoring configuration to the multiple-channel routers, collapse the channels so that it shows "+" sign, to restore to multi-channel router.
















The error message will be pop-up when the restored configuration file does not match the target device.



- 10 Save & Reboot** This will force the device to save all current settings and reboot. Settings that have not been saved will be lost when the device loses power. So please always perform Save and Reboot right after you changed device settings.
- 11 Clean Check Box** This will remove all check marks on the checkboxes before each device, deselecting all in the process.

Device List

You may click on the column headers to sort the device list by that column

| 1 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|---|---|----------|---|---|--------|-----------|-------------------|---------------------|---------------------|----------------------|-----------------------------|---------------------|----------------------|----------------------|----------------------|----|
| Action | # | Hostname | LAN IP | WAN IP | Chn ID | Http Port | MAC Address | Firmware Version | Router Version | Camera Profile | Model | Serial Number | Account | Password | Status | |
|  | 1 | ACTi |  |  | 1 | 80 | 00:0F:7C:1A:2B:3F | A1D-220-V3.11.13-AC | ----- | MT9M131-RA0_V091014A | ACM4200 Mega IP Cube Camera | ACM4200-10A-X-12390 | <input type="text"/> | <input type="text"/> | <input type="text"/> | |
|  | 4 | ACTi |  |  | 1 | 80 | 00:0F:7C:AB:CD:87 | A1D-220-V3.11.13-AC | A4D-R2N-V2.07.01-AC | ADV7180-RXK_V080415A | ACD2200 4-CH Video Server | N/A | <input type="text"/> | <input type="text"/> | <input type="text"/> | |
|  | 5 | ACTi |  |  | 2 | 80 | 00:0F:7C:AB:CD:87 | A1D-220-V3.11.13-AC | A4D-R2N-V2.07.01-AC | ADV7180-RXK_V080415A | ACD2200 4-CH Video Server | N/A | <input type="text"/> | <input type="text"/> | <input type="text"/> | |
|  | 6 | ACTi |  |  | 3 | 80 | 00:0F:7C:AB:CD:87 | A1D-220-V3.11.13-AC | A4D-R2N-V2.07.01-AC | ADV7180-RXK_V071030A | ACD2200 4-CH Video Server | N/A | <input type="text"/> | <input type="text"/> | <input type="text"/> | |
|  | 7 | ACTi |  |  | 4 | 80 | 00:0F:7C:AB:CD:87 | A1D-220-V3.11.13-AC | A4D-R2N-V2.07.01-AC | ADV7180-RXK_V080415A | ACD2200 4-CH Video Server | N/A | <input type="text"/> | <input type="text"/> | <input type="text"/> | |

- 1 Action Column** This column contains two quick buttons that you can use to access device settings. Multi-channel video servers will also display a "+" or "-" sign in front of it, to expand or collapse multiple channels into one row.
- 2 Info Button** This will display a dialog box showing basic settings of this device. This allows you to check important settings without going through login and multiple Web pages.

Camera Detail -- 網頁對話

LAN IP

172.16.15.94

Firmware Version

A1D-220-V3.11.13-AC

MAC Address

00:0F:7C:1A:2B:3F

Factory Default Type

Two Ways Audio(0x71)

SYSTEM

Embedded system

TYPE

Encoder

NO OF CHANNEL

1 channel

MULTIPLEXING

No multiplexing

NO OF AUDIO WAYS

2-way audio

VIDEO BRIGHTNESS

25

VIDEO CONTRAST

50

VIDEO SATURATION

67

VIDEO RESOLUTION

N1280x1024

VIDEO BITRATE

3M

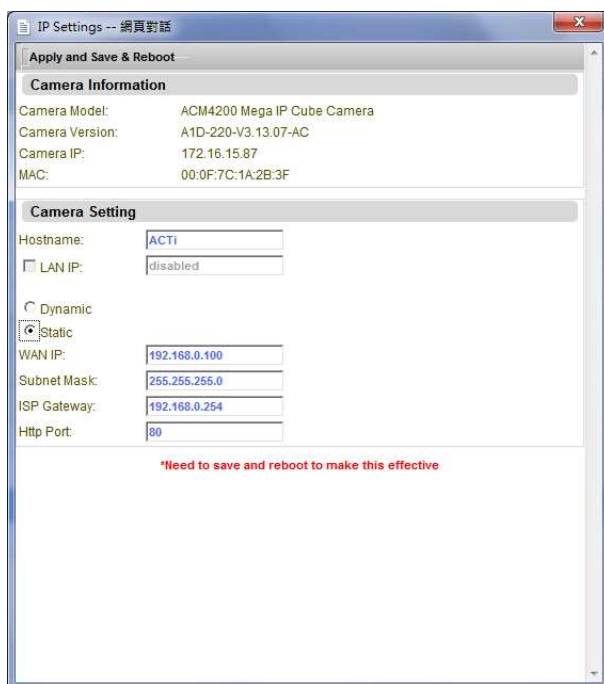
VIDEO FPS

Constant

VIDEO FPS NUM

8

- 3 Setting Button** This will display a dialog box showing the model, firmware version, IP and hostname. This also allows you to change device hostname, IP and port number without logging in. Click “Apply and save & reboot” to use the new settings.



- 4 Check Boxes** Select the devices you wish to do further operation on with the check boxes. You may also check or uncheck all devices by clicking on the checkbox in the title row.

- 5 Device No** This column shows the device sequence number. This is not fixed to the device, and even if you resort the whole list based upon different columns, this will remain in the same place.

- 6 Host name** This column displays the hostname of the device.

LAN IP This column displays the LAN IP of the device. Most devices have only one IP, and uses WAN IP column instead. Except PlatformW cameras and video encoders, there is no LAN port. The LAN IP setting will not be configurable and preset to disabled.

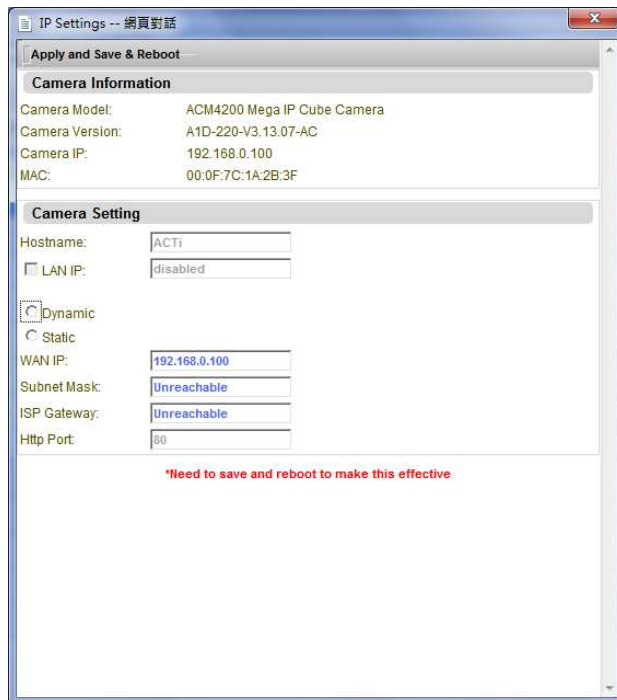
- 7 WAN IP** This column displays the WAN IP of each device. For both WAN IP and LAN IP, the numbers may be either shown as plain text or shown as an underlined link. If the numbers are shown in underlined link form, this device is reachable and clicking this will automatically use the IP, HTTP port and the Account / Password to connect to device.

When the device is not reachable (not in the same subnet of IP Utility):

(Check Limitations for device capability)

The connection type (Dynamic and Static) will not be checked. And, the Netmask and

Gateway will be shown Unreachable. Please refer to following figured.



When Static connection type is checked, the Netmask and Gateway will be blank. User has to enter them before press “Apply and Save & Reboot” button. The error message will be shown if the WAN IP, Netmask and Gateway are not correct.

When the Dynamic connection type is checked, the default WAN IP, Netmask and Gateway will be shown. The default values of them are

WAN_IP : 192.168.0.100

Netmask : 255.255.255.0

Gateway : 192.168.0.254

- 8 Channel ID** For IP Cameras, this column will show 1. The individual channels in Multiple Channel video servers will show the channel number here.
- 9 Http port** The HTTP port used to access the device is shown here. If the device is shown in IP utility, but you cannot connect by typing the IP address in Internet Explorer, sometimes the HTTP port is not the default 80. You should check here to find out.
- 10 MAC address** The MAC address of the device is shown here. For multi-channel devices, the MAC shown is the system MAC address.
- 11 Firmware Version** This column shows the device firmware version. For multiple channel video servers, this shows the **Channel** firmware version. The **Router** firmware version does not has a row of its own, and is instead shown in the Router Version column

12 Router Version This column shows the Router firmware version.

13 Camera Profile This column shows the camera profile of the device. For MPEG4 only devices, the Camera Profiles will not be displayed. Read camera profile ID from the camera needs account authentication. The IP Utility used the default account and password to query the camera information. If the authentication fails, the “Authentication failed” will be shown in this field when the device search is completed.

14 Model This column displays the model and type of the device.

15 Serial Number This column displays the Serial Number of the device.

16 Account This column displays the account used to log into device.

17 Password This column displays the password used to log into device.

18 Status This column is usually empty. It will show system messages when an action performed is successful or not. An example would be “Backup Successful” when you’ve completed configuration backup.

Camera Profile Upload Filtering

To have good video quality in night mode for IT-1 camera, the camera profile has to be upgraded. However, the new IT-1 camera profile could not work with old PlatformT firmware, 4.06.09 or before. It causes the firmware fails in bringing up the IT-1 DSP. No video stream is available then. The platformT firmware 4.07.15 was released formally. Most of users will use IP Utility to upgrade the new firmware and camera profile in IT-1 camera. This IP Utility blocks IT-1 camera upgrade when the firmware in the camera is 4.06 or before.

The following error message will be shown if user tried to upgrade the IT-1 camera profile to the camera which its firmware is 4.06 or before.



Limitations

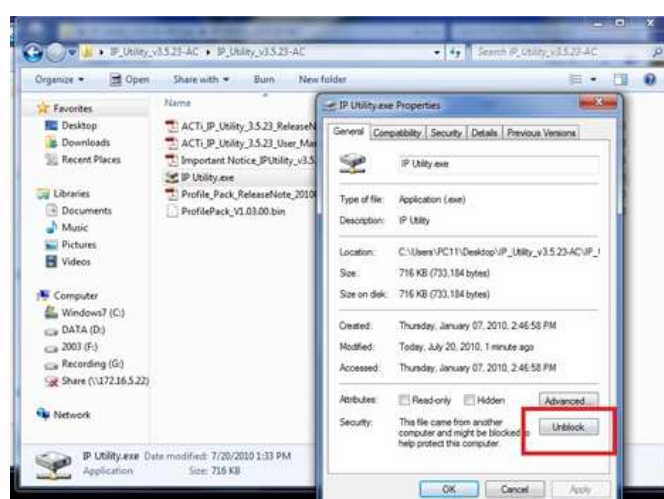
- 1 The model description depends on the device's capabilities. In new device firmware, it gives clear definitions of model description. The IP Utility could read the model description from the device and show on model filed. For old device firmware which it does not export the model description, the IP Utility uses its internal database to present the model description. Therefore, the model description might be not consistent.
- 2 The IP Utility is capable of decoder devices discovery. It just could link to decoder's WEB page through WAN port IP. The rest functions have not been tested and should not be used. You need to go to decoder's WEB page to manage it.
- 3 For CAM-xxxx camera, the device discovery was tested only. The rest functions have not been tested and should not be used. You need to go to device WEB page to manage it.
- 4 Error in running IP Utility.

Users might have problem to execute the IP Utility when they download it from WEB site. They might get following errors.



Solution:

1. Enter the IP Utility.exe property page
2. Unlock this file



- 5 Change IP address for unreachable devices

This function is available for some devices with specific firmware. Here is the list of these devices.

IP Utility 3.5.32

PlatformA cameras and video encoders: A1D-220-V3.10 and later

PlatformT camera and video encoders: A1D-310-V4.09 and later