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Product Manual Classification

In order to assist in the use of this product, huperLab has categorized the user manual in the following:

- ◆ For more detailed description and instruction on using huperVision, please refer to the huperVision manual files from the software CD.

For more product details, please click onto huperLab's website at

www.huperlab.com

huperVision 4000 v1.7

Quick Start Guide

Published on September 2013

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Package Contents

Product Model	Product CD & Quick Guide	Watchdog Cable	Internal Cable Assembly	Video Ports				Audio Ports				TV-out	
				Connector				Connector					
				16	8	6	4	8	6	4	1	4	2
4904A-120V													
4904A-60V	•	•											
4904A-30V													
4904Q-120													
4904Q-60	•	•											
4904Q-30													
4716A-960V													
4716A-480V													
4716A-240V	•	•		•									
4716A-120V													
4716A-60													
4716B-960V													
4716B-480V													
4716B-240V	•	•		•									
4716B-120V													
4716B-60													
4716U	•	•		•									
4716Q-480													
4716Q-240	•	•		•									
4716Q-120													
4716Q-60													
4708B-240V													
4708B-120V													
4708B-60V	•	•			•				•				
4708B-30													
4708Q-240													
4708Q-120	•	•			•				•				
4708Q-60													
4708Q-30													

Product Model	Product CD & Quick Guide	Watchdog Cable	Internal Cable Assembly	Video Ports Connector				Audio Ports Connector				TV-out	
				16	8	6	4	8	4	2	1	4	2
4704B-240V													
4704B-120V													
4704B-60V	●	●					◎			◎			◎
4704B-30V													
4704B-15													
4704U	●	●					◎			◎			◎
4704Q-120													
4704Q-60	●	●					◎			◎			◎
4704Q-30													
4704Q-15													
4704B-Me-120V				●			○			○			
4704B-Me-60V	●												
4704B-Me-30V													
4704B-Me-15													
4704Q-Me-120				●			○			○			
4704Q-Me-60	●				●						○		
4704Q-Me-30													
4704Q-Me-15													
4064IP-UI/UE	●												
4032IP-UI/UE	●												
4016IP-UI/UE	●												
4008IP-UI/UE	●												
4004IP-UI/UE	●												

Note:

- It stands for designed as integrated cable assemblies for Video and Audio Ports Connector.
- ◎ It stands for designed as integrated cable assemblies for Video, Audio and TV-Out Ports Connector.
- The items listed above are subject to change without notice.
- The 16CH audio connector of 4716U/4716Q series requires extra purchase.
- The 8CH integrated cable assemblies for Video, Audio and TV-out Ports Connector of 4708Q series requires extra charge.

Installation

1. Insert CDROM You will see the Autorun start up like following Picture

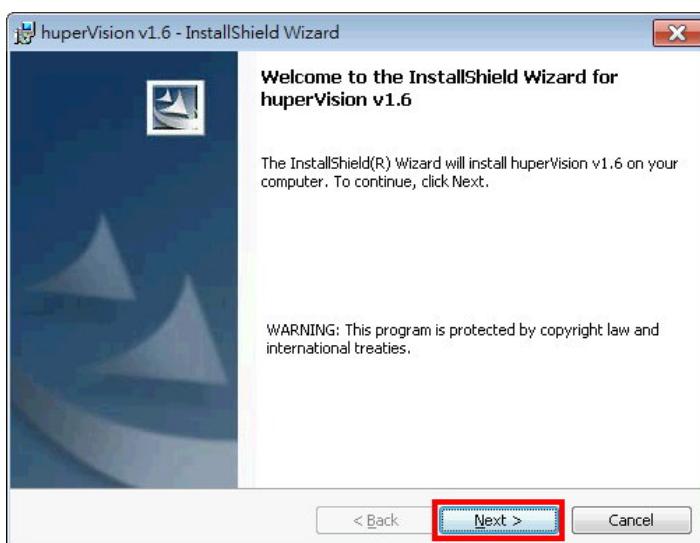


2. Press **[huperVision]** Button

Now start huperVision installation program, The first dialogue box pop-out and please select your installation languages and press **[OK]** button



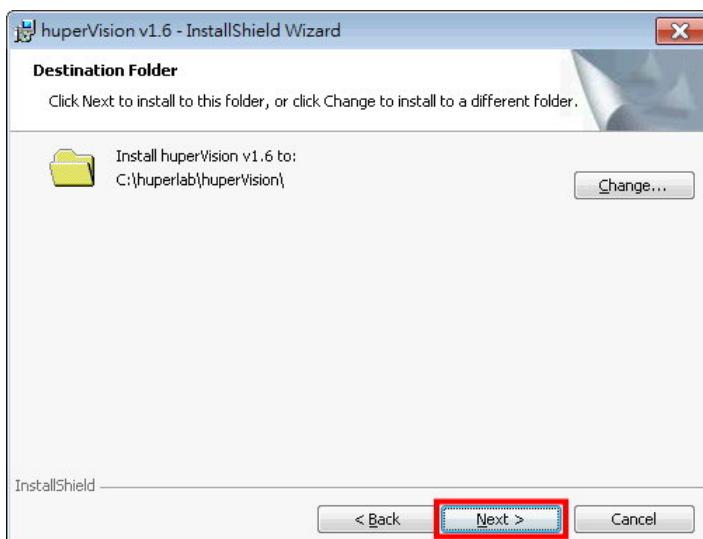
Please wait until the following dialogue appears. Please press **[Next]** button to proceed.



3. Now you see the License agreement, Please take a look if you want, or directly select [**I accept the terms in the license agreement**] then press [**Next**] button to proceed.



4. The destination folder selection appears. Please directly press [**Next**] button to use the default folder.

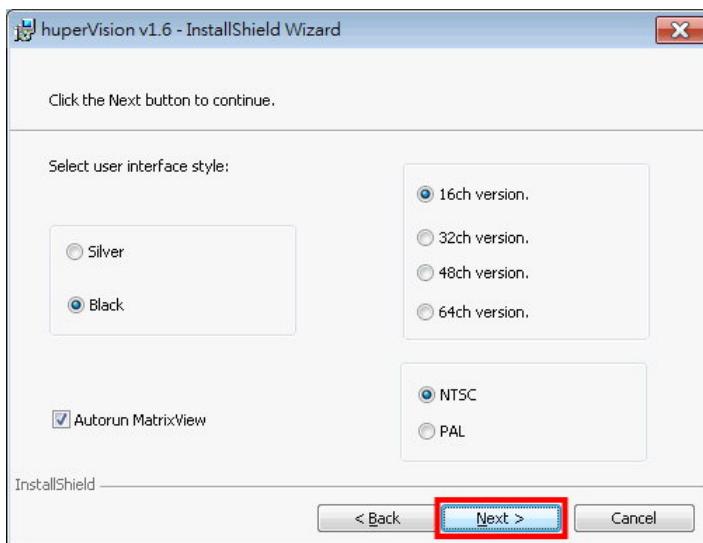


5. Selection of interface type and channel version.

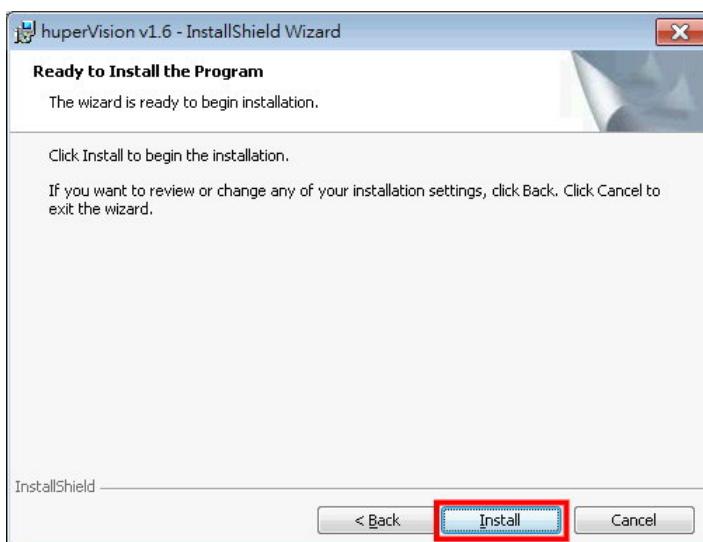
Select black (default) to use huperVision new interface style or silver to use huperVision traditional interface style.

Please select 16ch version to fit all series of huperVision capture cards. If you want to setup a 32CH machine, please select 32ch version which will use dual VGA output.

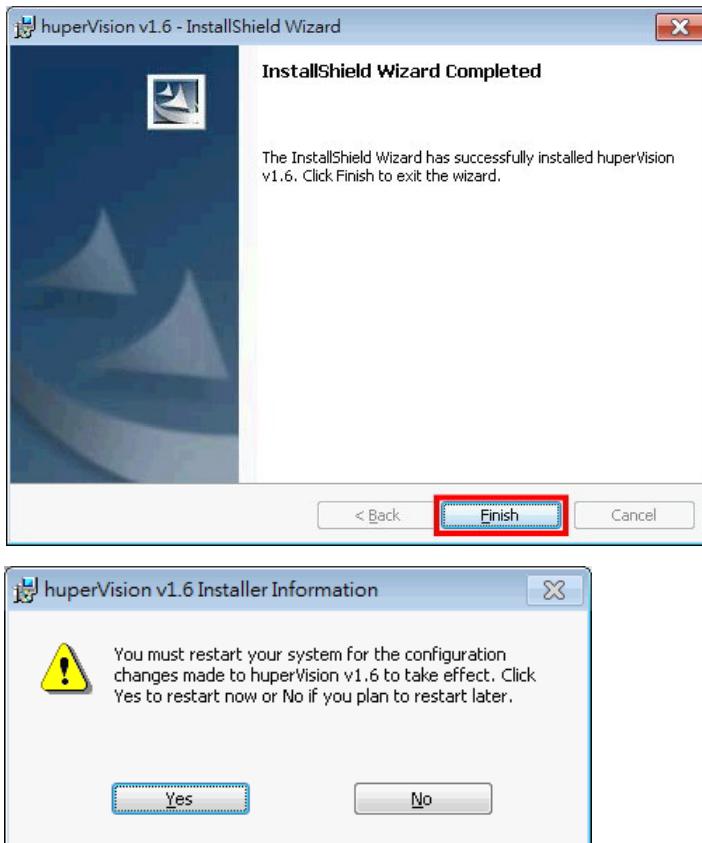
Meanwhile, select correct Video standard (NTSC/PAL) and press [**Next**] to proceed. (This option can be adjusted after setup)



6. Now Press the [**Install**] button to start full installation with capture card driver setup.



7. Press [Finish] to end installation. Please press [Yes] to initial huperVision site server program when the installer asking for a reboot.



Simple Steps to Start Recording

Please follow the steps below to start recording.

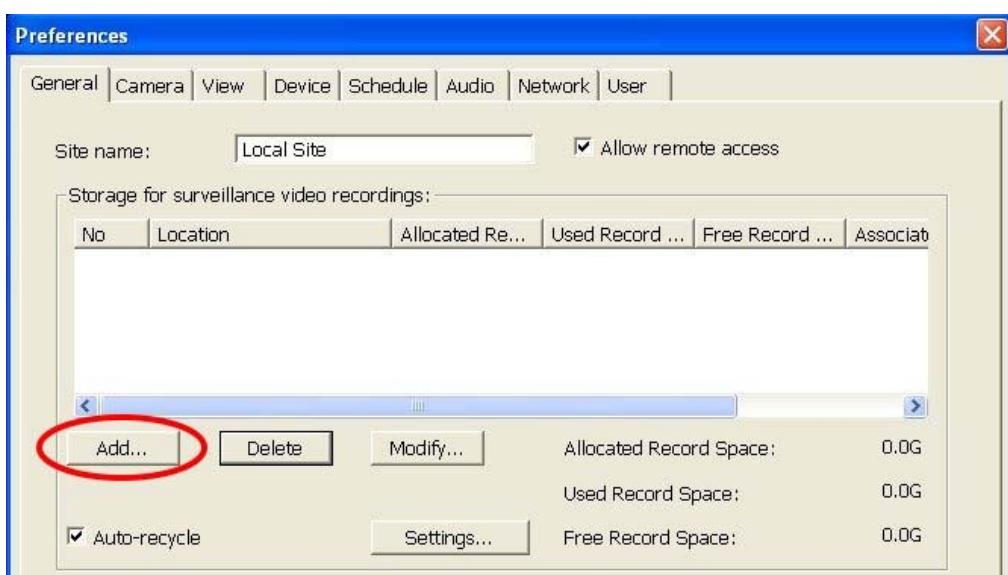
1. After reboot (Manually), huperVision site server program is launching. You will see a pop-up warning message; this is a notification that you have not specified a recording path to record.



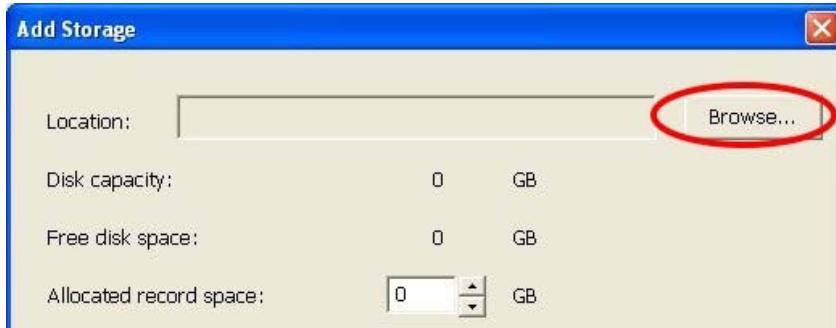
2. You can press the [Hammer] Button  to display the general page of preference.



3. Press the [Add...] button to add a new folder to store your recording data files.



4. Press [**Browser...**] button in the Add Storage dialogue box.

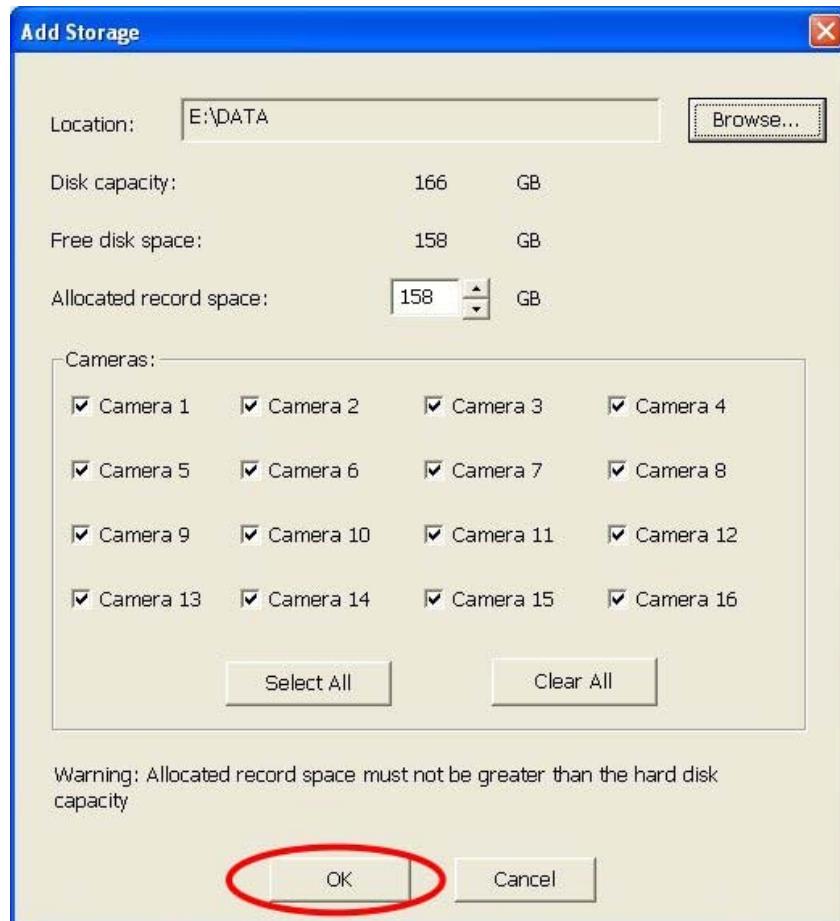


5. You can create a new folder in drive E; e.g. E:\DATA (D:\DATA indicates there is a DATA folder under Drive D.)

So, you select the Drive E icon and press the button [**Make New Folder**]
And input the new folder name “DATA”, then press [**OK**].



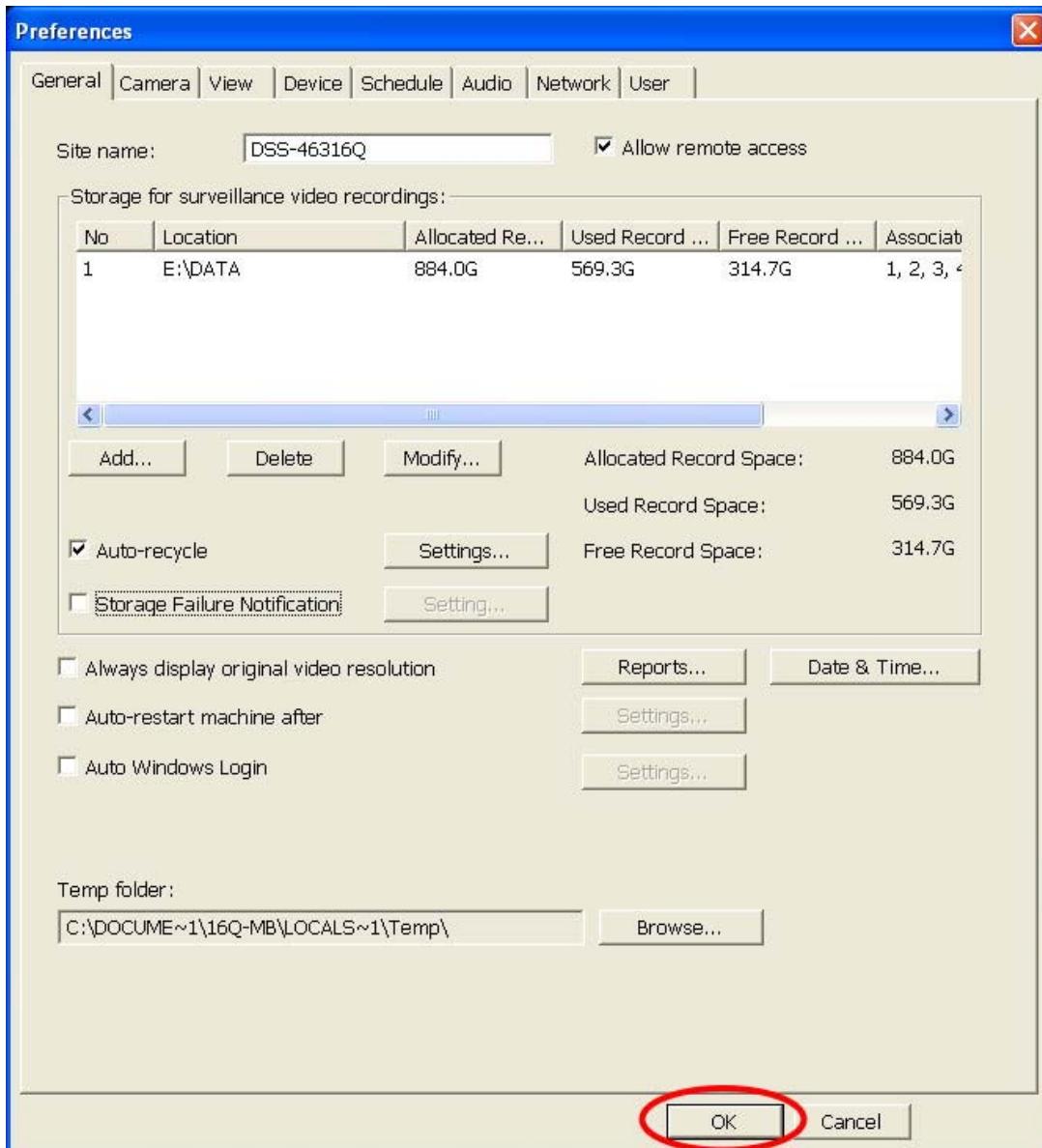
6. The result will be shown when back to the Add Storage dialogue box.
Please press [OK] button to save the decision.



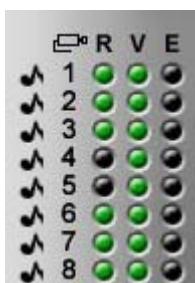
Note: Please keep the all 16 cameras be checked even if you don't have that much cameras.

Please also do NOT change the Allocated record space value by its automatic decision.

7. After Create the folder and press the **[OK]** button of the Preference page.
Congratulations! You start to record videos.

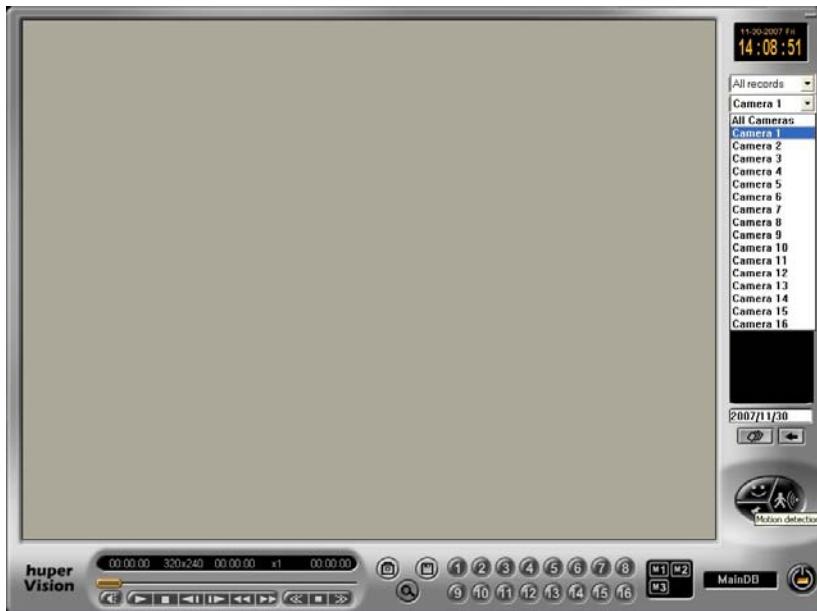


8. The R LED turns green at upper right side, indicates that available channels are recording now.



Simple Steps to Playback Recordings

1. Launch the huperVision Record Player program by clicking the icon 
2. You will see the following full screen program to cover the current huperVision Live view. Don't worry. The Live View and recording task are still working at the background.



3. You have to select which channel you want to playback with, or select All Channels to playback all available channels at the same time.



4. After you select the channel you want to playback, it shows a list of time mark for today's recording. Please select a Time mark to load the Video records.



5. All the video available channels will show the first Image in the Video split area, after the video load progress bar running to the end.

You can now press the Play Button to start playback selected channel recordings.



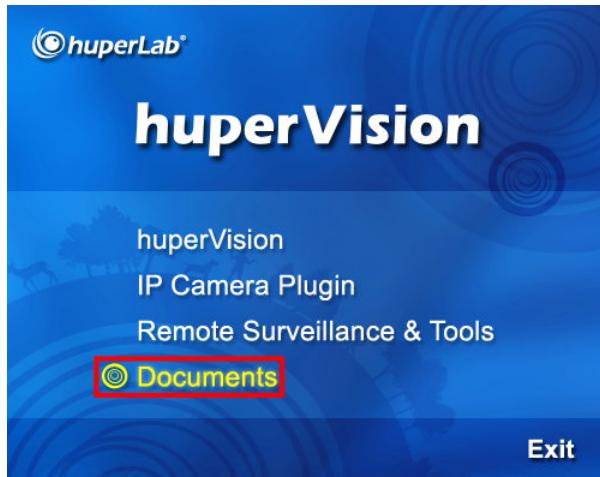
6. If you want to select different Channel to playback, please repeat from Step 3 to Step 5.

7. You can press the **[Power off]**  button to Exit this Playback program any time.

Note: Press this Power off button will NOT close the running huperVision site server. There is also a protection for accident press the huperVision site server power button, a Confirm dialogue box will show before it really shut down the huperVision site server main program.

Now you are ready to use huperVision IVS system, for more operation guide on Intelligent Video Functions, please refer to full Users Manual.

Press the **[Document]** on the Installation CDROM autorun program.

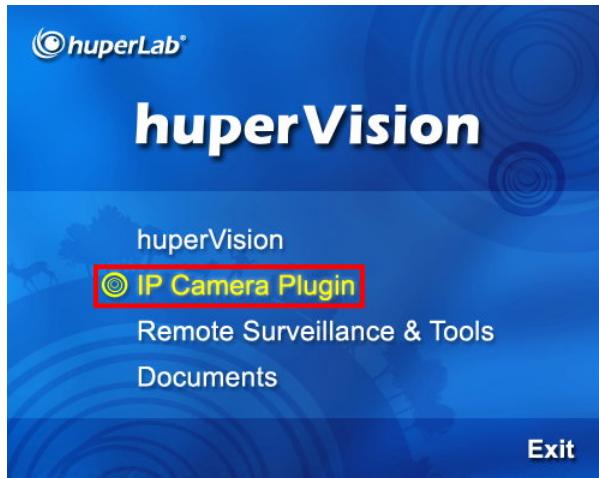


You will be able to open the Document. Before you load this document, please ensure your system have already Acrobat Reader program installed.

The Acrobat Reader program is included in the Installation CDROM
E:\English\Doc\aar.exe

How to connect IP Cameras / Video Servers

To use IP cameras as video source for recording and intelligent analysis, press the **[IP Camera Plugin]** on the Installation CDROM autorun program.



You will be able to use IP camera related features after installation. Next, let's see How to connect IP cameras step by step.

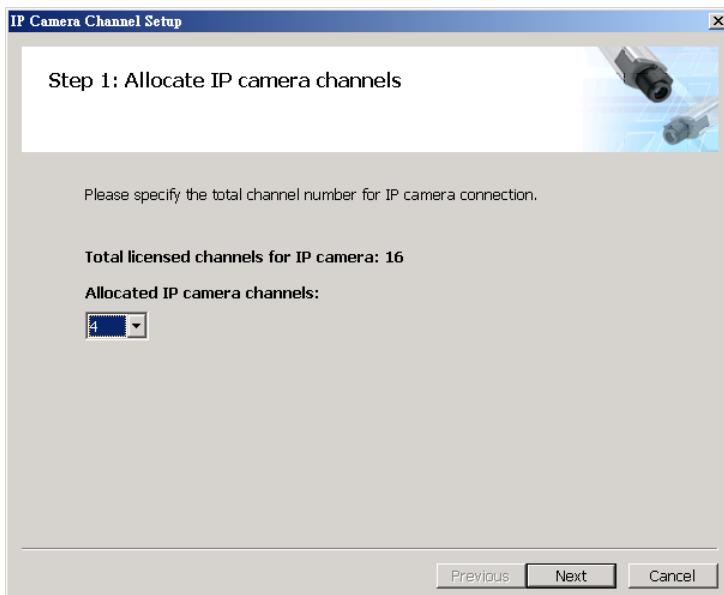
1. Click the **[Gear]** button . Then select the **[IP Camera Setup Wizard...]**.



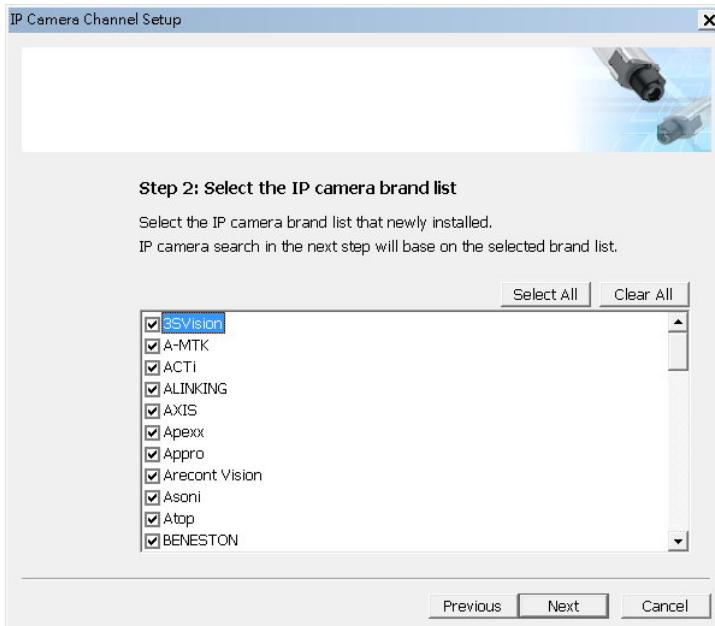
2. Press [**Next**] to start setup or [**Cancel**] to exit in the welcome page.



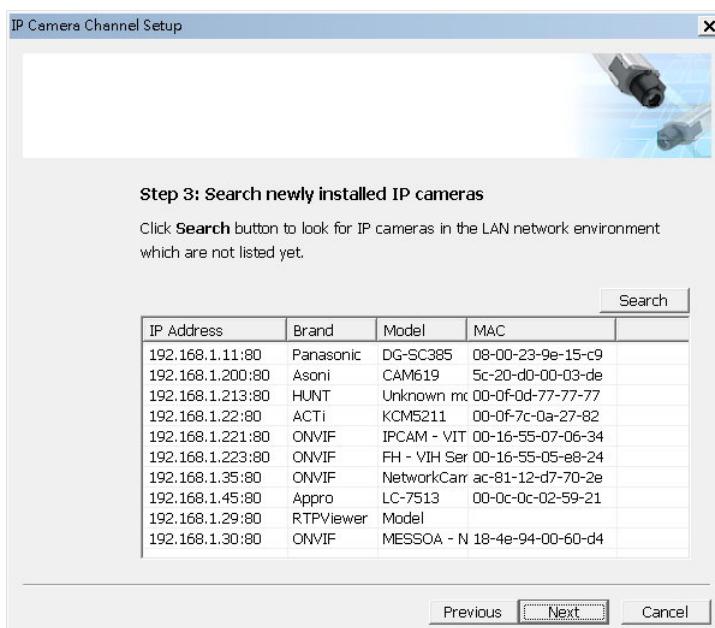
3. Please assign allocated IP camera channels in this step and press [**Next**] to continue. For pure NVR system, you just need to press [**Next**] to the next step.



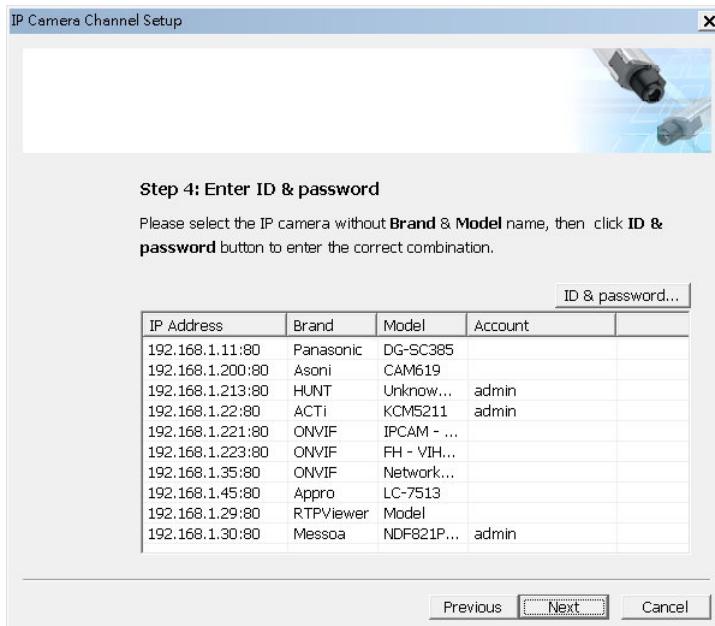
4. Please select the camera manufacturers from the list for searching and press [Next] to continue. You can click [Select All] button if you are not sure about the brand of installed IP cameras.



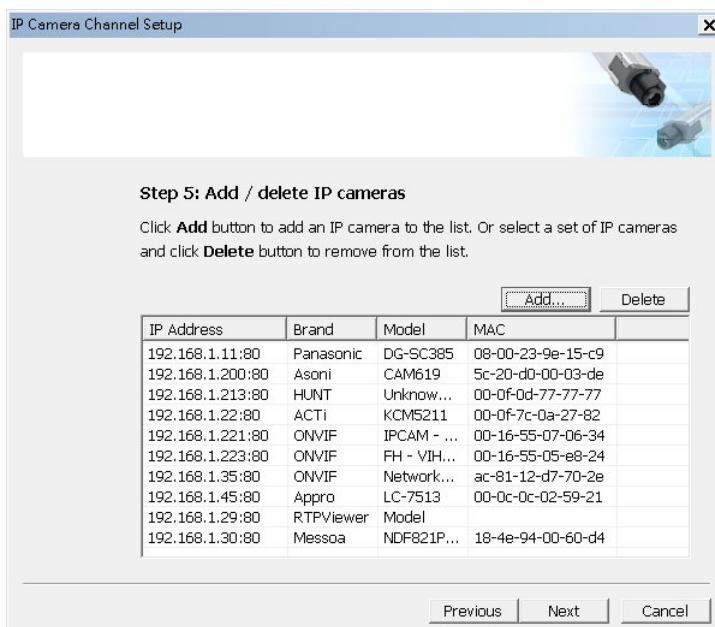
5. Please click [Search] button to start the IP cameras within the LAN environment. The search result will be displayed in the list. Press [Next] to continue.



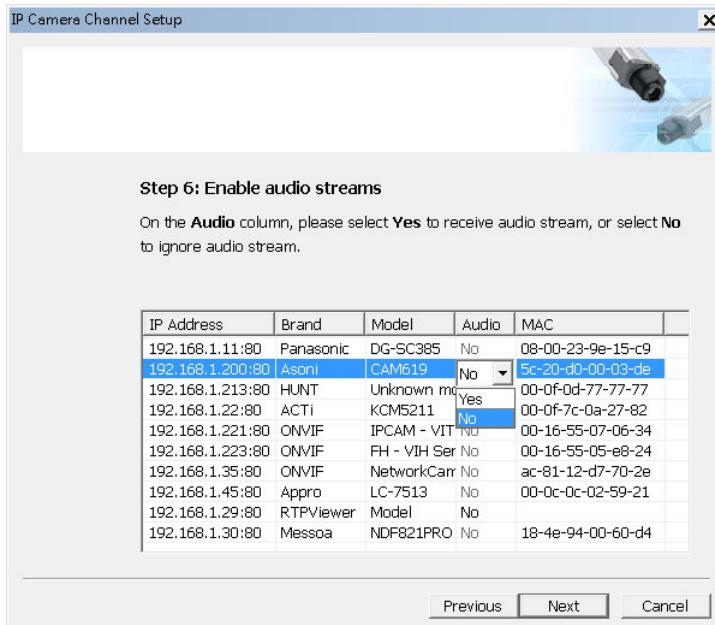
6. You need to press **[ID & password]** button to enter the login combination if the Brand & Model is blank in the search list. You can also select any camera in the list and press **[ID & password]** button to change the login combination. Press **[Next]** to continue.



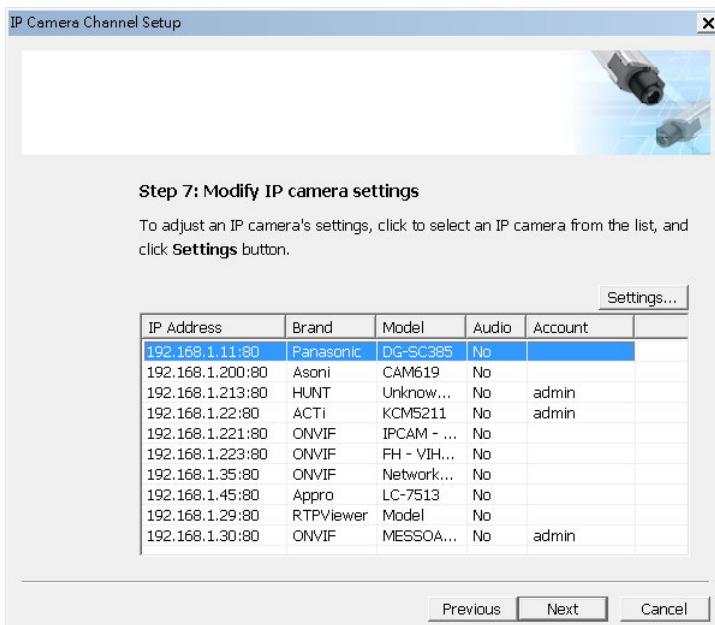
7. You can manually add IP camera to the list or delete from it. Press **[Add]** to add camera, select a camera in the list and press **[Delete]** to remove it. Press **[Next]** to continue if you have finished editing the camera list.



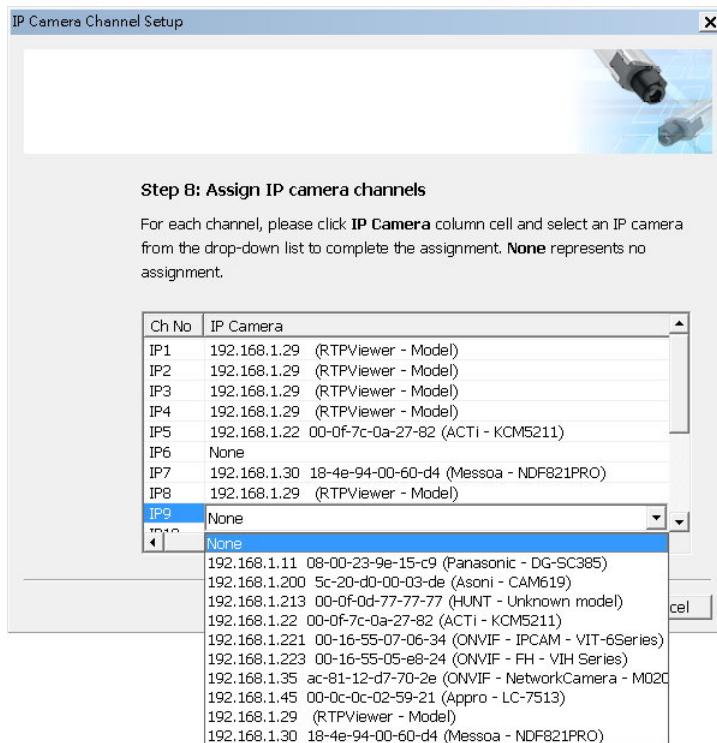
8. To enable audio stream, select a camera and click the **[Audio]** column to pop up selection menu. **[Yes]** to enable and **[No]** to disable. You cannot change the audio stream setting if the text in the **[Audio]** column is gray out (not supported). Press **[Next]** to continue if you have finished the audio stream settings.



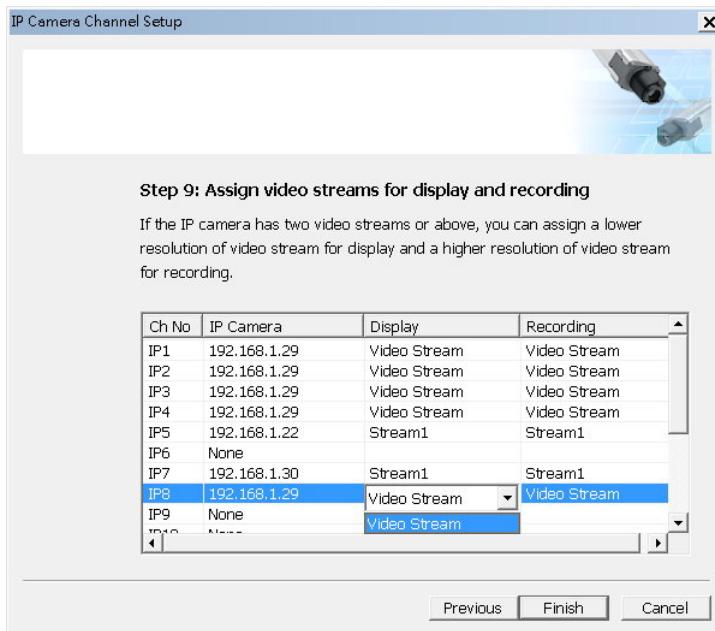
9. Please click **[Settings]** button if you want to modify IP camera settings in detail. Press **[Next]** to continue if you have finished editing.



10. To assign channel location, please click on the **[IP Camera]** column item and select camera from the drop down menu. Select **[None]** to assign no camera for the channel. Press **[Next]** to continue if you have finished assigning the cameras.

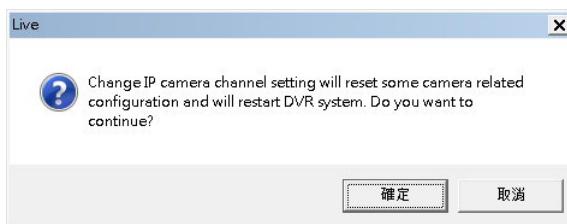


11. To assign display/recording stream, click an item in the **[Display]** / **[Recording]** column and to pop up selection menu. You cannot change the video stream setting if the selection menu contains only one item (dual stream not supported). Press **[Next]** to continue if you have finished the video stream settings.



Note: Please make sure you have enough dual stream licenses to use multiple video streams.

12. Press [OK] to finish setup IP cameras or [Cancel] to exit without change.
The Site Server will restart and all the IP cameras are ready to use.



How to use Motion Detection

Motion Detection is the basic detection of huperVision. It works like a motion sensor but with more powerful parameters to control the precision of detection result.

1. Click the [Hammer] button  and select [Preference...] to open the Preference window.



2. Click the [Camera] tab to bring up all the camera settings.

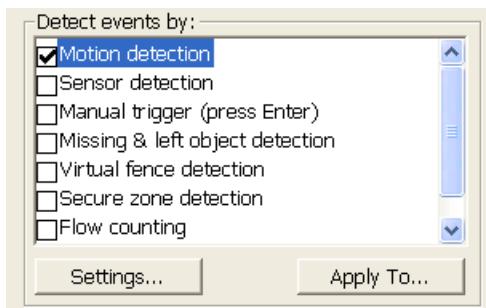


3. Select C1~16 or IP1~16 button to which camera you want to apply the motion detection.

e.g. C4 for the 4th camera and it is an Analog camera, IP6 for the 6th camera and it is an IP camera or Video server.



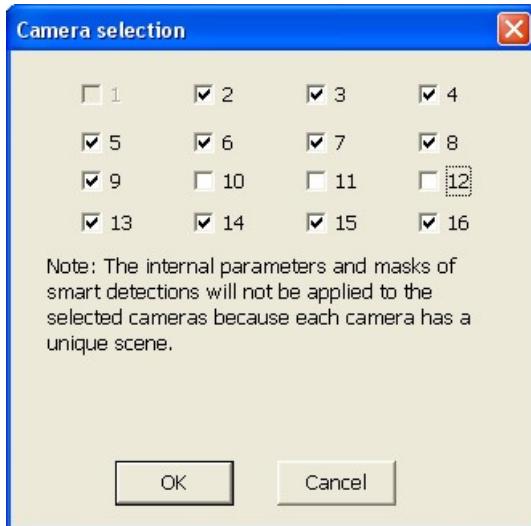
4. You can find the Motion Detection feature in the list of “**Detect Events by:**”



5. Check the Motion Detection feature and press [**OK**] button to take effect.

6. Or, you can press the [**Apply To...**] Button to select which other cameras you want to enable Motion Detection.

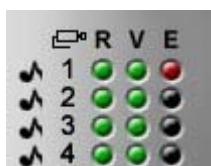
In this case, de-select 10~12 means Motion Detection will apply to all camera except No.10, 11 and 12.



7. BTW, you can also press the **[Settings...]** Button to bring up the detailed Motion Detection settings, like Adjustment of Sensitivity and Noise Tolerance, Ignore Smaller or Larger objects and mask out some area which you don't want to detect motion. For Detail Motion Detection settings, please refer to our users manual Motion Detection settings.



8. On the main screen of huperVision, upper right corner have a list of LED indicator. When motion has been detected on a camera, it's "E" will turn Red.



How to use Missing & Left Object Detection

Missing & Left Object Detection is the other way against Motion Detection. Motion Detection detects movement in a Video, but Missing & Left Object Detection monitor all the moving object in the video and only alarm when the moving object stops moving in the video for a while (Left Object). And it also alarms when still objects been moved or disappeared from the video for a period of time; e.g. 5 seconds.

You can use Missing & Left Object Detection to guard important property be stolen or unattended package left in unauthorized area.

1. Let's start from click the **[Hammer] Icon**  and select **[Preference...]** to open the Preference page.



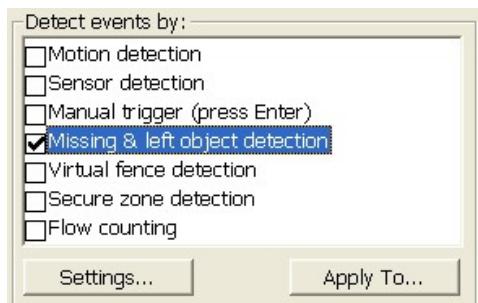
2. Click the **[Camera]** tab to show all the camera settings.



3. Select C1~16 or IP1~16 to which camera you want to apply the Missing & Left Object detection.
e.g. C4 for the 4th camera and it is an Analog camera, IP6 for the 6th camera and it is an IP camera or Video server.



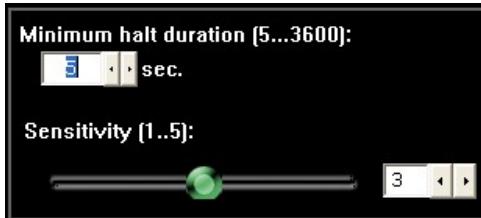
4. You can find the Missing & Left Object Detection feature in the list of "Detect Events by..."



5. Check the Missing & Left Object Detection feature and press [OK] to take effect.
6. If you want to change the time to alarm when an object been detected, you can press the [Settings...] button to bring up the settings dialogue page.



7. The timer to trigger an alarm is shown in the Picture below, and you can change the time in a range of 5~3600 seconds, which is described as **[Minimum halt duration...]**



8. After input the Detection time, please press  (OK button) to take effect.
9. If you want to do some Mask to avoid some area been detected, please refer to the "[**How to do Masks in Detection Features**](#)" session in this Quick Start Guide.
10. If you want to set the Object size range been detected, please refer to the "[**How to Ignore Smaller / Larger Object Size in detection**](#)" session in this Quick Start Guide.

How to use Secure Zone Detection

Secure Zone Detection is the Advanced Object Based version of Motion Detection. Motion detection use an algorithm to analyze the changes / difference area in a video, it has some limitation of precision when multiple objects existed on the video. Secure Zone Detection improves the precision by doing object analysis first then decides to trigger event or not. We specify several region of Secure Zone for detection and trigger alarm only when objects intrude these Zones and fit our expected conditions.

1. Click the **[Hammer] Icon**  and select **[Preference...]** to open the Preference window.



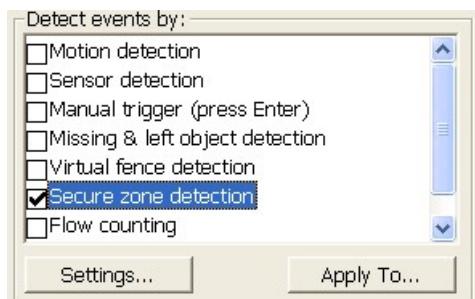
2. Click the **[Camera]** tab to show all the camera settings.



3. Select a Camera button which you want to enable Secure Zone Detection.
e.g. C4 for the 4th camera and it is an Analog camera, IP6 for the 6th camera and it is an IP camera or Video server.



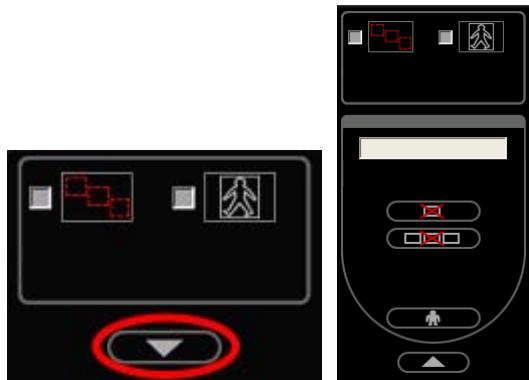
4. You can find the Secure Zone Detection feature in the list of “**Detect Events by:**”



5. Check the Secure Zone Detection and press the [**Settings...**] button to get in the settings page.



6. On the right hand side, press the pull down button to extend the settings menu.



7. Now you can use your mouse to drag an area or multiple areas in the Video.



8. Check this item  to show the detection area in Live Video, No matter you check it or not, the Secure Zone detection still works unless you disable this feature in camera page.
9. Check this item  to show the object which been identified by detection on the Live Video, No matter you check it or not, Secure Zone detection still works unless you disable this feature in camera page.
10. If you want to remove the area you drew in the video, you can simply click the

middle of the area to select it and press this button  Delete Selected Area to delete it.



11. If you want to remove all the area in the video, you can press this button  Delete All Areas to remove them all



12. Check this function to enable ignore smaller object, you can either adjust the value against object's width and height counted by pixel, or you can click the hand icon to drag the size directly on video by mouse. After mouse operation, press hand icon again to stop selection.



13. Check this function to enable ignore larger object, it's the same operation like ignore smaller object. Please note that if your ignore smaller size is larger than ignore larger size, you know that it's not logical and cannot work.

- 14.
- This number is the intrusion time to alarm, usually 1 second is good for most cases, if you switch to 0, probably it will be too sensitive for general purpose.



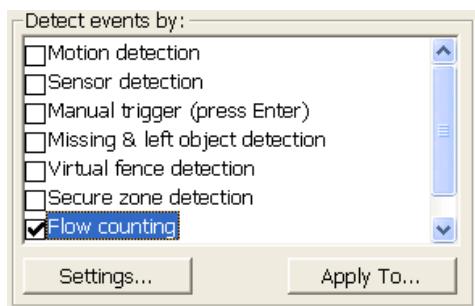
- 15.
- Sensitivity set to 3 fit most requirements, drag lower value to avoid too much false alarms or drag higher value for special scenario.

16. Finally, press OK button to take effect or cancel button to leave this page discard all the settings change here.

How to use Flow Counting feature

Flow Counting is designed to count moving object cross user defined line, 2 lines can be applied on 1 video / camera. Since this detection should really detect object touch the line, so, at least 7 FPS video should be used to fit most situation, otherwise, frame interval might cause object jump over the counting line and not be counted.

1. Like the other detection settings, you can enable and call up the Flow Counting setting pages.



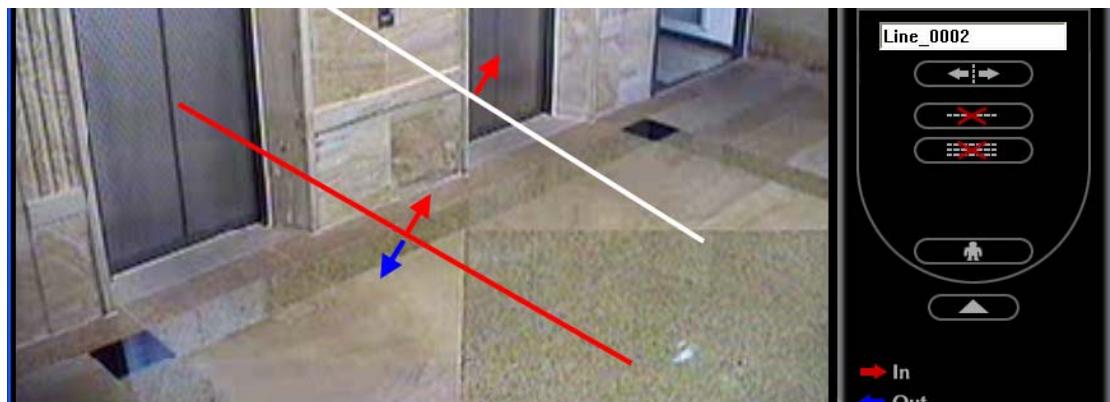
2. Press **[Settings...]** button to call up the Flow Counting settings window.



3. On the right hand side press this  button to extend the Criteria settings.

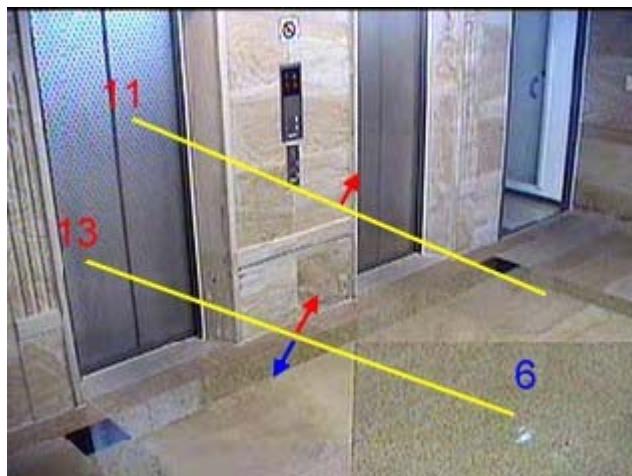


4. After extend this Criteria settings, you can use mouse to drag detection lines on the video area.



5. For example we draw 2 lines on the video area for flow count detection. Click to select the line on video and click this  button to toggle detect direction, you can either detect single direction or both in/out directions.
6. Click this  button to delete the line you selected. Or, Click this  button to delete all detection lines on video.
7. Check this  button to show the Flow Count Line and numbers if you want to see it on Live Video.
8. Check this  button to show tracking block of objects been found on Live video.
9. Finally, click this  OK button to finish the settings and take effect. If you want to discard your settings, you can click this  cancel button to leave without saving settings.

10. As the result of Flow Counting feature, you can see the 2 detection lines with count numbers on the Live video.

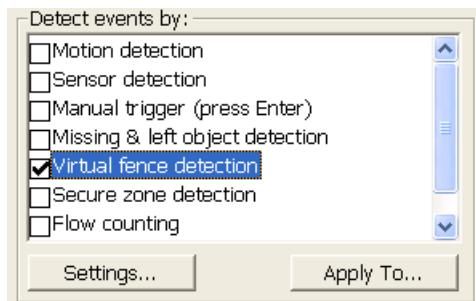


11. You can refer to the "[How to Ignore Smaller/Larger Objects in detections](#)" session to build a size filter for your Flow counting feature.

How to use Virtual Fence Detection

Virtual Fence Detection is the detection to alarm when objects cross a forbidden line. Maximum 5 lines can be defined in this detection.

1. Like the other detection settings, you can enable and call up the Virtual Fence Detection setting pages.



2. Press [**Settings...**] button to call up the Virtual Fence settings window.



3. On the right hand side press this  button to extend the Criteria settings.



4. It's very like Flow Counting Criteria settings, because it also needs to draw lines for detections.

After extend this Criteria settings, you can use mouse to drag detection lines on the video area.



5. For example we draw 2 lines on the video area for Virtual Fence detection.

Click the line on video to select it and click this  button to toggle detect direction, you can either detect single direction or both directions.

When an object crosses the line as the direction arrow, it will trigger the alarm.

Both direction arrow means the alarm will be triggered once an object cross the line no matter in which direction.

6. Click this  button to delete the line you selected. Or, Click this  button to delete all detection lines on video.

7. Check this  button to show the Flow Count Line and numbers if you want to see it on Live Video.

8. Check this  button to show tracking block of objects been found on Live video.

9. Finally, click this  OK button to finish the settings and take effect.

If you want to discard your settings, you can click this  cancel button to leave without saving settings.

10. You can refer to the "[How to Ignore Smaller/Larger Objects in detections](#)" session to setup a size filter for your Virtual Fence feature.

How to Ignore Smaller / Larger Object Size in detection

Ignore Smaller Object and Ignore Larger Object function exists in most huperVision's detection settings. Ignore smaller object like mice, cockroaches or smaller animals if you want to detect and alarm human or vehicles. Ignore larger object like a hand over camera lenses or camera shaking situation. Both size filter settings can improve a better alarm precision when proper value applied.



1.  Check this function to enable ignore smaller object, you can either adjust the value against object's width and height counted by pixel, or you can click the hand icon to drag the size directly on video by mouse. After mouse operation, press hand icon again to stop selection.

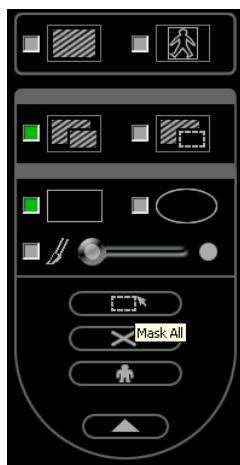


2.  Check this function to enable ignore larger object, it's the same operation like ignore smaller object. Please note that if your ignore smaller size is larger than ignore larger size, you know that it's not logical and cannot work.
3. Please note that when the hand Icon is pressed, the only thing you can do is use mouse to drag the size of object on the video, you cannot do anything else when this button is pressed again.

How to do Masks in Detection Features

Mask feature exist in some detection e.g. "Motion Detection" and "Missing & Left Object detection". You can either set a full Video detection or mask out some unwanted area to prevent false alarms.

Let's take Motion Detection for example. When you opened the Motion Detection settings page, press the  pull down button to extend the Mask menu, and you are ready to do a mask on video.



There are 2 type of mask can be applied, “**Add Mask**” or “**Subtract Mask**”



“Add Mask” button allow you to block out some area from detection, but “Subtract Mask” button help you to recover some area for detection from Mask. Combine both kind of Mask you can easily do a complicated mask to form a precise detection area.

There are 3 types of Mask shapes can be used when doing “Add Mask” and “Subtract Mask”:

Rectangle shape , Circular shape , Free hand sketching



Let's try to do Add Mask and Subtract Mask example here.

1. Check the "Add Mask"  Mode.
2. Check the Rectangle Shape .
3. Drag a Rectangle shape by Mouse to block out the Flashing screen from Motion Detection.
4. Check the Circular Shape .
5. Drag a Circular shape on the Video, you can find that the over lapped area between the circle and rectangle is auto merged together.
6. Check the Free hand sketching . Drag the size control bar right will let you draw with a bigger pen tip.
7. Click and hold to draw mask area on the video.
8. You will see my mask as the picture below. Masked area is marked in green color, which means these areas I don't want to do Detection.



The other way to do Mask: Full Screen mask .

When you need to block out most of the area and only detect several regions on video, you can use this button to block out the entire video, and the system will also



switch to “Subtract Mask” mode let you to remove some Mask area for detection.

1. Press the “Mask all”  button



You can see the entire Video is masked in green color.

2. Check the Rectangle Shape .

3. Dig a rectangle shape in the mask for your detection.



4. Check the Circular Shape .
5. Dig a circular shape in the mask for detection.



6. Check the Free hand sketching .

7. Use free hand sketching to wipe out Mask areas.



8. Now you know how to do masks. And hope the mask can help you to a precise detection area.

If you feel the moving video disturb your mask task, you can press this



Freeze Video button to freeze the video for your convenience.