



## **Quick Installation Guide**

**IRV Pro-AV8**

**IRV Pro-AV16**

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**SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT  
PRIOR NOTICE  
THE INFORMATION CONTAINED HEREIN IS TO BE  
CONSIDERED FOR REFERENCE ONLY**

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**WARNING**

**TO REDUCE RISK OF FIRE OR ELECTRIC SHOCK. DO NOT  
EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE  
WARRANTY VOID FOR ANY UNAUTHORIZED PRODUCT  
MODIFICATION**

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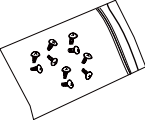
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## **Content Table**








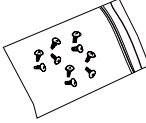
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## Package Contents

### IRV PRO-AV8

|  |  |  |   |
|--|--|--|---|
| <p>(1)</p>    | <p>(2)</p>  | <p>(3)</p>    | <p>(4)</p>  |
| <p>(5)</p>    | <p>(6)</p>  | <p>(7)</p>    | <p>(8)</p>  |
| <p>(1) IRV PRO-AV8+ unit<br/>(2) Quick Installation Guide<br/>(3) Software CD (User Manual included)<br/>(4) USB optical mouse<br/>(5) Power adaptor</p> |  | <p>(6) Power Cord ( The power cord varies depending on the standard power outlet of the country where it is sold)<br/>(7) SATA cable x 2<br/>(8) Screws for HDD installation</p> |   |

### IRV PRO-AV16

|   |  |  |  |
|---|--|--|--|
| <p>(1)</p>   | <p>(2)</p>   | <p>(3)</p>    | <p>(4)</p>    |
| <p>(5)</p>   | <p>(6)</p>  | <p>(7)</p>    | <p>(8)</p>  |
| <p>(1) IRV PRO-AV16+ unit<br/>(2) Quick Installation Guide<br/>(3) Software CD (User Manual included)<br/>(4) USB optical mouse<br/>(5) Power adaptor</p> |  | <p>(6) Power Cord ( The power cord varies depending on the standard power outlet of the country where it is sold)<br/>(7) SATA cable x 2<br/>(8) Screws for HDD installation</p> |  |



If there is any damage, shortage or inappropriate item in the package contents, please contact with local dealer

## Optional Accessories



Remote control  
(IR extended cable  
included)



DVI cable for IRV PRO-AV16  
series (16CH Loop out)



Audio cable for IRV PRO-AV16  
series

Red cable: 16CH audio in  
White cable: 1CH audio out  
Black cable: 1CH MIC in



Audio cable for IRV PRO-AV8  
series

(White cable: 1CH audio out  
Black cable: 1CH MIC in)  
(Red cable: 8CH audio in)



90W Power Adaptor  
(HDD holder for 4<sup>th</sup> HDD is included  
SATA Cable is included)



Rack ears

# Hardware Installation

## Install the hard disk

### ✧ To install the 1<sup>st</sup> and 2<sup>nd</sup> hard disk



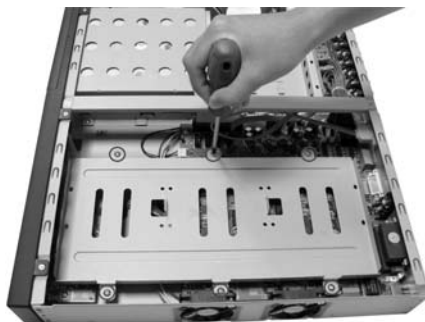
The power adaptor now only guarantees to support 2 HDD. If you require installing more than 2 HDD, please contact your local vendor to avoid unexpected damage of DVR system.

Follow the illustrated instructions below to install the hard disk:

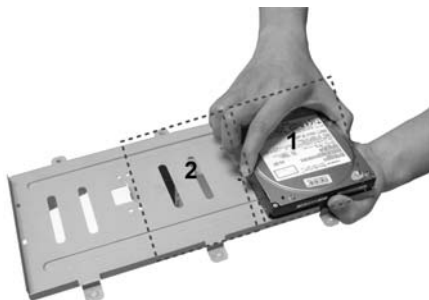
1. Loosen all screws (2 sides and back)
2. Push the cover backward and lift to open the case cover.



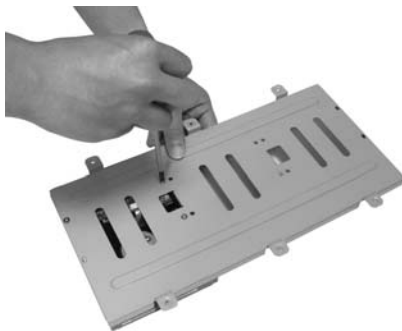
3. Loosen the screws of holder to make hard disk install more easily.
4. Loosen all the screws of hard disk plate.



5. The hard disk plate can be installed 2 hard disks. User can choose the position and place the hard disk on it.



6. Turn the plate and hard disk over carefully and secure the hard disk on the plate. If hard disk cannot be fit to the screw hole, then, you may adjust the hard disk position to fit the screw hole.



7. Screw tight the plate within hard disk inside the DVR unit



8. Plug the power cable into hard disk



9. Plug the SATA cable into SATA connector on the PC board



10. Plug another side of SATA cable into hard disk



11. Screw the holder



13.

12. Push the cover forward and secure the cover



14.

15. You may now connect all the cables and power on the DVR unit.



## ✧ To install the 3<sup>rd</sup> and 4<sup>th</sup> hard disk



Before install 3<sup>rd</sup> and 4<sup>th</sup> hard disk, please make sure to purchase the 90W power adaptor.

Please refer to the below steps to install 3<sup>rd</sup> and 4<sup>th</sup> hard disk.

1. Loosen all screws (2 sides and back)



2. Push the cover backward and lift to open the case cover.



3. Loosen the screws of holder to make hard disk install more easily.



4. Un-plug the power cables and SATA cables of 2 HDD.



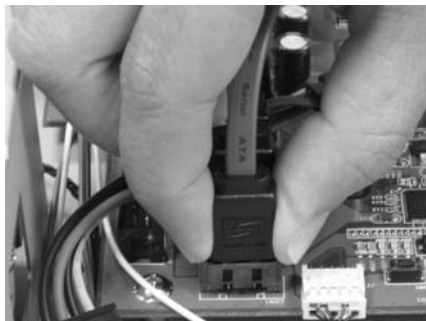
5. Loosen all the screws of hard disk plate. And then, take out the HDD plate from the DVR unit.



6. Place the 3<sup>rd</sup> hard disk on the hard disk plate.



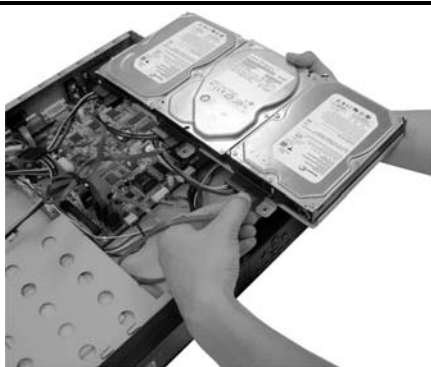
7. Turn the plate and hard disk over carefully and screwed the hard disk on the plate. If hard disk cannot be fit to the screw hole, then, you may adjust the hard disk position to fit the screw hole.
8. Plug the SATA cable into SATA connector on the PC board



9. Plug the power cables and SATA cables into all three hard disk.
10. Screwed the plate within hard disk inside the DVR unit.



- User can leave un-plug the SATA cable of the left side HDD for screwing plate inside the DVR more easily later.
- User may manage all power cables and SATA cables for better connection.



User can adjust the step 9 and 10 for easily install process if necessary.

11. If user wants to install 4<sup>th</sup> HDD, then follow the steps to continue. Otherwise, go to the last two steps to complete the installation.
12. Place the 4<sup>th</sup> hard disk on the HDD holder.  
The head side of hard disk is same side of the screw hole of HDD holder.
13. Screwed (6 screws for both side) the hard disk on the HDD holder.



14. Un-plug the eSATA cable from SATA connector on the PC board in order to plug in the SATA cable of 4<sup>th</sup> hard disk.



15. Plug the SATA cable into STAT connector on the PC board.



16. Plug another side of SATA cable into the hard disk.



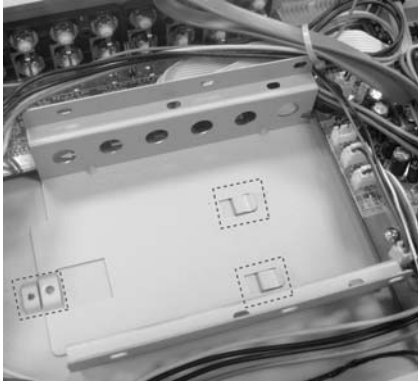
17. Plug the power cable into the hard disk.



18. Place the HDD holder inside the DVR unit. The screw hole of HDD holder is aligning with screw hole on the DVR unit.



19. Push the HDD holder forward and screw hole of HDD holder will match the screw hole on the DVR unit and HDD holder should hook on the stable hook on the DVR unit.



User can look through the DVR from position of FAN to adjust the HDD holder position to make sure the HDD holder has hooked into stable hook on the DVR unit.

20. Screwed the HDD holder inside the DVR unit.



21. Screwed the holder on the DVR unit.

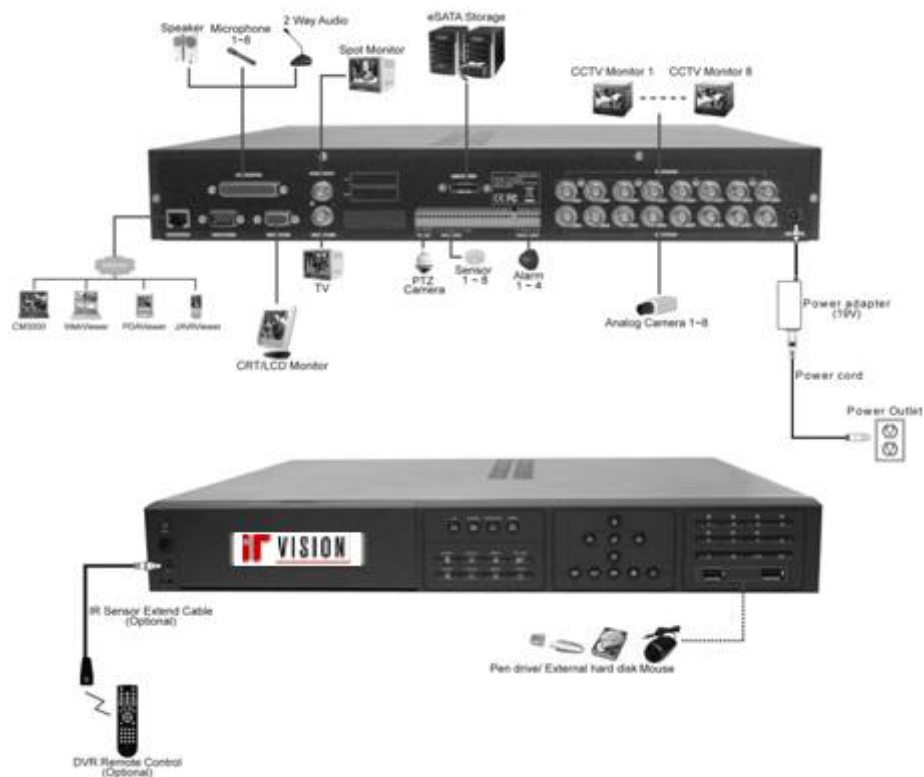


22. Push the cover forward and secure the cover

23. You may now connect all the cables and power (90W adaptor) on the DVR unit.

# Device Connection

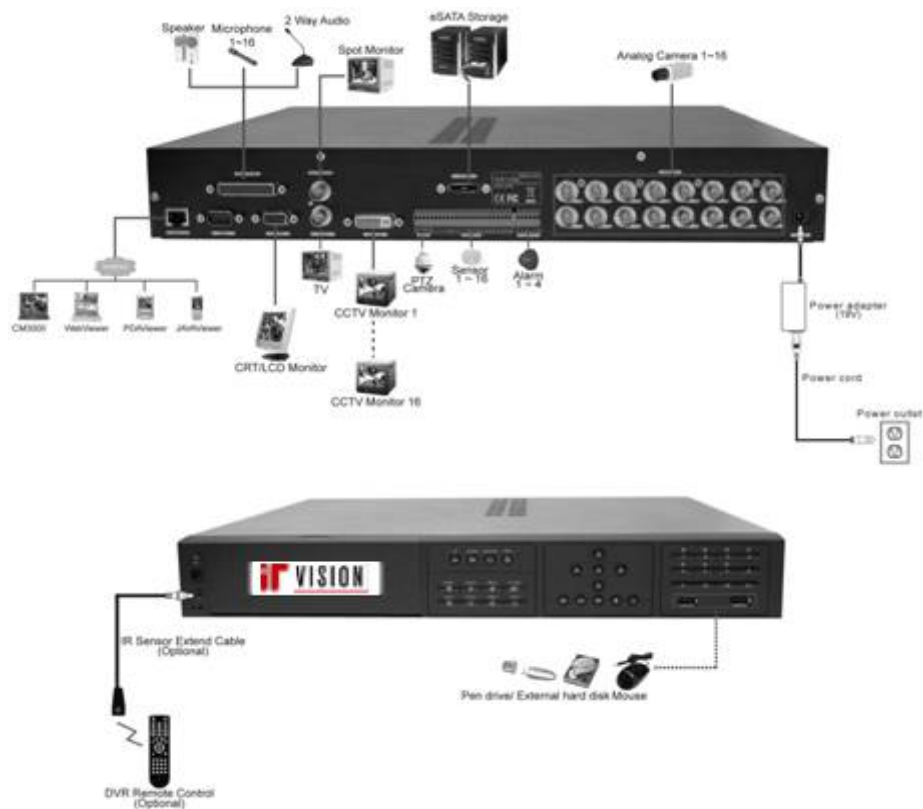
## IRV PRO-AV8



- 
- All connected devices have their own power supply are necessary.
  - Pen drive and external hard disk must be FAT32 format.
- 




## IRV PRO-AV16



- All connected devices have their own power supply are necessary.
- Pen drive and external hard disk must be FAT32 format.




## 1st Use of DVR

1. Connect the cameras
2. Connect the mouse to DVR unit(through USB port on front panel)
3. Power on the DVR unit.
4. The preset screen (color bar) will show up and wait for preview screen to display (about 60 seconds).
5. When preview screen show up, please wait for the authorization dialog pop-up. For security purpose, enter the User ID (**Admin** or **User**) and Password (default is 111111) to login the DVR system. Click  or right-click on the column to call out virtual keyboard to enter the ID and password.



**Preview Mode (IRV PRO-AV16 series)**

6. The hard disk must be formatted before user can use it with DVR unit. Following the below steps to format the hard disk.
  - a. Click  to call out **SETTING MENU**.





- b. Click **System** → **System** and click **Next**.
- c. Click **Refresh** button to detect the installed hard disk.
- d. Select the hard disk that user wants to format.
- e. And then, click **Format** to start formatting.

System Setting

System Network User

Storage

| Model Name | Free Space | Total Space | Status |
|------------|------------|-------------|--------|
|            |            |             |        |

Refresh Format Calculate

OverWriteEnable ☒ Record Limit 0 Days

DLS

Day Light Saving ☐

Start Time : January / Last Sunday / 0

End Time : January / Last Sunday / 0

Time offset 00 hour

Time

System time 03/05/2009 15:34:46 Setting

Back OK Cancel

7. Setup the date and time in order to have correct system time and date. Following the below steps to setup date and time:
  - a. Click and select **System** → **System** tab and click **Next**.
  - b. In **Time** section, click **Setting** button of **System Time**.
  - c. Select the date and adjust the time, and then, click **OK**.

System Setting

System Network User

Storage

| Model Name | Free Space | Total Space | Status |
|------------|------------|-------------|--------|
|            |            |             |        |

Refresh Format Calculate

OverWriteEnable ☒ Record Limit 0 Days

DLS

Day Light Saving ☐

Start Time : January / Last Sunday / 0

End Time : January / Last Sunday / 0

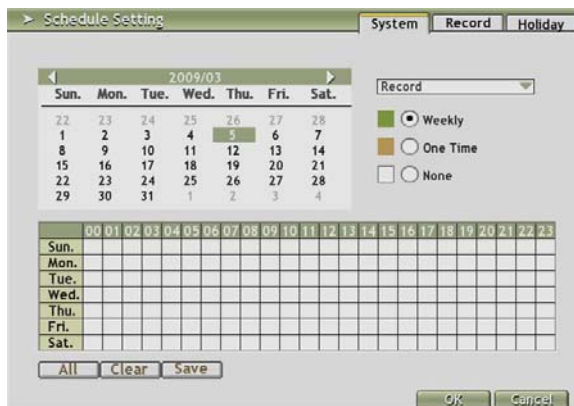
Time offset 00 hour

Time

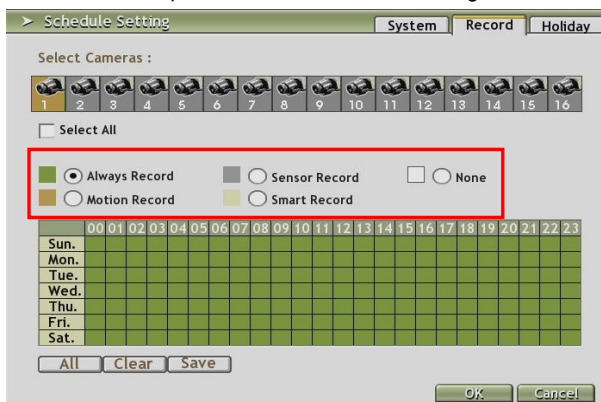
System time 03/05/2009 15:34:46 Setting

Back OK Cancel

8. Setup the **Schedule** to record.
  - a. Click → **Setting** → **Schedule** → **System**
  - b. Select the date and type of record (Weekly, Month, or None).
  - c. And then, select the week day (Sun. ~ Sat.) and hours (00 ~ 23) by click the week day and hours table.
  - d. Click **Save**.




- e. Click **Record** tab.
- f. Select the record mode (Always, Motion, Sensor, or Smart) and date.
- g. And then, select the week day (Sun. ~ Sat.) and hours (00 ~ 23) by click the week day and hours table.
- a. Click **Save** and **OK** to complete the record schedule setting.



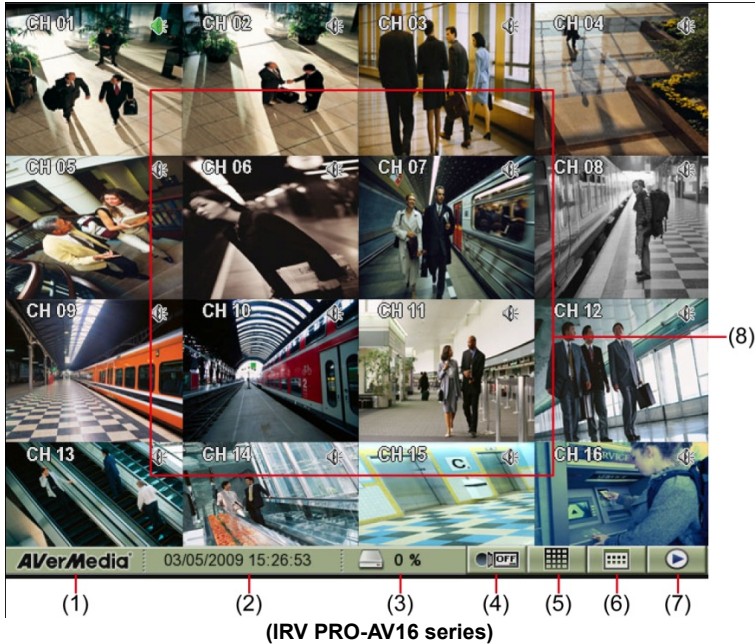
9. To start recording, click  (record) button.


# Using the Virtual Keyboard

Use the Virtual Keyboard and mouse to configure the DVR system. Just click  or select the column and right-click to call out the virtual keyboard. For uppercase, click Caps button. To exit, right-click anywhere on screen.




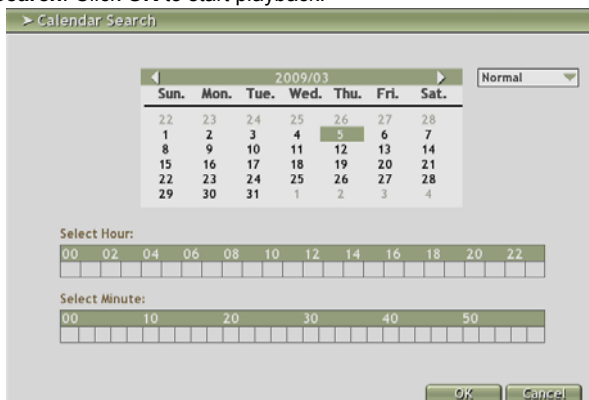
## Familiarizing the Buttons in Preview Mode



| Name  | Function  |
|---|---|
| (1) Login   | Click to select reboot the DVR system or re-login in different account.   |
| (2) Status  | Display recording date and time   |
| (3) Hard disk capacity  | Display the hard disk usage of capacity   |
| (4) Record  | Start/stop video recording.   |
| <b>i</b> To start recording, user need to setup record schedule. Click  > <b>Schedule</b> > <b>Record</b> tab. And then, select the record mode (Always, Motion, Sensor, or Smart) and date                |   |
|   |   |
| (5) Split screen mode   | Select from 6 different split screen types to view all the camera, or one camera over the other or alongside on a single screen. It also allows you to switch and view different camera number. |
| <b>i</b> <ul style="list-style-type: none"> <li>- Left-click on channel can switch to full screen mode of the channel.</li> <li>- When you are in single screen mode, <b>Right click</b> on the area you want to enlarge view. Double right-click will back to normal screen view.</li> </ul> |   |
|   |   |
| (6) Setup menu  | To call out system setup menu   |
| (7) Playback  | Switch to Playback mode. This allows you to view the recorded video file.   |
| (8) Channel preview   | To display live video of all channels   |

## To Playback the Recorded File

To switch in Playback mode, click  (**Playback**) button at the bottom right corner of Preview mode user interface. And then, select the date, hour, and minute that user wants to playback from **Calendar Search**. Click **OK** to start playback.



The dialog box titled "Calendar Search" contains a calendar for March 2009. The calendar grid shows days of the week (Sun. to Sat.) and dates (1 to 31). The date 5 is highlighted. Below the calendar, there are two sections: "Select Hour:" and "Select Minute:". Each section has a row of buttons labeled from 00 to 22 for hours and 00 to 50 for minutes. At the bottom right, there are "OK" and "Cancel" buttons.

| 2009/03 |      |      |      |      |      |      |
|---------|------|------|------|------|------|------|
| Sun.    | Mon. | Tue. | Wed. | Thu. | Fri. | Sat. |
| 22      | 23   | 24   | 25   | 26   | 27   | 28   |
| 1       | 2    | 3    | 4    | 5    | 6    | 7    |
| 8       | 9    | 10   | 11   | 12   | 13   | 14   |
| 15      | 16   | 17   | 18   | 19   | 20   | 21   |
| 22      | 23   | 24   | 25   | 26   | 27   | 28   |
| 29      | 30   | 31   | 1    | 2    | 3    | 4    |

Select Hour:

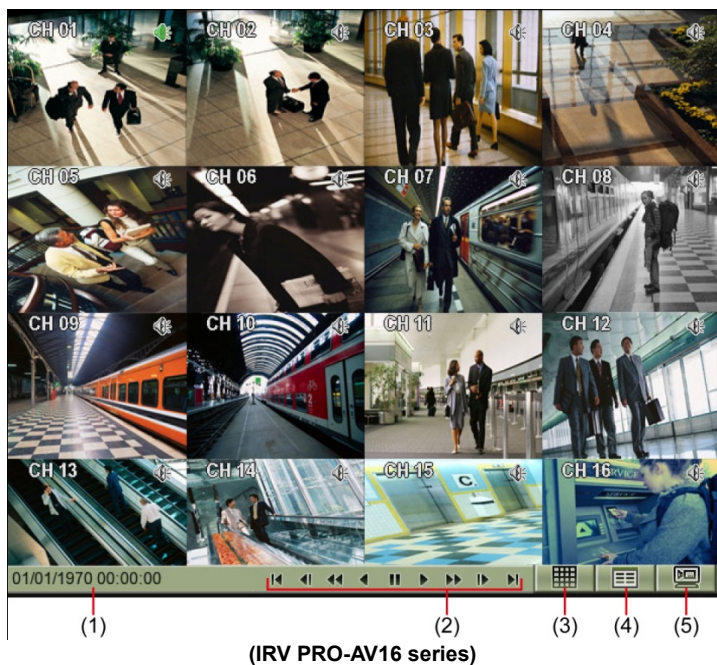
|    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|
| 00 | 02 | 04 | 06 | 08 | 10 | 12 | 14 | 16 | 18 | 20 | 22 |
|----|----|----|----|----|----|----|----|----|----|----|----|

Select Minute:

|    |    |    |    |    |    |
|----|----|----|----|----|----|
| 00 | 10 | 20 | 30 | 40 | 50 |
|----|----|----|----|----|----|

OK Cancel

# Familiarizing the Buttons in Playback Mode



| Name                         | Function  |
|------------------------------|---|
| (1) Status                   | Display the recorded date, time and playback speed.   |
| (2) Playback Control Buttons | <p>⏮ : Move at the beginning of the recorded video file.</p> <p>⏪ : Go back to the previous frame.</p> <p>⏩ : To reduce the playback speed. When each time press ⏩, the speed will reduce 1/2 from original speed (16X, 8X, 4X, 2X, 1X, 1/2X, 1/4X, 1/8X, 1/16X).</p> <p>⏮ : Wind back the recorded video file.</p> <p>⏸ : Briefly stop playing the recorded video file.</p> <p>▶ : Play the recorded video file.</p> <p>⏭ : To faster playback speed. When each time press ⏭, the speed will double the playback speed (1/16X, 1/8X, 1/4X, 1/2X, 1X, 2X, 4X, 8X, 16X).</p> <p>⏭ : Go to the next frame.</p> <p>⏭ : Go to the end of the recorded video file.</p> |
| (3) Split Screen Mode        | Select from 6 different split screen type to playback the recorded video file of all the cameras, or one camera over the other or alongside on a single screen.   |
| (4) Playback menu            | To call out playback menu   |
| (5) Preview                  | Switch to Preview mode.   |

# Playback Backup Video

You can playback the backup files and output video segment by using QPlayer applications on the PC. When you back up the recorded file, QPlayer applications are automatically included in the backup folder. With QPlayer, it is the same as in Playback mode and supports 6 different split screen types to view all the video at the same time. The only difference is that there are no Preview and Playback buttons.



To run the application, go to backup folder and double-click QPlayer.






The QPlayer only support the \*.dvr format.



| Name   | Function  |
|--|---|
| (1) Split Screen Mode  | Select from 6 different split screen type to playback the recorded video file of all the cameras, or one camera over the other or alongside on a single screen. |
| <div> <ul style="list-style-type: none"> <li>- If there are only 4 cameras, you won't be able to switch to 8,9,13, and 16 split screen mode.</li> <li>- To zoom in an area on the screen, <b>Right</b> click and <b>Drag</b> a square on the area you want to enlarge.</li> </ul> </div> |   |
| (2) Exit   | Close the QPlayer application.  |
| (3) Progress bar   | Show the progress of the file being played. You may move the bar to seek at any location of the track.  |

| Name  | Function   |
|---|--|
| (4) Hour Buttons  | Select and click to playback the recorded video file on the specific time frame.   |
|  The Hour buttons represent the time in 24-hour clock. The blue bar on top of the hour button indicates that there is a recorded video file on that period of time. While the red bar indicates that you are currently viewing the recorded video file.  |  |
| (5) Playback Control Buttons  | <p>From left to right order:</p> <p><b>Begin:</b> Move at the beginning of the recorded video file.</p> <p><b>Previous:</b> Go back to the previous frame.</p> <p><b>Slower:</b> To reduce the playback speed. When each time press slower button, the speed will reduce 1/2 from original speed (32X, 16X, 8X, 4X, 2X, 1X, 1/2X, 1/4X, 1/8X, 1/16X, 1/32X).</p> <p><b>Rewind:</b> Wind back the recorded video file.</p> <p><b>Pause:</b> Briefly stop playing the recorded video file.</p> <p><b>Play:</b> Play the recorded video file.</p> <p><b>Faster:</b> To faster playback speed. When each time press faster button, the speed will double the playback speed (1/32X, 1/16X, 1/8X, 1/4X, 1/2X, 1X, 2X, 4X, 8X, 16X, 32X).</p> <p><b>Next:</b> Go to the next frame.</p> <p><b>End:</b> Go to the end of the recorded video file.</p> |
| (6) Archive   | <p>Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file.</p> <ul style="list-style-type: none"> <li>– Also, user can open the recorded file from certain location by click <b>OPEN FILE</b> button</li> <li>– Click <b>Channel 01~ 16</b> and <b>Channel 17 ~ 32</b> button to switch to different channel group of playback calendar.</li> <li>– Mark <b>Day Light Saving</b>, the playback calendar will show the available playback records during day light saving period.</li> </ul>  |
|  The numbers from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 16 represent the camera ID. The blue coloured column indicates that there is a recorded video file on that period of time. While the red coloured column indicates on where to start playing the recorded video file. |  |
| (7) Status bar  | Display the recorded date, time and play speed.  |
| (8) Camera ID   | Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.  |
| (9) Language  | Switch to different UI tool tip language   |
| (10) Export   | <p>Export includes Snapshot, Print, and Output function.</p> <ul style="list-style-type: none"> <li>■ <b>Snapshot:</b> Capture and save the screen shot either in *.jpg format.</li> </ul>   |

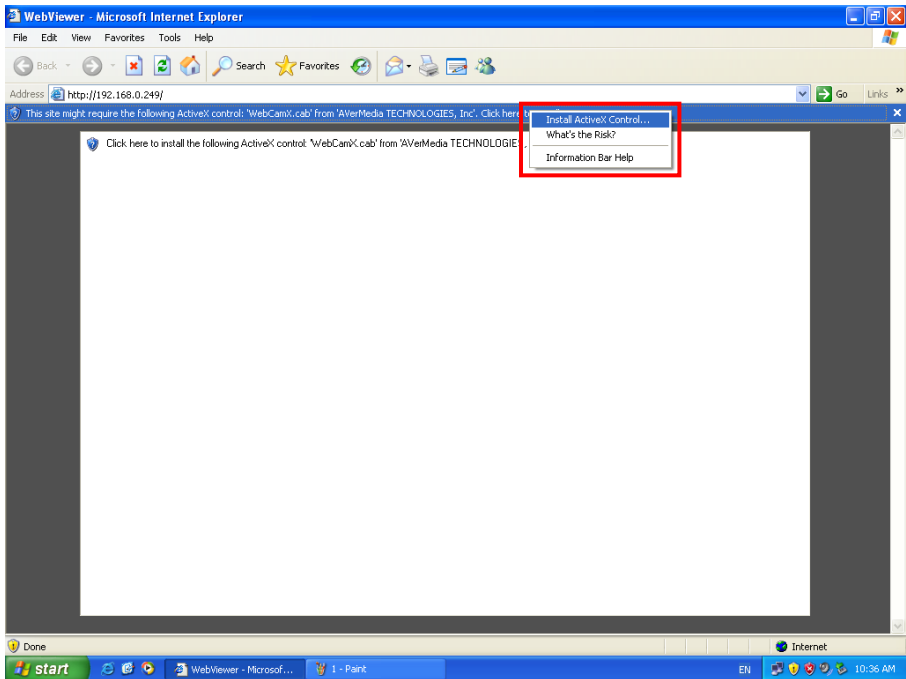


| Name              | Function   |
|-------------------|--|
|                   | <ul style="list-style-type: none"> <li>■ <b>Print:</b> Print the screen shot.</li> <li>■ <b>Output Video Clip:</b> Save the segmented file in *.mpg, *.avi, *.dvr format.</li> </ul>   |
| (11) Segment      | <p>Keep a portion of the recorded video.</p> <p>Following the below steps to Cut and Save the Wanted Portion of the Recorded Video</p> <ol style="list-style-type: none"> <li>1. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to start the cut. Then, click Segment to set the begin mark.</li> </ol>  <ol style="list-style-type: none"> <li>2. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to end the cut. Then, click Segment to set the end mark. To cancel segmentation or set the segment marks from the start, click Segment button again.</li> </ol>  <ol style="list-style-type: none"> <li>3. Click <b>Export</b> button → <b>Output Video Clip</b> to save the wanted clip.</li> <li>4. In the Save As dialog box, locate on where you want to save the file, type the filename, and select the video format.</li> </ol> |
| (12) Full screen  | <p>View in full screen mode. To return, press the right button of the mouse or <b>ESC</b> on the keyboard or click the arrow icon.</p>  <p>When you switch to full screen in multiple-screen mode, <b>Left</b> click to toggle to only display one of the video in the multiple-screen mode or all.</p>  |
| (13) Audio        | Enable/disable audio sound   |
| (14) De-interlace | To enhance the video quality. Set the de-interlace mode to #1, if you are capturing motionless picture and #2, if it captures lots of movement.  |

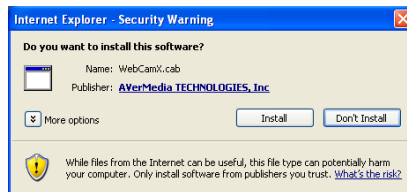
## Using the Remote Programs

User can use Microsoft Internet Explorer to access DVR system by entering the IP address. To use this feature, make sure that your PC and DVR server both are connected to the internet and the Network feature is enabled.

Accessing this feature for the first time you will be prompted by your browser to install WebCamX.cab, allow the installation and you should be able to connect and login afterwards. Click to **install ActiveX** if your PC required to be installed.



And then, Click **Install** when the Internet Explorer - Security Warning dialog box appears.



After installing the WebCamX.cab and when connecting to the DVR system, you are required to enter default account ID (Admin; capital in first letter) and password (111111) and select the type of network.



Changing account password is strongly recommended.

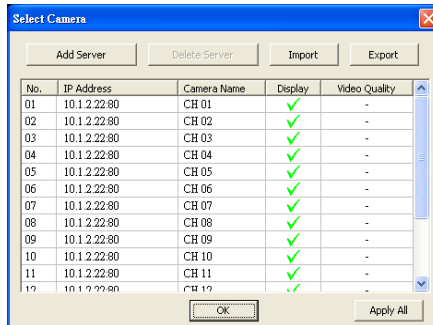
# Familiarizing the Web Viewer Buttons

Right-clicking on the Web Viewer video screen, enables you to start video recording, change video quality, switch camera and enable/disable DirectDraw.



| Name   | Function  |
|--|---|
| (1) DirectDraw   | Enhance the video quality.  |
| <div><div></div><div>Not all graphic cards can support this function. If you cannot see the screen display correctly or screen is messed, please check with VGA card vendor.</div></div> |   |
| (2) Received file size   | Indicate the size of the data being sent per second.  |
| (3) Camera frames  | Indicate the number of frames per second.   |
| (4) Split screen view  | Select from 4 different split screen type to view the video from remote DVR server.   |
| (5) Audio  | Enable/disable remote sound.  |
| (6) 2-way audio  | Enable/disable 2-way audio function. This function allows the client and server to talk via internet using MIC.<br>Make sure your microphone and speakers work before using this function. If the DVR server Talk to web-client setting is disabled, you won't be able to hear from the other side. |
| (7) Record   | Start to record the video of the selected camera in AVI format.<br>Directly click screen to select the channel that user wants to record and press <b>Record</b> button.  |

| Name                        | Function  |
|-----------------------------|---|
| (8) Remote Console          | Initiate Remote Console. It allows you to view the video from DVR server  |
| (9) Remote setup            | Change the DVR server settings<br><div data-bbox="367 220 820 360" data-label="Image"> </div>   |
| (10) PTZ Control            | Initiate PTZ camera controller  |
| (11) Snapshot               | Capture and save the screen shot in *.bmp format.   |
| (12) Full screen            | Use the entire area of the screen to only display the video.<br>To return, Right-click or press ESC on the keyboard.  |
| (13) Select cameras to view | <p>Select to the view camera from different server. In Select Camera dialog box, Display column, click to enable/disable viewing the camera.</p> <p>Click <b>Add</b> Server and select the server type between DVR and IP Cam to add.</p> <p>Click <b>Delete</b> Server to delete the selected item.</p> <p>Click <b>Import</b> to load the previous saved list.</p> <p>Click <b>Export</b> to save the list.</p> <p>Click <b>Apply All</b> to change all the camera video quality based on the selected setting.</p> <p>Click <b>OK</b> to exit.</p> |



IRV PRO-AV8 series only has 8 channels will be available.