Quick Installation Guide

IRV PRO-HB Series

IRV PRO-NVR Series

ⓘ SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE

THE INFORMATION CONTAINED HEREIN IS TO BE CONSIDERED FOR REFERENCE
ONLY

⚠ 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

Table of Content

I. Package Contents

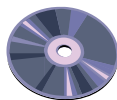**IRV PRO-HB16/IRV PRO-HB8 Series**
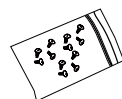

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	If there is any damage, shortage or inappropriate item in the package contents, please contact with local dealer

(1) DVR unit	(5) 12 * screws for internal HDD installation
a. IRV PRO-HB16⁺/IRV PRO-HB8⁺	(6) Power adaptor
(2) Optical USB mouse	(7) Power Cord (*The power cord may vary
(3) Quick Installation Guide	according to the local electricity system.)
(4) Software CD (Manual is included)	(8) 2 * SATA cable
	(9) Audio cable for IRV PRO-HB16H series
	(Red cable: 16CH audio in/White cable: 1CH
	audio out/Black cable: 1CH MIC in)
	(10) Audio cable for IRV PRO-HB8H series
	(Red cable: 8CH audio in/White cable: 1CH
	audio out/Black cable: 1CH MIC in)

	IRV PRO-HB16 series and IRV PRO-HB8 series appear the same except the name of product and camera inputs.

Optional Accessories

Remote controller

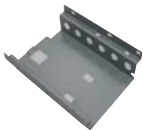DVI cable for IRV PRO-HB16 series
(16CH Loop out)

Audio cable
(For IRV PRO-HB16 series)

Audio cable
(For IRV PRO-HB8 series)

SATA cable for 3rd and 4th hard disk

HDD Holder
(for 4th hard disk)

IR extended cable

Rack ears

IRV PRO-NVR16 Series

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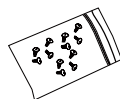

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ⓘ   If there is any damage, shortage or inappropriate item in the package contents, please contact with local dealer

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(1) DVR unit
  a. IRV PRO-NVR16⁺
(2) Optical USB mouse
(3) Quick Installation Guide
(4) Software CD (Manual is included)

(5) 12 * screws for internal HDD installation
(6) Power adaptor
(7) Power Cord (*The power cord may vary according to the local electricity system.)
(8) 2 * SATA cable

Optional Accessories (IRV PRO-NVR16 series)

Remote controller

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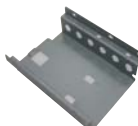(White cable: 1CH audio out
Black cable: 1CH MIC in)

IR extended cable

Rack ears

SATA cable for 3rd and 4th hard disk

HDD Holder(for 4th hard disk)

II. Hardware Installation

A. Install the hard disk

Hard disk installation for IRV PRO-HB16 series, IRV PRO-HB8 series, IRV PRO-HB16H series, IRV PRO-HB8H series and IRV PRO-NVR16 series are same. The following is an IRV PRO-HB16 Lite for an example.

> **i** For hard disk spec, please referring support@ireurope.co.uk　Embedded Hybrid DVR/NVR　IRV PRO-HB16 series, IRV PRO-HB8 series, or IRV PRO-NVR16 series → Hardware Recommendations

Follow the illustrated instructions below to install the hard disk:

1. Loosen all screws

2. Push the cover backward and lift

3. Loosen the screws of holder in order to take out the hard disk rack.

4. Loosen all the screws of hard disk plate.

5. The hard disk plate can be installed 3 hard disks. User can choose the position and place the hard disk on it.
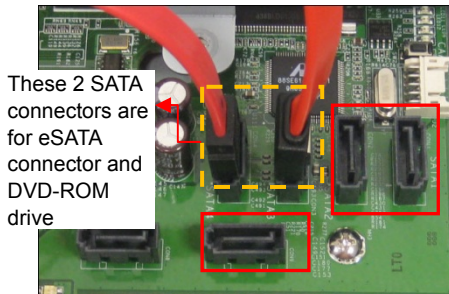

Turn the plate and hard disk over carefully and screwed the hard disk on the plate. If hard disk cannot be fit to the screw hole, then, you may adjust the hard disk position to fit the screw hole.

6. The look of three hard disks is installed on hard disk plate.

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

These 2 SATA connectors are for eSATA connector and DVD-ROM drive

ⓘ The DVD-ROM drive only available on IRV PRO-HB16H^{+} series, IRV PRO-HB8 [+] series.

8. Plug the power cable into hard disk

9. Plug the SATA cable into hard disk

ⓘ - User can leave un-plug the SATA cable of the left side HDD for screwing plate inside the DVR more easily later.
- The 3rd SATA cable is an optional accessory. Please purchase from your dealer.

10. Screw the plate within hard disk inside the DVR unit

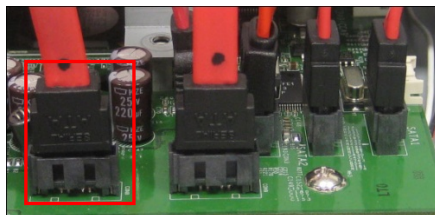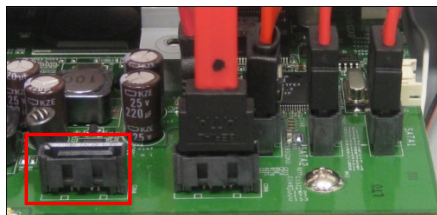11. Plug the SATA cable into the left side hard disk.

| | User can adjust the step 9, 10, and 11 for easily install process if necessary. |

12. If user wants to install 4th HDD, then follow the steps to continue. Otherwise, go to the last two steps to complete the installation.

13. Place the 4th hard disk on the HDD holder. The head side of hard disk is same side of the screw hole of HDD holder.

14. Screw (6 screws for both side) the hard disk on the HDD holder.

| | HDD holder is an optional accessory. User need to purchase from your dealer. |

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

16. Plug the power cable into the hard disk.
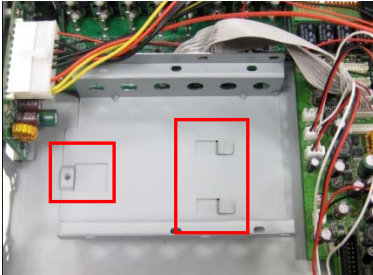
17. Plug the SATA cable into the hard disk.

| | The SATA cable is an optional accessory. Please purchase from your dealer. |

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 stabled hook on the DVR unit.

20. Screw the HDD holder inside the DVR unit. 21. Screw the holder on the DVR unit.

22. The look of four hard disks is installed. 23. Push the cover forward and secure the cover

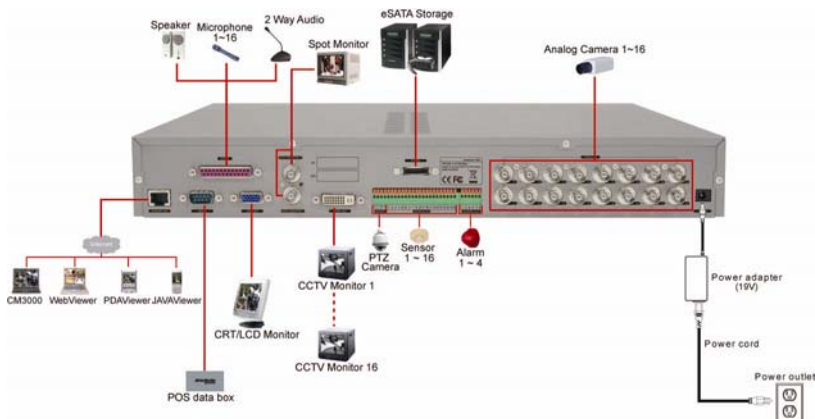24. You may now connect all the cables and power on the DVR unit.

B. Device Connection

⚠️ Pen drive and external hard disk must be FAT32 format.

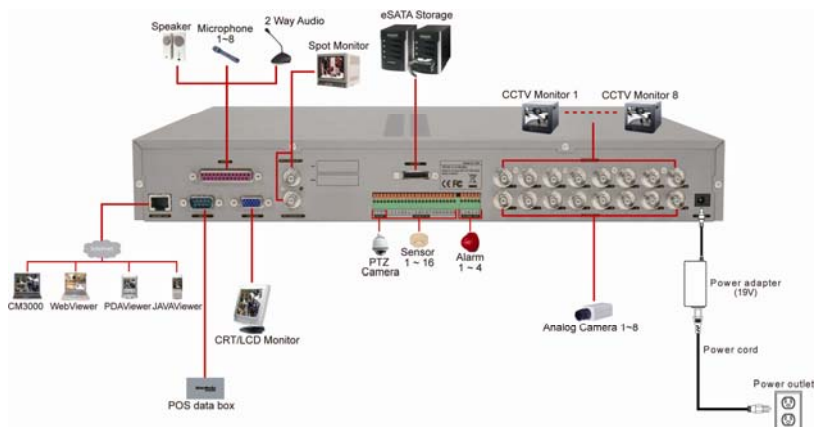ℹ️ All connected devices have their own power supply are necessary.

IRV PRO-HB16

The back panel of the DVR unit, user can connect up to 16 cameras in combination of analogue and IP camera. The DVR unit also can connect 16 sensor devices, 4 alarm devices, and output video to a TV or CRT/LCD monitor. Follow the illustration below to make the connection:

IRV PRO-HB8series

The back panel of the DVR unit, user can connect up to 8 cameras in combination of analogue and IP camera. The DVR unit also can connect 16 sensor devices, 4 alarm devices, and output video to a TV or CRT/LCD monitor. Follow the illustration below to make the connection:

For backup recorded video, plugging the pen drive or external hard disk through USB port that are
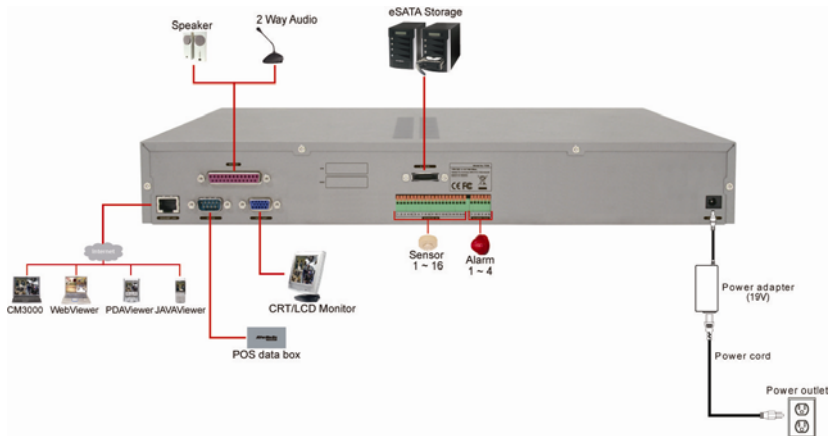
located at front panel of DVR unit, and then, use the bundled software enables user to transfer, playback and segment the video. Follow the illustration below to make the connection:

- IRV PRO-NVR16^{+}/IRV PRO-NVR8

IRV PRO-NVR16 series

The back panel of the DVR unit, user can connect up to 16 IP cameras. The DVR unit also can connect 16 sensor devices, 4 alarm devices, and output video to a CRT/LCD monitor.
Follow the illustration below to make the connection:

For backup recorded video, plugging the pen drive or external hard disk through USB port that are located at front panel of DVR unit, and then, use the bundled software enables user to transfer, playback and segment the video.

- IRV PRO-NVR16

⚠	Pen drive and external hard disk must be FAT32 format.
ⓘ	- All connected devices have their own power supply are necessary. - IIRV PRO-NVR unit can connect 16 IP cameras.

III. Using DVR System

A. Way to Operate DVR

There are three ways can be managed the DVR unit:

1. **Using mouse and keyboard**

   Connecting the mouse and keyboard through USB interface, user can easily to management the DVR unit. For the first time using DVR unit, mouse and keyboard is the best way to set up all DVR relevant configurations.

2. **Using Remote Controller(Optional accessory)**

   After DVR unit has been setup, user can use remote control to preview, playback, backup, reset alarm, output video and so on functions.

3. **Using Front Panel button(For IRV PRO-HB16,   IRV PRO-HB8,   and IRV PRO-NVR16)**

   It's an optional way to operate DVR unit. Front panel button function acts as same as remote controller.

> ⓘ   For the first time using DVR unit, using mouse and keyboard to setup all configurations.

B. First Time Using DVR Unit

1. Connect the mouse and keyboard to DVR unit(through USB interface)
2. Power on the DVR unit.
3. For security purpose, the DVR system would require you to enter User ID and Password before it can be accessed. When the Authorization dialog box appears, enter the ID (**superuser**) and Password (**111111**).

> ⓘ   The **superuser** has full authority to configure and operate DVR system.

After login, the main GUI as following shown:

IRV PRO-HB16/8 series Preview UI

4. The hard disk must be formatted before user can use it with DVR unit. Following the below steps
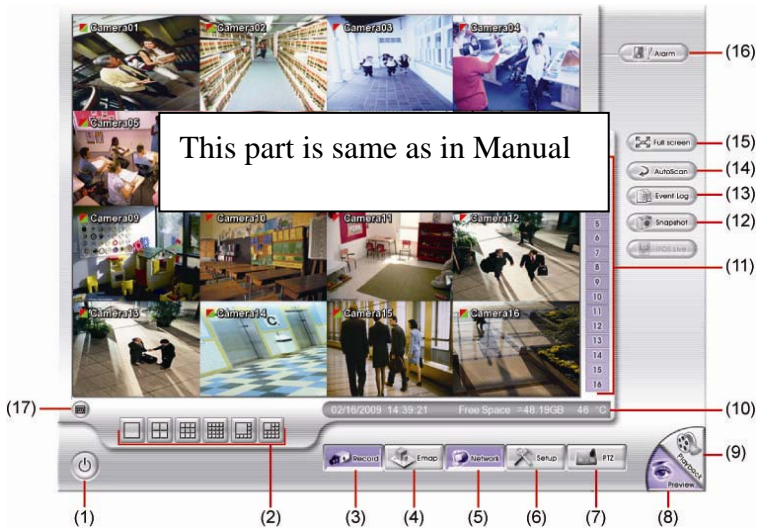
to format the hard disk.

    a. Click **Setup** and enter the password

    b. Click **System** → **Add**

    c. Select the hard disk from device list and select **Format type**

    d. Click **Format** button to start formatting

    e. When formatting is done, click **OK**.

5. Setup the date and time in order to have correct recording time and date. Following the below steps to setup date and time:

    a. Click **Setup** and enter the password

    b. Click **System**

    c. In **Time** section, click **Setting** button of **System Time**.

    d. Select the date and adjust the time, and then, click **OK**.

6. Connecting the camera.

    ■ **To connect analog camera(HB series only):**

        a. Plug the analog camera video cable into DVR unit.

        b. Click **Setup** and enter the password

        c. Click **Camera**

        d. Select camera channel and type of camera – Analog Camera

        e. And then, enable the camera

        f. Give a name of camera and enter short description.

        g. Adjust the bright, contrast, hue, and saturation of camera

        h. Click **OK**

    ■ **To connect IP camera:**

        a. Click **Setup** and enter the password

        b. Click **Camera**

        c. Select camera channel and type of camera – IP Camera

        d. And then, enable the camera

        e. Click **IP Setting**

        f. Enable **Protocol**, and then, select **protocol**, **mode**, **video format**, **resolution**, and **channel** of IP camera.

        g. Enter **IP address** or **URL** of IP camera.

        h. Enter **ID** and **password** if IP camera's access authority is required.

        i. Click **OK**.

🛈
- IRV PRO-HB16 series can connect 16 cameras of analog and IP cameras combo.
- IRV PRO-HB8 series can connect 8 cameras of analog and IP cameras combo.
- IRV PRO-NVR16 series only can connect 16 IP cameras.
- DVR unit doesn't supply the power to connected external device.
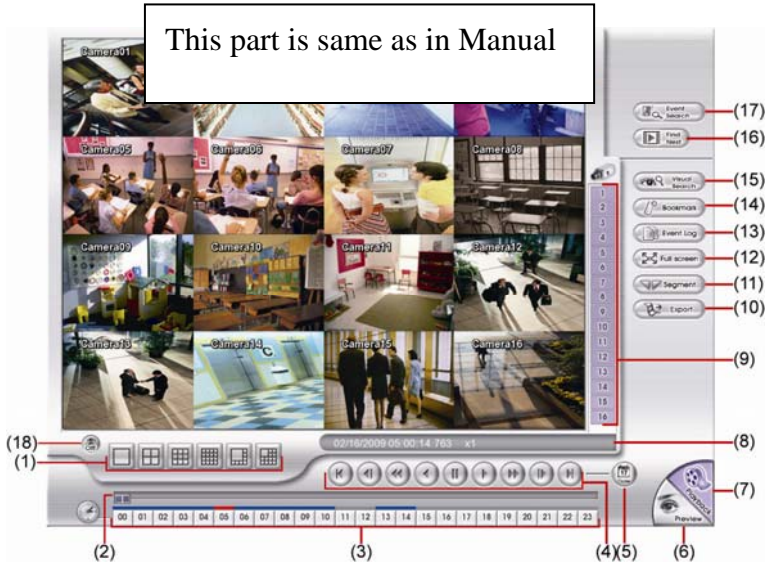

IV. Familiarizing the Buttons in Preview Mode

Name	Function
(1) Exit	**Reboot:** To restart the DVR system. It is required to enter the password **Power Off:** To shut down the DVR system. It is required to enter the password **Login:** Using different ID to login to DVR system. **Cancel:** To return to DVR application.
(2) 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.
(3) Record	Start/stop video recording.
(4) EMap	Display the map in each area, and the location of camera/ sensor/ relay and the warning.
(5) Network	Enable/disable remote system access. This feature allows you to access DVR server from a remote location via internet connection. The default is enabling.
(6) Setup	Configure the system settings.
(7) PTZ	Access PTZ control panel.
(8) Preview	Switch to Preview mode. This allows you to view live camera display.
(9) Playback	Switch to Playback mode. This allows you to view the recorded video file.
(10) Status bar	Display the current date, time, hard disk free space, and system temperature.
(11) 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.
(12) Snapshot	Capture and save the screen shot in *.jpg format.
(13) Event log	Show the record of activities that take place in the system.

| Name	Function
(14) Auto Scan	Start/Stop video screen cycle switch.
(15) Full screen	View in full screen. To return, press the right button of the mouse or **ESC** on the keyboard or click the arrow icon. Click to exit from full screen mode When you switch to full screen in multiple-screen mode, **Left** click to toggle to only display one of the video in the multiple-screen mode or all.
(16) Alarm	Alert and display warning info. Superuser and user both can reset alarm status.
(17) Virtual Keyboard	Click to enable virtual keyboard.

V. Familiarizing the Buttons in Playback Mode

To switch in Playback mode, click **Playback** button at the lower right corner of Preview mode user interface.

This part is same as in Manual

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.
(2) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(3) Hour Buttons	Select and click to playback the recorded video file on the specific time frame.

> ℹ 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.

Name	Function
(4) Playback Control Buttons	**Begin:** Move at the beginning of the recorded video file. **Previous:** Go back to the previous frame. **Slower:** Play the recorded video file at the speed of 1/2X, 1/4X, 1/8X, 1/16X, or 1/32X **Rewind:** Wind back the recorded video file. **Pause:** Briefly stop playing the recorded video file. **Play:** Play the recorded video file. **Faster:** Play the recorded video file at the speed of 2X, 4X, 8X, 16X, 32X, or 64X. **Next:** Go to the next frame. **End:** Go to the end of the recorded video file.

Name	Function
(5) Date	Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file.

ⓘ 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.

Name	Function
(6) Preview	Switch to Preview mode.
(7) Playback	Switch to Playback mode to view the recorded video file.
(8) Status bar	Display the recorded date, time and play speed.
(9) 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.
(10) Export	Export includes Snapshot, Output Video Clip, and Backup function. ■ **Snapshot:** Capture and save the screen shot in *.jpg format. ■ **Output Video Clip:** Save the segmented file in *.dvr format to external USB storage device. ■ **Backup:** Save the playback file to USB device or DVD disk
(11) Segment	Keep a portion of the recorded video. 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. 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. 3. Click **Export** button → **Output Video Clip** to save the video segment to the USB storage device.
(12) Full screen	View in full screen. To return, press the right button of the mouse or **ESC** on the keyboard or click the arrow icon. When you switch to full screen in multiple-screen mode, **Left** click to toggle to only display one of the video in the multiple-screen mode or all.
(13) Event log	Show the record of activities that take place in the system. To filter the records, select and click the option button to only display Event, System, Operation, Network or All.

(14) Bookmark	Mark a reference point when reviewing the recorded video file to which you may return for later reference.
	1. Click **Bookmark** button
	2. In the Bookmark dialog box, you may do the following:
	   - **Add** to create the new reference mark in the bookmark list.
	   - **Edit** to change the mark description.
	   - **Delete** to remove the selected reference mark in the list.
	   - **Delete All** to remove all the reference marks in the list.
	   - **Exit** to close Bookmark dialog box.
	3. Select and click one in the bookmark list to review the file.

Name	Function
(15) Visual Search	Search from a specific camera by Date, Hour, Minute, 10 Seconds and Second.

1. Click **Visual Search**.
2. In the Visual Search Setting dialog box, select the Camera number and the date. Then click **OK**.

3. When a series of frames appear by date, click on the frame to display another series of frames and search by every Hour of that date, every Minutes of that hour, and every Seconds of that minute. Using ◀ and ▶ to go next and last page of time page. To go back last time selection (hour, minute, or second), click ⟵. To close event search, click ☒. Click 🗓 to select different date of video for visual search.
4. On the time second screen, click the channel and playback button will appear. Click playback button to playback the selected channel video frame.

Name	Function
(16) Find Next	Search for the next event or changes in the motion detector frame. You can use this when you are using Event Search function.
(17) Event Search	Search from the recorded activities that were recorded in event log (i.e., Sensor, Motion, and Video Loss).
(18) 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.

ⓘ   De-interlace only supports on IRV PRO-HB16 series.