

***TeleEye* RX800 Series**

Ultra-high Resolution

Video Recording Server

RX806 / RX812 / RX816

Quick Start Guide

Contents

1	Introduction.....	1
1.1	Package Contents.....	2
1.2	Hardware Features.....	3
1.3	Functional Features.....	5
1.4	Hard Disk Installation.....	6
2.	Setup for Local Monitoring & Recording.....	9
3.	Setup for Remote Monitoring & Recording.....	13
4.	Reference.....	17

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1. Introduction

TeleEye RX800 Series is a range of 6-, 12- and 16-channel ultra high resolution video recording servers, designed for professional video surveillance and event management applications. With its state-of-the-art video compression engine supporting dual compression algorithms, TeleEye RX800 series delivers both video streaming and recording performance with a truly “no compromise” approach.

With the high resolution footages recorded, it is equally important to ensure the security of the information. TeleEye Hacker Resistant technology is able to prevent any unauthorised access into the video surveillance systems.

1. Max. resolution: 960x576 (PAL) and 960x480 (NTSC) (33% higher than D1)
2. Real-time recording up to 400fps (PAL) and 480fps (NTSC)
3. Dual compressions: SMAC-M and H.264
4. 4 video streams with independent recording stream
5. Hacker Resistant
6. Excellent video streaming performance via LAN, broadband & mobile network
7. Main (HD/VGA) + Spot (BNC) video outputs
8. Video loop-through
9. Support 4 internal SATA Hard Drives
10. USB Port for fast video extraction
11. Up to 16-channel audio input
12. British Standard BS8418 compliant

RX800

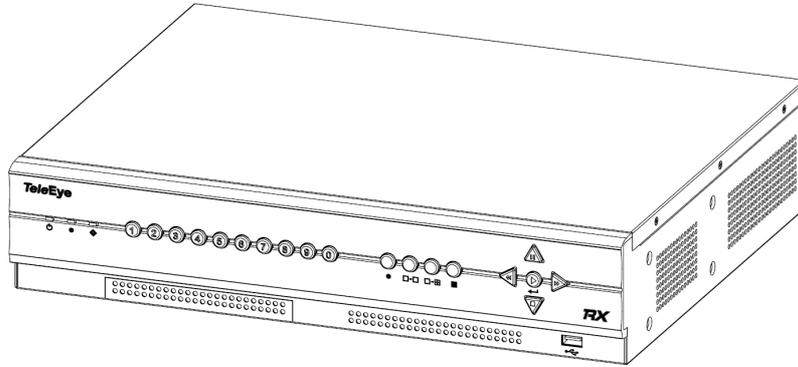
Model	Description
RX806	6-Video, 16-Alarm, Max. Recording: 150 / 180fps, 4 Internal SATA, BS 8418 Compliant, Ultra Hi-Res Video Recording Server
RX812	12-Video, 16-Alarm, Max. Recording: 300 / 360fps, 4 Internal SATA, BS 8418 Compliant, Ultra Hi-Res Video Recording Server
RX816	16-Video, 16-Alarm, Max. Recording: 400 / 480fps, 4 Internal SATA, BS 8418 Compliant, Ultra Hi-Res Video Recording Server

Accessories

Model	Description
RX-KB03	TeleEye RX & DM Keyboard with Joystick
RX-ALM	TeleEye Alarm Break-Out box
LTV-8A / LTV-8B	TeleEye Video Loop through cable
AIC-16	TeleEye Audio input cable

1.1 Package Contents

Ensure the following items are included within the package



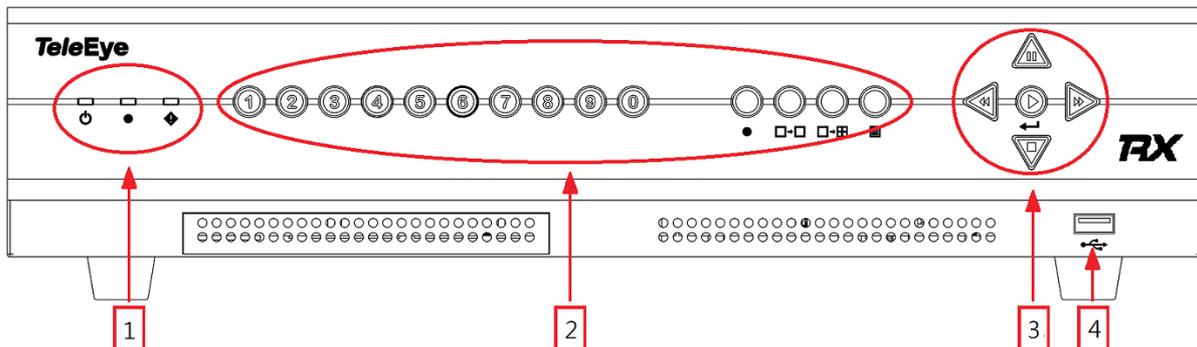
TeleEye RX800 HD Video Recording Server

Item	Description	Item	Description
	Quick start guide		Power adaptor
	Registration code sheet		HDD screws
	HDD recommendation sheet		Straight-through Ethernet cable

	Warranty card		Alarm port connector & alarm port cover
	Software CD		Resistors (for tamper detection)
	Mouse		

1.1. Hardware Feature

1.1.1. Front View



1. Notification LEDs

LED	Description
	Lights up when power is on
	Lights up when performing recording
	Blinks when an event is triggered

2. Main control buttons

Button	Description
	Select camera / Enter password

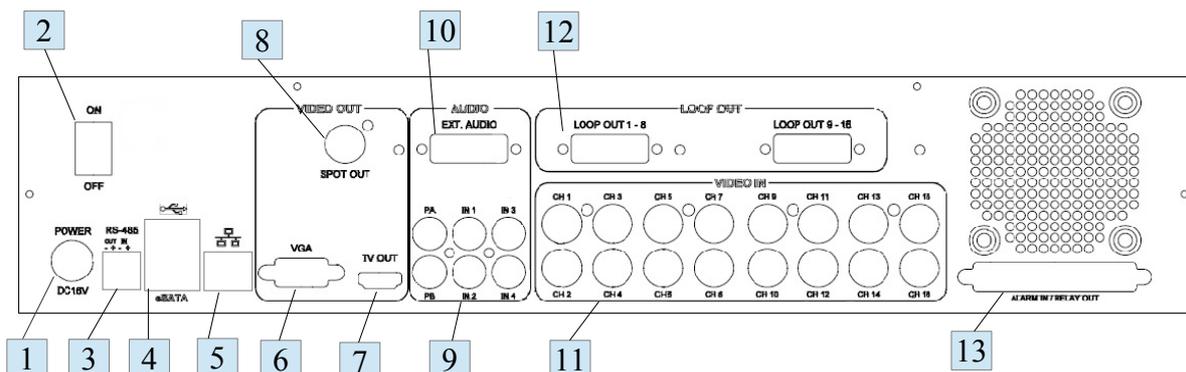
	Quick button for recording
	Display next camera / Start sequential mode
	Change to next screen mode (e.g. Full → 2x2)
	Open main OSD menu / Back to previous menu

3. Menu control / local playback control buttons

Button	Description	
	Menu mode	Playback mode
	Up	Pause
	Down	Stop
	Left	Rewind
	Right	Fast forward
	Enter	Play

4. Front USB port

1.1.2. Back View



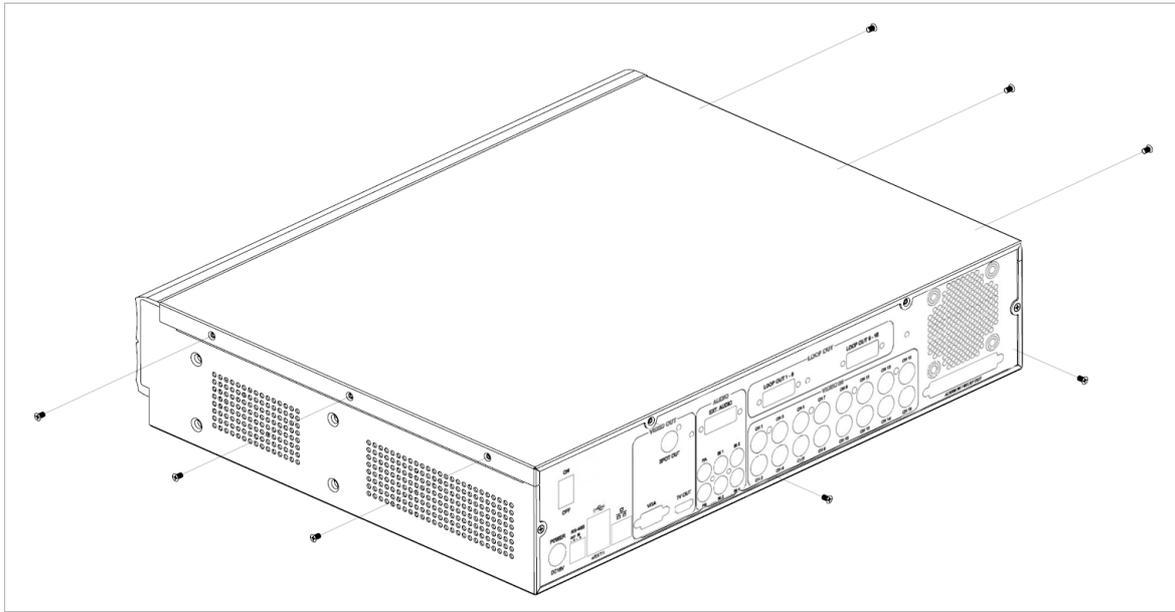
1. Power input (16V DC)
2. Power switch
3. RS-485 in/out port
4. USB ports
5. Ethernet jack (10/100 Base-T)
6. VGA output
7. HDTV output
8. SPOT video output
9. Audio in/out port, PA
10. External Audio input (require optional cable)
11. Video input ports (BNC)
12. Video loop-through outputs (require optional cable)
13. Alarm/switch port

1.2. Functional Features

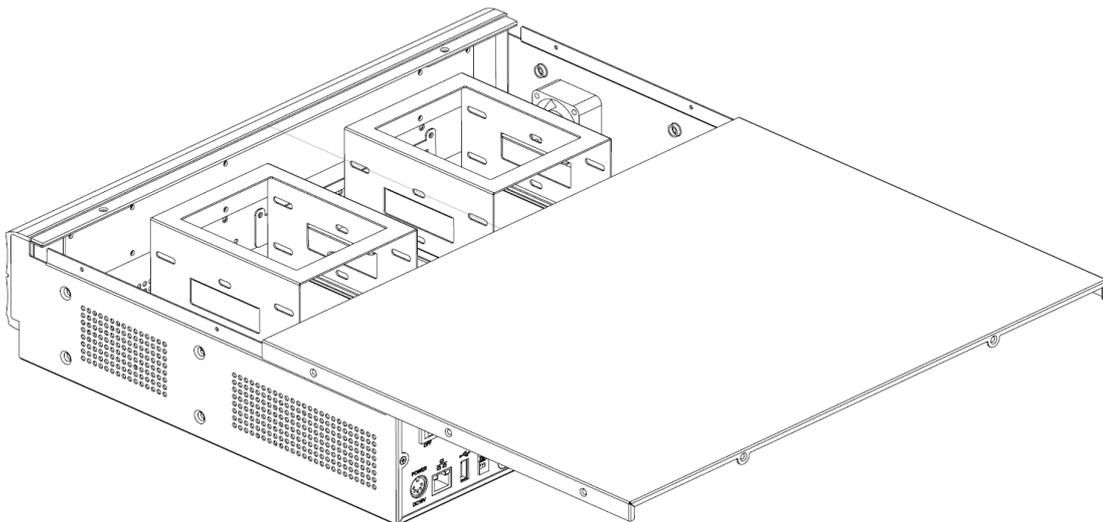
- Dual codec operation for recording and streaming
- Real-time video recording
- Configurable recording frame rate
- Supporting up to 4 SATA hard drives
- USB video extraction
- Flexible connections: LAN, broadband & mobile network
- Support both static & dynamic IP
- IP filtering
- Mobile video monitoring
- Triplex operation: simultaneous video monitoring, recording & playback
- HD video output
- Multiple login accounts
- Compliance with BS 8418
- Sophisticated event management
- Multi-language OSD
- Mouse control

1.3. Hard Disk Installation

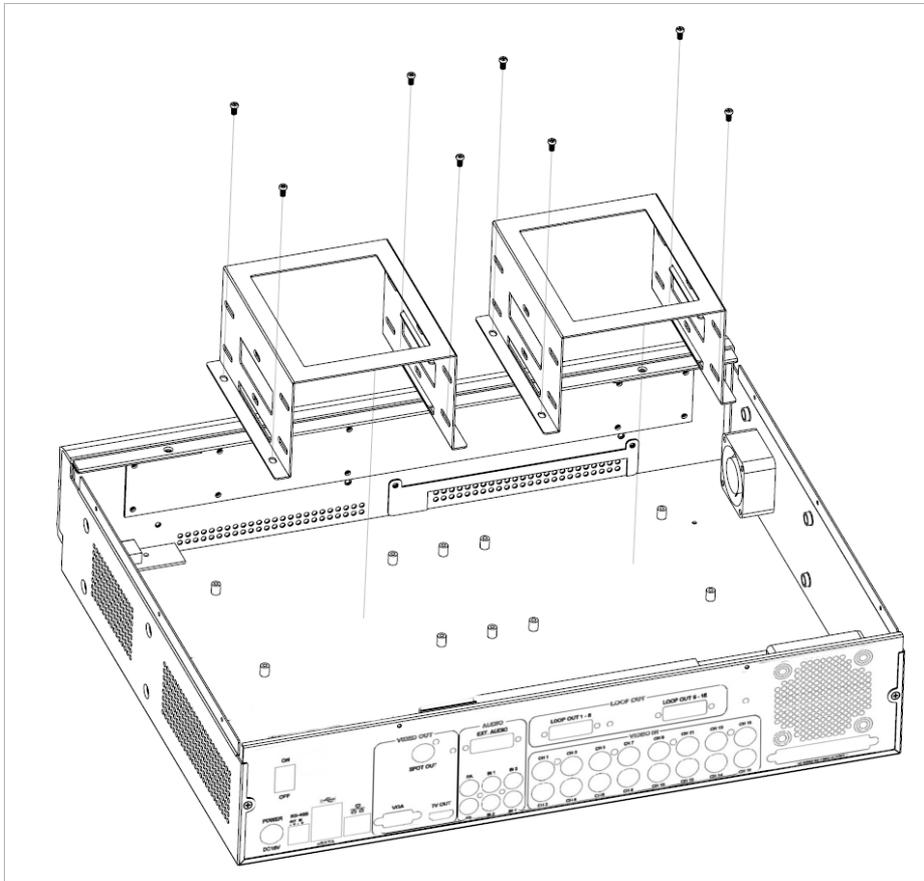
1. Make sure that the video recording server is turned off.



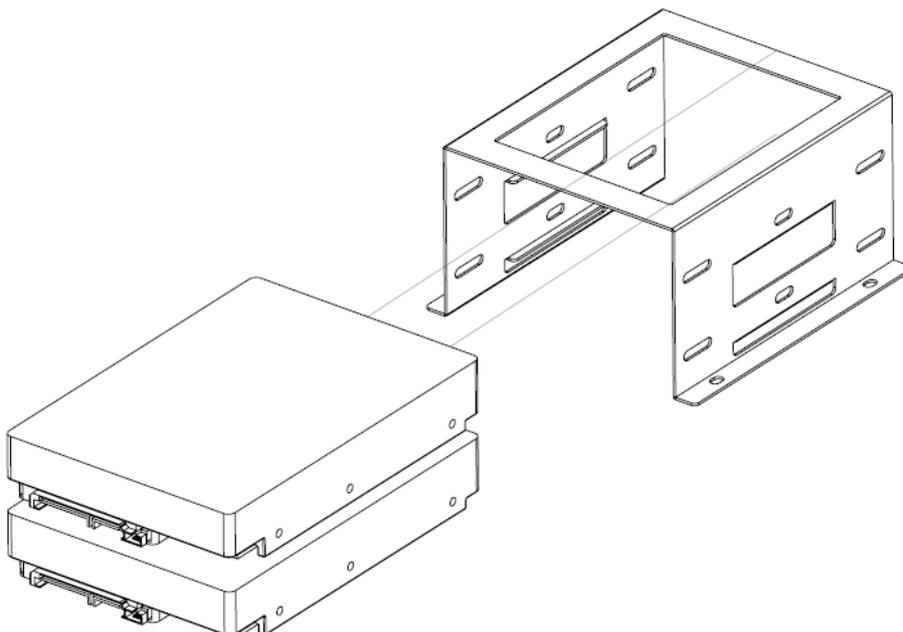
2. Loosen the screws that hold the cover.
3. Remove the cover.



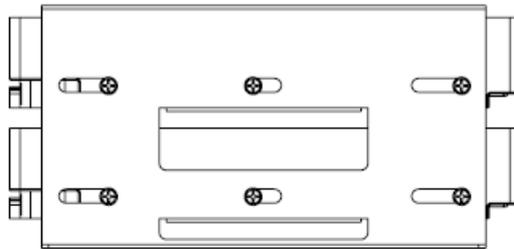
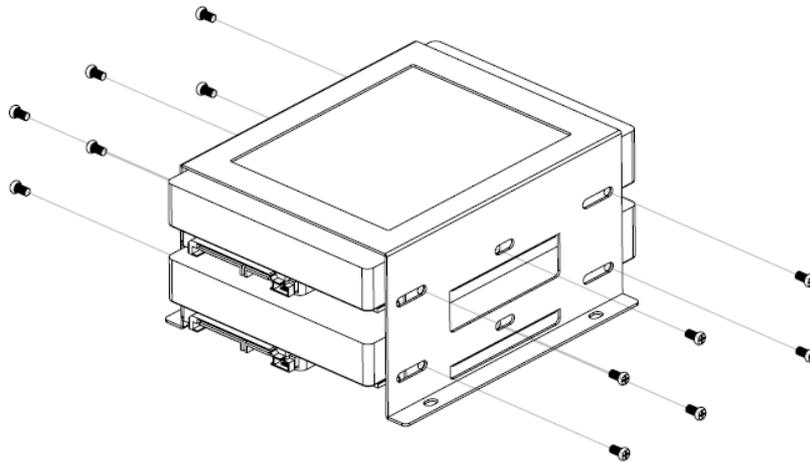
4. Loosen the screws of the hard disk holder.



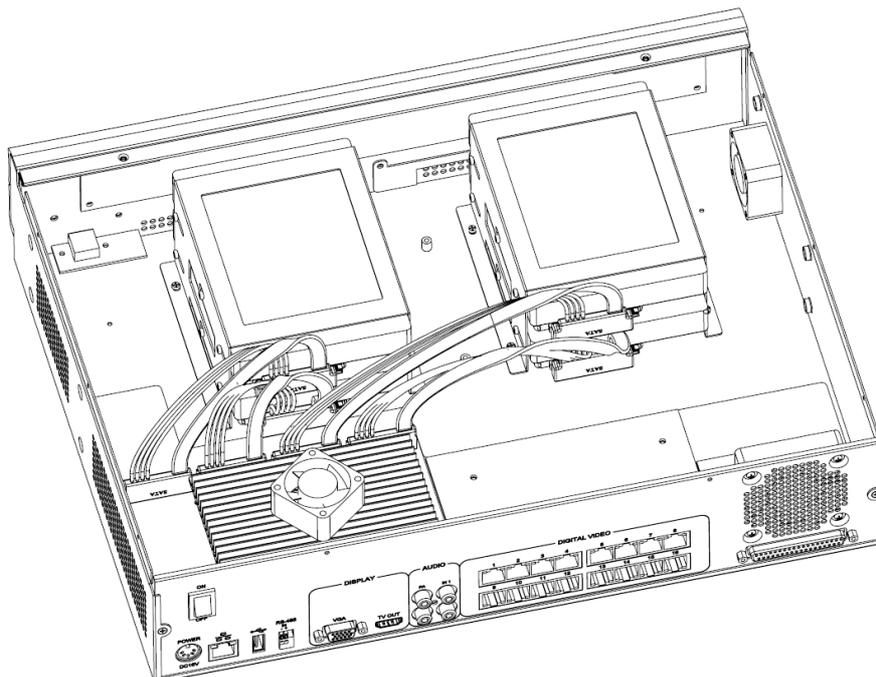
5. Insert HDD into one of the available holders. Maximum 4 HDD can be installed.



6. Mount the HDD to holder with attached screws.



7. Remount the hard disk holder to TeleEye RX.
8. Connect the SATA cable to the HDD.



2. Setup for Local Monitoring & Recording

Equipment:

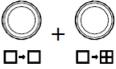
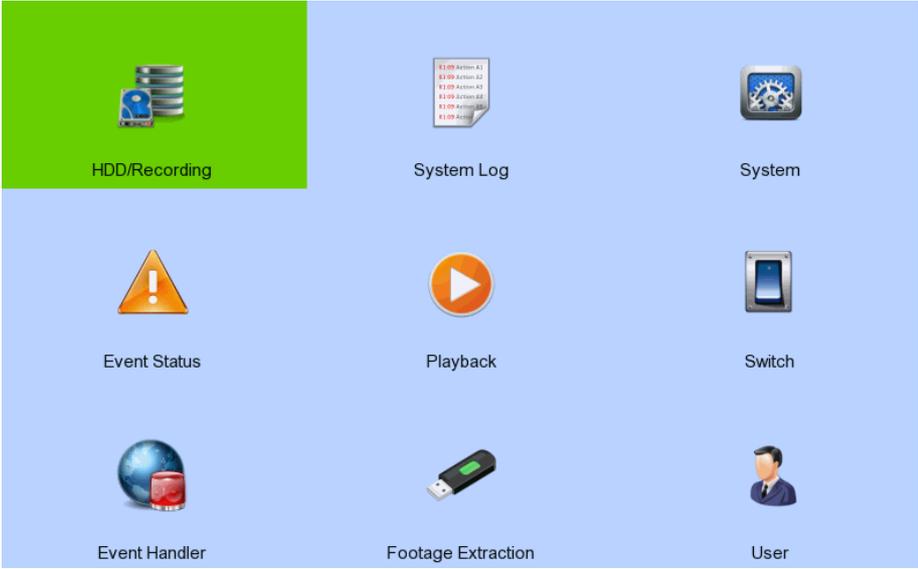
- TeleEye RX video recording server and its power adaptor
- Cameras and their power adaptors
- Coaxial cables
- HD Monitor
- HD TV cable

Setup Procedures:

1. Install hard disk(s) to the RX
Note: If there is no hard disk installed, Recording and Playback are not functional
2. Connect cameras to the video ports of RX
3. Connect a monitor to TV OUT or VGA output of RX
4. Plug in the power adaptors to RX, cameras and monitor
5. Switch on the power of RX, a startup screen will appear on the connected monitor.
6. If an installed hard disk is not in RX recognised format, it will be formatted automatically when startup is completed.
7. RX is ready for operation. Live video should appear on the monitor. Recording will start automatically by default.
8. User can use USB mouse or control buttons on the front panel to perform different operations.

When using buttons on the front panel:

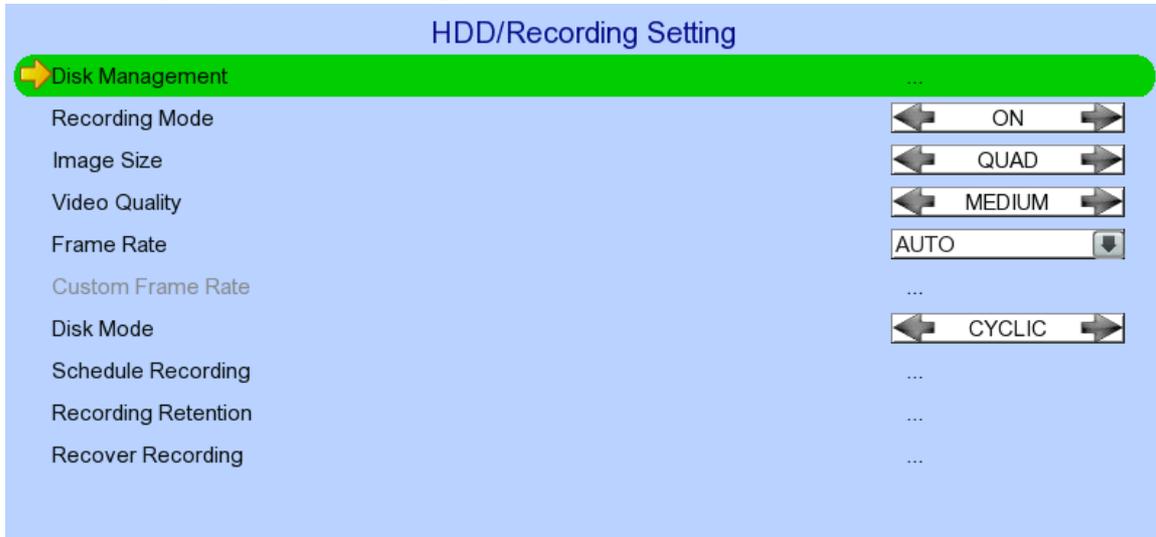
	Press button 1 to 9 to select Camera 1 to 9. Press button 0 first, then press button 0 to 6 to select Camera 10 to 16.
	Hold down button 0 for a few seconds to change the display resolution.
	Quick button to change recording to on, off or schedule.
	Display next page of cameras (e.g. Cam 2 → Cam 3). Hold down the button for a few seconds to start sequential mode.
	Switch to next screen mode (e.g. Full → 2x2).

	<p>Hold down both buttons for a few seconds to refresh the local display.</p>
	<p>Menu button: used to open and close main OSD menu, or navigate backward to previous menu.</p> <div data-bbox="472 530 1390 1099" style="border: 1px solid black; padding: 10px; background-color: #e6f2ff;">  </div>

When using the mouse:

 <p>(Left click)</p>	<p>Enter a sub-menu. Select an option. Double click on a recording log to select playback cameras. Double click on a system log to perform searching. Double click on an IP filtering entry to edit.</p>
 <p>(Right click)</p>	<p>Use to open and close the OSD menu, or navigate backward to previous menu.</p>

9. TeleEye RX supports 3 recording modes to suit different situations: manual recording, schedule recording and event recording. When a camera's video is being recorded, the icon  will be shown next to its name and the LED  will light up. For advanced recording settings, go to **[Main Menu] → [HDD/Recording]**



Disk Management	View hard disk information
	Format and scan disk
Recording Mode	Select the recording mode
Image Size	Set recording resolution
	- Ultra-High: 960x576 / 960x480
	- QUAD: 320x288 / 320 x 240
Video Quality	Set video quality
Frame Rate	Set recording frame rate, applied to all cameras
	- Auto: Record at highest achievable frame rate
	- X fps: Record at X frames per second
	- Custom: Enable custom frame rate for individual camera
Custom Frame Rate	Set recording frame rate of individual cameras
Disk Mode	Set disk mode
	- Cyclic: Remove oldest data when hard disk full
	- Fixed: Stop recording when hard disk full
Schedule Recording	View or change recording schedules
Recording Retention	Set recording retention settings
Recover Recording	Recover damaged recorded video or recording logs

3. Setup for Remote Monitoring & Recording

Equipment:

- RX video recording server and its power adaptor
- Cameras and their power adaptors
- Coaxial cables
- Network switch or router
- PC

PC Requirements:

- CPU: Intel ® Core i3 Processor
- RAM: 2 GB
- HDD: 10 GB free space
- Display: Direct 3D, Nvidia GeForce GT 220 / ATI Radeon HD 5450 or above
- OS: Windows XP, Windows Vista, Windows 7 or Windows 8

Other Requirements:

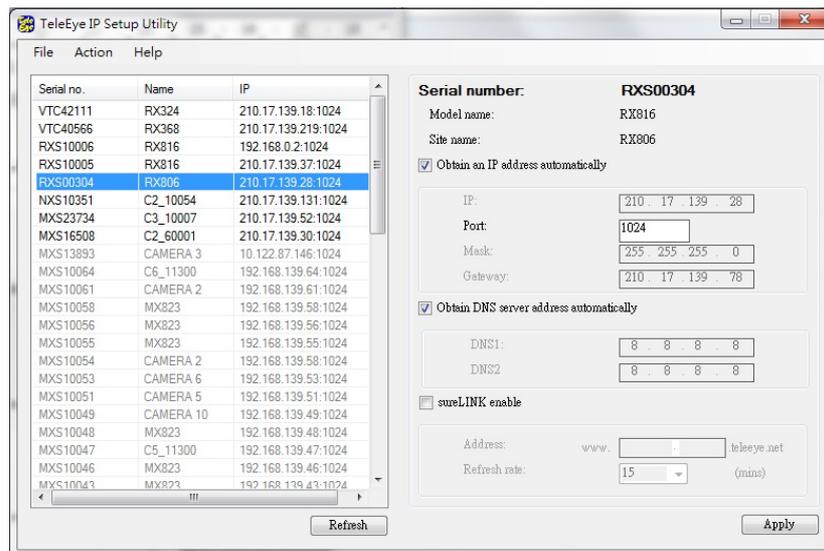
- Java: Sun Microsystems Java 2 runtime Version 1.6.0 or above
- IE: Windows Internet Explorer Version 8 or above

Setup Procedures on RX Side:

1. Install a hard disk to the TeleEye RX
Note: If there is no hard disk installed, Recording and Playback are not functional
2. Connect cameras to the video ports of TeleEye RX
3. Plug in the power adaptors to TeleEye RX and cameras.
4. Connect TeleEye RX to the network switch.
5. Switch on the power switch of TeleEye RX.
6. If all installed hard disks are not in TeleEye RX recognised format, they will be formatted automatically when startup is completed.

Setup Procedures on PC Side:

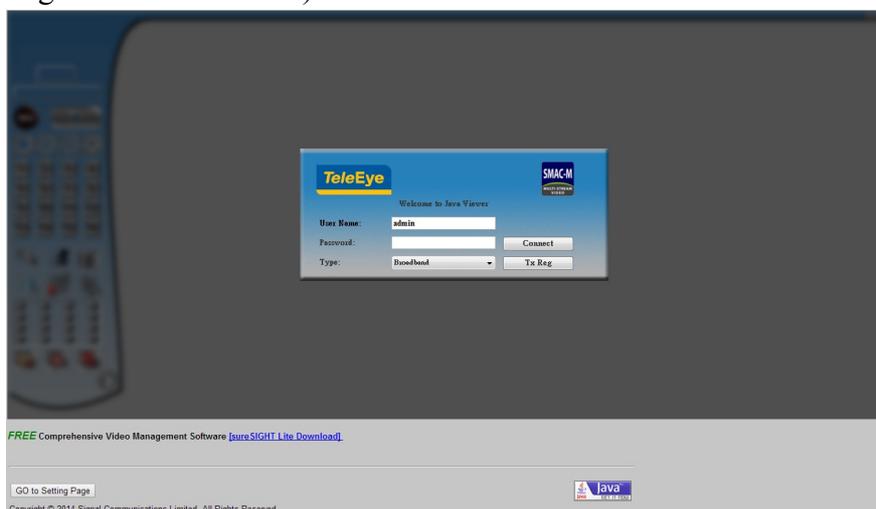
1. Configure the network settings of TeleEye RX through PC with LAN connection.
2. Install TeleEye sureSight Light and IP Setup Utility from the software CD included.
3. Run IP Setup Utility.
4. Find the video recording server according to the serial number on registration code sheet.



5. By default, TeleEye RX obtains the IP address, netmask and gateway automatically through DHCP. To assign a static IP, unselect the “**Obtain an IP address automatically**” checkbox and enter the corresponding information. The gateway should be the IP address of the router. Click “**Apply**” button when done, enter the default password on registration code sheet to complete setup.

Note: The DNS setting is used for sureLINK, time synchronisation and e-mail notification.

6. Reconnect the video recording server to the Internet network.
7. Configure other network settings for TeleEye RX and the PC if necessary, such as router port mapping, firewall, etc. Please refer to the manual of the router.
8. Open a web browser and type the IP address plus port number in the format `http://IPAddress:PortNumber` (e.g. `http://192.168.1.2:1024`) or **sureLINK** address in address bar directly.
9. Enter user name and password and press [**Connect**]. (Default user name and password can be found in the registration code sheet)

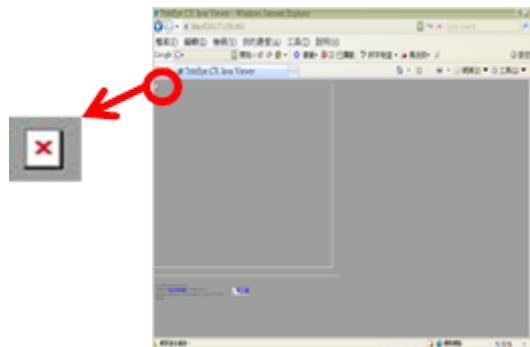


10. Use screen mode selection panel and camera selection panel (circled in the red colour in the image below) to view video.



Note: If a cross sign is shown at the top left corner of the web page, it implies that Java JVM is not installed in the computer. It can be obtained through the following methods

- Install through the software CD in the package
- Download from <http://www.java.com> and install it



Setup Procedures on Router Side:

Port forward of router is required to establish the Internet connection of the camera. Please refer to the user manual of your router for setup details. An example of establishing the port forward of a router is given below.

1. Open a web browser and type the router IP address (e.g. <http://192.168.1.1>) in address bar to

access the web-based utility of router.

2. Enter the user name and password if login is required. Please refer to the setup manual of router.

Enter Network Password

Please type your user name and password.

Site: 192.168.1.1

Realm: Linksys WAG54G

User Name: admin

Password: *****

Save this password in your password list

OK Cancel

3. Enter the IP address and port number of TeleEye RX in the NAT / port forward table of the router. Note that the naming for port forwarding may be different for different routers.

Etherfast® Cable/DSL Router BEFSR41

Applications & Gaming

Setup Security Applications & Gaming Administration Status

Port Range Forwarding Port Triggering UPnP Forwarding DMZ QoS

Port Range Forwarding

Application	Start	End	Protocol	IP Address	Enabled
TeleEye	1024 to 1024	TCP	192.168.1.2	<input checked="" type="checkbox"/>	
	0 to 0	Both	192.168.1.0	<input type="checkbox"/>	
	0 to 0			<input type="checkbox"/>	
	0 to 0			<input type="checkbox"/>	

Port forward setup for TeleEye monitoring service

Port Range Forwarding

Port Range Forwarding can be used to set up public services on your network. When users from the Internet make certain requests on your network, the Router can forward those requests to computers equipped to handle the requests. If, for example, you set the port number 80 (HTTP) to be forwarded to IP Address 192.168.1.2, then all HTTP

4. Reference

For advanced operations, please refer to the full TeleEye RX user guide in the software CD.