

# ***TeleEye* RX Series**

---

## **Video Recording Server**

**RX364 / RX368\_V2 / RX3616\_V2 (Support SATA)  
RX324 / RX328 / RX3216**

## **User Guide**





**Notice:**

Signal Communications Limited reserves the right to make improvements to the product described in this manual at any time and without prior notice.

This manual is copyrighted. All rights are reserved. This manual should not be copied, reproduced or translated in whole or part without prior consent from Signal Communications Limited.

**TeleEye** is a trademark of Signal Communications Limited and is registered in China, European Communities, Hong Kong, US and other countries.

All other trademarks are the property of their respective owners.

Copyright (c) 2008 Signal Communications Limited (A member of **TeleEye** Group). All rights reserved.

Release Version 3.7.2

**Limits of Liability and Disclaimer of Warranty**

**Signal Communications Limited** has taken care in preparation of this manual, but makes no expressed or implied warranty of any kind and assume no responsibility for errors or omissions. No liability is assumed for incidental or consequential damages in connection with or arising out of the use of the information or accessories contained herein.

Features and specifications are subject to change without prior notice.

**Introduction**

# Table of Contents

<b>SECTION 1</b>	<b>1</b>
Introduction	1
1. Introduction	1
2. Features	2
3. Removing the Packages	3
4. Convention Used in This Manual	3
5. Front Panel Description	3
6. Rear Panel Description	6
<b>SECTION 2</b>	<b>10</b>
Hard Disk Installation, Formatting and Scanning	10
A. Hard Disk Installation (for RX364 / RX368_V2 / RX3616_V2)	10
B. Hard Disk Installation (for RX324 / RX328 / RX3216)	13
C. Hard Disk Formatting	15
D. Scan Disk	17
<b>SECTION 3</b>	<b>18</b>
Basic Installation for Local and Remote Monitoring	18
A. <b>TeleEye</b> RX Setup for Local CCTV Monitor	18
B. <b>TeleEye</b> RX Setup for VGA Monitor	21
C. <b>TeleEye</b> RX Setup for LAN Connection with Static IP	24
D. <b>TeleEye</b> RX Setup for Broadband or Narrowband Internet Connection with Static IP	34
E. <b>TeleEye</b> RX Setup for Broadband or Narrowband Internet Connection with Dynamic IP	43
F. <b>TeleEye</b> RX Setup for Modem Connection	53
<b>SECTION 4</b>	<b>62</b>
Basic Operation for Local and Remote Monitoring	62
A. Local CCTV Monitor : Live Monitoring, Recording and Playback	62
B. <b>TeleEye</b> RX Reception Software WX-30 : Live Monitoring, Recording and Playback	65
<b>SECTION 5</b>	<b>68</b>
OSD Menu Operation	68
A. How to use OSD menu	68
B. Main Menu	69
C. Recording Log Menu	91
D. PTZ Menu	93
E. Recording Menu	94
F. Event Menu	94
<b>SECTION 6</b>	<b>100</b>
Advanced Operation	100
A. Install <b>TeleEye</b> RX with Alarm Sensors and Relay Control Port	100
B. Install <b>TeleEye</b> RX with Tamper Circuit and External Resistors	101
C. Throughput Control	104
D. Event Handling	105
E. Event Action	127
F. Password	142
G. Built-In Web Server	143
H. Backup to CD / DVD / USB Flash	146
I. Connection with PTZ cameras	149
J. Panel Key Lock	152
K. Time Synchronization	153
L. Import and Export	154
M. RX-SE setting	155
N. User account	158
O. External Keyboard	160
<b>APPENDIX A</b>	<b>162</b>
Safety Instruction	162
<b>APPENDIX B</b>	<b>163</b>
Limited Warranty	163

<b>APPENDIX C</b>	<b>164</b>
<i>sure</i> LINK Technology	164
<b>APPENDIX D</b>	<b>168</b>
Firmware Upgrade	168
<b>APPENDIX E</b>	<b>169</b>
Security Mode	169
<b>APPENDIX F</b>	<b>172</b>
General Terms Discussion	172
<b>APPENDIX G</b>	<b>173</b>
Audit Trial Log Description	173
A.    Audit Trial Log Description of Setting Log and Operation Log	173
B.    Setting Log Operation Column Table :	173
C.    Operation Log Operation Column Table :	175
<b>APPENDIX H</b>	<b>176</b>
Specifications	176
A.    RX364 / RX368_V2 / RX3616_V2	176
B.    RX324 / RX328 / RX3216	178

## SECTION 1

# Introduction

## 1. Introduction

**TeleEye RX** Series Video Recording Server operates with its revolutionary multi-rate video coder to fulfill the highest video coding requirements for simultaneous transmission and recording. Seamless video transmission by **TeleEye RX** can be performed in low and medium bandwidth communication networks including ADSL, ISDN and PSTN; whilst DVD-quality videos can be transmitted through LAN and recorded into local hard drive with optimum speed at 100/120 fps at D1 resolution. Real time recording rate of up to 200/240fps on all video channels can also be achieved at CIF resolution.

**TeleEye RX** provides professional and real life security control of premises with its sophisticated event management scheme. It responses to a wide range of events triggered by external alarm sensor, video motion, power interruption and tamper. There is an arm/disarm control for the event management mechanism. Every external alarm input is configurable with an individual entry/exit delay, fire zone and tamper detection setting. Various actions like sending video back to a designated receiving PC, video recording, email notification, etc. can be performed. **TeleEye RX** can also keep a comprehensive log of the events for audit trail.

**TeleEye RX** is designed to fully comply with the British Standard BS 8418:2003, providing professional remote monitoring and visual alarm verification solution to central monitoring station.

With a built-in DVD-writer, video footage stored inside **TeleEye RX** can be easily extracted for evidential purposes. Recorded video can be backed up in CD/DVD and played back in any PC without any special software.

## 2. Features

### Hardware Feature

- Video recording with rate up to 100/120fps (RX364 / RX324), 200/240fps (RX368\_V2 / RX328 / RX3616\_V2 / RX3216)
- Remote and standalone operations
- Composite video output with OSD menu
- SMAC-M multi-rate video coding technology
- Real time video transmission
  - Up to 60fps (RX364 / RX324), 120fps (RX368\_V2 / RX328 / RX3616\_V2 / RX3216) over LAN for NTSC
  - Up to 50fps (RX364 / RX324), 100fps (RX368\_V2 / RX328 / RX3616\_V2 / RX3216) over LAN for PAL
- Excellent picture resolution
  - Up to 720 x 480 pixels for NTSC
  - Up to 720 x 576 pixels for PAL
- 4 (RX364 / RX324), 8 (RX368\_V2 / RX328), 16 (RX3616\_V2 / RX3216) video inputs with one video output
- 1 (RX364 / RX324), 2 (RX368\_V2 / RX328 / RX3616\_V2 / RX3216) audio inputs
- 1 Spot video output (RX368\_V2 / RX328 / RX3616\_V2 / RX3216)
- 1 audio output and 1 public addressing (P.A.) output
- 4 relay switches and 16 alarm inputs
- 4 additional detection inputs
- Removable hard disk (RX364 / RX368\_V2 / RX3616\_V2)
- Built-in DVD writer (RX364 / RX368\_V2 / RX3616\_V2)

### Functional Feature

- **sureLINK**, support both static and dynamic IP
- Sophisticated event management
- System arm/disarm
- Flexible connections: LAN, ADSL, PSTN, ISDN, mobile network, etc.
- Triplex operation: simultaneous video monitoring, recording & playback
- Video motion detection
- Event-driven recording
- Pre- & post-event video recording
- Entry/exit zone configurable on all alarm inputs
- Auto alarm dialback
- Connection authentication
- Compatibility with popular telemetry protocols
- Single-site monitoring
- Web-based video monitoring
- Programmable video recording
- Data retention
- Mobile monitoring

### 3. Removing the Packages

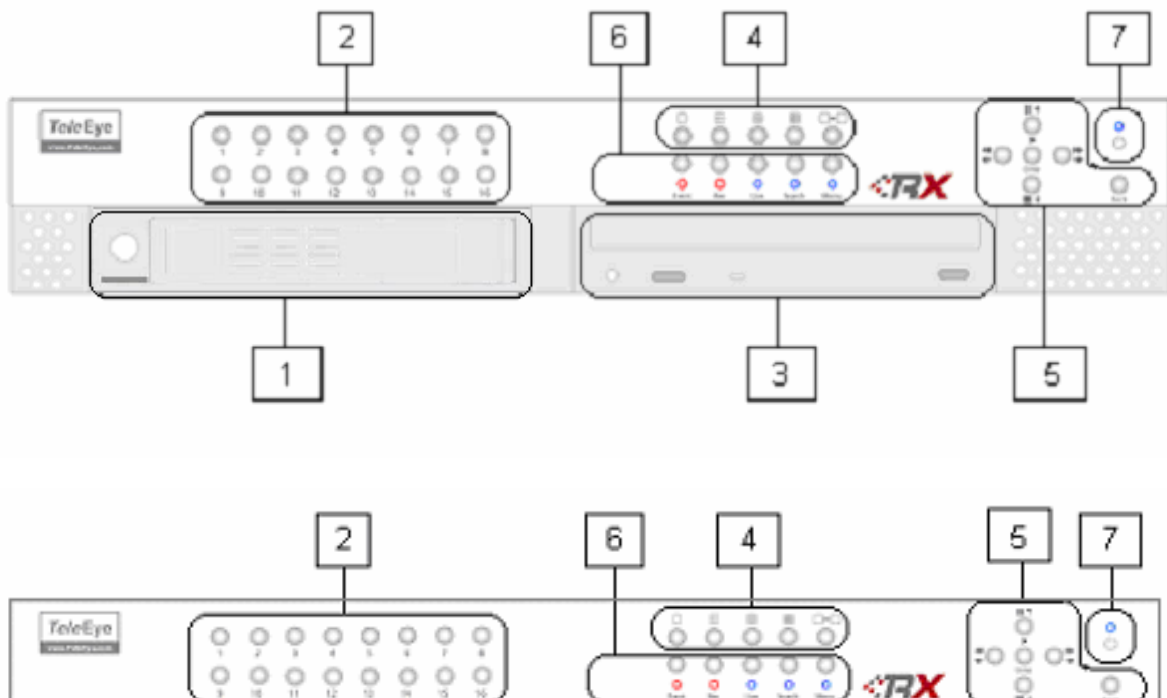
After removing the package, make sure you have the following items:

- **TeleEye RX** Video Recording Server with Built-in DVD Writer
- Hard Disk Cartridge Accessories (Key x 2 and Screw x 4)
- User Guide
- Warranty Card
- Registration Code Sheet
- HDD Recommendation List
- Software CD
- Power Adaptor and Power Cord
- Alarm Port Connector (37 Pins) & Alarm Port Cover
- Resistors (1.2k $\Omega$  x 20, 6k $\Omega$  x 20)
- Straight-through Ethernet Cable

### 4. Convention Used in This Manual

- “ ” : Buttons on the **TeleEye** RX video recording server front panel  
 { } : Hardware Items on the **TeleEye** RX video recording server besides buttons  
 [ ] : OSD menu or MS Windows menu  
 ( ) : Refers to other section or page

### 5. Front Panel Description





## Removable Hard Disk Cartridge

{Key Lock} and {Key} are provided to lock the hard disk from unauthorized removing and also be used to switch ON/OFF the system






## Live Camera Control Buttons

For RX364 / RX324 (1-4), RX368\_V2 / RX328 (1-8), RX3616\_V2 / RX3216 (1-16)  
**“Camera Control”** fast switch to a specific camera for local monitoring

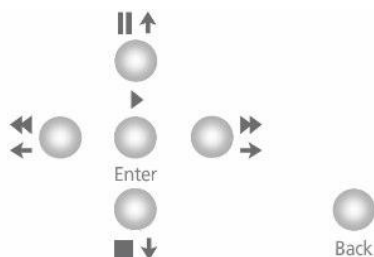
## Built-in DVD Writer

It allows user to back up video to CD-R, CD-RW or DVD (Max size of 4700 MB)







## Screen Mode Control

<p><b>For RX364/ RX324</b></p>  <p><b>For RX368_V2 / RX328</b></p>  <p><b>For RX3616_V2 / RX3216</b></p> 	<p>Full, Quad, 3 x 3, Hex screen mode: </p> <p>The system will display one, four, eight, sixteen screens decided on the button pressed. Sequential mode will also be disabled.</p> <p>Sequential mode**: </p> <p>The sequential button enables the sequential page mode of live monitoring. In sequential mode, screen mode can be changed by pressing the sequential button again.</p> <p>**In FULL screen sequential mode, the camera sequence can be set on user's preference.        (Main Menu --- Setup --- Video --- Local monitoring --- Sequential Cams)</p>
--	---

## Menu Control Buttons / Local Playback Control Buttons / PTZ Control



### Summary of Control Button

Buttons	Menu Mode	Playback Mode	PTZ Mode
	Cursor Up	Pause	Tilt Up
	Cursor Down	Stop	Tilt Down
	Cursor Left	Rewind	Pan Left
	Cursor Right	Forward	Pan Right
	Enter	Play	Zoom In
	Pervious Page	Back/Stop	Zoom Out

### Mode Control Buttons and LED



These 5 buttons are used for switching between the control modes

- “Event” button : Pop up event menu
- “Rec” button : Enable/disable normal or scheduled recording
- “Live” button : View live video at any time and PTZ control in live mode
- “Search” button : Playback log menu
- “Menu” button : System settings and other system operations

### Notification LEDs



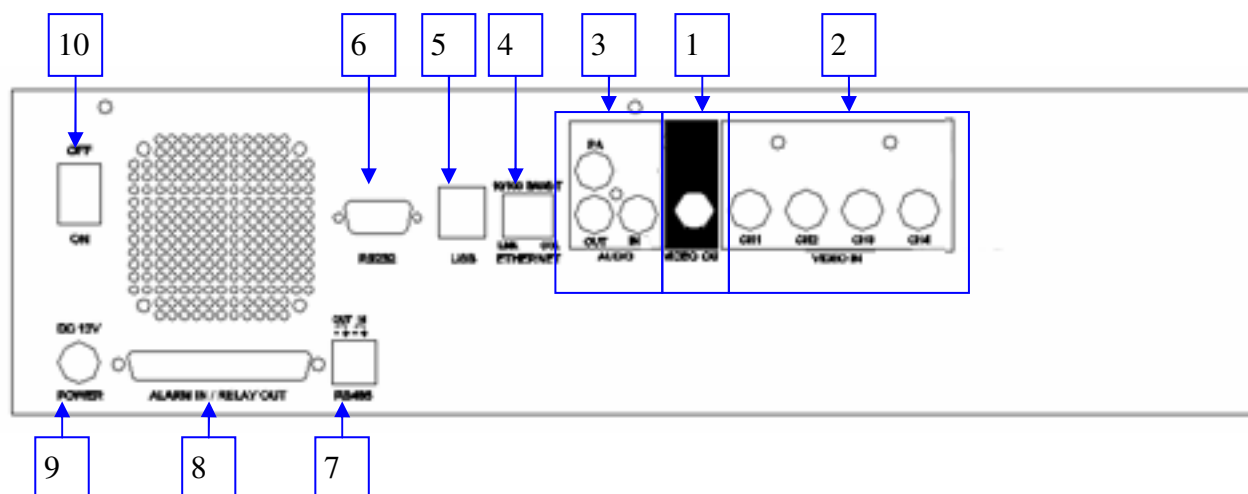
There are 5 notification LEDs, 2 red colors and 3 blue colors from left to right.

- {Event LED} : Blinks when event is triggered
- {Recording LED} : Is ON when the video recording server is recording
- {Live LED} : Is ON during live monitoring
- {Search LED} : Is ON when the system is in playback mode
- {Menu LED} : Is ON when the system is in menu mode
- {Power LED} : Is ON continuously when the system is powered up

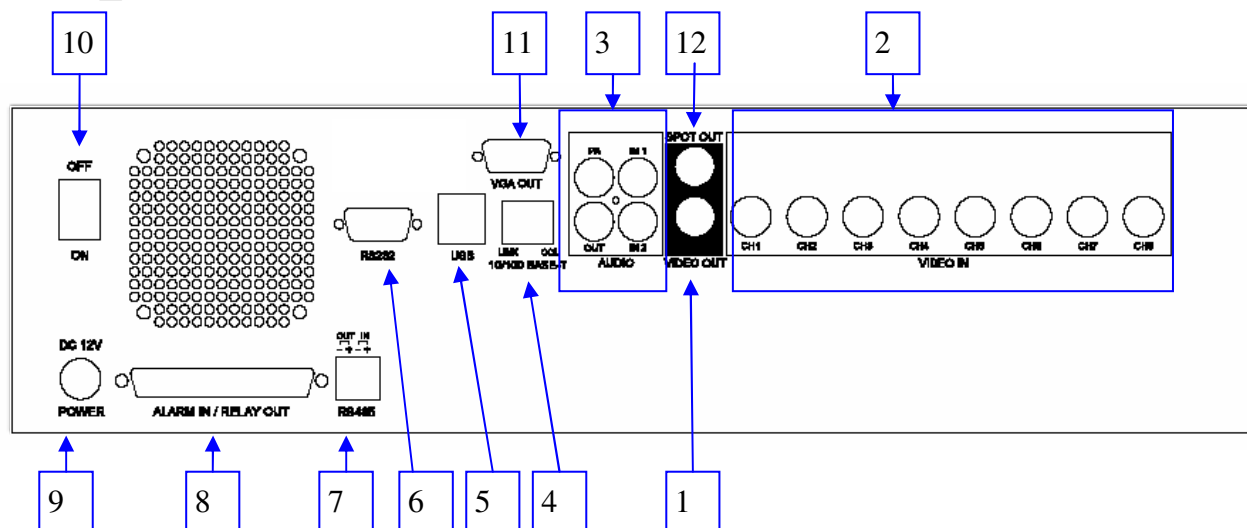
### Introduction

## 6. Rear Panel Description

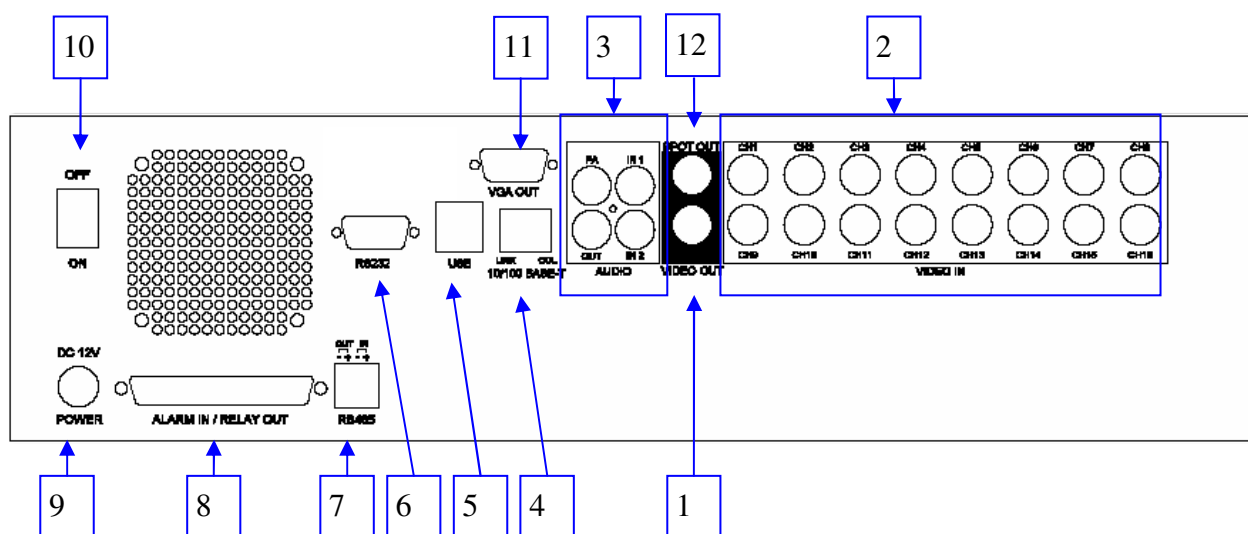
### RX364:



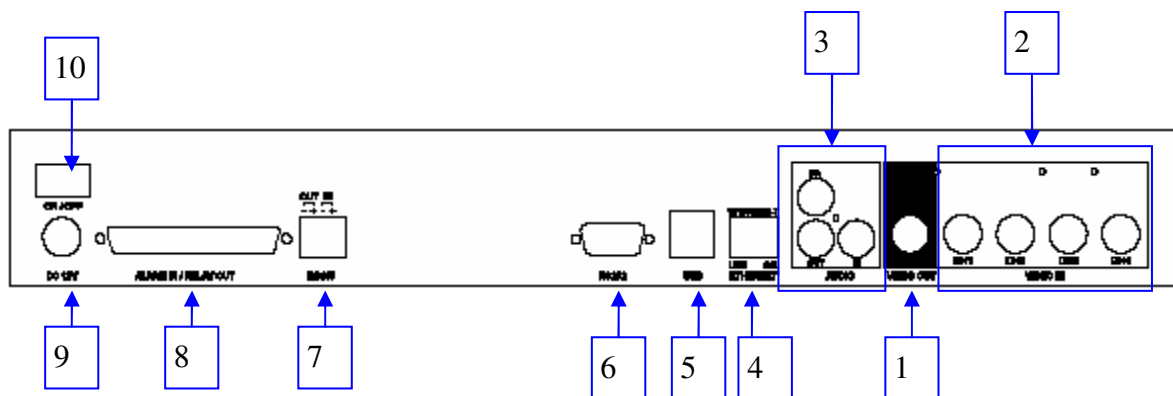
### RX368\_V2



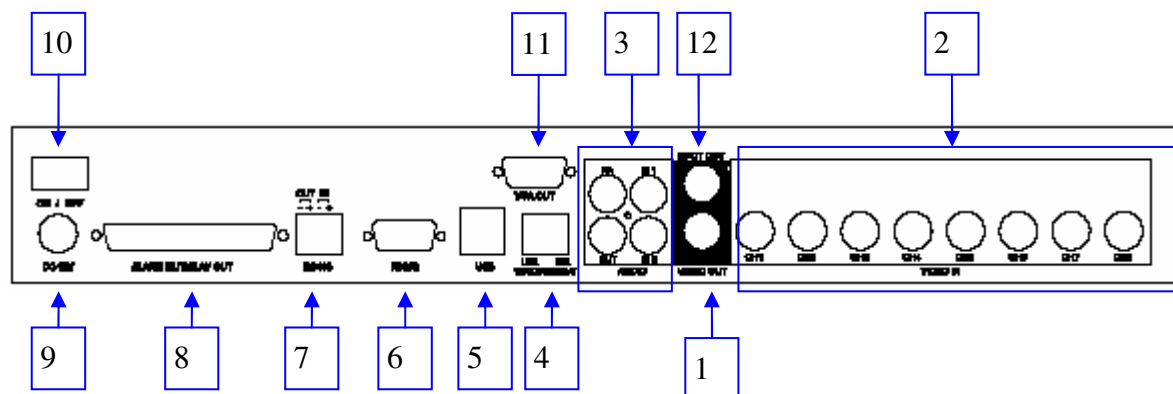
### RX3616\_V2



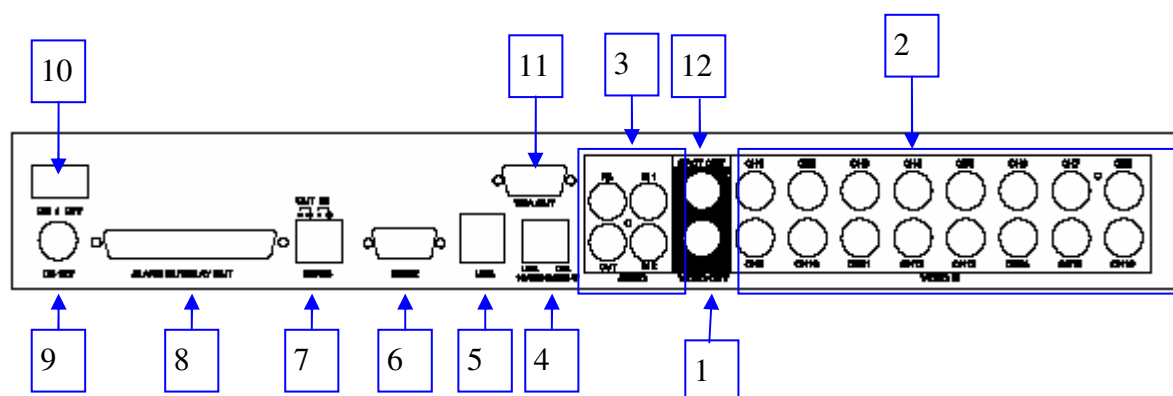
## RX324



## RX328



## RX3216



**1. Video Output Connectors**

- A composite video signal with 1V p-p is output from this connector
- PAL/CCIR format with 625 lines, 25 frames per second
- NTSC/EIA format with 525 lines, 30 frames per second

**2. Video Input Connector**

- {Standard BNC connectors} for video source input
- A composite video source from camera should be supplied to these connectors
- CH1 – CH4 (RX364 / RX324)
- CH1 – CH8 (RX368\_V2 / RX328)
- CH1 – CH16 (RX3616\_V2 / RX3216)

**3. Audio In/Out Port**

- {Audio In} : Connect audio input device (e.g. microphone) with RCA jack to **TeleEye RX** video recording server for recording. (Only 1 {Audio In} for RX364 / RX324)
- {Audio Out} : Connect audio output device (e.g. speaker) with RCA jack to **TeleEye RX** video recording server and generate output audio signal
- {Audio PA} : Connect audio output device (e.g. speaker) to **TeleEye RX** video recording server and generate audio signal to facilitate remote public addressing

**4. Ethernet Socket (10/100 Base-T)**

- This socket is used for connecting **TeleEye RX** to the corporate computer network (e.g. LAN)
- This socket includes {COL LED} and {LINK LED}
- {COL LED} : When ON, indicates that collision is occurring on the network
- {LINK LED} : When ON, indicates that **TeleEye RX** is connecting to the network and ready to function

**5. USB**

- For support firmware upgrade, setting import/export, USB modem and footage backup.

**6. RS 232 (Modem) Port**

- A {DB-9 Male Connector} of DTE format, capable for connecting to DCE such as modem, ISDN terminal adapter

Pin number	Definition	Direction
1	CD	Input
2	RXD	Input
3	TXD	Output
4	DTR	Output
5	GND	—
6	DSR	Input
7	RTS	Output
8	CTS	Input
9		—

**7. RS 485 In/Out Port**

- {In}: 2-way terminal block for connecting a keyboard controller to **TeleEye RX** video recording server in order to control a PTZ camera
- {Out}: 2-way terminal block for connecting a PTZ camera

**8. Relay Out / Alarm In Port**

- 4 relay (also call switch) outputs
- 16 alarm inputs
- All alarm ports are NC/NO type and none/SEOL/DEOL tamper type input
- All relay ports are latching/push-button type output

**9. Power**

- Connect power supply (12V DC) to **TeleEye RX** video recording server

**10. Switch**

- Switch on or off the **TeleEye RX** video recording server

**11. VGA output (Optional)**

- Standard VGA connector
- RX368\_V2 / RX328 / RX3616\_V2 / RX3216 only

**12. Spot Output**

- A composite video signal with 1V p-p is output from this connector
- RX368\_V2 / RX328 / RX3616\_V2 / RX3216 only

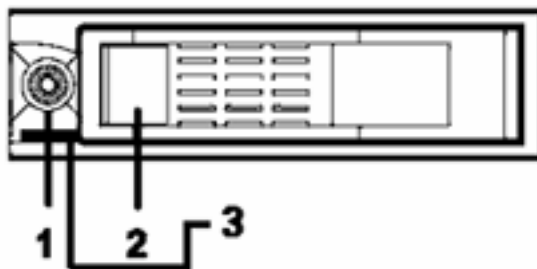
## SECTION 2

# Hard Disk Installation, Formatting and Scanning

## A. Hard Disk Installation (for RX364 / RX368\_V2 / RX3616\_V2)

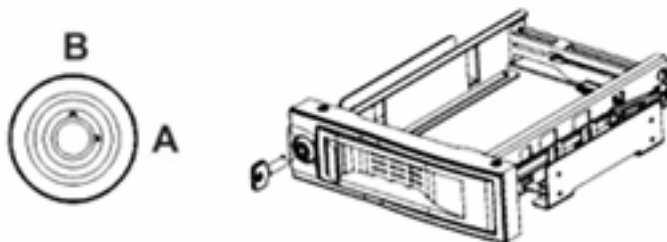
*TeleEye RX* video recording server supports SATA standard hard disk.

### Hard Disk Front Panel Description



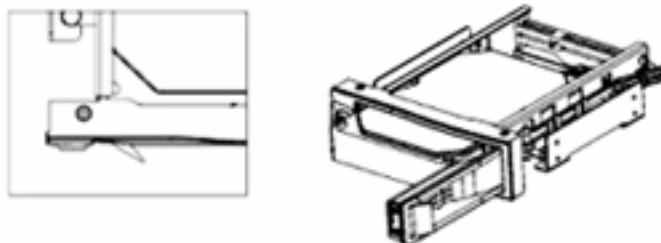
1. Key lock
2. Spring lock
3. LED indicator (for  
Power & Access)

### Key Lock Description



A:Non-removable  
B:Removable

### Spring Lock Description







Pull the hard drive spring lock to unload  
hard drive

## Hard Disk Installation, Formatting and Scanning

## Installation Procedure

**RX** MUST be shut down before installing / uninstalling hard disk

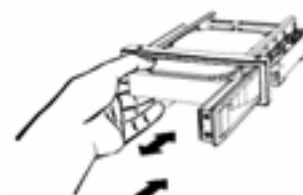
1. Press “**Menu**”  button, select [**SHUT DOWN**] option and press “**Enter**”  button.
2. [**SHUT DOWN**] menu will pop up and select [**SHUT DOWN**] option and press “**Enter**”  button.
3. Select [**YES**] and press “**Enter**”  button to confirm the shut down and wait for the message [**IT IS NOW SAFE TO TURN OFF**].
4. Switch off RX.
5. Insert the bundled key provided into the keyhole and turn the key clockwise (position B).



6. Pull the spring lock to open the front door.



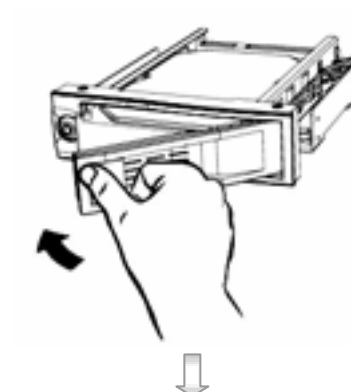
7. Place the HDD into the cartridge with the hard drive label (printed) side up and be sure the HDD connector side is properly inserted into the cartridge.



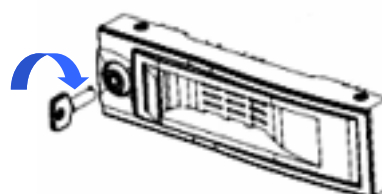
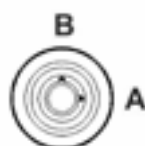
## Hard Disk Installation, Formatting and Scanning



8. Close the front door.









9. Insert the bundled key provided into the keyhole and turn the key anti-clockwise (position A).



10. Switch on RX.

## **Hard Disk Installation, Formatting and Scanning**

## B. Hard Disk Installation (for RX324 / RX328 / RX3216)

<ol style="list-style-type: none"> <li>1. Press “<b>Menu</b>”  button, select [SHUT DOWN] option and press “<b>Enter</b>”  button.</li> <li>2. [SHUT DOWN] menu will pop up and select [SHUT DOWN] option and press “<b>Enter</b>”  button.</li> <li>3. Select [YES] and press “<b>Enter</b>”  button to confirm the shut down and wait for the message [IT IS NOW SAFE TO TURN OFF RX].</li> </ol>	
<ol style="list-style-type: none"> <li>4. Remove the 9 fixing screws of the top cover and take off the cover of <b>TeleEye RX</b>.</li> </ol>	
<ol style="list-style-type: none"> <li>5. This figure shows the internal structure and HDD mounting and cabling position. If only one HDD is used, it must connect to the “C” header of the IDE cable</li> </ol>	

### Hard Disk Installation, Formatting and Scanning

6. Set the HDD jumper to “**Cable Select**” position. For details , please follow the instruction of the HDD’s manual and label on the HDD.
7. Insert the **IDE cable** and **DC power cable** to the HDD




8. Mount the holder to the HDD with screws.



9. Mount the L-shape frame on both sides with screws.



## Hard Disk Installation, Formatting and Scanning


<p>10. Position the cover with <b>TeleEye RX</b> and secure by using the screws.</p>	
<p>11. To uninstall HDD, reverse the steps of 7, 8, 9.</p>	

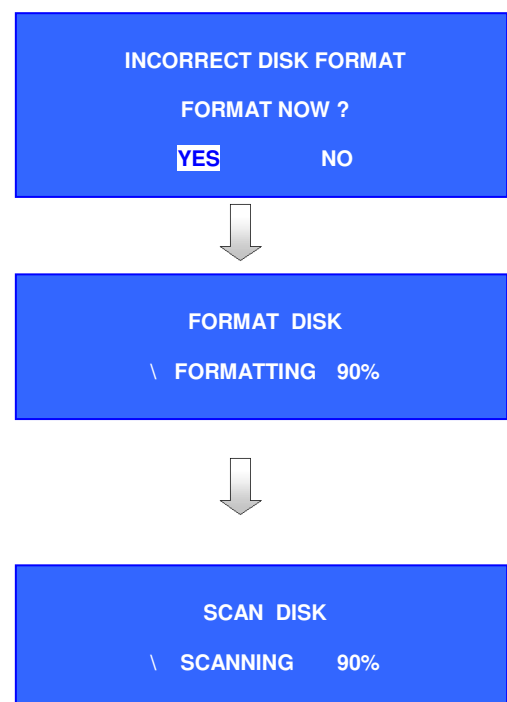
## C. Hard Disk Formatting

Formatting a hard disk will erase all data in the hard disk. When it is reconstructed, it is readable by **TeleEye RX** video recording server.

Formatting will be used if the hard disk format is NOT **TeleEye RX** video recording server recognized. Usually, it is a new hard disk, or a hard disk which has not been used by **TeleEye RX** video recording server.

### Procedure



1. After starting up **TeleEye RX** video recording server, OSD menu will pop up **[INCORRECT DISK FORMAT]** menu. Select **[YES]** option and press “**Enter**”  button to format the hard disk.
2. **[FORMAT DISK]** message board will pop up to show about the status
3. After finishing format process, **[SCAN DISK]** processing board will pop up to show the scanning status. The video recording server will restart.

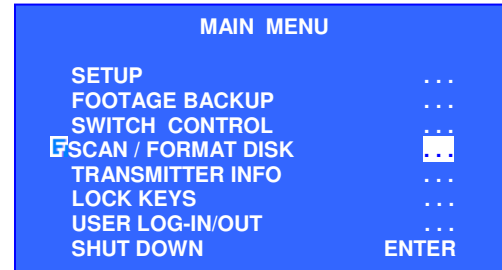


## Hard Disk Installation, Formatting and Scanning

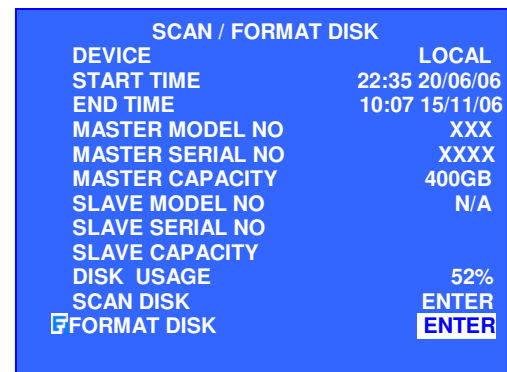
## Manual Formatting


It will be used if user wants to format the hard disk so as to have a clean recording space and redeem the file allocation.

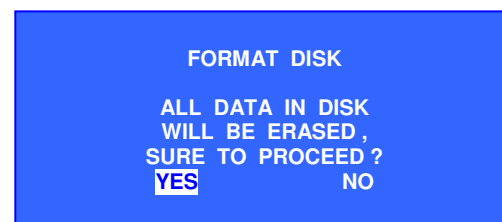
1. Press **“Menu”**  button, select **[SCAN/FORMAT DISK]** option and press **“Enter”**  button to enter **[SCAN/FORAMAT DISK]** sub menu.



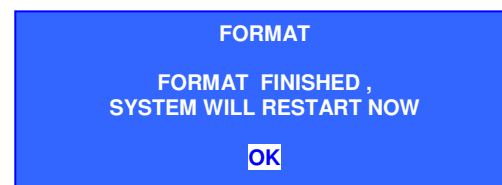
2. Select **[FORMAT]** option press **“Enter”**  button





3. Select **[YES]** option and press **“Enter”**  button and **[FORMAT DISK]** board will pop up to show about hard disk format processing status



4. Press **“Enter”**  button to restart video recording server when **[FORMAT FINISHED]** message board pops up.



*Note :*



Select **[DEVICE]** in scan/format disk menu and press **“Left”**  or **“Right”**  button to set **[RX-SE1]** option. Choose **[FORMAT DISK]** and select **[YES]**. The RX-SE1 will be formatted

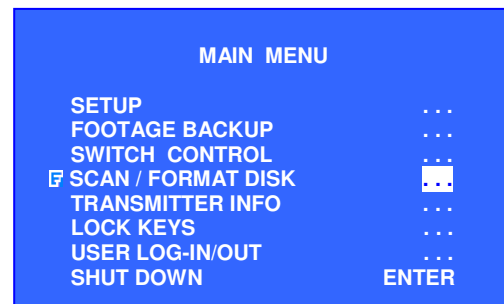
## Hard Disk Installation, Formatting and Scanning

## D. Scan Disk


It is a hard disk maintenance function which is similar to Scan Disk function provided by the Operating System of your personal computer. **TeleEye RX** video recording server provides this function in an attempt to rescue the hard disk when errors are found, and to enhance its performance and reliability.

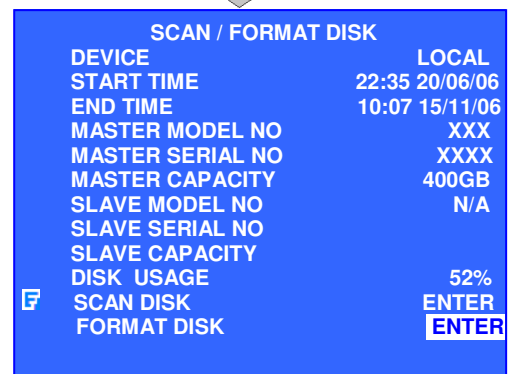
### Procedure


1. Press “Menu”  button, select [SCAN/FORMAT DISK] option and press “Enter”  button to enter [SCAN/FORAMT DISK] sub menu.

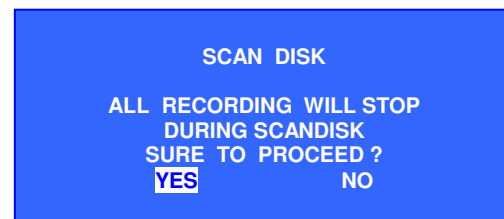


There is information about the hard disk. If not, please check that the hard disk is installed properly.

2. Select [SCANDISK] option press “Enter”  button.



3. Select [YES] option and press “Enter”  button to start the [SCANDISK] process.



*Note :*

Select [DEVICE] in main menu and press “Left”  or “Right”  button to set [RX-SE1] option. Choose [SCAN DISK] and select [YES]. The RX-SE1 will be scanned.

## Hard Disk Installation, Formatting and Scanning

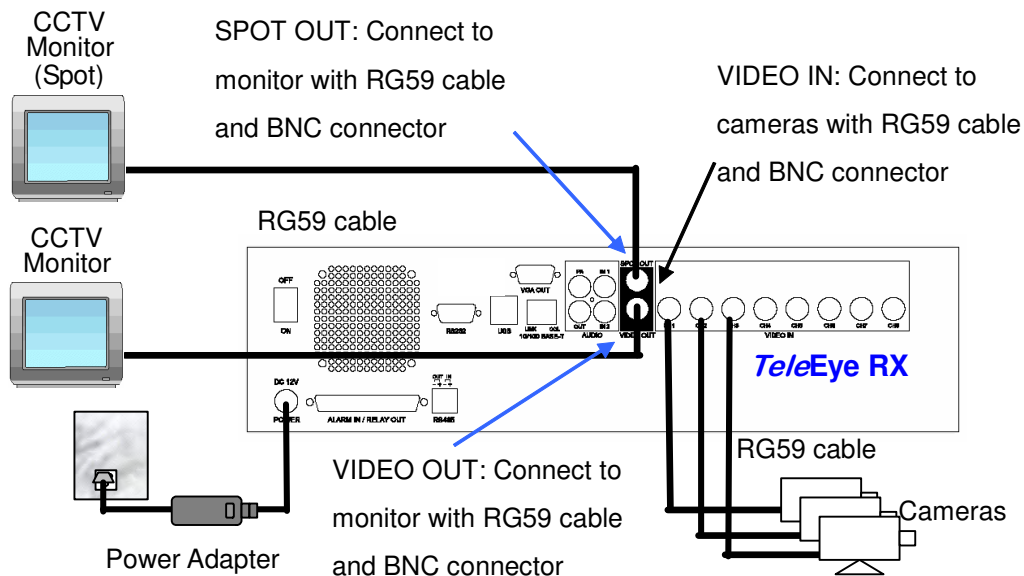


## SECTION 3

# Basic Installation for Local and Remote Monitoring

## A. TeleEye RX Setup for Local CCTV Monitor

### Connection Topology



*\*Note: **SPOT OUT** only for RX368\_V2 / RX328 / RX3616\_V2 / RX3216 Equipment*

- **TeleEye RX** Video recording server
- Cameras
- Video Cables (RG-59) with BNC Header
- CCTV Monitor

## Setup Procedure


1. Connect cameras to **TeleEye RX {Video Input}** with RG59 cable and BNC connector.

*Note: The camera system is either NTSC or PAL and all cameras must have the SAME system format.*

2. Connect CCTV monitor to **TeleEye RX {Video Output}** with RG59 cable and BNC connector.
3. Install and use the bundled key to lock the **{Hard Disk Rack}** with hard disk to the **TeleEye RX**.

*Note: If there is no hard disk installed, Recording and Playback are not functional*

4. Plug in the power adapter (12V DC) to **TeleEye RX**.





5. Turn on the power of **TeleEye RX**, camera and monitor. Check the **{Power LED}**  which is lit up in blue color continuously at **TeleEye RX** front panel after power on. After several seconds, live video appears on the CCTV monitor as follows:

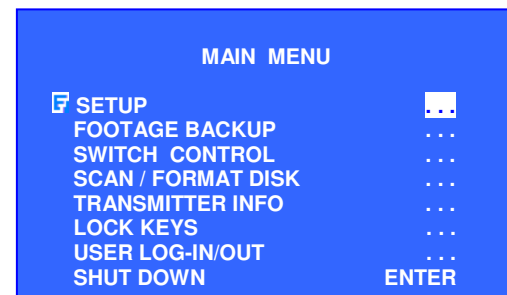





*Note: Please go through the following steps (6-10) if CCTV monitor does not show video clearly*

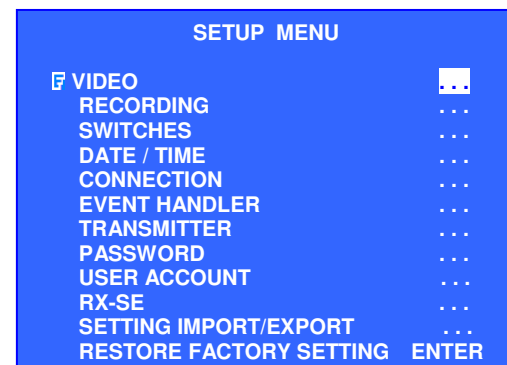
## Basic Installation for Local and Remote Monitoring






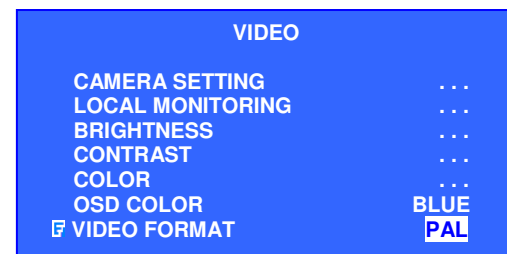
6. Press the “Menu”  button to pop up the [MAIN MENU] on OSD.
7. Use “Up”  or “Down”  button to select [SETUP] option and press “Enter”  button to enter the [SETUP] sub-menu.



8. Use “Up”  or “Down”  button to select [VIDEO] option and press “Enter”  button to enter the [VIDEO] sub-menu.

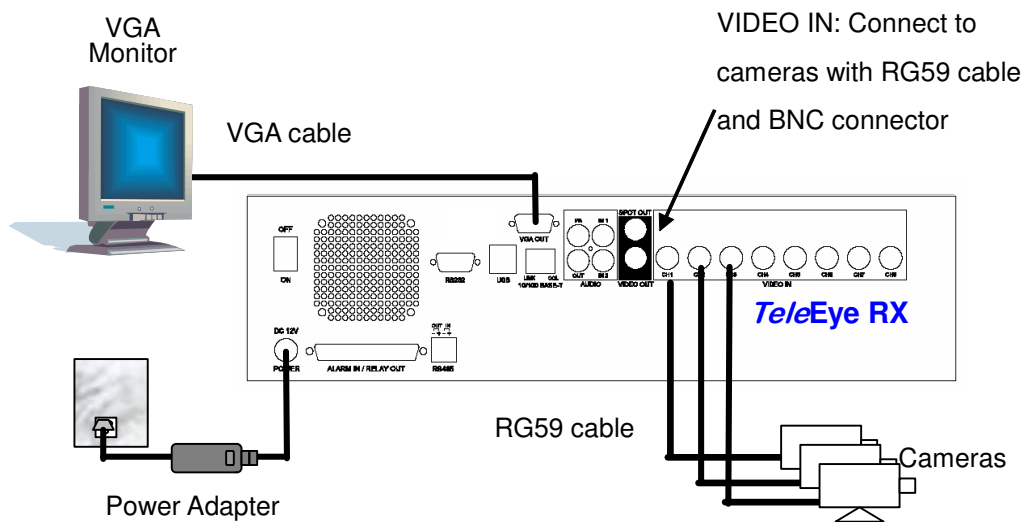


9. Select [VIDEO FORMAT] and press “Left”  or “Right”  button to set either [NTSC] or [PAL] option. (All cameras should have the same video format).
10. You can always press “Live”  button to exit any menu operation and start live monitoring.



## B. TeleEye RX Setup for VGA Monitor

### Connection Topology



*\*Note: **VGA OUTPUT** only for RX368\_V2 / RX328 / RX3616\_V2 / RX3216 with optional VGA module installed .*

### Equipment

- TeleEye RX Video Recording Server
- Cameras
- VGA cable
- VGA Monitor (support 1024x768 / 1280x1024 / 60Hz / 75Hz)

### Basic Installation for Local and Remote Monitoring

## Setup Procedure


1. Connect cameras to **TeleEye RX {Video Input}** with RG59 cable and BNC connector.

*Note: The camera system is either NTSC or PAL and all cameras must have the SAME system format.*

2. Connect VGA monitor to **TeleEye RX {VGA Output}** with VGA Cable.
3. Install and use the bundled key to lock the **{Hard Disk Rack}** with hard disk to the **TeleEye RX**.

*Note: If there is no hard disk installed, Recording and Playback are not functional*

4. Plug in the power adapter (12V DC) to **TeleEye RX**.




5. Turn on the power of **TeleEye RX**, camera and monitor. Check the **{Power LED}**  which is lit up in blue color continuously at **TeleEye RX** front panel after power on. After several seconds, live video appears on the VGA monitor as follows:








*Note: If video does not shown on VGA monitor correctly, please check the VGA monitor support RX default VGA setting (1024x768 resolution, 60Hz). If VGA monitoring does not support default VGA setting, please use WX-30 reception software to select proper settings after setup network connection.*

## Basic Installation for Local and Remote Monitoring



6. Press the “Menu”  button to pop up the [MAIN MENU] on OSD.



7. Use “Up”  or “Down”  button to select [SETUP] option and press “Enter”  button to enter the [SETUP] sub-menu.


8. Use “Up”  or “Down”  button to select [VIDEO] option and press “Enter”  button to enter the [VIDEO] sub-menu.

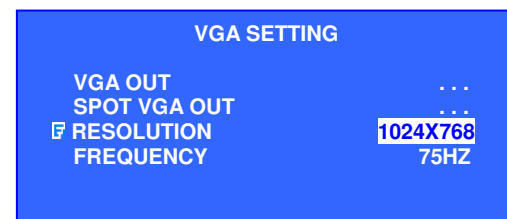
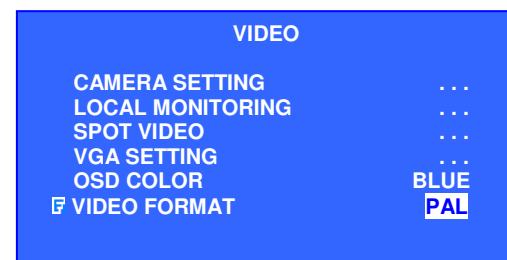
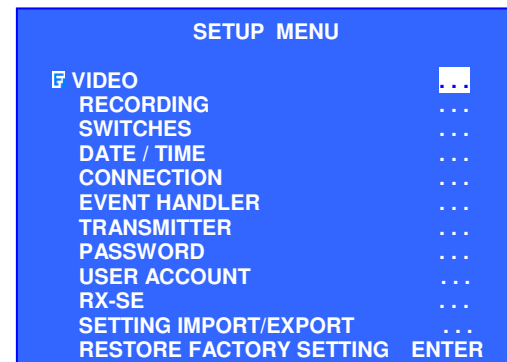
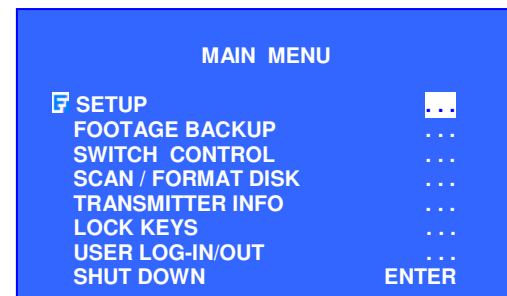
9. Select [VIDEO FORMAT] and press “Left”  or “Right”  button to set either [NTSC] or [PAL] option. (All cameras should have the same video format).

10. Select [VGA SETTING] and press “Enter” button to enter [VGA SETTING] menu.

11. Select [RESOLUTION] and press “Left”  or “Right”  button to set VGA resolution according to the VGA monitoring

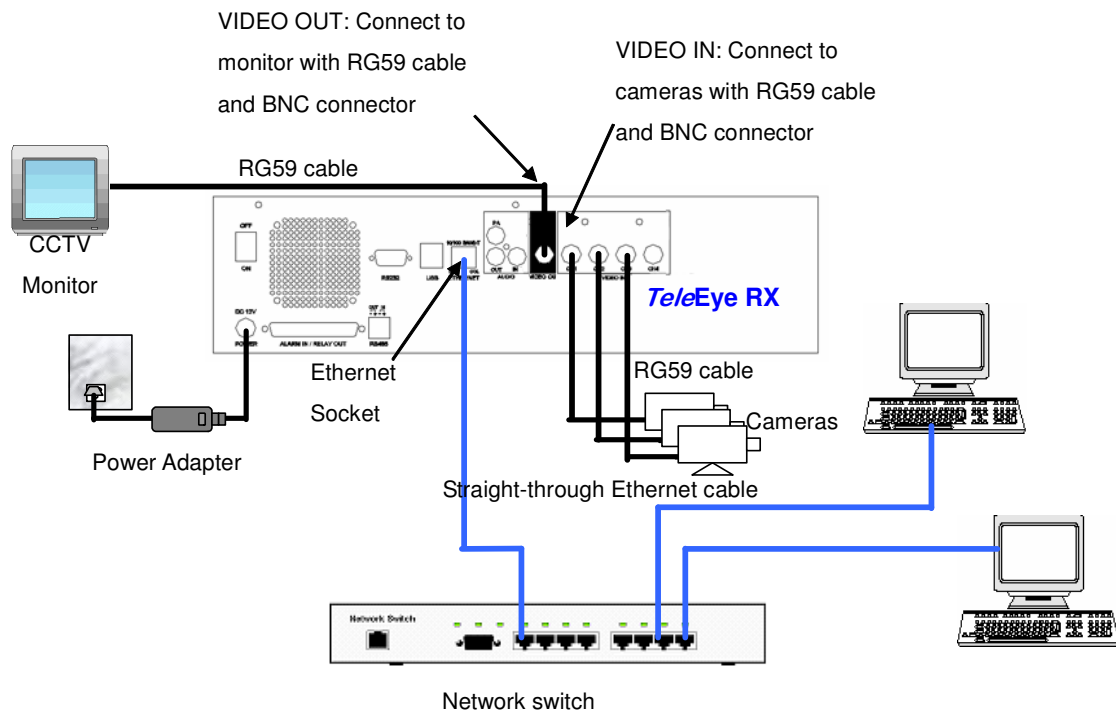
12. Select [FREQUENCY] and press “Left”  or “Right”  button to set VGA frequency according to the VGA monitoring

13. You can always press “Live”  button to exit any menu operation and start live monitoring.



## C. TeleEye RX Setup for LAN Connection with Static IP

### Connection Topology



### Equipment

- **TeleEye RX** Video recording server
- Network Switch
- Straight-through Ethernet Cable (bundled)
- Cross-over Ethernet Cable
- Cameras
- Video Cables (RG-59) with BNC Header
- CCTV Monitor
- CD ROM with WX-30 Software (bundled) (for PC operation only)
- PC

### PC Requirements

- **CPU** : Pentium IV 2.4 GHz or above
- **RAM** : 512 MB or above
- **Display** : 1024 x 768, true color or better
- **OS** : MS Windows 2000, XP
- **HDD** : 1GB of free disk space or above

## Basic Installation for Local and Remote Monitoring

## Setup Procedure


1. Connect cameras to **TeleEye RX {Video Input}** with RG59 cable and BNC connector.

*Note: The cameras system is either NTSC or PAL and all cameras must have the SAME system format.*

2. Connect CCTV monitor to **TeleEye RX {Video Output}** with RG59 cable and BNC connector.
3. Install and use the bundled key to lock the **{Hard Disk Rack}** with hard disk to the **TeleEye RX**.

*Note: If there is no hard disk installed, Recording and Playback are not functional*









4. Connect the power adapter (12V DC) to the **TeleEye RX**.

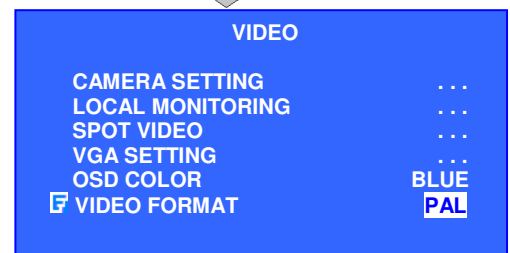
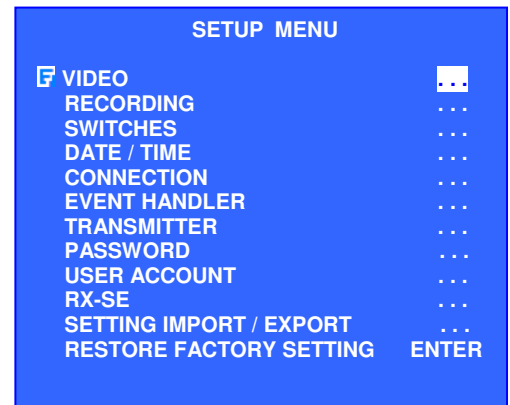
5. Turn on the power of **TeleEye RX**, camera and monitor. Check the **{Power LED}**  which is lit up in blue color continuously at **TeleEye RX** front panel after power on. After several seconds, live video appears on the CCTV monitor as follows:



*Note: Please go through the following steps (6-10) if the video of CCTV monitor does not show clearly.*

## Basic Installation for Local and Remote Monitoring

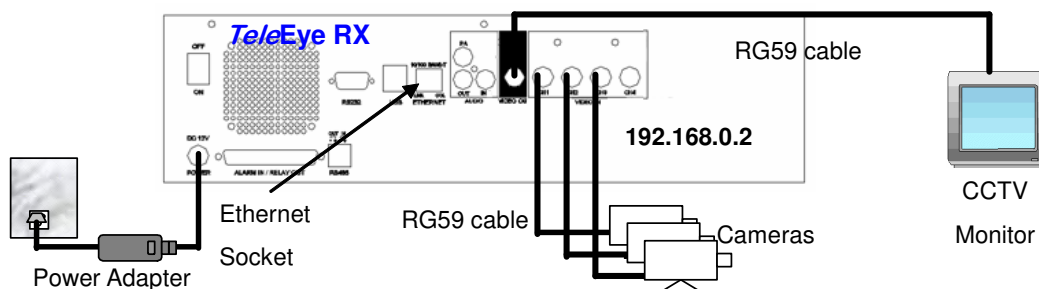
6. Press the “Menu”  button to pop up the [MAIN MENU] on OSD.
7. Use “Up”  or “Down”  button to select [SETUP] option and press “Enter”  button to enter the [SETUP] sub-menu.
8. Select [VIDEO] option and press “Enter”  button to enter the [VIDEO] sub-menu
9. Select [VIDEO FORMAT] and press “Left”  or “Right”  button to set either [NTSC] or [PAL] option. (All cameras should have the same video format).
10. You can always press “Live”  button to exit any menu operation and start live monitoring.



11. Configure **TeleEye RX** video recording server IP setting

Setup **TeleEye RX** video recording server IP through CCTV monitor, please go to step 11a.  
Setup **TeleEye RX** video recording server IP through PC, please go to step 11b.




- 11.a.1 Configure **TeleEye RX** video recording server IP setting through CCTV Monitor




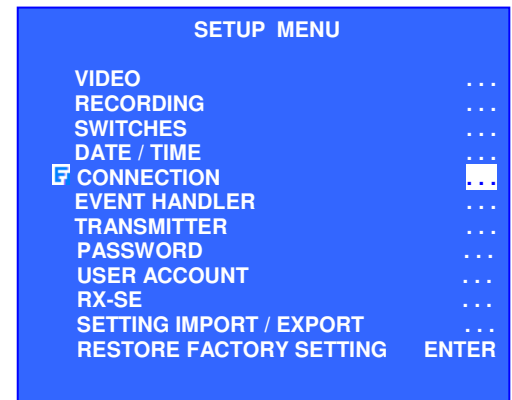
## Basic Installation for Local and Remote Monitoring




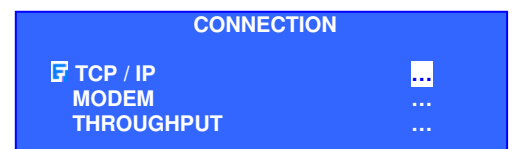
11.a.2 Press the “**Menu**”  button such that the OSD main menu opens on the monitor.


11.a.3 Use “**Up**”  or “**Down**”  button to select [SETUP] option and press “**Enter**”  button to enter [SETUP] sub menu.

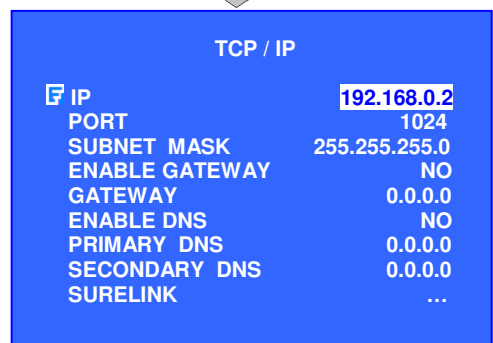
11.a.4 Select [CONNECTION] option and press “**Enter**”  button to enter connection setting menu.








11.a.5 Select [TCP/IP] option and press “**Enter**”  button

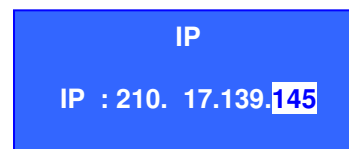


11.a.6 Select [IP] option and press “**Enter**”  button. IP address consists of four fields. Each field can assign a number from 0 to 255



11.a.7 Use “**Left**”  or “**Right**”  button to select field and use “**Up**”  or “**Down**”  button to set number.

11.a.8 Press “**Enter**”  button to save the change and return previous menu.







- 11.a.9 Follow the network setting and assign a valid subnet mask to [SUBNET MASK] and select [ENABLE GATEWAY] option and input [GATEWAY] option in similar way.

Note: The DNS setting is optional which is useful for **sureLINK**, time synchronization and e-mail notification.

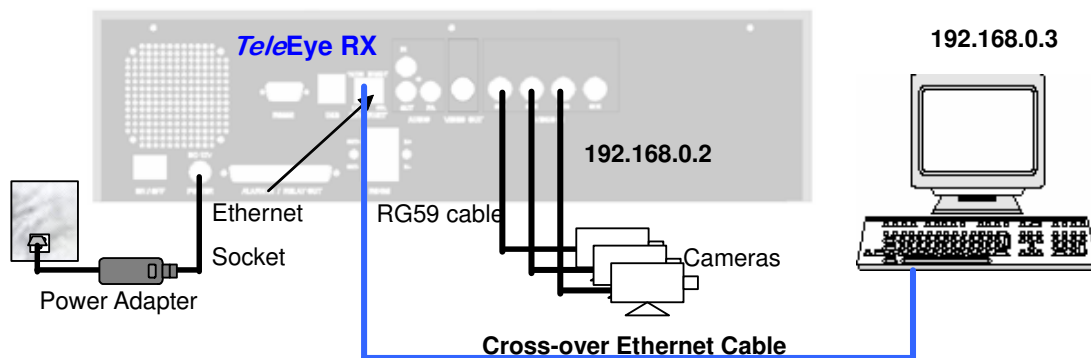
TCP / IP	
IP	210.17.139.145
PORT	1024
SUBNET MASK	255.255.255.0
ENABLE GATEWAY	YES
<input checked="" type="checkbox"/> GATEWAY	210.17.139.1
ENABLE DNS	NO
PRIMARY DNS	0.0.0.0
SECONDARY DNS	0.0.0.0
SURELINK	...



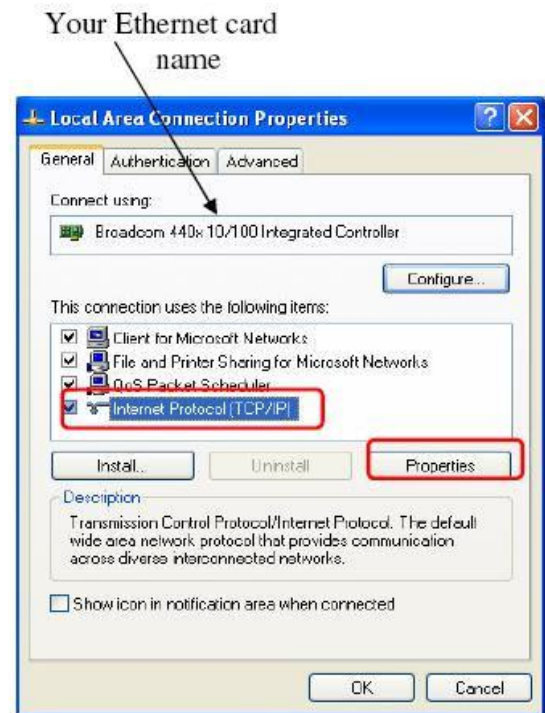
- 11.a.10 Press “**Live**”  button, then [SETTING MODIFIED] message board will pop up.  
Press “**Enter**”  button to restart the **TeleEye RX**.

SETTING MODIFIED
SETTING WILL TAKE EFFECT AFTER RESTART , PRESS ENTER TO CONTINUE
<b>OK</b>

- 11.b Configure **TeleEye RX** video recording server IP setting through PC

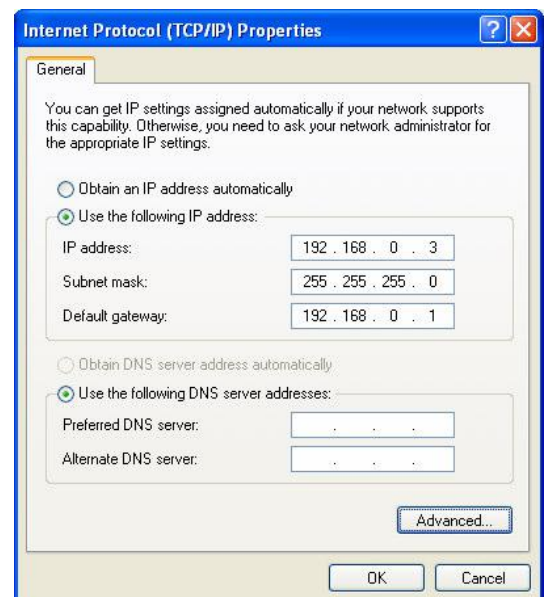


- 11.b.1. In Windows 2000/XP desktop, select **Start > Control Panel**
- 11.b.2. Double click **Network and Dial-up Connections** > right click **Local Area Connections** and choose **Properties**.
- 11.b.3. Choose **Internet Protocol (TCP/IP)** and click **Properties**

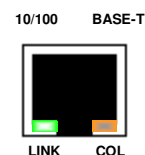


- 11.b.4. Enter an **IP address, subnet mask and Default gateway**. *Note that IP address should be "192.168.0.xx" except "192.168.0.2" which is TeleEye RX default IP address.*
- 11.b.5. Enter the **Preferred and Alternate DNS server**, if necessary.
- 11.b.6. Click **OK** to activate the new IP.

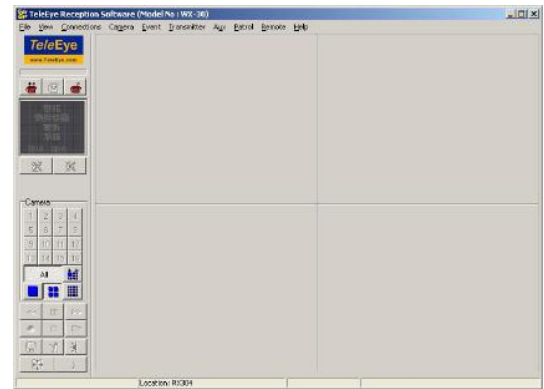
You have to confirm that IP address has been correctly set on your computer. On your windows, click **start > run**, type "**cmd**" at open field, press **OK** button, type "**ipconfig**" on the DOS prompt and you will see an IP set on your computer.



- 11.b.7. Connect the PC Ethernet socket to the video recording server Ethernet socket at rear panel of the video recording server with **cross-over** Ethernet cable. Check if the {**LINK LED**} of the video recording server is **ON**.



- 11.b.8. Run WX-30 software which has been installed to the PC. (For details of WX-30 software installation, please refer to WX-30 Software Guide)



- 11.b.9. Choose [Transmitter] → [Registration] to register the **TeleEye RX** video recording server. User needs to input video recording server serial number and registration code.

For example :

**Serial No. :** VTC12345

**Registration Code :** 1234567890



- 11.b.10. Press [Connect]  icon to pop up the [Connect Window]. Type and select the following setting :

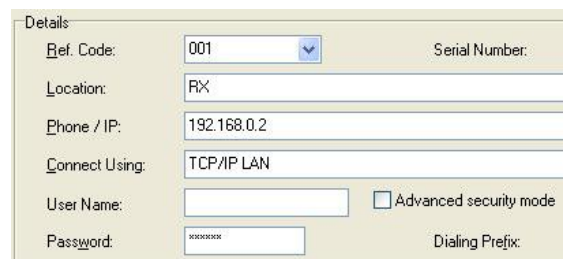
**Phone/IP :** 192.168.0.2



**Connect Using:** TCP/IP LAN

**Password:** 000000

**IP** (192.168.0.2) and **Password** (000000) are default setting of **TeleEye RX**


If RX is set to advanced security mode, check **Advanced security mode** box and enter **User Name**

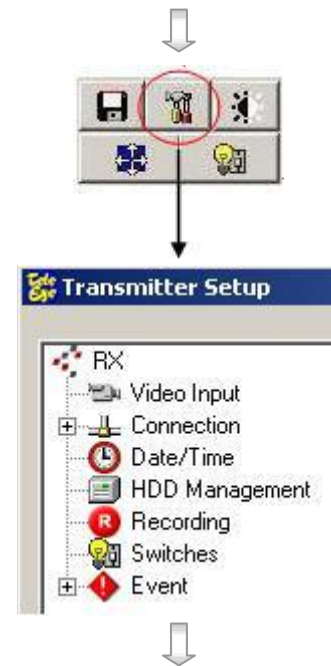


- 11.b.11. Press [Connect]  icon to connect your PC to the video recording server. Live video is shown on the WX-30 if success. Otherwise, the [Warning] board will pop up and show you failure message. For failure case, please press [Connect]  icon to check that the connection setting is valid or not.

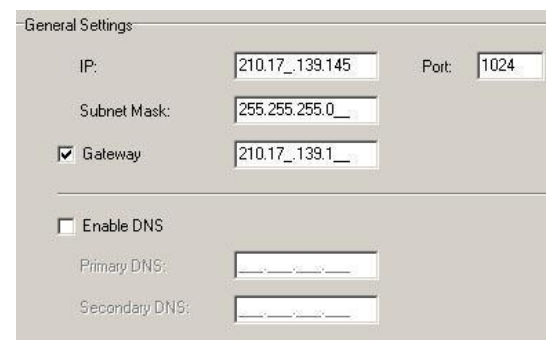


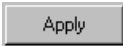
11.b.12. Press [Transmitter Setup]  icon to show **TeleEye RX** configuration menu.

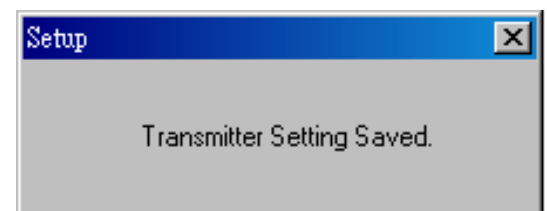
11.b.13. Select [Connection] and press [Network Settings]  icon to configure network setting.



11.b.14. Change the IP from 192.168.0.2 to 210.17.139.145 (for example). Gateway setting is used for WAN. Primary and Secondary DNS setting are used for **sureLINK**, time synchronization or e-mail notification function.

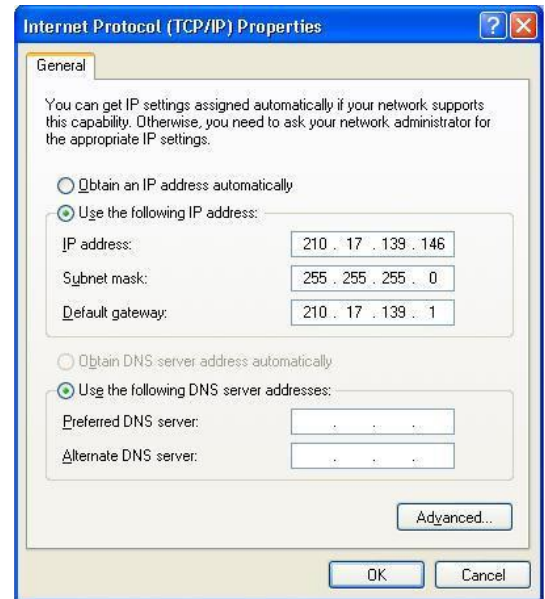


11.b.15. Press [Apply]  icon to save the network setting and the message board will pop up. After several seconds, the video recording server will restart automatically.

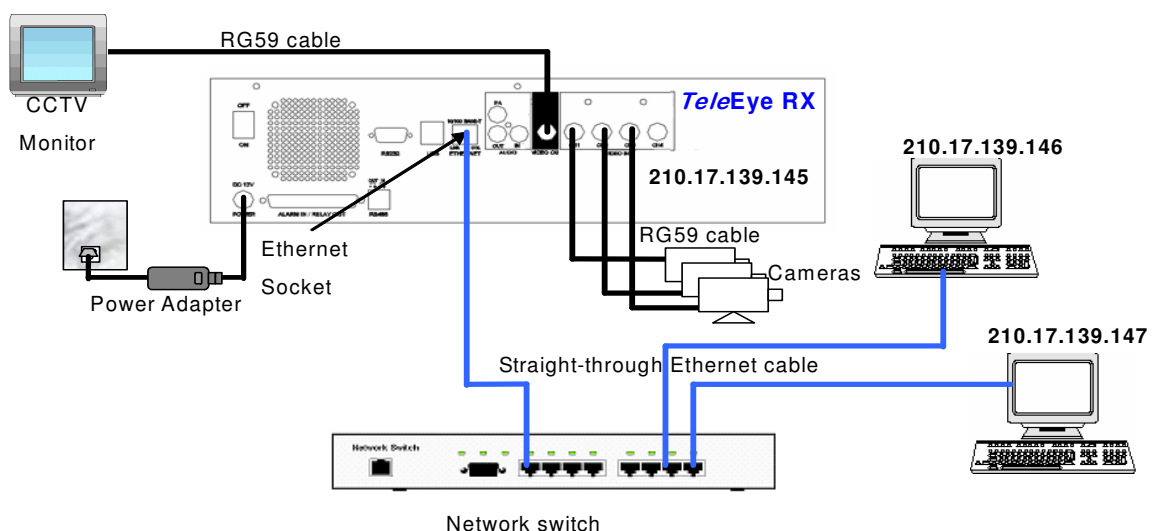


- 11.b.16. In Windows 2000/XP desktop, select **Start > Control Panel**
- 11.b.17. Double click **Network and Dial-up Connections** > right click **Local Area Connections** and choose **Properties**.
- 11.b.18. Choose **Internet Protocol (TCP/IP)** and click **Properties**
- 11.b.19. Enter the **IP address**, **subnet mask** and **Default gateway** for the PC to **restore to its original network configuration**.

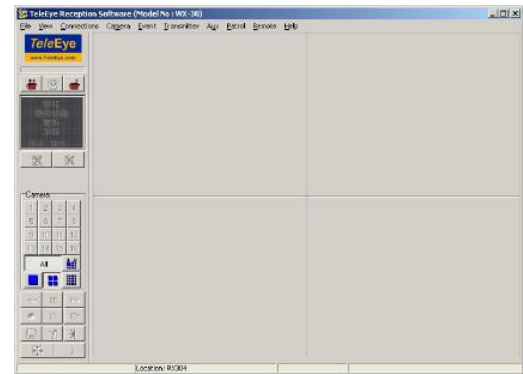
*Note: The first 3 field of IP address should be same as **TeleEye RX** video recording server IP and gateway address. IP address is "210.17.139.146" and gateway address is "210.17.139.1" in this example.*




- 11.b.20. Click **OK** to apply the settings
12. Disconnect the **TeleEye RX** video recording server and current PC. Reconnect the video recording server and current PC to the LAN network through **straight-through Ethernet cable**.
13. Check Ethernet socket of both **TeleEye RX** video recording server and PC to ensure the {**GREEN LINK LED**} turns ON. Then connection diagram is shown as below:



14. Run **WX-30** software at any local network PC. (For details of WX-30 software installation, please refer to WX-30 Software Guide)



15. Press [**Connect**]  icon to pop up the [**Connect Window**]. For example, type and select the following setting :

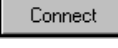

**Phone/IP** : 210.17.139.153

**Connect Using**: TCP/IP LAN

**Password**: 000000

If RX is set to advanced security mode, check **Advanced security mode** box and enter **User Name**



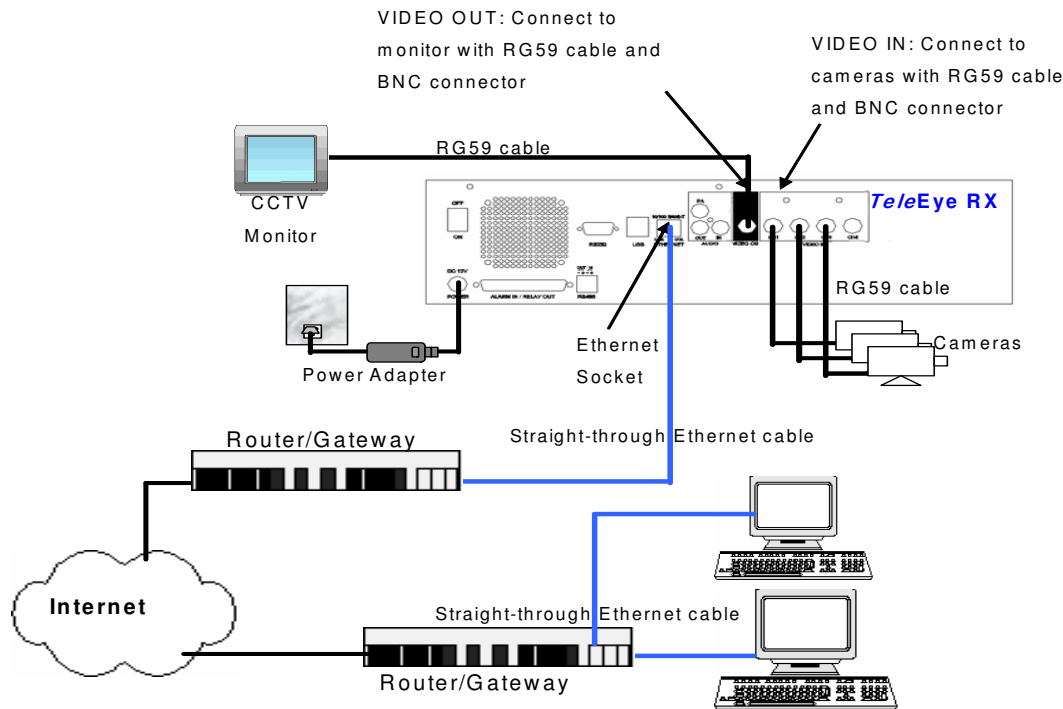
16. Press [**Connect**]  icon to connect your PC and the video recording server. The video appears on the WX-30 if success. Otherwise, the [**Warning**] board will pop up and failure message will be shown. For failure case, please press [**Connect**]  icon to check that the connection setting is valid or not.





## D. TeleEye RX Setup for Broadband or Narrowband Internet Connection with Static IP

### Connection Topology



### Remark for Internet Connection Definition

**Broadband :** Connection speed is equals to 128kbps or above, e.g. ADSL, DSL.

**Narrowband :** Connection speed is below 128kbps, e.g. dial up network, GPRS

### Equipment

- **TeleEye RX** Video recording server
- Network Switch, Router/Gateway
- Straight-through Ethernet Cable (bundled)
- Cross-over Ethernet Cable
- Cameras, Video Cables (RG-59) with BNC Header
- CCTV Monitor
- CD ROM with WX-30 Software (bundled) (for PC operation only)
- PC

### PC Requirements

- **CPU** : Pentium IV 2.4 GHz or above
- **RAM** : 512 MB or above
- **Display** : 1024x768, true color or better
- **OS** : MS Windows 2000, XP
- **HDD** : 1 GB of free disk space or above

### Basic Installation for Local and Remote Monitoring

## Setup Procedure


1. Connect cameras to **TeleEye RX** {Video Input} with RG59 cable and BNC connector.

*Note: The camera system is either NTSC or PAL and all cameras must have the SAME system format.*

2. Connect CCTV monitor to **TeleEye RX** {Video Output} with RG59 cable and BNC connector.
3. Install and use the bundled key to lock the {Hard Disk Rack} with hard disk to the **TeleEye RX**.

*Note: If there is no hard disk installed, Recording and Playback are not functional.*

4. Connect the power adapter (12V DC) to the **TeleEye RX**.





5. Turn on the power of **TeleEye RX**, camera and monitor. Check the {Power LED} , which is lit up in blue color continuously at **TeleEye RX** front panel after power on. After several seconds, live video appears on the CCTV monitor as follows:

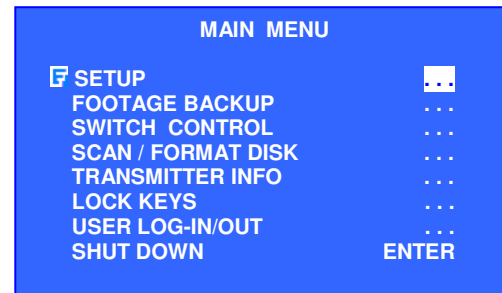



*Note: Please go through the following steps (6-10) if the video of CCTV monitor does not show clearly.*

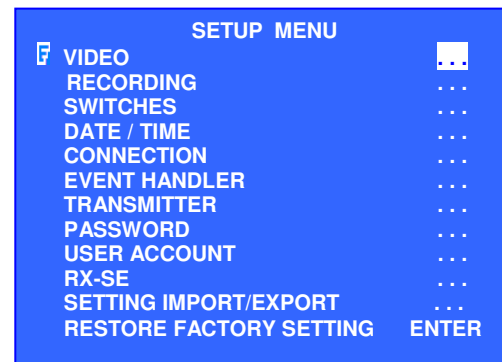
## Basic Installation for Local and Remote Monitoring






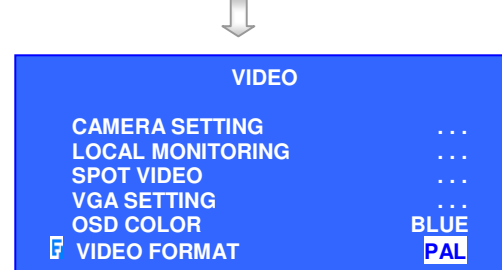
6. Press the “Menu”  button to pop up the [MAIN MENU] on OSD.
7. Use “Up”  or “Down”  button to select [SETUP] option and press “Enter”  button to enter the [SETUP] sub-menu.



8. Select [VIDEO] option and press “Enter”  button to enter the [VIDEO] sub-menu.

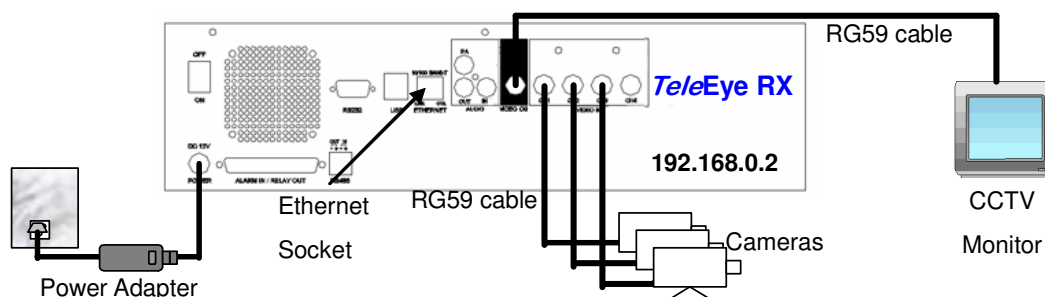


9. Select [VIDEO FORMAT] and press “Left”  or “Right”  button to set either [NTSC] or [PAL] option. (All cameras should have the same video format).
10. You can always press “Live”  button to exit any menu operation and start live monitoring.






Setup **TeleEye RX** video recording server IP through CCTV monitor, please go to step 11a.  
Setup **TeleEye RX** video recording server IP through PC, please go to step 11b.

#### 11.a Configure **TeleEye RX** video recording server IP setting through CCTV Monitor





### Basic Installation for Local and Remote Monitoring





11.a.1 Press the “Menu”  button such that the **OSD main menu** pops up on the monitor.

11.a.2 Use “Up”  or “Down”  button to select [SETUP] option and press “Enter”  button.

11.a.3 Select [CONNECTION] option and press “Enter”  button

11.a.4 Select [TCP/IP] option and press “Enter”  button

11.a.5 Select [IP] option and press “Enter”  button. IP address consists of **four fields**. Each field can assign a number from **0 to 255**.


11.a.6 Use “Left”  or “Right”  button to select field and use “Up”  or “Down”  button to set number.

11.a.7 Press “Enter”  button to save the change and return previous menu.

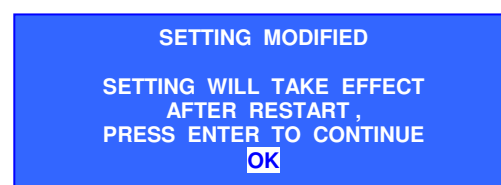
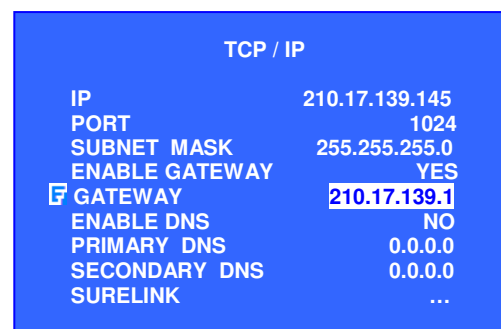
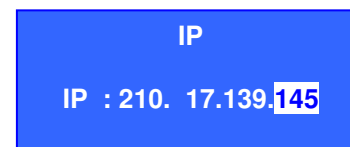
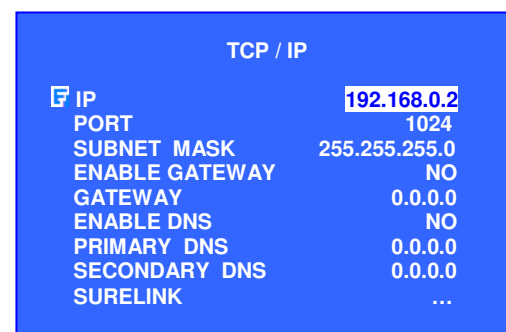
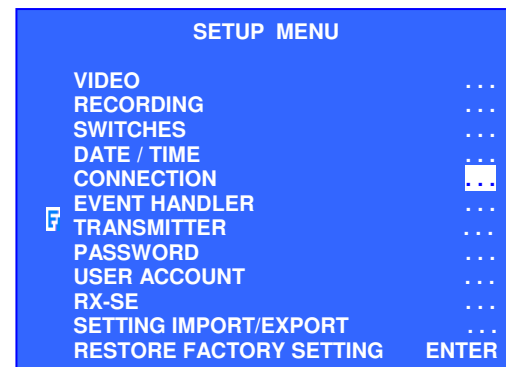
11.a.8 Follow the network setting and assign valid subnet mask to [SUBNET MASK] and select [ENABLE GATEWAY] option and input [GATEWAY] option in similar way.

11.a.9 Set the Gateway value (for example) to **210.17.139.1**

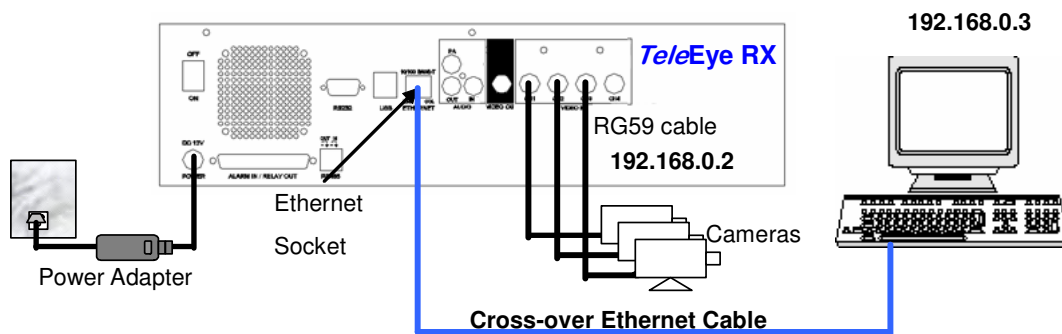
*Note: The DNS setting is optional which is useful for **sureLINK**, time synchronization or e-mail notification function.*

11.a.10 Press “Live”  button and [SETTING MODIFIED] message board will pop up.

11.b Configure **TeleEye RX** video recording server IP setting through PC



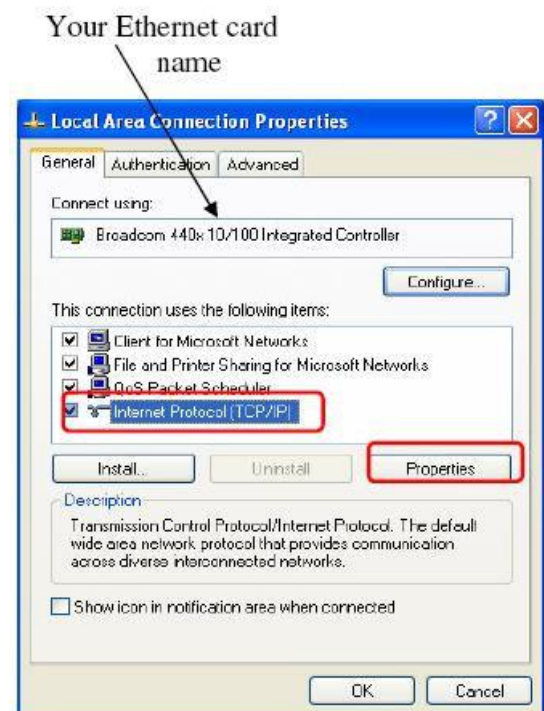
## Basic Installation for Local and Remote Monitoring



11.b.1. In Windows 2000/XP desktop, select **Start > Control Panel**

11.b.2. Double click **Network and Dial-up Connections > right click Local Area Connections** and choose **Properties**.

11.b.3. Choose **Internet Protocol (TCP/IP)** and click **Properties**

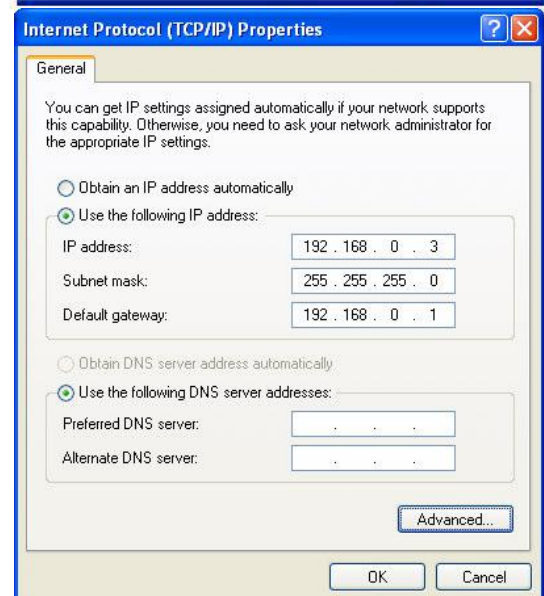


11.b.4. Enter an IP address, subnet mask and Default gateway. Note that IP address should be “192.168.0.xx” except “192.168.0.2” which is **TeleEye RX** default IP address.

11.b.5. Enter the Preferred and Alternate DNS server, if necessary.

11.b.6. Click **OK** to activate the new IP.

*Note: You have to confirm that IP address has been correctly set on your computer. On your windows, click **start > run**, type “cmd” at Open field and press **OK** button, then type “**ipconfig**” on the DOS prompt, you will see an IP set on your computer.*



11.b.7. Connect the PC Ethernet socket to the video recording server Ethernet socket at rear panel of the video recording server with **cross-over** Ethernet cable. Check if the {**LINK LED**} of the video recording server is **ON**.


11.b.8. Run WX-30 software which has been installed to the PC. (For details of WX-30 software installation, please refer to WX-30 Software Guide)

11.b.9. Choose [Transmitter] → [Registration] to register the **TeleEye RX** video recording server. User needs to input video recording server serial number and registration code.

For example :

**Serial No. :** VTC12345

**Registration Code :** 1234567890

11.b.10. Press [Connect]  icon to pop up the [Connect Window]. Type and select the following setting :

**For Broadband Connection :**

**Phone/IP** : 192.168.0.2

**Connect Using** : TCP/IP Broadband

**Password** : 000000

OR

**For Narrowband Connection :**

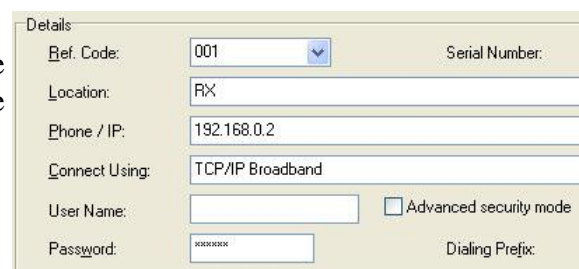
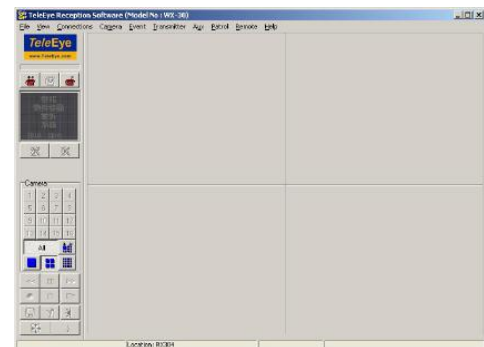
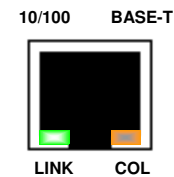
**Phone/IP** : 192.168.0.2



**Connect Using** : TCP/IP Narrowband

**Password** : 000000


**IP** (192.168.0.2) and **Password** (000000)


If RX is set to advanced security mode, check **Advanced security mode** box and enter **User Name**

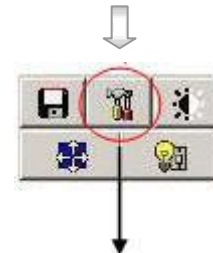


- 11.b.11. Press **[Connect]**  icon to connect your PC and the video recording server. The video appears on the WX-30 if success. Otherwise, the **[Warning]** board will pop up and show you failure message. For failure case, please press **[Connect]**  icon to check that the connection setting is valid or not.

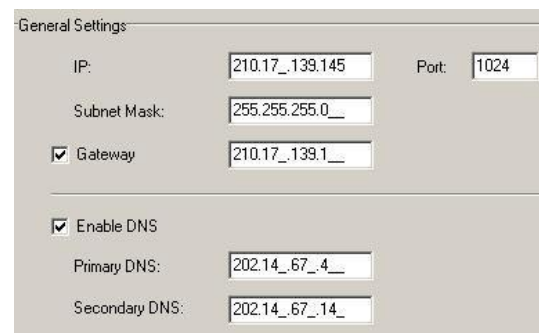


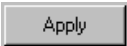
- 11.b.12. Press **[Transmitter setup]**  icon to show **TeleEye RX** configuration menu.

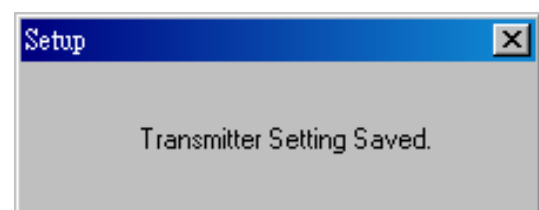
- 11.b.13. Select **[Connection]** and press **[Network Settings]**  icon to configure network setting.



- 11.b.14. Change the IP from 192.168.0.2 to (for example) 210.17.139.145 and Gateway setting 210.17.139.1 (for example). Primary and Secondary DNS setting (for example) are used for **sureLINK**, time synchronization\*\* or e-mail notification function \*\*.



- 11.b.15. Press **[Apply]**  icon to save the network setting and the message board will pop up. After several seconds, the video recording server will restart automatically.



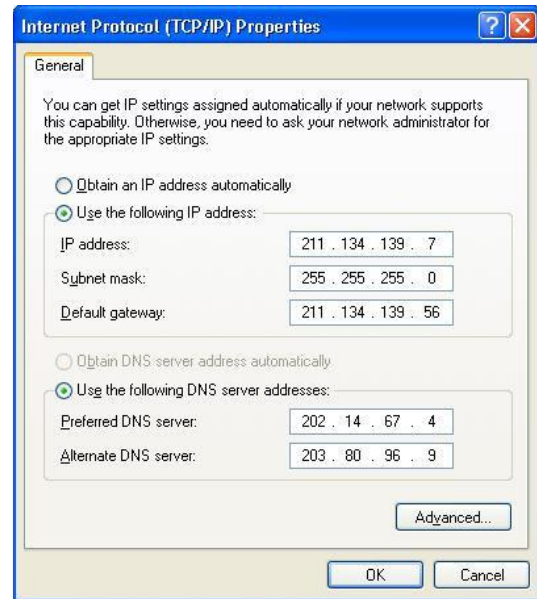
11.b.16. In Windows 2000/XP desktop, select **Start > Control Panel**

11.b.17. Double click **Network and Dial-up Connections > right click Local Area Connections** and choose **Properties**.

11.b.18. Choose **Internet Protocol (TCP/IP)** and click **Properties**

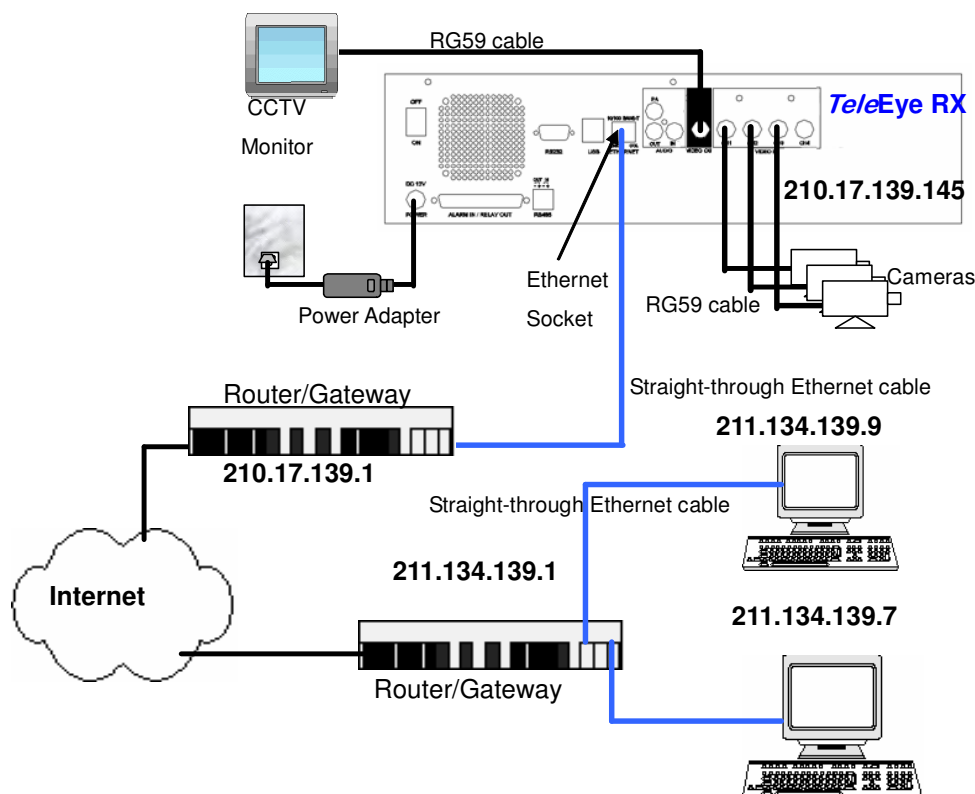
11.b.19. Enter the IP address, subnet mask and Default gateway for the PC to restore to its original network configuration.

11.b.20. Click **OK** to apply the setting



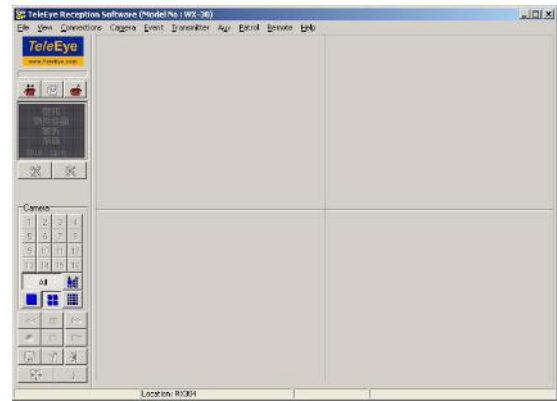
12. Disconnect the video recording server and current PC. Reconnect the video recording server and current PC to the Internet network through **straight-through Ethernet cable**.


13. Check Ethernet socket of both the video recording server and PC to ensure that the **{GREEN LINK LED}** turns ON. Then connection diagram is shown as follows:





14. Configure the network setting for **TeleEye RX** video recording server and your PC if necessary, such as router/gateway port mapping (select router/gateway IP as IP provided by your ISP and the video recording server IP as IP provided by the router/gateway), firewall, etc. (Please refer to the manual of your router/gateway.)
15. Run **WX-30** software at any network PC. (For details of WX-30 software installation, please refer to WX-30 Software Guide)



16. Press **[Connect]**  icon to pop up the **[Connect Window]**. For example, type and select the following setting :

**Broadband Connection :**

**Phone/IP** : 210.17.139.145  
**Connect Using** : TCP/IP Broadband  
**Password** : 000000



**OR**

**Narrowband Connection :**

**Phone/IP** : 210.17.139.145  
**Connect Using** : TCP/IP Narrowband  
**Password** : 000000

If RX is set to advanced security mode, check **Advanced security mode** box and enter **User Name**

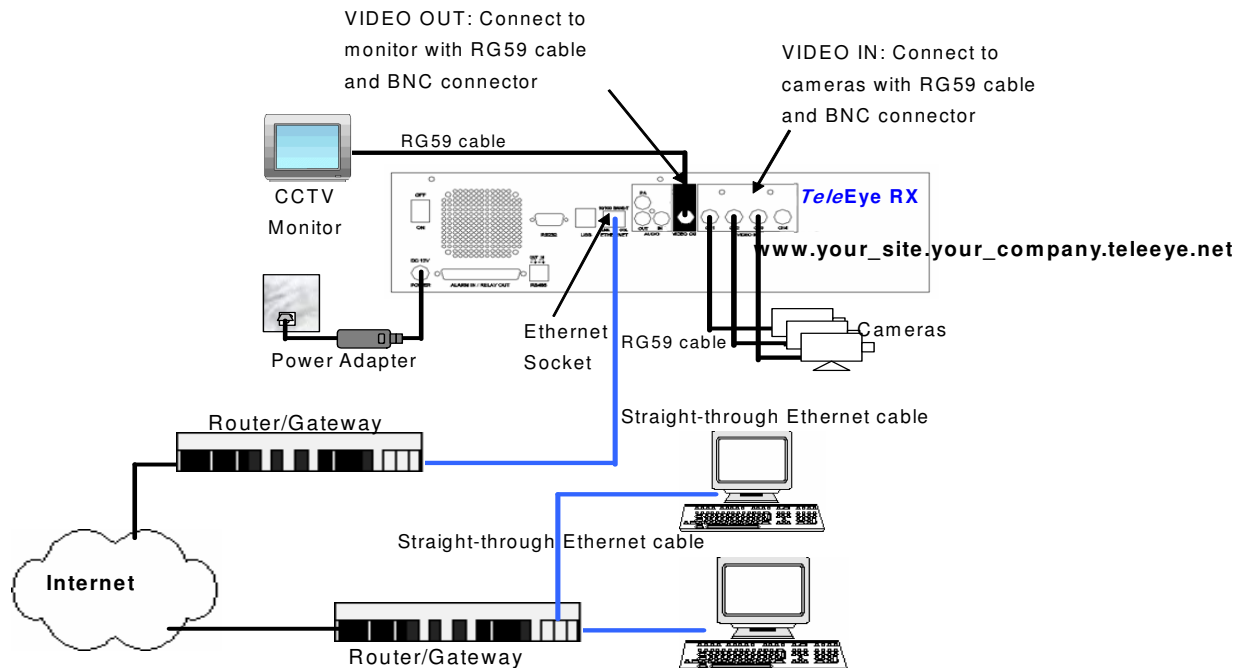


17. Press **[Connect]**  icon to connect your PC and the video recording server. The video appears on the WX-30 if success. Otherwise, the **[Warning]** board will pop up and the failure message will be shown. For failure case, please press **[Connect]**  icon to check that the connection setting is valid or not.



## E. TeleEye RX Setup for Broadband or Narrowband Internet Connection with Dynamic IP

### Connection Topology



### Remark for Internet Connection Definition

Broadband : Connection speed equals to 128kbps or above, e.g. ADSL, DSL.

Narrowband : Connection speed is below 128kbps, e.g. dial up network, GPRS

### Equipment

- **TeleEye RX** Video recording server
- Network Switch, Router/Gateway, ADSL Modem
- Straight-through Ethernet Cable (bundled), Cross-over Ethernet Cable
- Cameras, Video Cables (RG-59) with BNC Header, Monitor
- CD ROM with WX-30 Software (bundled) (for PC operation only)
- CCTV Monitor
- PC

### PC Requirements

- **CPU** : Pentium IV 2.4 GHz or above
- **RAM** : 512 MB or above
- **Display** : 1024 x 768, true color or better
- **HDD** : 1 GB of free disk space or above
- **OS** : MS Windows 2000, XP

### Basic Installation for Local and Remote Monitoring



## Setup Procedure


1. Connect cameras to **TeleEye RX** {Video Input} with RG59 cable and BNC connector.

*Note: The camera system is either NTSC or PAL and all cameras must have the SAME system format.*

2. Connect CCTV monitor to **TeleEye RX** {Video Output} with RG59 cable and BNC connector.
3. Install and use the bundled key to lock the {Hard Disk Rack} with Hard disk to the **TeleEye RX**.

*Note: If there is no hard disk installed, Recording and Playback are not functional.*









4. Connect the power adapter (12V DC) to the **TeleEye RX**.

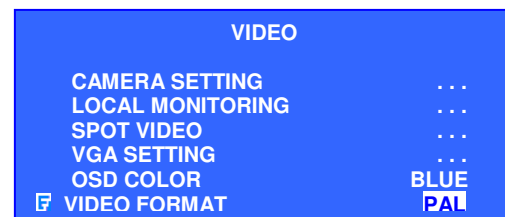
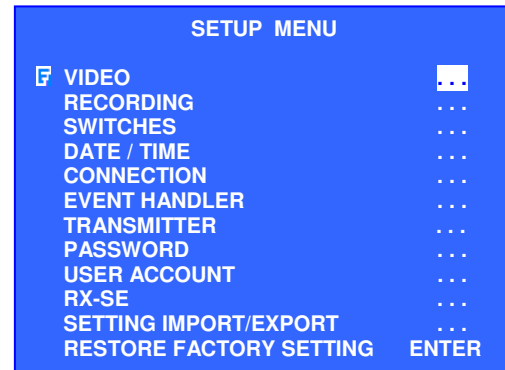
5. Turn on the power of **TeleEye RX**, camera and monitor. Check the {Power LED} , which is lit up in blue color continuously at **TeleEye RX** front panel after power on. After several seconds, live video appears on the CCTV monitor as follows:



*Note: Please go through the following steps (6-10) if the video of CCTV monitor does not show clearly.*

## Basic Installation for Local and Remote Monitoring

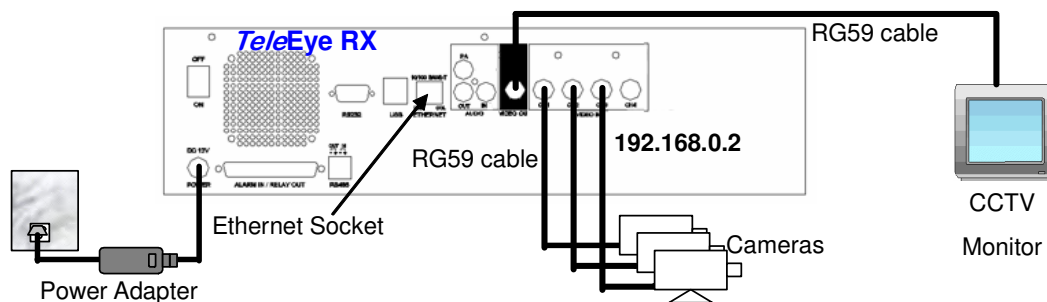
6. Press the “Menu”  button to pop up the [MAIN MENU] on OSD.
7. Use “Up”  or “Down”  button to select [SETUP] option and press “Enter”  button to enter the [SETUP] sub-menu.
8. Select [VIDEO] option and press “Enter”  button
9. Select [VIDEO FORMAT] and press “Left”  or “Right”  button to set either [NTSC] or [PAL] option. (All cameras should have the same video format).
10. You can always press “Live”  button to exit any menu operation and start live monitoring.








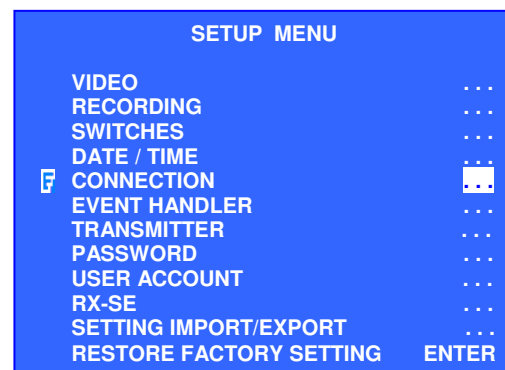
Setup **TeleEye RX** video recording server IP through CCTV monitor, please go to step 11a.

Setup **TeleEye RX** video recording server IP through PC, please go to step 11b.


#### 11.a Configure **TeleEye RX** video recording server IP setting through CCTV Monitor




- 11.a.1 Press the “Menu”  button such that the OSD main menu pops up on the monitor.
- 11.a.2 Use “Up”  or “Down”  button to select [SETUP] option and press “Enter”  button.
- 11.a.3 Select [CONNECTION] option and press “Enter”  button

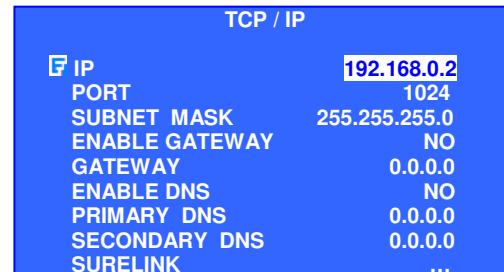






## Basic Installation for Local and Remote Monitoring

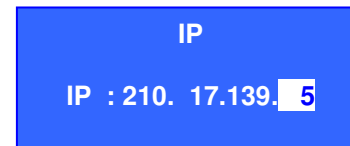
- 11.a.4 Select [TCP/IP] option and press “Enter”  button




- 11.a.5 Select [IP] option and press “Enter”  button.  
IP address consists of four fields. Each field can assign a number from 0 to 255.

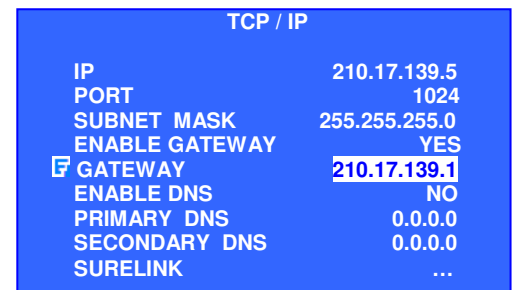




- 11.a.6 Use “Left”  or “Right”  button to select field and use “Up”  or “Down”  button to set number. Set IP address (for example) to 210.17.139.5



- 11.a.7 Press “Enter”  button to save the change and return to previous menu.

- 11.a.8 Follow the network setting and assign valid subnet mask to [SUBNET MASK] and select [ENABLE GATEWAY] option and input [GATEWAY] option in similar way. Assign the Gateway (for example) to 210.17.139.1

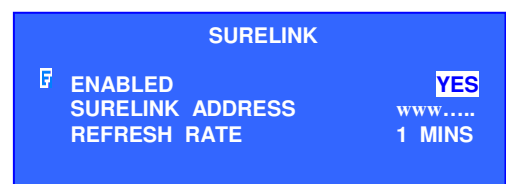




- 11.a.9 Select [ENABLE DNS] option Use “Left”  or “Right”  button to select [YES] to enable DNS.

- 11.a.10 Assign the Primary DNS (for example) to 202.14.67.4

- 11.a.11 Assign the Secondary DNS (for example) to 202.14.67.14

- 11.a.12 Select [SURELINK] option from TCP/IP menu and press “Enter”  button to enter the sub menu.



- 11.a.13 Select [ENABLED] option and press “Left”  or “Right”  button to set [YES] value

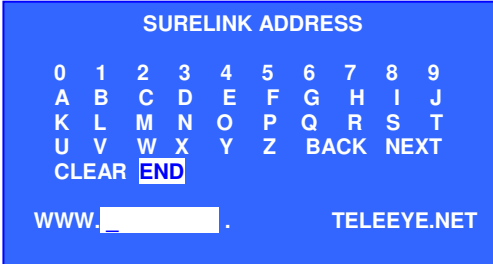
## Basic Installation for Local and Remote Monitoring

11.a.14 Select **[SURELINK ADDRESS]** option

and press “**Enter**”  button to **sureLINK** editing menu.

There are two fields for assigning **sureLINK** address

“www.your\_site.your\_company.teleeye.net”



The screen displays a numeric keypad (0-9) and an alphanumeric keypad (A-Z). Below the keypads are buttons for 'CLEAR' and 'END'. At the bottom, there are two input fields: 'WWW.' followed by a blank space, and 'TELEEEYE.NET'.



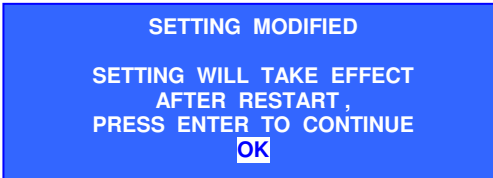
11.a.15 Use “**Up**” or “**Down**” or “**Left**” or “**Right**” button to select values and use “**Enter**” button to assign value.

11.a.16 **[BACK]** → back to previous value or field

11.a.17 **[NEXT]** → next to field

11.a.18 **[CLEAR]** → clear field

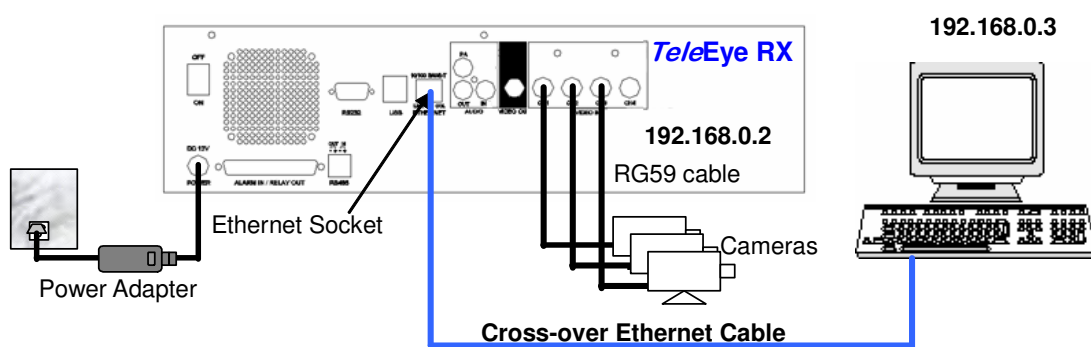
11.a.19 **[END]** → finish to assign **sureLINK** address and exit the editing menu.



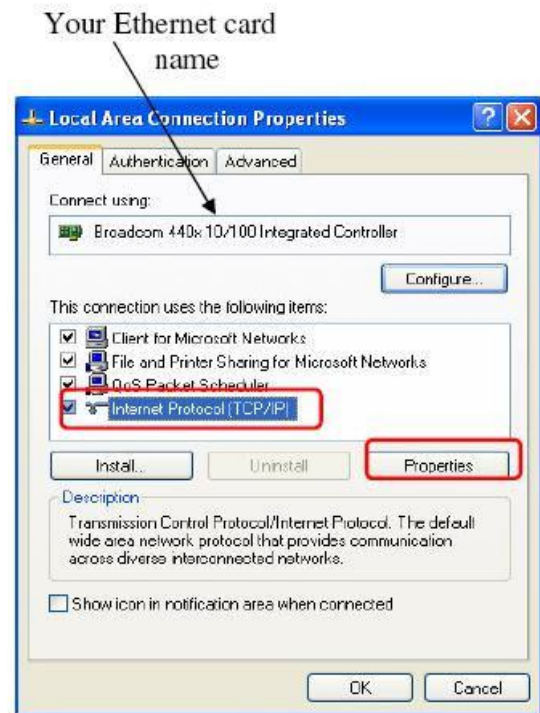
The message board displays the text: 'SETTING MODIFIED', 'SETTING WILL TAKE EFFECT AFTER RESTART,', 'PRESS ENTER TO CONTINUE', and an 'OK' button.

11.a.20 Press “**Live**”  button and **[SETTING MODIFIED]** message board will pop up. Press “**Enter**”  button to restart the video recording server.

11b Configure **TeleEye RX** video recording server IP setting through PC



- 11.b.1. In Windows 2000/XP desktop, select **Start > Control Panel**
- 11.b.2. Double click **Network and Dial-up Connections** > right click **Local Area Connections** and choose **Properties**.
- 11.b.3. Choose **Internet Protocol (TCP/IP)** and click **Properties**

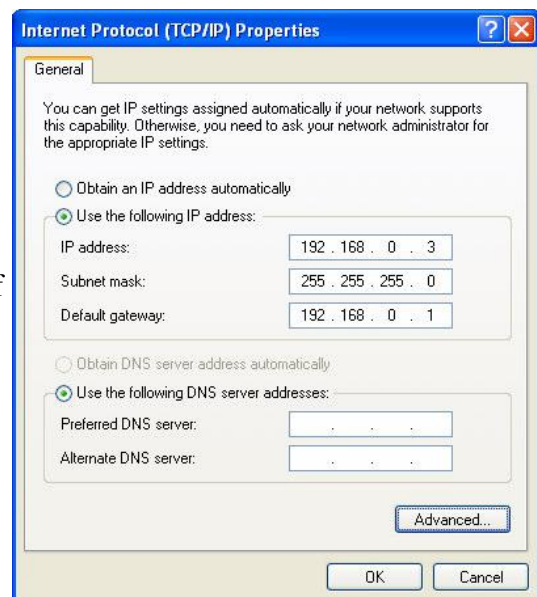


- 11.b.4. Enter an IP address, subnet mask and Default gateway.

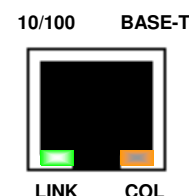
*Note: IP address should be "192.168.0.xx" except "192.168.0.2" which is **TeleEye RX** default IP address.*

- 11.b.5. Enter the Preferred and Alternate DNS server, if necessary.
- 11.b.6. Click **OK** to activate the new IP.

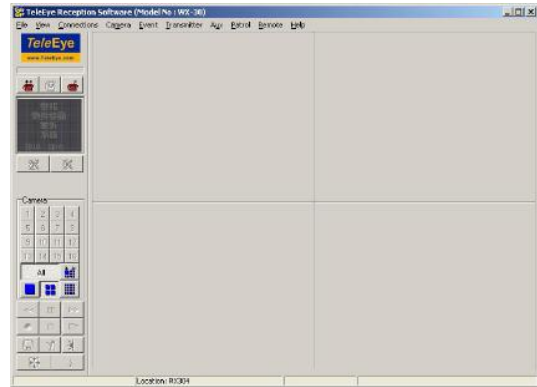
You have to confirm that IP address has been correctly set on your computer. On your windows, click **start > run**, type "**cmd**" at Open field and press **OK** button, then type "**ipconfig**" on the DOS prompt, you will see an IP set on your computer.



- 11.b.7. Connect the PC Ethernet socket to the video recording server Ethernet socket at rear panel of the video recording server with **cross-over** Ethernet cable. Check if the {**LINK LED**} of the video recording server is **ON**.



- 11.b.8. Run WX-30 software which has been installed to the PC. (For details of WX-30 software installation, please refer to WX-30 Software Guide)




- 11.b.9. Choose [Transmitter] → [Registration] to register the **TeleEye RX** video recording server. User needs to input video recording server serial number and registration code.

For example :

**Serial No. :** VTC12345

**Registration Code :** 1234567890



- 11.b.10. Press [Connect]  icon to pop up the [Connect Window]. Type and select the following setting :

**Broadband Connection :**

**Phone/IP** : 192.168.0.2

**Connect Using** : TCP/IP Broadband

**Password** : 000000

OR

**Narrowband Connection :**

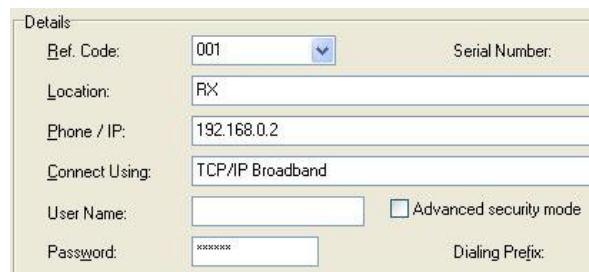
**Phone/IP** : 192.168.0.2

**Connect Using** : TCP/IP Narrowband



**Password** : 000000

**IP** (192.168.0.2) and **Password** (000000) are default setting of **TeleEye RX**

If RX is set to advanced security mode, check **Advanced security mode** box and enter **User Name**






- 11.b.11. Press **[Connect]**  icon to connect your PC and the video recording server. The video appears on the WX-30 if success. Otherwise, the **[Warning]** board will pop up and show you failure message. For failure case, please press **[Connect]**  icon to check that the connection setting is valid or not.



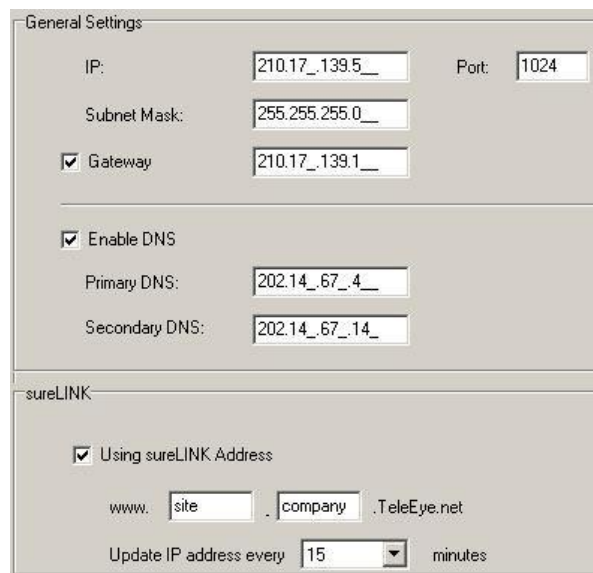
- 11.b.12. Press **[Transmitter Setup]**  icon to show **TeleEye RX** configuration menu.

- 11.b.13. Select **[Connection]** and press **[Network Settings]**  icon to configure network setting.



- 11.b.14. For example :  
 Assign 210.17.139.5 to IP  
 Assign 210.17.139.1 to Gateway  
 Assign 202.14.67.4 to Primary DNS  
 Assign 202.14.67.14 to Secondary DNS  
 Enable **sureLINK**  
 Assign  
 “www.your\_site.your\_company.TeleEye.net”

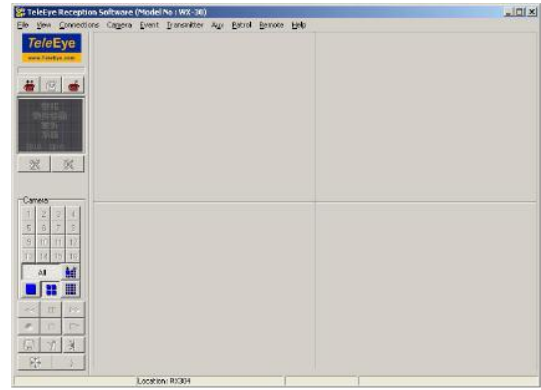
*Note: The above network setting is an example.  
 Please consult you network administrator to get  
 your network setting information*








14. Configure the network setting for **TeleEye RX** video recording server and your PC if necessary, such as router/gateway port mapping (select router/gateway IP as IP provided by your ISP and the video recording server IP as IP provided by the router/gateway), firewall, etc. (Please refers to the manual of your router/gateway.)
15. Run **WX-30** software at any network PC. (For details of WX-30 software installation, please refer to WX-30 Software Guide)



16. Press **[Connect]**  icon to pop up the **[Connect Window]**. For example, type and select the following setting :

**Broadband Connection :**

**Phone/IP :**

www.your\_site.your\_company.TeleEye.net

**Connect Using** : TCP/IP Broadband

**Password** : 000000

**OR**

**Narrowband Connection :**

**Phone/IP :**

www.your\_site.your\_company.TeleEye.net

**Connect Using** : TCP/IP Narrowband



**Password** : 000000

Details

Ref. Code:	001	Serial Number:	
Location:	RX		
Phone / IP:	www.your_site.your_company.TeleEye.net		
Connect Using:	TCP/IP Broadband		
User Name:		<input type="checkbox"/> Advanced security mode	
Password:	xxxxxxx	Dialing Prefix:	



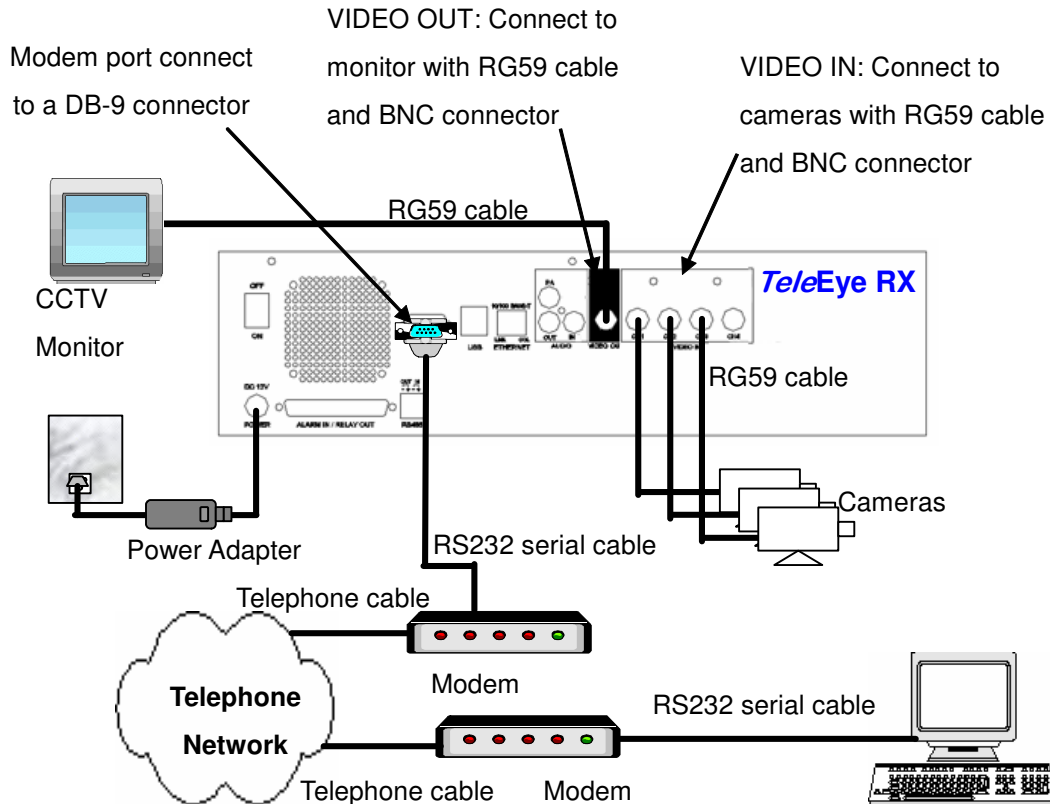
If RX is set to advanced security mode, check **Advanced security mode** box and enter **User Name**

17. Press **[Connect]**  icon to connect your PC and the video recording server. The video appears on the WX-30 if success. Otherwise, the **[Warning]** board will pop up and the failure message will be shown. For failure case, please press **[Connect]**  icon to check that the connection setting is valid or not.



## F. TeleEye RX Setup for Modem Connection

### Connection Topology



### Equipment

- **TeleEye RX** Video recording server
- ISDN/PSTN Modem
- RS232 Serial Cable
- Telephone Cable
- Cameras
- Video Cables (RG-59) with BNC Header
- CCTV Monitor
- CD ROM with WX-30 Software (bundled) (for PC operation only)
- PC

### PC Requirements

- **CPU** : Pentium IV 2G Hz or above
- **RAM** : 256 MB or above
- **Display** : 800x600, hi-color or better
- **OS** : MS Windows 2000, XP

### Basic Installation for Local and Remote Monitoring

## Setup Procedure


1. Connect cameras to **TeleEye RX {Video Input}** with RG59 cable and BNC connector.

*Note: The camera system is either NTSC or PAL and all cameras must have the SAME system format.*

2. Connect CCTV monitor to **TeleEye RX {Video Output}** with RG59 cable and BNC connector.
3. Install and use the bundled key to lock the **{Hard Disk Rack}** with hard disk to the **TeleEye RX**.

*Note: If there is no hard disk installed, Recording or Playback is not functional during live video monitoring.*









4. Connect the power adapter (12V DC) to the **TeleEye RX**.

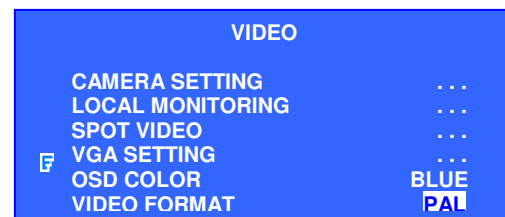
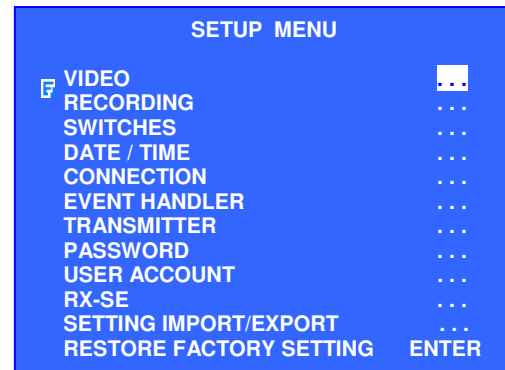
5. Turn on the power of **TeleEye RX**, camera and monitor. Check the **{Power LED}** , which is lit up in blue color continuously at **TeleEye RX** front panel after power on. After several seconds, live video appears on the CCTV monitor as follows:



*Note: Please go through the following steps (6-10) if the video of CCTV monitor does not show clearly.*

## Basic Installation for Local and Remote Monitoring

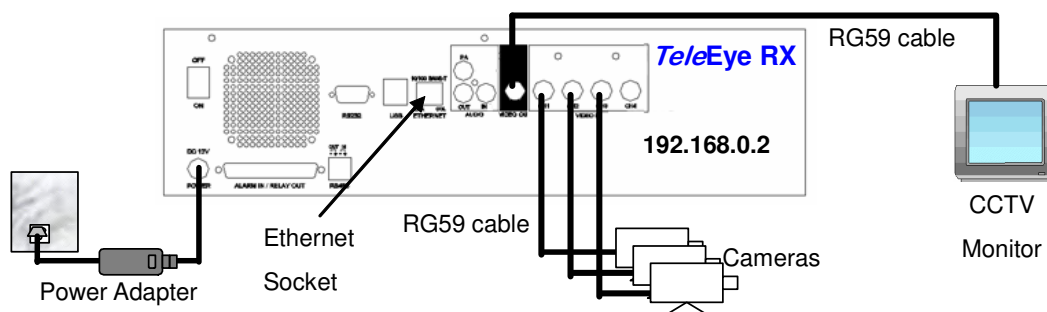
6. Press the “Menu”  button to pop up the [MAIN MENU] on OSD.
7. Use “Up”  or “Down”  button to select [SETUP] option and press “Enter”  button to enter the [SETUP] sub-menu.
8. Select [VIDEO] option and press “Enter”  button
9. Select [VIDEO FORMAT] and press “Left”  or “Right”  button to set either [NTSC] or [PAL] option. (All cameras should have the same video format).
10. You can always press “Live”  button to exit any menu operation and start live monitoring.








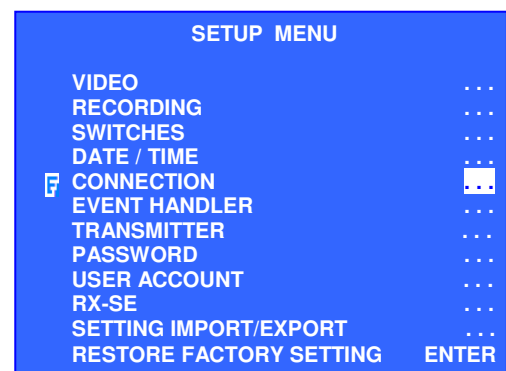
Setup **TeleEye RX** video recording server IP through CCTV monitor, please go to step 11a.

Setup **TeleEye RX** video recording server IP through PC, please go to step 11b.




11a: Configure **TeleEye RX** video recording server modem connection setting through CCTV Monitor

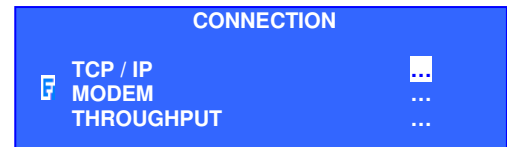



- 11.a.1. Press the “Menu”  button such that the OSD [MAIN MENU] pop up on the monitor.
- 11.a.2. Use “Up”  or “Down”  button to select [SETUP] option and press “Enter”  button and select [CONNECTION] option and press “Enter”  button.






## Basic Installation for Local and Remote Monitoring

11.a.3. Use “Up”  or “Down”  button to select [MODEM] option and press “Enter”  button

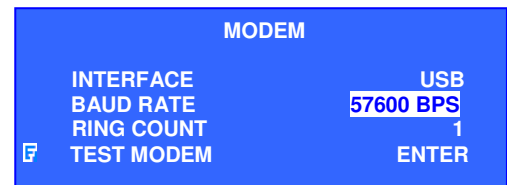


11.a.4. Select [BAUD RATE] and then [RING COUNT] option press “Enter”  button

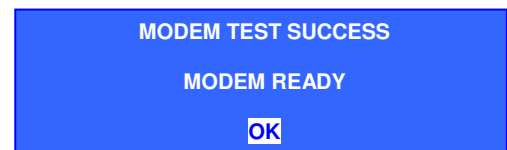


11.a.5. Use “Up”  or “Down”  button to set number. Press “Enter”  button to input baud rate and ring count setting

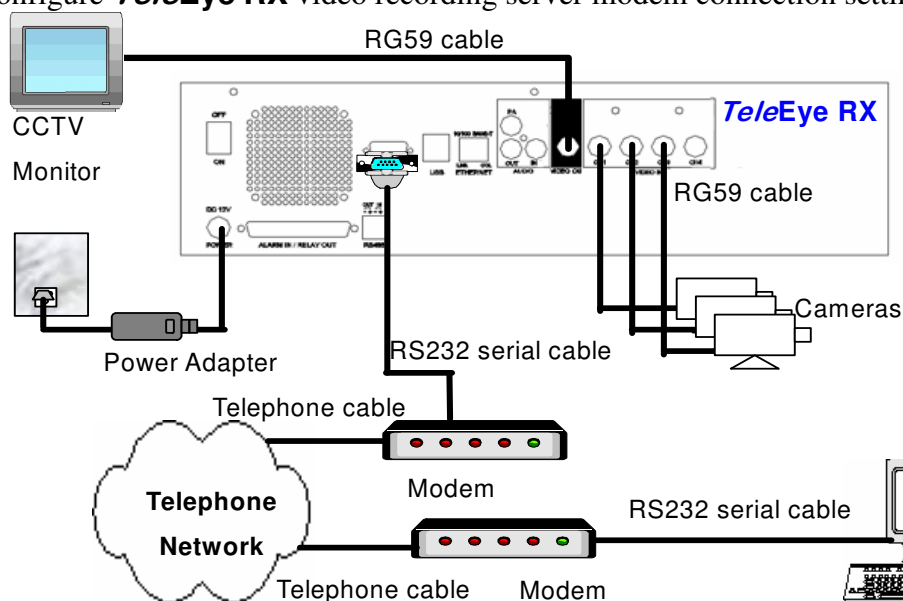
11.a.6. Select [TEST MODEM] and press “Enter”  button.



11.a.7. Press [OK] and back to modem sub-menu. Make sure the modem is connected and restart the modem if the modem is not ready.



11.b: Configure **TeleEye RX** video recording server modem connection setting through PC



## Basic Installation for Local and Remote Monitoring

## Modem Setup for Windows 2000/XP of PC

11.b.1. In Windows 2000/XP desktop, select **Start > Control Panel**

11.b.2. Double click Add Hardware, press **Next**, to search the modem connected to the PC automatically



11.b.3. Windows 2000/XP can search the modem device automatically. If there is any problem in modem installation, please refer to the modem manual.



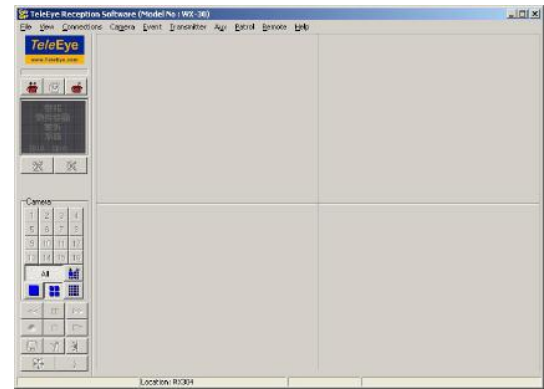
11.b.4. After searching the modem, Windows 2000/XP can install the modem driver automatically. Press **[Finish]** button to exit the menu. The modem is ready to use.



## Basic Installation for Local and Remote Monitoring



- 11.b.5. Run WX-30 software which has been installed to the PC. (For details of WX-30 software installation, please refer to WX-30 Software Guide)

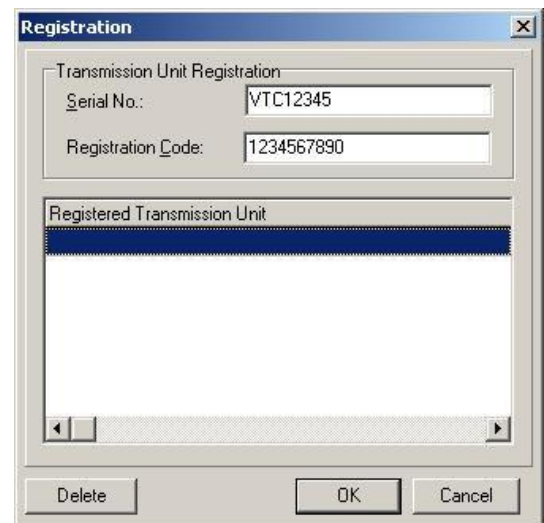



- 11.b.6. Choose [Transmitter] → [Registration] to register the **TeleEye RX** video recording server. User is required to input video recording server serial number and registration code.

For example :

**Serial No. :** VTC12345

**Registration Code :** 1234567890



- 11.b.7. Press [Connect]  icon to pop up the [Connect Window]. For example, type and select the following setting :

**Phone/IP :**

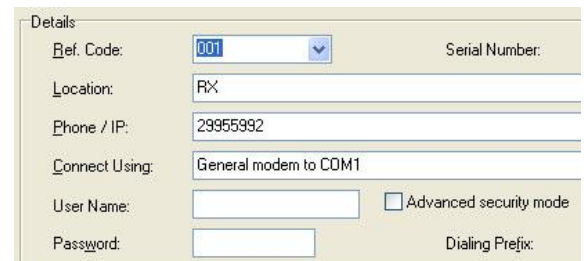
29955992 (Phone number of the video recording server)



**Connect Using :**

General modem to COM1  
(Modem Driver)



**Password:** 000000

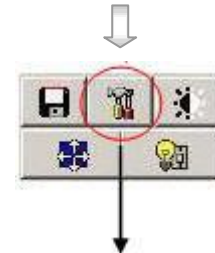
If RX is set to advanced security mode, check **Advanced security mode** box and enter **User Name**



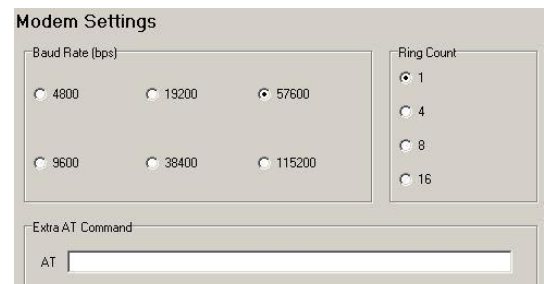
- 11.b.8. Press [**Connect**]  icon to connect your PC and the video recording server. The video appears on the WX-30 if success. Otherwise, the [**Warning**] board will pop up and show you failure message. For failure case, please press [**Connect**]  icon to check that the connection setting is valid or not.

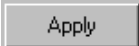


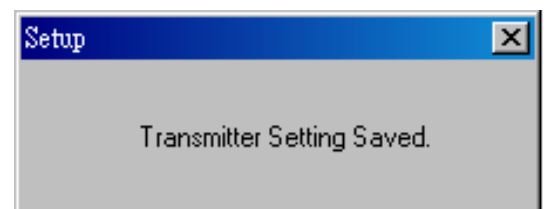
- 11.b.9. Press [**Transmitter setup**]  icon to show **TeleEye RX** configuration menu.
- 11.b.10. Select [**Connection**] and press [**Modem Settings**]  icon to configure network setting.



- 11.b.11. Assign modem baud rate in order to adjust modem connection speed.
- 11.b.12. Assign ring count, so modem can connect to the video recording server after that ring count.



- 11.b.13. Press [**Apply**]  icon to save the network setting and the message board will pop up. After several seconds, the video recording server will restart automatically.



12. If user setup modem connection by using local CCTV monitor (Step 11a), please install the modem for your PC and connect to the telephone network in order to connect to **TeleEye RX** video recording server

## Basic Installation for Local and Remote Monitoring



12.1 In Windows 2000/XP desktop, select **Start > Control Panel**

12.2 Double click Add Hardware, press **Next**, to search the modem connected to the PC automatically



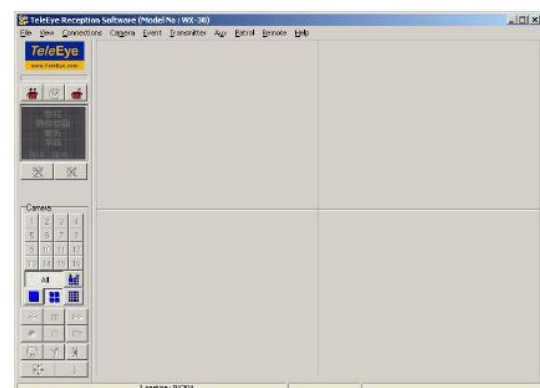
12.3 Windows 2000/XP can search the modem device automatically. If there is any problem in modem installation, please refer to the modem manual.




12.4 After searching the modem, Windows 2000/XP can install the modem driver automatically. Press **[Finish]** button to exit the menu. The modem is ready to use.



12.5 Run WX-30 software which has been installed to the PC. (For details of WX-30 software installation, please refer to WX-30 Software Guide)



## Basic Installation for Local and Remote Monitoring

- 12.6 Press **[Connect]**  icon to pop up the **[Connect Window]**. For example, type and select the following setting :

**Phone/IP :**

29955992 (Phone number of the video recording server)

**Connect Using :**

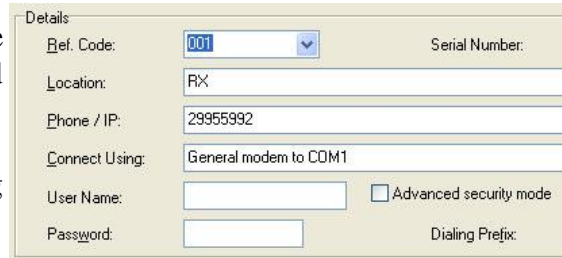
General modem to COM1



(Modem Driver)

**Password:** 000000

If RX is set to advanced security mode, check

**Advanced security mode** box and enter **User Name**




- 12.7 Press **[Connect]**  icon to connect your PC and the video recording server. The video appears on the WX-30 if success. Otherwise, the **[Warning]** board will pop up and show you failure message. For failure case, please press **[Connect]**  icon to check that the connection setting is valid or not.



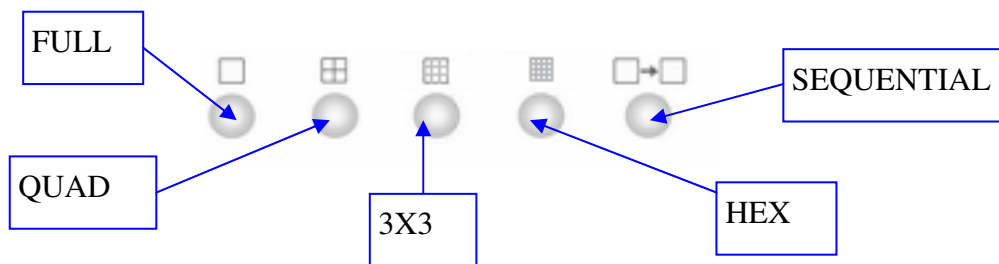
## SECTION 4

# Basic Operation for Local and Remote Monitoring

## A. Local CCTV Monitor : Live Monitoring, Recording and Playback

### 1. Live Monitoring

Press “**Screen Control**” buttons to view the live video in full, quad, 3 x 3 (RX368\_V2 / RX328 / 3616\_V2 / RX3216), hex (RX3616\_V2 / RX3216) and sequential display mode.



- for **RX364 / RX324**, FULL, QUAD and SEQUENTIAL buttons are available
- for **RX368\_V2 / RX328**, FULL, QUAD, 3X3 and SEQUENTIAL buttons are available
- for **RX3616\_V2 / RX3216**, FULL, QUAD, 3X3, HEX and SEQUENTIAL buttons are available











Press “**Live Camera Control**” buttons to fast switch to a specific camera for local monitoring



- for **RX364 / RX324**, buttons 1-4 are available
- for **RX368\_V2 / RX328**, buttons 1-8 are available
- for **RX3616\_V2 / RX3216**, buttons 1-16 are available

## Basic Local Operation: Live Monitoring, Recording and Playback

## 2. Recording

1. Press “**Rec**”  button and **[RECORDING]** menu will pop up.
2. Select **[REC CAMERA]** option and press “**Enter**”  button to enable recording cameras.\*
3. Use “**Left**”  or “**Right**”  button to select the recording camera and use “**Up**”  or “**Down**”  button to enable or disable the recording camera.
4. Step 4: After setting the recording cameras, press “**Enter**”  button to save the setting and back to **[RECORDING]** menu.
5. Select **[START RECORDING]** option and press “**Enter**”  button for recording. The **{Rec LED}** will be turned ON (**RED Color**)  which indicates that recording is processing.
6. Press “**Rec**”  button again to stop recording function and the **{REC LED}** will be turned OFF.

*\*Note: REC CAMERA is not selectable when recording mode is set to FULL 100FPS, all cameras will be recorded under this recording mode.*





(e.g. Cam 1 & 3 are enabled, Cam 2 & 4 are disabled)



## Playback


1. Press “**Search**”  button to pop up [RECORDING LOG] board on OSD.

RECORDING LOG 12 – 13 AUG2005				
TIME	CAMERA	EVENT	REMARK	SENSOR
11 : 00	1234	----	-----	----
12 : 00	---4	----	-----	----
13 : 00	---	----	-----	----
14 : 00	- 2 -	----	-----	----
15 : 00	---	----	-----	----
16 : 00	1 ---	----	-----	----

2. Press “**Play/Enter**”  button to show [PLAY] menu.
3. Select [MINUTE LOG] and press “**Enter**”  button.


PLAY				
TIME	SEARCH	MONTH LOG	DAY LOG	HOUR LOG
10MIN LOG	MINUTE LOG			

[RECORDING LOG] board will show the log in minute scale.

4. Select a record and press “**Enter**”  button for playback.

RECORDING LOG 12 – 13 AUG2005				
TIME	CAMERA	EVENT	REMARK	SENSOR
11 : 54	1234	----	-----	----
11 : 55	1234	----	-----	----
11 : 56	1234	----	-----	----
11 : 57	1234	----	-----	----
11 : 58	1234	----	-----	----
11 : 59	1234	----	-----	----

Then [PLAYBACK] menu will pop up again.

5. Select [PLAY] option and press “**Enter**”  button again for playback.








PLAY				
TIME	SEARCH	MONTH LOG	DAY LOG	HOUR LOG
10MIN LOG	MINUTE LOG			

6. Using “**Playback Control button**” for



Play  
Pause  
Rewind  
Forward  
Fast forward  
Step forward  
Step backward

*These icons will  
shown on OSD  
for playback  
status*

7. Press “**screen control**”    or “**camera control**”     buttons to change the view mode in local CCTV video playback.



## B. TeleEye RX Reception Software WX-30 : Live Monitoring, Recording and Playback

### 1. Live Monitoring

User can view a particular camera by simply clicking the camera button (e.g. 1, 2, 3) on the camera control panel, to view all cameras, click **[All]** button.

Screen views in Full screen



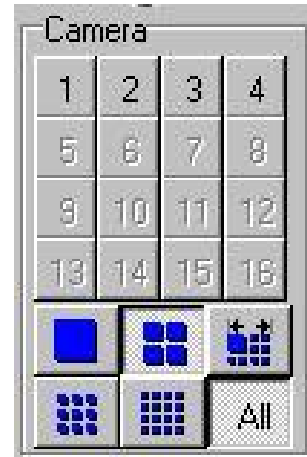
Screen views in Quarter screen




Screen views in Hex screen

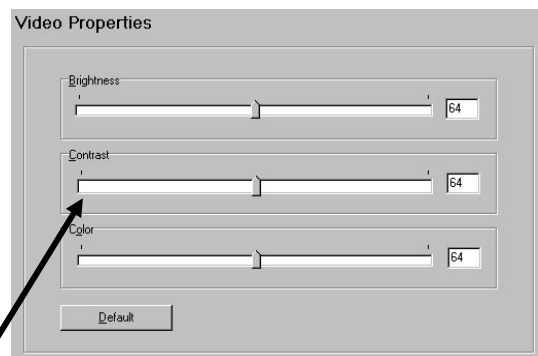


Auto-arrange is to optimize the screen views in order to display as many high-resolution pictures as possible.

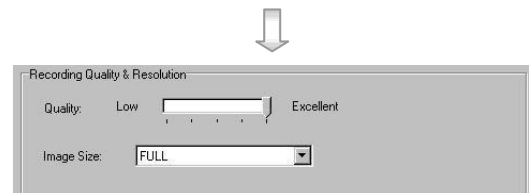


User can change **TeleEye RX** Reception Software WX-30 live monitoring picture quality by following steps.


1. Click **[Transmitter Settings]**  button at the software front panel.
2. Enter the **administrator password** to proceed.
3. A video recording server settings menu will pop up.
4. Choose video properties under **[video input]** to change the brightness, contrast and color level.



5. Select in **[Recording]** to change the recording quality and resolution.

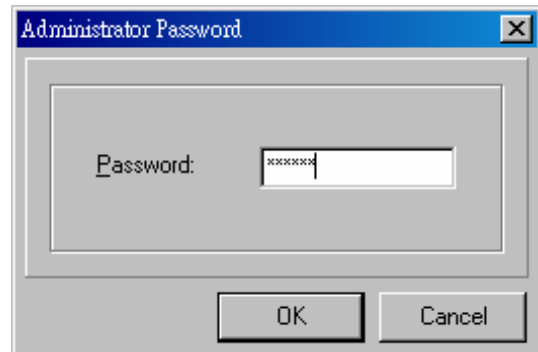


## 2. Recording

1. Press **[Record]**  icon to setup recording setting.

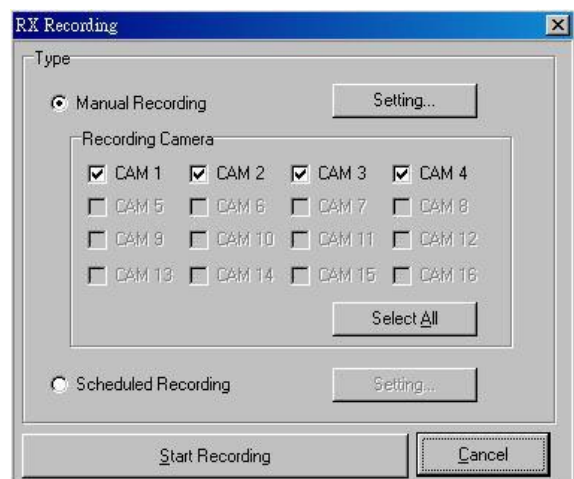


2. Input administrator password (**000000** as default password) and press **[OK]** button.



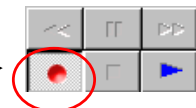
3. Enable recording cameras ( Tick ☒ for enable, blank for disable)

4. Press **[Start Recording]**  button to start recording



Recording

function is running →


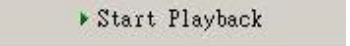


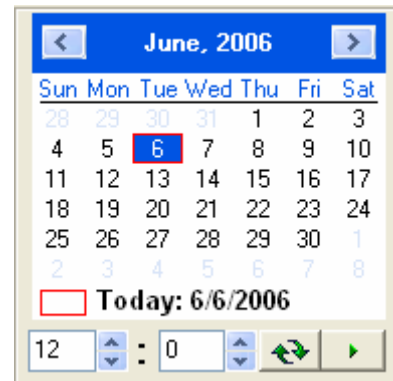









### 3. Playback

1. Press [Play]  button to show playback menu



2. Select and input the record date and time for searching and press [Reload]  button.
3. Select a **time slot record** and press [Start Playback]  button.



4. Use “**playback control button**”  to control playback video such as “**play**”, “**pause**”, “**forward**”, “**backward**” and “**stop**” function.
5. Press [All] , [Full screen] , [Quarter screen] , [3X3 screen] , [Hex screen]  or [Auto-arrange]  icon to change the view mode for playback.



*Note: After pressing “**pause**” button for 1 minute, reception software WX-30 will continue to playback the video automatically.*

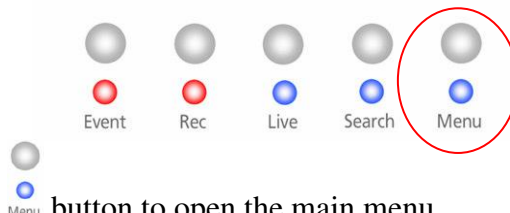
*Note: If user record video by using quad recording mode, the playback video quality may not be good as in full screen display mode.*













## SECTION 5

# OSD Menu Operation

## A. How to use OSD menu



1. Press the “**Menu**”  button to open the main menu
2. Use the “**Up**”  / “**Down**”  button to select a sub-menu
3. A selected sub-menu option will be pointed by a hand cursor and highlighted
4. Press “**Enter**”  button to confirm the selection and open the sub-menu
5. If menu option ends with [...] indicates sub-menu existing, you can always press the “**Enter**”  button to open the sub-menu.
6. If menu option does not end with [...] but provides selection, user can press the “**Left**”  / “**Right**”  button to select the options.
7. You can press the “**Back**”  button once back to previous menu.
8. Press “**Live**”  button or “**Back**”  button until OSD disappears to exit menu and save the setting. [SETTING SAVED] message will be shown.

## B. Main Menu

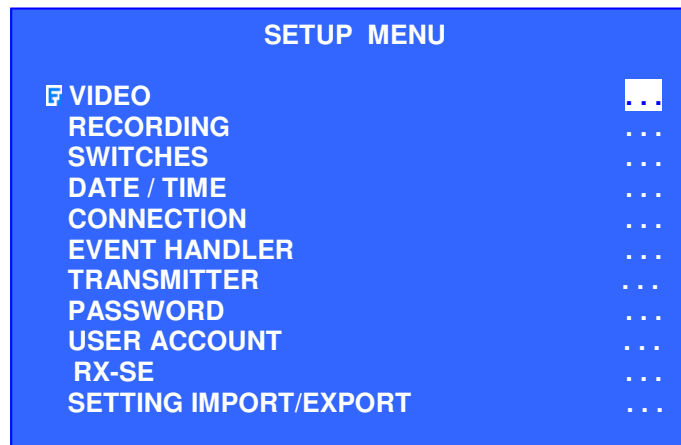
The Main menu allows user to setup and control the video recording server, some operations such as backup, switch, scandisk and format can be done in the main menu.

### Main Menu



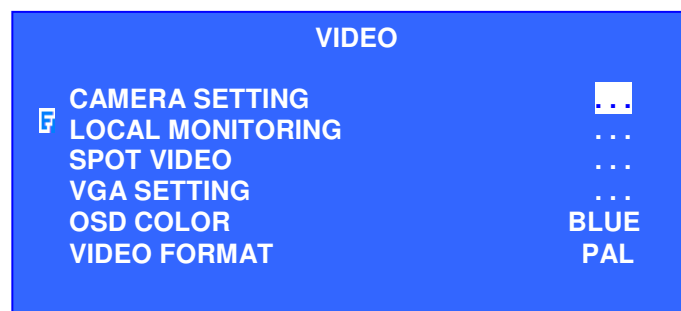
<b>SETUP</b>	: Change the <b>TeleEye RX</b> video recording server setting
<b>FOOTAGE BACKUP</b>	: Backup recorded video to CD, DVD or USB Flash
<b>SWITCH CONTROL</b>	: Turn on /off switch 1-4
<b>SCAN / FORMAT DISK</b>	: Show the hard disk information, scandisk and format
<b>TRANSMITTER INFO</b>	: Show the <b>TeleEye RX</b> video recording server information
<b>LOCK KEYS</b>	: Lock the panel keys
<b>USER LOG-IN/OUT</b>	: User log-in or log-out
<b>SHUT DOWN</b>	: Shut down or restart <b>TeleEye RX</b> video recording server

## Main Menu→Setup



<b>VIDEO</b>	: Change camera, local monitoring, PTZ setting, OSD color and video format related settings
<b>RECORDING</b>	: Change recording related settings
<b>SWITCHES</b>	: Change switches related settings
<b>DATE/TIME</b>	: Change date and time settings
<b>CONNECTION</b>	: Change connection and network related settings
<b>EVENT HANDLER</b>	: Change event related settings
<b>TRANSMITTER</b>	: Change the video recording server name, registration checking and perform firmware upgrade
<b>PASSWORD</b>	: Change the password
<b>USER ACCOUNT</b>	: Add / modify user account
<b>RX-SE</b>	: Change RX-SE setting
<b>SETTING IMPORT /EXPORT</b>	: Import and export setting
<b>RESTORE FACTORY SETTING</b>	: Restore default factory setting

## Main Menu→ Setup→Video

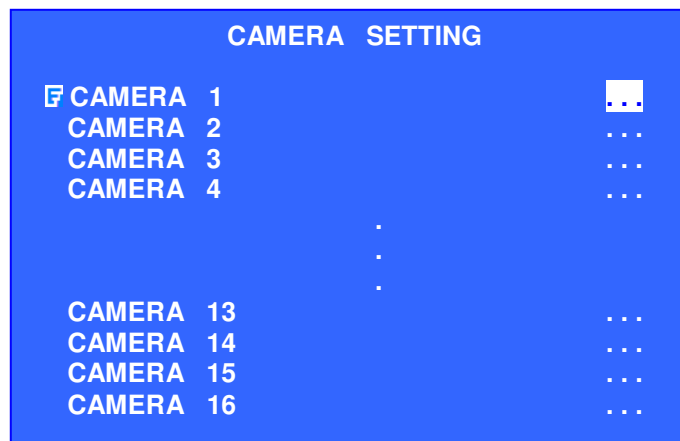


<b>CAMERA SETTING</b>	: Change camera name and install camera
<b>LOCAL MONITORING</b>	: Change local CCTV monitor related setting
<b>SPOT VIDEO*</b>	: Change Spot video output setting
<b>VGA SETTING*</b>	: Change VGA output setting
<b>OSD COLOR</b>	: Change OSD color
<b>VIDEO FORMAT</b>	: Change the video format to PAL or NTSC format

*\*Note : only supported in RX368\_V2 / RX328 / RX3616\_V2 / RX3216*

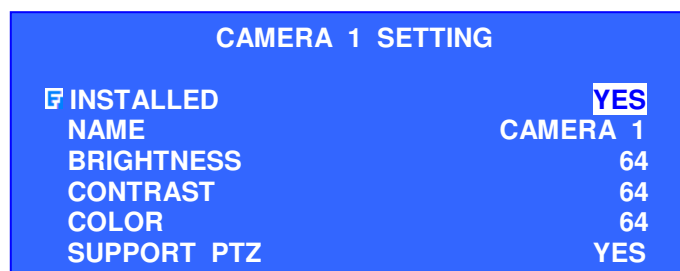
## OSD Menu Operation

## Main Menu→ Setup→Video→Camera Setting



*Note: Number of items in this menu depends on video recording server model.*

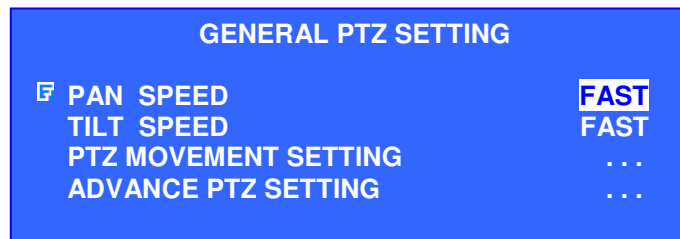
## Main Menu→ Setup→Video→Camera Setting→ Camera 1 Setting



<b>INSTALLED</b>	: Install the camera
<b>NAME</b>	: Rename the camera
<b>BRIGHTNESS</b>	: *Change camera brightness
<b>CONTRAST</b>	: *Change camera contrast
<b>COLOR</b>	: *Change camera color
<b>SUPPORT PTZ</b>	: Enable the PTZ camera
<b>GENERAL PTZ SETTING</b>	: Change PTZ camera setting

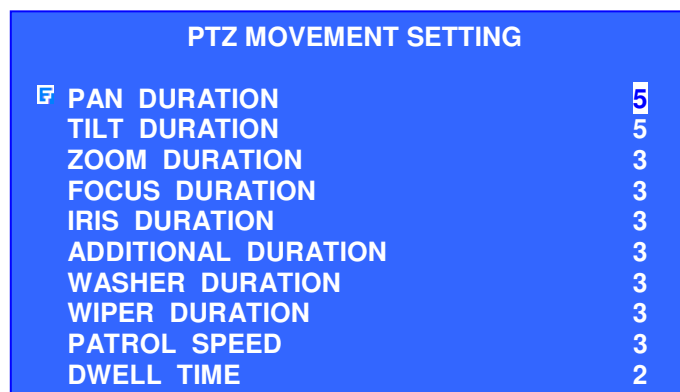
*\*Note: **BRIGHTNESS** / **CONTRAST** / **COLOR** settings only available in RX368\_V2 / RX328 / RX3616\_V2 / RX3216*

## Main Menu→ Setup→Video→Camera Setting→ Camera X Setting → General PTZ Setting



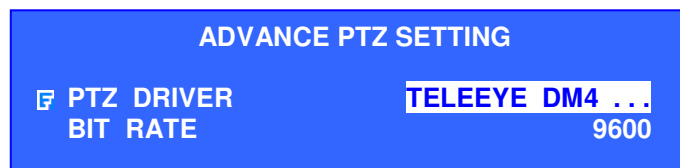
- |                             |   |
|-----------------------------|---|
| <b>PAN SPEED</b>            | : Select the pan (horizontal direction) speed of the PTZ camera |
| <b>TILT SPEED</b>           | : Select the tilt (vertical direction) speed of the PTZ camera  |
| <b>PTZ MOVEMENT SETTING</b> | : Change the PTZ camera movement duration                       |
| <b>ADVANCE PTZ SETTING</b>  | : Change the PTZ camera driver and baud rate                    |

## Main Menu→ Setup→Video→Camera Setting→ Camera X Setting → General PTZ Setting→ PTZ Movement Setting



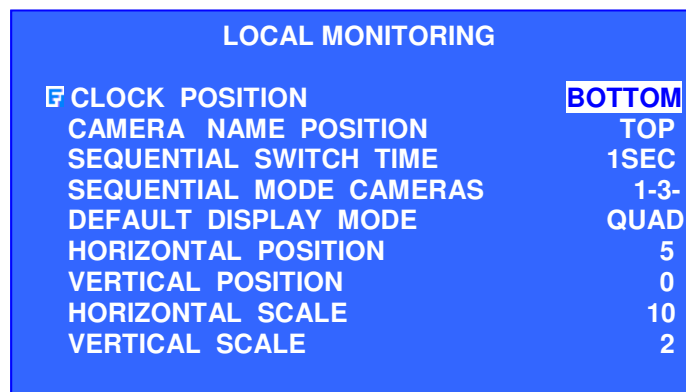
- |                            |  |
|----------------------------|--|
| <b>PAN DURATION</b>        | : Select the PTZ camera pan duration               |
| <b>TILT DURATION</b>       | : Select the PTZ camera tilt duration              |
| <b>ZOOM DURATION</b>       | : Select the PTZ camera zoom duration              |
| <b>FOCUS DURATION</b>      | : Select the PTZ camera focus duration             |
| <b>IRIS DURATION</b>       | : Select the PTZ camera iris duration              |
| <b>ADDITIONAL DURATION</b> | : Select the PTZ camera additional duration if any |
| <b>WASHER DURATION</b>     | : Select the PTZ camera washer duration            |
| <b>WIPER DURATION</b>      | : Select the PTZ camera wiper duration             |
| <b>PATROL SPEED</b>        | : Select the PTZ camera patrol speed               |
| <b>DWELL TIME</b>          | : Select the PTZ camera dwell time                 |

**Main Menu→ Setup→Video→Camera Setting→ Camera X Setting  
→ General PTZ Setting→ Advance PTZ Setting**



**PTZ DRIVER** : Select the PTZ camera driver  
**BIT RATE** : Select the PTZ camera bit rate

**Main Menu→ Setup→Video→Local Monitoring**



**CLOCK POSITION** : Change the clock position  
**CAMERA NAME POSITION** : Change the camera name position  
**SEQUENTIAL SWITCH TIME** : Change the switch time between each live camera display for sequential mode monitoring  
**SEQUENTIAL MODE CAMERAS** : Select cameras for sequential mode monitoring  
**DEFAULT DISPLAY MODE** : Select default display mode in CCTV monitor after **TeleEye RX** video recording server boot up  
**HORIZONTAL POSITION** : Change horizontal position of local video output  
**VERTICAL POSITION** : Change vertical position of local video output  
**HORIZONTAL SCALE** : Change horizontal scale of local video output  
**VERTICAL SCALE** : Change vertical scale of local video output

For [HORIZONTAL POSITION], [VERTICAL POSITON], [HORIZONTAL SCALE] and [VERTICAL SCALE] options, change these options if live video position or size display does not fit in the local CCTV monitor.

**Main Menu→ Setup→Video→Spot Video**

SPOT VIDEO	
<input type="checkbox"/> DEFAULT CAMERAS	12345678
SEQUENTIAL TIME	3SEC

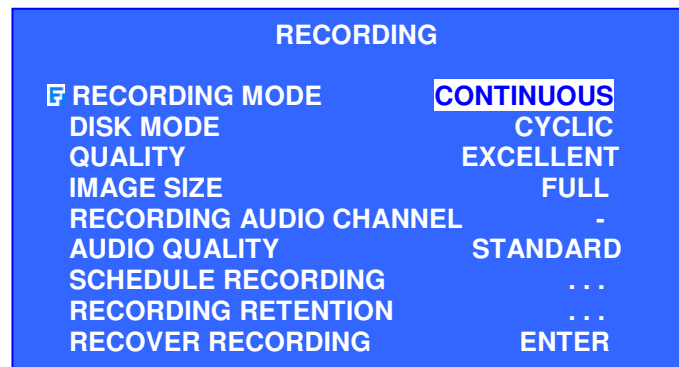
**CLOCK POSITION** : Change the clock position  
**CAMERA NAME POSITION** : Change the camera name position

**Main Menu→ Setup→Video→VGA Setting**

VGA SETTING	
VGA OUT	DETECTED
SPOT VGA OUT	NONE
<input type="checkbox"/> RESOLUTION	1024X768
FREQUENCY	75HZ

**VGA OUT** : Change the clock position  
**SPOT VGA OUT** : Change the camera name position  
**RESOLUTION** : Change VGA output resolution  
**FREQUENCY** : Change VGA output frequency

## Main Menu→Setup→Recording



<b>RECORDING MODE</b>	: Change recording mode in 1, 2, 3, 4, 5 frame per second (FPS), FULL 100 FPS* and continuous setting.
<b>DISK MODE</b>	: Select the fix or cyclic disk mode
<b>QUALITY</b>	: Change recording quality with 5 levels
<b>IMAGE SIZE*</b>	: Change recording video size in different modes
<b>RECORDING AUDIO CHANNEL</b>	: Select the recording audio channels
<b>AUDIO QUALITY</b>	: Change audio quality with standard or high quality
<b>SCHEDULE RECORDING</b>	: Set up a recording schedule up to 1 week
<b>RECORDING RETENTION</b>	: Set a retention period for recording
<b>RECOVER RECORDING</b>	: Recover damaged recording log.

*\*Note: FULL 100 FPS mode will record all installed cameras in FULL image size at 100 frames per second. User cannot change image size and recording cameras while FULL 100 FPS mode is selected.*

*Note: Recording in cyclic disk mode can erase the oldest recording data in hard disk if the hard disk is full, whereas recording will be stopped in fix disk mode*

*Note: 4 and 5 FPS are not supported in RX3616\_V2 / RX3216 when recording image size is set to FULL.*

**Recording Scheduler**

Recording scheduler allows users to record video with user selected time. It supports 2 modes of schedule recording: normal recording and motion recording.

**Normal type:**

The video recording server records video with user selected frame rate. Continuous, 1FPS, 2FPS, 3FPS, 4FPS, 5FPS and FULL 100 FPS can be chosen in normal recording mode.

**Motion type:**

The video recording server records video of a camera if the selected motion block in the camera detects motion during user selected time. Motion recording only provides 1FPS and continuous recording frame rate.

**OSD Menu Operation**



## Main Menu→Setup→Recording→Recording Audio Channel





## RECORDING AUDIO

1-


Press “Up”  / “Down”  / “Left”  / “Right”  to select the channel



*Note: One audio channel for RX364 / RX324. Two audio channels for RX368\_V2 / RX328 / RX3616\_V2 / RX3216. Recording audio channel 1 associates with camera 1. Recording channel 2 associates with camera 2.*


## ■ Adding Schedule In Calendar View

1. Press “Menu”  button, select [SETUP] option and press “Enter”  button to enter [SETUP] sub menu. Select [RECORDING] option and press “Enter”  button, then select [SCHEDULED RECORDING] option and press “Enter”  button to show recording scheduler menu.

RECORDING	
RECORDING MODE	CONTINUOUS
DISK MODE	CYCLIC
QUALITY	EXCELLENT
IMAGE SIZE	FULL
RECORDING AUDIO CHANNEL	-
AUDIO QUALITY	STANDARD
<input checked="" type="checkbox"/> SCHEDULED RECORDING	...
RECORDING RETENTION	...
RECOVER RECORDING	ENTER

2. Calendar View of recording schedule is shown. Press “Enter”  button to add schedule or change view.

SUNDAY		
HOUR	TIME SCALE	CAMERA
00 : 00		----
02 : 00		----
04 : 00		----
06 : 00		----
08 : 00		----
10 : 00		----
12 : 00		----
14 : 00		----
16 : 00		----
18 : 00		----
20 : 00		----
22 : 00		----
 : REC		 : MOTION REC









3. Select [ADD] option and press “Enter”  button to add a new recording schedule.

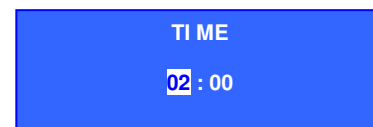
OPTION	
<b>ADD</b>	
LIST VIEW	

4. Select [TYPE] option to choose schedule recording type. [REC] for normal schedule recording. [MOTION REC] for motion schedule recording.

ADD SCHEDULE	
<input checked="" type="checkbox"/> TYPE	<b>REC</b>
WEEKDAYS	S-----
START TIME	00 : 00
END TIME	02 : 00
CAMERA	1234
FRAME RATE	CONTINUOUS
GENERAL MOTION SETTING	...
APPLY	ENTER

## OSD Menu Operation

5. Select **[WEEKDAYS]** and press “Enter”  button to select the day of time slot added in a week. Use “Up”  or “Down”  button to enable the day. From left to right, the day options are Sunday (S), Monday (M), Tuesday (T), Wednesday (W), Thursday (T), Friday (F) and Saturday (S). Press “Enter”  button to apply the weekdays setting.
6. In **[ADD SCHEDULE]** menu, select **[START TIME]** and **[END TIME]** to choose the time interval for the schedule recording. Press “Enter”  button and use “Up”  or “Down”  button to select the time. A time slot is minimum **10 minutes** long. Finally, press “Enter”  button to apply the time settings.



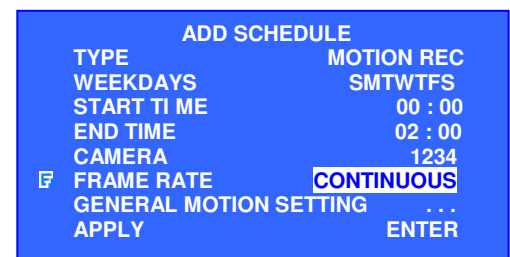
**Note that :**

If **[END TIME]** is earlier than **[START TIME]**, it will assume the end time is on next day.

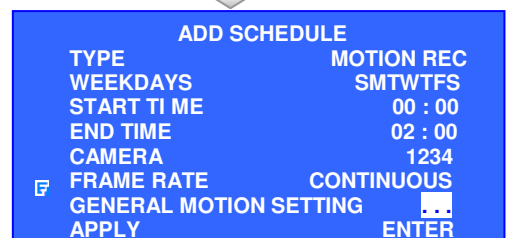
E.g. Monday, start time : 18:00, end time : 09:00

The schedule period is from Monday 18:00 to Tuesday 09:00.

7. In **[ADD SCHEDULE]** menu, select **[CAMERA]** or **[FRAME RATE]** to choose the frame rate or camera respectively. If **[FRAME RATE]** is set to FULL 100 FPS, **[CAMERA]** is not selectable and set to all installed camera automatically.




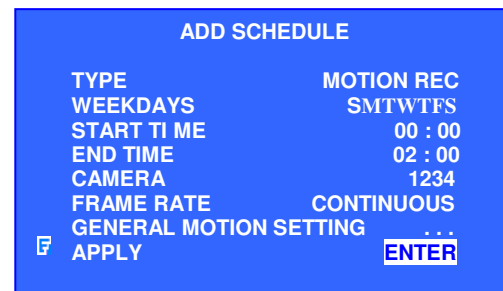
8. If user selects motion recording in **[TYPE]** option, user should set motion settings in **[GENERAL MOTION SETTING]** option.



9. Select the motion region and press “Enter”



10. Select [APPLY] and press “Enter”  button to save the recording schedule setting of the time slot.



← SUNDAY →			
HOUR	TIME SCALE		CAMERA
00:00			123546789ABCDEFGG
02:00			123546789ABCDEFGG
04:00			123546789ABCDEFGG
06:00			123546789ABCDEFGG
08:00			123546789ABCDEFGG
10:00			123546789ABCDEFGG
12:00			123546789ABCDEFGG
14:00			123546789ABCDEFGG
16:00			123546789ABCDEFGG
18:00			123546789ABCDEFGG
20:00			123546789ABCDEFGG
22:00			123546789ABCDEFGG




: REC    : MOTION REC

One block of time slot on calendar view represents a 10minute schedule, so one row represents 2-hour schedule.

The row represents a period of 8:00-10:00



- Red numbers means the cameras is normal recording.
- Green numbers means the cameras is motion recording
- White numbers means the cameras are set to motion and normal in the same row, i.e. within 2 hours.

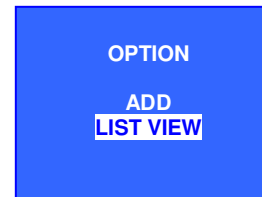
- Red block means the timeslot is set to normal recording.
- Green block means the time slot is set to motion recording.
- Only one recording type can be set in one time slot

11. Press “**Live**”  button to exit OSD menu or press “**Back**”  button to enter action menu again. Press “**Record**” button to enter [RECORDING] menu. Select [START SCHEDULE REC] and press “**Enter**”  button to activate recording scheduler




## ■ Recording Scheduler in List View

1. In calendar view, press “**Enter**”  button to pop up [OPTION] menu. Select [LIST VIEW] and press “**Enter**”  button to enter list view.




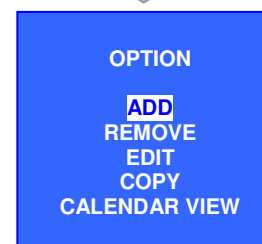
2. List view schedule is shown. The schedule in list view is same as the schedule in calendar view.

Press “**Enter**”  button to pop up [OPTION] menu.

SUNDAY				
START	END	CAMERA	FPS	
00 : 00	09 : 00	1234	C	
09 : 00	10 : 00	12-4	2	
10 : 00	12 : 00	1-3	1	
12 : 00	14 : 00	12—	3	
14 : 00	16 : 00	1-3	4	
16 : 00	18 : 00	1-34	5	
18 : 00	19 : 00	1234	C	
19 : 00	22 : 00	1234	1	
22 : 00	00 : 00	1-34	C	



3. In [OPTION] menu of list view, user can add, remove, edit or copy schedule in list view. Select [CALENDAR VIEW] and press “**Enter**”  button to return to calendar view.





## ■ Removing Schedule Procedure

1. In list view, select the time slot that you would like to remove.

SUNDAY			
START	END	CAMERA	FPS
00 : 00	09 : 00	1234	C
09 : 00	10 : 00	12-4	2
10 : 00	12 : 00	1-3-	1
12 : 00	14 : 00	12-	3
14 : 00	16 : 00	1-3-	4
16 : 00	18 : 00	1-34	5
18 : 00	19 : 00	1234	C
19 : 00	22 : 00	1234	1
22 : 00	00 : 00	1-34	C

■ : REC    ■ : MOTION REC

2. Press “**Enter**”  button to pop up [OPTION] menu. Select [**REMOVE**] and press “**Enter**”  button to pop up [REMOVE OPTION] menu.

OPTION

ADD  
REMOVE  
 EDIT  
 COPY  
 CALENDAR VIEW

3. Select [**REMOVE SELECTED**] to remove the selected schedule. User may choose [**REMOVE DAY**] to remove all schedules for the whole day. Or, choose [**REMOVE WEEK**] to remove all schedules in a week. Select [**CANCEL**] to exit the menu without removing schedule.

REMOVE OPTION



REMOVE SELECTED  
 REMOVE DAY  
 REMOVE WEEK  
 CANCEL

## ■ Editing Schedule Procedure

1. In list view, select a time slot that you would like to edit.


SUNDAY			
START	END	CAMERA	FPS
00 : 00	09 : 00	1234	C
09 : 00	10 : 00	12-4	2
10 : 00	12 : 00	1-3-	1
12 : 00	14 : 00	12-	3
14 : 00	16 : 00	1-3-	4
16 : 00	18 : 00	1-34	5
18 : 00	19 : 00	1234	C
19 : 00	22 : 00	1234	1
22 : 00	00 : 00	1-34	C

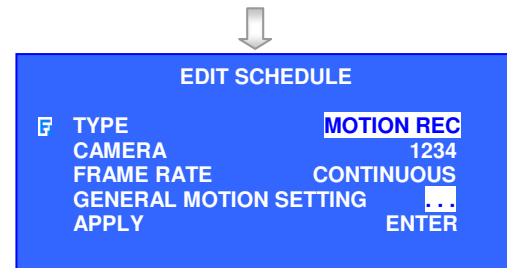
■ : REC    ■ : MOTION REC

2. Press “**Enter**”  button to pop up [OPTION] menu. Select [**EDIT**] and press “**Enter**”  button to pop up [EDIT SCHEDULE] menu.

OPTION

ADD  
 REMOVE  
EDIT  
 COPY  
 CALENDAR VIEW



3. In **[EDIT SCHEDULE]** menu, user can change recording type, camera and frame rate of that schedule. If the schedule is motion recording, user should change motion settings. After changing the settings, select **[APPLY]** and press “**Enter**”  button to save the new schedule settings.




## ■ Copying Schedule Procedure

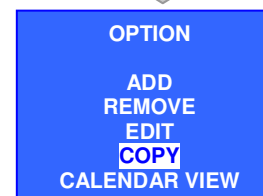
1. In list view, select the time slot that you would like to copy.

SUNDAY			
START	END	CAMERA	FPS
00 : 00	09 : 00	1234	C
09 : 00	10 : 00	12-4	2
10 : 00	12 : 00	1-3-	1
12 : 00	14 : 00	12-	3
14 : 00	16 : 00	1-3-	4
16 : 00	18 : 00	1-34	5
18 : 00	19 : 00	1234	C
19 : 00	22 : 00	1234	1
22 : 00	00 : 00	1-34	C

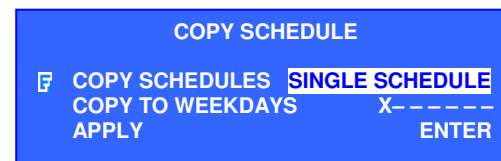
 : REC  : MOTION REC


Press “**Enter**”  button to pop up **[OPTION]** menu.

Select **[COPY]** option and press “**Enter**”  button to pop up **[COPY SCHEDULE]** menu.



2. In **[COPY SCHEDULE]** menu, select **[COPY SCHEDULES]** option and user should set **[SINGLE SCHEDULE]** to copy the selected schedule of the day or set **[ENTIRE DAY]** to copy all schedules of the day.










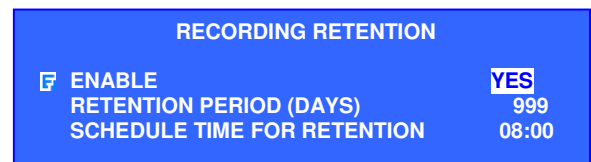
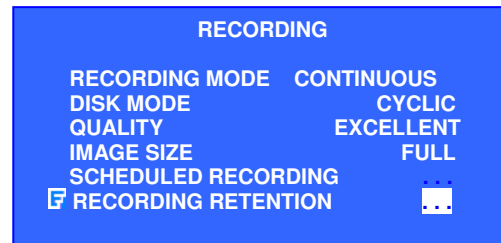
3. Select **[COPY TO WEEKDAYS]** option to set the day that the schedule copies to. Select **[APPLY]** option and press “**Enter**”  button to copy the schedule.

## ■ Recording Retention

**TeleEye RX** video recording server supports password protection for all menus, System administrator can setup a password to protect the video recording server from being operated by unauthorized operators

### Record Retention Setup Procedure

1. Press “Menu”  button, select [SETUP] option and press “Enter”  button to enter [SETUP] sub menu. Select [RECORDING] option and press “Enter”  button, then select [RECORD RETENTION] option and press “Enter”  button to show [RECORDING RETENTION] menu.
2. In [RECORDING RETENTION] menu, user can enable/disable this function, set retention period and schedule time for retention. Press “Enter”  button after selecting [RETENTION PERIOD (DAYS)] / [SCHEDULE TIME FOR RETENTION] and use “Up”  or “Down”  button to select the period / time.



### Main Menu→Setup→Switches

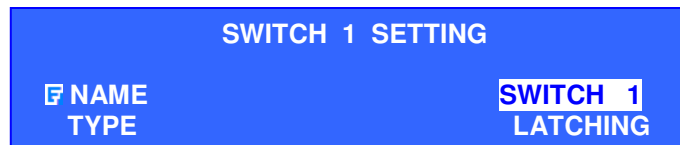


Change the switch setting by choosing “SWITCH 1, 2, 3 and 4”

## OSD Menu Operation

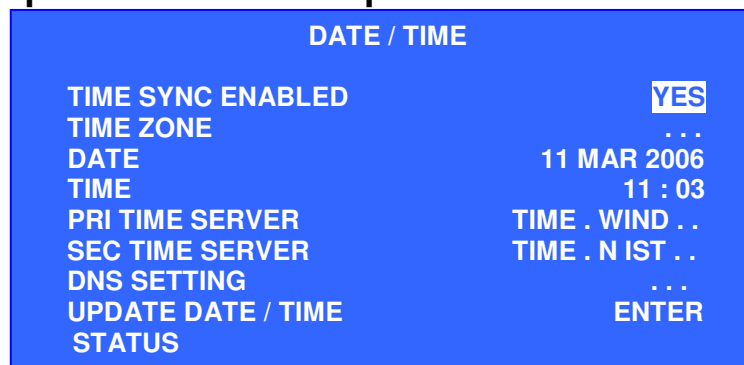


## Main Menu→ Setup→ Switches→ Switch 1 Setting



- NAME** : Edit the name of the switch
- TYPE** : Change the type of the switch, either **latching** or **push-button** type

## Main Menu→ Setup→ Date Time Setup

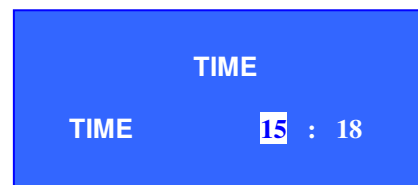
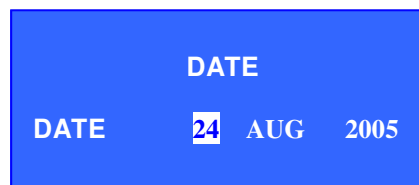







- TIME SYNC ENABLED** : Enable/Disable time synchronization
- TIME ZONE** : Change the time zone
- DATE** : Set the current date
- TIME** : Set the current time
- PRI TIME SERVER** : Set a primary time server
- SEC TIME SERVER** : Set a secondary time server
- DNS SETTING** : Change the network setting
- UPDATE DATE/TIME** : Update date/time from server
- STATUS** : Show the status of time sync

## Modify system time

1. System date and time can only be modified when **TIME SYNC** is disabled.






2. Press “Enter”  button to select [DATE TIME] or [TIME] option



3. Press “Left”  / “Right”  button to select date, month, year for [DATE TIME] or select hour, minutes for [TIME] option
4. Press “Up”  / “Down”  button to change the value
5. Press “Enter”  button to save setting and exit this page of menu

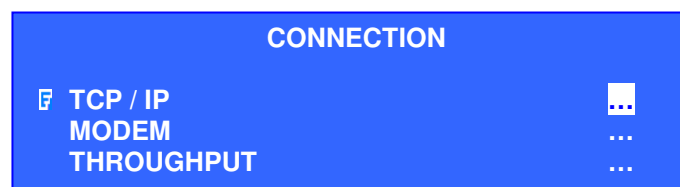
## OSD Menu Operation

## Main Menu→ Setup→ Date/Time→ Time Zone

1. Select a corresponding time zone will enable Daylight saving function.
2. Press “Left”  / “Right”  button to select between time zones (GMT).
3. Press “Up”  / “Down”  button to select between different cities
4. Press “Enter”  button to save setting and back to previous menu.



## Main Menu→ Setup→ Connection



- |            |   |
|------------|---|
| TCP / IP   | : Configure <b>TCP/IP</b> network related setting |
| MODEM      | : Configure modem related setting                 |
| THROUGHPUT | : Configure throughput control setting            |

## Main Menu→ Setup→ Connection→ TCP / IP

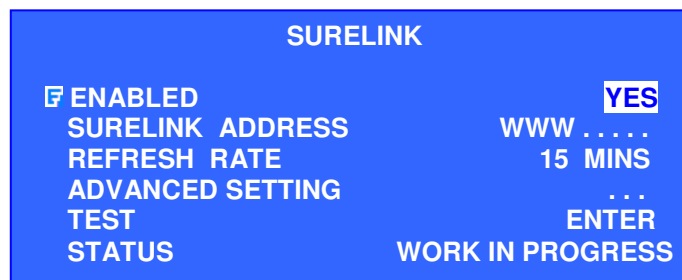


- |                |   |
|----------------|---|
| IP             | : Change <b>TeleEye RX</b> video recording server IP              |
| PORT           | : Change <b>TeleEye RX</b> video recording server port            |
| SUBNET MASK    | : Change <b>TeleEye RX</b> video recording server subnet mask     |
| ENABLE GATEWAY | : Enable <b>TeleEye RX</b> video recording server gateway setting |
| GATEWAY        | : Change <b>TeleEye RX</b> video recording server gateway         |
| ENABLE DNS     | : Enable <b>TeleEye RX</b> video recording server DNS             |

## OSD Menu Operation

setting  
**PRIMARY DNS** : Change **TeleEye RX** video recording server primary DNS  
**SECONDARY DNS** : Change **TeleEye RX** video recording server secondary DNS  
**SURELINK** : Change **TeleEye RX** video recording server **sureLINK** setting

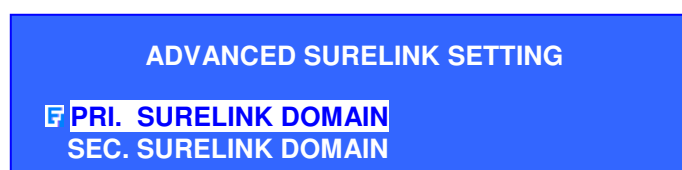
**Main Menu→ Setup→ Connection→ TCP / IP→ **sureLINK****





**ENABLED** : Enable **sureLINK** option  
**SURELINK ADDRESS** : Change the **TeleEye RX** video recording server **sureLINK** address  
**REFRESH RATE** : Select the **sureLINK** refresh rate  
**ADVANCED SETTING** : Set the primary and secondary **sureLINK** domain  
**TEST** : Test connection to **sureLINK** server  
**STATUS** : The status of the **sureLINK**

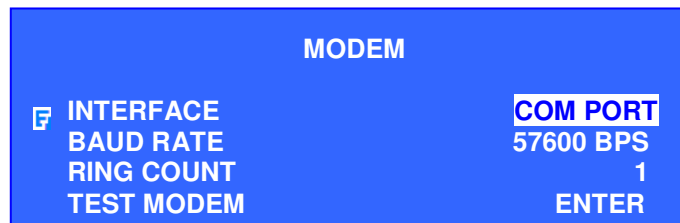
*Note: There are three status; success, work in progress and fail. Success means it connects to the **sureLINK** server successfully.*

**Main Menu→ Setup→ Connection→ TCP / IP→ **sureLINK****  
**→ Advanced setting**



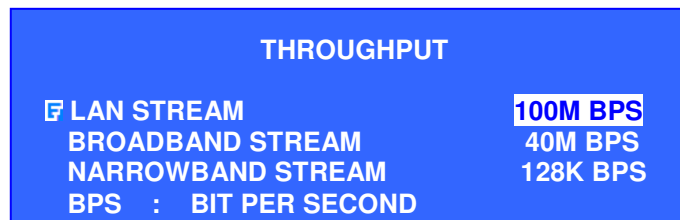
1. Select [PRI. SURELINK DOMAIN] and press “Enter”  button to set the primary **sureLINK** suffix.
2. After inputting the primary **sureLINK** domain, select [SEC. SURELINK DOMAIN] and press “Enter”  button to set the secondary **sureLINK** suffix.

## Main Menu→ Setup→ Connection→ Modem



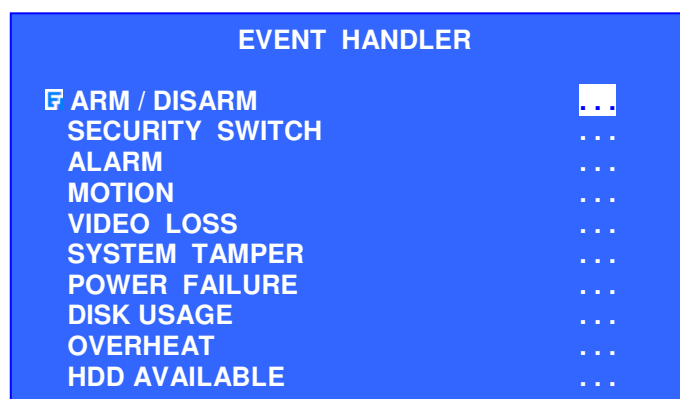
- INTERFACE** : Change the interface of the modem (USB/COM POT/DISABLE)
- BAUD RATE** : Change the baud rate of the modem
- RING COUNT** : Change the ring count to connect to the modem
- TEST MODEM** : Test the status of the modem

## Main Menu→ Setup→ Connection→ Throughput



- LAN STREAM** : Change the data rate of LAN connection
- BROADBAND STREAM** : Change the data rate of broadband connection
- NARROWBAND STREAM** : Change the data rate of narrowband connection

## Main Menu→ Setup→ Event Handler



The event handler menu contain 9 functions (**ARM/DISARM**, **SECURITY SWITCH**, **ALARM**, **MOTION**, **VIDEO LOSS**, **SYSTEM TAMPER**, **POWER FAILURE**, **DISK USAGE**, **OVERHEAT** and **HDD Available**)

## Main Menu→ Setup→ Transmitter

TRANSMITTER	
TRANSMITTER NAME	RX364
REGISTRATION CHECKING	YES
BUILT-IN WEB SERVER	NO
UPGRADE	...

- TRANSMITTER NAME** : Rename the video recording server
- REGISTRATION CHECKING** : Check if the serial number of the video recording server match the serial number registered in the reception software WX-30 or not
- BUILT-IN WEB SERVER** : Change the status of built-in server
- UPGRADE** : Upgrade new version firmware

## Main Menu→ Setup→ Transmitter→Upgrade

FIRMWARE UPGRADE	
UPGRADE FROM USB	ENTER
UPGRADE FROM CD	ENTER

The new version firmware can be upgraded via USB or CD

*Note: User needs to install a formatted hard disk first before the firmware upgrade through CD*

## Main Menu→ Setup→ Password

PASSWORD MENU	
ENABLE EVENT MENU PASSWORD	NO
ENABLE RECORDING MENU PASSWORD	NO
ENABLE SEARCH MENU PASSWORD	NO
ENABLE MAIN MENU PASSWORD	NO
ENABLE KEYS LOCKED PASSWORD	NO
CHANGE PASSWORD	...

- ENABLE EVENT MENU PASSWORD** : Change the status of event menu password
- ENABLE RECORDING MENU PASSWORD** : Change the status of recording menu password
- ENABLE SEARCH MENU PASSWORD** : Change the status of search menu password
- ENABLE MAIN MENU PASSWORD** : Change the status of main menu password
- ENABLE KEYS LOCKED PASSWORD** : Change the status of keys locked password
- CHANGE PASSWORD** : Setup a new password

*\*Note: default password = 111111*

## OSD Menu Operation

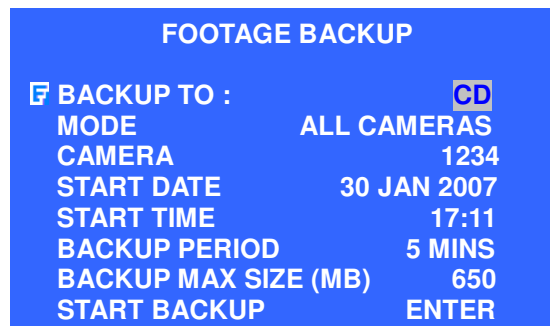
## Main Menu→ Footage Backup



**BACKUP TO CD** : Backup footage to CD-R

**BACKUP TO DVD** : Backup footage to DVD-R

**BACKUP TO USB FLASH** : Backup footage to USB Flash



**MODE** : Set the backup type (ALL CAMERAS / SELECT CAM / QUICK)

**CAMERA** : Choose backup cameras

**START DATE** : Set the start date of the footage

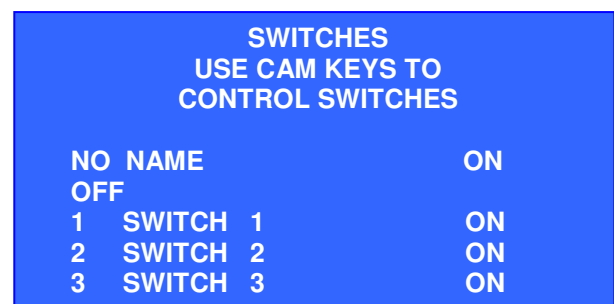
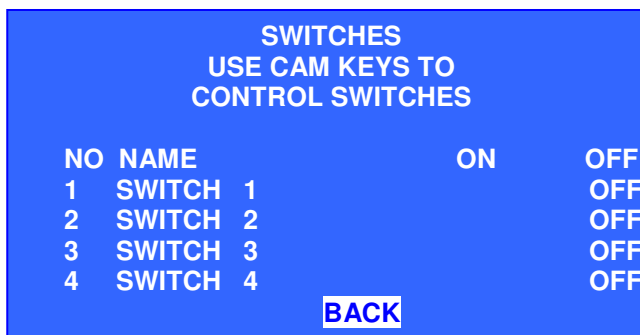
**START TIME** : Set the start time of the footage

**BACKUP PERIOD** : Set the backup period

**MAX BACKUP SIZE** : Set the backup size (10MB ~ 650 MB for CD, 10MB ~ 4700 MB for DVD and USB Flash)

**START BACKUP** : Start Backup operation, and **TeleEye RX** video recording server will search the footages from start date and time and calculate the end time of footage according to the footages size and backup size.

## Main Menu→ Switch Control



The switches can be controlled by pressing the cam keys (1, 2, 3 and 4) respectively. And the screen will show the current status (ON/OFF) of switches

**SWITCH 1** : Control by cam key 1

**SWITCH 2** : Control by cam key 2

**SWITCH 3** : Control by cam key 3

**SWITCH 4** : Control by cam key 4



## OSD Menu Operation

## Main Menu→ Scan / Format Disk

SCAN / FORMAT DISK	
DEVICE	LOCAL
START TIME	22:35 20/06/06
END TIME	10:07 15/11/06
MASTER MODEL NO	XXXX
MASTER SERIAL NO	XXXX
MASTER CAPACITY	400GB
SLAVE MODEL NO	N/A
SLAVE SERIAL NO	
SLAVE CAPACITY	
DISK USAGE	52%
SCAN DISK	ENTER
FORMAT DISK	ENTER

DEVICE	: Show the device type
START TIME	: Show the start time of recording
END TIME	: Show the end time of recording
MODEL NO	: Show the device model no.
SERIAL NO	: Show the device serial no.
CAPACITY	: Show the capacity of the device
DISK USAGE	: Show the disk usage in percentage
SCANDISK	: Start HDD scanning operation
FORMAT	: Start HDD formatting operation

Note :

Start time is the first recording time and end time is the latest recording time in RX. Select [DEVICE] and use “Left”  or “Right”  button to choose RX-SE. It will show the first and the latest recording time of RX-SE in START TIME and END TIME. The information under the scan/format disk sub-menu will be changed after formatted disk.

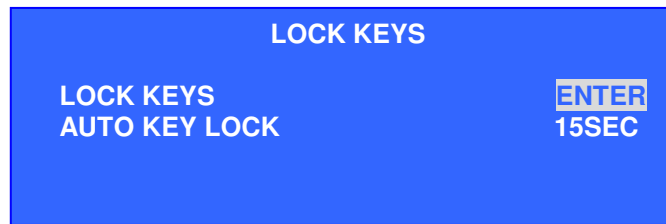
## Main Menu→ Transmitter Information

TRANSMITTER INFORMATION	
TRANSMITTER NAME	RX364
TRANSMITTER IP	192.168.0.2
MODEL NO .	RX364
SERIAL NO .	VTCXXXXX
VERSION	01.00

TRANSMITTER NAME	: Show the video recording server name
TRANSMITTER IP	: Show the video recording server IP address
MODEL NO.	: Show the video recording server model no.
SERIAL NO.	: Show the video recording server serial no.
VERSION	: Show the video recording server firmware version

## OSD Menu Operation

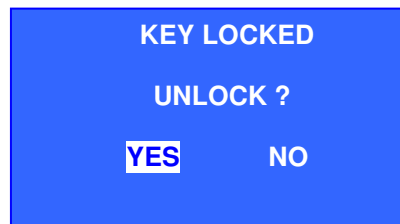


**Main Menu→ Lock Keys****LOCK KEYS**

: Lock all keys on the front panel

**AUTO KEY LOCK**

: Select auto key lock duration, keys on front panel will be automatically locked up if no button is being pressed after the selected period.





When the keys are being locked, pressing any key on the front panel the system will show a message to confirm the unlock operation. Select “YES” to unlock the keys , “NO” to keep the keys locked.

## C. Recording Log Menu



RECORDING LOG		12 - 13 AUG2005					
TIME	CAMERA	EVENT	REMARK	SENSOR	MOTION	AUDIO	VIDEOLOSS
11 : 00	1234	----	-----	----	----	--	----
12 : 00	---4	----	-----	----	----	--	----
13 : 00	----	----	-----	----	----	--	----
14 : 00	- 2 -	----	-----	----	----	--	----
15 : 00	----	----	-----	----	----	--	----
16 : 00	1---	----	-----	----	----	--	----
17 : 00	1---	----	-----	----	----	--	----

<b>TIME</b>	: Show date of log
<b>CAMERA</b>	: Show time of log
<b>EVENT</b>	: Show event triggered
<b>REMARK</b>	: Items are not available now
<b>SENSOR</b>	: Show alarm sensor triggered
<b>MOTION</b>	: Show motion trigger in which camera
<b>AUDIO</b>	: Show audio channel
<b>VIDEOLOSS</b>	: Show camera video loss

1. Press “**Enter**”  button to choose play recording log, time search function and log time scale
2. Press the “**Back**”  button to exit the recording log menu

<b>PLAY</b>
<b>TIME SEARCH</b>
<b>MONTH LOG</b>
<b>DAY LOG</b>
<b>HOURL LOG</b>
<b>10MIN LOG</b>
<b>MINUTE LOG</b>

<b>PLAY</b>	: Play the current selected record
<b>TIME SEARCH</b>	: Search specify time recording log and play it
<b>MONTH LOG</b>	: Change the recording log scale to month
<b>DAY LOG</b>	: Change the recording log scale to day
<b>HOURL LOG</b>	: Change the recording log scale to hour
<b>10MIN LOG</b>	: Change the recording log scale to 10 minutes
<b>MINUTE LOG</b>	: Change the recording log scale to 1 minute


## Recording Log Menu→Time Search

TIME SEARCH	
DATE	13 SEP 2005
TIME	10 : 30
CAMERA	1234
<input type="checkbox"/> SEARCH	<b>ENTER</b>
SEARCH MULTIPLE	ENTER


**DATE** : Select the date of record  
**TIME** : Select the time of record  
**CAMERA** : Select the camera of record  
**SEARCH** : Search the record  
**SEARCH MULTIPLE** : Search the multiple records


## Recording Log Menu→Search Multiple

TIME SEARCH	
DATE	13 SEP 2005
TIME	10 : 30
CAMERA	1234
SEARCH	<b>ENTER</b>
<input checked="" type="checkbox"/> SEARCH MULTIPLE	<b>ENTER</b>

1. Select search multiple and press “**Enter**”  button. Multiple results will show if there is more than one record included in the search time.

SEARCH RESULT						10:30 13 SEP2005	
NO.	CAMERA	EVENT	REMARK	SENSOR	MOTION	AUDIO	VIDEOLOSS
1	1234	----	-----	----	----	--	----
2	---4	----	-----	----	----	--	----
3	12--	----	-----	----	----	--	----
4	-2--	----	-----	----	----	--	----

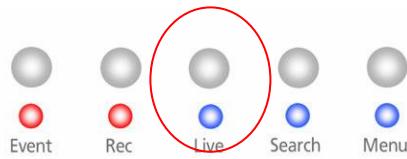
2. Select the number and press “**Enter**”  button.




3. Select play and Press “**Enter**”  button to view the result.

<b>PLAY</b>
TIME SEARCH
MONTH LOG
DAY LOG
HOUR LOG
10MIN LOG
MINIUTE LOG


## OSD Menu Operation

## D. PTZ Menu





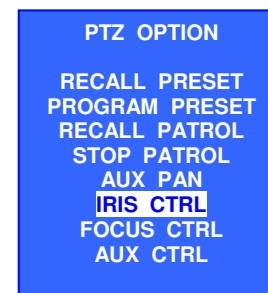
- For any camera supports PTZ, [PTZ OPTION] menu always pops up when user press the “Live”  button. Select [DISABLE PTZ] to disable PTZ function.
- Use the “Up”  / “Down”  button to select each option



### PTZ Control Interface

PTZ symbol  will flash near the camera name on the OSD for current controlling PTZ camera. User can use front panel to perform pan / tilt / zoom action of the selected PTZ supported camera anytime when live monitoring on OSD.

### PTZ Control Method :

- Press “Live”  button to pop up PTZ control options.  
Select any options and press “Enter”  button to pop up.





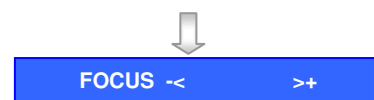
- For example, if [IRIS CTRL] is selected. Iris control menu will pop up. Use “Left”  or “Right”  button to control - or + the value respectively.



- To Recall Preset, Program Preset and Recall Patrol options, Press “Live Camera Control Buttons” to select preset numbers.

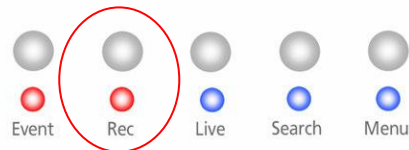


- Use “Up” , “Down”  buttons to select other PTZ camera control as example on the left.



### OSD Menu Operation

## E. Recording Menu



1. Press the “**Rec**” button to pop up the main menu
2. Using the “**Up**” / “**Down**” button to select recording and set recording camera

**START RECORDING** : Start recording operation  
**RECORDING CAMERA** : Select the camera for recording\*  
**START SCHEDULE REC** : Start scheduled recording

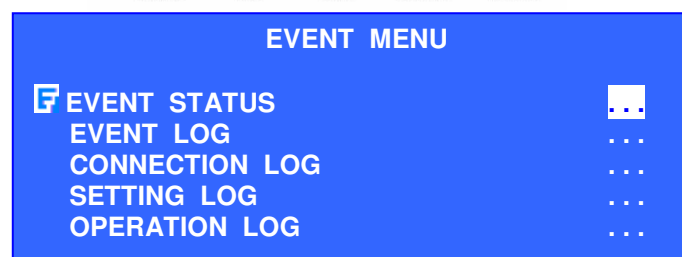
*\*Note: REC CAMERA is not selectable when recording mode is set to FULL 100FPS, all cameras will be recorded under this recording mode.*





### Recording Menu→Recording Camera




1. Using the “**Left**” / “**Right**” button to select camera
2. Press the “**Up**” / “**Down**” button to enable or disable camera for recording
3. Press “**Enter**” button to confirm the selection. Press the “**Back**” button to exit without saving any recording camera setting



## F. Event Menu




1. Press the “**Event**”  button to pop up the event menu
2. Using the “**Up**”  / “**Down**”  button to select a sub-menu
3. A selected sub-menu option will be pointed by a hand cursor and highlighted
4. Press “**Enter**”  button to confirm the selection and pop up the sub-menu

<b>EVENT STATUS</b>	: Show event status
<b>EVENT LOG</b>	: Show the event log
<b>CONNECTION LOG</b>	: Show the remote connection log
<b>SETTING LOG</b>	: Show the setting log
<b>OPERATION LOG</b>	: Show the operation log

1. If menu option end with [. . .] indicates sub-menu existing, you can always press “**Enter**”  button to pop up the sub-menu.

2. Press the “**Back**”  button back to previous menu and “**Live**”  button to exit menu.

## Event Menu→ Event Status

EVENT STATUS	
ALARM	1234
MOTION	12
VIDEO LOSS	- - 34
DISK FULL	NORMAL
OVERHEAT	NORMAL
TAMPER	SYS/ARMSECSW
POWER FAILURE	FAIL
HDD AVAILABLE	. . .
 CLEAR EVENT	<b>ENTER</b>

<b>ALARM</b>	: Show the alarm status
<b>MOTION</b>	: Show the motion status
<b>VIDEO LOSS</b>	: Show the video loss status
<b>DISK FULL</b>	: Show the hard disk status
<b>OVERHEAT</b>	: Show the overheat status
<b>SYSTEM FAILURE</b>	: Show the system status
<b>TAMPER</b>	: Show the arm, security switch and system tamper status
<b>POWER FAILURE</b>	: Show the status of power failure input
<b>HDD AVAILABLE</b>	: Show the HDD ststus
<b>CLEAR EVENT</b>	: Clear event

## OSD Menu Operation

## Event Menu→ Alarm Log

ALARM LOG				
DATE	TIME	CHANNEL	STATUS	ACTION
03AUG05	12 : 45 : 18	--- 4 ----	RESET	-----
03AUG05	12 : 29 : 46	--- 4 ----	TGR	R- D - B-
02AUG05	09 : 50 : 33	-----	ARM	-----
02AUG05	09 : 35 : 02	- 2 -----	TAMPER	--- E - -
01AUG05	11 : 05 : 03	-----	SS ON	-----
01AUG05	10 : 25 : 36	1 -----	RESET	-----
01AUG05	10 : 10 : 10	1 -----	TGR	- S- E - P
01AUG05	09 : 29 : 17	-----	ENTRY	-----

**DATE** : Show the date log  
**TIME** : Show the time log  
**CHANNEL** : Show the event number (alarm / motion & videoloss only)  
**STATUS** : Show the status. Full description of status is shown as follow:

Display	Description
TGR	Event trigger
TAMPER	Alarm tampered
RESET	Event reset
CLEAR	User clear event status
ARM	System is armed
DISARM	System is disarmed
SS ON	Security switch turned on
SS OFF	Security switch turned off
ENTRY	Event trigger during entry delay time
EXIT	Event trigger during exit delay time

**ACTION** : Show the event associated action

Display	Description
R	Recording
S	Switch
D	Dial back
E	E-mail notification
M	SMS
B	Buzzer
P	Recall Preset PTZ position
L	Associate camera to local monitor



## Event Menu→ Connection Log

CONNECTION LOG						
DATE	TIME	USER	REMARK	IP/PHONE NO	DEVICE	STATUS
22AUG05	12 : 45 : 18	ADMIN	- - - -	192.168.0.2	TCP / IP	DISCONNECTED
22AUG05	12 : 29 : 46	ADMIN	DIAL IN	192.168.0.2	TCP / IP	CONNECTED
21AUG05	09 : 50 : 33	ADMIN	- - - -	192.168.0.2	TCP / IP	DISCONNECTED
21AUG05	09 : 35 : 02	ADMIN	DIAL BACK	192.168.0.2	TCP / IP	CONNECTED
20AUG05	11 : 05 : 03	ADMIN	- - - -	192.168.0.2	TCP / IP	DISCONNECTED
20AUG05	10 : 25 : 36	ADMIN	DIAL BACK	192.168.0.2	TCP / IP	CONNECTED
20AUG05	10 : 10 : 10	ADMIN	- - - -	192.168.0.2	TCP / IP	DISCONNECTED
20AUG05	09 : 29 : 17	ADMIN	DIAL BACK	192.168.0.2	TCP / IP	CONNECTED

**DATE** : Show the date log  
**TIME** : Show the time log  
**USER** : Show the user type connected to the video recording server through remote software  
**REMARK** : Show the connection triggered by user or dialback action  
DIAL IN→ Remote connect to video recording server  
DIAL BACK→ Transmitter connect to remote  
**IP/PHONE NO.** : Show the IP or phone number of the remote host  
**DEVICE** : Show connection method by the remote software  
**STATUS** : Show the connection status

## Event Menu→ Setting Log

SETTING LOG						
DATE	TIME	OPERATION	CHANNEL	REMARK	DEVICE	IP / PHONE NO
03DEC05	12 : 45 : 18	ALARM SEN TYPE	- - - 4	NC	TCP / IP	192.168. 0. 2
03DEC05	12 : 29 : 46	MOTION	- - - 4	ENABLED	LOCAL	0. 0. 0. 0
02DEC05	09 : 50 : 33	RECORD MODE	- - - -	CONTINUOUS	LOCAL	0. 0. 0. 0
02DEC05	09 : 35 : 02	VIDEOLOSS	- 2 - -	ENABLED	LOCAL	0. 0. 0. 0
01DEC05	11 : 05 : 03	VIDEO FORMAT	- - - -	NTSC	TCP / IP	192.168. 0. 2
01DEC05	10 : 25 : 36	ALARM TMR TYPE	1 - - -	DEOL	TCP / IP	192.168. 0. 2
01DEC05	10 : 10 : 10	ALARM	1 - - -	ENABLED	LOCAL	0. 0. 0. 0
01DEC05	09 : 29 : 17	CAMERA	- - 3 -	INSTALLED	LOCAL	0. 0. 0. 0



**DATE** : Show the date log  
**TIME** : Show the time log  
**OPERATION** : Show the setting that was done by user (Please refer to the Appendix)  
**CHANNEL** : Show the channel for the setting, such as alarm sensor number, camera number  
**REMARK** : Show the set value of the setting  
**DEVICE** : Show the setting that was done by which type of user  
**IP / PHONE NO** : Show the IP or phone number for the remote user

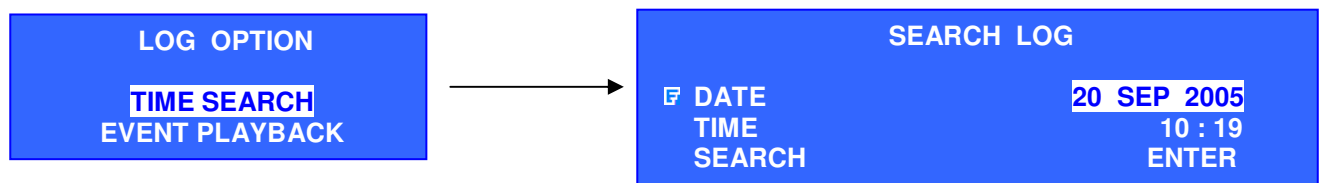
## Event Menu→ Operation Log

OPERATION LOG				
DATE	TIME	OPERATION	DEVICE	IP / PHONE NO
03DEC05	12 : 45 : 18	STOP PLAYBACK	TCP / IP	192.168. 0. 2
03DEC05	12 : 29 : 46	START PLAYBACK	LOCAL	0. 0. 0. 0
02DEC05	09 : 50 : 33	STOP RECORDING	LOCAL	0. 0. 0. 0
02DEC05	09 : 35 : 02	START RECORDING	LOCAL	0. 0. 0. 0
01DEC05	11 : 05 : 03	STOP PLAYBACK	LOCAL	0. 0. 0. 0
01DEC05	10 : 25 : 36	START PLAYBACK	TCP / IP	192.168. 0. 2
01DEC05	10 : 10 : 10	STOP RECORDING	LOCAL	0. 0. 0. 0
01DEC05	09 : 29 : 17	START RECORDING	TCP / IP	192.168. 0. 2

**DATE** : Show the date log  
**TIME** : Show the time log  
**OPERATION** : Show the operation done by user (Please refer to the Appendix)  
**DEVICE** : Show the setting done by which type of user  
**IP / PHONE NO** : Show the IP or phone number for the remote user

## Search Log

For each log, you can press “**Enter**”  button to enter the log option, and press “**Enter**”  button in [TIME SEARCH] option to enter search log menu.





The connection log contains the following options

**DATE** : Set the search date  
**TIME** : Set the search time  
**SEARCH** : Search the nearest record according to the **date** and **time**

## Playing corresponding footage from event Log


Event log playback supports user to playback the video directly from selected event log.

### Event Log Playback Procedure :

1. Press “**Event**”  button to pop up the event menu. Select **[EVENT LOG]** option and press “**Enter**”  button to view all kinds of event logs.



EVENT LOG	
ALARM LOG	...
MOTION LOG	...
VIDEO LOSS LOG	...
SYSTEM TAMPER LOG	...
ARM DISARM TAMPER LOG	...
SECU. SWITCH TAMPER LOG	...
POWER FAILURE LOG	...
DISK USAGE LOG	...
OVERHEAT LOG	...
HDD AVAILABLE	...



2. For example, selecting **[ALARM LOG]** and press “**Enter**”  button to enter alarm log menu.

ALARM LOG				
DATE	TIME	CHANNEL	STATUS	ACTION
03AUG05	12 : 45 : 18	--- 4 ---	RESET	-----
03AUG05	12 : 29 : 46	--- 4 ---	TGR	R- D - B-
02AUG05	09 : 50 : 33	-----	ARM	-----
02AUG05	09 : 35 : 02	- 2 -----	TAMPER	--- E --
01AUG05	11 : 05 : 03	-----	SS ON	-----
01AUG05	10 : 25 : 36	1 -----	RESET	-----
01AUG05	10 : 10 : 10	1 -----	TGR	- S - E - P
01AUG05	09 : 29 : 17	-----	ENTRY	-----



3. In the alarm log menu, press “**Enter**”  button to pop up **[LOG OPTION]** menu. If there exists a corresponding recording event, **[EVENT PLAYBACK]** option will be included in the **[LOG OPTION]** menu for playback the video.
4. Select **[EVENT PLAYBACK]** and press “**Enter**”  button to watch the playback for this event.

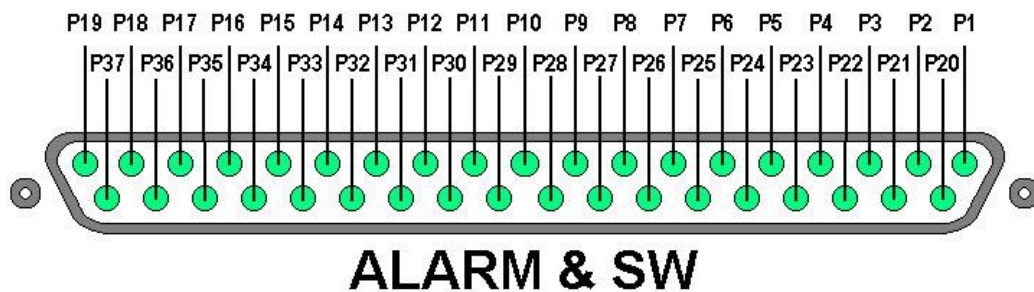
LOG OPTION	
TIME SEARCH	
EVENT PLAYBACK	

## SECTION 6

# Advanced Operation

## A. Install *TeleEye* RX with Alarm Sensors and Relay Control Port

*TeleEye* RX supports up to 16 alarm ports in that order with tamper detection for connecting with alarm sensors, 4 additional input sensors and 4 relay ports for control. The definitions of alarm and relay control ports are shown in the following diagram.



### Pin assignment for *TeleEye* RX

Pin 1	ALARM 1	Pin 20	GND
Pin 2	ALARM 2	Pin 21	GND
Pin 3	ALARM 3	Pin 22	GND
Pin 4	ALARM 4	Pin 23	GND
Pin 5	ALARM 5	Pin 24	GND
Pin 6	ALARM 6	Pin 25	GND
Pin 7	ALARM 7	Pin 26	GND
Pin 8	ALARM 8	Pin 27	GND
Pin 9	ALARM 9	Pin 28	ARM/DISARM
Pin 10	ALARM 10	Pin 29	SECURITY SWITCH
Pin 11	ALARM 11	Pin 30	POWER FAILURE
Pin 12	ALARM 12	Pin 31	SYSTEM TAMPER
Pin 13	ALARM 13	Pin 32	ALARM 14
Pin 14	ALARM 15	Pin 33	ALARM 16
Pin 15	RELAY 0a	Pin 34	RELAY 0b
Pin 16	RELAY 1a	Pin 35	RELAY 1b
Pin 17	RELAY 2a	Pin 36	RELAY 2b
Pin 18	RELAY 3a	Pin 37	RELAY 3b
Pin 19	N/A		

## B. Install TeleEye RX with Tamper Circuit and External Resistors

**TeleEye RX** supports tamper detection (DEOL and SEOL) on all alarm inputs including arm/disarm input, security switch input, system tamper and power failure input.

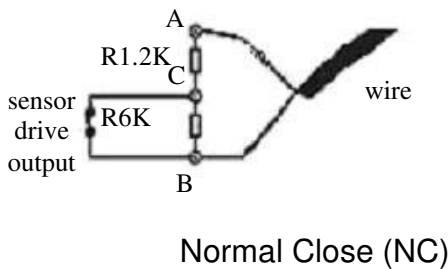
**DEOL: Dual End of Line termination with NC and NO connection**

**SEOL: Single End of Line termination with NC and NO connection**

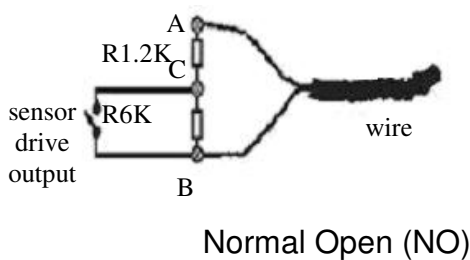
**NC/NO: Alarm and other input ports without tamper detection circuit connection**

For example: By connecting the tamper circuit with DEOL, the circuit is in the normal close condition if the resistance between point A and B detects  $1.2k\Omega$  (shown as below), whereas the circuit is in normal open condition if the resistance between point A and B (shown as below) detects  $7.2k\Omega$ . The resistance transition from  $1.2k\Omega$  to  $7.2k\Omega$  is generated by an alarm tamper event for normal close circuit. The setup configuration of those alarms and input ports are shown in the following diagram. The circuit debouncing time between each sensor is 20 millisecond.

### Dual End of Line Configuration

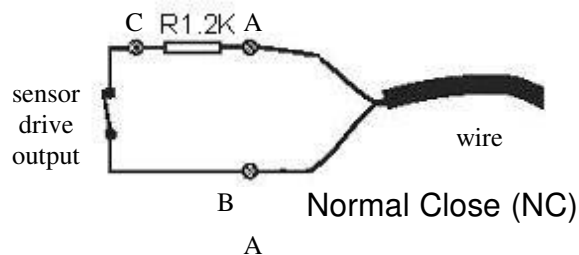


Term	Status	Description
S/C	TAMPER	Wire short (point A and B)
LoZ	NORMAL	Sensor drive output close (point B and C)
HiZ	ALARM	Sensor drive output open (point B and C)
O/C	TAMPER	Wire open (point A and B)

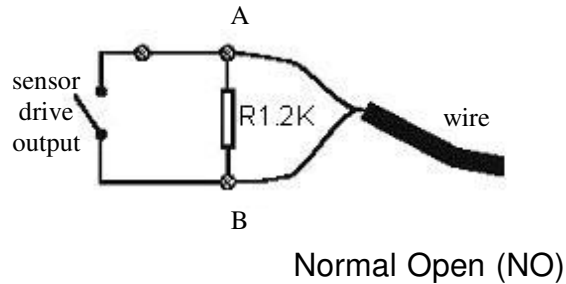


Term	Status	Description
S/C	TAMPER	Wire short (point A and B)
LoZ	ALARM	Sensor drive output close (point B and C)
HiZ	NORMAL	Sensor drive output open (point B and C)
O/C	TAMPER	Wire open (point A and B)

## Single End of Line Configuration

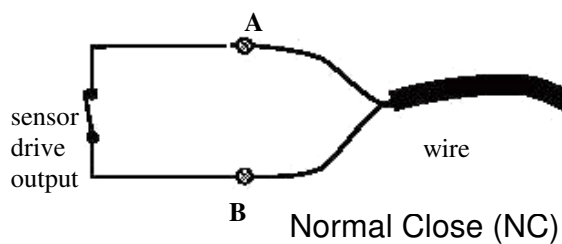


Term	Status	Description
S/C	TAMPER	Wire short (point A and B)
LoZ	NORMAL	Sensor drive output close (point B and C)
O/C	ALARM	Sensor drive output open (point B and C)

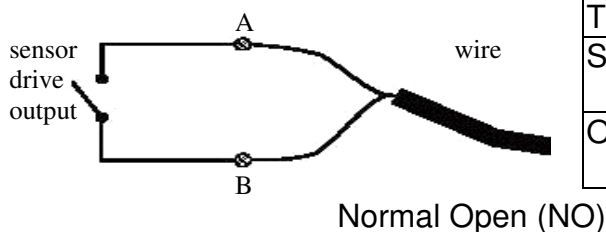


Term	Status	Description
S/C	ALARM	Sensor drive output close (point A and B)
LoZ	NORMAL	Sensor drive output open (point A and B)
O/C	TAMPER	Wire open (point A and B)

## Without Tamper Detection Circuit Configuration



Term	Status	Description
S/C	NORMAL	Sensor drive output close (point A and B)
O/C	ALARM	Sensor drive output open (point A and B)



Term	Status	Description
S/C	ALARM	Sensor drive output close (point A and B)
O/C	NORMAL	Sensor drive output open (point A and B)

LEGEND	
NO	Normally Open Alarm
NC	Normally Closed Alarm
O/C	Open Circuit
S/C	Short Circuit
LoZ	Low Impedance
HiZ	High Impedance

### Notes:

The table below shows the summary between the resistance network and the condition result. Note that this table is used as a reference. There may be a 10% tolerance for the resistance value in the below table.

## Install TeleEye RX with Tamper Circuit and External Resistors




Condition	Resistance ( $\Omega$ )			
	0~400	401~2780	2781~29.5k	29.5k~Infinity
DEOL (Normal Close)	Tamper Short	Normal (Close)	Alarm (Open)	Tamper Open
DEOL (Normal Open)	Tamper Short	Alarm (Close)	Normal (Open)	Tamper Open
SEOL (Normal Close)	Tamper Short	Normal (Close)	Alarm (N/A)	Alarm (Open)
SEOL (Normal Open)	Alarm (Close)	Normal (Open)	Alarm (N/A)	Tamper Open
NC without tamper	Normal (Close)	Alarm (N/A)	Alarm (N/A)	Alarm (Open)
NO without tamper	Alarm (Close)	Alarm (N/A)	Alarm (N/A)	Normal (Open)

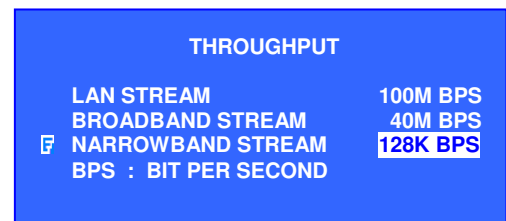
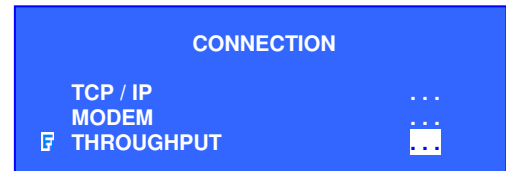
Alarm (N/A): Alarm is not applicable.

## C. Throughput Control

Throughput control function can limit the video recording server output data rate.

### Throughput Control Setup Procedure












1. Press “Menu”  button, select [SETUP] option and press “Enter”  button to enter [SETUP] sub menu. Select [CONNECTION] option and press “Enter”  button to show connection setting menu. Select [THROUGHPUT] option to enter the throughput control menu.
2. Choose [LAN STREAM], [BROADBAND STREAM] and [NARROWBAND STREAM] to select the data rate of respective connection.

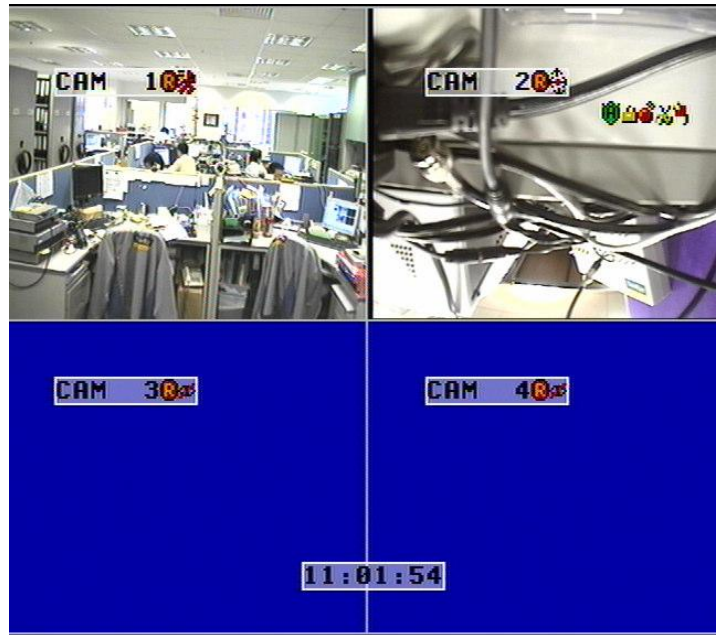




## D. Event Handling

TeleEye RX video recording server supports 10 events and their icons are as follows.

1. Arm/Disarm  
2. Security Switch  
3. Alarm 
4. Motion 
5. Video loss 
6. System Tamper 
7. Power Failure 
8. Disk Usage 
9. Overheat 
10. HDD available



TeleEye RX supports 10 actions which can be activated by any events as above.

1. Recording
2. Switch
3. Dial back
4. Email
5. SMS
6. Buzzer
7. Event LED
8. Live Camera
9. PTZ
10. Spot Alarm (Only supported by RX 368\_V2 / RX328 / RX 3616\_V2 / RX3216)

### Event and Action Icons in Local CCTV Monitor

The icons of the 10 events are shown as above. If an event is being triggered, its respective icon will be flashing on the top right corner (for events: arm/disarm, security switch, alarm, power failure, system tamper) or next to the camera name (for events: motion, video loss). If an event has been triggered before user clear, the icon will remain static on its original position.

## 1. Arm/Disarm

### Arm/Disarm

Arm/Disarm input is used for enhancing security level of the surveillance area. This input introduces the concept of 3 zone types of alarm, fire zone, normal and entry exit zone.

#### Armed

If the system is armed, alarm sensor in normal zone type can be triggered immediately if someone triggers the sensor. It is usually used when there is no operator at surveillance area.

#### Disarmed

If the system is disarmed, alarm events detected from sensors will not result in an alarm except the fire zone type alarm and arm/disarm tamper. If there are operators at surveillance area, it is usually disarmed.

### Arm/Disarm Tamper Type

Arm/Disarm tamper event triggers if someone cuts the wire between the arm/disarm input and the video recording server. This event can be triggered immediately no matter which the zone is. Arm/Disarm tamper type has choice of none, SEOL and DEOL.

### Arm State











The arm/disarm input circuit type is normal close (NC). When the state of the circuit is close, it indicates disarm of **TeleEye RX**. Otherwise, when the state of the circuit is open, it indicates arm of **TeleEye RX**. The arm/disarm input circuit type is normal open (NO). When the state of the circuit is open, it indicates disarm of **TeleEye RX**. Otherwise, when the state of the circuit is close, it indicates arm of **TeleEye RX**.

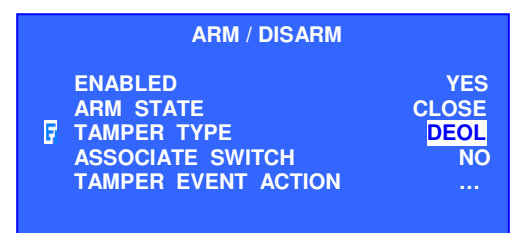
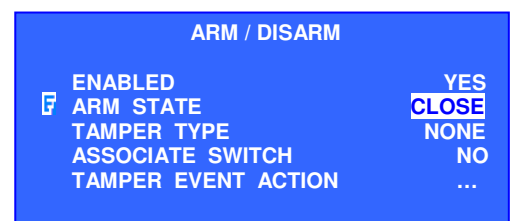
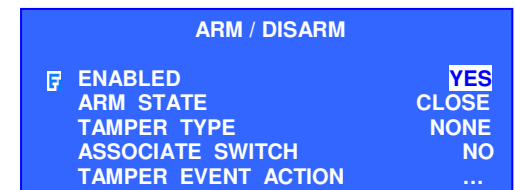
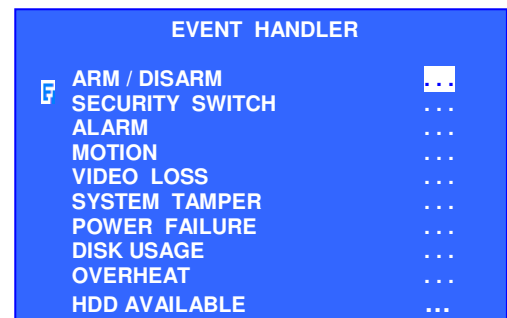
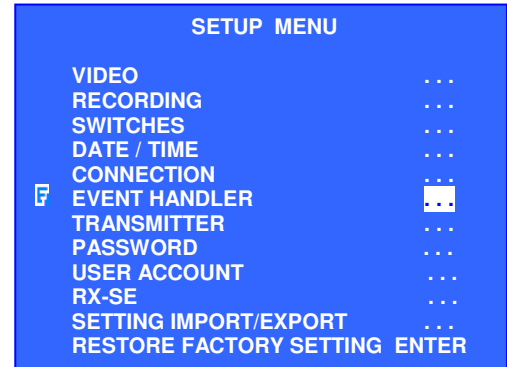
### Physical Configuration for Arm/Disarm

The arm/disarm input and ground of **TeleEye RX** video recording server needs to connect to a control unit which is commonly a switch or password panel for arm/disarm input.





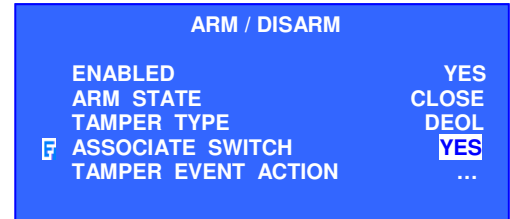
## Arm/Disarm Setup Procedure


1. Press “Menu”  button, select [SETUP] option and press “Enter”  button to enter [SETUP] sub-menu. Select [EVENT HANDLER] option and press “Enter”  button.
2. Select [ARM/DISARM] option and press “Enter”  button to show arm/disarm setting menu.
3. Select [ENABLED] option and use “Left”  or “Right”  button to enable (i.e. set the value to [YES]) the arm/disarm function.
4. Select [ARM STATE] option and use “Left”  or “Right”  button to choose arm state according to the configuration of **TeleEye RX** arm/disarm control circuit type.
5. Select [TAMPER TYPE] option and use “Left”  or “Right”  button to choose arm/disarm tamper circuit type according to the configuration of **TeleEye RX** arm/disarm tamper circuit type.

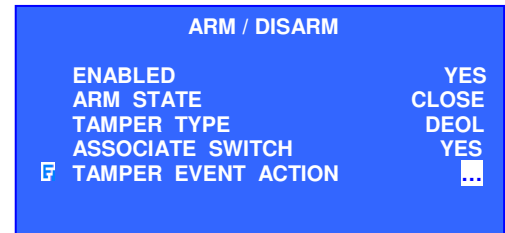


## Event Handling

- Select [ASSOCIATE SWITCH] option and use “Left”  or “Right”  button to select [YES] and enable **switch 1 only** for arm/disarm associate switch. Switch 1 will be ON when **TeleEye RX** is armed. Switch 1 will be OFF when **TeleEye RX** is disarmed. Switch 1 cannot be activated by other events anymore if it is an associate switch of arm/disarm.



- Select [TAMPER EVENT ACTION] option and press “Enter”  button to select arm/disarm tamper action. (For action, please refer to Event Action Part in Advance Operation Section of User Guide)



## 2. Security Switch

### Security Switch

It is an input to the video recording server for wiring a security switch. The purpose of the security switch is to terminate the exit delay for exit zone alarm. If the security switch is on and the system is armed, all exit delay will be terminated. If the security switch is off and an entry alarm is triggered, entry delays will start.

### Security Switch Tamper Type

Security switch tamper event will be triggered if someone cuts the wire between the security switch input and the video recording server. This event behaves as fire zone type that can be triggered once the wire is being cut. Arm/Disarm tamper type has choice of none, SEOL and DEOL.

### On State











The security switch input circuit type is normal close (NC). When the state of the circuit is close, it indicates security switch off of **TeleEye RX**. Otherwise, when the state of the circuit is open, it indicates security switch on of **TeleEye RX**. The security switch input circuit type is normal open (NO). When the state of the circuit is opened, it indicates security switch off of **TeleEye RX**. Otherwise, when the state of the circuit is closed, it indicates security switch on of **TeleEye RX**.

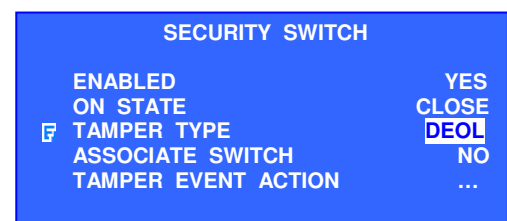
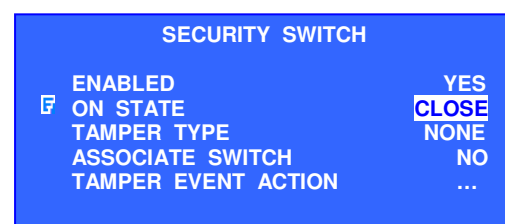
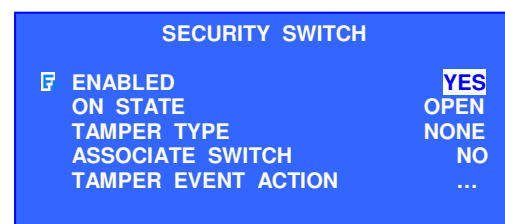
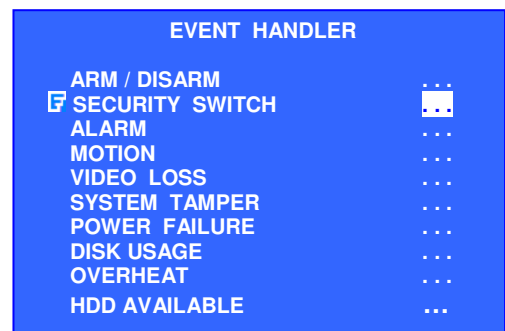
### Physical Configuration for Security Switch

The security switch input and ground of **TeleEye RX** video recording server needs to connect to a control circuit which is commonly the lock of the surveillance area for security switch input.






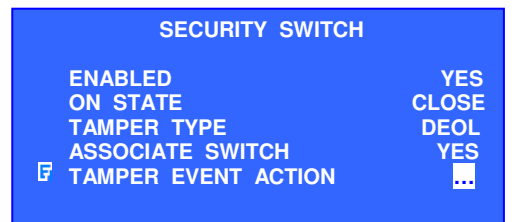
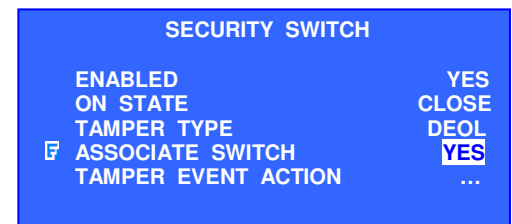
## Security Switch Setup Procedure

1. Press “Menu”  button, select [SETUP] option and press “Enter”  button to enter [SETUP] sub menu. Select [EVENT HANDLER] option and press “Enter”  button.
2. Select [SECURITY SWITCH] option and press “Enter”  button to show security switch setting menu.
3. Select [ENABLED] option and use “Left”  or “Right”  button to enable (i.e. set the value to [YES]) the security switch function.
4. Select [ON STATE] option and use “Left”  or “Right”  button to choose on state according to the configuration of **TeleEye RX** security switch control circuit type.
5. Select [TAMPER TYPE] option and use “Left”  or “Right”  button to choose security switch tamper circuit type according to the configuration of **TeleEye RX** security switch tamper circuit type.



## Event Handling

6. Select [ASSOCIATE SWITCH] option and use “Left”  or “Right”  button to select [YES] and enable **switch 2 only** for security switch associate switch. Switch 2 will be ON when the security switch is on. Switch 1 will be OFF when the security switch is off. Switch 2 cannot be activated by other events anymore if it is an associate switch of security switch.
7. Select [TAMPER EVENT ACTION] option and press “Enter”  button to select security switch tamper action. (For action, please refer to Event Action Part in Advance Operation Section of User Guide)



### 3. Alarm

#### Alarm

It is an input to the video recording server from external alarm sensors. Alarm can be used to detect many events occur at the surveillance area, such as fire and illegal entering by someone. The alarm event supports BS 8418:2003 which has arm/disarm and security switch functions.

#### Sensor Tamper Type

Alarm tamper event will be triggered if someone cuts the wire between the alarm input and the video recording server. This event behaves as fire zone type that can be triggered once the wire is being cut. Alarm tamper type has choice of none, SEOL and DEOL.

#### Sensor Type

The alarm sensor input circuit type is normal close (NC). When the state of the circuit is closed; it indicates normal of **TeleEye RX**. Otherwise, when the state of the circuit is opened, it indicates alarm trigger of **TeleEye RX**. The alarm sensor input circuit type is normal open (NO). When the state of the circuit is open; it indicates normal of **TeleEye RX**. Otherwise, when the state of the circuit is closed, it indicates alarm trigger of **TeleEye RX**.

#### Zone Type

All alarm sensors can be associated with zone types if ARM/DISARM input is installed.

##### Normal Zone

This zone allows alarms to be triggered after armed.

##### Fire Zone

This zone allows alarms to be triggered no matter which arm state of the system is, i.e. armed or disarmed. It is suitable for installation of fire detectors

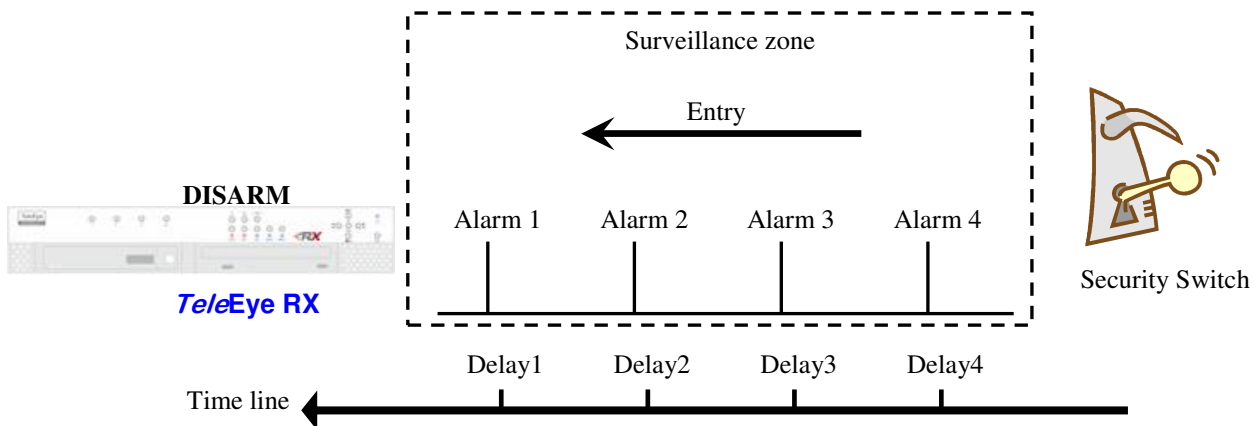
##### Entry/Exit Zone

This zone allows user to set the delay time for entering or leaving the surveillance area without triggering any alarm event. If alarm recording action is enabled, recording starts at entry or exit time throughout the delay.

### Event Handling

## Example of Entry/Exit Zone WITH Security Switch Usage

### For Entry Zone:



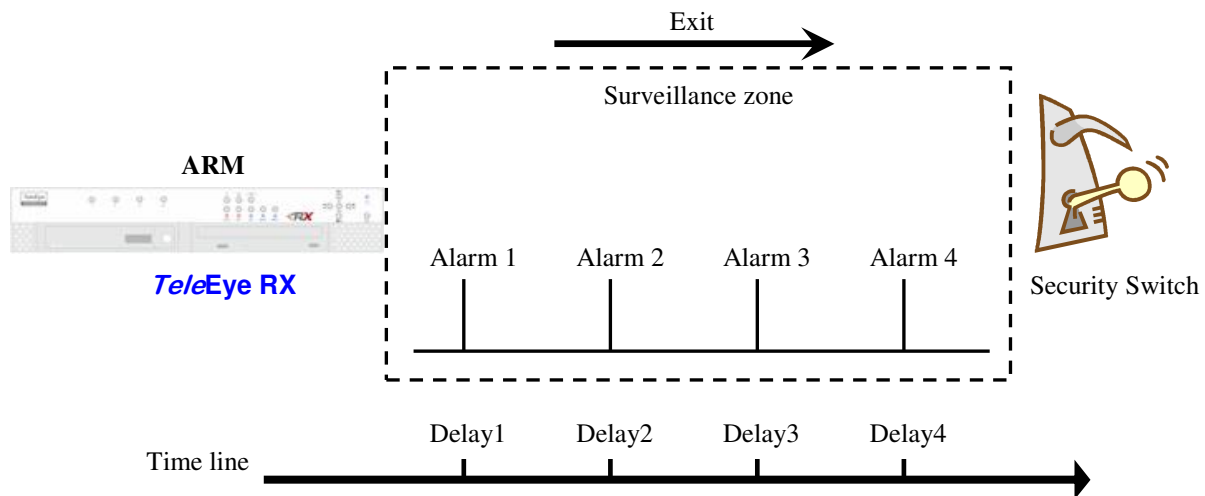
The entry delay is the period of time between entering the surveillance zone and reaching the video recording server. In order to disarm the system for maintenance or repair, user / installer needs to turn off the security switch and enter the surveillance zone. However, the delay time starts from the 1st trigger by the 1st alarm sensor (i.e. Alarm 4). Note that if user enables recording action, recording action is automatically activated during entry delay.

The detail procedure is as below:

- 1) user turns off security switch
- 2) the alarm is set at entry delay
- 3) the 1<sup>st</sup> trigger is made by Alarm 4 (i.e. user enters the surveillance zone and the entry delay time begins)
- 4) 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> trigger are made and each entry delay starts respectively
- 5) user disarms the system for maintenance

For example: If the time for going from security switch to video recording server is about 8 minutes, Delay 1 should be longer than 8 minutes, while Delay 2 should be longer than the time for going from security switch to Alarm 2, and so on.

## For Exit Zone:



The exit delay is the period of time for leaving a surveillance zone without making false alarm (i.e. Alarm 1, Alarm 2, Alarm 3 and Alarm 4). The purpose is to let the user / installer have enough time to leave the surveillance zone after the video recording server is armed. User / installer can set the delay time for each alarm.

The detail procedure is as below:

- 1) user arms the system
- 2) the alarm is set at exit delay
- 3) the 1<sup>st</sup> trigger is made by Alarm 1 (i.e. user leaves the surveillance zone and the exit delay time begins)
- 4) 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> triggers are made and each exit delay starts respectively
- 5) User turns on the security switch or waits for any alarm exit delays to expire.

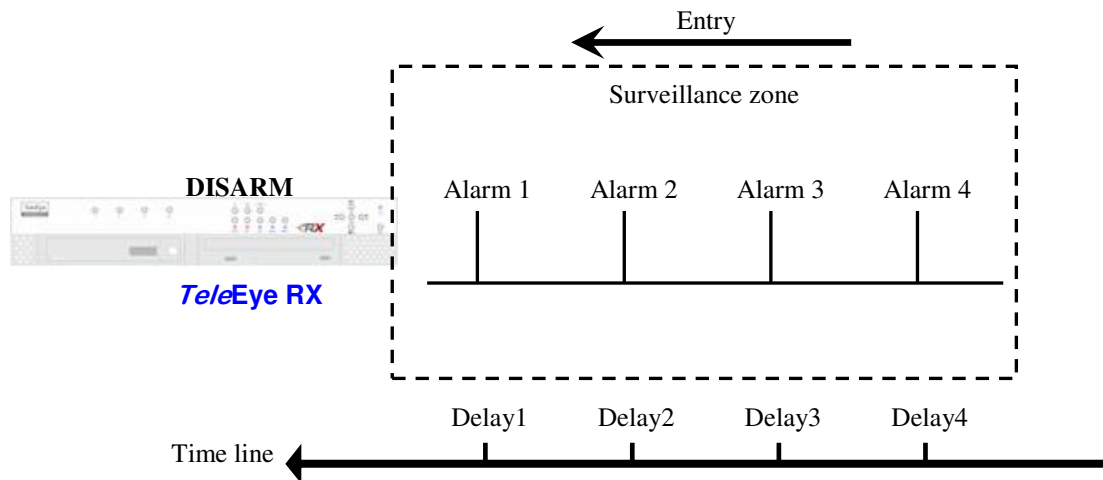
For example, if the time for leaving the surveillance zone is about 8 minutes, user should adjust the delay time so that Delay 1 = leaving time between video recording server and Alarm 1, Delay 2 = leaving time between video recording server and Alarm 2, Delay 3 = leaving time between video recording server and Alarm 3 and Delay 4 = 8 minutes. The alarm will be activated after the exit delay expired. Note that if user enables recording action, recording action is automatically activated during exit delay.

## Event Handling



## Example of Entry/Exit Zone WITHOUT Security Switch Usage

### For Entry Zone:



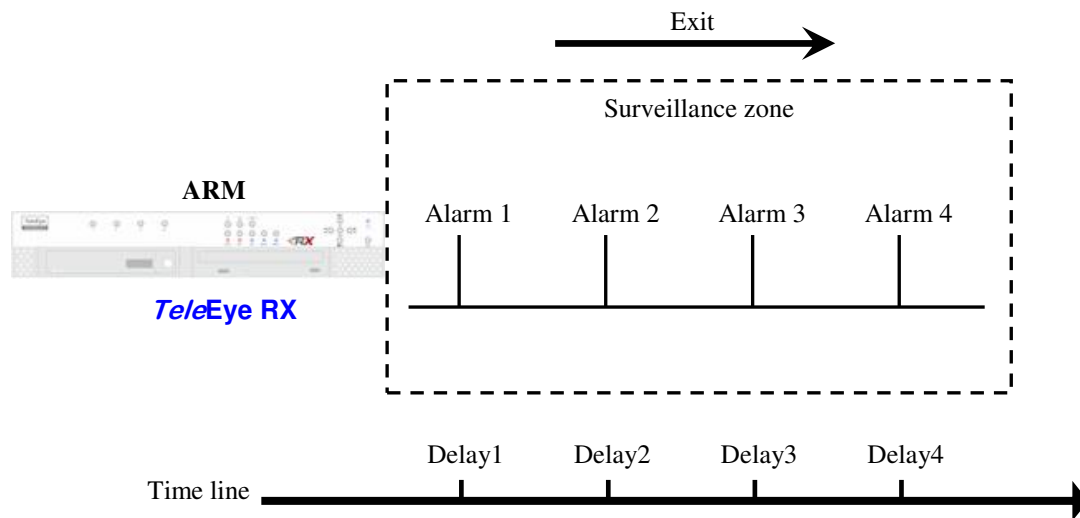
The entry delay is the period of time between entering the surveillance zone and reaching the video recording server. In order to disarm the system for maintenance or repair, user / installer enters the surveillance zone, and the delay time starts from the 1<sup>st</sup> trigger by the 1<sup>st</sup> alarm sensor (i.e. Alarm 4) automatically. Note that if user enables recording action, recording action is automatically activated during entry delay.

The detail procedure is as below:

- 1) the alarm is at entry delay
- 2) the 1<sup>st</sup> trigger is made by Alarm 4 (i.e. user enters the surveillance zone and the entry delay time begins)
- 3) 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> trigger are made and each entry delay starts respectively
- 4) user disarms the system for maintenance

For example: If the time for going from Alarm 4 to video recording server is about 8 minutes, Delay 1 should be longer than 8 minutes, while Delay 2 should be longer than the time for going from security switch to Alarm 2, and so on.

## For Exit Zone :



The exit delay is the period of time for leaving a surveillance zone without making false alarm (i.e. Alarm 1, Alarm 2, Alarm 3 and Alarm 4). The purpose is to let the user / installer have enough time to leave the surveillance zone after the video recording server is armed. User / installer can set the delay time for each alarm.

The detail procedure is as below:

- 1) user arms the system
- 2) the alarm moves to exit delay
- 3) the 1<sup>st</sup> trigger is made by Alarm1 (i.e. user leaves the surveillance zone and the exit delay time begins)
- 4) 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> trigger are made and each exit delay starts respectively
- 5) user waits for any alarm exit delay to expire.

For example, if the time for leaving the surveillance zone is about 8 minutes, user should adjust the delay time so that Delay 1 = leaving time between video recording server and Alarm 1, Delay 2 = leaving time between video recording server and Alarm 2, Delay 3 = leaving time between video recording server and Alarm 3 and Delay 4 = 8 minutes. The alarm will be activated after the exit delay expired. Note that if user enables recording action, recording action is automatically activated during exit delay.

## Different Combination Cases of Arm/Disarm, Security Switch and Alarm for the 3 Zone Type

Initial State			Step 1	Step 2	Step 3	Result
Arm	Security Switch	Alarm				
Fire Zone						
Arm	On	No trigger	Trigger alarm	\	\	Alarm trigger
Arm	Off	No trigger	Trigger alarm	\	\	Alarm trigger
Arm	Uninstall	No trigger	Trigger alarm	\	\	Alarm trigger
Disarm	\	No trigger	Trigger alarm	\	\	Alarm trigger
Uninstall	\	No trigger	Trigger alarm	\	\	Alarm trigger
Uninstall	Uninstall	No trigger	Trigger alarm	\	\	Alarm trigger
Normal						
Arm	On	No trigger	Trigger alarm	\	\	Alarm trigger
Arm	Off	No trigger	Trigger alarm	\	\	Alarm trigger
Arm	Uninstall	No trigger	Trigger alarm	\	\	Alarm trigger
Disarm	\	No trigger	Trigger alarm	\	\	No alarm trigger
Uninstall	\	No trigger	Trigger alarm	\	\	Alarm trigger
Uninstall	Uninstall	No trigger	Trigger alarm	\	\	Alarm trigger
Entry / Exit Zone						
Arm	On	No trigger	Trigger alarm	\	\	Alarm trigger
Disarm	Off	No trigger	Arm	Trigger alarm. Exit delay starts. Recording starts (if recording action is enabled)	Security switch on. Exit delay ends. Recording stops	Alarm can be triggered any time after that
					Security switch off. Exit delay ends after the preset exit time value. Recording stops	Alarm can be triggered any time after that

## Event Handling

Initial State			Step 1	Step 2	Step 3	Result
Arm	Security Switch	Alarm				
Entry / Exit Zone						
Arm	On	No trigger	Security switch off	Trigger alarm. Entry delay starts. Recording starts (if recording action is enabled)	Disarm	No alarm trigger. Recording stops
					Arm	Alarm is triggered Recording does not stop unless user disarm the system
Disarm	Uninstall	No trigger	Arm	Trigger alarm. Exit delay starts. Recording starts (if recording action is enabled)	Exit delay ends after the preset exit time value. Recording stops	The system will enter entry delay automatically after next alarm trigger
Arm	Uninstall	No trigger	Trigger alarm. Entry delay starts. Recording starts (if recording action is enabled)	Disarm	\	No alarm trigger. Recording stops.
				Arm	\	Alarm is triggered. Recording does not stop unless user disarm the system.
Disarm		No trigger	Trigger alarm	\	\	No alarm trigger
Uninstall		No trigger	Trigger alarm	\	\	Alarm trigger
Uninstall	Uninstall	No trigger	Trigger alarm	\	\	Alarm trigger

## Event Handling

## Physical Configuration for Alarm



The alarm input and ground of **TeleEye RX** video recording server need to connect to various kinds of sensors which are commonly installed at entrance or special part of the surveillance area.

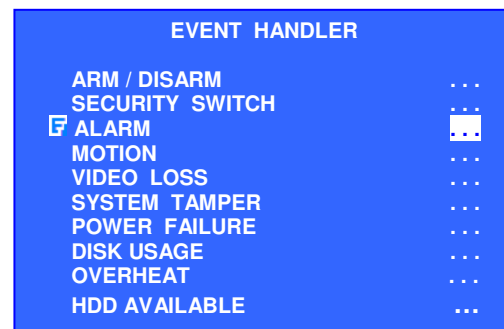




## Alarm Setup Procedure

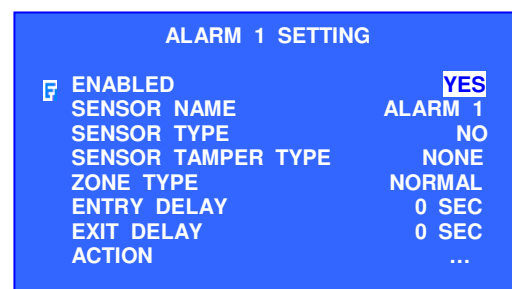
1. Press “Menu”  button, select [SETUP] option and press “Enter”  button to enter [SETUP] sub menu. Select [EVENT HANDLER] option and press “Enter”  button.





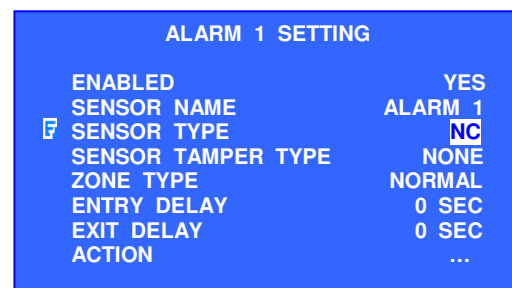
2. Select [ALARM] option and press “Enter”  button to show the alarm selection menu. Select appropriate alarm and press “Enter”  button to enter the alarm setting menu.



3. Select [ENABLED] option and use “Left”  or “Right”  button to enable (i.e. set the value to [YES]) alarm.






4. Select [SENSOR TYPE] option and use “Left”  or “Right”  button to choose sensor type according to the configuration of **TeleEye RX** alarm sensor control circuit type.







## Event Handling




5. Select [SENSOR TAMPER TYPE] option and use “Left”  or “Right”  button to choose alarm sensor tamper circuit type according to the configuration of **TeleEye RX** alarm sensor tamper circuit type.


ALARM 1 SETTING	
ENABLED	YES
SENSOR NAME	ALARM 1
SENSOR TYPE	NC
 SENSOR TAMPER TYPE	DEOL
ZONE TYPE	NORMAL
ENTRY DELAY	0 SEC
EXIT DELAY	0 SEC
ACTION	...




6. Select [ZONE] option and use “Left”  or “Right”  button to choose zone type. Select [ENTRY DELAY], [EXIT DELAY] option and use “Left”  or “Right”  button to choose entry and exit delay

ALARM 1 SETTING	
ENABLED	YES
SENSOR NAME	ALARM 1
SENSOR TYPE	NC
 SENSOR TAMPER TYPE	DEOL
ZONE TYPE	NORMAL
ENTRY DELAY	0 SEC
EXIT DELAY	0 SEC
ACTION	...



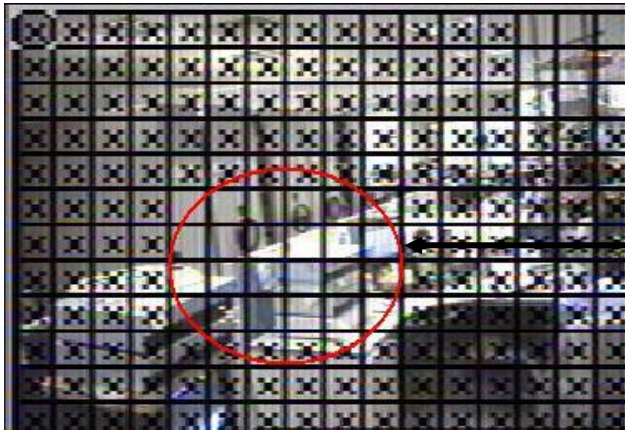
7. Select [ACTION] option and press “Enter”  button to select alarm trigger or tamper action. (For action, please refer to Event Action Part in Advance Operation Section of User Guide)

ALARM 1 SETTING	
ENABLED	YES
SENSOR NAME	ALARM 1
SENSOR TYPE	NC
SENSOR TAMPER TYPE	DEOL
ZONE TYPE	NORMAL
ENTRY DELAY	0 SEC
EXIT DELAY	0 SEC
 ACTION	...

## Motion

### Motion

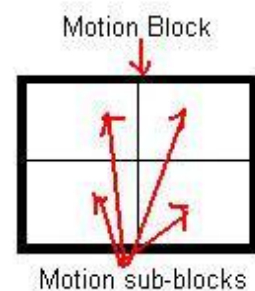
Motion detection can be triggered when motion occurs on the camera. Motion detection has different sensitivity levels. For motion event on each video input channel, it depends on the motion of selected area. User should set up the select motion areas and sensitivity. Motion detection has generally 4 options: **high**, **middle**, **low** and **custom**. Custom option allows user to select the sensitivity level and area by themselves.



### Motion Detection Example

If motion detection is enabled, object movement is captured by the camera as shown below.

The figure on the left shows motion detection. The normal display area is the selected motion detection area. The crossed area cannot detect any motion. Motion block is activated when there is any movement on the camera.



### Sensitivity

#### Level

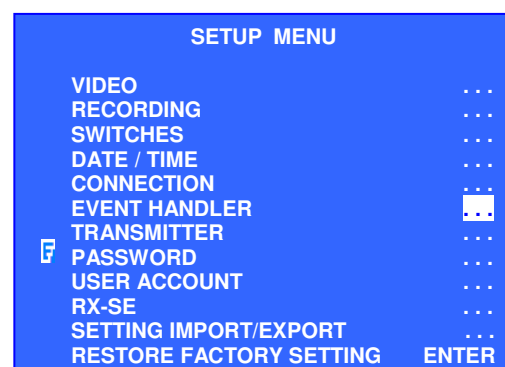
The level definition of motion detection is due to the luminance level difference between current and reference field. The level range is 1 to 10, 1 is the most sensitive and 10 is the least sensitive

#### Area



In motion detection, one selected motion block is divided into four sub-blocks. The definition of area is how many sub-blocks have detected motion in order to trigger a motion event. The range of area option is 1 to 4. More blocks are selected, the motion trigger sensitivity decreases.

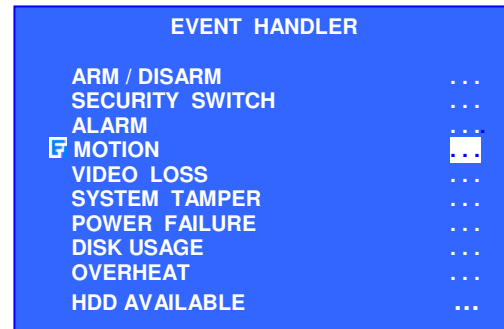
### Motion Setup Procedure


1. Press "Menu"  button, select [SETUP] option and press "Enter"  button to enter [SETUP] sub menu. Select [EVENT HANDLER] option and press "Enter"  button.

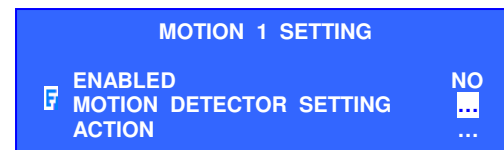


## Event Handling

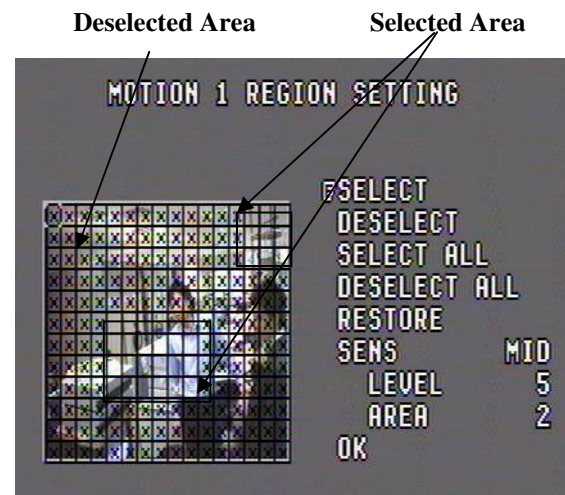
2. Select [**MOTION**] option and press “**Enter**”  button to show the motion selection menu. Select motion and press “**Enter**”  button to enter the motion setting menu.



3. Enable the motion setting. Select [**MOTION DETECTOR SETTING**] option and press “**Enter**”  button to setup motion detection setting.




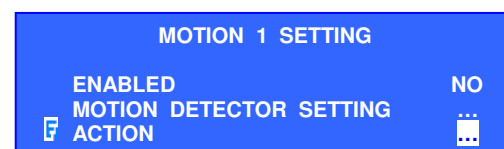
4. Setting motion detection as follow:  
**DESELECT** : deselect motion area  
**SELECT** : select motion area  
**DESELECT ALL** : clear all motion block  
**SELECT ALL** : select all motion block  
**RESTORE** : restore previous motion setting  
**SENS** : sensitivity option : LOW, MID, HIGH, CUSTOM  
**LEVEL** : customize level sensitivity  
**AREA** : customize spatial sensitivity  
**OK** : finish, save the setting and exit the detection menu



*\*Note: option position will be different in RX368\_V2 / RX328 / RX3616\_V2 / RX3216*



5. Select [**ACTION**] option and press “**Enter**”  button to select alarm trigger or tamper action. (For action, please refer to Event Action Part in Advance Operation Section of User Guide)













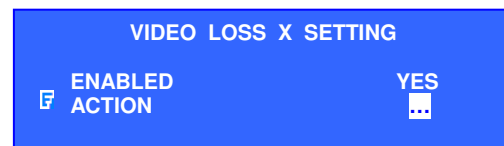
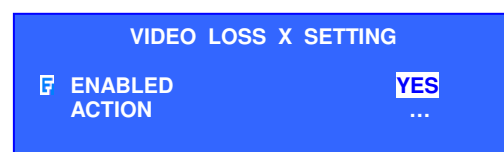
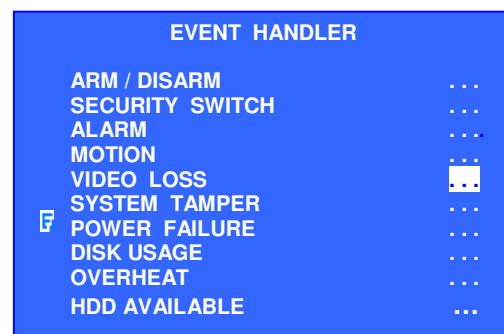
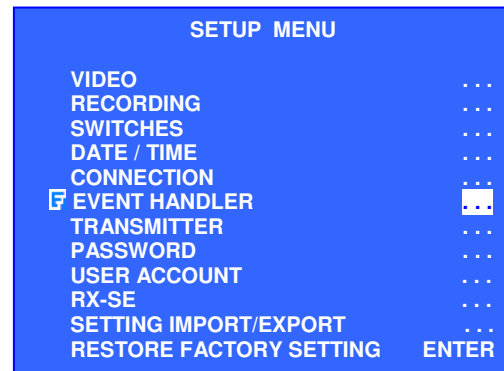
## 5. Video Loss

### Video Loss

Video loss can be triggered when the video channel input disappears and happens if the video recording server receives no signal from the camera. The local CCTV monitor displays a blue screen for video loss condition.

### Video Loss Setup Procedure

1. Press “**Menu**”  button, select [SETUP] option and press “**Enter**”  button to enter [SETUP] sub menu. Select [EVENT HANDLER] option and press “**Enter**”  button.
2. Select [VIDEO LOSS] option and press “**Enter**”  button to show the camera selection menu.  
Select a camera and press “**Enter**”  button to enter the video loss setting menu.
3. Select [ENABLED] option and use “**Left**”  or “**Right**”  button to enable (i.e. set the value to [YES]) video loss event handler.
4. Select [ACTION] option and press “**Enter**”  button to select alarm trigger or tamper action. (For action, please refer to Event Action Part in Advance Operation Section of User Guide)



## 6. System Tamper

### System Tamper Input

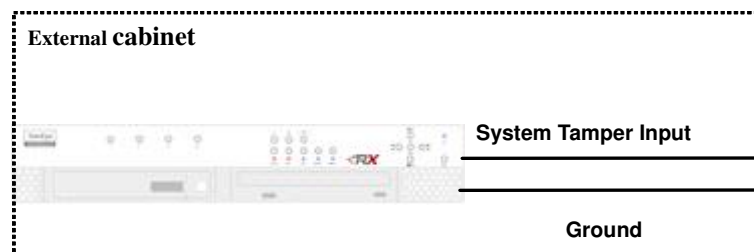
It is an input to the video recording server for wiring a tamper switch of the external cabinet outside the video recording server and its accessories. The purpose of system tamper event is to prevent someone to break into the cabinet and destroy the video recording server.

### Sensor Type


The system tamper input circuit type is normal close (NC). When the state of the circuit is closed, it indicates normal of **TeleEye RX**. Otherwise, when the state of the circuit is opened, it indicates system tamper of **TeleEye RX**. The system tamper input circuit type is normal open (NO). When the state of the circuit is opened, it indicates normal of **TeleEye RX**. Otherwise, when the state of the circuit is close, it indicates system tamper of **TeleEye RX**.

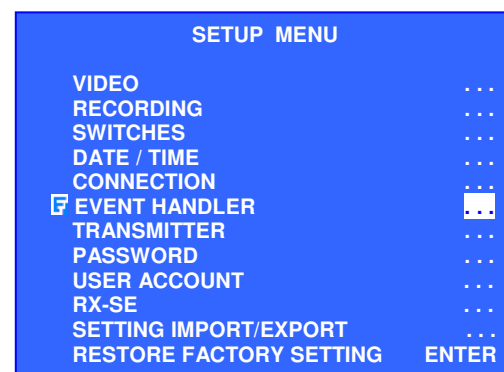
### Physical Configuration for System Tamper



The system tamper input and ground of **TeleEye RX** video recording server need to connect to an external cabinet which is used for protecting the video recording server and its accessories



## System Tamper Setup Procedure






1. Press “Menu”  button, select [SETUP] option and press “Enter”  button to enter [SETUP] sub menu. Select [EVENT HANDLER] option and press “Enter”  button.



2. Select [SYSTEM TAMPER] option and press “Enter”  button to show the system tamper menu and press “Enter”  button to enter the System Tamper setting menu.



## Event Handling

3. Select [ENABLED] option and use “Left”  or “Right”  button to enable (i.e. set the value to [YES]) System Tamper event handler.
4. Select [SENSOR TYPE] option and use “Left”  or “Right”  button to choose sensor type according to the configuration of **TeleEye RX** system tamper control circuit type
5. Select [ACTION] option and press “Enter”  button to select system tamper action. (For action, please refer to Event Action Part in Advance Operation Section of User Guide)

SYSTEM TAMPER		
<input checked="" type="checkbox"/> ENABLED		YES
SENSOR TYPE		NO
ACTION		...



SYSTEM TAMPER		
<input checked="" type="checkbox"/> ENABLED		YES
SENSOR TYPE		NC
ACTION		...



SYSTEM TAMPER		
<input checked="" type="checkbox"/> ENABLED		YES
SENSOR TYPE		NC
ACTION		...

## 7. Power Failure

### Power Failure Input

It is an input to the video recording server typically used for wiring the output signal pin from an **uninterruptible power supply (UPS)**.

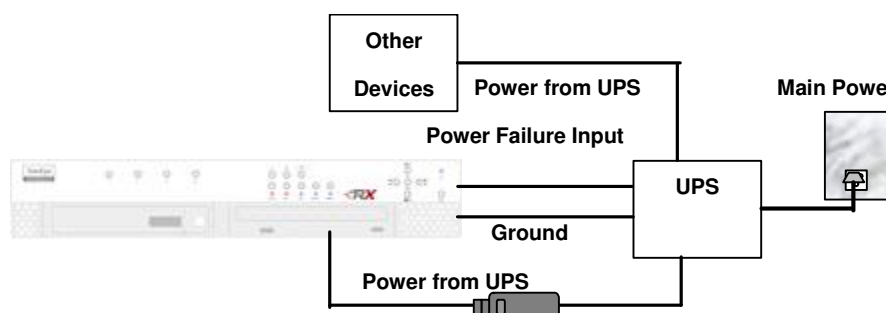
### Sensor Type

The power failure input circuit type is normal close (NC). When the state of the circuit is closed, it indicates normal of **TeleEye RX**. Otherwise, when the state of the circuit is opened, it indicates power failure of **TeleEye RX**. The power failure input circuit type is normal open (NO). When the state of the circuit is opened, it indicates normal of **TeleEye RX**. Otherwise, when the state of the circuit is closed, it indicates power failure of **TeleEye RX**.

### Physical Configuration for Power Failure Input

The power failure input and ground of **TeleEye RX** video recording server need to connect to a universal power supply circuit UPS, so the video recording server can detect any power failure condition.










*Note: The UPS circuit setup below is used as an example. Not all UPS have signal output. Some UPS have self-test for a period of time. Their signal output may toggle during test.*

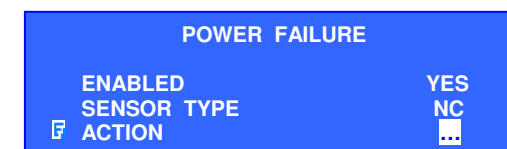
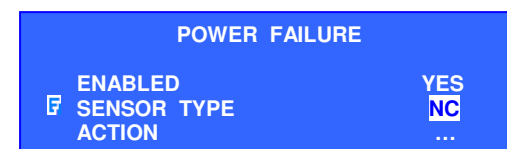
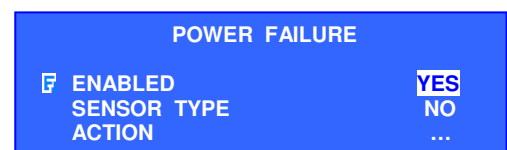
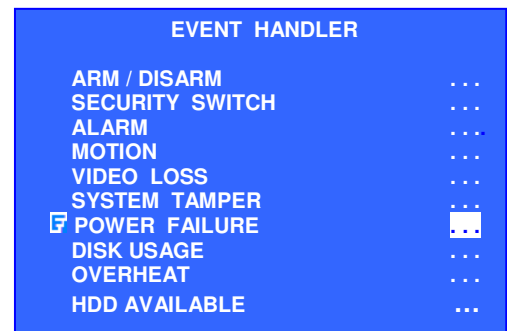
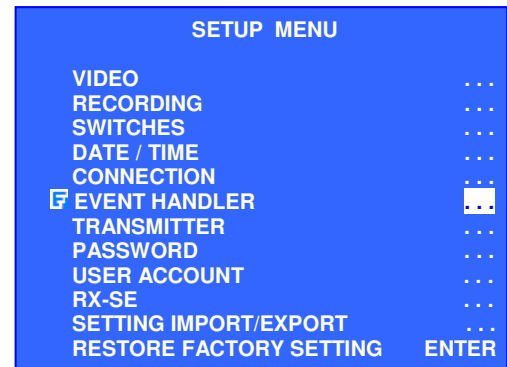


UPS provides backup power in certain period and send a power failure signal to RX when the main power does not work.

## Event Handling

## Power Failure Setup Procedure






1. Press “Menu”  button, select [SETUP] option and press “Enter”  button to enter [SETUP] sub menu. Select [EVENT HANDLER] option and press “Enter”  button.
2. Select [POWER FAILURE] option and press “Enter”  button to enter the power failure setting menu.
3. Select [ENABLED] option and use “Left”  or “Right”  button to enable (i.e. set the value to [YES]) power failure event handler.
4. Select [SENSOR TYPE] option and use “Left”  or “Right”  button to choose sensor type according to the configuration of **TeleEye RX** power failure control circuit type
5. Select [ACTION] option and press “Enter”  button to select power failure action. (For action, please refer to Event Action Part in Advance Operation Section of User Guide)

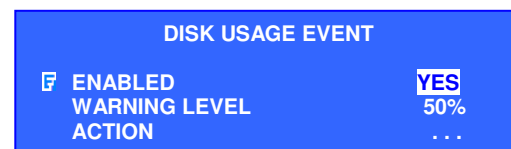
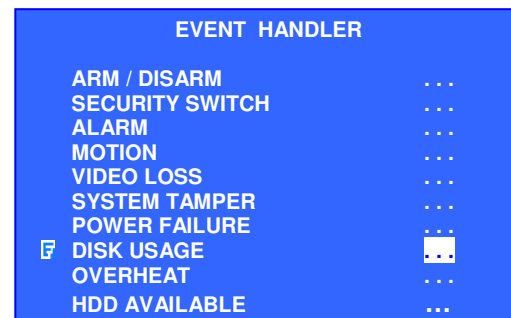


## 8. Disk Usage

Disk usage event will be triggered if hard disk usage exceeds user specified warning level. The warning level consists of 6 levels : 50%, 60%, 70%, 80%, 90% and 100%. If the hard disk usage achieves the warning level, the disk usage event will be triggered.

### Disk Usage Event Setup Procedure :






1. Press “Menu”  button, select [SETUP] option and press “Enter”  button to enter [SETUP] sub menu. Select [EVENT HANDLER] option and press “Enter”  button. Select [DISK USAGE] option and press “Enter”  button to show disk usage setting menu.
2. Select [ENABLED] and set [YES] to enable disk usage event. Select [WARNING LEVEL] to choose the suitable disk usage warning level. Select [ACTION] option and press “Enter”  button to select disk usage action.

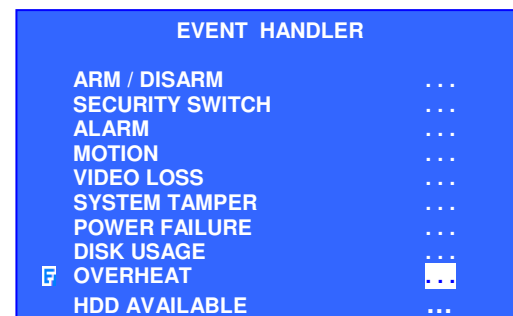


## 9. Overheat

Overheat event will be triggered if video recording server gets overheat.

### Overheat Event Setup Procedure :






1. Press “Menu”  button, select [SETUP] option and press “Enter”  button to enter [SETUP] sub menu. Select [EVENT HANDLER] option and press “Enter”  button. Select [OVERHEAT] option and press “Enter”  button to show overheat setting menu.
2. Select [ENABLED] and set [YES] to enable overheat event. Select [ACTION] option and press “Enter”  button to select overheat action.

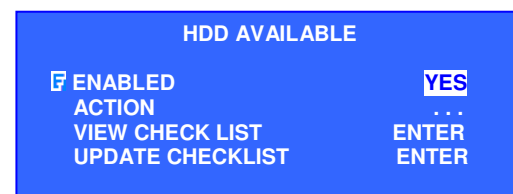
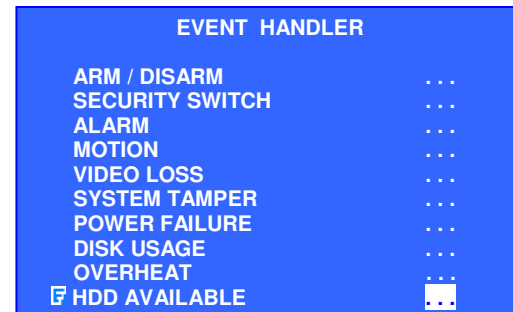


## 10. HDD Available

HDD available event will trigger when hard disk failure or hard disk change according to checklist.

### HDD Available Event Setup Procedure :




1. Press “Menu”  button, select [SETUP] option and press “Enter”  button to enter [SETUP] sub menu. Select [EVENT HANDLER] option and press “Enter”  button. Select [HDD AVAILABLE] option and press “Enter”  button to show overheat setting menu.
2. Select [ENABLED] and set [YES] to enable HDD available event. Select [ACTION] option and press “Enter”  button to select overheat action.
3. Checklist will automatically update according to current system’s hard disk combination when enable this event.
4. Select [UPDATE CHECKLIST] to manually update hard disk check list. Or select [VIEW CHECKLIST] to view the current checklist. It will show the number of HDD to be checked .

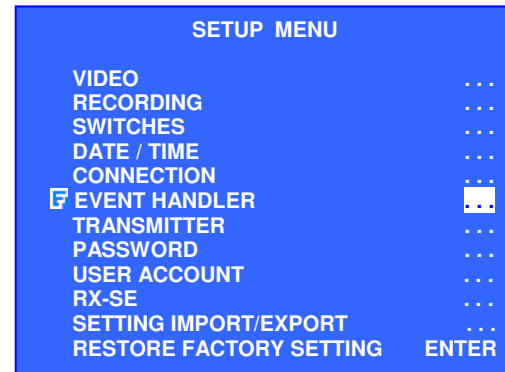



## E. Event Action

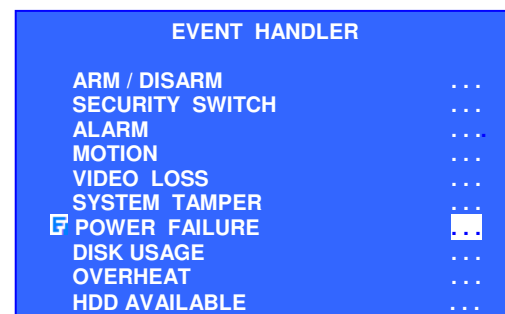
**TeleEye RX** supports event actions such as Recording, Switch, Dialback, Email, Buzzer, Event LED, Live camera and PTZ when there is an event detected from alarm, tamper of alarm, motion, video loss, tamper of arm/disarm, tamper of security switch, power failure, disk usage, overheat and system tamper.




### Event Action Setup Procedure

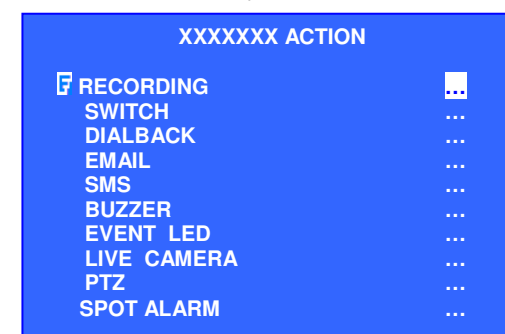
1. Press “Menu”  button, select [SETUP] option and press “Enter”  button to enter [SETUP] sub menu. Select [EVENT HANDLER] option and press “Enter”  button.



2. Select **any event** option and press “Enter”  button to enter the setting menu.



3. Select [ENABLED] option and use “Left”  or “Right”  button to enable (i.e. set the value to [YES]) event handler.
4. Select [ACTION] option and press “Enter”  button to enter the action menu.



## 1. Recording

### Recording

If an event is triggered, recording can record the video content at user selected camera with selected recording mode.

### Pre-Alarm Recording

Pre-alarm recording allows video recording before an event is triggered. The period of pre-alarm recording is at least 1 minute (not more than 2 minutes) before the event trigger. User can find that there is at least 1 minute more video content in **[RECORDING LOG MENU]** before event trigger.







### Duration After Event Clear

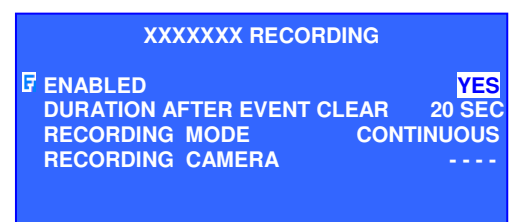
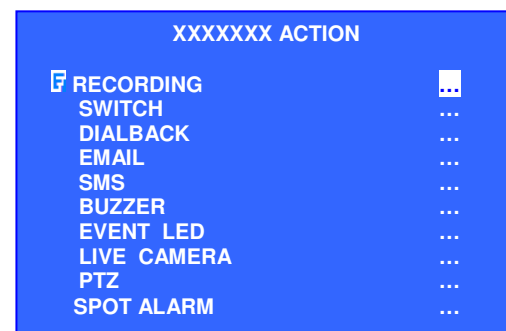
After event is reset, the recording action will stop after the duration time.

### Recording Mode

Event recording provides 2 recording mode, 1 frame per second (1 FPS) and continuous mode. In 1 FPS mode, the recording frame rate is less, so the storage size is smaller. In continuous mode, the recording frame rate depends on the number of recording camera and more than 1 FPS, so the storage size is larger.





## Recording Action Setup Procedures

1. In the action menu, select **[RECORDING]** option and press “**Enter**”  button to enter the recording action setting menu.
2. Select **[ENABLED]** option and use “**Left**”  or “**Right**”  button to enable (i.e. set the value to **[YES]**) recording action.
3. Select the **[DURATION AFTER EVENT CLEAR]** and **[RECORDING MODE]** options and uses the “**Left**”  or “**Right**”  button to choose the suitable setting.
4. Select **[RECORDING CAMERA]** option and press “**Enter**”  button to enter the recording camera menu.






## Password



5. Use the “**Left**”  or “**Right**”  button to select camera and press the “**Up**”  or “**Down**”  button to enable or disable recording camera.

RECORDING CAMERA

1 - 3 -

6. Press “**Enter**”  button to save the camera setting and go back to recording action menu.
7. You can press “**Live**”  button to exit OSD menu or press “**Back**”  button to enter action menu again.

## 2. Switch

Switch allows video recording server to control 4 external relays which are defined by user.

### Switch Type

Switch has 2 types. They are latching or push-button type. In latching type, the switch turns on for a period of time. In push-button type, the switch turns on and off after 1 second.

### Latching Duration

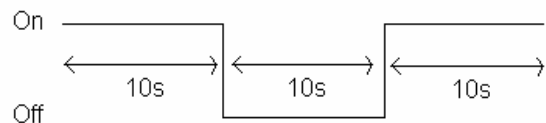
The latch duration period is the time for turning on the switch.

### Action Delay

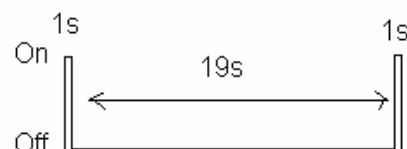
The delay is the period of time after turning off the switch before next turning on.

### Latching Duration and Action Delay Example

For latch type switch, set latch duration to be 10sec and action delay to be 10sec. If an event is triggered, the status of the switch is shown on the right.


















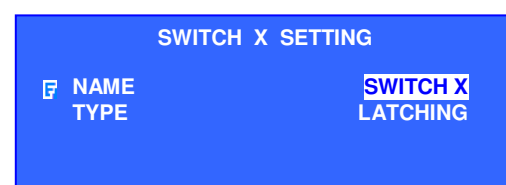
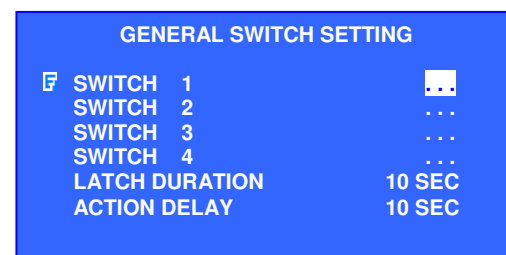
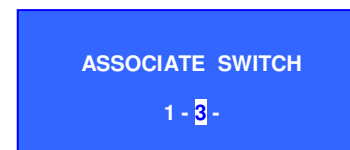
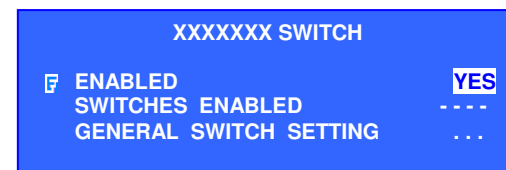
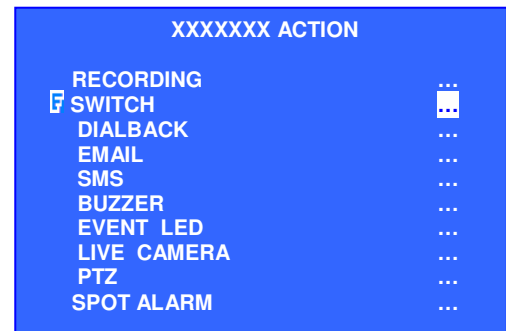
For push-button type switch, set latch duration 10sec and action delay 10sec. If an event is triggered, the status of the switch is shown on the right.




## Password


## Switch Action Setup Procedure


1. In the action menu, select [SWITCH] option and press “**Enter**”  button to enter the switch action setting menu.
2. Select [ENABLED] option and use “**Left**”  or “**Right**”  button to enable (i.e. set the value to [YES]) switch action.
3. Select [SWITCHES ENABLED] option and press “**Enter**”  button to enable or disable the switches.
4. Use the “**Left**”  or “**Right**”  button to select switch and press the “**Up**”  or “**Down**”  button to enable or disable switch.
5. Press “**Enter**”  button to save the selection setting and go back to switch action menu.
6. Select [GENERAL SWITCH SETTING] option and press “**Enter**”  button to enter the switch setting menu.
7. Select [SWITCH (No.)] option and press “**Enter**”  button to enter the switch (No.) setting menu.
8. Select [NAME] option and press “**Enter**”  button to edit the name of switch (No.).
9. Select [TYPE] option and press the “**Left**”  or “**Right**”  button to choose the switch type.  
Press the “**Back**”  button to go back the general switch setting menu and save the setting.



## Password

10. Select [**LATCH DURATION**] option and press the “**Left**”  or “**Right**”  button to choose the latch duration.
11. Select [**ACTION DELAY**] option and press the “**Left**”  or “**Right**”  button to choose the switch action delay between each on/off.
12. You can press “**Live**”  button to exit OSD menu or press “**Back**”  button to enter action menu again.



GENERAL SWITCH SETTING		
SWITCH	1	...
SWITCH	2	...
SWITCH	3	...
SWITCH	4	...
	LATCH DURATION	10 SEC
	ACTION DELAY	10 SEC

### 3. Dialback

Dialback allows the video recording server to connect to one remote PC and displays live video if an event is triggered. Through the support for different connection methods, such as TCP/IP, modem, null modem and leased line modem. As a result, remote operator can recognize what situation is at the surveillance area.







#### Retry Duration



The retry duration is the period between each dialback retrial (in second).

#### Retry Count

The retry count is the number of dialback retrial if dialback fails.


### Dialback Action Setup Procedure

1. Press “**Menu**”  button, select [**SETUP**] option and press “**Enter**”  button to enter [**SETUP**] sub menu. Select [**EVENT HANDLER**] option and press “**Enter**”  button. Select an event and press “**Enter**”  button to show event setting menu. Enable the event, select [**ACTION**] and press “**Enter**”  button, then select [**DIAL BACK**] and press “**Enter**”  button to enter dial back setting menu.


XXXXXXX ACTION		
RECORDING		...
SWITCH		...
	DIALBACK	
EMAIL		...
SMS		...
BUZZER		...
EVENT LED		...
LIVE CAMERA		...
PTZ		...
SPOT ALARM		...

### Password

2. Select **[ENABLED]** and set **[YES]** to enable dial back action. Select **[GENERAL DIALBACK SETTING]** option and press

“Enter”  button to select other dial back action settings.

XXXXXXX DIAL BACK


	ENABLED	YES
	GENERAL DIALBACK SETTING	...



3. Select **[RETRY DURATION]** or **[RETRY COUNT]** to choose dial back retry duration and retry count respectively. Select **[PHONE**

**(No.)]** and press “Enter”  button to input the dial back address for different connection methods.


GENERAL DIALBACK SETTING

	RETRY DURATION	0
	RETRY COUNT	1
	PHONE/IP 1	...
	PHONE/IP 2	...
	PHONE/IP 3	...
	PHONE/IP 4	...
	TEST	ENTER









4. User can select **[TYPE]** for different connection methods: TCP/IP, modem and null/leased modem. For TCP/IP connection, user needs to input the dial back IP address and port no. in **[IP]** and **[PORT]**

DIALBACK PHONE X SETTING

	TYPE	TCP / IP
	PHONE	
	IP	192.168.0.10
	PORT	2048









5. Select **[IP]** option and press “Enter”  button to set IP. Use “Left”  or “Right”  button to select field and use “Up”  or “Down”  button to set number. Press “Enter”  button to save the change and return to previous menu.

IP

IP : 210. 17.139.145



6. Select **[PORT]** option and press “Enter”  button to set port. Use “Left”  or “Right”  button to select field and use “Up”  or “Down”  button to set number. Press “Enter”  button to save the change and return to previous menu.

PORT

PORT : - 2 0 4 8





7. For modem connection, user needs to input the dial back phone number in **[PHONE]** option.

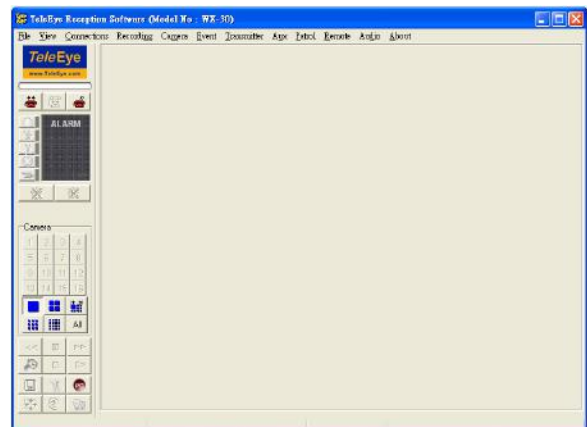
DIALBACK PHONE X SETTING	
TYPE	MODEM
PHONE	29955900
IP	0.0.0.0
PORT	0




8. For null modem / leased line modem connection, user does not need to input any IP or phone numbers.

DIALBACK PHONE X SETTING	
TYPE	NULL MODEM/ LEASED LINE
PHONE	
IP	0.0.0.0
PORT	0

9. You can press “**Live**”  button to exit OSD menu or press “**Back**”  button to enter action menu again.
10. Run **WX-30** software at the local network PC. (For details of WX-30 software installation, please refer to WX-30 Software Guide)



11. Press **[Alarm Standby]**  icon for activating dialback action standby
12. **[Alarm Password]** message broad pops up. Enter alarm password and press **[OK]** icon




Alarm Password	
Password:	<input type="text"/>
<input type="button" value="OK"/> <input type="button" value="Cancel"/>	




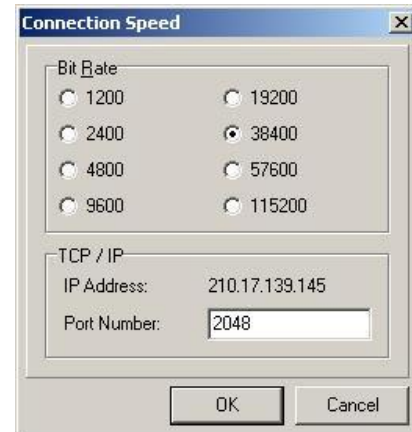
(Default alarm password of WX-30 is 000000)

## Password

13. Press the icon  to select the connection type for dialback










14. Press the icon  to enter [Connection Speed] message broad to select bit rate, port number. The port number **should be as same as the port number set in step 8**
15. Press [OK] icon to exit and save the settings

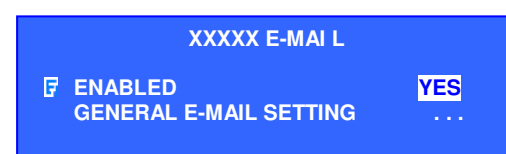
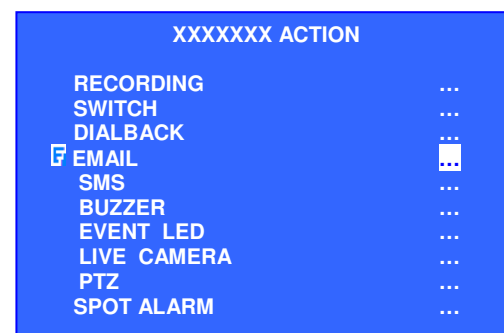


## 4. Email


Email action supports user to send emails to recipient addresses in order to notice the event trigger status.

### Email Setup Procedure :

- Press "Menu"  button, select [SETUP] option and press "Enter"  button to enter [SETUP] sub menu.
- Select [EVENT HANDLER] option and press "Enter"  button. Select an action and press "Enter"  button to show event setting menu. Select [ACTION] option and press "Enter"  button, then select [E-MAIL] option and press "Enter"  button to enter email setting menu.
- Select [ENABLED] and set [YES] to enable email action. Select [GENERAL E-MAIL SETTING] option and press "Enter"  button to select other email action settings.




## Password

4. Select [SENDER E-MAIL] and press “Enter”  button to input the sender e-mail address.


GENERAL E-MAIL SETTING	
SMTP SERVER	...
E-MAIL 1	
E-MAIL 2	
E-MAIL 3	
E-MAIL 4	
<input checked="" type="checkbox"/> SENDER E - MAIL	SENDER@TEL..
ACTION	10SEC
MAX. NO OF E-MAIL	5
TEST E-MAIL	ENTER



5. Select [E-MAIL (No.)] and press “Enter”  button to input the recipient address for email action. Select [ACTION] to set the action delay for email action. Select [MAX. NO OF E-MAIL] to set the maximum number of email for an event trigger.




GENERAL E-MAIL SETTING	
SMTP SERVER	...
E-MAIL 1	
E-MAIL 2	
E-MAIL 3	
E-MAIL 4	
SENDER E - MAIL	SENDER@TEL..
<input checked="" type="checkbox"/> ACTION	10SEC
MAX. NO OF E-MAIL	5
TEST E-MAIL	ENTER



6. Select [SMTP SERVER] and press “Enter”  button to input the SMTP server settings.

GENERAL E-MAIL SETTING	
<input checked="" type="checkbox"/> SMTP SERVER	...
E-MAIL 1	USER1@TEL..
E-MAIL 2	USER2@TEL..
E-MAIL 3	USER3@TEL..
E-MAIL 4	USER4@TEL..
SENDER E - MAIL	SENDER@TEL..
ACTION	10SEC
MAX. NO OF E-MAIL	5
TEST E-MAIL	ENTER








7. Choose [SMTP SERVER ADDRESS] press “Enter”  button to input the SMTP server address. Use “Left”  or “Right”  button to select SMTP server timeout time and send mail retry number.

SMTP SERVER	
<input checked="" type="checkbox"/> SMTP SERVER ADDRESS	TELEEEYE.C..
AUTHENTICATION	YES
USER NAME	USER
PASSWORD	****
DNS SETTING	...
TIMEOUT	1
RETRY COUNT	1



8. If the SMTP server needs authentication, please select [AUTHENTICATION] and set [YES] to enable authentication. Input [USER NAME] and [PASSWORD] for authentication.

9. DNS setting must be set for SMTP server. Choose **[DNS SETTING]** in SMTP server OSD menu and press “**Enter**”  button to enter TCP/IP menu as shown.
10. Set the **[ENABLE DNS]** option to yes and input the primary DNS and secondary DNS setting in **[PRIMARY DNS]** and **[SECONDARY DNS]** option.
11. After changing the DNS setting, press “**Live**”  button or “**Back**”  button several times to exit the OSD menu and **RX** video recording server will pop up a restart message. Press “**Enter**”  button to restart the video recording server.
12. After restart the **RX** video recording server, go back the **[GENERAL E-MAIL SETTING]** menu to test the email. Select the **[TEST E-MAIL]** option and press “**Enter**”  button to test the email, a test mail will be sent to each of the e-mail addresses.







TCP / IP	
IP	210.17.125.98
PORT	1024
SUBNET MASK	255.255.255.0
ENABLE GATEWAY	YES
GATEWAY	210.17.125.7
<input checked="" type="checkbox"/> ENABLE DNS	YES
PRIMARY DNS	210.17.125.4
SECONDARY DNS	210.17.125.14
SURELINK	...



GENERAL E-MAIL SETTING	
SMTP SERVER	...
E-MAIL 1	USER1@TEL ..
E-MAIL 2	USER2@TEL ..
E-MAIL 3	USER3@TEL ..
E-MAIL 4	USER4@TEL ..
SENDER E – MAIL	SENDER@TEL..
ACTION	10SEC
MAX. NO OF E-MAIL	5
<input checked="" type="checkbox"/> TEST E-MAIL	<b>ENTER</b>

## 5. SMS

SMS action supports user to send short message to mobile user in order to notice the event trigger status.

1. Press “**Menu**”  button, select **[SETUP]** option and press “**Enter**”  button to enter **[SETUP]** sub menu.
2. Select **[EVENT HANDLER]** option and press “**Enter**”  button. Select an action and press “**Enter**”  button to show event setting menu. Select **[ACTION]** option and press “**Enter**”  button, then select **[SMS]** option and press “**Enter**”  button to enter SMS setting menu.

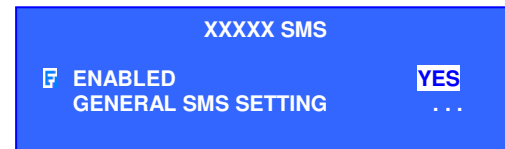
XXXXXXX ACTION	
RECORDING	...
SWITCH	...
DIALBACK	...
EMAIL	...
<input checked="" type="checkbox"/> SMS	...
BUZZER	...
EVENT LED	...
LIVE CAMERA	...
PTZ	...
SPOT ALARM	...



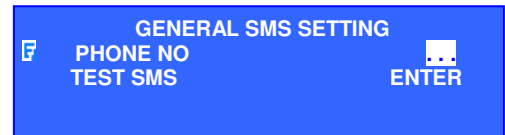
## Password



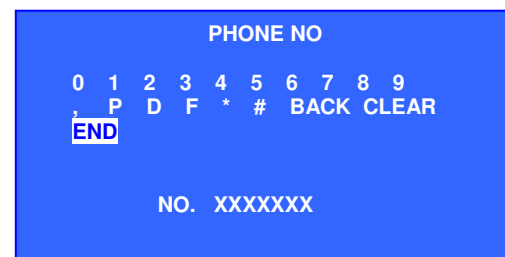
- Select **[ENABLED]** and set **[YES]** to enable SMS action. Select **[GENERAL SMS SETTING]** option and press “**Enter**” button to enter SMS action settings.



- Select **[PHONE NO]** and press “**Enter**” button to input the SMS receiver phone number. One phone number is allowed.

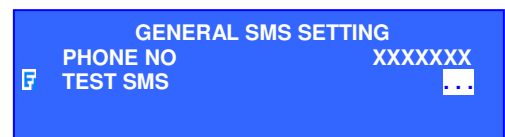


- Input the receiver phone number. Select **[END]** and press “**Enter**” button to save the phone number.



*Note: The phone number should include the district code.*

- Select **[TEST SMS]** and press “**Enter**” button to test the SMS number. A short message will send to mobile user.



*Note: This function is supported only after the SMS box installed.*

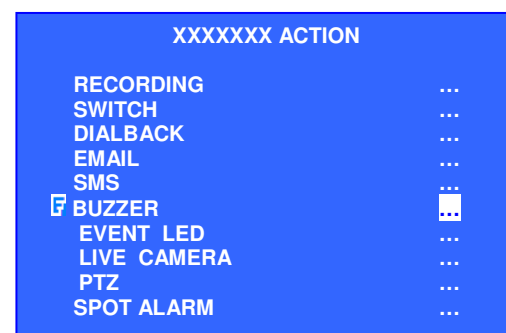
## 6. Buzzer

The built-in buzzer can give “**Beep**” sound that draws nearby operator’s attention when event is triggered.










**Duration** is the period for turning on the buzzer and **Action delay** is the period after turning off the buzzer turning on.

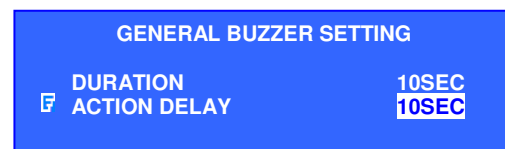
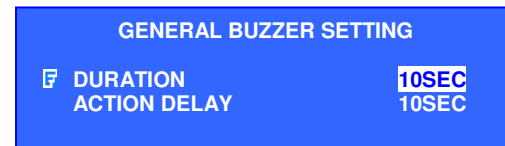
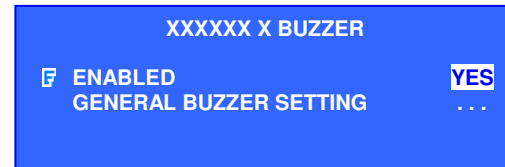
### Buzzer Action setup procedure

- In the action menu, select **[BUZZER]** option and press “**Enter**” button to enter the buzzer action setting menu.




## Password


2. Select **[ENABLED]** option and use “Left”  or “Right”  button to enable (i.e. set the value to **[YES]**) buzzer action.
3. Select **[GENERAL BUZZER SETTING]** option and press “Enter”  button to enter the buzzer setting menu.
4. Select **[DURATION]** option and press the “Left”  or “Right”  button to choose the duration.
5. Select **[ACTION DELAY]** option and press the “Left”  or “Right”  button to choose the action delay
6. You can press “Live”  button to exit OSD menu or press “Back”  button to enter action menu again.

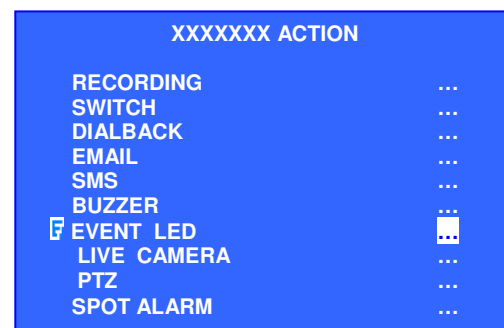






## 7. Event LED

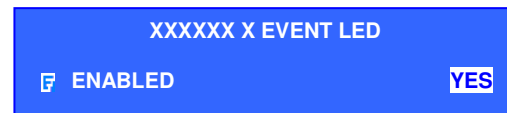
The event LED is the LED built on the front panel of **TeleEye RX** video recording server . If an event is triggered, the LED is blinking until the event is cleared.

### Event LED Action setup procedure

1. In the action menu, select **[EVENT LED]** option and press “Enter”  button to enter the event LED action setting menu.



2. Select [ENABLED] option and use “Left”  or “Right”  button to enable (i.e. set the value to [YES]) event LED action.
3. You can press “Live”  button to exit OSD menu or press “Back”  button to enter action menu again.




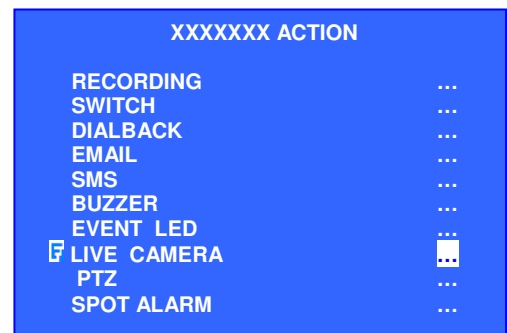
## 8. Live Camera



### Live Camera

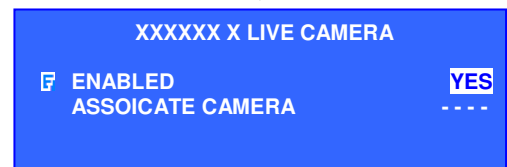
Event associated live camera displays real time live video of pre-selected camera if an event is triggered, so operator can immediately know what is happening at the site. Live camera action can only display live video one time before user clears the event.







### Live Camera Action setup procedure

1. In the action menu, select [LIVE CAMERA] option and press “Enter”  button to enter the live camera action setting menu.





Select [ENABLED] option and use “Left”  or “Right”  button to enable (i.e. set the value to [YES]) live camera action.



2. Select [ASSOCIATE CAMERA] option and press “Enter”  button to enter the live camera action setting menu. Use the “Left”  or “Right”  button to select camera and press the “Up”  or “Down”  button to enable or disable camera. Press “Enter”  button to save the camera setting and go back to live camera action menu.




3. You can press “Live”  button to exit OSD menu or press “Back”  button to enter action menu again.

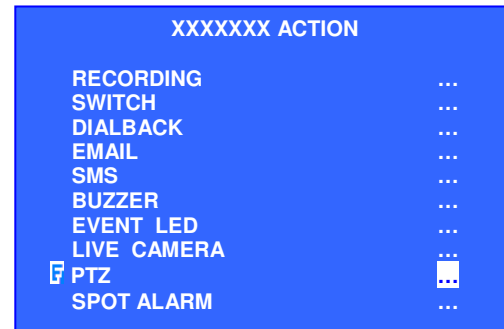
## Password



## 9. PTZ

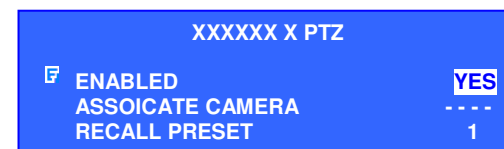
PTZ camera action allows the pan tilt zoom camera to go to user preset position for viewing what happen if an event has been triggered.







### PTZ Action setup procedure

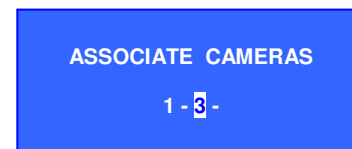
1. In the action menu, select [PTZ] option and press “Enter”  button to enter the PTZ action setting menu.







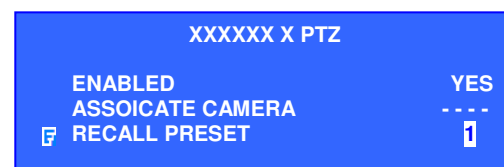
2. Select [ENABLED] option and use “Left”  or “Right”  button to enable (i.e. set the value to [YES]) PTZ action.





3. Select [ASSOCAITE CAMERA] option and press “Enter”  button to enter the PTZ action setting menu. Use the “Left”  or “Right”  button to select camera and press the “Up”  or “Down”  button to enable or disable camera. Press “Enter”  button to save the camera setting and go back to PTZ action menu.



4. Select [RECALL PRESET] option and use the “Left”  or “Right”  button to select camera and press the “Up”  or “Down”  button to choose the preset position of the PTZ camera.




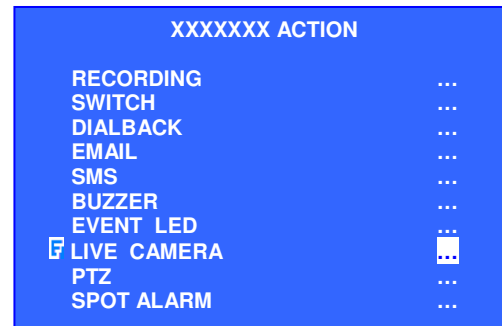
5. You can press “Live”  button to exit OSD menu or press “Back”  button to enter action menu again.



## 10. Spot alarm

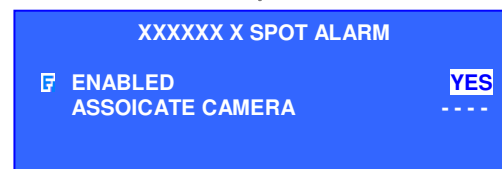
Spot alarm displays real time live video of pre-selected camera when event triggered, so operator can immediately know what is happening at the site. If more than one associated camera is selected, Spot alarm will change to switch mode.







### Spot alarm setup procedure

1. In the action menu, select [SPOT ALARM] option and press “**Enter**”  button to enter the live camera action setting menu.





2. Select [ENABLED] option and use “**Left**”  or “**Right**”  button to enable (i.e. set the value to [YES]) live camera action.



3. Select [ASSOCIATE CAMERA] option and press “**Enter**”  button to enter the live camera action setting menu. Use the “**Left**”  or “**Right**”  button to select camera and press the “**Up**”  or “**Down**”  button to enable or disable camera. Press “**Enter**”  button to save the camera setting and go back to live camera action menu.









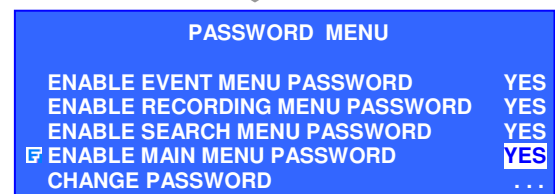
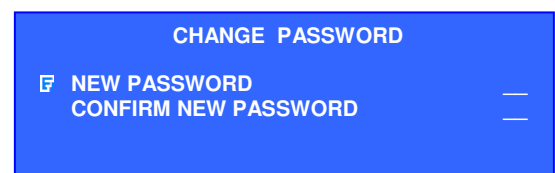
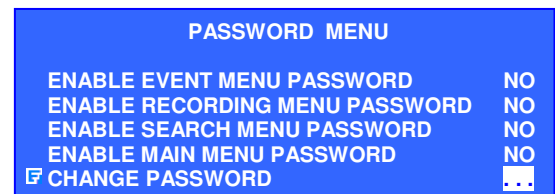
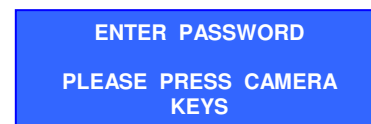
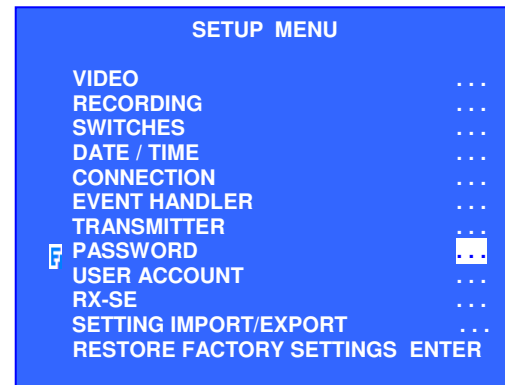
4. You can press “**Live**”  button to exit OSD menu or press “**Back**”  button to enter action menu again.

## F. Password

System administrator can setup a password to protect the video recording server from being operated by unauthorized operators.

### Password Setup Procedures:





1. Press “Menu”  button, select [SETUP] option and press “Enter”  button to enter [SETUP] sub menu. Select [PASSWORD] option and press “Enter”  button.
2. Enter the password first by using the “Live Camera Control Button”. The default password is “11111” and press “Enter”  button.
3. User can change the password by selecting [CHANGE PASSWORD] option and press “Enter”  button. It is highly recommended to change the password after the 1<sup>st</sup> installation immediately.
4. Type a new password using the “Live Camera Control Button” on [NEW PASSWORD] and retype the same password on [CONFIRM NEW PASSWORD]. Press “Back”  button to save and exit the menu.
5. User can enable password protection for event, recording, search and main menu by choosing [YES] option.

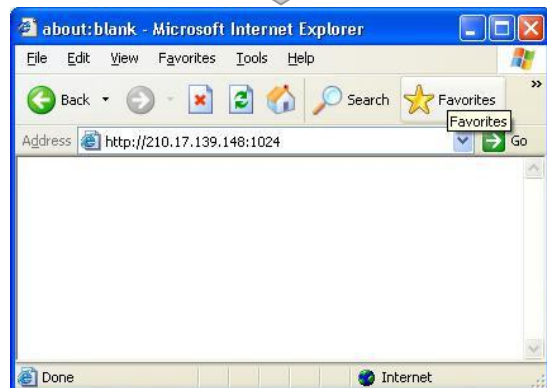
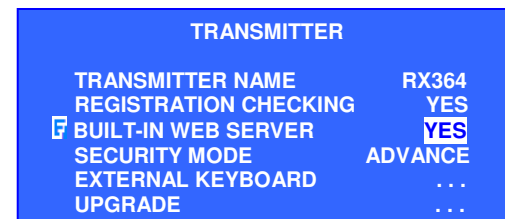
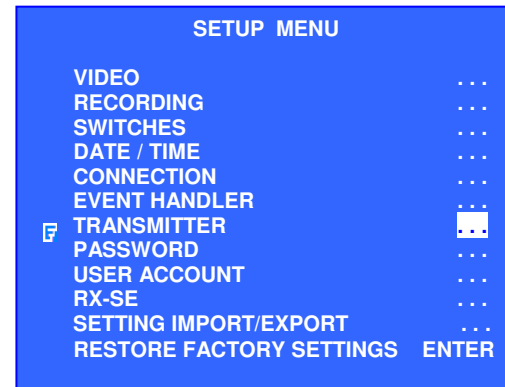


## G. Built-In Web Server

Built-in web server allows user to access and control **TeleEye RX** video recording server by using web browser, such as MS Internet Explorer. In order to use web server function, user must install **Virtual Machine**, such as Sun Java VM (<http://www.java.com>).

### Built-in Web Server Setup Procedures

1. Press “Menu”  button, select [SETUP] option and press “Enter”  button to enter [SETUP] sub menu. Select [TRANSMITTER] option and press “Enter”  button to show video recording server setting menu.
2. Select [BUILT-IN WEB SERVER] option and set [YES] to enable the built-in web server. Press “Back”  button to exit the menu. The video recording server will restart.
3. After video recording server restarts, open a web browser in your PC as shown. Type the IP address and port number of the video recording server with the format as example below :  
**http://210.17.139.148:1024**  
Port number input is optional. If no port number is input, default port number is 80.
4. Type the video recording server password which is same as the administrator password of **TeleEye Reception Software WX-30**. Choose the connection stream, LAN, broadband or narrowband for the web server connection.





5. User can view the site through the web browser as below :

Open the playback menu

Select quality of video

Select camera


Show alarm status

Control RX switch

Exit

View and control the PTZ camera channel


Full view of that camera channel

6. Press “**Switch Control**”  button and the switches control menu will pop up as shown.



7. Press the “**1, 2, 3 or 4**” button to set the switch of **TeleEye RX** video recording server on or off.

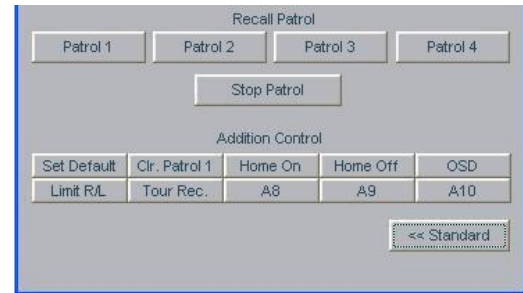
E.g. Switch 2 and 4 are on and switch 2 and 3 are off.

8. Press “**PTZ**”  button to view and control the PTZ camera. The PTZ control menu will pop up as shown. User can control the PTZ camera in this menu such as Pan, Tilt, Auto and so on.

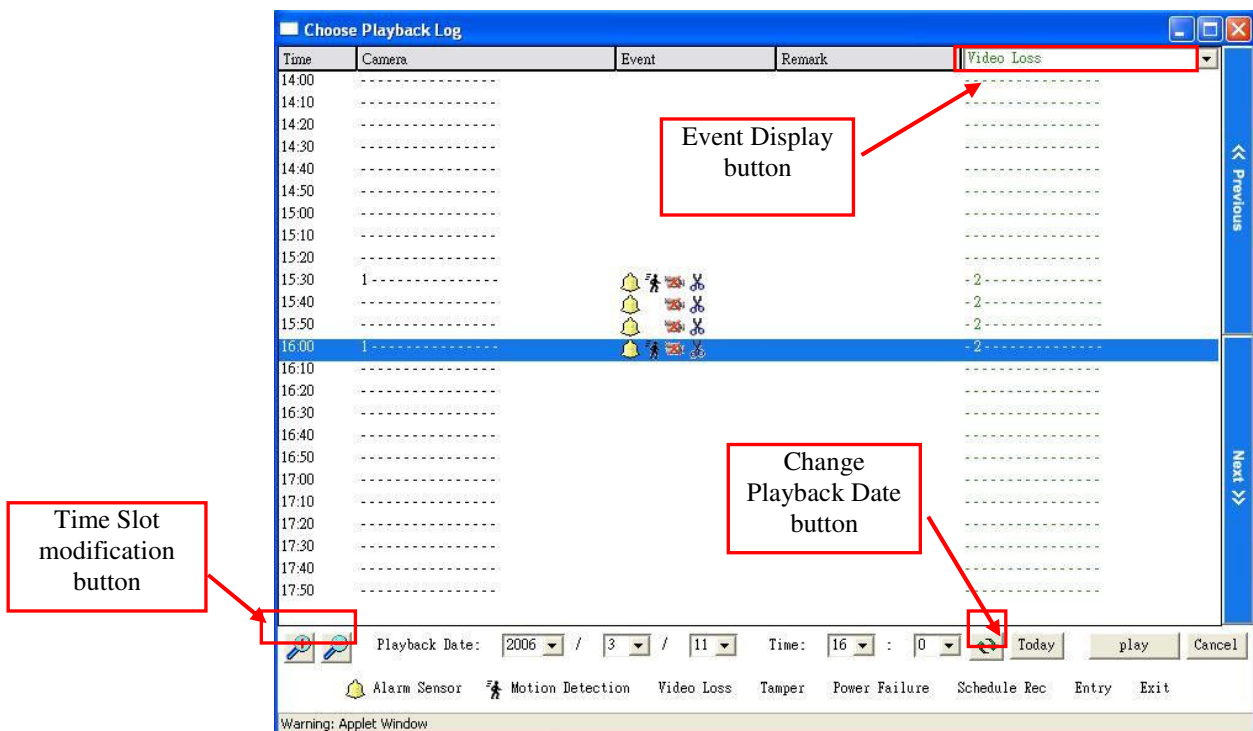






9. Press “Advanced” button to pop up the advance menu for controlling the advance setting of PTZ camera.



10. Press **To Playback** button to pop up choose playback log menu as shown.



The functions of the buttons:

Time Slot modification button: Change the displaying time slot.  will make the time slot smaller while  will make the time slot larger.

Change Playback Date button: Change the current time display to the selected time in the boxes provided.

Event Display button: Display the event happened during the time of the corresponding time slot

## H. Backup to CD / DVD / USB Flash

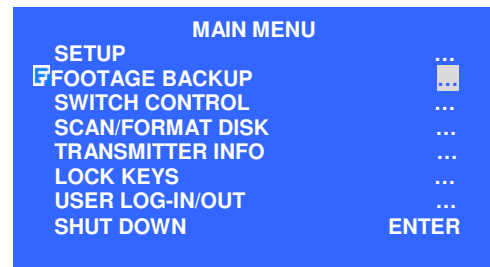
**TeleEye** RX video recording servers support backup footage to CD, DVD and USB Flash. Supported disc type includes: CD-R, CD-RW, DVD+R, DVD-R and DVD+RW. Maximum backup size for CD is 650 MB and 4.7GB for DVD and USB.

*Note: A recommended physical size of CD/DVD should be 120mm / 5.25"*

### Backup to CD / DVD / USB Flash Setup Procedure

1. Press “Menu”  button, select [FOOTAGE

BACKUP] option and press “Enter”  button to enter FOOTAGE BACKUP sub menu.



2. For backup to CD, select [BACKUP TO CD]

option and press “Enter”  button to enter backup menu;



For backup to DVD, select [BACKUP TO DVD]

option and press “Enter”  button to enter backup menu;

For backup to USB, select [BACKUP TO USB]

option and press “Enter”  button to enter backup menu;



3. In [MODE] option, use “Left”  and “Right”  buttons to select [MODE].

*Note:*

*All cameras :*

- Extract all recorded video
- The total files size is large

*Selected camera :*

- Only selected cameras' recording will be extracted
- File size is reduced depend on number of camera selected















*Quick :*

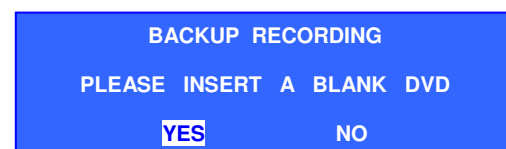
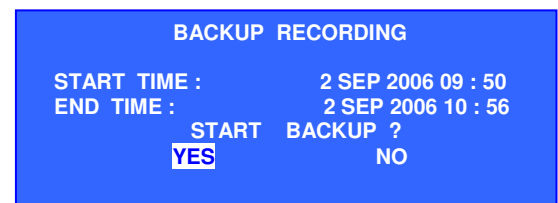
- Extract recording with lower frame rate of selected camera.
- No audio will be extracted

*Smallest file size among the 3 modes*

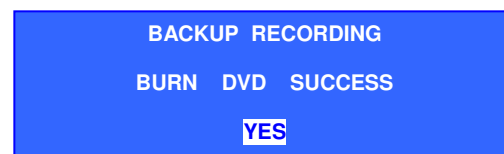
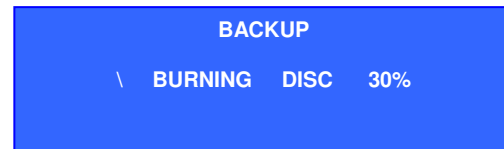
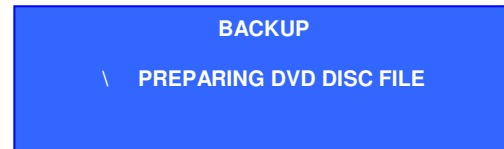



### Backup to CD / DVD / USB Flash

4. In [START DATE] and [START TIME] option, use “Enter” , “Up” , “Down” , “Left”  and “Right”  buttons to select the starting date and time of the backup footage.
5. In [BACKUP PERIOD] option, use “Left”  and “Right”  buttons to select desired backup period of the footage. Backup period will according to the [BACKUP MAX SIZE] if MAX SIZE is selected or size required for the [BACKUP PERIOD] exceed the [BACKUP MAX SIZE].
6. Select [BACKUP MAX SIZE] option and press “Enter”  button to setup the maximum backup size by using “Up” , “Down” , “Left”  and “Right”  buttons. The maximum size for CD backup is 650MB and 4700MB for DVD
7. Select [START BACKUP] option and press “Enter”  button to show [BACKUP RECORDING] message board and it shows user about the end time. Select [YES] option and press “Enter”  button to start backup function.
8. When the message pop-up, insert a blank disc into the DVD recorder.




9. During backup process, backup status will show on OSD, i.e. preparing file and burning disc percentage.



10. After finishing the backup process, press “**Enter**”  button to exit and the CD/DVD will be ejected.

11. Insert the CD/DVD to PC with window OS and the Portable Player software will pop up automatically.

Press “**Play**”  button for playback in the CD/DVD.

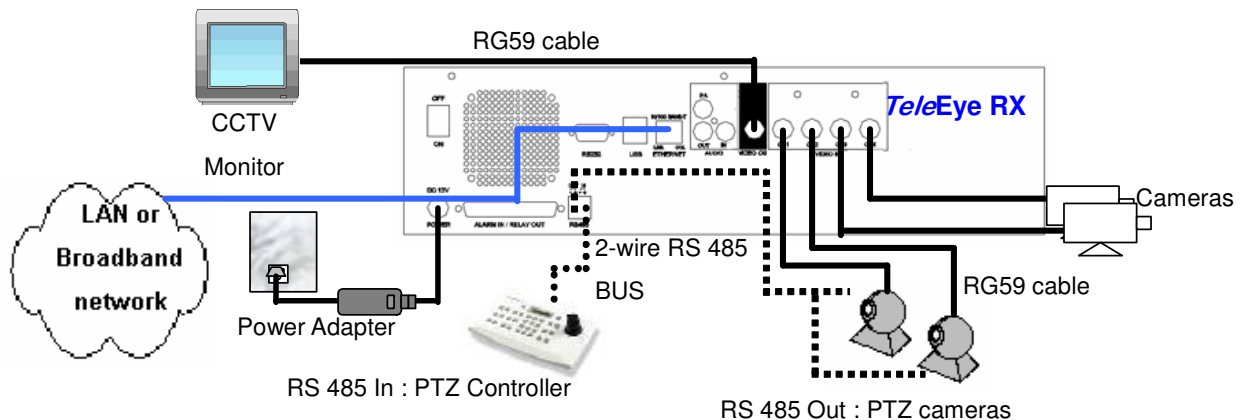


*Note 1: For playback from DVD, the PC must be installed with a DVD-ROM, DVD-RW or Combo drive which supports the backup disc type.*

*Note 2: If the Portable Player software does not pop up automatically, please double click the CD or DVD drive in your PC.*

## I. Connection with PTZ cameras

As **TeleEye RX** video recording server built with a RS485 IN and OUT port, you can connect port OUT to Pan/Tilt/Zoom cameras (in parallel) and connect port IN to keyboard controller. The connection diagram is shown below.

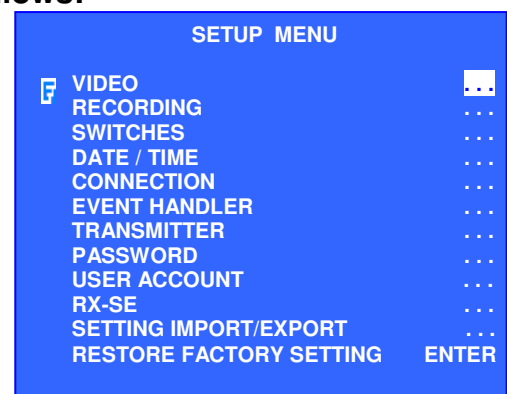


### Setup Procedure















1. Connect the P/T/Z cameras to the RS 485 OUT port in parallel at the **TeleEye RX** rear panel. Connect the P/T/Z cameras to video input port according to each P/T/Z camera ID.  
*Note: All P/T/Z cameras should be the same model.*
2. Connect the keyboard controller to the RS 485 IN port at the **TeleEye RX** rear panel. For keyboard controller setup, please refer to the keyboard controller manual.
3. Configure P/T/Z cameras driver and setting through OSD menu by CCTV monitor.

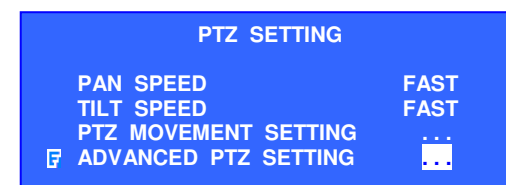
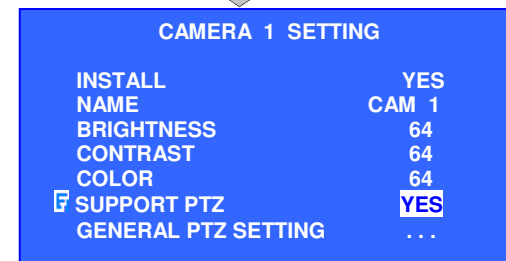
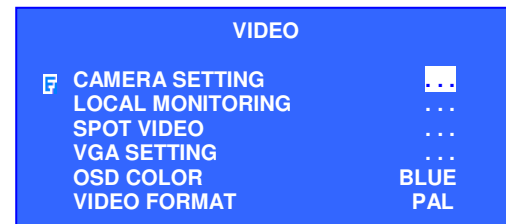
### Configure P/T/Z cameras driver and setting as follows:

1. Press “Menu” button, select [SETUP] option and press “Enter” button to enter [SETUP] sub menu. Select [VIDEO] option and press “Enter” button.

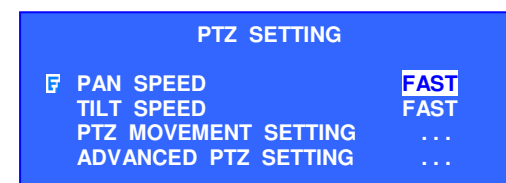


### Connection with PTZ cameras


2. Select [**CAMERA SETTING**] option and press  **“Enter”** button to enter the camera setting menu. Select [**CAMERA (NO.)**] option and press  **“Enter”** button to choose the camera as PTZ camera.
3. Select [**SUPPORT PTZ**] option and use **“Left”**  or **“Right”**  button to choose [**YES**] option. Select [**GENERAL PTZ SETTING**] option and press  **“Enter”** button to set the PTZ feature.
4. Select [**ADVANCED PTZ SETTING**] option and press  **“Enter”** button to configure P/T/Z cameras driver and bit rate.
5. Select [**PTZ DRIVER**] option and press  **“Enter”** button to select P/T/Z cameras driver. According to the P/T/Z camera model, please select a certain driver for required PTZ camera and press  **“Enter”** button to save the setting.
6. Select [**BIT RATE**] option and use **“Left”**  or **“Right”**  button to set bit rate corresponding to your P/T/Z cameras. Press **“Back”**  button to go to [**PTZ SETTING**] menu
7. Select [**PAN SPEED**] and [**TILT SPEED**] options and use **“Left”**  or **“Right”**  button to change the pan (**horizontal direction**) and tilt (**vertical direction**) speed of the PTZ camera.
8. Select [**PTZ MOVEMENT**] option and press  **“Enter”** button to change PTZ movement timing setting




*Note: If there is no driver to support your P/T/Z cameras, please refer to WX-30 software upload PTZ driver section*




9. User can select different movement direction duration according to whether the PTZ camera supports those functions.



PTZ MOVEMENT SETTING		
	PAN DURATION	5
	TILT DURATION	5
	ZOOM DURATION	3
	FOCUS DURATION	3
	IRIS DURATION	3
	ADDITIONAL DURATION	3
	WASHER DURATION	3
	WIPER DURATION	3
	PATROL SPEED	3
	DWELL TIME	2


10. Press “**Back**”  button for several times to exit main menu. Use “**Camera Control**” buttons (as below) to select the PTZ camera.









11. Press “**Live**”  button to show the PTZ Camera Enable menu.



12. Select [YES] option and press “**Enter**”  button to enable PTZ function and the **PTZ enable icon**  shown at the corresponding PTZ camera in CCTV monitor.

13. Press “**Live**”  button to enter the PTZ option menu for advance control and disable PTZ camera.

	Tilt Up
	Tilt Down
	Pan Left
	Pan Right
	Zoom In
	Zoom Out


PTZ OPTION	
RECALL PRESET	
PROGRAM PRESET	
RECALL PATROL	
STOP PATROL	
AUX CTRL	
IRIS CTRL	
FOCUS CTRL	
ZOOM CTRL	
AUTO	
<b>DISABLE PTZ</b>	

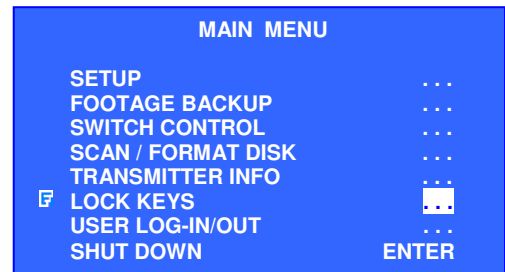
You can use “**control button**” to control PTZ camera.


## J. Panel Key Lock

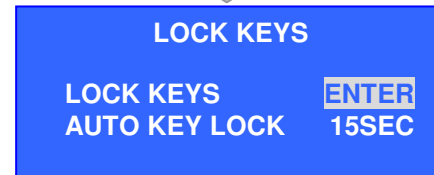
Panel key lock is used to prevent the buttons on the video recording server panel from being pressed carelessly.

### Panel Key Lock and Unlock Procedure:

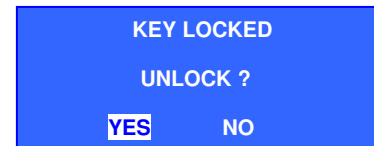
1. Press “Menu”  button, select [LOCK KEY] to enter [LOCK KEY] menu.



2. Select [LOCK KEY] option and press “Enter”  button to enable the panel key lock.






3. In order to unlock the key lock, user should press any keys on the panel. [UNLOCK] message is shown. Choose [YES] to unlock the key lock.

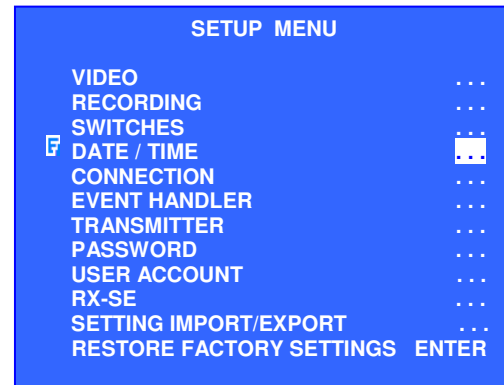




*\*NOTE: password is required if KEY LOCK PASSWORD is enabled.*

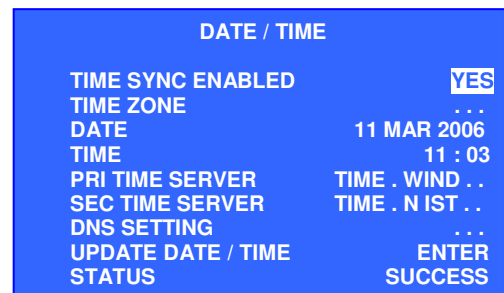



## K. Time Synchronization

1. Press “Menu”  button, select [SETUP] option and press “Enter”  button to enter [SETUP] sub menu. Select [DATE/TIME] option and press “Enter”  button.



2. Select [ENABLED] and set [YES] to enable dial back action. Select [DNS] and press “Enter”  to set DNS setting. Select [PRI TIME SERVER] and press “Enter”  to set the primary time server address and [SEC TIME SERVER] to set the secondary time server address.









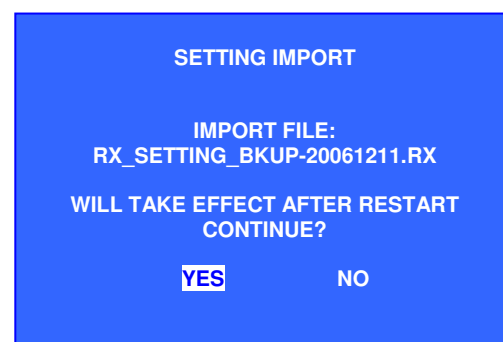
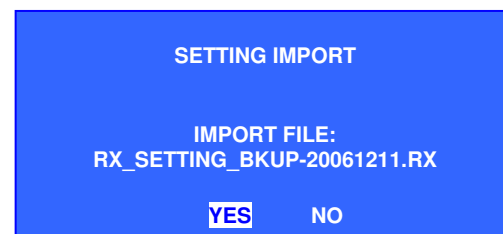
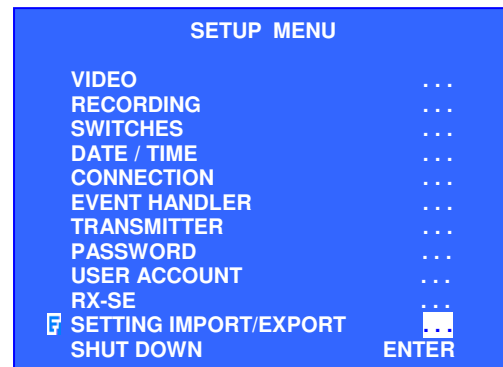
3. Select [UPDATE DATE / TIME] and press “Enter”  to update the date and time with the above setting and the bottom line

- “STATUS” indicates the results
- “SUCCESS” means successful update
- “WORK-IN-PROGRESS” means it is trying to update
- “CANNOT RESOLVE DNS” means unsuccessful update and user should check the setting of time server and DNS setting.

## L. Import and Export

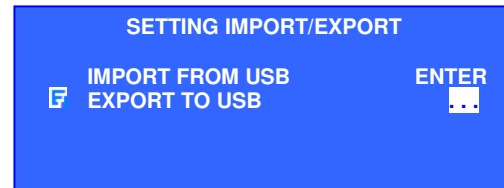
### Import :






1. Press “Menu”  button, select [SETUP] option and press “Enter”  button to enter [SETUP] sub menu. Select [SETTING IMPORT/EXPORT] option and press “Enter”  button.
2. Select [IMPORT FROM USE] option and press “Enter”  button to start import.
3. Plug the USB flash into USB port. Select [YES] and press “Enter”  button to start import. The import file name will be “RX\_SETTING-BKUP-XXXXXX.RX”. “XXXXXX” represents the date. E.g. “RX\_SETTING-BKUP-20061211.RX”. It will change to the next .rx file if you select [No].
4. Select [YES] and press “Enter”  button to restart.




**Export :**

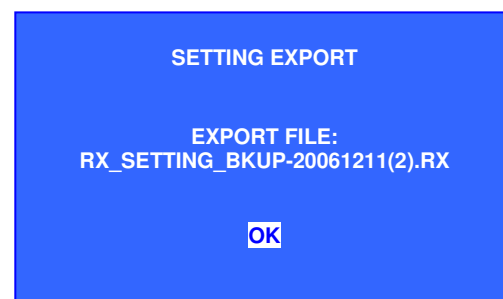
1. Select [EXPORT TO USB] option and press “Enter”  button.






2. Use “Left”  or “Right”  button to select the export type. Press “Left”  or “Right”  button on [SELECT ALL] if you want to export all type of file to USB. Select [START EXPORT] and press “Enter”  button.

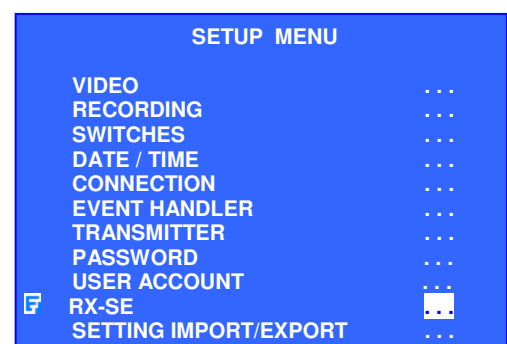



3. Press “Enter”  button to start export. The file name will change to “RX\_SETTING-BKUP-20061211(2).RX” automatically if a same file name existed before.

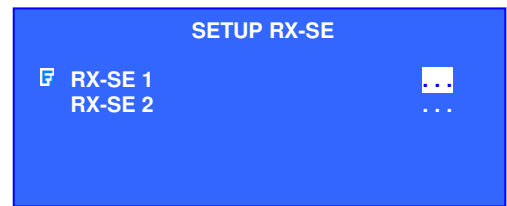
**M. RX-SE setting**



1. Setup RX-SE and press “Menu”  button.

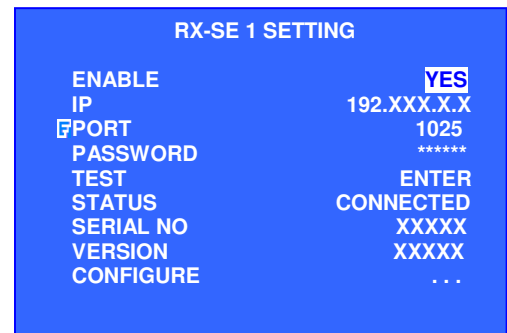
Select [SETUP] option and press “Enter”  button to enter [SETUP] sub menu. Choose RX-SE and press “Enter”  button.



2. Select **[RX-SE]** option and press “**Enter**”  button to enter the RX-SE setting menu. You can choose different RX-SE number in this setup menu.




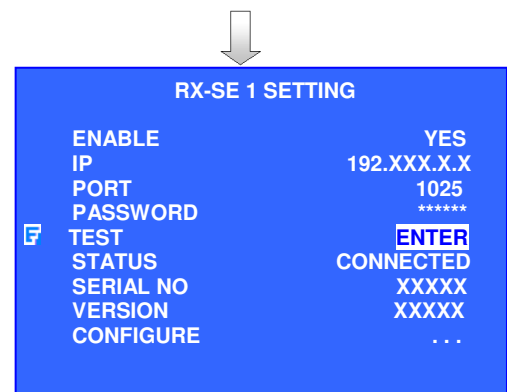
3. Select **[ENABLE]** option and Use “**Left**”  or “**Right**”  button to select **[YES]** for enable RX-SE setting.



*Note:*

*IP and PORT is the IP address and port number of the RX-SE. IP, PORT and PASSWORD can change here. It will find the RX-SE by this IP address and port number.*

4. Select **[TEST]** option and press “**Enter**”  button to test the connection of RX-SE. Result will show in the STATUS. If it shows ERROR or DISCONNECTED, you should check the RX-SE connection and the IP address ,port number or password correct or not. SERIAL NO and VERSION represent the serial number and version of RX-SE. It will show after the RX-SE is connected.



*Note:*



*There are several statuses.*

<b>STATUS :</b>	<b>MEANING :</b>
DISCONNECTED	Disconnected
CONNECTED	Normal
INCORRECT PW	Incorrect password
SE BUSY	The RX-SE is in use
IP/PORT ERROR	Cannot establish connection
MOUNT ERROR	Testing result : HDD error
READ ERROR	Testing result : HDD error
WRITE ERROR	Testing result : HDD error
UMOUNT ERROR	Testing result : HDD error
VALID	Tested OK

## RX-SE Settings


5. Select [**CONFIGURE**] option and press

“**Enter**”  button.

RX-SE 1 SETTING	
ENABLE	YES
IP	192.XXX.X.X
PORT	1025
PASSWORD	*****
TEST	...
STATUS	CONNECTED
SERIAL NO	XXXXX
VERSION	XXXXX
 CONFIGURE	





6. Select [**PASSWORD**] option and press

“**Enter**”  button to change the password.


*Note:*


*RX-SE IP can change here. The IP of RX-SE 1 will change if you input a new IP.*

RX-SE 1 CONFIG	
IP	192.XXX.X.X
PORT	1025
SUBNET	255.XXX.XXX.X
GATEWAY	192.XXX.X.X
 PASSWORD	



7. Select [**NEW PASSWORD**] option and press

“**Enter**”  button to change the password.

RX-SE 1 PASSWORD	
OLD PASSWORD	*****
 NEW PASSWORD	*****
RE ENTER NEW PASSWORD	*****






8. Input the new password and press [**END**].  
Select [**RE ENTER NEW PASSWORD**]



option and press “**Enter**”  button in the RX-SE password submenu to confirm the changed password.

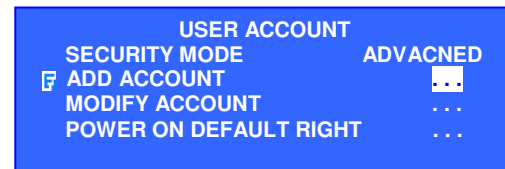
NEW PASSWORD											
0	1	2	3	4	5	6	7	8	9		
A	B	C	D	E	F	G	H	I	J		
K	L	M	N	O	P	Q	R	S	T		
U	V	W	X	Y	Z						
BACK	NEXT	CLEAR	END								
NEW PASSWORD :											






## N. User account

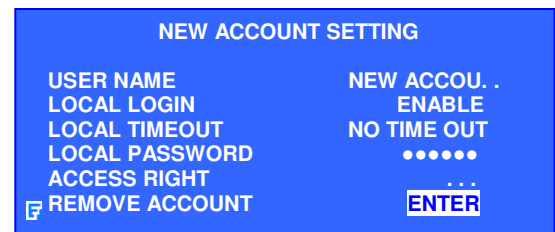
1. Press “Menu”  button, select [SETUP] option and press “Enter”  button to enter [SETUP] sub menu. Select [USER ACCOUNT] option and press “Enter”  button.




2. At [SECURITY MODE] select [ADVANCED]
3. Enter advanced security mode ADMINISTRATOR local password to change the video recording server security mode.
4. After video recording server restart, repeat Step 1. to [USER ACCOUNT] page.
5. Select [ADD ACCOUNT] option and press “Enter”  button to add a new user account. Select [MODIFY ACCOUNT] option and press “Enter”  button to modify existing user account setting.



6. In [ACCOUNT NAME] option, press “Enter”  button to edit a 4-16 characters account name. (Account name can only be edited while adding a new account)
7. In [LOCAL LOGIN] option, use “Left”  and “Right”  buttons to enable/disable this user as local account type.
8. In [LOCAL TIMEOUT] option, use “Left”  and “Right”  buttons to select local timeout period.



9. In [LOCAL PASSWORD] option, press

“**Enter**”  button to input a 4-10 numeric characters local password by using keypad

key. Press “**Enter**”  button and retype the same password by keypad keys to confirm



*Note: Enter password key mapping:*

RX364 / RX324:

‘1’- ‘4’ → “Cam 1” – “Cam 4”

‘5’ → “Full”  ‘6’ → “Quad” 

‘7’ → “Seq”  ‘8’ → “Event” 

‘9’ → “Rec”  ‘0’ → “Live” 

RX368\_V2 / RX328:

‘1’- ‘8’ → “Cam 1” – “Cam 8”


‘9’ → “Full”  ‘0’ → “Quad” 

RX3616\_V2 / RX3216:

‘1’- ‘9’ → “Cam 1” – “Cam 9”

‘0’ → “Cam 10”

10. Select [ACCESS RIGHT] option and press

“**Enter**”  button to edit account access right.


*Notes:*

**NO** Access right disabled

**YES** Access right enabled

**[YES]** Access right automatic enabled because other dependent access right is enabled (refer Appendix E for more detail)

11. Select [REMOVE ACCOUNT] option and

press “**Enter**”  button if want to remove this account.



**ENTER PASSWORD**

1 – 9	CAM KEY
0	CAM 10
PASSWORD: ●●●●●●	



**RETYPE PASSWORD**

1 – 9	CAM KEY
0	CAM 10
PASSWORD: ●●●●●●	



**ACCESS RIGHT:**

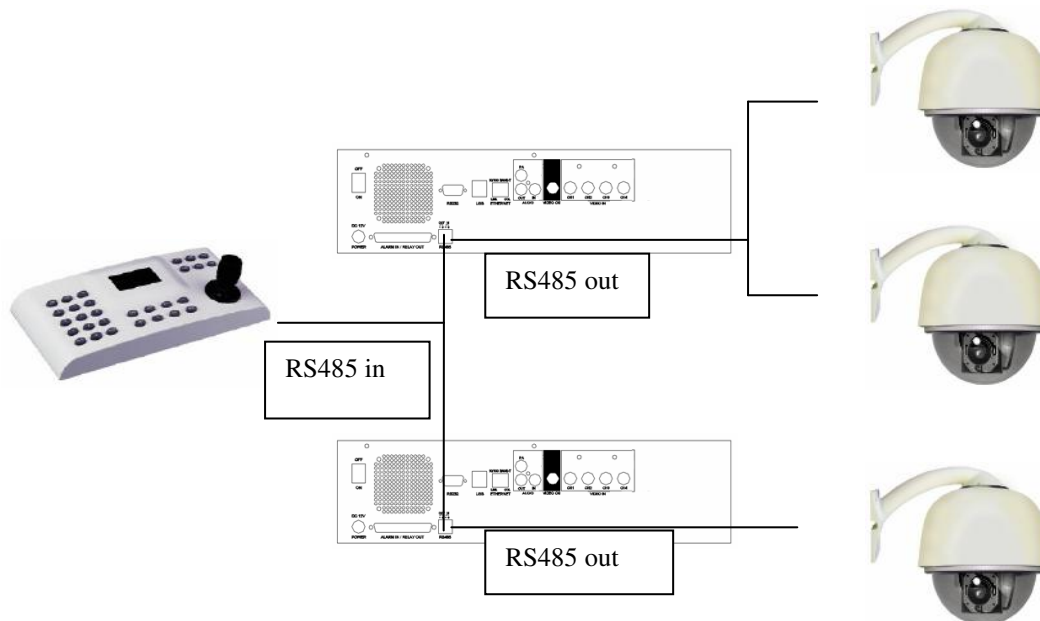
1. ACCOUNT SETTING ENABLED	NO
2. SYSTEM SETTING ENABLED	NO
3. RECORDING ENABLED	NO
4. BACKUP ENABLED	YES
5. SWITCH CONTROL	1 – 3 –
6. EVENT CONTROL ENABLED	NO
7. CAMERA CONTROL ENABLED	YES
8. PLAYBACK ENABLED	[ YES]
9. AUDIO ENABLED	[YES]
10. VIDEO ENABLED	123456789ABCDEF

## O. External Keyboard





RX supports **TeleEye** KB-02 to control local operation and PTZ cameras.

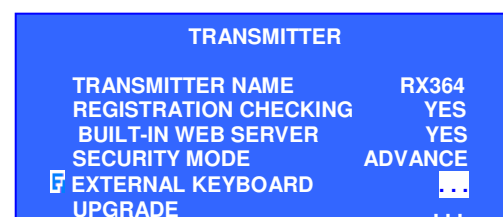
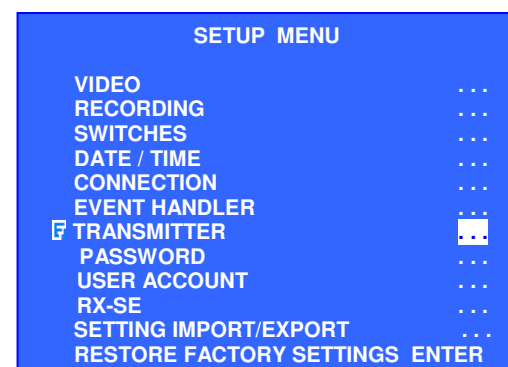
### External Keyboard and Camera Setup

1. Connect **TeleEye** KB0-2 to RX RS485 IN connector at the rear panel.
2. Connect Cameras' RS485 wire to RX RS485 OUT connector.






### External Keyboard Setup Procedures

1. Press “**Menu**”  button, select [SETUP] option and press “**Enter**”  button to enter [SETUP] sub menu. Select [TRANSMITTER] option and press “**Enter**”  button to show video recording server setting menu.
2. Select [EXTERNAL KEYBOARD] option and press “**Enter**”  button to enter [EXTERNAL KEYBOARD] sub menu.




### External Keyboard



3. Select [TRANSMITTER AND PTZ] option and press “Enter”  button to enable External Keyboard control video recording server
4. Select [TRANSMITTER ID] and [RS-485 BAUD RATE] by using “Left”  and “Right”  buttons. Noted that RS-485 BAUD RATE is recommended to use 4800.
5. Follow the installation procedure of **TeleEye** DM-KB02 to setup keyboard parameter.



EXTERNAL KEYBOARD	
 MODE	TRANSMITTER AND PTZ
TRANSMITTER ID	1
RS-485 BAUD RATE	4800

## APPENDIX A

# Safety Instruction

## Important safety instruction

Read the instruction carefully. Save these instructions for future reference.

1. Follow all warnings and instructions marked on the product and this user guide.
2. Do not place this product on unstable cart, stand, or table. The product may fall, causing serious damage to the product.
3. Slot and openings of the casing are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered. The openings should never be placed near of over a radiator or heat source, or in a built-in installation unless proper ventilation is provided.
4. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type power available, consult your dealer or local power company.
5. The DVD drive used with this product is a laser product. It radiates Class 3B invisible laser when open. Avoid direct exposure to the beam
6. Beware of the DVD drive's tray when inserting/ ejecting DVD disc. Incorrect usage may cause damage on the DVD disc, the DVD drive or hurt the operator's finger.
7. Make sure the Hard Disk cartridge lock is open before removing and installing the cartridge.
8. The Hard Disk cartridge and cartridge frame contain metal parts that may cause injury of user. Handle with care especially when installing and removing Hard Disk.
9. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks.

## APPENDIX B

# Limited Warranty

**Conditions, Limitations and Liabilities of This Warranty:**

1. Signal Communications Ltd. (hereinafter called **TeleEye**) provides free repairing labour and free repairing parts for the first 12 months. Please present the Warranty Card and the original invoice when you are asking for service support.
2. In case of applicable, **TeleEye** staff shall request a remote access inspection or trouble shooting through internet, PSTN, ISDN, or mobile media.
3. When service is required, the Customer is responsible for all the transportation costs.
4. Outdoor services are not included. Subject to **TeleEye**, outdoor services will be provided at extra charges.
5. This warranty does not extend to cover any damages or malfunction resulting from disaster, environmental factor, abnormal humidity/temperature, improper voltage, electrostatic discharge, misuse, negligence, ignorance, accident, mold, or repairs /modifications made by any person(s) other than the authorized personnel of **TeleEye**.
6. **TeleEye** reserves the right to charge Customer an inspection fee, on-site service fee or cost of parts if (i) no fault in the equipment can be found during inspection or (ii) the defect is caused at conditions those mentioned in point 5 above or (iii) Customer fail in providing access methods to the site or the equipment, e.g. specified access permit or key. Such determination is up to the sole discretion of **TeleEye**.
7. The warranty is void if any of the cabinet seal has been removed or opened if there is any such sign not being made by any authorized personnel of **TeleEye**.
8. Under no circumstance shall **TeleEye** be liable for any damages to any parties so caused by the usage of the above specified equipment or so caused during service provision.
9. The conditions, limitations and liabilities of this warranty card may be extended to further terms and conditions or superseded by other terms and conditions when otherwise specified on any of the products.
10. Customer shall be responsible for backing up the data contained in the disk products.
11. **TeleEye** shall have no responsibility arising out of any damage to, or loss of the data contained in the disk products.
12. All the above determinations are up to the sole discretion of **TeleEye**.

## APPENDIX C

# sureLINK Technology

**sureLINK** technology is available in **TeleEye RX**, which enables you to connect to the video recording server with broadband dynamic IP Internet connection. If you can only use broadband dial-up account to connect to the Internet through your computer, **sureLINK** provides a solution for sharing the Internet connection between your computer and the video recording server.

**sureLINK** is a group of additional functions, services and software provided for the video recording server so as to make it connect to the Internet in any connection methods. Such function can only be used if you have applied for this service. After you have done so, you also need to configure the video recording server to make **sureLINK** available. This section will help you to configure and use it.

By using of **sureLINK** technology, the powerful **TeleEye RX** can work on broadband Internet economically. You can perform a cost effective and convenient remote live video monitoring anytime and anywhere.

## sureLINK Address

You can apply for a **sureLINK** address (domain name), such as *www.hkpublic.teleeye.teleeye.net*, for your video recording server. You can use this name to login or browse the built-in web server \*\*. One of the advantages is that you are not required to memorize the IP address (e.g. 210.177.50.156) of the video recording server. Since the **sureLINK** address is fixed while the IP address may change periodically (in case when dynamic IP is used), you do not need to worry about the expiration of the IP address. The **sureLINK** address can also be used in video recording server web browsing to see live video on standard web browser (e.g. IE, Netscape).

## Refreshing Rate

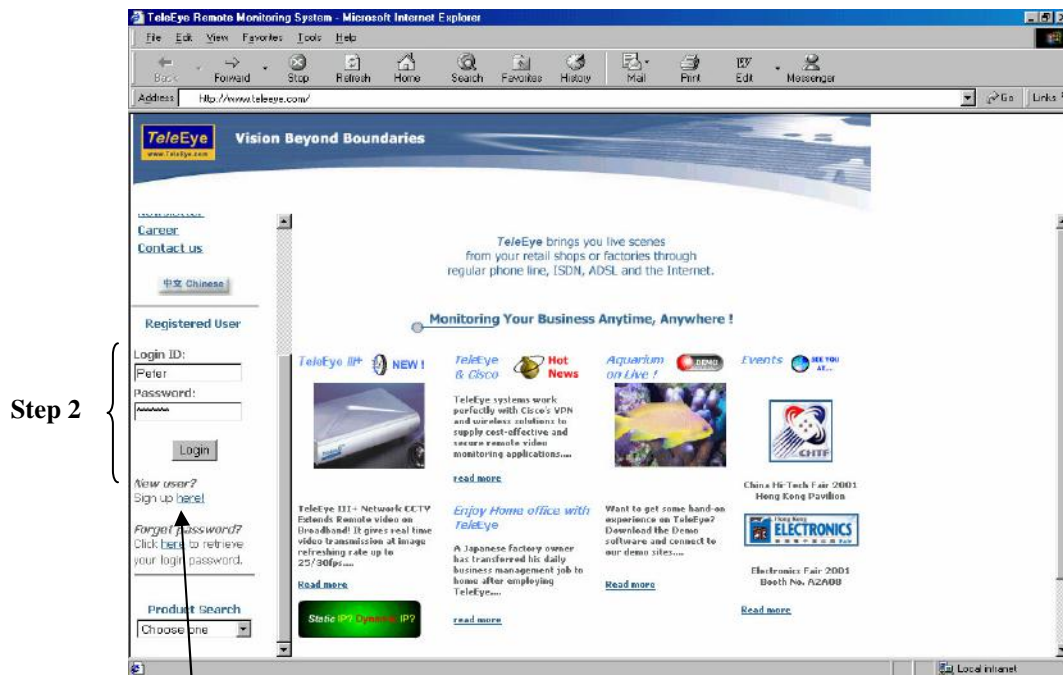
When **sureLINK** address feature is enabled, the video recording server will periodically update its current IP address to our database to ensure that the **sureLINK** address is always forwarded to a valid IP. You can set this update period through OSD menu.

## DNS Services:

Assigned when the video recording server can directly access the Internet without the help of **TeleEye** Proxy Server

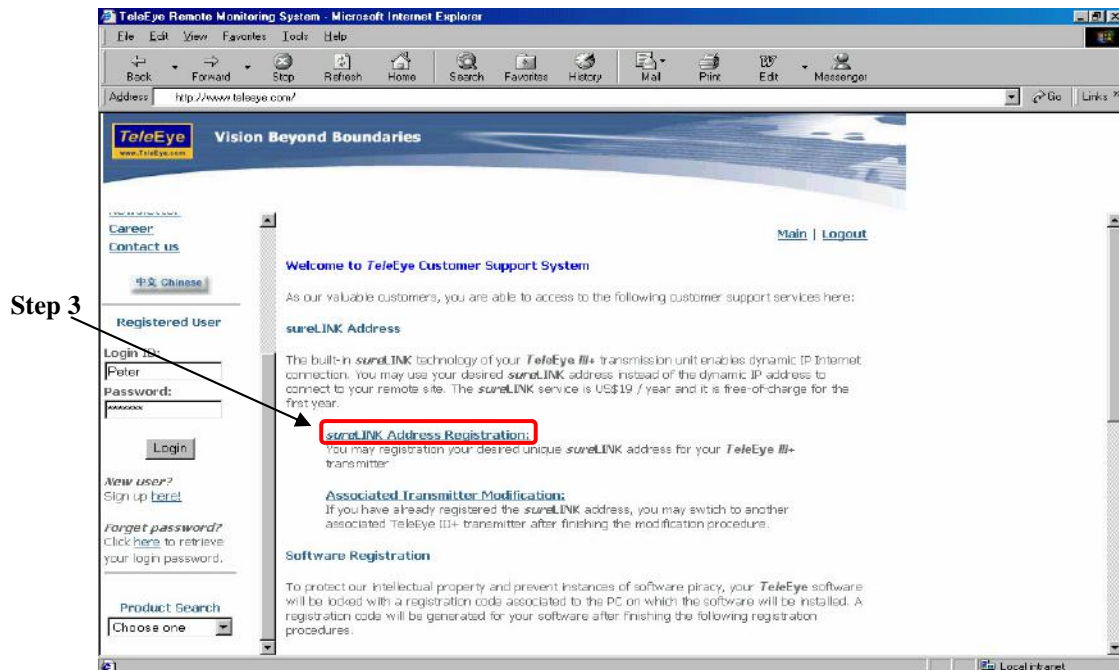
## How to Apply for **sureLINK** Address

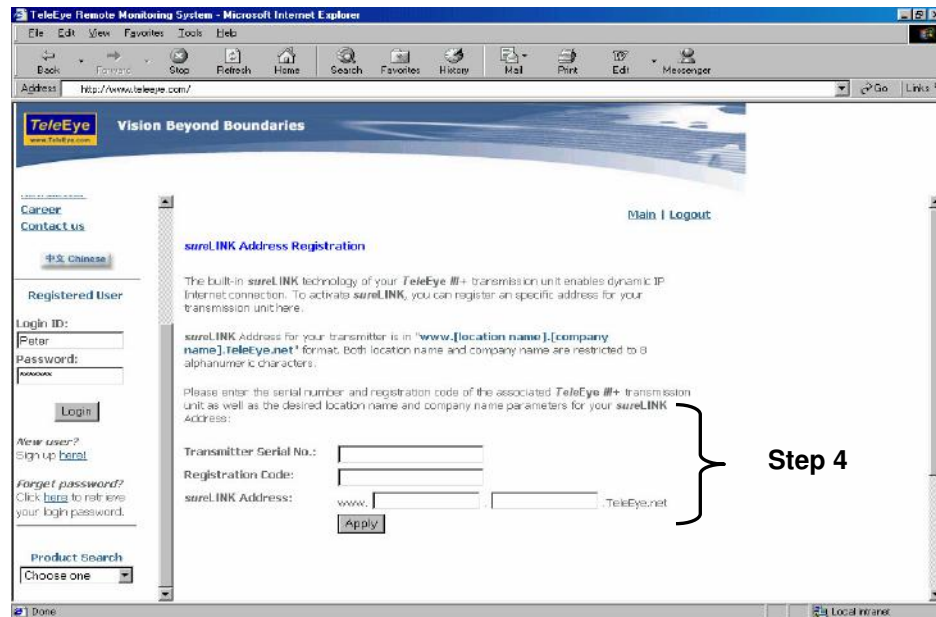
You can apply for **sureLINK** by visiting our web site at <http://www.TeleEye.com>



Step 1

1. Sign up to create your user account
2. Login the page using your registered name and password.
3. Click **sureLINK** Address Registration button





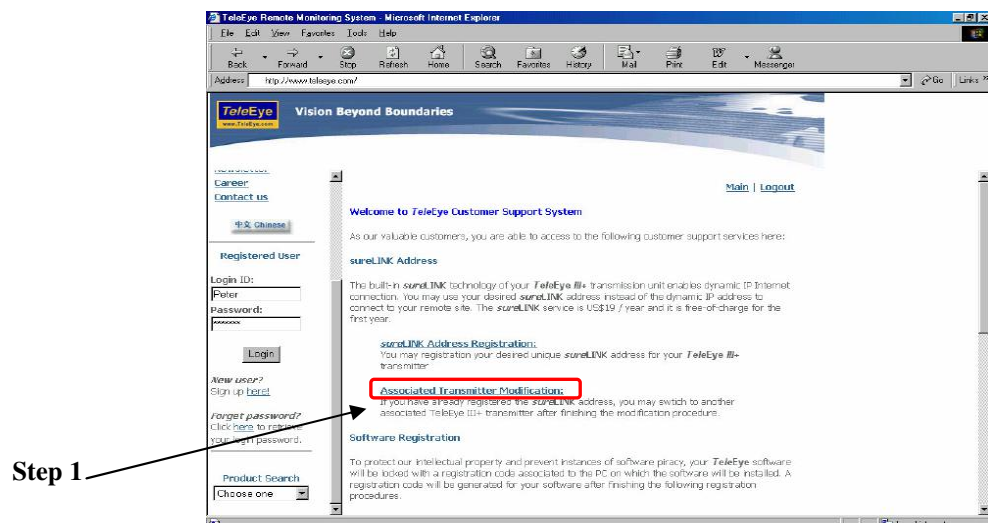
4. Enter a **sureLINK** address (**Domain Name**), your **Video recording server Serial No.** and **Registration Code** in the fields provided respectively. Then click the **Apply** button. The process is then completed.

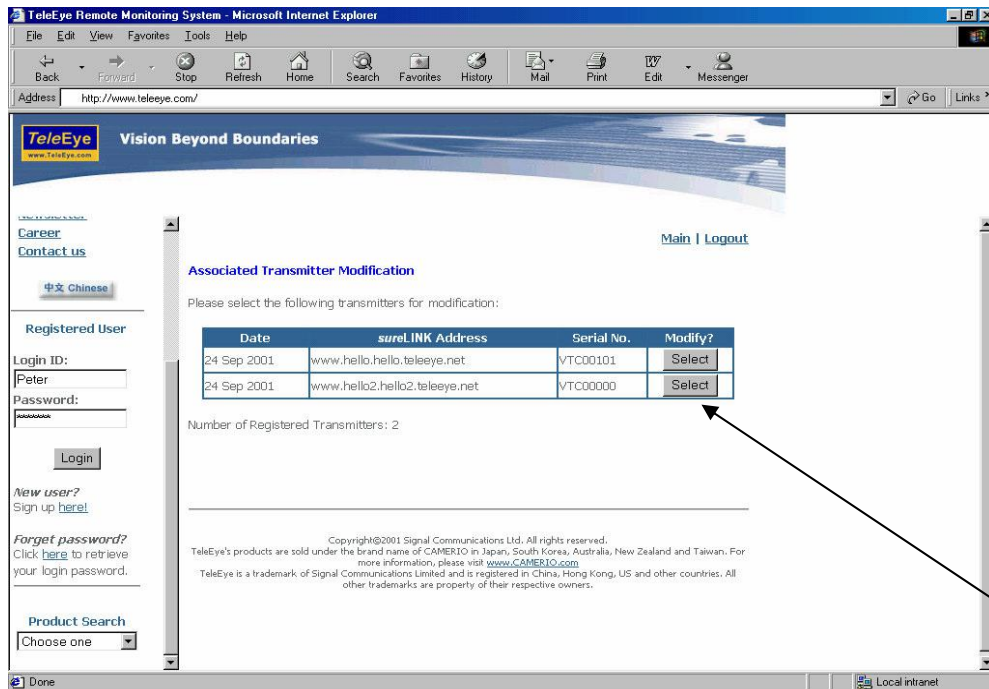
After we receive your domain name registration for your video recording server, your application will be processed. Normally, it requires about 2 to 3 working days to activate **sureLINK** for your video recording server. You will receive a notification e-mail when your **sureLINK** service is ready.

### Transmitter Modification

Since the **sureLINK** (Domain name) address corresponds to a single video recording server, if you change from one video recording server to another one, you have to inform us to update our database record. To do this, you can visit our **TeleEye** Product Support again and follow the steps as below:

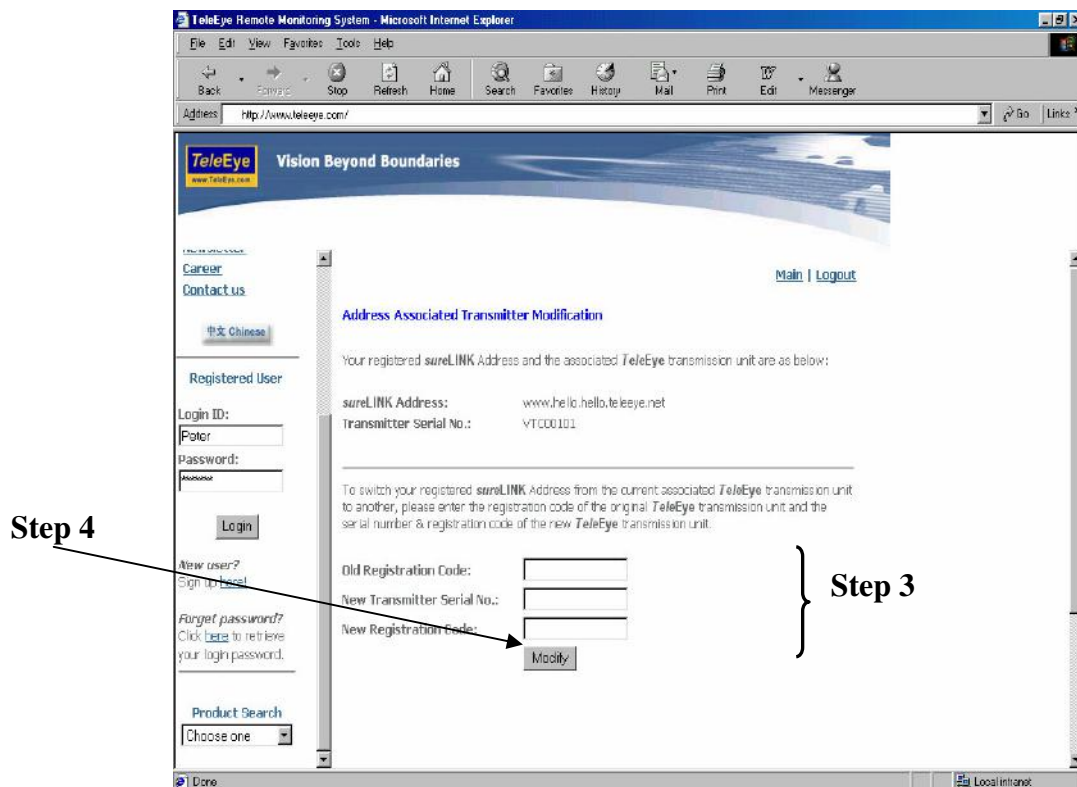
1. Transmitter Modification > Select a **sureLINK** address (**Domain Name**) you want to modify





Step 2

- Enter the **Old Registration Code**, **New Transmitter Serial Number** and **New Registration Code** at each field provided. Click **Modify** button to submit the form.



Step 4

Step 3

If the above procedure is completed successfully, the **sureLINK** will be effective immediately.

## APPENDIX D

# Firmware Upgrade

Please follow the following procedures to upgrade the new version of **TeleEye RX** firmware. Note that user must upgrade the new version of **TeleEye RX** firmware TWICE if the current version firmware is below 2.00.00 version.

## USB Upgrade :

<b>Step 1 :</b>	<ul style="list-style-type: none"> <li>If you already have the firmware upgrade file in a USB, please go to <b>Step 3</b>. Otherwise, please go to <b>Step 2</b>.</li> </ul>
<b>Step 2 :</b>	<ul style="list-style-type: none"> <li>Get ready the <b>RX</b> firmware upgrade file *.rxp. Get ready an empty USB drive and download the <b>RX</b> firmware upgrade file to your USB <b>root directory</b>, for example, E:\*.rxp.</li> </ul>
<b>Step 3 :</b>	<ul style="list-style-type: none"> <li>Turn on <b>RX</b> video recording server. Plug the USB flash into USB port in the rear panel of <b>RX</b> video recording server. Press <b>Menu</b> button at the front panel of the video recording server.</li> <li>Enter Main menu → Setup menu → Transmitter menu → Upgrade menu → Upgrade Transmitter Firmware → Choose Upgrade from USB and press <b>Enter</b> button.</li> <li>The video recording server will complete the upgrade process automatically.</li> </ul>
<b>Step 4 :</b>	<ul style="list-style-type: none"> <li>After upgrade, press <b>Menu</b> button at the front panel of the video recording server.</li> <li>Enter Main menu → Transmitter Info menu, to check the <b>RX</b> firmware version is upgraded or not.</li> </ul>

## CD Upgrade :

<b>Step 1 :</b>	<ul style="list-style-type: none"> <li>If you already have the firmware upgrade file in a CD, please go to <b>Step 3</b>. Otherwise, please go to <b>Step 2</b>.</li> </ul>
<b>Step 2 :</b>	<ul style="list-style-type: none"> <li>Prepare a blank CDR. Burn the <b>RX</b> firmware upgrade file into the <b>root directory</b> of the blank CDR, for example, F:\*.rxp. (For burning the <b>RX</b> firmware upgrade file into the CDR, please refer to the user guide of the software for burning CDR.)</li> </ul>
<b>Step 3 :</b>	<ul style="list-style-type: none"> <li><b>Install a RX formatted hard disk</b> into <b>RX</b> video recording server and turn it on. Insert the CD into the CD-ROM of <b>RX</b> video recording server. Press <b>Menu</b> button at the front panel of the video recording server.</li> <li>Enter Main menu → Setup menu → Transmitter menu → Upgrade menu → Upgrade Transmitter Firmware → Choose Upgrade from CD and press <b>Enter</b> button.</li> <li>The video recording server will complete the upgrade process automatically.</li> </ul>
<b>Step 4 :</b>	<ul style="list-style-type: none"> <li>After upgraded, press <b>Menu</b> button at the front panel of the video recording server.</li> <li>Enter Main menu → Transmitter Info menu, to check the <b>RX</b> firmware version is upgraded or not.</li> </ul>



## APPENDIX E

# Security Mode

There are 2 security modes in **TeleEye** RX: BASIC and ADVANCED. User can either choose BASIC security mode for simple usage or ADVANCED security mode for multiple user accounts and flexible access right. The comparison of the security modes can be found in the following table:

Description		Basic Security Mode	Advanced Security Mode
Number of account		2	20
Account apply on		reception software	reception software and local OSD
Password length		6	4 – 10
Password encryption		No	Yes
Login	Reception software	Only password	User name and password
	Local menu	- -	Only password
Access right		Operation System setting	Video monitoring Audio monitoring and PA Playback Camera Control Event Control Switch Control Video backup Recording System setting User account

\* 6 concurrent users in both security modes

## Basic security mode -- User account

### ADMINISTRATOR

Type	Default	Remark
User name	ADMINISTRATOR	FIXED
Access right	Operation and System setting	FIXED
Network password	000000	Available to change

### USER

Type	Default	Remark
User name	USER	FIXED
Access right	Operation	FIXED
Network password	123456	Available to change

## Basic security mode -- Access right

Group	Features Involved
Operation	Video/audio monitoring, PTZ, Playback, Switch control
System setting	Start/stop recording, Video backup, System setting, Restart transmitter Firmware upgrade

## RX Security Mode

## Advanced security mode -- User account

### Account structure

Type	Description	Remark
<b>General setting</b>		
User name	Login user name from remote software	4-16 characters case insensitive unique between each account
Account type	LOCAL / NETWORK / BOTH	allow user to login from local OSD / remote software / both
Access right	Access right of the user account	(Access right)
<b>Network account type setting</b>		
Network password	Login password from remote software	4-10 characters case insensitive
<b>Local account type setting</b>		
Local password	Login password from local OSD menu	4-10 characters ( <b>ONLY</b> numeric character available) unique between each account
Local time out	Automatic log-out time period when keypad idle	except in playback state

In factory default, 2 preset accounts: ADMINISTRATOR and USER1 are stored in the video recording server.

### Administrator account: ADMINISTRATOR\*\*

Type	Default	Remark
User name	ADMINISTRATOR	FIXED
Account type	BOTH	FIXED
Access right	ALL	FIXED
Network password	000000	Available to change
Local password	111111	Available to change
Local time out	15 MINS	Available to change

\*\*Administrator account cannot be removed

### Normal account: USER1

Type	Default	Remark
User name	USER1	FIXED
Account type	BOTH	Available to change
Access right	VIDEO MONITORING	Available to change
Network password	123456	Available to change
Local password	123456	Available to change
Local time out	15 MINS	Available to change

### POWER ON DEFAULT RIGHT

At RX startup or local user logout, access right of local menu will follow the setting of "POWER ON DEFAULT RIGHT"

Type	Default	Remark
Access right	NONE	Available to change

## RX Security Mode

**Advanced security mode -- Access right**

Group	Features Involved
VIDEO MONITORING <sup>#</sup>	basic video monitoring with fixed cameras browsing the event status**
AUDIO MONITORING and PA	audio monitoring** PA with microphone, PA with pre-recorded voice clips
PLAYBACK	video playback** browsing event logs , connection log, setting log and operation log
CAMERA CONTROL	PTZ**
EVENT CTRL	clear event
SWITCH CONTROL	switch control
{All video monitoring}, {audio monitoring} & {playback} access right group will be enabled	
VIDEO BACKUP <sup>1</sup>	video extraction and backup
RECORDING <sup>1</sup>	start/stop recording start/stop schedule recording
SYSTEM SETTING <sup>1</sup>	video format, camera installation, throughput control setting change live video quality, brightness, contrast network and modem setting data/time setting hard-disk formatting recording setting switch setting event setting firmware upgrade shutdown/restart
All access right group will be enabled	
USER ACCOUNT <sup>2</sup>	setting import/export user account setting switch video recording server security mode restore factory setting

# at least one camera should be selected

\*\* Video monitoring dependence. For example, if user has no access right on camera 2 monitoring, he cannot browse event status, control PTZ and playback on this camera.

<sup>1</sup> Automatic enable all video monitoring, audio monitoring and playback permission

<sup>2</sup> Automatic enable all access right permission

## APPENDIX F

# General Terms Discussion

Before you start to configure the video recording server, you may need to know some of the terms and information used in the video recording server.

## Registration Checking

Users need to do the registration in the **TeleEye** Reception Software WX-30 for authorization before the video recording server can be used when such feature is enabled in the **TeleEye RX**. This option can be applied to improve the security protection for the organization when higher security level is required. If the video recording server is decided to open for public use, you can disable this feature so that public users do not need to register for viewing live video from the **TeleEye** Reception Software WX-30.

## Site Monitoring Method

There are mainly four methods to link up with the video recording server to see video:

- Telephone Line (Public Telephone Network/ISDN)
- TCP/IP in LAN
- TCP/IP on the Internet using Broadband and Internet Router
- TCP/IP on the Internet using Broadband with Dial-up Software

You have to choose one of the **connection methods** in Section 3 to configure the video recording server before use so as to make it function properly.

The **TeleEye Reception Software WX-30** contains all the settings for different remote video monitoring method. Different connection methods may have different settings, and some of the setting configured in one connection method is not applicable to other method. In this case, you can refer to one of the following configuration procedures for the connection method you will use.

It is recommended that the above items should be configured before the first time you use the video recording server no matter which connection method you use. The steps to set the above items are discussed in **Section 3 : Basic Installation for Local and Remote Monitoring**

## APPENDIX G

# Audit Trial Log Description

## A. Audit Trial Log Description of Setting Log and Operation Log

Event short form : *[EVENT]*

**ARM** : arm / disarm input

**SECUSW** : security switch input

**ALARM** : alarm sensor input

**MOTION** : motion

**VLOSS** : video loss

**SYSTMTR** : system tamper input

**PWRFAL** : power failure input

**HDD** : disk usage

**HI TMP** : overheat

## B. Setting Log Operation Column Table :

OPERATION	DESCRIPTION
CAMERA	Install/uninstall camera
CAMERA NAME	Change camera name
PTZ CAMERA	Support / unsupported PTZ camera
PTZ PAN SPEED	Change PTZ camera pan speed
PTZ TILT SPEED	Change PTZ camera tilt speed
PTZ PAN DUR	Change PTZ camera pan duration
PTZ TILT DUR	Change PTZ camera tilt duration
PTZ ZOOM DUR	Change PTZ camera zoom duration
PTZ FOCUS DUR	Change PTZ camera focus duration
PTZ IRIS DUR	Change PTZ camera iris duration
PTZ ADDI DUR	Change PTZ camera additional duration
PTZ WASHER DUR	Change PTZ camera washer duration
PTZ WIPER DUR	Change PTZ camera wiper duration
PTZ PTL SPEED	Change PTZ camera patrol speed
PTZ DWELL TIME	Change PTZ camera dwell time
PTZ DRIVER	Change PTZ driver
PTZ BAUD RATE	Change PTZ camera baud rate
CLOCK POSITION	Change OSD clock position
CAM NAME POSN	Change OSD camera name position
SEQ SW TIME	Change camera sequential switch time
SEQ MODE CAM	Change camera in sequential display mode
DISPLAY MODE	Change default display mode
OSD COLOR	Change OSD menu color

VIDEO FORMAT	Change camera video format
RECORD MODE	Change recording mode
DISK MODE	Change recording disk mode
QUALITY	Change recording quality
IMAGE SIZE	Change recording image size
SWITCH NAME	Change switch name
SWITCH TYPE	Change switch type
DATE TIME	Change date time
NETWORK	Change IP, subnet mask. Change / enable / disable gateway
PORT	Change port
DNS	Enable / disable DNS
DNS ADDRESS	Change DNS address
SURELINK	Enable / disable <b>sureLINK</b>
SULK ADDRESS	Change <b>sureLINK</b> address
SULK REFR RATE	Change <b>sureLINK</b> refresh rate
MODEM BAUD RATE	Change modem baud rate
MODEM RING CNT	Change modem ring count
THROUGHPUT	Change video recording server throughput
ARM/DISARM	Enable / disable arm/disarm input
ARM STATE	Change arm state
ARM TMR TYPE	Change arm/disarm tamper type
ASSOCIATE SW 1	Enable / disable arm/disarm associate switch 1
SECURITY SWITCH	Enable / disable security switch
SECUSW ON STATE	Change security switch on state
SECUSW TMR TYPE	Change security switch tamper type
ASSOCIATE SW 2	Enable / disable security switch associate switch 2
ALARM	Enable / disable alarm sensor
ALARM NAME	Change the alarm sensor name
ALARM SEN TYPE	Change alarm sensor type
ALARM TMR TYPE	Change alarm tamper type
ZONE TYPE	Change alarm sensor zone type
ENTRY DELAY	Change alarm sensor entry delay
EXIT DELAY	Change alarm sensor exit delay
MOTION	Enable / disable motion
MOTION BLOCK	Change motion block
MOT SENSITIVITY	Change motion sensitivity
VIDEOLOSS	Enable / disable video loss
SYSTEM TAMPER	Enable / disable system tamper
SYSTM SEN TYPE	Change system tamper sensor type
POWER FAILURE	Enable / disable power failure
PWRFAL SEN TYPE	Change power failure sensor type
DISK USAGE	Enable / disable disk usage
HDD USAGE LEVEL	Change disk usage warning level
OVERHEAT	Enable / disable overheat
[EVENT] RECORD	Enable / disable recording action for the event
[EVENT] REC CLDU	Change recording duration after event clear
[EVENT] REC MODE	Change event recording mode
[EVENT] REC CAM	Change event recording camera

## Audit Trial Log Description

[EVENT] SWITCH	Enable / disable switch action
[EVENT] SW EN	Change associate switch in switch action
SW LATCH DUR	Change switch latch duration
SWITCH DELAY	Change switch action delay
[EVENT] DIALBACK	Enable / disable dial back action
DB RETRY DUR	Change dial back retry duration
DB RETRY COUNT	Change dial back retry count
DIALBACK IP	Change dial back IP address
DIALBACK PORT	Change dial back port
[EVENT] EMAIL	Enable / disable email action
SMTP SERVER	Change SMTP server address
SMTP AUTH	Enable / disable SMTP server authentication
SMTP USER	Change SMTP server user name
SMTP PW	Change SMTP server user password
EMAIL ADDR	Change recipient email address
MAX EMAIL NO	Change maximum no of email
[EVENT] BUZZER	Enable / disable buzzer action
BUZZER DURATION	Change buzzer duration
BUZZER DELAY	Change buzzer delay
[EVENT] LED	Enable / disable LED action
[EVENT] LIVECAM	Enable / disable live camera action
[EVENT] LIVE CAM	Change associate cameras in live camera action
[EVENT] PTZ	Enable / disable PTZ action
[EVENT] PTZ CAM	Change PTZ associate camera
[EVENT] PTZ PSET	Change PTZ camera recall preset position
TX NAME	Change video recording server name
REG CHECK	Enable / disable registration checking
WEB SERVER	Enable / disable built-in web server
EVENT MENU	Protect / unprotect event menu by password
RECORD MENU	Protect / unprotect recording menu by password
SEARCH MENU	Protect / unprotect search menu by password
MAIN MENU	Protect / unprotect main menu by password
CHANGE PASSWORD	Change password

## C. Operation Log Operation Column Table :

OPERATION	DESCRIPTION
START RECORDING	Start manual recording
STOP RECORDING	Stop manual recording
START PLAYBACK	Start playback video
STOP PLAYBACK	Stop playback video
START BACKUP CD	Start backup video to CD
RESTORE BACKUP	Restore default factory setting
RESTART	Restart video recording server
SHUTDOWN	Shut down video recording server
UGRADE USB	Upgrade firmware from USB
UGRADE CDR	Upgrade firmware from CDR
SWITCH (No.1~4) ON	Switch (No.) turn on
SWITCH (No.1~4) OFF	Switch (No.) turn off

## Audit Trial Log Description

## APPENDIX H

## Specifications

## A. RX364 / RX368\_V2 / RX3616\_V2

MODEL			
VIDEO INPUT	RX364	RX368_V2	RX3616_V2
STANDARD	(P): PAL/CCIR, 625 lines, 25 frames per second (N): NTSC/EIA, 525 lines, 30 frames per second composite video, 1 V <sub>p-p</sub> , BNC		
NO. OF CHANNELS	4	8	16
VIDEO OUTPUT			
STANDARD	(P): PAL/CCIR, 625 lines, 25 frames per second (N): NTSC/EIA, 525 lines, 30 frames per second composite video, 1 V <sub>p-p</sub> , BNC		
NO. OF CHANNELS	1	1 Video out, 1 Spot out	
DISPLAY SCREEN	full, quad	full, quad, 3 x 3	full, quad, 3 x 3, hex
DISPLAY FRAME RATE	25/30fps D1, 100/120fps CIF	25/30fps D1, 100/120fps CIF, 200/240fps 3 x 3	25/30fps D1, 100/120fps CIF, 200/240fps 3 x 3, 400/480fps QCIF
VGA			
SUPPORT	N/A	Optional	
FREQUENCY	N/A	60 / 75 Hz	
RESOLUTION	N/A	1024 x 768 / 1280 x 1024	
STANDALONE OPERATION			
TYPE	System configuration, operation, audit trail		
AUDIO			
INPUT	1 channel, RCA, line level	2 channels, RCA, line level	
	Input impedance : 30k, frequency : 200-3500Hz		
OUTPUT	PA/local output : 1 channel, RCA, line level; Output impedance : 600ohm, frequency : 200-3500Hz		
COMMUNICATION			
NETWORK	RJ-45, 10/100 Base-T Ethernet (auto-sensing)		
CONCURRENT USERS	6(independent)		
sureLINK	support Internet connection assigned with dynamic IP address		
MAX. TRANSMISSION FRAME RATE	20/30fps D1, 50/60fps CIF	25/30fps D1, 100/120fps CIF	
WEB SERVER	Built-in		
USB	USB2.0, 12Mbps		
MODEM PORT	RS-232C: DB-9 male, asynchronous, 8 data bits, 1 stop bit, no parity, 9.6k-115.2kbps, hardware flow control		
TELEMETRY CONTROL	Keyboard/ Camera port: RS-422/485: 2-way terminal, asynchronous, 8 data bits, 1 stop bit, no parity, 2.4-19.2kbps		



RECORDING			
MODE	manual, schedule, event-driven		
HD TYPE	SATA interface, removable		
MAX. RECORDING RATE	(P) : 25fps at 720 X 576 pixels; 100fps at 360 X 288 pixels (N) : 30fps at 720 X 480 pixels; 120fps at 360 X 240 pixels	(P) : 100fps at 720 X 576 pixels; 200fps at 360 X 288 pixels (N) : 120fps at 720 X 480 pixels; 240fps at 360 X 240 pixels	
PLAYBACK	Forward, Backward, Pause, Step Forward, Step Backward, x10 Fast Forward, x100 Fast Forward		
DVD WRITER			
TYPE	Built-in		
EVENT HANDLING			
EVENT TYPE	external alarm, tamper, video motion detection, video loss, disk full, power interruption, system fail, disk usage, overheat		
ACTION TYPE	Live camera, buzzer, dial back, recording, relay control, PTZ, email notification, spot output (RX368_V2 / RX3616_V2)		
EXTERNAL ALARM INPUTS	16 x NC/NO		
RELAY SWITCH			
NO. OF CHANNELS	4		
MAX. RATING	24V AC, 1000mA		
POWER			
VOLTAGE	12V DC		
MAX. RATING	50W	55W	70W
OPERATING ENVIRONMENT			
AMBIENT TEMPERATURE	5°C – 40°C		
RELATIVE HUMIDITY	<85% (no condensation)		
MECHANICAL DESIGN			
DIMENSION	400mm x 365mm x 120mm		
WEIGHT	6.5kg	6.7kg	6.7kg

## B. RX324 / RX328 / RX3216

MODEL			
VIDEO INPUT	RX324	RX328	RX3216
STANDARD	(P): PAL/CCIR, 625 lines, 25 frames per second (N): NTSC/EIA, 525 lines, 30 frames per second composite video, 1 V <sub>p-p</sub> , BNC		
NO. OF CHANNELS	4	8	16
VIDEO OUTPUT			
STANDARD	(P): PAL/CCIR, 625 lines, 25 frames per second (N): NTSC/EIA, 525 lines, 30 frames per second composite video, 1 V <sub>p-p</sub> , BNC		
NO. OF CHANNELS	1	1 Video out, 1 Spot out	
DISPLAY SCREEN	full, quad	full, quad, 3 x 3	full, quad, 3 x 3, hex
DISPLAY FRAME RATE	25/30fps D1, 100/120fps CIF	25/30fps D1, 100/120fps CIF, 200/240fps 3 x 3	25/30fps D1, 100/120fps CIF, 200/240fps 3 x 3, 400/480fps QCIF
VGA			
SUPPORT	N/A	Optional	
FREQUENCY	N/A	60 / 75 Hz	
RESOLUTION	N/A	1024 x 768 / 1280 x 1024	
STANDALONE OPERATION			
TYPE	System configuration, operation, audit trail		
AUDIO			
INPUT	1 channel, RCA, line level	2 channels, RCA, line level	
	Input impedance : 30k, frequency : 200-3500Hz		
OUTPUT	PA/local output : 1 channel, RCA, line level; Output impedance : 600ohm, frequency : 200-3500Hz		
COMMUNICATION			
NETWORK	RJ-45, 10/100 Base-T Ethernet (auto-sensing)		
CONCURRENT USERS	6(independent)		
sureLINK	support Internet connection assigned with dynamic IP address		
MAX. TRANSMISSION FRAME RATE	20/30fps D1, 50/60fps CIF	25/30fps D1, 100/120fps CIF	
WEB SERVER	Built-in		
USB	USB2.0, 12Mbps		
MODEM PORT	RS-232C: DB-9 male, asynchronous, 8 data bits, 1 stop bit, no parity, 9.6k-115.2kbps, hardware flow control		
TELEMETRY CONTROL	Keyboard/ Camera port: RS-422/485: 2-way terminal, asynchronous, 8 data bits, 1 stop bit, no parity, 2.4-19.2kbps		

RECORDING			
MODE	manual, schedule, event-driven		
HD TYPE	IDE interface, built-in		
MAX. RECORDING RATE	(P) : 25fps at 720 X 576 pixels; 100fps at 360 X 288 pixels (N) : 30fps at 720 X 480 pixels; 120fps at 360 X 240 pixels	(P) : 100fps at 720 X 576 pixels; 200fps at 360 X 288 pixels (N) : 120fps at 720 X 480 pixels; 240fps at 360 X 240 pixels	
PLAYBACK	Forward, Backward, Pause, Step Forward, Step Backward, x10 Fast Forward, x100 Fast Forward		
EVENT HANDLING			
EVENT TYPE	external alarm, tamper, video motion detection, video loss, disk full, power interruption, system fail, disk usage, overheat		
ACTION TYPE	Live camera, buzzer, dial back, recording, relay control, PTZ, email notification, spot output (RX328 / RX3216)		
EXTERNAL ALARM INPUTS	16 x NC/NO		
RELAY SWITCH			
NO. OF CHANNELS	4		
MAX. RATING	24V AC, 1000mA		
POWER			
VOLTAGE	12V DC		
MAX. RATING	60W	65W	80W
OPERATING ENVIRONMENT			
AMBIENT TEMPERATURE	5°C – 40°C		
RELATIVE HUMIDITY	<85% (no condensation)		
MECHANICAL DESIGN			
DIMENSION	400mm x 380mm x 65mm		
WEIGHT	3.2kg	3.4kg	3.4kg

- END -