

Intelligence POS Surveillance System Smartbox User Manual

Table of Contents

1. CONNECTING DEVICES.....	ERROR! BOOKMARK NOT DEFINED.
<i>1.1 Interfaces</i>	<i>2</i>
<i>1.2 Installation.....</i>	<i>3</i>
2. SOFTWARE INSTALLATION	4
3. QUICK GUIDE.....	4
<i>3.1 Quick guide for applying monitoring function:</i>	<i>4</i>
<i>3.2 Quick guide for applying receipt format inquiry function:</i>	<i>4</i>
4. OPERATION.....	5
<i>4.1 Login.....</i>	<i>5</i>
<i>4.2 Add users</i>	<i>7</i>
<i>4.3 Add channels.....</i>	<i>8</i>
<i>4.4 Add DVR device.....</i>	<i>9</i>
<i>4.5 Setup SmartBox.....</i>	<i>10</i>
<i>4.6 Setup SmartBox alarm</i>	<i>11</i>
<i>4.7 Alarm interface.....</i>	<i>14</i>
<i>4.8 Receipts review</i>	<i>16</i>
<i>4.9 Alarm log searching.....</i>	<i>17</i>
5. RECEIPT DATA TRANSMISSION SIMULATION	18
6. UPGRADE TOOL GUIDE.....	19
7. FAQ	20

CONNECTING DEVICES

1.1 Interfaces

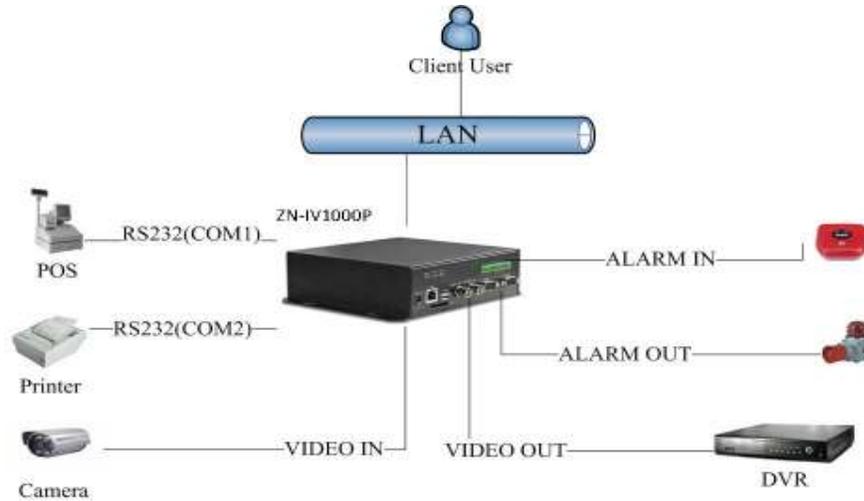


Diagram 1.1

Number	Name	Description
1	DC/12V	interface for direct current 12 volt
2	LAN	to connect with the network cable
3	USB	USB interface
4	SD	SD card interface
5	VIDEO IN	inputting interface connected with camera, BNC interface
6	VIDEO OUT	video outputting interface
7	COM1	input/output interface
8	COM2	input/output interface
9	POWER	power state
10	STATUS	system running state
11	ALARM	alarm lamp
12	ALARM IN	alarm input (4 interfaces) see Diagram 1.1
13	ALARM OUT	alarm output (2 interfaces) see Diagram 1.2
14	DEBUG	debug interface

1.2 Installation

The correct installation:



Circuit of alarm input/output:

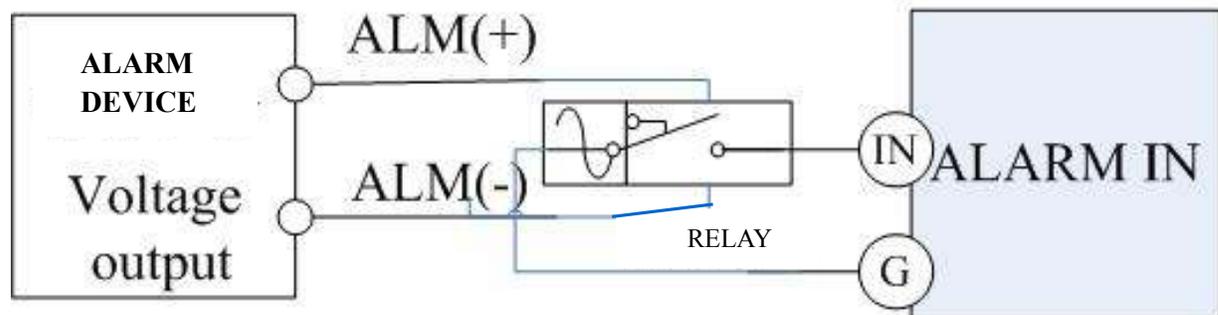


Diagram 1.1: Circuit of alarm input

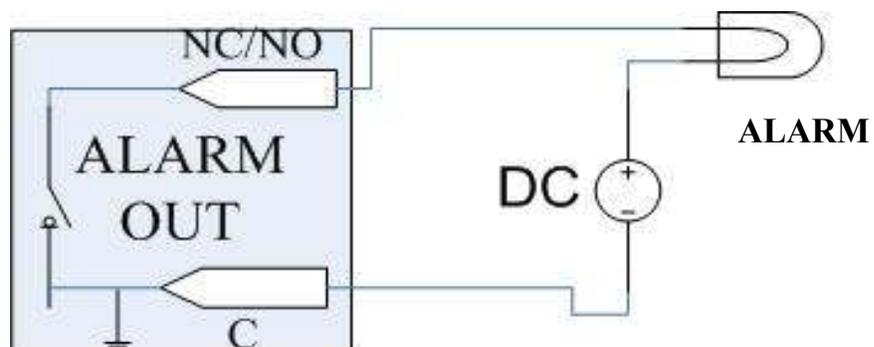


Diagram 1.2: Circuit of alarm output

2. SOFTWARE INSTALLATION

In first installation, please set up “IMS1000_setup.exe” as illustrated in next diagram:



IMS1000-POS icon:  will be created automatically on your desktop when you finish the installment.

Note: to run the “cmd” program in “db” file when database connecting is fail.

1. to double click: *uninstallAndStartMYSQL.cmd* for data release
2. to double click: *installAndStartMYSQL.cmd* for database installation
3. to double click: *initdatabase.bat* for initialization

3. QUICK GUIDE

After connecting the device and installing the software, follow the quick guide below.

3.1 Quick guide for applying monitoring function:

1. Correctly login “IMS1000-POS”
To install hardware & software and login, see [1/2/4.1](#)
2. To add SmartBox
To add SmartBox device in “SmartBox” interface, see [4.5](#)
3. To add organizational region
To add organizational region in “Region” interface, see [4.3](#)
4. To set DVR and channel:
To add DVR and connect channel with SmartBox, see [4.4](#)

3.2 Quick guide for applying receipt format inquiry function:

- 1 To connect the DVR channel and device, see [4.4](#)
- 2 To Set receipt formats and alarm condition in device configuration interface, see [4.6](#)

4. OPERATION

4.1 Login



Double click the  icon to start the Smartbox software. When it is your first time to login, please use “system” as the username and password, and the user will login as the administrator. See the next diagram.



Description:

Click “OK” to log in directly and check the last login time if the “Remember” option is ticked. See the next diagram.



You will enter the main interface after successful login, see the next diagram:



Description: there are four zones to be aware of:

Alarms: alarm list to display alarm information including the receipt information

Channels: a channel list of all associated DVRs and Smartbox devices

Search: search past recorded receipts, alarms and video

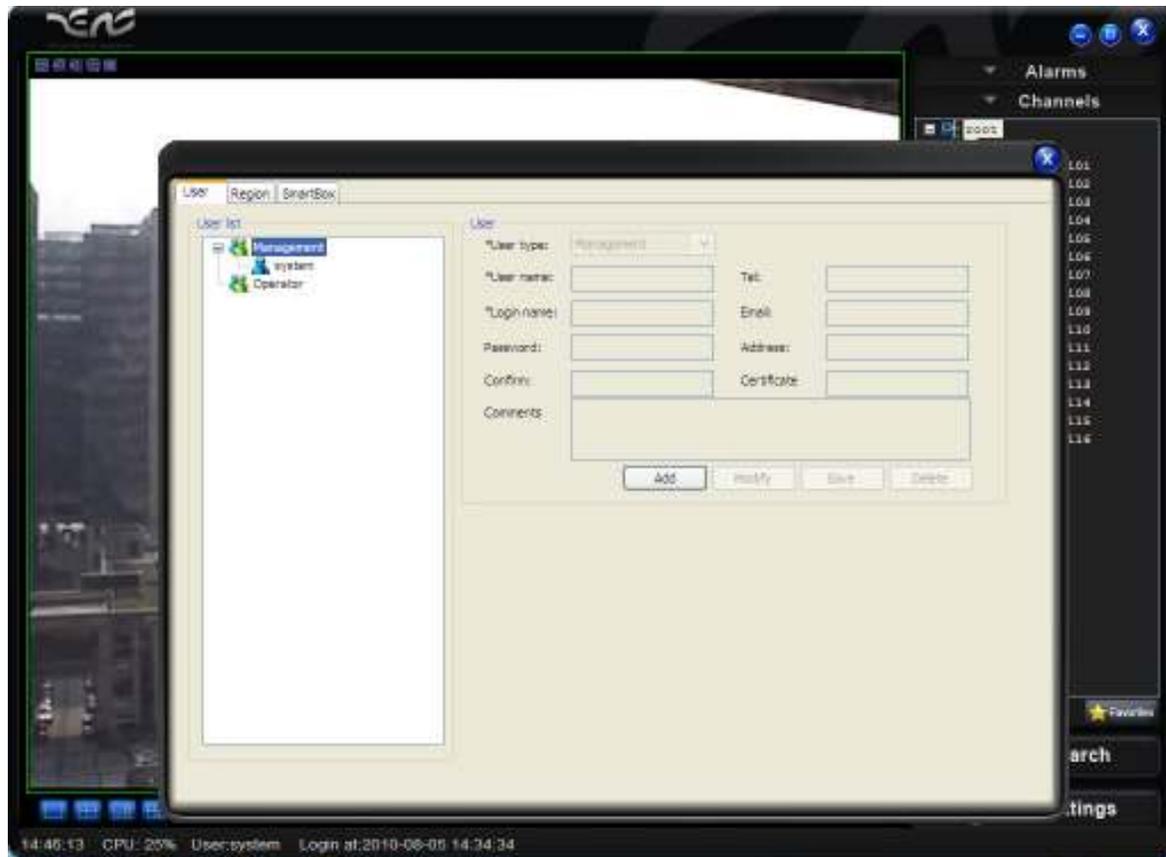
Settings: set parameters of all associated functions of the client software. Such settings include adding DVRs, setting up various Smartboxes and setting up receipt formats.

Double click a channel in list or drag the selected channel to an empty window preview box to play the real-time surveillance video. Please reference section 4.4 in adding a DVR to the software.

The information displaying on bottom left hand side is: real-time video screen switching, time, CPU utilization, username and login time.

4.2 Add users

Click “Settings” and enter the “User” tab; add management users and operators in this interface:



Description:

Add: to add new users that classified into “Management type” and “Operator type”. Duplicating the username again is not allowed.

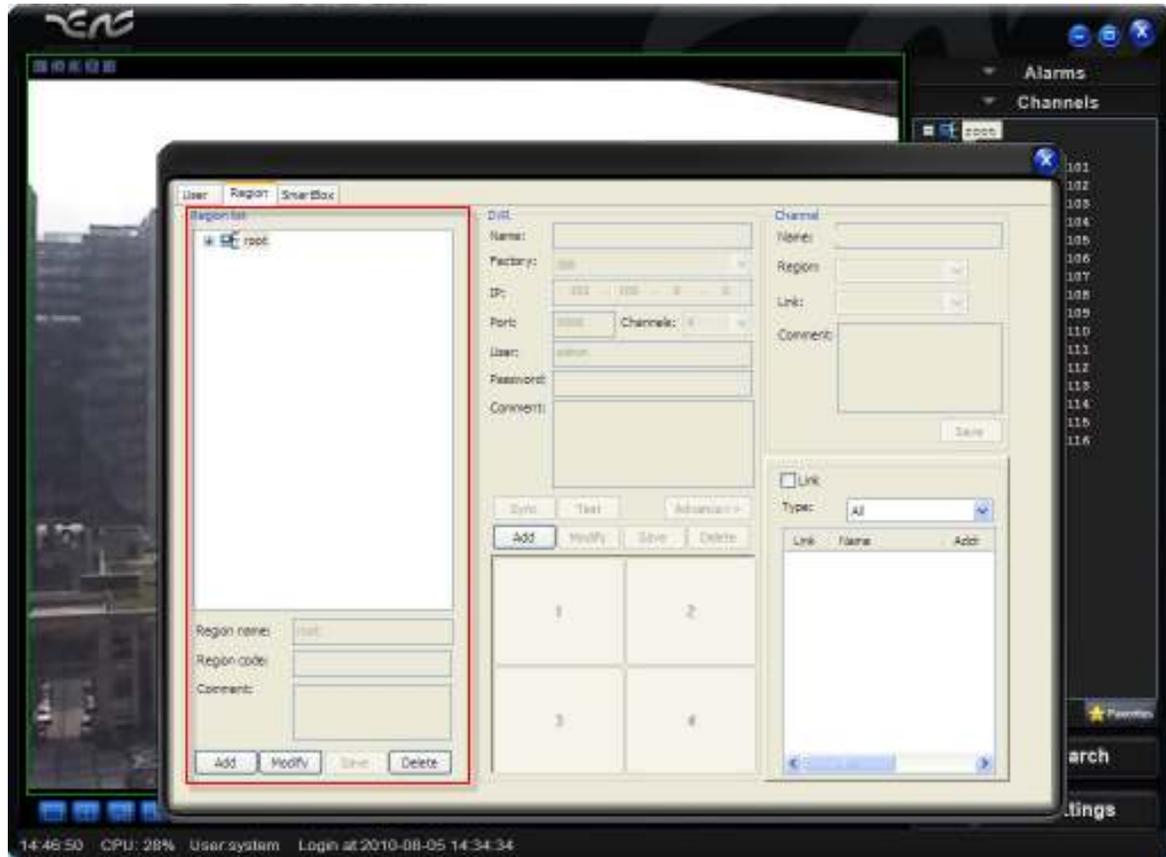
Modify: to modify the users’ information.

Save: to save users’ information

Delete: delete the user selected

4.3 Add channels

Click “Settings” and “Region” to edit organizational region in following interface:



Description:

The organizational region can add new categories to organize several different DVRs and Smartboxes.

Add: to add organizational region

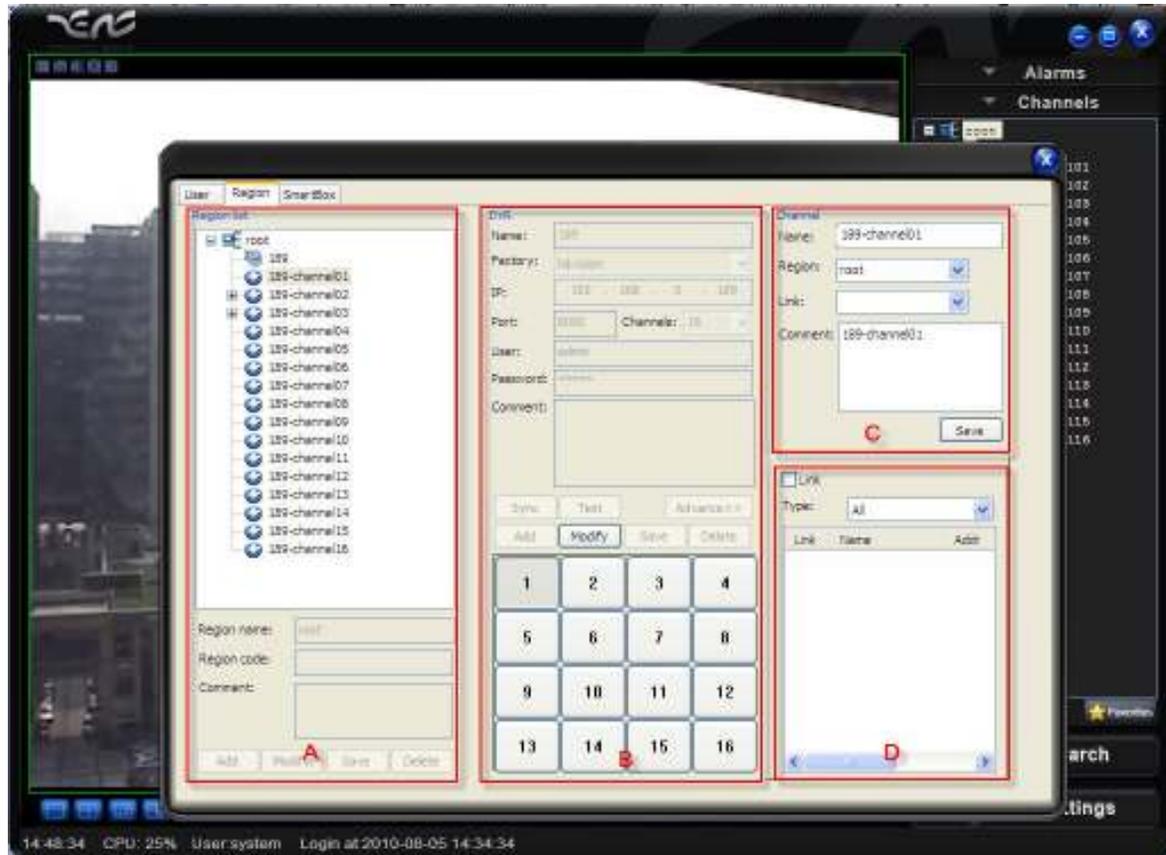
Modify: to modify the selected region

Save: to save region parameter

Delete: to delete region

4.4 Add DVR device

Click “Settings” and “Region” to add DVR in following interface:



Description:

Choose one of the organizations in ‘A’ area and set DVR in ‘B’ area.

‘B’ area: illustrate the operations of DVR which include adding, modifying, deleting, synchronization time, testing DVR connection and setting equipment parameters. Choose channel buttons to select the channels and display related information in A, B, C and D area.

Sync: DVR time in-sync with Smartbox system

Test: to check whether DVR is available over its network connection

Advance: configuration information

Add: to add DVR device

Modify: to modify the selected DVR device

Save: to save device parameter

Delete: to delete device

‘C’ area: to set the channels’ detail information

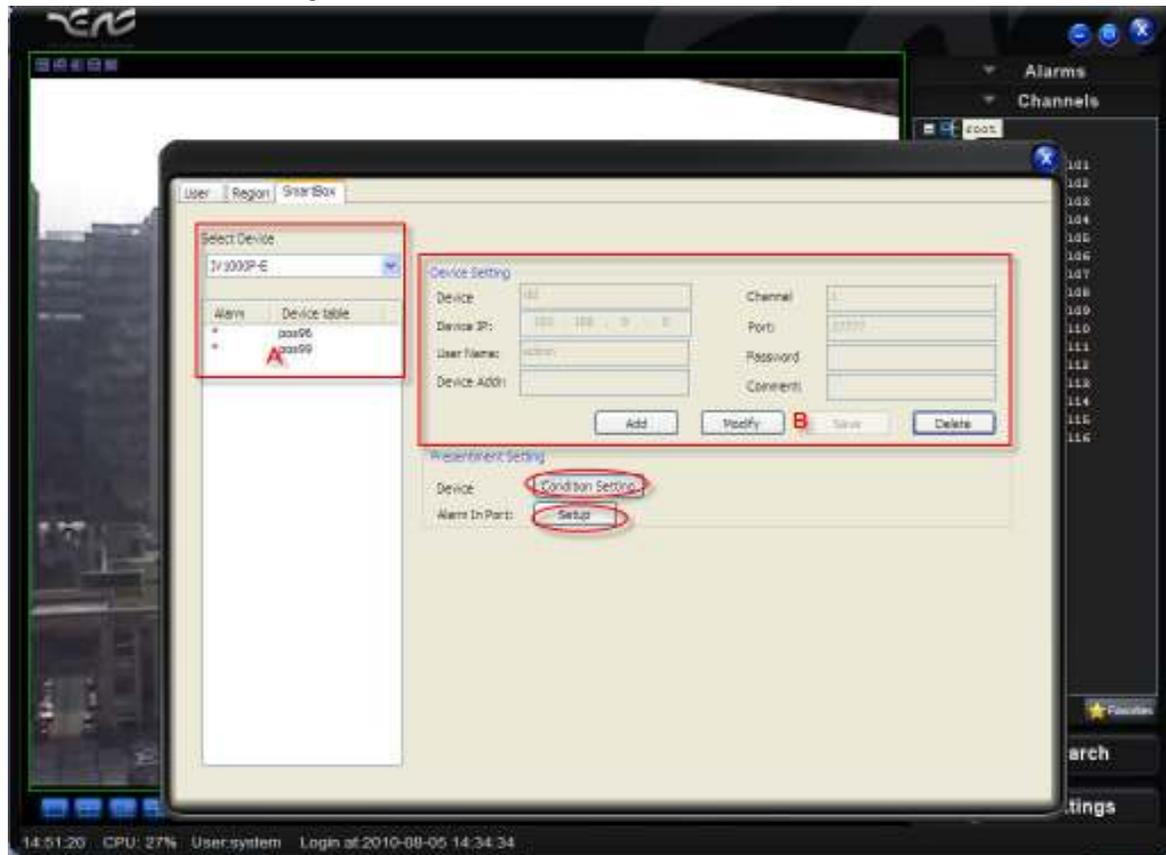
Link: to connect with SmartBox

Save: to save channels and devices setting

'D' area: SmartBox list which could be connected with channel

4.5 Setup SmartBox

Click "SmartBox" in "Settings" to set it:



Description:

'A' area: to illustrate the SmartBox devices

'B' area: the operation options of SmartBox include added modified and deleted

Add: to add SmartBox devices. Make sure all information is correct while inputting its information. Confirm the IP address, port number, and the username/password to login to that Smartbox.

Modify: to modify SmartBox device parameter

Save: to save SmartBox device parameter

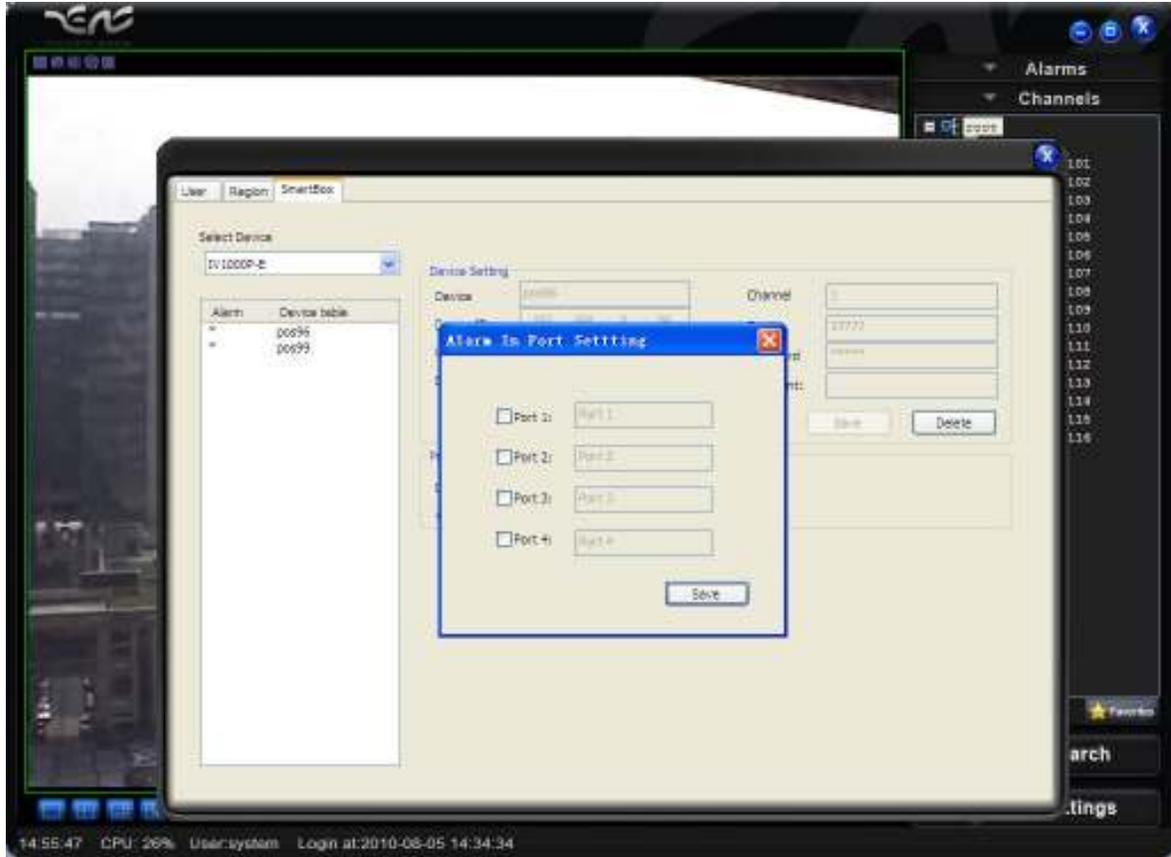
Delete: to delete parameter

Presentation setting:

Condition Setting: to set alarm condition, see [4.6](#)

Setup: to set ports' alarm, setting the alarm type, port name which is refers to a specific meaning. See next diagram.

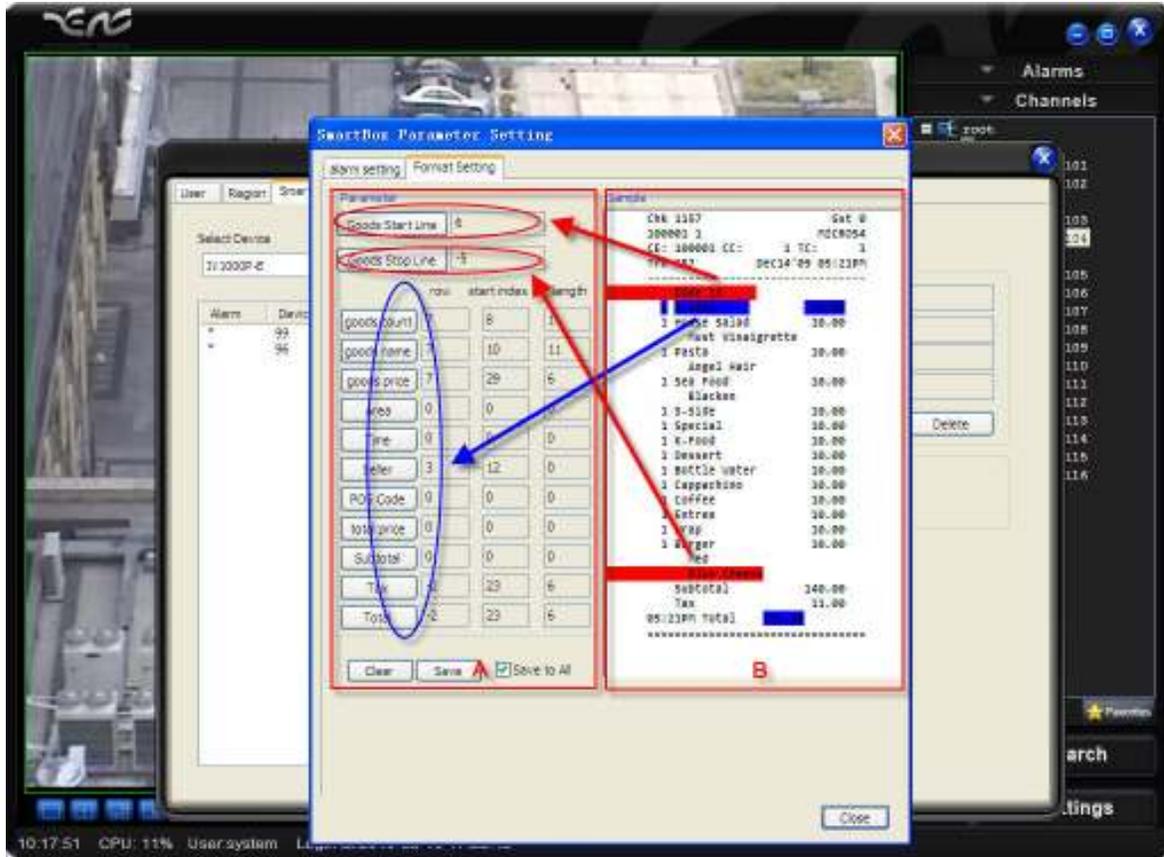
Save: to save the ports' alarm setting



4.6 Setup SmartBox alarm

Click **Condition Setting** to enter the interface which includes the alarm settings and format settings.

In first using, please click the “Format Setting” to set the receipt form:



Description:

‘A’ area: to display the parameter of receipt form

Clear: to delete receipt format

Save: to save receipt format

Save to All: to save the format to all receipts

‘B’ area: to display latest and complete receipt from Smartbox

Firstly, select the start and stop lines of items in B, the system will automatically records the selection by clicking the related button in A. Then set other detail information and save the setting.

Note:

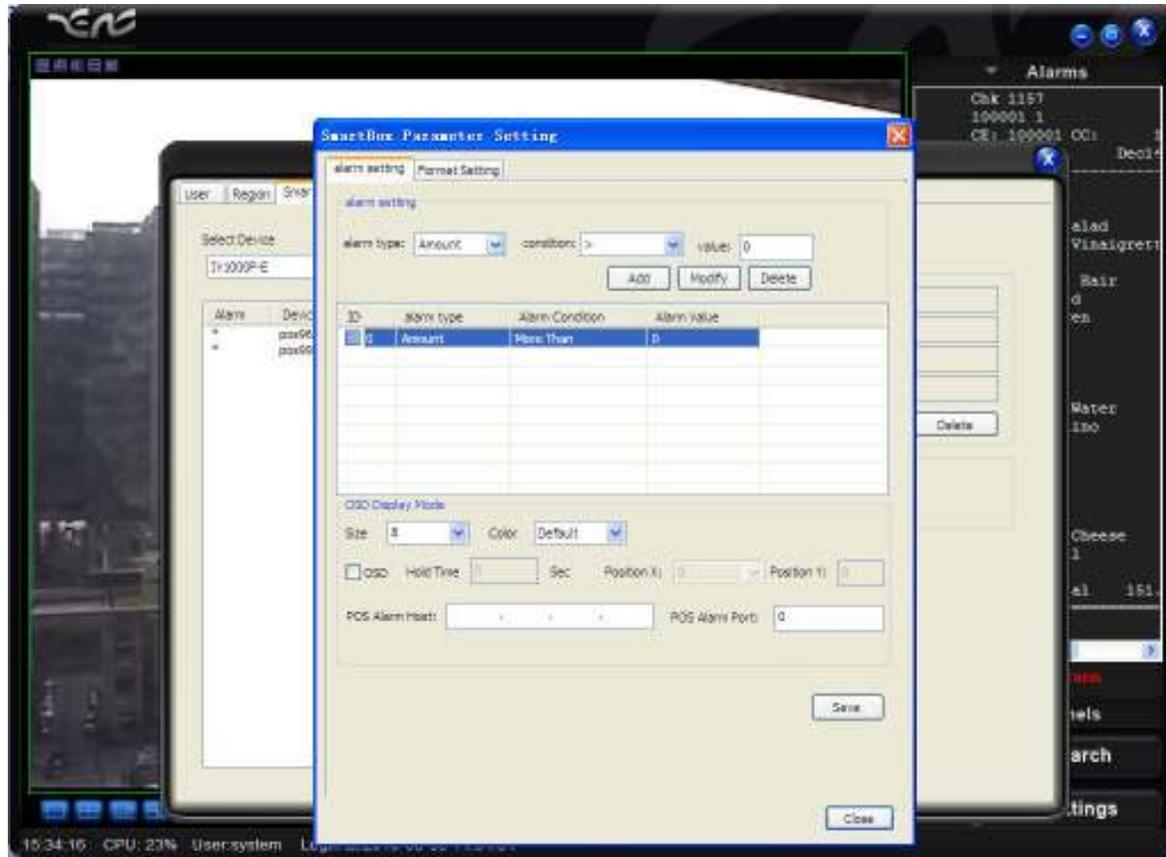
1. The red means the start and stop lines of the goods and the blue means the detail information of the goods.
2. To set the start and stop lines, goods name, price, total correctly. (select longer space for “total”)

Note:

Do NOT change the ticket information unless you know the exact lines that need to be changed. The Smartbox should already be configured for your POS system.

Click the ‘Alarm Setting’ to set alarm:

The “alarm setting” is shown in the following diagram. Prompt the alarm by choosing the type, condition and set value of alarm to. The user can add, modify and delete the alarm types, then click button to save.



Description:

Add: to add alarm types which display on list

Modify: to modify alarm condition

Delete: to delete selected items in list

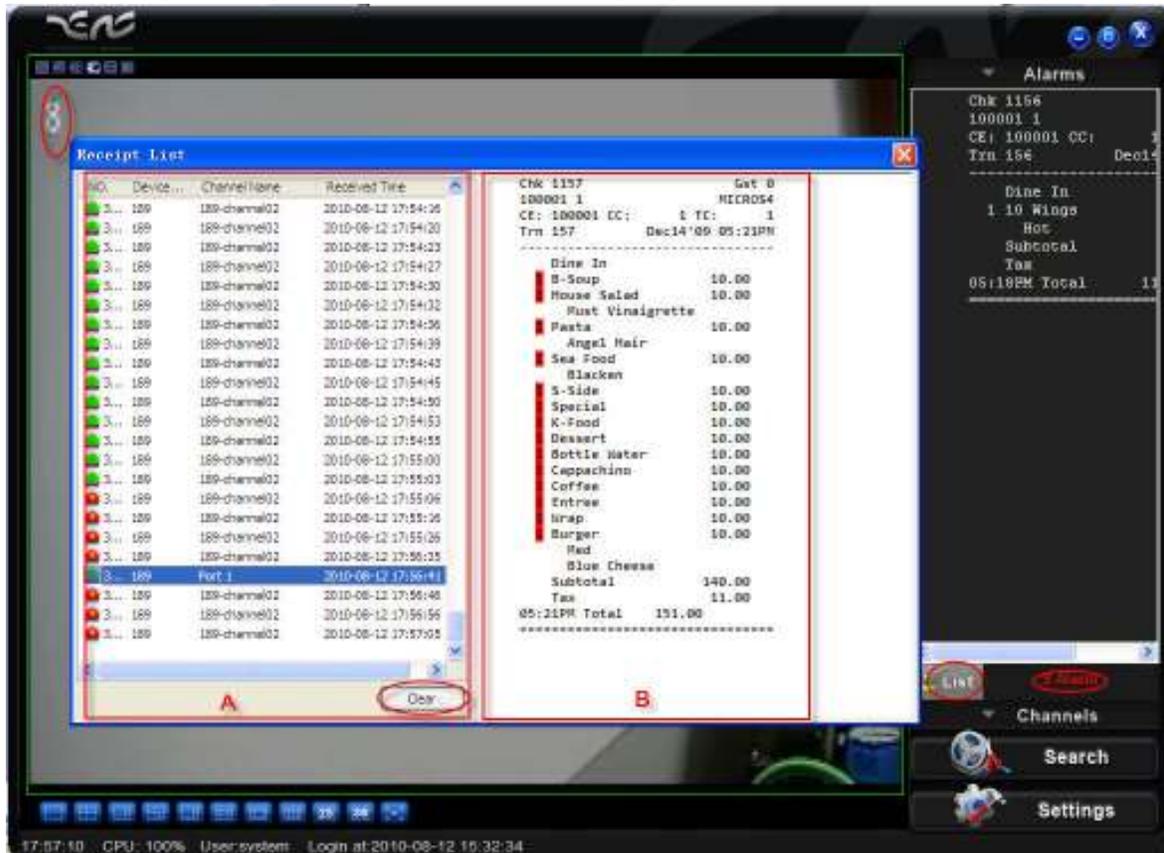
OSD Display Mode: to set the parameter like font, color, position and overlying, click “save ” to complete the operation.

Save: to save the current OSD setting

Close: to close all interfaces

4.7 Alarm interface

When the alarm condition is reached, the system will receive the message and print the detail of the receipt, click “List” to get “Receipt List” as shown in the following diagram:



Description:

Double click the alarm numbers area to get **【Receipt List】** interface. All the detail receipt information is illustrated here.

The number on the top left shows the external port alarm number.

A area: to display all receipts.

B area: to display a specific receipt, high light refers to the cause of alarm.

Clear: to delete all receipts

Note:

Yellow spot appears when the receipts storage exceed 3M, see next diagram:

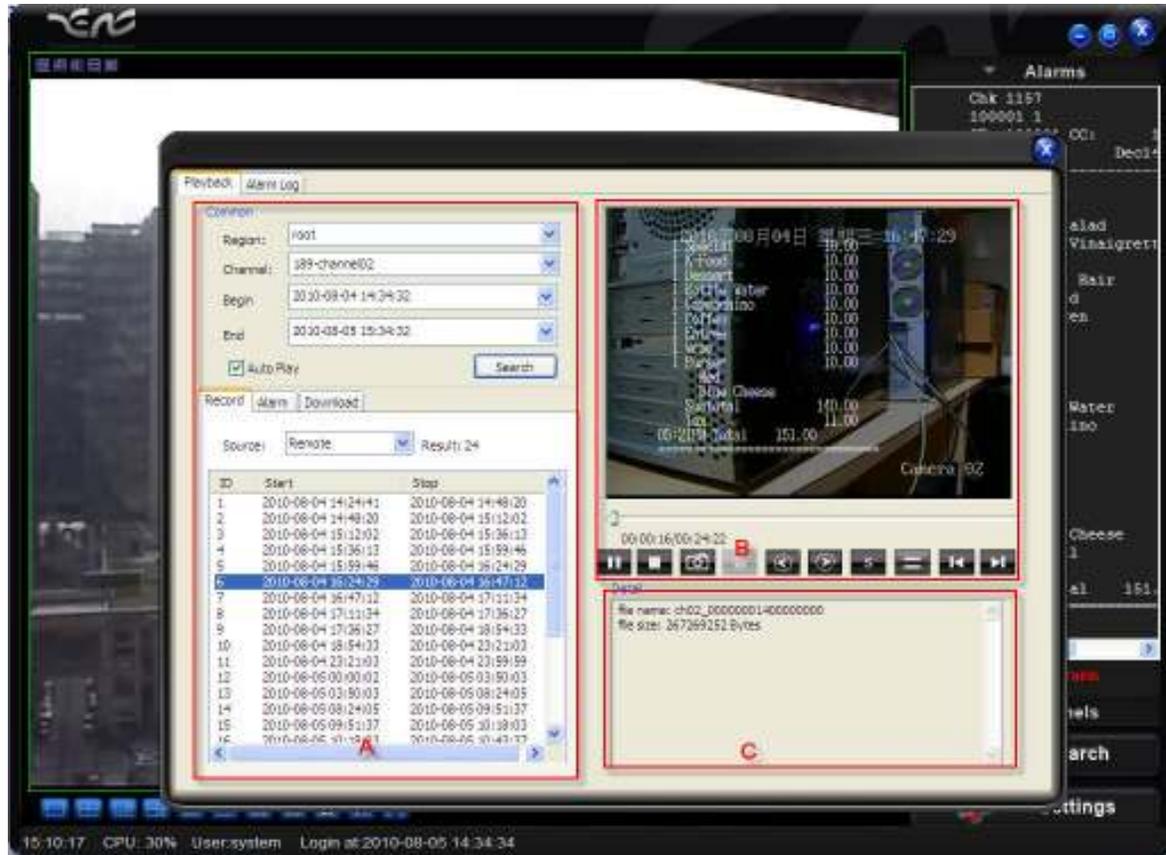


Red spot appears when the receipts storage exceed 3.8M, see next diagram:



4.8 Receipts review

Click “Search” to enter “Playback” interface:



Description:

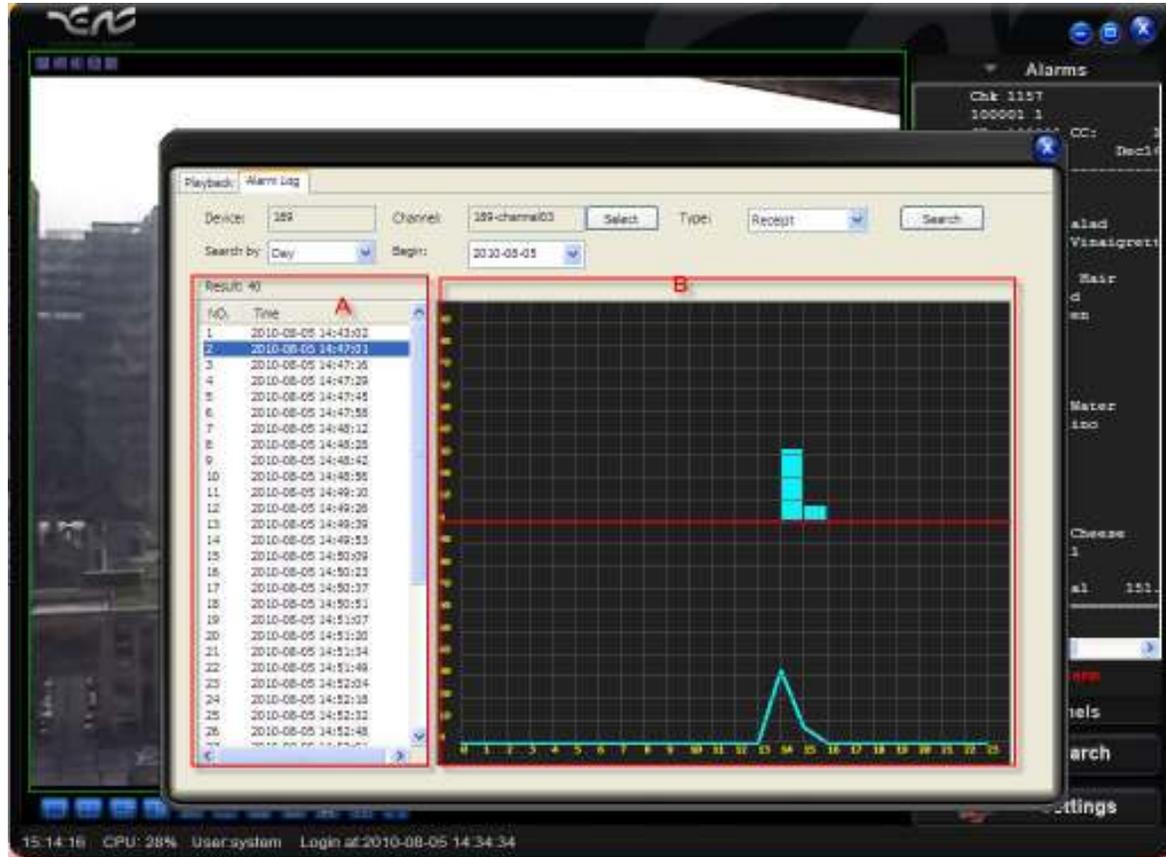
A area: to search receipts by region, channel, begin & end time, record, alarm and download information

B area: to playback the video records, the options are play, stop, capture, slow, fast, single frame, normal, previous, next.

C area: to display the detail of receipt record

4.9 Alarm log searching

Click 'Search' to enter "Alarm Log", see next diagram



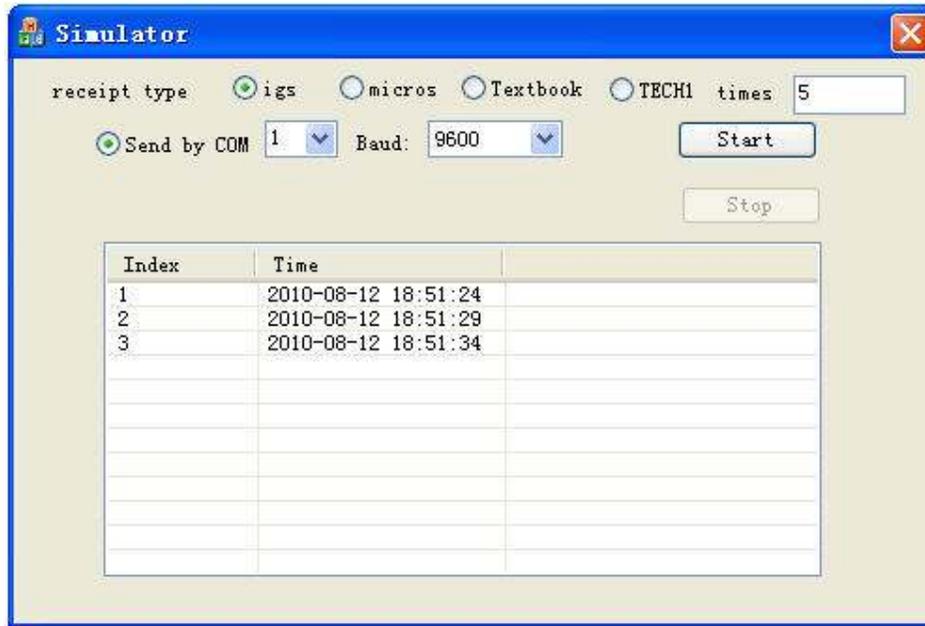
Description:

A area shows the connected channels and alarm type (receipt alarm or external port alarm); count amount according day, month and year; list the historical record.

B area shows the searching results by bar chart and line chart.

5. Receipt Data Transmission Simulation

Simulation software helps to simulated operate without ZN-IV1000P-E device. The interface of simulation as illustrated in next diagram:



Description:

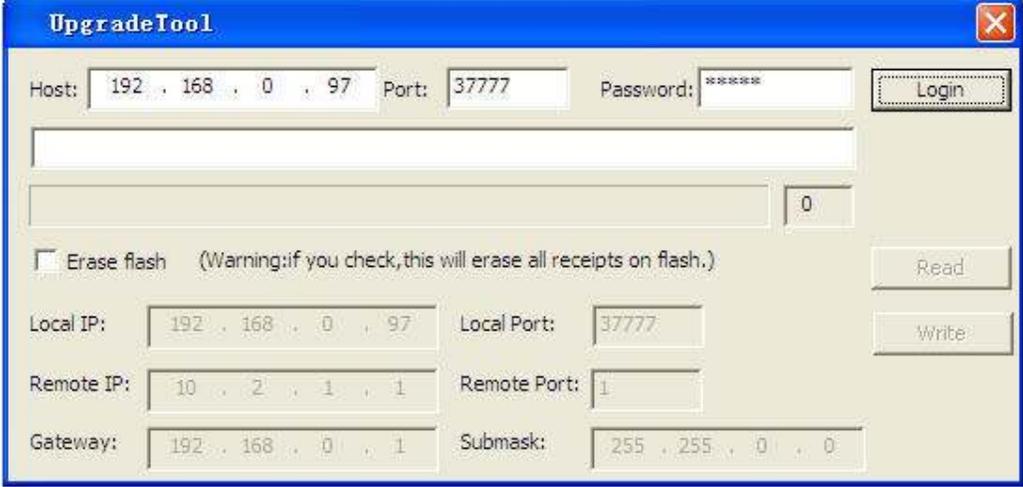
To send receipts by COM port, click "Start" to test. Receipt amount and time will be listed. Click "Stop" to cancel.

Note:

In "Send by COM" mode, connect PC with ZN-IV1000P-E device by serial port cable, and confirm the port numbers of program and PC are accordant

6. Upgrade Tool Guide

Click  to run the “Upgrading Tool” interface:



The screenshot shows a software window titled "UpgradeTool" with a blue title bar and a close button. The interface is divided into several sections:

- Host:** 192 . 168 . 0 . 97
- Port:** 37777
- Password:** [masked]
- Login:** Button
- Local IP:** 192 . 168 . 0 . 97
- Local Port:** 37777
- Remote IP:** 10 . 2 . 1 . 1
- Remote Port:** 1
- Gateway:** 192 . 168 . 0 . 1
- Submask:** 255 . 255 . 0 . 0
- Erase flash:** (Warning:if you check, this will erase all receipts on flash.)
- Read:** Button
- Write:** Button

Description: upgrade tool is used for setting the network parameter of ZN-IV1000P-E to adapt the local network. Login the device, inputting the IP, port and password before operation.

【Read】 to read the device parameter

【Write】 to set the device parameter

Note:

The device would automatically restart when modify the port number of ZN-IV1000P-E.

7. FAQ

Q: There is no picture on the screen?

A: Ensure the “VIDEO OUT” and “VIDEO IN” on the Smartbox device is linked correctly and make sure the power is on.

Q: How do you connect to a channel on a DVR through the software?

A: Be sure you added a DVR to the device list and all information is correct. Double click the monitored channel which is on the information bar that is on the bottom of the interface or drag the selected channel to the monitored area.

Q: Remote surveillance is not working?

A: Ensure that the IP, port number, username and password are set correctly for the DVR you are trying to remotely view. Click “Test” to confirm the DVR device is available.

Q: The receipt is not overlaid on the video through the Smartbox device?

A: Test the procedure by the simulation software. How to use the simulation software can be found in [chapter 5](#).

Q: The receipt is not overlaid on the video when running through the simulation tool.

A: Complete the installation; there is a “Receipts” folder in main directory of the software client. Ensure the folder exists and is not empty.

Q: The receipt is not overlaid in the video when playback by “searching the receipt”?

A: Assure that the channel you are using with the DVR and Smartbox are synced. Check to be sure you are searching for the correct time and date that the receipt occurred on.

Q: Receipt alarm is not displayed in list?

A: Ensure the receipt format is correct and that the Smartbox picked up the receipt as an alarm.