



Guard Tour Management Software

User's Manual

WM-5000P5+

JWM HI-TECH DEVELOPMENT CO., LTD

Web: <http://www.jwm-rfid.com/>

WM-5000P5+ Real time Guard Patrol System

(GPS + GPRS+RFID)

Product Introduction

I. System Components

One system mainly includes: WM-5000P5+ Reader, USB Port Cable, System Software



WM-5000P5+ system offer a completely new and powerful way of collecting and managing your data. With GPS, GPRS, RFID module, WM-5000P5+ terminal unit is able to collect and trace accurate location information, including longitude, latitude and patrol time. For checkpoint installed indoor where device can't get GPS signal, install RFID tag will be realized. Then, all patrol data will be back to control center immediately and directly in real time by GPRS / GSM data transmission.

It can be used widely in many areas, especially remote area, such as power transmission cable checking & management, telecom fiber cable checking & management and oil pipeline checking & management and etc.

Reader

Features:

Through GPRS network send real time patrol message to control center or USB cable communication

Use GPS to collect location information outdoor

Use RFID to collect location information indoor

Adopt Pogo Pin Connector USB port

Super storage capacity, 15000 records storage

Extruded ABS plastic case, super durability

Brilliant exterior design, easy carrying

Sabotage absorbent, easy maintenance

Real time internal clock

Completely water resistant and guard proof

Resistant to electrical shock

Long battery life, rechargeable 3.7v lithium battery

Technical Information:

	WM-5000P5+
Physical	Extruded ABS Plastic Case
Dimension	102mm*62mm*26mm
Water proof	IP67
Working Frequency	125Khz
Locating Precision	<10m (SA off)
Velocity Precision	<0.1s (SA off)
Operating Temperature	-25°to +85°C
Memory	16Mbit Flash ROM
Storage Capacity	15000 pieces records
Battery	3.7 V Lithium Recharge Battery, 2000m Ah
Communication	USB port, no need downloader station
Weight	147g

Applicants (Tour Areas)

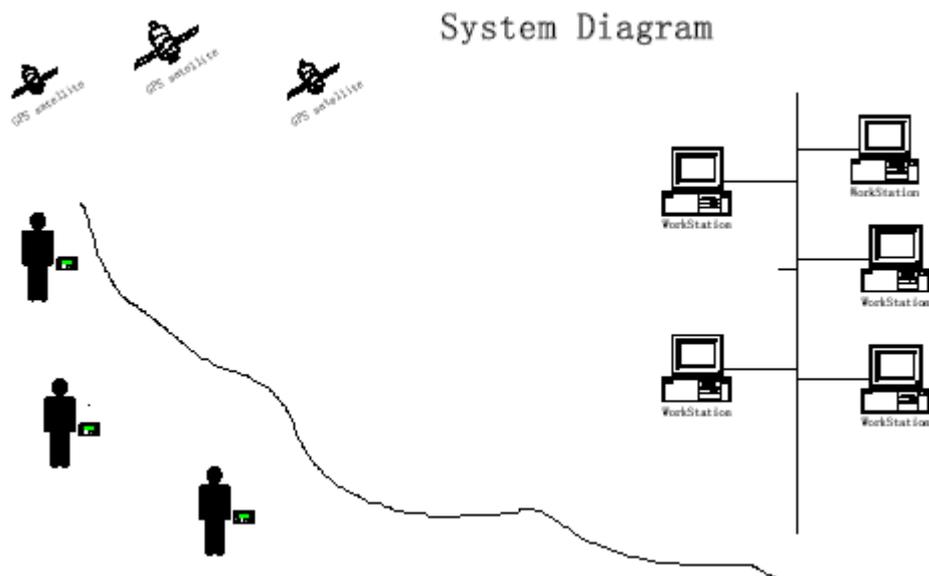
a. Power transmission cable checking and management

b. Transporting trucks tracing and management

- c. Oil pipeline checking and management
- d. Urban bus controlling and management
- e. Patrol police tracing and management
- f. Frontier patrolling soldier tracing and management
- g. Telecom fiber cable checking and management

Operation Flows

1. Software installation -> 2. Register reader to software system -> 3. Use GPS reader collects site data information -> 4. Software Initial setup -> 5. Download station, guards information from software to the reader -> 6. Guard patrol -> 7. Upload patrol records to the PC by SMS and have a patrol analysis



User Guidance

WM-5000P5+ (GPS+GPRS+RFID) real time guard tour system.

Button functions, please consult the below picture.



Before using WM-5000P5+, please follow the instructions below:

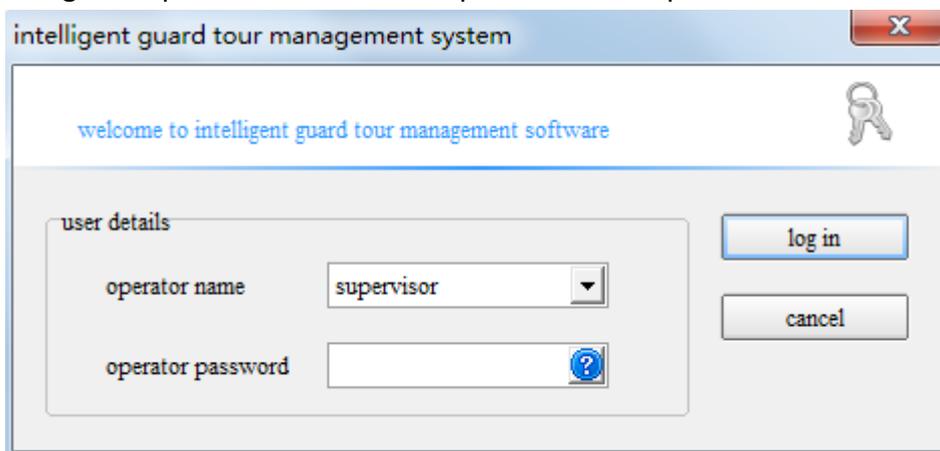
2. Please insert a proper SIM card in the reader to make sure the real-time patrol management system operating smoothly. ([JWM device frequency channel is 850/900/1800/1900](#), and SIM card better be 2.5GSM/GPRS or 3G WCDMA, can't be

CDMA or CDMA 2000.) Using the screwdriver to open the back of the reader, when you open it please insert the SIM card. (Please note do not upside-down the SIM card otherwise it can not work) **Please switch the reader to the guarding mode when you register.**

3. The operation system requirement is windows XP, vista, windows 7 and etc. and only with 32-bit version of Windows, not 64-bits.

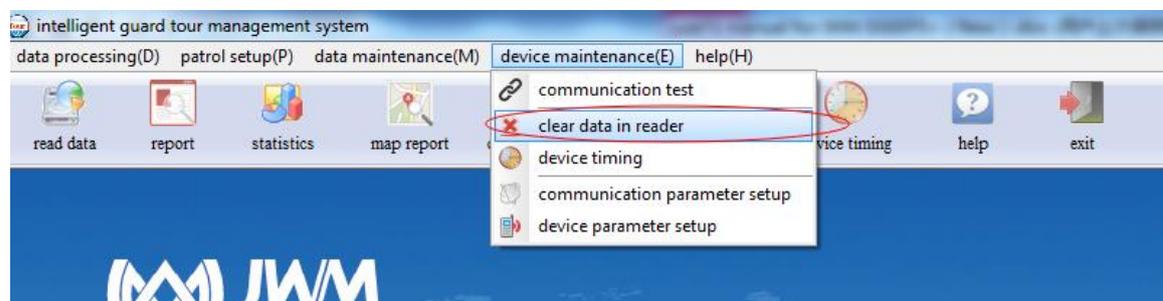


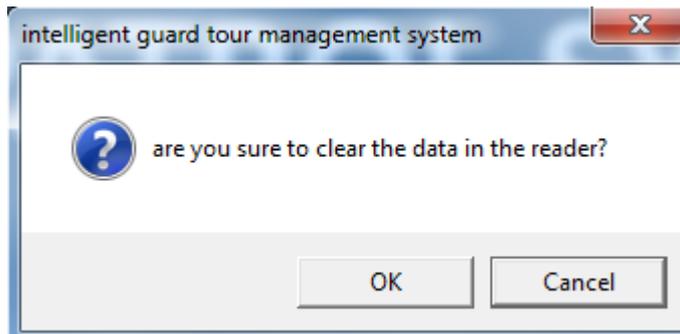
When you finish software installation please double click the Shortcut icon and then pop up the dialogue box .Please click the question mark on the Combo Box and get the password. The default password for supervisor is 999.



When enter the front page of the system, Please initialize the guard tour reader to erase all the data before using.

For detail operations please see the pics below



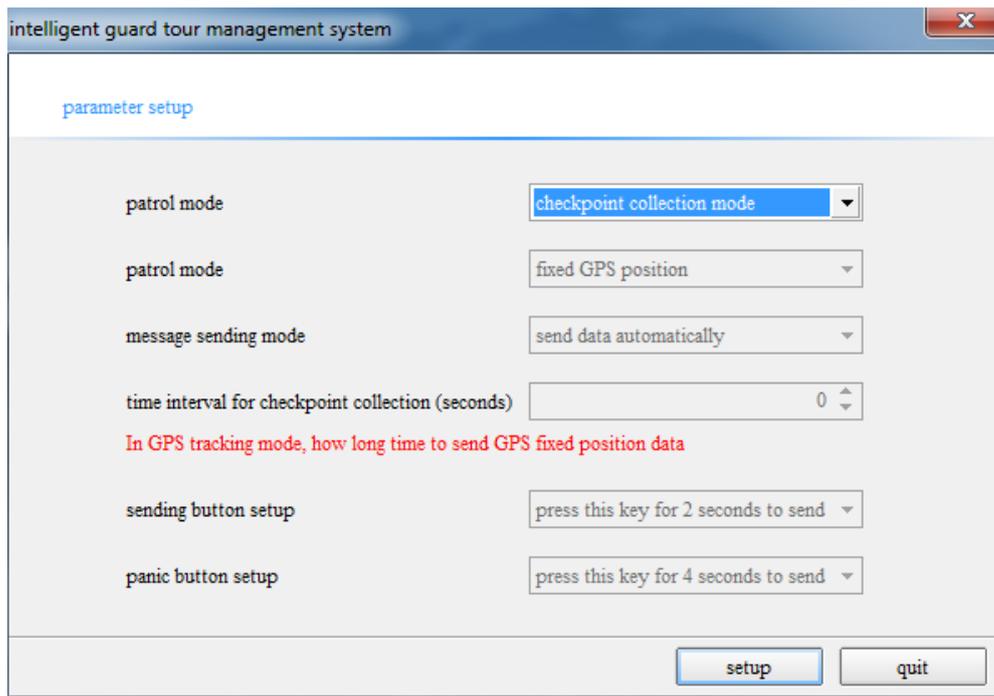


4. Under collection mode:

After installation the software, before you set up tour plan, firstly, you need to collect all of GPS locations (longitude and latitude) and RFID sites which you need patrol. So, please connect the reader with PC, you need set up the reader under collection mode through software. And then take the reader go to all of places which you need patrol, to collect GPS location (their longitude and latitude).

Please note: Under collection mode, after collecting GPS location, only use the USB cable to upload to the software, so don't insert SIM card into the reader.

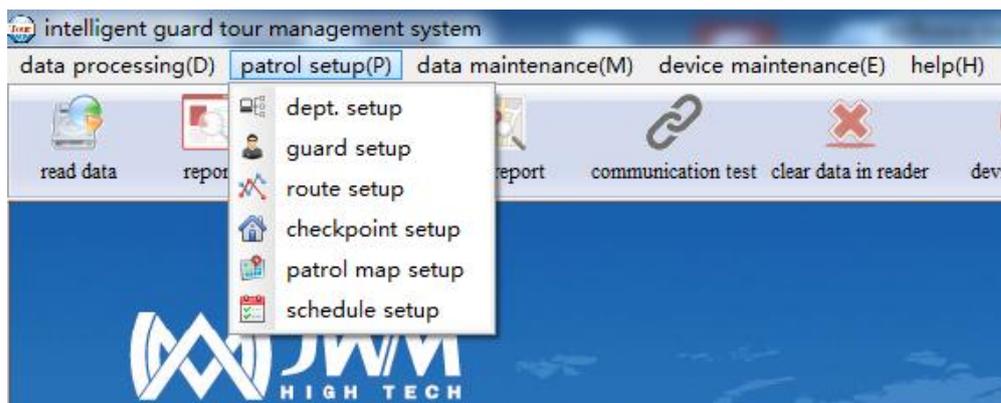
When start, the reader is with two vibrations, and then searching GPS signal, after searching successfully, the GPS(red) shines once every second, please press sending message button for 2 seconds, the reader will have a vibration and then collecting GPS position(longitude and attitude). Collection successful, the GPS(red) shines 5 times with 2 vibrations. In RFID sites collection condition, device vibrates twice along with 5 times GPS light flicker to save information after reading RFID tag. The reader can save 1500 locations at most.

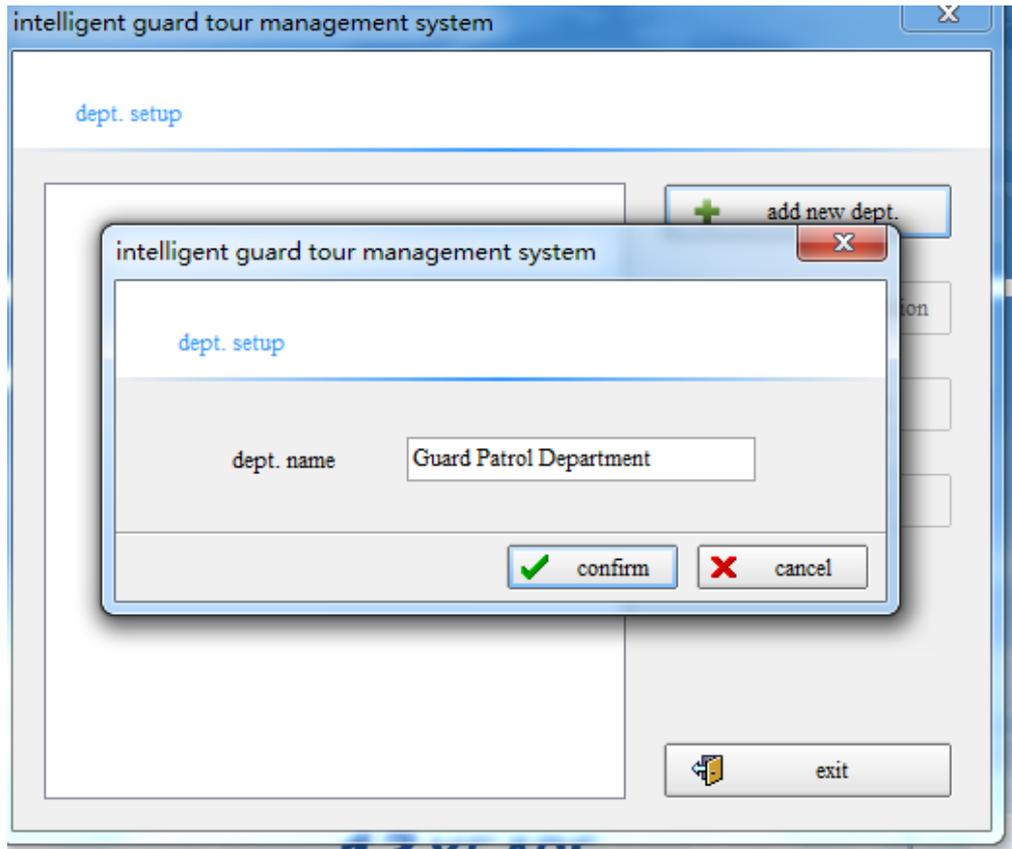


5. When you finish all the GPS positioning of your target checkpoints, please complete the following setups

Department setup

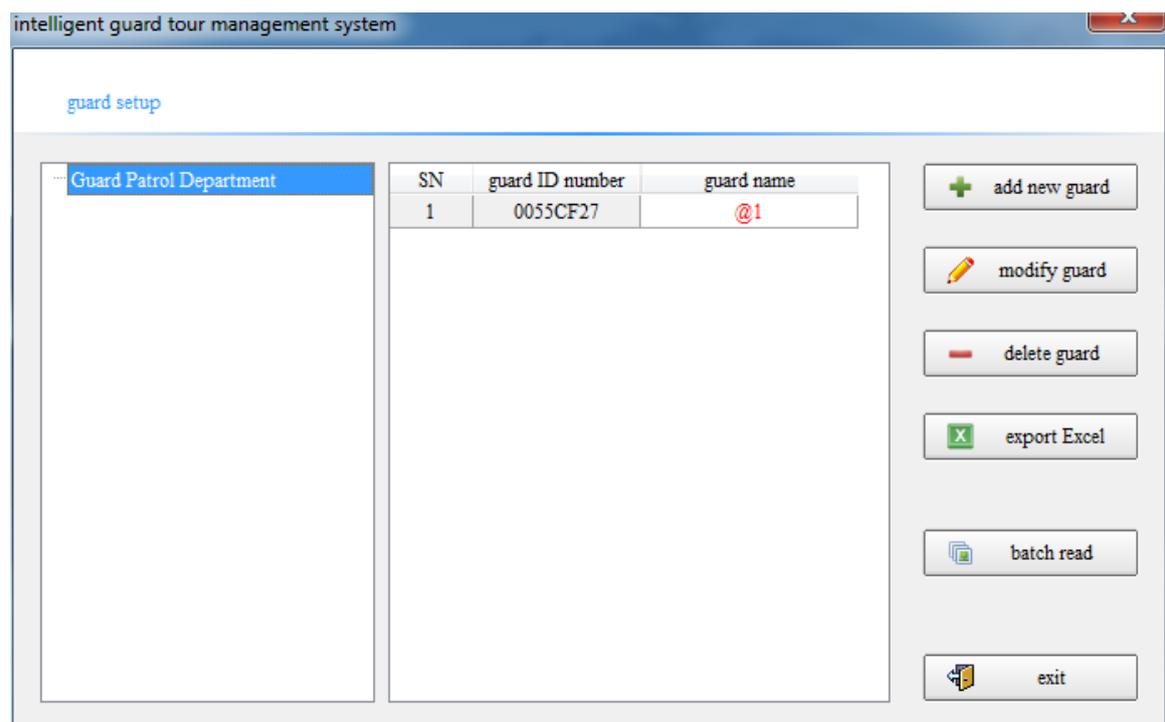
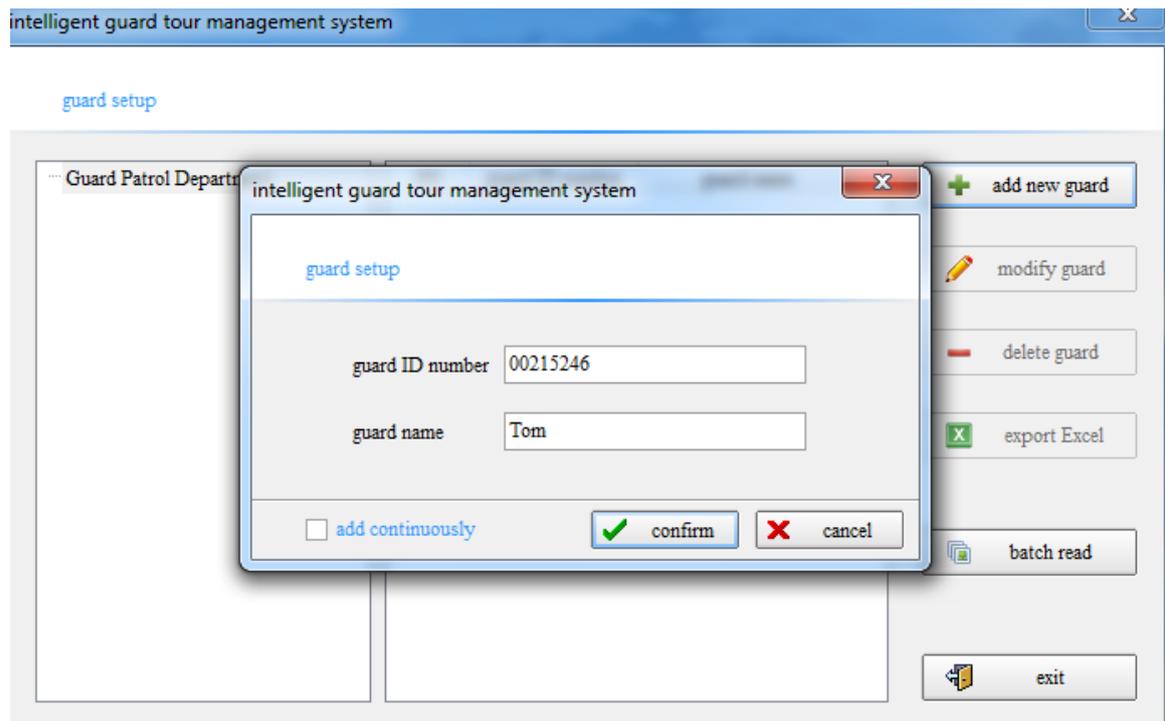
click the patrol setup in the heading column and select dept. setup. Click adds new dept. to add one department, for example Department1. Reference to the pics below





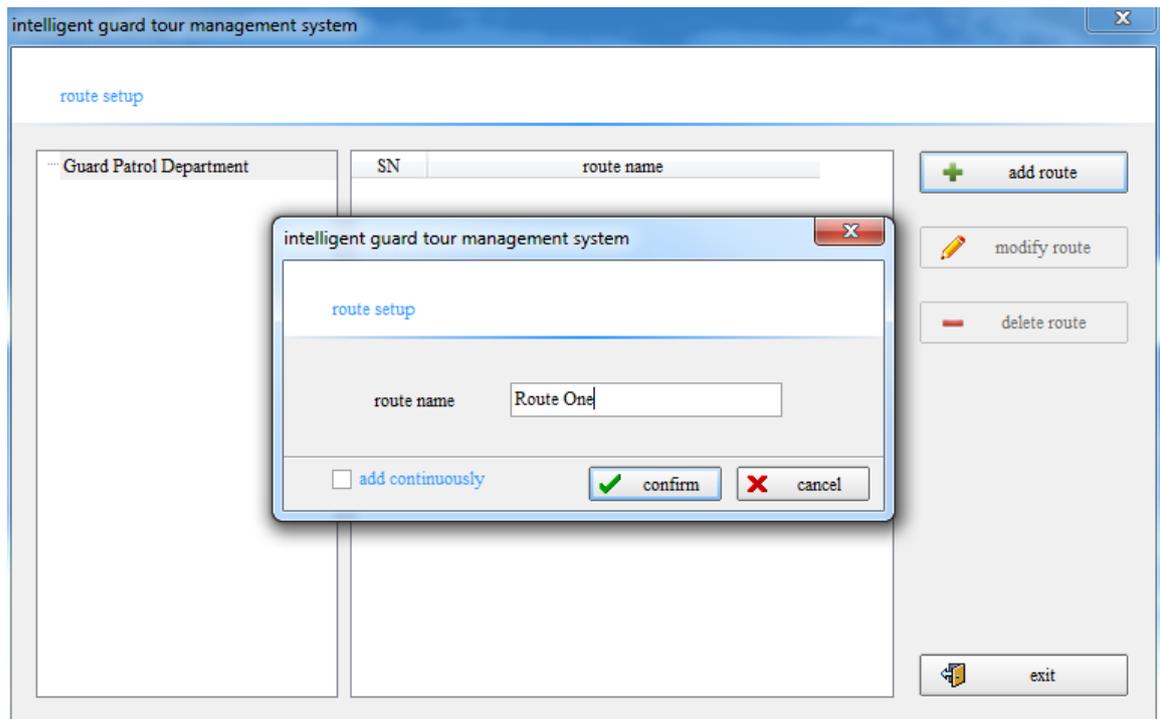
Guard Setup

When you complete the above setup, please still click patrol setup heading column to select **guard setup**. Click "add new guard" button to add guard for example: TOM
You can add manually by click "add new event" to input event card number and edit event name, or batch read at one time.



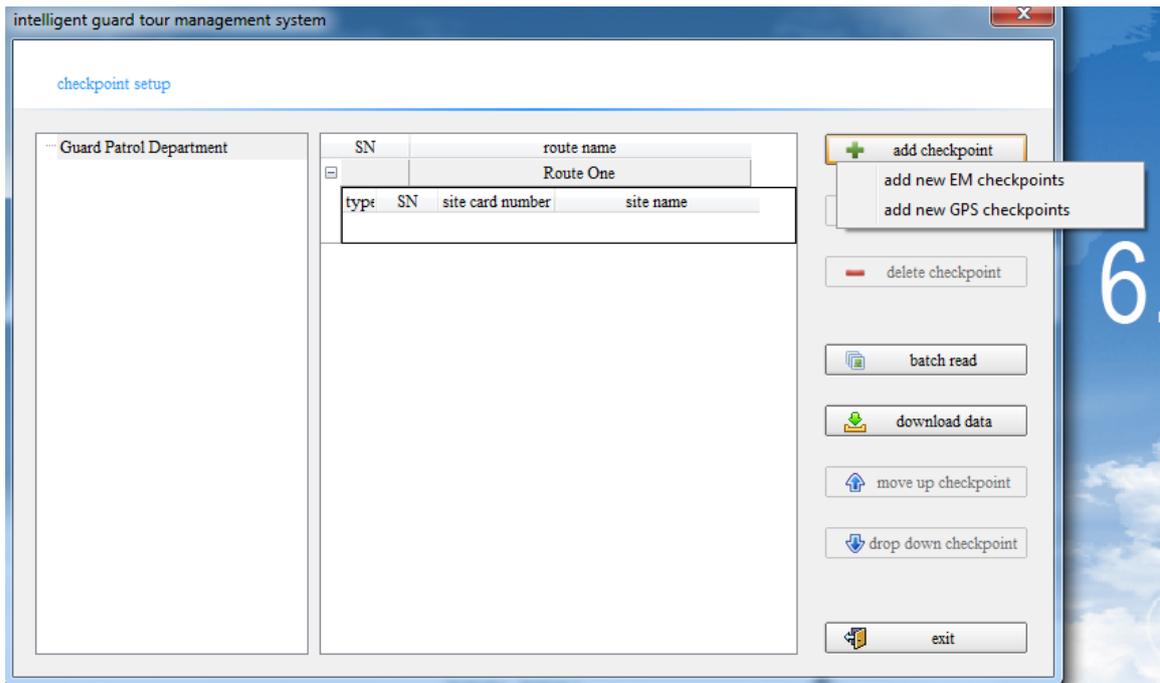
Route setup

click add route button on the right side of the dialogue box and input route name for example route1. And then click the confirm button.

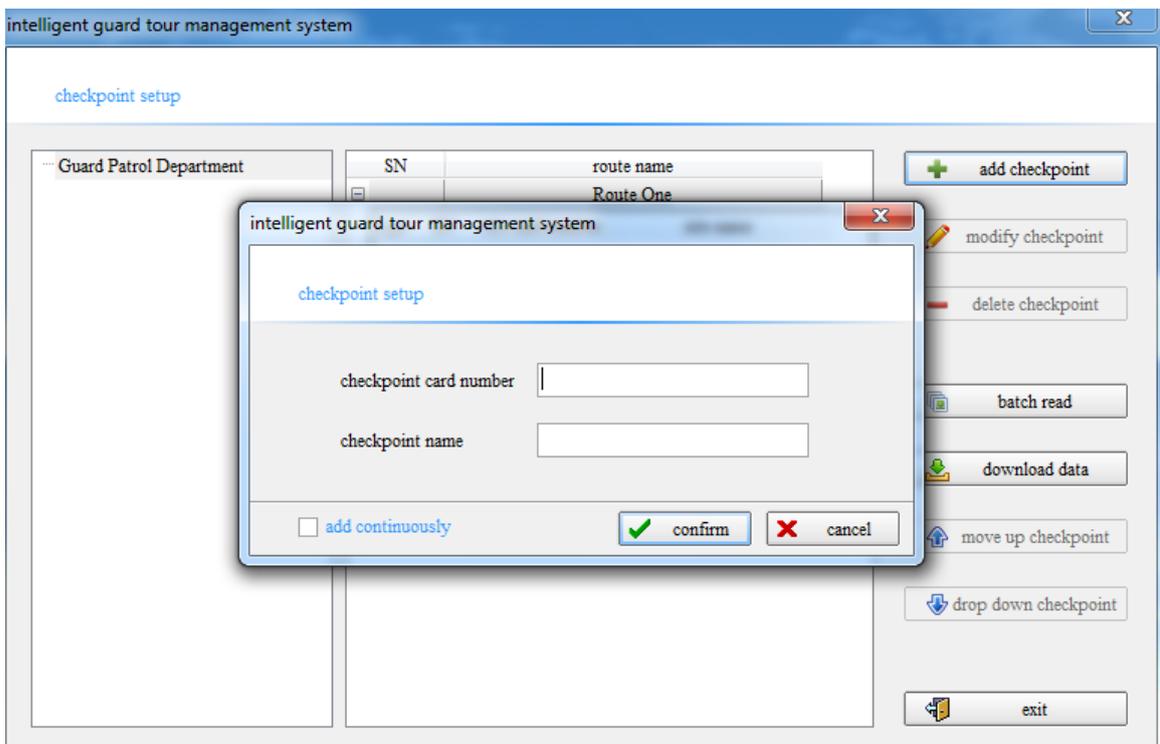


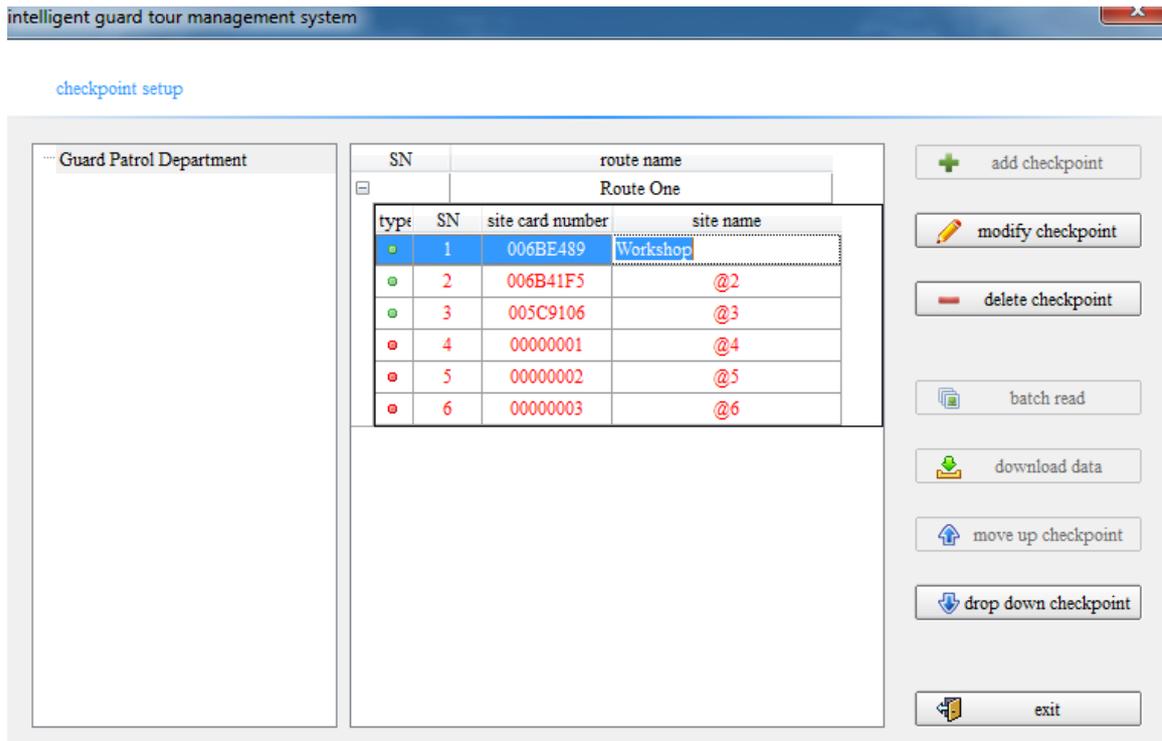
Checkpoint set up

please click checkpoint setup and it will pop up the dialogue box please consult the pic below. Please click add checkpoint button and you will see 2 choices, one is to add new EM checkpoints which is used for adding RFID tags and the other is used for adding new GPS station. You can edit by hand or click batch read button to transfer the data in the reader and edit according to your needs. (Please remember to download those information to device after setup.)



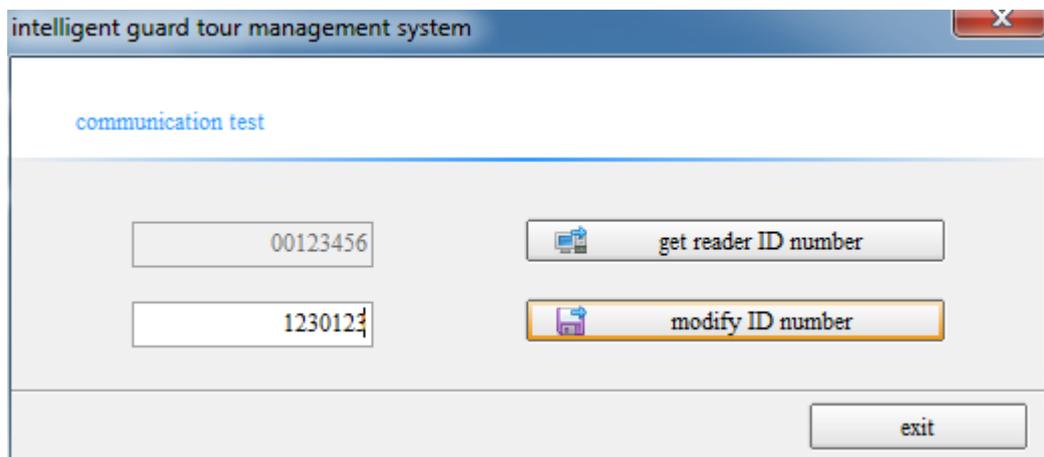
6





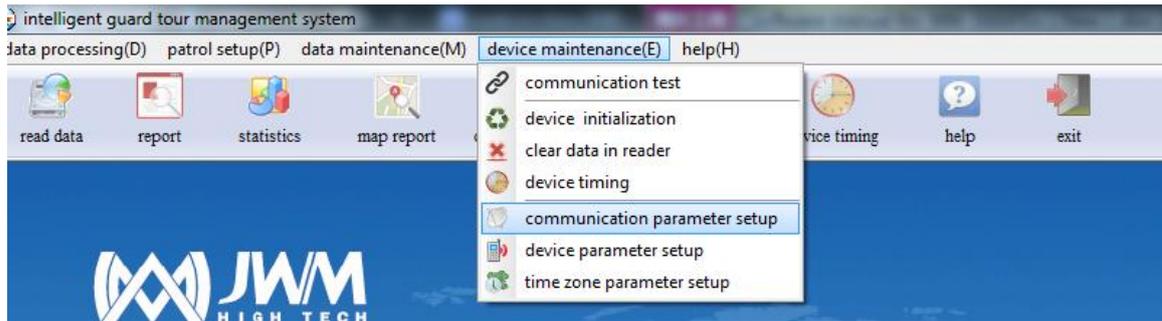
Device setup

please click "Communication test" and you can edit device's number by hand or read it directly . Please consult the pic below.

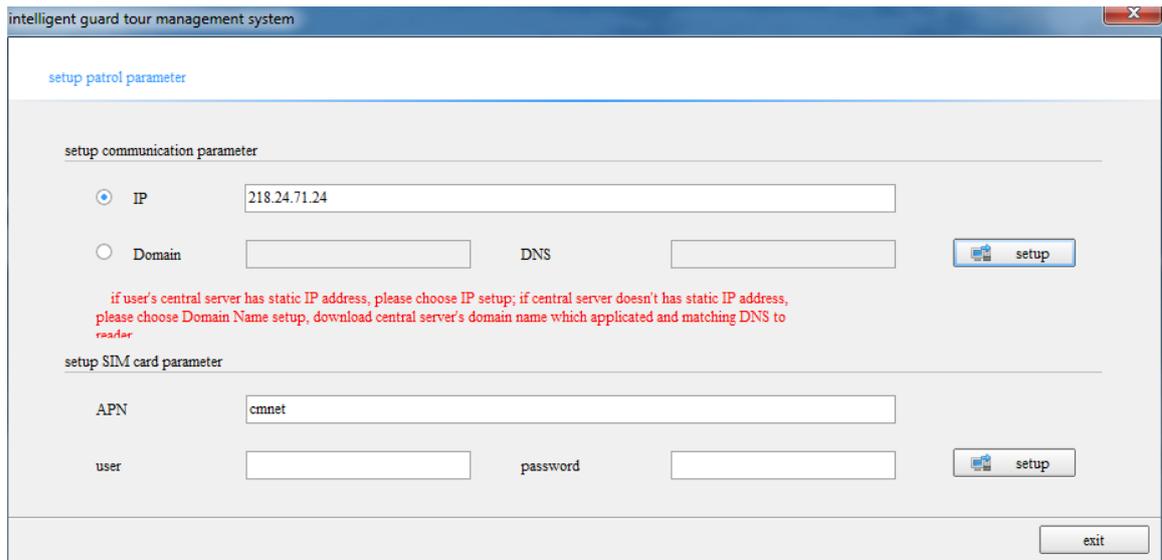


Communication parameter setup

Please click device maintenance heading column to select [Communication parameter setup](#).



If your PC has fixed IP address, Please consult the pic below



Please choose connect by IP address, input your IP address and ANP (Access Point Name), download those information to your device.

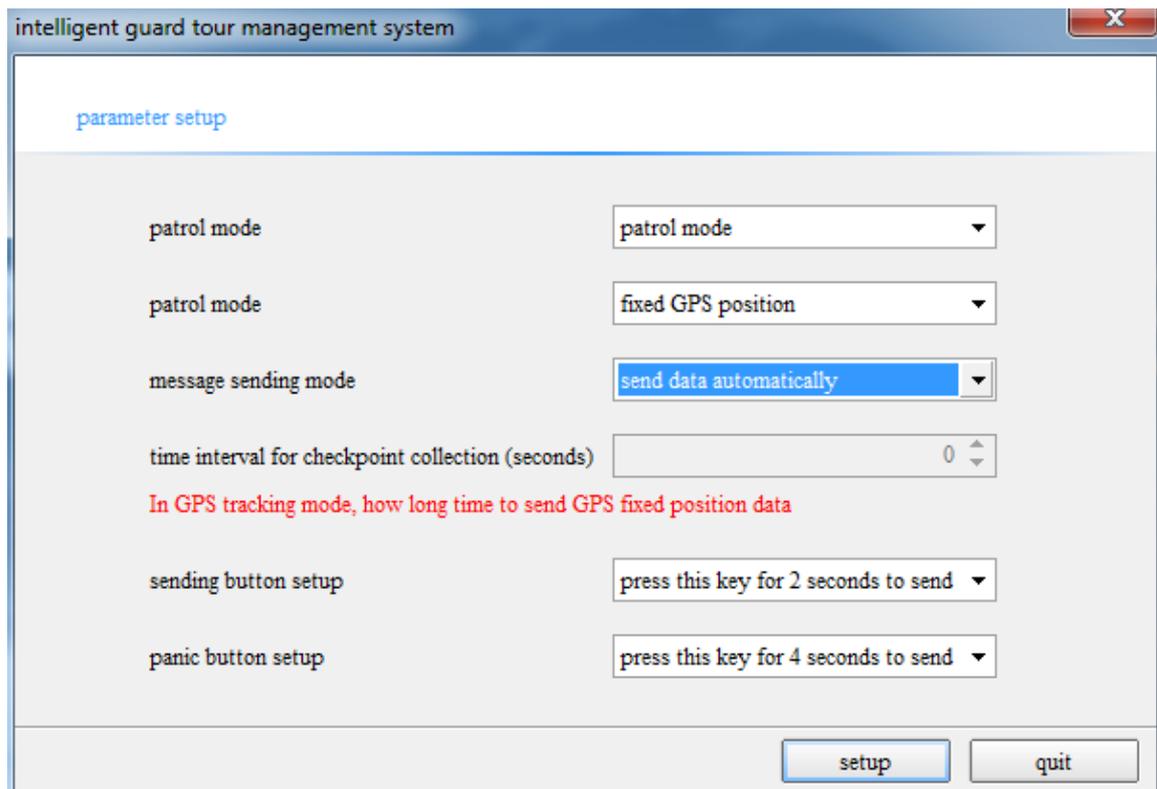
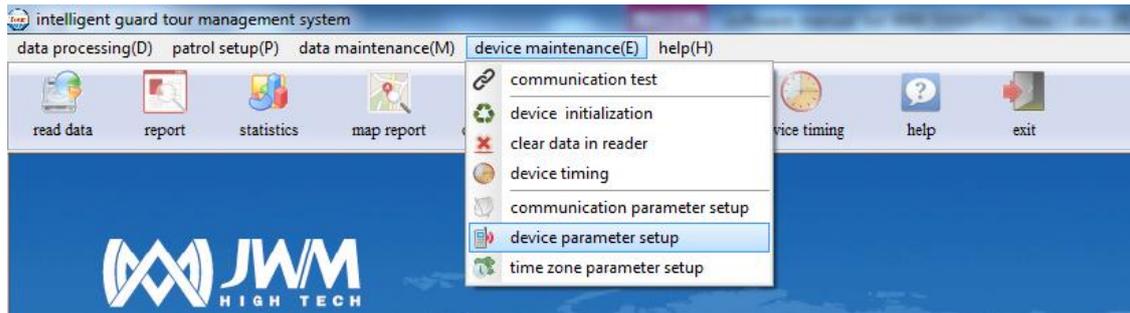
If you don't have fixed IP address, you need register a Dynamic Domain Name Service client software we provide you at first. Then please choose connect by domain name, input **user's name.gnway.net**, and user's name is for the Dynamic Domain Name software you registered.

Then input DNS and APN, download to device.(if you choose this one, please note to log in your Dynamic Domain Name Service client software every time when you need receive data from device)

e Service client software every time when you need receive data from device)

Device parameter setup

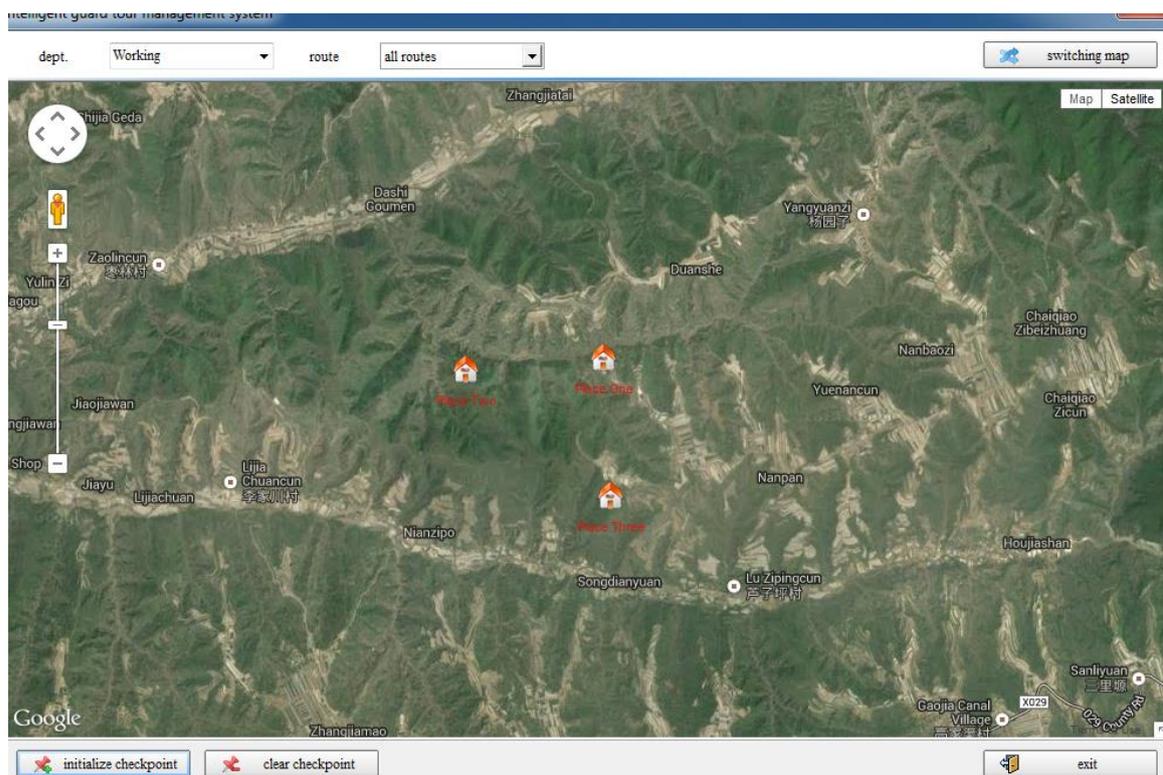
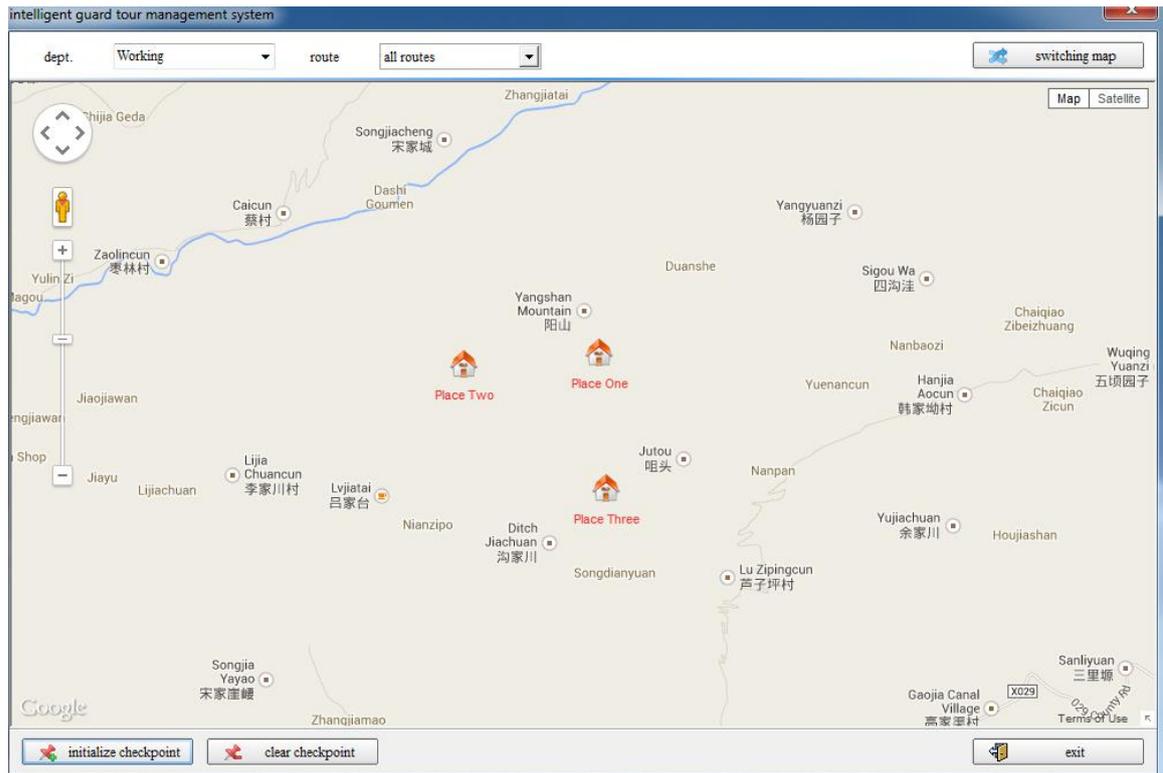
Please click device maintenance heading column to select **Device parameter setup**.



Please choose proper device work mode as your actual demand, and download those data to your device.

Patrol map setup

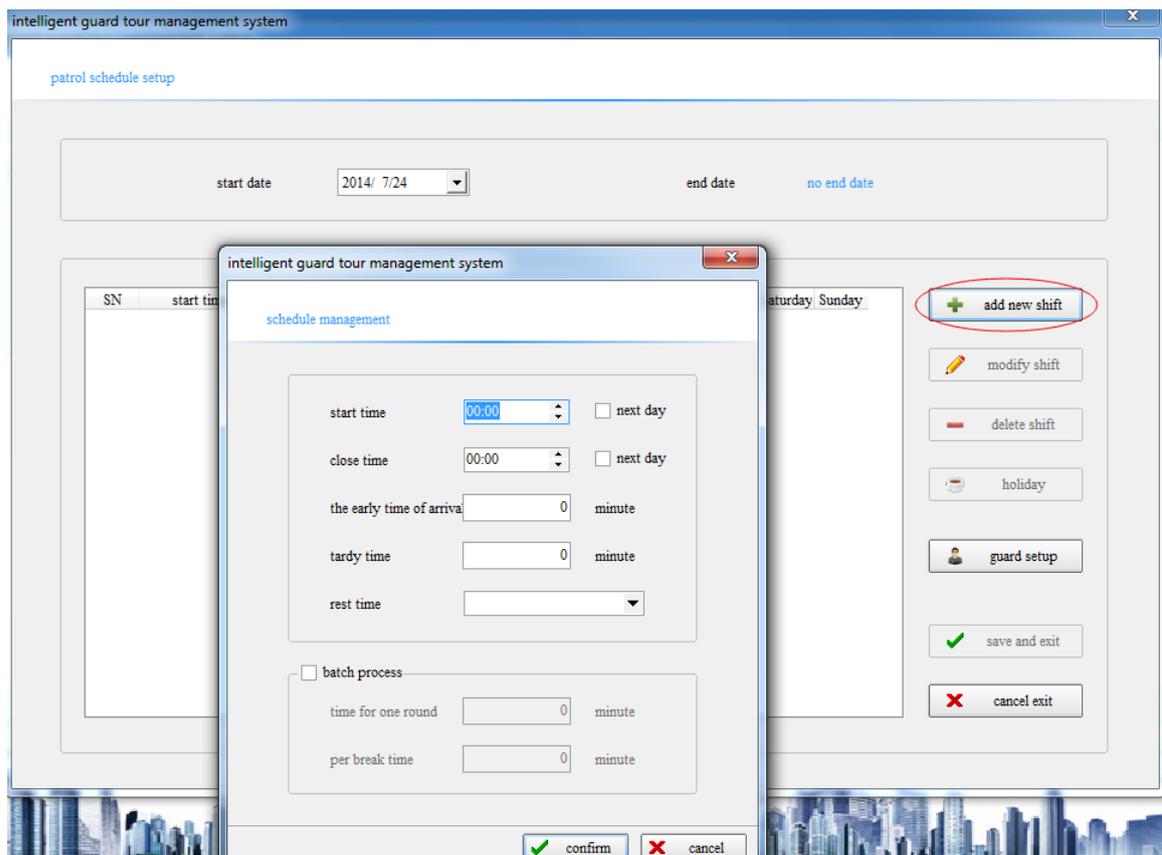
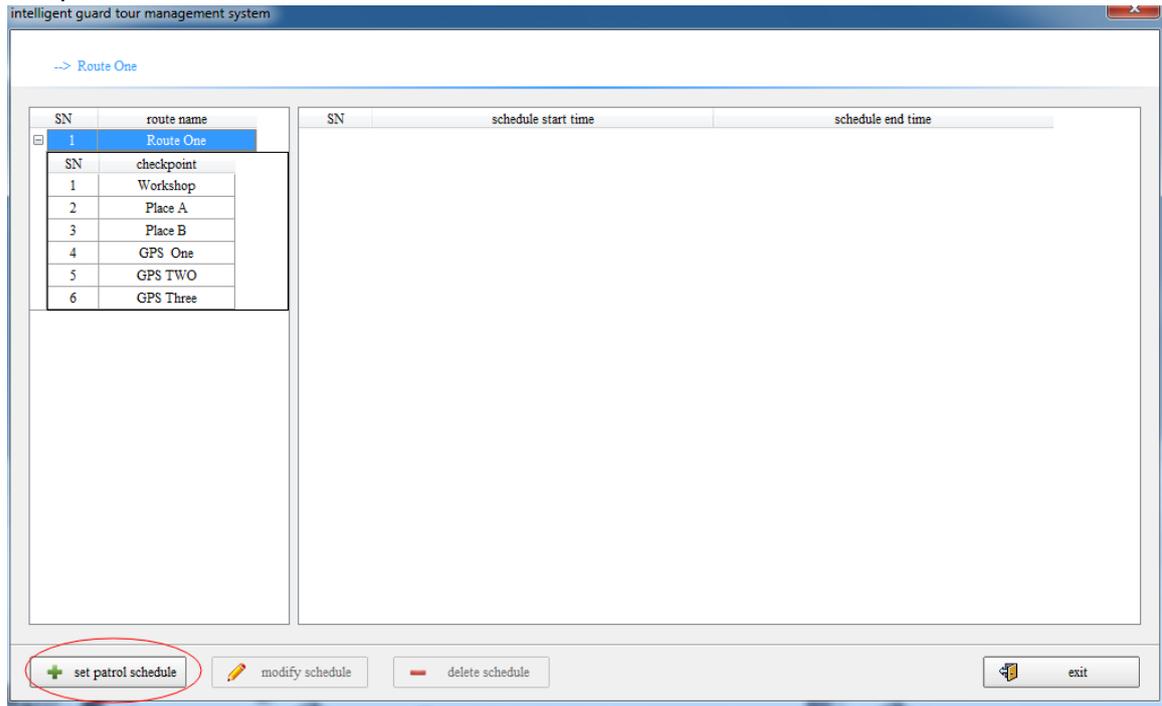
Click the patrol setup in the heading column and select patrol map setup. It will pop up the map and you can see the  house sign from the below map which means the GPS checkpoint you collect before.



Schedule setup

select schedule setup and click set patrol schedule button to set patrol report. Please

see pics below.



patrol schedule setup

start date end date

SN	start time	end time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	that day 06:00	that day 07:00	V	V	V	V	V	rest	rest
2	that day 07:15	that day 08:15	V	V	V	V	V	rest	rest
3	that day 08:30	that day 09:30	V	V	V	V	V	rest	rest
4	that day 09:45	that day 10:45	V	V	V	V	V	rest	rest
5	that day 11:00	that day 12:00	V	V	V	V	V	rest	rest
6	that day 12:15	that day 13:15	V	V	V	V	V	rest	rest
7	that day 13:30	that day 14:30	V	V	V	V	V	rest	rest
8	that day 14:45	that day 15:45	V	V	V	V	V	rest	rest
9	that day 16:00	that day 17:00	V	V	V	V	V	rest	rest
10	that day 17:15	that day 18:15	V	V	V	V	V	rest	rest
11	that day 18:30	that day 19:30	V	V	V	V	V	rest	rest
12	that day 19:45	that day 20:45	V	V	V	V	V	rest	rest
13	that day 21:00	that day 22:00	V	V	V	V	V	rest	rest
14	that day 22:15	that day 23:15	V	V	V	V	V	rest	rest
15	that day 23:30	next day 00:30	V	V	V	V	V	rest	rest
16	next day 00:45	next day 01:45	V	V	V	V	V	rest	rest
17	next day 02:00	next day 03:00	V	V	V	V	V	rest	rest

add new shift

delete shift

holiday

guard setup

save and exit

cancel exit

intelligent guard tour management system

guard setup

patrol staff shift

make shift by team make shift by day

selected guard information

TOM

add selection

add all

delete selection

delete all

proposed guard information

TOM

confirm

patrol schedule management --> Route 1

SN	route name
1	Route 1

SN	checkpoint
1	Site1
2	Site2
3	Site3

SN	schedule start time	schedule end time	no end date							guard
SN	start time	end time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	guard
1	the1 day 06:00	the1 day 07:00	V	V	V	V	V	rest	rest	TOM
2	the1 day 07:15	the1 day 08:15	V	V	V	V	V	rest	rest	TOM
3	the1 day 08:30	the1 day 09:30	V	V	V	V	V	rest	rest	TOM
4	the1 day 09:45	the1 day 10:45	V	V	V	V	V	rest	rest	TOM
5	the1 day 11:00	the1 day 12:00	V	V	V	V	V	rest	rest	TOM
6	the1 day 12:15	the1 day 13:15	V	V	V	V	V	rest	rest	TOM
7	the1 day 13:30	the1 day 14:30	V	V	V	V	V	rest	rest	TOM
8	the1 day 14:45	the1 day 15:45	V	V	V	V	V	rest	rest	TOM
9	the1 day 16:00	the1 day 17:00	V	V	V	V	V	rest	rest	TOM
10	the1 day 17:15	the1 day 18:15	V	V	V	V	V	rest	rest	TOM
11	the1 day 18:30	the1 day 19:30	V	V	V	V	V	rest	rest	TOM
12	the1 day 19:45	the1 day 20:45	V	V	V	V	V	rest	rest	TOM
13	the1 day 21:00	the1 day 22:00	V	V	V	V	V	rest	rest	TOM
14	the1 day 22:15	the1 day 23:15	V	V	V	V	V	rest	rest	TOM
15	the1 day 23:30	the2 day 00:30	V	V	V	V	V	rest	rest	TOM
16	the2 day 00:45	the2 day 01:45	V	V	V	V	V	rest	rest	TOM
17	the2 day 02:00	the2 day 03:00	V	V	V	V	V	rest	rest	TOM
18	the2 day 03:15	the2 day 04:15	V	V	V	V	V	rest	rest	TOM
19	the2 day 04:30	the2 day 05:30	V	V	V	V	V	rest	rest	TOM

set patrol schedule modify schedule delete schedule

When you finish the procedures above the guards can patrol according to the time you setup if the guards fail to patrol during required time the patrol report will show it.

Map report

Please select [map report](#) button from the column and then you can see the patrol route from the map.

data processing(D) patrol setup(P) data maintenance(M) device maintenance(E) help(H)

read data report statistics **map report** stop service communication test clear data in reader help exit

position data enquiry real time monitoring patrol history replay

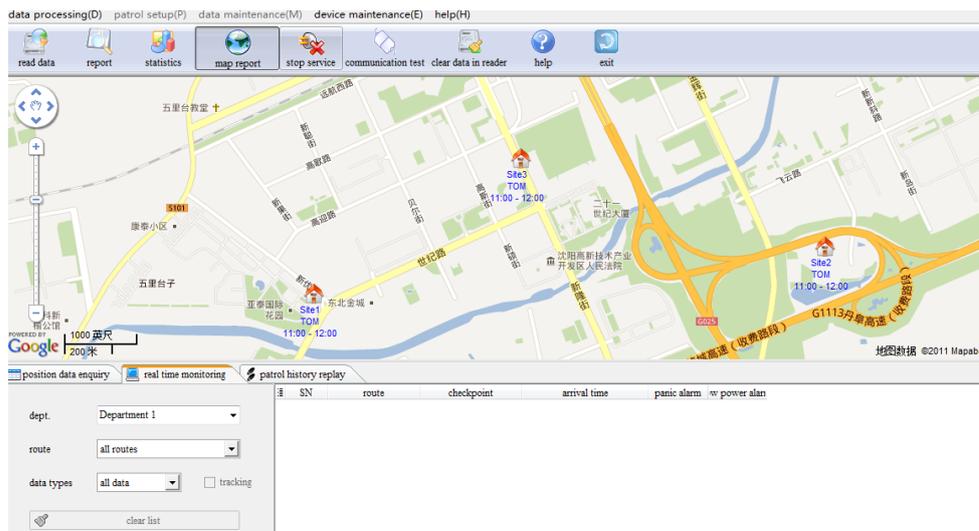
dept.	patrol date	SN	start time	end time	patrolled times	omission times
Department 1	2011/12/23	1	2011/12/23 06:00:00	2011/12/23 07:00:00	0	3
		2	2011/12/23 07:15:00	2011/12/23 08:15:00	0	3
		3	2011/12/23 08:30:00	2011/12/23 09:30:00	0	3
		4	2011/12/23 09:45:00	2011/12/23 10:45:00	0	3
		5	2011/12/23 11:00:00	2011/12/23 12:00:00	0	3
		6	2011/12/23 12:15:00	2011/12/23 13:15:00	0	3
		7	2011/12/23 13:30:00	2011/12/23 14:30:00	0	3
		8	2011/12/23 14:45:00	2011/12/23 15:45:00	0	3
		9	2011/12/23 16:00:00	2011/12/23 17:00:00	0	3
		10	2011/12/23 17:15:00	2011/12/23 18:15:00	0	3
		11	2011/12/23 18:30:00	2011/12/23 19:30:00	0	3

route: Route 1

start time: 2011/12/23 00:00

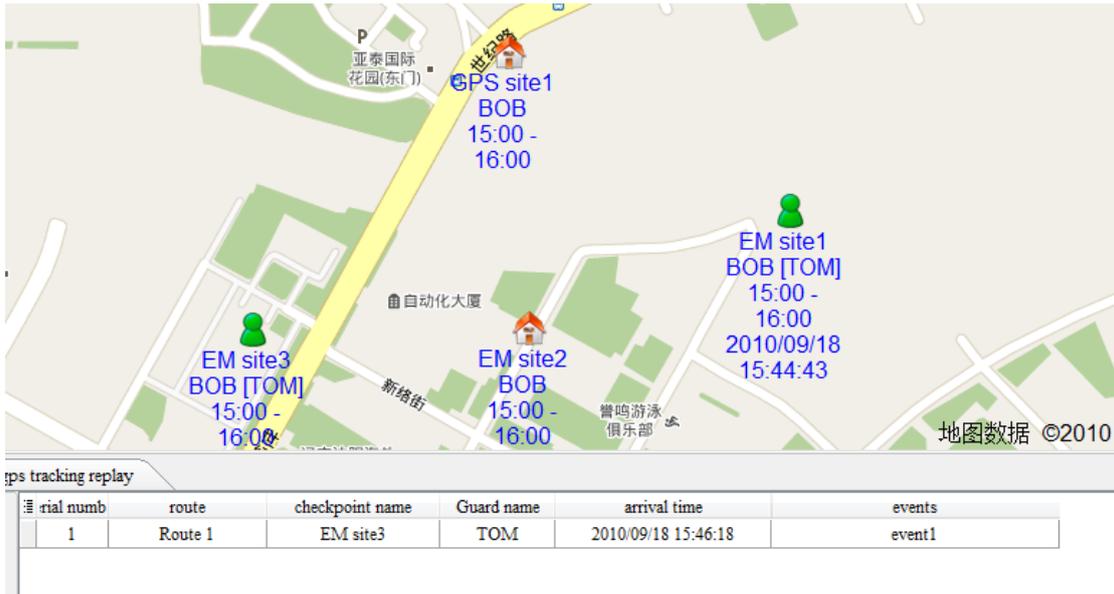
end time: 2011/12/24 00:00

enquiry

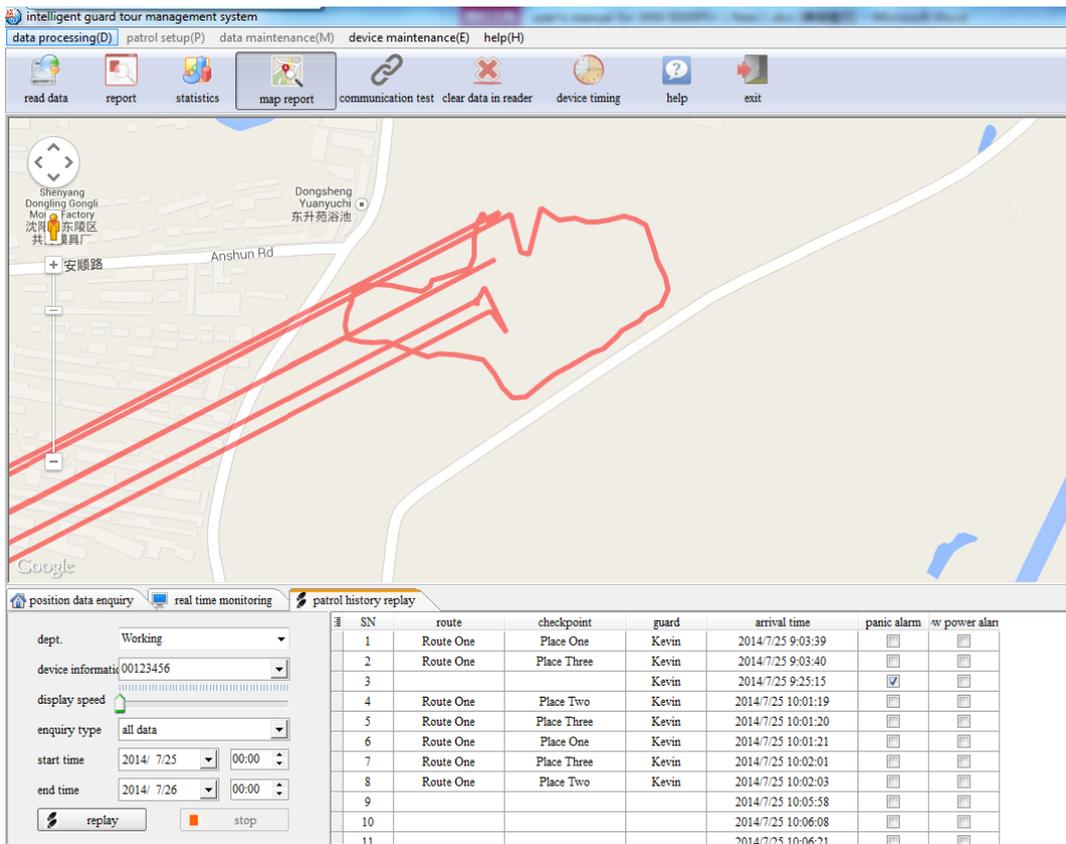


When guard send a patrol message to control center,  will turn into



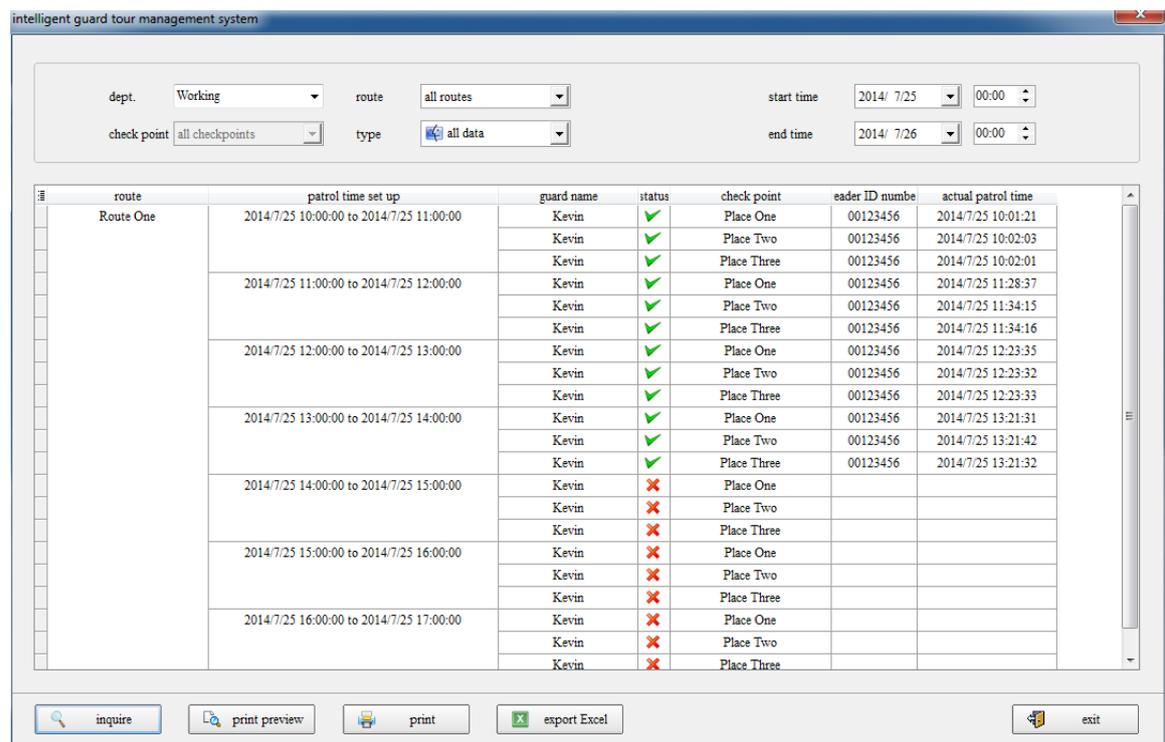
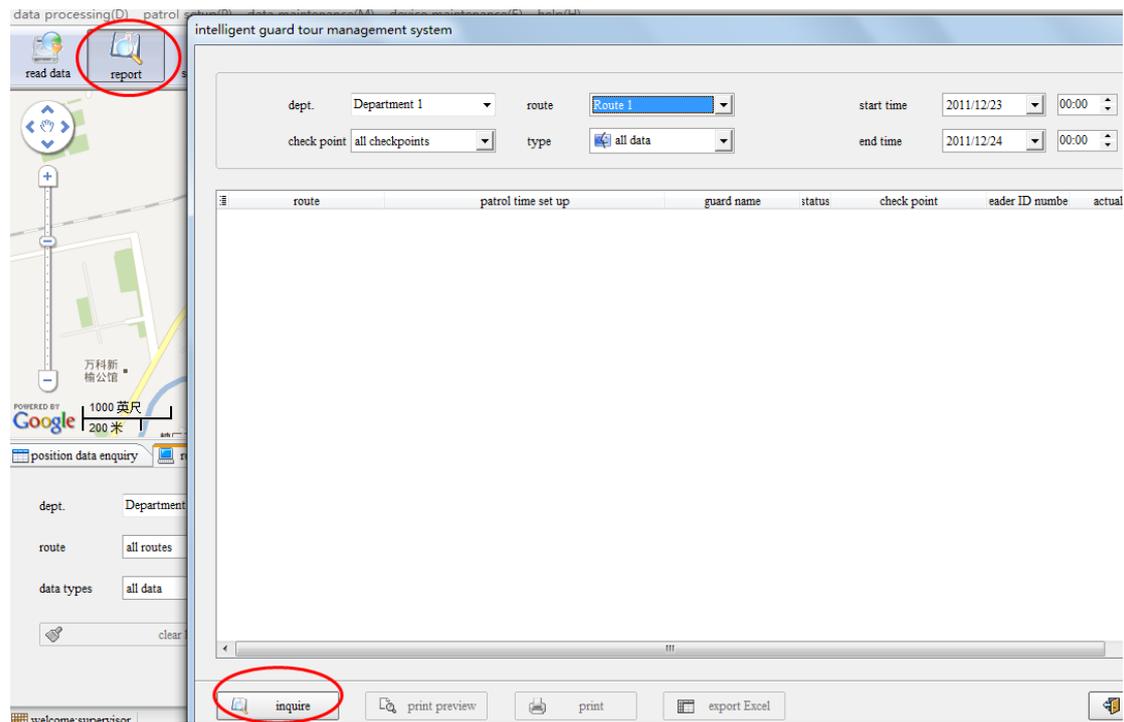


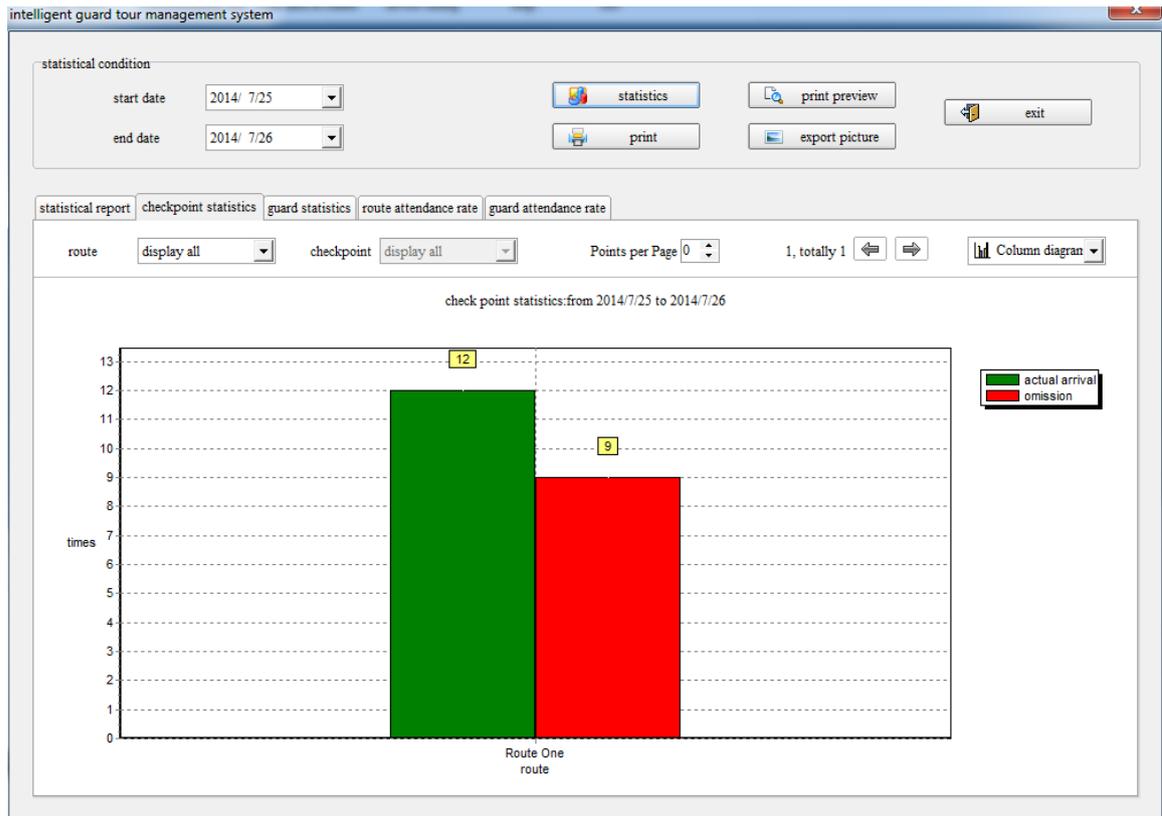
Trough GPS tracking replay you can also see the tracking routes, please see the pic below.



Patrol report

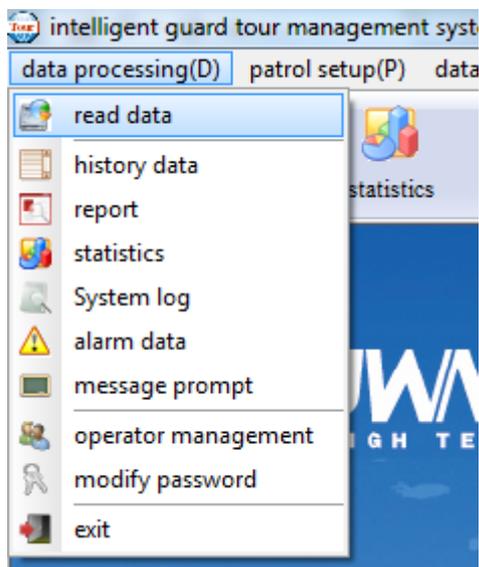
Please choose **report** button the column and set relevant requirement

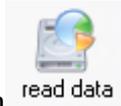




Data Processing

1. Read Data





a. Click on **read data** on the main screen

b. Then the screen below will pop up. With the Reader connected to computer, click on **Read Data** button, and then the data in the Reader (condition for patrolling, such as guard name, time cost, route, station, time, date and incident etc.) will be transferred to the computer.

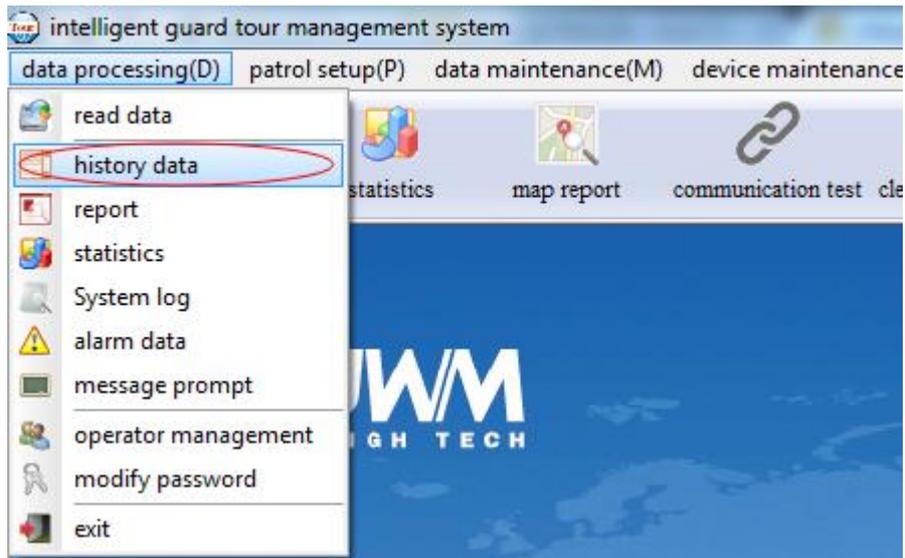
When reading data, the software will automatically process records, and incomplete tour and omissions will be shown here.

The screenshot shows the 'guard patrol management software' interface. The title bar reads 'guard patrol management software'. Below the title bar, the text 'data reading' is displayed. The main area contains a table with the following data:

route name	checkpoint name	staff name	arrival time	event
building 1	meeting room	Tom	01-09-2009 10:55:00	
building 1	manager office	Tom	01-09-2009 10:55:00	fire
building 1	front door	Tom	01-09-2009 10:55:00	

On the right side of the interface, there are several buttons: 'data reading', 'print preview', 'print', 'save as Ex...', and 'quit'.

2. History Data



With this function, you can check original data that upload from the reader. Please check below.

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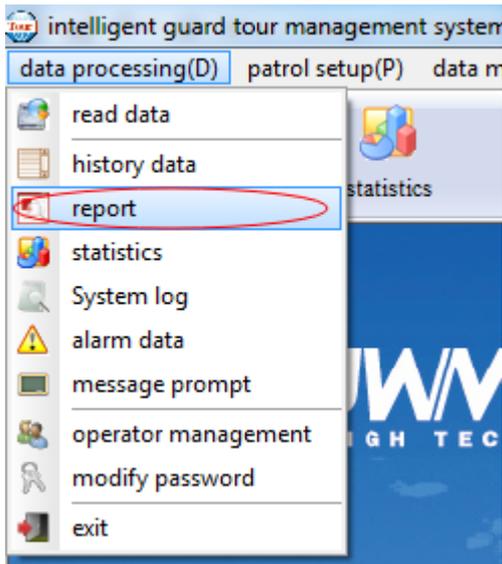
division: jwm company route: all routes start time: 2/11/2011 00:00

site: all sites reader: all readers end time: 2/13/2011 00:00

SN	route name	site name	guard name	arrival time
1	building1	second floor	Jim	2/11/2011 2:26:00 PM
2	building1	first floor	Jim	2/11/2011 2:26:01 PM
3	building1	front door	Jim	2/11/2011 2:26:02 PM
4	building1	front door	David	2/11/2011 2:26:07 PM
5	building1	first floor	David	2/11/2011 2:26:09 PM
6	building1	second floor	David	2/11/2011 2:26:11 PM
7	building 2	workshop	David	2/11/2011 2:26:20 PM
8	building 2	manager office	David	2/11/2011 2:26:21 PM
9	building 2	meeting room	David	2/11/2011 2:26:23 PM
10	building 2	account department	David	2/11/2011 2:26:25 PM
11	building 2	workshop	Jim	2/11/2011 2:26:30 PM
12	building 2	account department	Jim	2/11/2011 2:26:34 PM
13	building 2	manager office	Jim	2/11/2011 2:26:36 PM
14	building 2	meeting room	Jim	2/11/2011 2:26:39 PM

enquiry print preview print save as excel clear data

3. Patrol Report



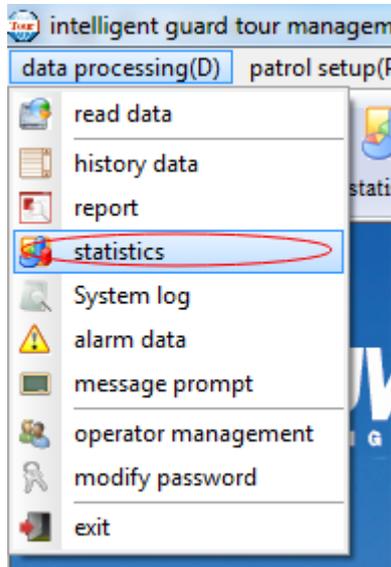
a. By this function, you can query all what you want. Click  on the main screen.

b. Then the screen below will pop up. Choose date range (Start Date, End Date) to query the patrolling reports, then all the data you need will be shown on the following screen.

route	patrol time	guard name	status	site	leader ID numbe	actual patrol time
building1	2/11/2011 10:00:00 AM to 2/11/2011 11:00:00 AM	David	✗	front door		
		David	✗	first floor		
		David	✗	second floor		
	2/11/2011 11:05:00 AM to 2/11/2011 12:05:00 PM	Jim	✗	front door		
		Jim	✗	first floor		
		Jim	✗	second floor		
	2/11/2011 12:10:00 PM to 2/11/2011 1:10:00 PM	David	✗	front door		
		David	✗	first floor		
		David	✗	second floor		
	2/11/2011 1:15:00 PM to 2/11/2011 2:15:00 PM	Jim	✗	front door		
		Jim	✗	first floor		
		Jim	✗	second floor		
	2/11/2011 2:20:00 PM to 2/11/2011 3:20:00 PM	David	✓	front door	012345	2/11/2011 2:26:07 PM
		David	✓	first floor	012345	2/11/2011 2:26:09 PM
		David	✓	second floor	012345	2/11/2011 2:26:11 PM
	2/11/2011 3:25:00 PM to 2/11/2011 4:25:00 PM	Jim	✗	front door		
		Jim	✗	first floor		
		Jim	✗	second floor		
	2/11/2011 4:30:00 PM to 2/11/2011 5:30:00 PM	David	✗	front door		
		David	✗	first floor		

c. For conditional query, click each title bar

4. Statistical



Click **statistics** button on the main screen.

a. First, choose start date and end date you want to have a statistics, and then choose statistical way. If you want to see guard statistical result, then please choose **Guard** and click **Stat.** Button. Please see below

b. if you want to have route statistical result, then choose **Route** and click **Stat.** Button.

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statistical condition

start date: 2/ 1/2011

end date: 2/13/2011

statistics, print, print preview, export data, exit

statistical report | site statistics | guard statistics | route attendance rate | guard attendance rate

statistical report from 2/1/2011 to 2/13/2011

route (selected) | guard | by date

		from 2/1/2011 to 2/13/2011				
route name	guard name	planned patrol times	actual arrival (times)	omission (times)	attendance rate	absent rate
[-] building 2	David	28	0	28	0.00%	100.00%
	Jim	28	0	28	0.00%	100.00%
building 2 Group Total		56	0	56	0.00%	100.00%
[-] building 1	David	36	3	33	8.33%	91.67%
	Jim	36	0	36	0.00%	100.00%
building 1 Group Total		72	3	69	4.17%	95.83%
Grand Total		128	3	125	2.34%	97.66%

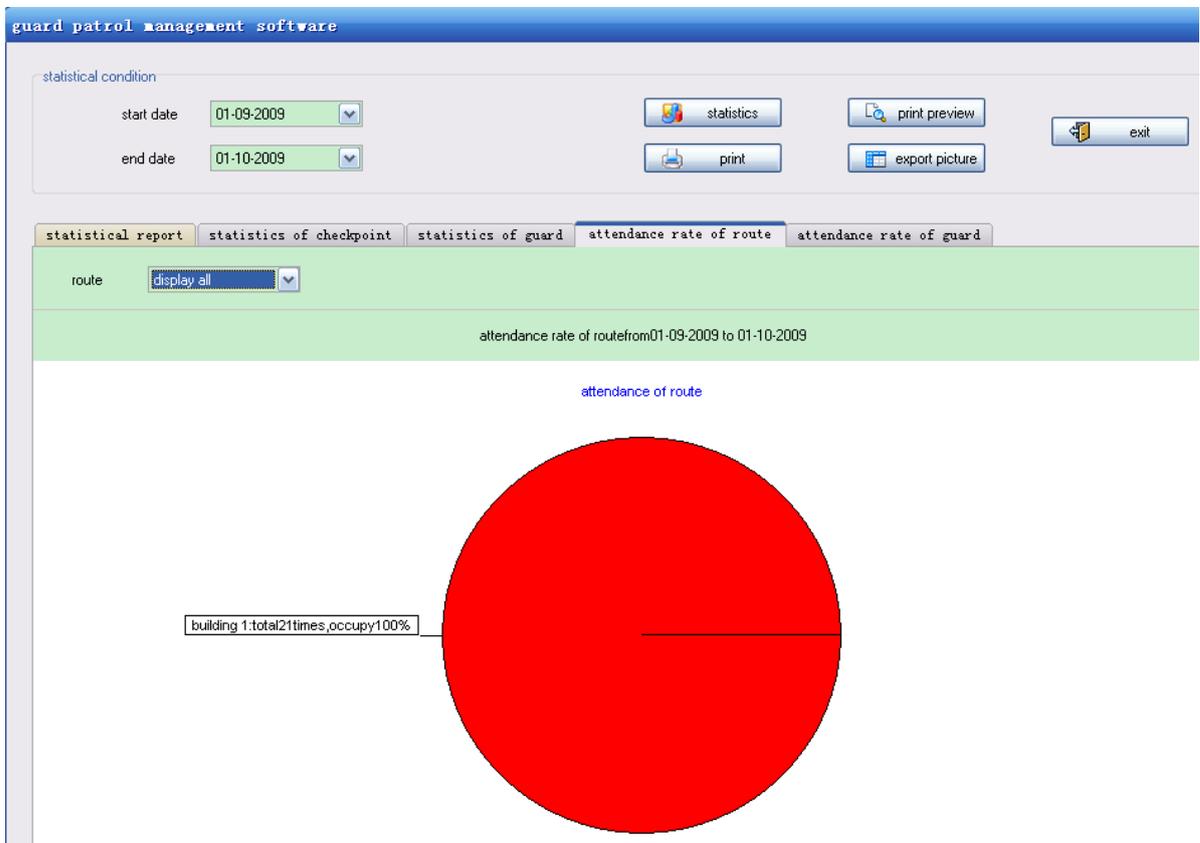
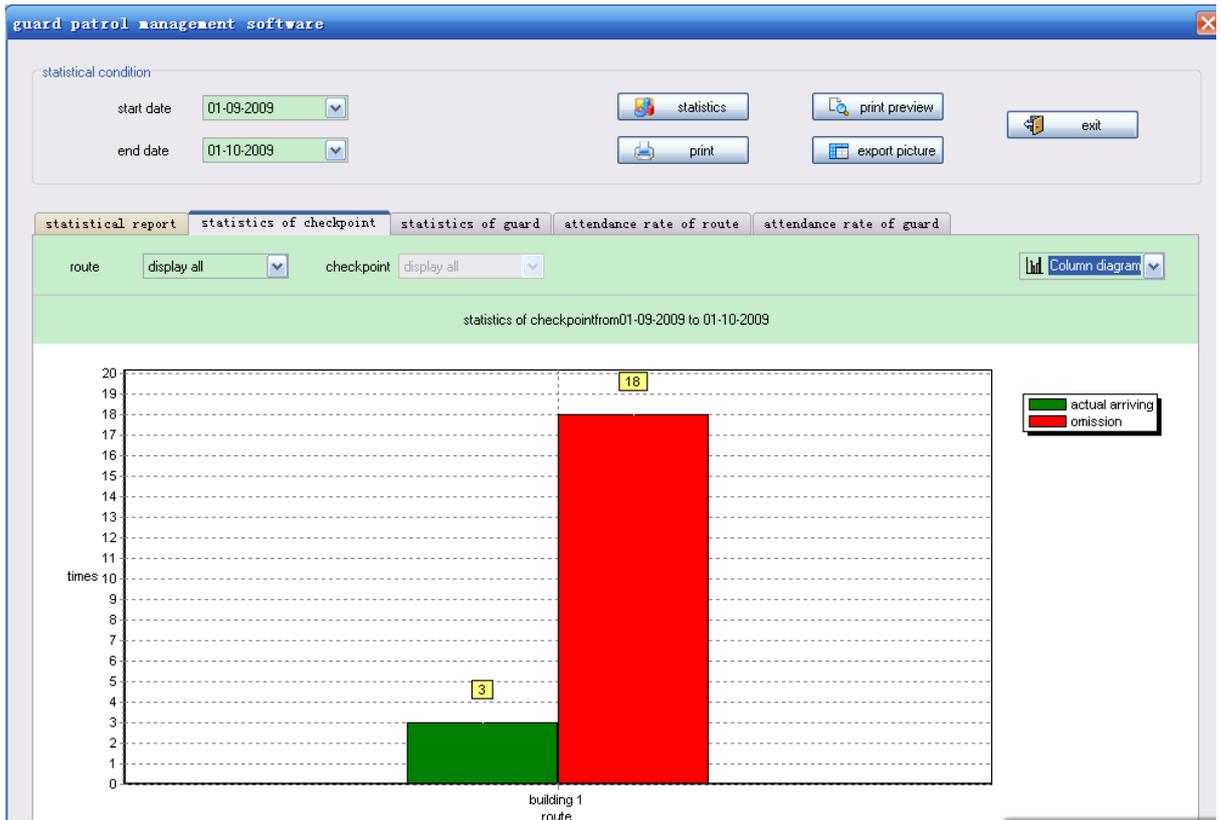
c. For conditional query, click the button 

In statistical, besides statistical table, there are also diagrams which show guards patrol conditions visually.

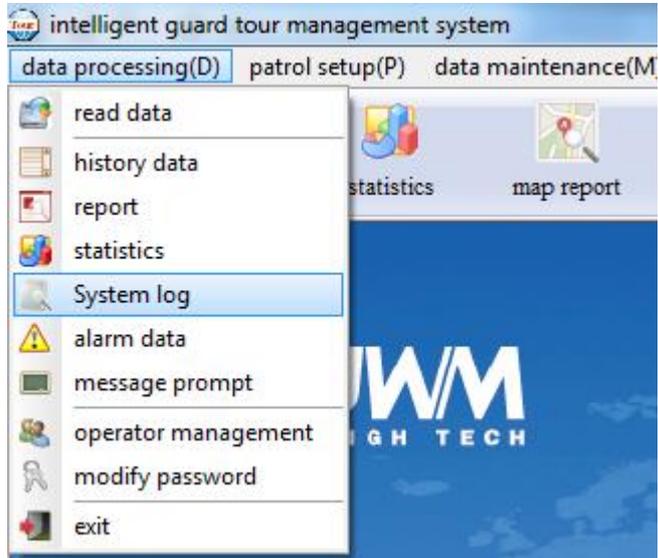
Stat. forms | Site stat. | Guard man stat. | Route attendance rate | Attendance rate

route: office building (selected) | site: display all (selected)

display all, office building



5. System log

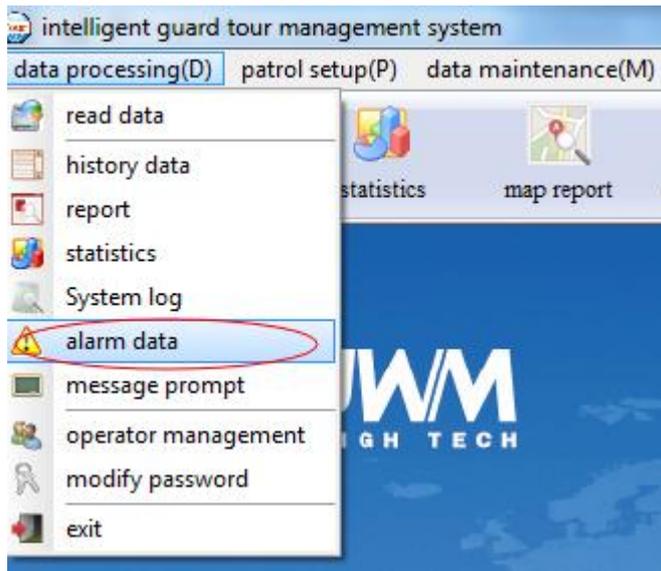


intelligent guard tour management system

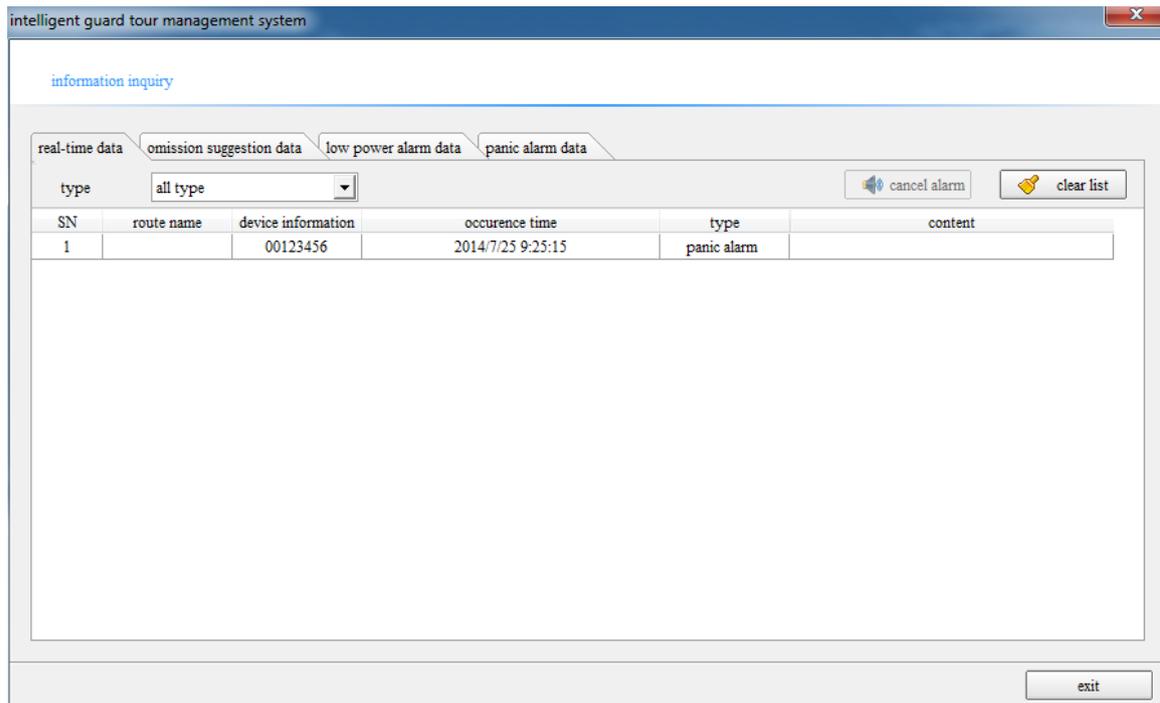
start time: 2014/ 7/25 00:00 enquiry print preview clear data
 end time: 2014/ 7/26 00:00 print save as excel exit

serial Num	operator name	operation dialogue box	operation content	operation time
1	supervisor	intelligent guard tour management	log in: KEVIN-PC 192.168.1.6	2014/7/25 10:20:40
2	supervisor	intelligent guard tour management	device parameter setup	2014/7/25 10:21:46
3	supervisor	device parameter setup	quit	2014/7/25 10:34:43
4	supervisor	intelligent guard tour management	communication parameter setup	2014/7/25 10:34:45
5	supervisor	communication parameter setup	exit	2014/7/25 10:37:57
6	supervisor	intelligent guard tour management	dept. setup	2014/7/25 10:42:39
7	supervisor	dept. setup	add new dept.	2014/7/25 10:42:41
8	supervisor	add new dept.	cancel	2014/7/25 10:43:11
9	supervisor	dept. setup	exit	2014/7/25 10:43:12
10	supervisor	intelligent guard tour management	guard setup	2014/7/25 10:44:52
11	supervisor	guard setup	exit	2014/7/25 10:44:58
12	supervisor	intelligent guard tour management	guard setup	2014/7/25 10:45:00
13	supervisor	guard setup	exit	2014/7/25 10:45:02
14	supervisor	intelligent guard tour management	guard setup	2014/7/25 10:45:04
15	supervisor	guard setup	exit	2014/7/25 10:45:14
16	supervisor	intelligent guard tour management	dept. setup	2014/7/25 10:45:15
17	supervisor	dept. setup	add new dept.	2014/7/25 10:45:16
18	supervisor	add new dept.	confirm -- dept. name:Part One	2014/7/25 10:45:25
19	supervisor	dept. setup	exit	2014/7/25 10:45:26
20	supervisor	intelligent guard tour management	statistics	2014/7/25 10:45:27
21	supervisor	statistics	exit	2014/7/25 10:45:29
22	supervisor	intelligent guard tour management	guard setup	2014/7/25 10:45:30
23	supervisor	guard setup	Part One -> add new guard	2014/7/25 10:45:31

6. Alarm Data

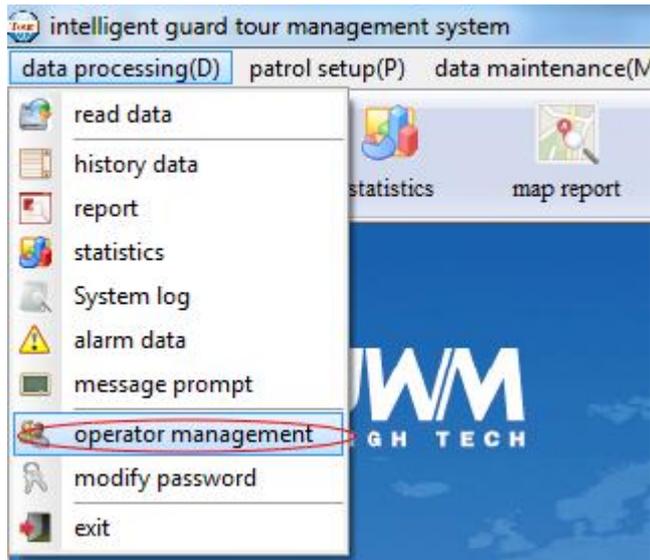


There is a black button on right side of the reader, which is used as panic button. During patrol, if something happened and guard wants to record this event and send this message to control center in real time. In **alarm data**, you can see real time alarm data and can check history alarm data. Please see below:



7. Operator Management

- a. Our guard tour system is multi-level operator system, and different level operator has different access rights, which can guarantee data's safety and validity.



b. Press **System Tool**, and then choose **Operator Management**, then click on **Modify** to reset username, password at different access level. Same way to click **Add**, to increase new username and password.

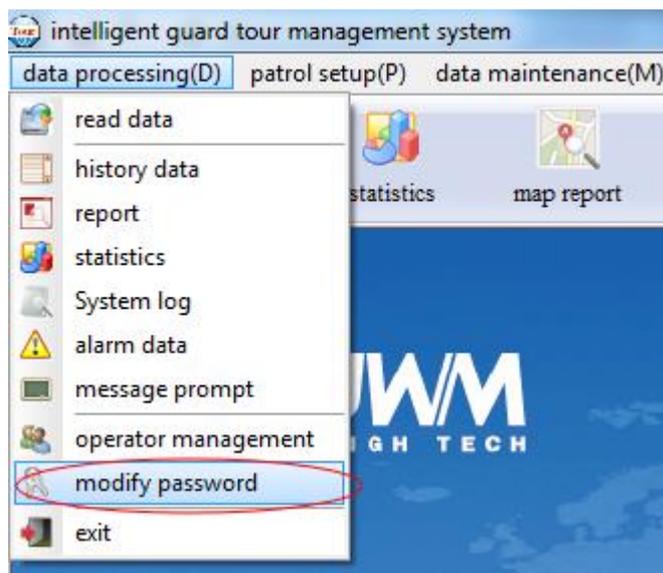


c. There are two login operators each with different levels of rights:

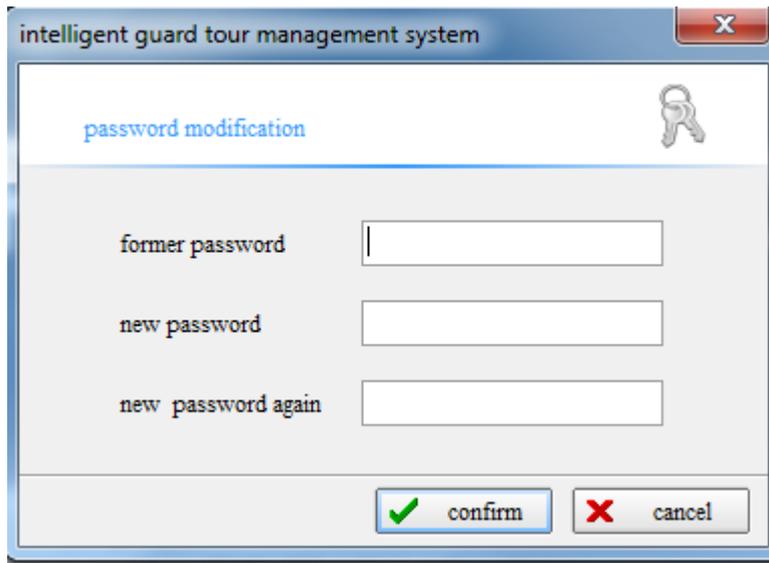
Access Level:	"User"	"Master"
Initial Username	user	master
Initial Password	123	999

Allows Data Reading and Query	Yes	Yes
Allows Test Reader	Yes	Yes
Allows Modify User's name and Password	Yes	Yes
Allows Modify Master's name and Password	No	Yes
Allows System Setup	No	Yes
Allows System Maintenance	No	Yes
Allows Reader Initialization	No	Yes
Allows Import of Basic Data	No	Yes

8. Password Modify

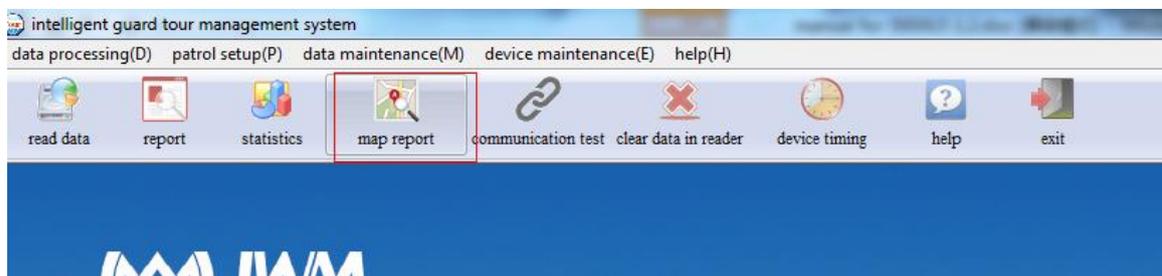


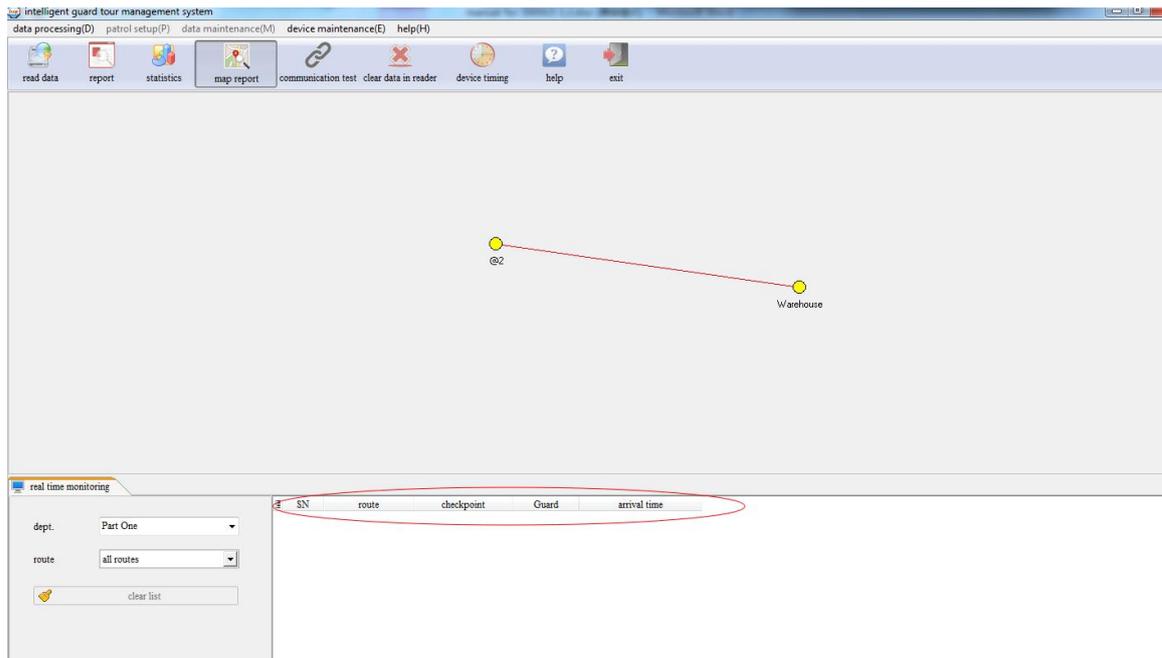
The screen below will pop up. Enter current Password and the new Password, then click **OK**. (password is not more than 6-bit number)



9. Real Time Data

Besides Reports and Patrol Statistics, you also can check patrol performance in **Real time data**. Click this button and choose route you want check, you will see patrol performance on map.





Direction for use

a. After software installation and setup, all the checkpoint cards have been labeled names (checkpoint names, personnel names or events), which are as same as being assigned in the software. Then fix these checkpoint cards to the proposed positions. Make sure that, the correctly named cards will be installed in the correct places of the proposed tour.

b. When patrolling, first the patrolling guard takes the Reader and read his own Guard ID to identify himself with the system, e.g. Guard A.

Make sure that the guard cards are not read in the middle of patrol routes, which can cause the data will be showed by the software that a no-name guard have the former part patrolling.

c. Then the guards go to the checkpoints, the Reader will automatically read each card. When reading successfully, a red indicator light accompanies with a vibration means a reading has been made. Then the reader will store card's ID number in it.

d. When scan a tag in check place, according to patrol sending mode, the patrol records will be sent to control center automatically.

e. Then through report, statistics or real time data, you will see patrol performance so that can manage the patrol guards.

Thanks for using our WM-5000P5 GPS +GPRS guard tour system.