

iZaac 4.2 Patrol System

Operating Manual



User's Guide for iZaac 4.2 Patrol System

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1. Principle

The Patrol Wand is an information collector with a built-in clock and storage.

Each information button (or card) has a unique code number which is different from all the other buttons.

The information button is installed at each patrol point. When the Patrol Wand is placed over the information button, it reads the code number and generates a time stamp with it.

The information from the Patrol Wand is transferred to the PC by means of a USB communication unit.

Each patrol wand can store up to 8000 records. The patrol wand will give one long “beep” (for a second) and a quick flash from the indicator to confirm that the button information is successfully stored.

If the same button is read within 2 minutes, the patrol wand will send out a short “beep” (shorter than a half second) and a quick flash from the indicator to prompt an error in reading. The data from the same button will not be recorded in this case.

When the records exceed 7700 entries, the patrol wand will give a four “beeps” and four flashes from the indicator to alert the user that the storage is almost full. The user is strongly advice to transfer the data to the PC as soon as possible. When the records reach 8000 entries, the Patrol Wand will not store further information. The user needs to transfer the data to the PC via the USB communication unit to clear the Patrol Wand’s storage space for new data.

2、Technical Indicators

2、1、Patrol Wand

Volume: $\varnothing 25 \times 165 \text{mm}$

Weight: 400g

Storage Level: 8000 records

Operating Temperature: -20°C —— 55°C

Power Supply: built-in 3.6V lithium battery

2、2、Communication Unit

Volume: $158 \times 121 \times 58 \text{mm}$

Weight: 600g

Power Supply: DC9V

Operating Temperature: -20°C —— 55°C

Communication Interface: USB Interface

2、3、Information Button

Volume: $\varnothing 16.3 \times 3.2 \text{mm}$

Weight: 1.6g

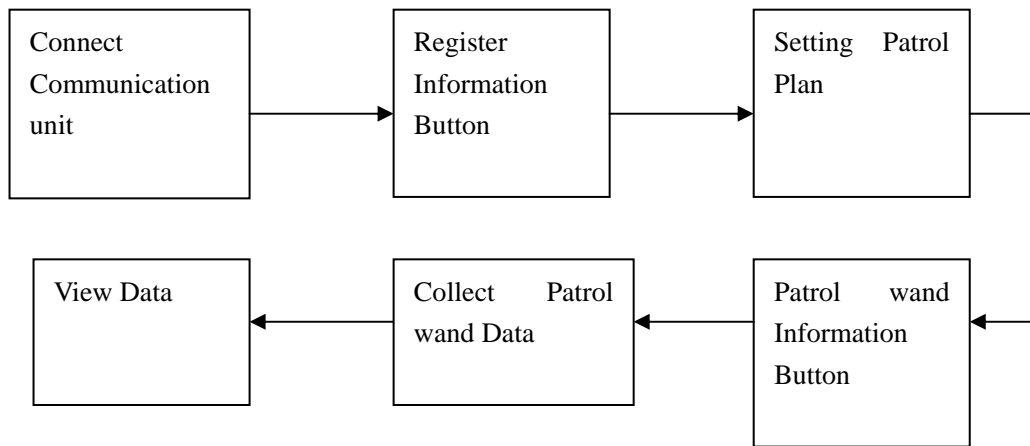
Operating Temperature: -40°C —— 85°C

Operating Environment: sheltered and dry environment.

3、 Software Installation

- 1、 Opb4.0A Patrol Management System is compatible with WINDOWS9X or WINDOWS XP operating system.
- 2、 If the operating system is Windows9X, it is necessary to run the file mdac_typ.exe under the root directory of this CD.
- 3、 Run the SETUP.EXE file in the installation CD and install the software according to the installation instructions. Generate a shortcut on the desktop for the Opb4 Patrol System.

4、Flow Chart



5、System Operation

(1) How to Connect A Communication unit

OCOM-PBU (USB Communication)

Connect the communication unit to the Computer via USB port. You can now power up the communication unit after connecting the USB cable.

Start the computer. The new hardware will be found by the computer.

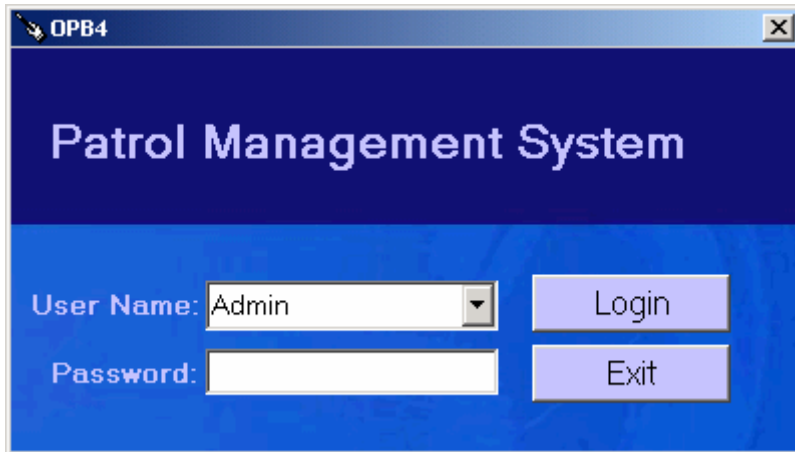
Install the USB driver program from the CD by selecting the file “USB DRIVE/DRIVER/CH341SER” in the installation disk.

After the installation, the communication unit is now ready to be used.

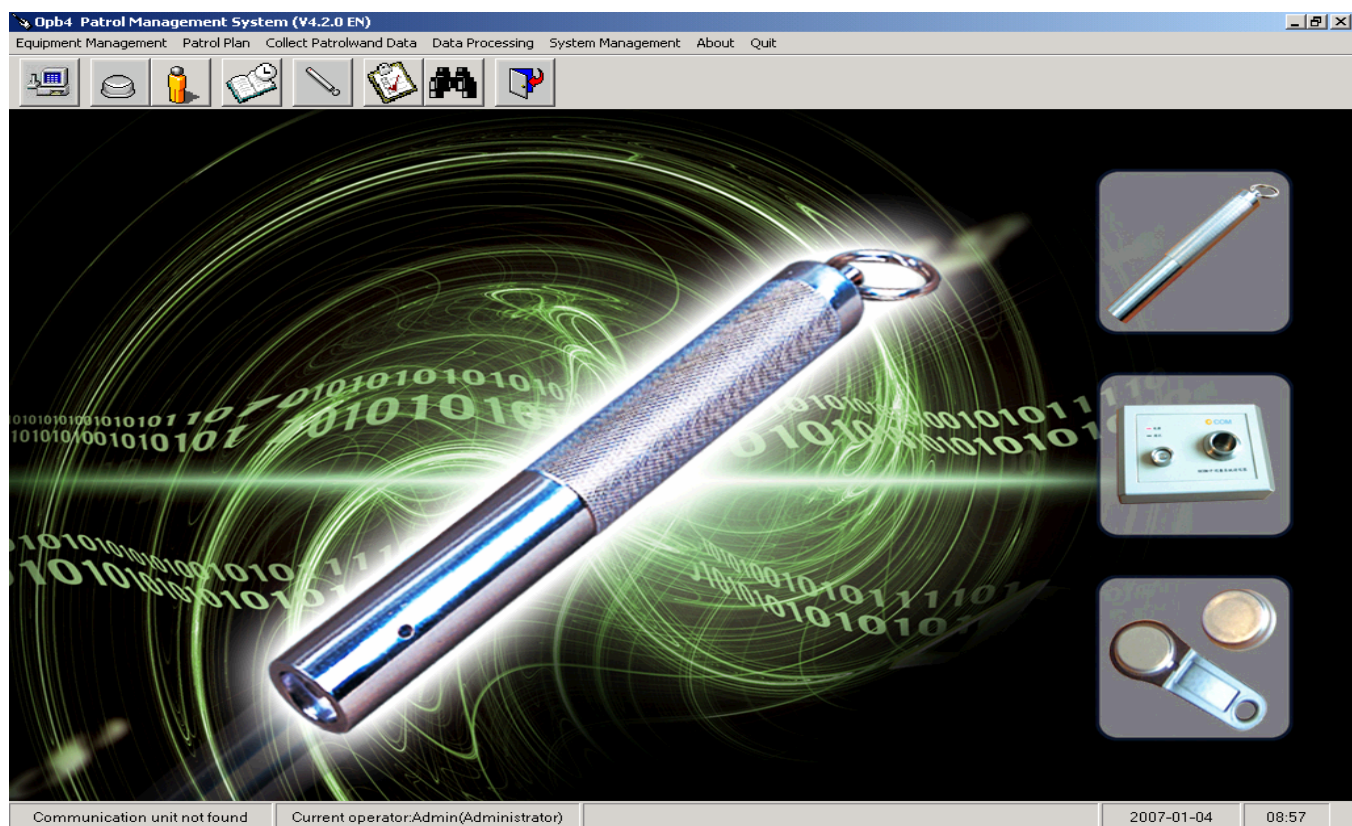
Note: Please close the USB port from the computer before removing the USB cable from the communication unit.

(2) How to Use the Software

Double-click on the OPB4 shortcut icon on the computer to activate the Patrol Management System.



Input **Admin** for User Name and left blank for the Password. Then click on **Login**.



The system interface provides the following menu functions:

- Equipment Management
- Patrol Plan
- Collect Patrol Wand Data
- View Data
- System Management
- Help
- Exit

5、1、 Patrol point Registry

You are advised to register the information button before the actual site installation. (If an information button is installed without registry or loses any data, please re-register the button by using the “Re-register Information Button”; please refer to the “Re-register Information Button” section for more information.) Open the pull down menu “Equipment Management” and then click “Patrol point Registry” to enter the appropriate interface.

	Point Name	Point Code	Quantity of Buttons Registered
1	A1	1	0
2	A2	2	0

Patrol Point Name:	A1
Patrol Point Code:	1

Button Data:

Button Code	Register Time
-------------	---------------

Read by Comm Socket

Delete Button

Add Patrol Point Change Patrol Point Delete Patrol Point Output Exit

To input a new patrol point; please click “Add Patrol point”. Enter the name and number of the patrol point to be added and then press “Go”

Please refer to the diagram below to register an information button at each patrol point. Select a patrol point from the patrol point list on the left and then put the information button on the reading seat (or reading zone).

Now click “Send Information Button via Communication Unit” to register the Information Button Code Number to the patrol point.

5、 2、 Patroller Registry

Open the pull down menu “Equipment Management” and then click “Patroller Registry” to enter the appropriate field.

	Patroller Name	Patroller Code	Quantity of Buttons Registered
1	R1	5	0
2	R2	6	0

Patroller Name: R1

Patroller Code: 5

Button Data:

Button Code	Register Time
-------------	---------------

Read by Comm Socket

Delete Button

Add Patroller Change Patroller Delete Patroller Output Exit

Keying in of the Data Registry is quite similar with the operation of “Patrol Point Registry”.

5、3、 Patrol Plan

Open the pull down menu “Patrol Plan” and then click “Patrol Plan” to enter the appropriate field.

Shift defined at present		
	Patrol Shift Name	Patrol Shift Co
1	PS_1	1

Patrol Task of Shift				
	Patrol Route Name	Patrol Start	Patrol End	Tim
1	Xian_1	Intraday 09:00:00	Intraday 10:00:00	

Patrol Day: ☒ Monday ☒ Tuesday ☒ Wednesday ☒ Thursday ☒ Friday ☒ Saturday ☒ Sunday

Week: ☐ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday

Buttons: Add Shift, Delete Shift, Update Shift, Output, Exit

A patrol plan includes three indispensable components: patrol shift, patrol route and patrol task. The software will automatically instruct you to make relevant settings.

To set a patrol shift, click “Add Patrol Shift” to display the appropriate field.

Patrol Shift Management					
Change Patrol Shift					
Patrol Shift		PS_1			
Patrol Shift Code:		1			
Patrol Shift Description					
Patrol Day: <input checked="" type="radio"/> By Week: <input checked="" type="checkbox"/> Monday <input checked="" type="checkbox"/> Tuesday <input checked="" type="checkbox"/> Wednesday <input checked="" type="checkbox"/> Thursday <input checked="" type="checkbox"/> Friday <input checked="" type="checkbox"/> Saturday <input checked="" type="checkbox"/> Sunday					
<input type="radio"/> By Date:					
Patrol Task included in this shift					
	Patrol Route Name	Patrol Start	Patrol End	Time Required for One Patrol	Patr
1	Xian_1	Intraday 09:00:00	Intraday 10:00:00	60Minute	

Buttons: Add Patrol Shift, Change Patrol Task, Delete Patrol Task, Output, Save And Return, Cancel And Return

Please note that a shift has two attributes: shift set by week and shift set by date. In the actual application, there are two situations:

Patrol task is the same in each day, that is, there is no difference on day-offs and holidays. Thus it is enough to set one patrol task for each shift and it is alright to tick from Monday till Saturday and Sunday.

There might be different patrol tasks on different dates and weekdays. The system can set patrol shifts of different tasks by date and week and analyze patrol results by calling out appropriate shifts according to dates and weekdays. When calling out a patrol shift, priority will be given to the “By Date” shift, that is, if a “By Date” shift is set on a certain date, the “By Week” shift appropriate to that date won’t be considered. For example, 1st May 2006 is a Monday; if the shift/task of 1st May 2006 is set, the shift/task on that Monday won’t be considered when summarizing the patrol task that day.

Example: The security guards of a company are arranged to implement such morning patrols: 5 patrols per day from Mondays to Fridays, 10 patrols on Saturdays and Sundays and 20 patrols on holidays. In such case, we may set 3 kinds of morning shifts: common morning shift, day-off morning shift and holiday morning shift.

Tick Monday to Friday on the interface of “Common Morning Shift”.

Tick Saturday and Sunday on the interface of “Day-off Morning Shift”.

Choose the attribute “By Date” from the interface “Holiday Morning Shift” and then input the dates of holidays.

Do the same setting for swing shift and night shift. Thus, when you view the patrol status of a certain day, the system will call out the appropriate shift statistics according to the chosen date. For example, 29th December 2005 is a Thursday and so it is summarized as a common shift. Though 1st May 2006 is a Monday, it is also included in the holiday shifts and therefore is summarized as a holiday shift.

After setting the shifts, you may set patrol route and task for each shift.

5、4、 Collect Patrol Wand Data

Insert a Patrol Wand into the communication unit and then click “Collect Patrol Wand Data” menu. The system will start collecting Patrol Wand data.

Collect Patrolwand Data

Patrolwand Information

WandNo: 17619188

InWandTime: 2007-01-04 09:54:40

Records: 12

SystemTime: 2007-01-04 09:54:39

Last Collect Time:

Save & Return

Reregister Button

Seq	Patrol Time	Patroller	Patrol Point	Button Code
1	2007-01-04 09:54:17	Ren 1	Patrol Button	0F-1D05005E7330-DD
2	2007-01-04 09:54:18	Ren 1	Dian 4	2C-1D05005E4EB8-DD
3	2007-01-04 09:54:19	Ren 1	Dian 3	A9-1D0100EF6292-DD
4	2007-01-04 09:54:20	Ren 1	Dian 2	ED-1D05005E50DC-DD
5	2007-01-04 09:54:21	Ren 1	Dian 1	45-1D08000F2C32-DD
6	2007-01-04 09:54:22	Ren 1	Dian 5	8D-1D05005D8A06-DD
7	2007-01-04 09:54:23	Ren 2	Patrol Button	45-1D0500F0E91D-DD
8	2007-01-04 09:54:24	Ren 2	Dian 5	8D-1D05005D8A06-DD
9	2007-01-04 09:54:25	Ren 2	Dian 1	45-1D08000F2C32-DD
10	2007-01-04 09:54:26	Ren 2	Dian 2	ED-1D05005E50DC-DD
11	2007-01-04 09:54:27	Ren 2	Dian 3	A9-1D0100EF6292-DD
12	2007-01-04 09:54:28	Ren 2	Dian 4	2C-1D05005E4EB8-DD

After collecting all data, click “Save Data and Return” button. The system will save the data and carry out clock setting and storage clearance for the Patrol Wand. As clock setting is applied to the Patrol Wand, please **ensure that the computer’s clock and date are correct.**

5、5、 View Data

Click “View Data” to pull down the three menus: “Analyze Data”, “Original Records” and “Original Records (Display by Patrol point)”. “Analyze Data” provides results acquired by analyzing the Patrol Wand data according to the patrol plan. “Original Records” displays Patrol Wand records only, without making any analysis.

Results are displayed as below:

Analyze Data

Analyze Data

Viewing Condition:

Date:2007-01-042007-01-04

Patrol Shift:AllPatrol Route:All

View

Output

Lookup Patrol Record

View Patrol Result

☒Detail Patrol Result

☐Summerize Patrol Tasks

☐Summerize Patrol Shifts

Print Selection

☒All

☐Unpatrolled

☐Behind-Schedule

Seq	Shift Date	Week	Patrol Shift	Patrol Task	Patrol Point	Patroller	Patrol Time And Result
1	2007-01-04	hursda	PS_1	Xian_1	Patrol Begin		2007-01-04 09:00:00--2007-01-04 10:00:00
2					Dian_1	Ren_1	Normal 2007-01-04 09:54:21
3					Dian_2	Ren_1	Normal 2007-01-04 09:54:20
4	2007-01-04	hursda	PS_1	Xian_1	Dian_3	Ren_1	Normal 2007-01-04 09:54:19
5					Dian_4	Ren_1	Normal 2007-01-04 09:54:18
6					Dian_5	Ren_1	Normal 2007-01-04 09:54:22

Original Records

Lookup Patrol Record

Viewing Condition:

Date/Time: 2007-01-04 00:00:00 — 2007-01-04 23:59:59

Patrol Point: All Patroller: All Patrol Wand Code: All

View

Reregister Button

Output

Seq	Patrol Time	Patroller	Patrol Point	Button Code	Patrol Wand Code
1	2007-01-04 09:54:17	Ren 1	Patrol Button	0F-1D05005E7330-DD	17619188
2	2007-01-04 09:54:18	Ren 1	Dian 4	2C-1D05005E4EB8-DD	17619188
3	2007-01-04 09:54:19	Ren 1	Dian 3	A9-1D0100EF6292-DD	17619188
4	2007-01-04 09:54:20	Ren 1	Dian 2	ED-1D05005E50DC-DD	17619188
5	2007-01-04 09:54:21	Ren 1	Dian 1	45-1D08000F2C32-DD	17619188
6	2007-01-04 09:54:22	Ren 1	Dian 5	8D-1D05005D8A06-DD	17619188
7	2007-01-04 09:54:23	Ren 2	Patrol Button	45-1D0500F0E91D-DD	17619188
8	2007-01-04 09:54:24	Ren 2	Dian 5	8D-1D05005D8A06-DD	17619188
9	2007-01-04 09:54:25	Ren 2	Dian 1	45-1D08000F2C32-DD	17619188
10	2007-01-04 09:54:26	Ren 2	Dian 2	ED-1D05005E50DC-DD	17619188
11	2007-01-04 09:54:27	Ren 2	Dian 3	A9-1D0100EF6292-DD	17619188
12	2007-01-04 09:54:28	Ren 2	Dian 4	2C-1D05005E4EB8-DD	17619188

Original Records (Display by Patrol point)

View Data (Display by Patrol Point)

Viewing Condition:

Date/Time: 2007-01-04 00:00:00 — 2007-01-04 23:59:59

Patrol Point: All Patroller: All Patrol Wand Code: All

View

Output

	Dian 1	Dian 2	Dian 3	Dian 4	Dian 5
1	2007-01-04 09:54:21 Patroller:Ren_1	2007-01-04 09:54:20 Patroller:Ren_1	2007-01-04 09:54:19 Patroller:Ren_1	2007-01-04 09:54:18 Patroller:Ren_1	2007-01-04 09:54:17 Patroller:Ren_1
2	2007-01-04 09:54:25 Patroller:Ren_2	2007-01-04 09:54:26 Patroller:Ren_2	2007-01-04 09:54:27 Patroller:Ren_2	2007-01-04 09:54:28 Patroller:Ren_2	2007-01-04 09:54:29 Patroller:Ren_2

5、6、 Summarize Results

You can summarize all kinds of patrol results through the patrol-result inquiry interface

5、7、 Re-register Information Button

During the use of the system, there might be such a situation that although you have read information from a patrol point with a Patrol Wand and save the data into the computer, yet you can't see the patrol point on the computer. This suggests the information button hasn't been registered. You can re-register the unregistered information button and patrol point through the "Re-register" function.

The re-registry can be done during the collecting of Patrol Wand data or the viewing of records.

During the collection of Patrol Wand data:

Collect Patrolwand Data

Patrolwand Information

WandNo: 17619188

InWandTime: 2007-01-04 09:57:39

Records: 15

SystemTime: 2007-01-04 09:57:36

Last Collect Time: 2007-01-04 09:55:31

Save & Return

Reregister Button

Seq	Patrol Time	Patroller	Patrol Point	Button Code
1	2007-01-04 09:57:14	Ren 1	Patrol Button	0F-1D05005E7330-DD
2	2007-01-04 09:57:15	Ren 1	Dian 4	2C-1D05005E4EB8-DD
3	2007-01-04 09:57:16	Ren 1	Dian 3	A9-1D0100EF6292-DD
4	2007-01-04 09:57:17	Ren 1	Dian 2	ED-1D05005E50DC-DD
5	2007-01-04 09:57:18	Ren 1	Dian 1	45-1D08000F2C32-DD
6	2007-01-04 09:57:19	Ren 1	Dian 5	8D-1D05005D8A06-DD
7	2007-01-04 09:57:20	Unregistered		2F-1D0500F0E595-DD
8	2007-01-04 09:57:25	Unregistered		6E-1D090007E508-DD
9	2007-01-04 09:57:26	Ren 2	Patrol Button	45-1D0500F0E91D-DD
10	2007-01-04 09:57:27	Ren 2	Dian 4	2C-1D05005E4EB8-DD
11	2007-01-04 09:57:28	Ren 2	Dian 3	A9-1D0100EF6292-DD
12	2007-01-04 09:57:29	Unregistered		AF-1D0500F0F3EE-DD
13	2007-01-04 09:57:30	Ren 2	Dian 2	ED-1D05005E50DC-DD
14	2007-01-04 09:57:31	Ren 2	Dian 1	45-1D08000F2C32-DD
15	2007-01-04 09:57:32	Ren 2	Dian 5	8D-1D05005D8A06-DD

During the viewing of records:

Lookup Patrol Record

Viewing Condition:

Date/Time: 2007-01-04 00:00:00 — 2007-01-04 23:59:59

Patrol Point: All Patroller: All Patrol Wand Code: All

View

Reregister Button

Output

Seq	Patrol Time	Patroller	Patrol Point	Button Code	Patrol Wand Code
8	2007-01-04 09:54:24	Ren 2	Dian 5	8D-1D05005D8A06-DD	17619188
9	2007-01-04 09:54:25	Ren 2	Dian 1	45-1D08000F2C32-DD	17619188
10	2007-01-04 09:54:26	Ren 2	Dian 2	ED-1D05005E50DC-DD	17619188
11	2007-01-04 09:54:27	Ren 2	Dian 3	A9-1D0100EF8292-DD	17619188
12	2007-01-04 09:54:28	Ren 2	Dian 4	2C-1D05005E4EB8-DD	17619188
13	2007-01-04 09:57:14	Ren 1	Patrol Button	0F-1D05005E7330-DD	17619188
14	2007-01-04 09:57:15	Ren 1	Dian 4	2C-1D05005E4EB8-DD	17619188
15	2007-01-04 09:57:16	Ren 1	Dian 3	A9-1D0100EF8292-DD	17619188
16	2007-01-04 09:57:17	Ren 1	Dian 2	ED-1D05005E50DC-DD	17619188
17	2007-01-04 09:57:18	Ren 1	Dian 1	45-1D08000F2C32-DD	17619188
18	2007-01-04 09:57:19	Ren 1	Dian 5	8D-1D05005D8A06-DD	17619188
19	2007-01-04 09:57:20	Unregistered		2F-1D0500F0E595-DD	17619188
20	2007-01-04 09:57:25	Unregistered		6E-1D090007E508-DD	17619188
21	2007-01-04 09:57:26	Ren 2	Patrol Button	45-1D0500F0E91D-DD	17619188
22	2007-01-04 09:57:27	Ren 2	Dian 4	2C-1D05005E4EB8-DD	17619188
23	2007-01-04 09:57:28	Ren 2	Dian 3	A9-1D0100EF8292-DD	17619188
24	2007-01-04 09:57:29	Unregistered		AF-1D0500F0F3EE-DD	17619188
25	2007-01-04 09:57:30	Ren 2	Dian 2	ED-1D05005E50DC-DD	17619188
26	2007-01-04 09:57:31	Ren 2	Dian 1	45-1D08000F2C32-DD	17619188
27	2007-01-04 09:57:32	Ren 2	Dian 5	8D-1D05005D8A06-DD	17619188

Choose one unregistered button and then click “Re-register Button”. It displays:

Reregister Button

Information Button Type To Be Re-registered:

☒ Patrol Point ☐ Patroller

	Point Name	Point Code	Quantity of Buttons Registered
1	Dian 1	d1	1
2	Dian 2	d2	1
3	Dian 3	d3	1
4	Dian 4	d4	1
5	Dian 5	d5	1

Point Name:

Point Code:

Information Button Data Sent:

Information Button	Register Time

Information Button Number To Be Re-registered:

2F-1D0500F0E595-DD

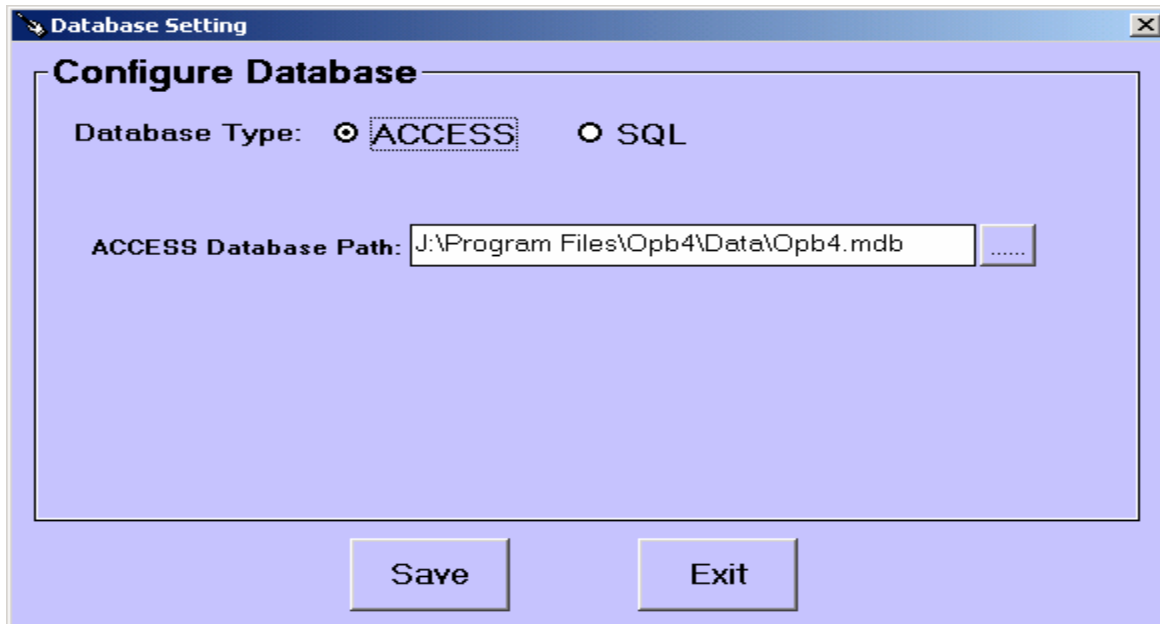
Reregister And Return

Return

Choose one of the patrol points and click “Re-register and Return”, the button thus is re-registered successfully:

5、8、 Single-machine Mode

This is a basic mode which uses the database of this machine. After the program is installed, this mode is accepted as default mode and there's no need to make any setting. If there's a need to choose database of different route, please enter the "Database Setting" interface and change the database route. Open the "System Management" menu and click "Database setting" to show the following interface:

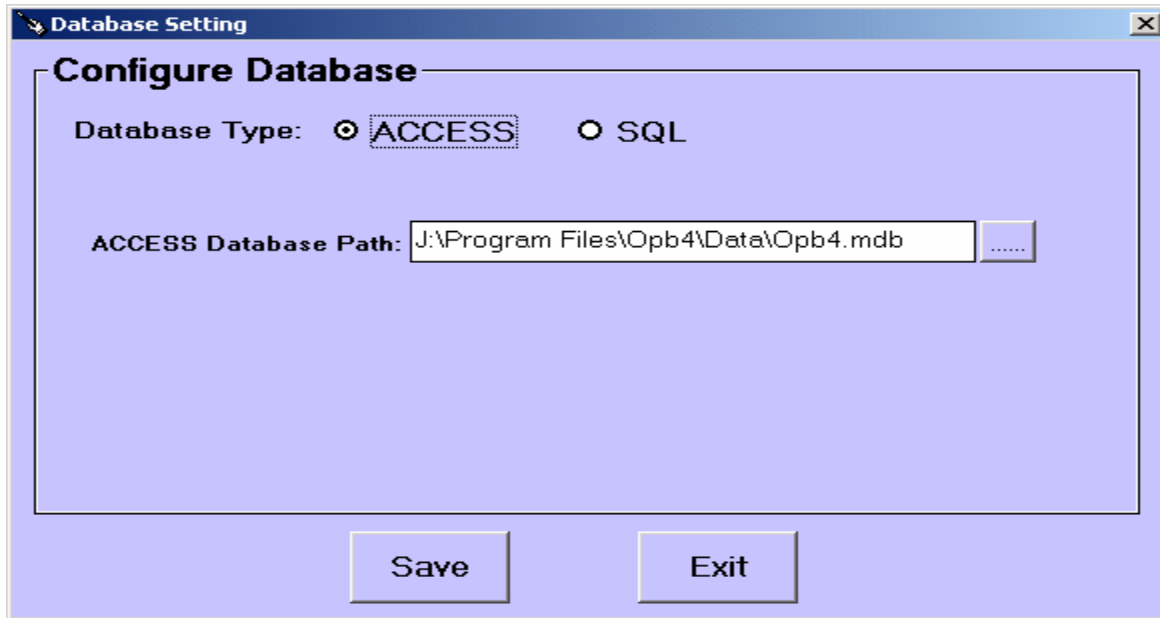


点击路径右面的浏览按钮“.....”，选择数据库所在路径，点击“保存”即可。

Click the Browse Button on the right of the route list. Choose the route to the required database and then click "Save".

5、 9、 Network Mode

It is possible to view patrol data on several computers through the network. Share the patrol software database OPB4 on the data-collected computer and install the patrol system software onto the other computers. Run the patrol software and open the “System Management” menu. Click “Database Setting” to display the interface below.



Click the Browse Button “...” on the right of the route list to eject the file-route dialogue box :

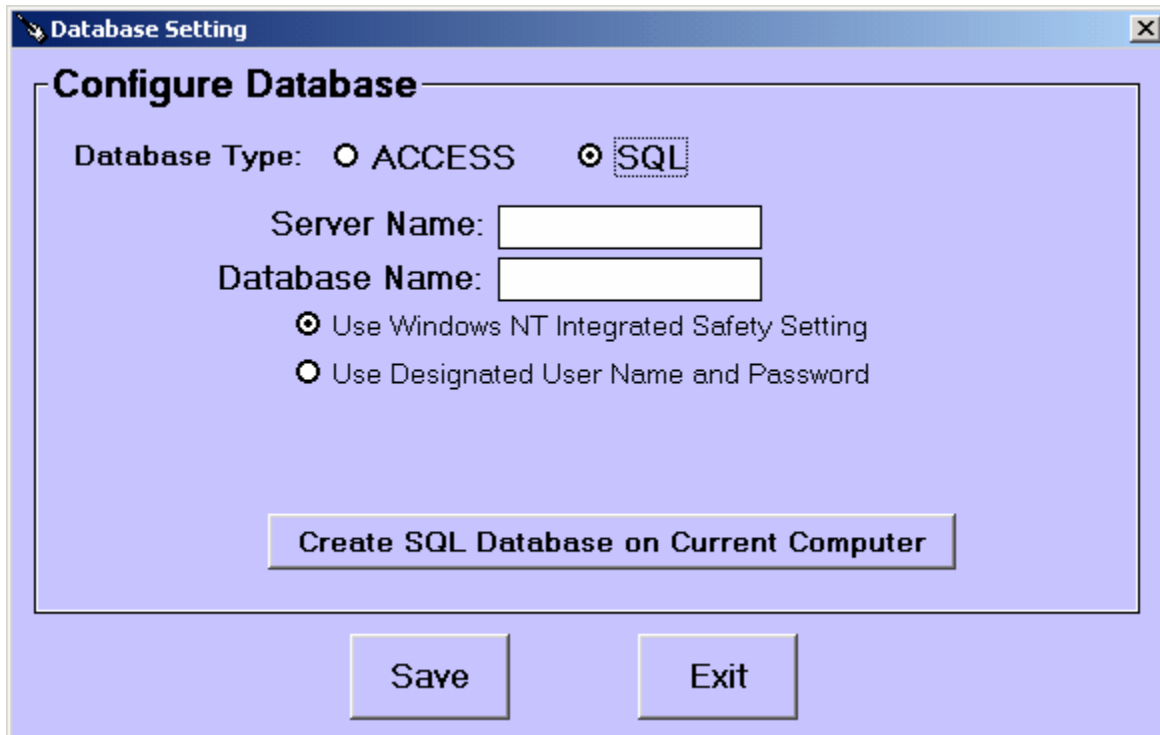
Choose “Network Neighborhood” and find out the database OPB4. Click “Open” and then click “Save”.

5、10、 Database Type

This system can use two kinds of database types: ACCESS and SQL. On the “System Management” menu, open the “Database Setting” interfaces and choose either ACCESS or SQL. For the ACCESS database, simply choose the database route.

For SQL database (SQL Server must be installed into the computer), you should build up a database before accessing to it.

Build up a database as the diagram shown below:



The screenshot shows a window titled "Database Setting" with a sub-dialog titled "Configure Database". Inside the dialog, under "Database Type:", the "SQL" radio button is selected. Below this, there are two text input fields: "Server Name:" and "Database Name:". Under these fields, there are two radio button options: "Use Windows NT Integrated Safety Setting" (which is selected) and "Use Designated User Name and Password". At the bottom of the dialog is a button labeled "Create SQL Database on Current Computer". Below the dialog, outside the main window frame, are two buttons: "Save" and "Exit".

Choose SQL on the interface and then click “Built up SQL database on the current computer” button to create a database named OPB4. There will be a prompt that the database has been created successfully.

Access to the database: input the server name (the equipment on which the database is built) and the database name OPB4.

Choose the way to access to the required database and then click “Save”

5、11、 Data Backup

As soon as the system is put into formal use, please backup data and save the data into the other computers to prevent the patrol point's data from any loss due to system failure.

5、12、 Data Recovery

After the system is reinstalled, it is possible to recover the system data utilizing this function.

5、13、 Software Management Authorities

The authorities of this system are classified into two kinds: Administrator Authority and Operator Authority. The administrator possesses the ownership authority while the operator owns the authority to collect and view data only, but no authority to change any parameters. The setting of the administrator and operator can be made through "System Management | Operator Management".

6、 Troubleshooting

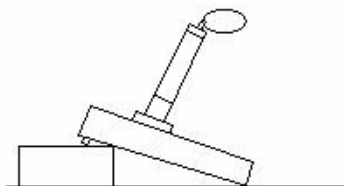
When reading a card (button), the Patrol Wand sends out 4 beeps and the indicator sends 4 flashes. This is a normal phenomenon indicating that the Patrol Wand is going to be full of data (exceeding 1700 or 7700 records; full load is 2000 or 8000 records). Please collect data as soon as possible.

The Patrol Wand fails in reading a card (button). The main reason might be: 1. full of data 2. clock reset 3. dead battery

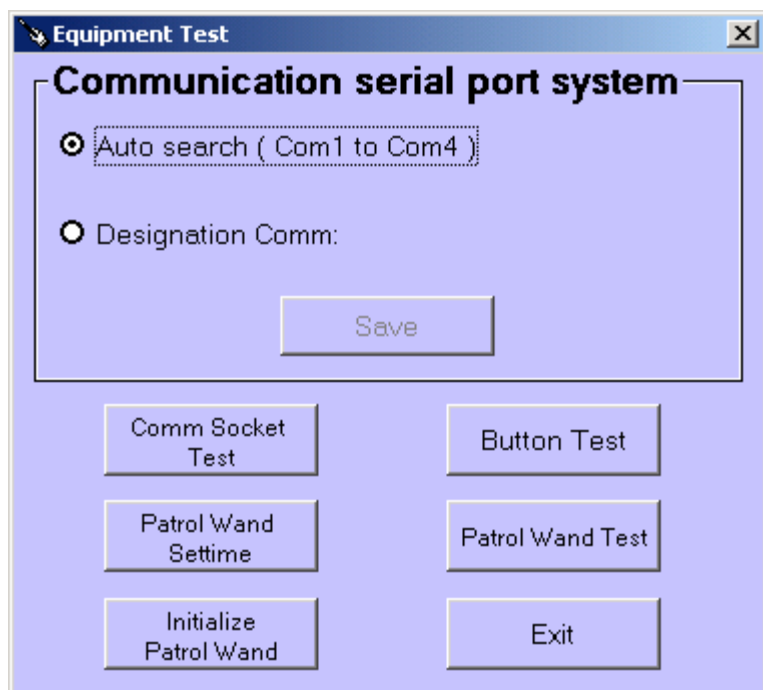
Check if the Patrol Wand data can be collected through the communication unit. If yes, collect the data and click "Save" to save the data. During the data collection, the Patrol Wand's storage will be cleared and the clock will be reset. Note: Do click the "Save" button. It is necessary to carry out this operation even though there's no data. Do empty the Patrol Wand's storage and reset the clock. The computer clock must be correct. After the data in the Patrol Wand is cleared out and the clock is reset, the Patrol Wand can read cards (buttons) again.

If the above operation cannot restore reading Patrol Wand data, please try the following treatment:

Press the Patrol Wand more tightly to improve its contact with the communication unit. If the wand is a metal one, please let the communication unit incline a bit so that it has a better contact with the metal edge of the wand.



If the Patrol Wand still cannot read data, please enter the “System Management \ Test Equipment” menu to test if the communication unit can be successfully connected to the machine.



Click “Comm Socket Test”. If the unit is well connected, a prompt will appear:

If not successful, please power up the communication unit once again or change the port (COM port)

If the communication unit can be successfully connected to the machine yet the Patrol Wand still cannot read data, please power up the communication unit once again.

If the Patrol Wand still cannot read data, the wand probably has a dead battery. Please replace the battery.

After installed with Windows9X, the system cannot operate normally.

The reason is the system is lack of Microsoft Data Access Components 2.7. Users are suggested to run the “mdac_typ.exe” file under the root directory of the installation disk and then install the Microsoft Data Access Components 2.7. Now restart the computer to run the patrol system.