Megapatrol

User Manual

MPE-100

BIORF
www.biorf.co.kr

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◆ Note

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

  - Reorient or relocate the receiving antenna.

  - Increase the separation between the equipment and receiver.

  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

  - Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operated the equipment under FCC rules.

◆ Safety Note

Since this **'Safety Notes'** is made to protect unexpected risks or damages in advance by using the product safely and correctly, please read this note carefully and always keep it handy within users' reach.

> ✖ **Alert : Violation of instructions in this note may cause a severe injury or a death.**

- When the checking machine is wet, please do not put it in a heating system (stove, electric micro oven, etc). This may cause a change of appearance, breakdown and risk of an explosion.

- Do not use in a place with high temperature or hight humidity.

- Do not keep the checking machine in an airtight place with high temperature like next to the car window under direct sunlight. It may cause a change of appearance, breakdown and risk of an explosion.

- If you use unauthorized batteries and accessories, you may have a risk of shorter life of the product, a risk of an explosion or a damage to the checking machine. In this case, you will not get a free warranty service.

- Please keep the checking machine or the battery out of children's reach.
  If you put the checking machine or the battery in the mouth or use a damaged battery, it may give a bad influence to the human body and you may be exposed to a risk of an electric shock, an exposure to electromagnetic influence. Please pay attention for children not to swallow parts including rubber covers on the product. It may cause a suffocation or a choke in the throat.

- Please use USB cables we provide to you only.
  If you use other cables, it may cause a shorter battery lifetime, a risk of an explosion and a damage to the checking machine. In this case, you will not get a free warranty service.

- Please do not disassemble the checking machine at your discretion or give an impact to it.
  It may cause a electric shock or fire by an electric leakage.

- Please refrain form using the checking machine under severe weather conditions like thunderstorm, thunder, lightening and pull off the USB cable.
  You may get a severe body damage by a thunderbolt or a fire.

- Please do not use chemicals or detergents to clean the checking machine.

It may cause a fire. When you clean the USB connector especially, use it after drying it for enough time and make sure the rubber cover is fitted well so that foreign substances (sands, dusts, cigarette ashes, etc) can not get inside.

◆ Product Components

Basic Components : When you buy the product, please make sure all the components are inside the package. If you find something missing, please contact the store you bought from.

Checking Machine

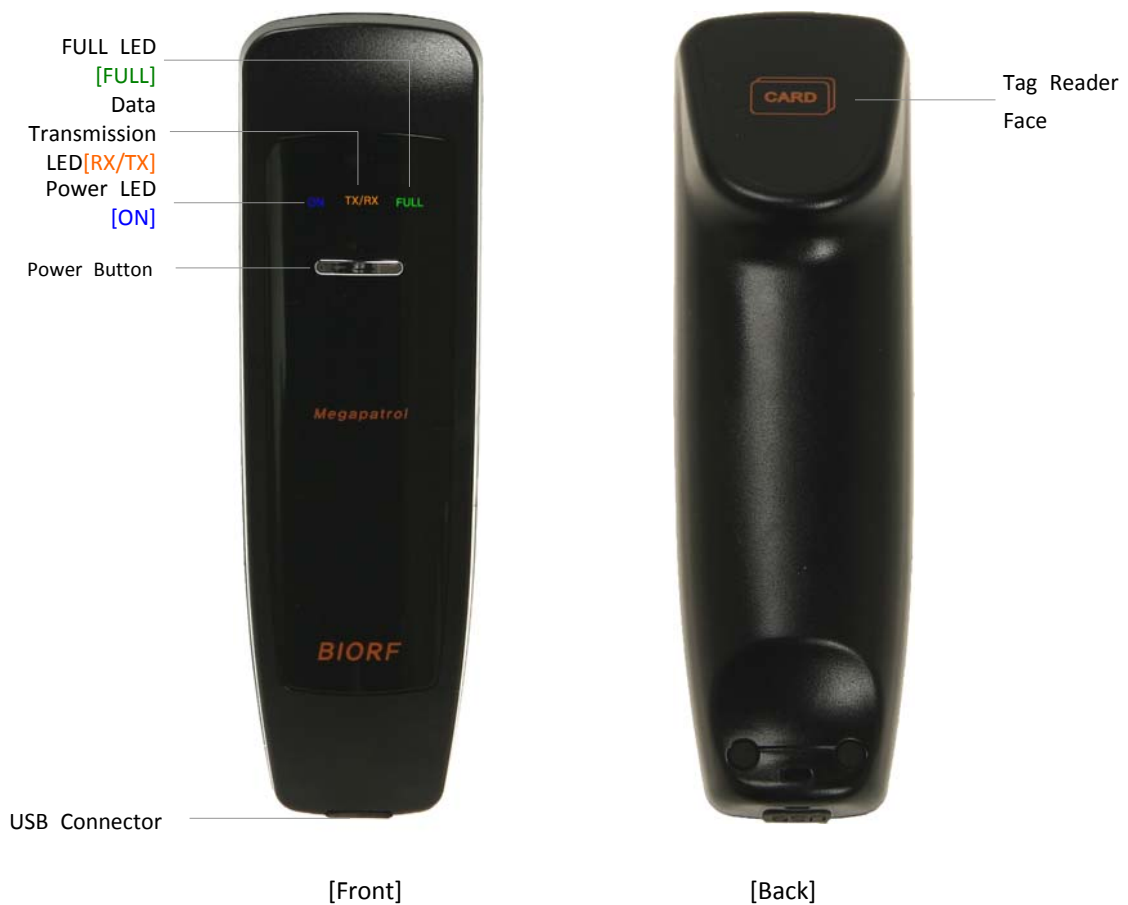| Operating Program	Checkpoint Tags	USB Cable

◆ Product Specifications

- Recognition Method : RFID
- RF Frequency: 129 kHz
- RF Modulation: ASK
- Recognition Distance : 3cm ~ 7cm
- Alarms   : Sound/Vibration
- Communication Method : USB2.0/USB1.1
- Communication Speed : 115,200bps
- Memory : 2MB EEPROM (Expandable to 4MB)
- Storage Capacity : 20,000 times (Expandable to 40,000 times)

- Operating Voltage : DC 3.7V
- Rechargeable Battery : Lithium-Ion 3.7V, 2,200mAh
- Recharging Method : Direct recharge via USB communication port (Rechargeable during data transmission)
- Exterior Material : PC
- Product Size : 150 X 43 X 38(36)(mm)
- Product Weight : 150g
- Operating System : Microsoft Windows XP, VISTA(32bit)

◆ **Checking Machine Part Names**

FULL LED [FULL]
Data Transmission LED[RX/TX]
Power LED [ON]
Power Button
USB Connector
Tag Reader Face

[Front]   [Back]

◆ **Battery Recharge**

- When a battery recharge is needed, the blue LED of the Power LED [ON] will flash three times and the buzzer will go off twice in 3 seconds.
- When you connect the checking machine to the computer using a USB cable, the power will be on and recharge will start automatically and when recharge is completed, the green LED of Memory/Battery Full LED [FULL] will be on.

◆ **How To Use The Checking Machine ?**

- Recognition of Checkpoint Tags
   ・ When you press the power button, a blue LED of Power LED [ON] will be on and gets into a standby mode for three seconds.
   ・ When you approach the tag reader face to the tag (3~7cm) at this time, an orange LED of Data Transmission LED [TX/RX] will be on for one second and the buzzer(or vibration) will go off for one second and recognized tag information will be stored in the checking machine.
   ・ The checking machine will be off three seconds after getting into the standby mode automatically.
   ※ You can recognize a tag by pressing the power button after you approach the checking machine to the tag, too.

- Data Transmission
   ・ Connect the PC and the checking machine using the USB cable.
   ・ Turn on the checking machine by pressing the power button, run the program and register patrol data.
   ・ During the data transmission, a orange LED of Data Transmission LED [TX/RX] will flash repeatedly.

◆ **Checking Machine Buzzer Sounds and Types of LED Indication**

| Type	Reasons	Buzzer (Vibration)	LED	Actions to be taken
Power ON	When the power is on	-	[ON] On	-
Tag Recognition	When the tag is recognized	Splash Sound	[TX/RX] Flash (Once)	-
Data Transmission	When the data is transmitted	-	[TX/RX] Flash (Repeated)	-
Memory FULL	Memory is full	Beep~Beep~ Beep~	[FULL] Flash (3 seconds) [TX/RX] Flash (3 times)	Store patrol data and use again
Battery FULL	Battery is full	Beep~ (3seconds)	[FULL] On	Disconnect USB cable
Low Voltage	When the battery is low	Beep~Beep~	[ON] Flash 3 times	Use after battery recharge
Extraordinary Cases	Error of the checking machine	Beep~Beep~ Beep~	All LED's flash	Use after storing the patrol data or deletion of the data on the checking machine and use again. If the problem persists, call customer service center.

◆ **Minimum Computer Requirements**

- CPU : Over Pentium Ⅱ

- RAM : 256MB

- HDD : 100MB (Including data storage space)

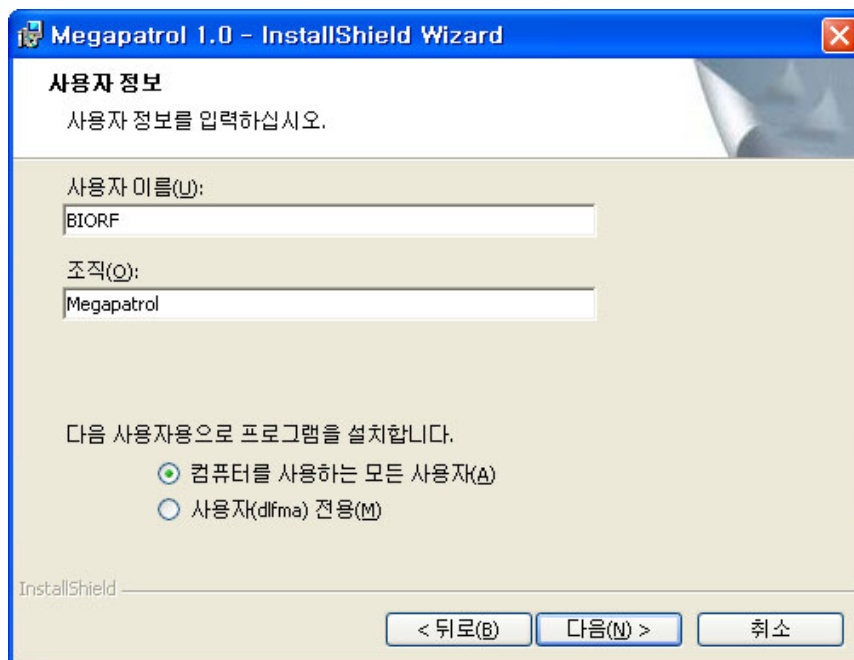- OS : Windows XP, VISTA(32bit) **(Except Windows VISTA(64bit))**

◆ **Program Installation and Uninstallation**

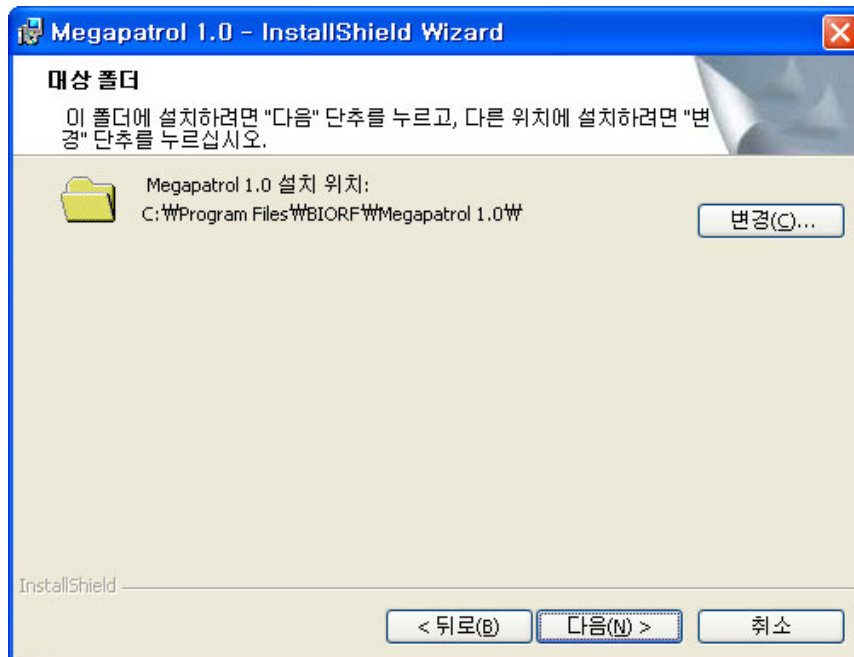1) Program Installation
① Double click MegapatrolSetup.exe file in the CD and when you see the following screen, click on
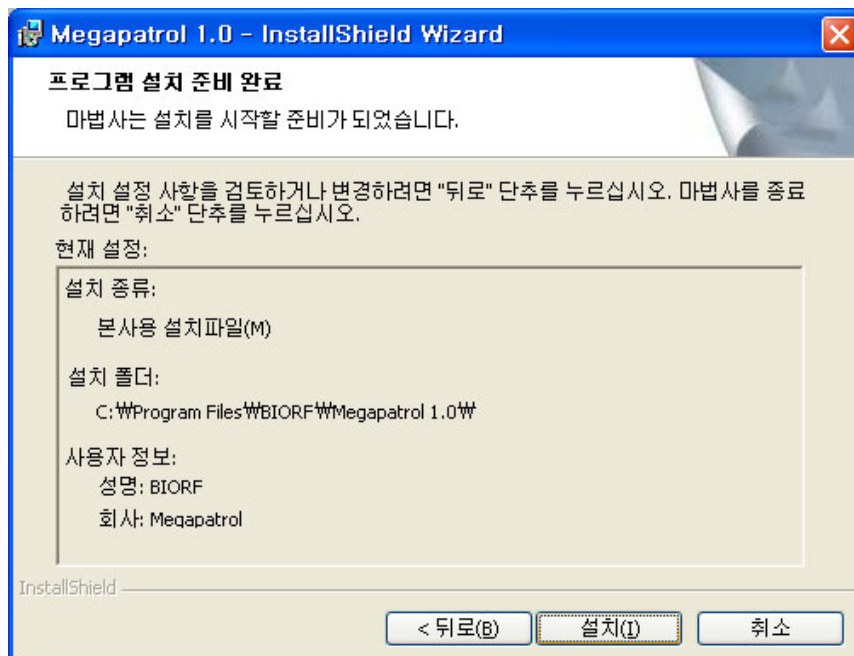**[Next].**
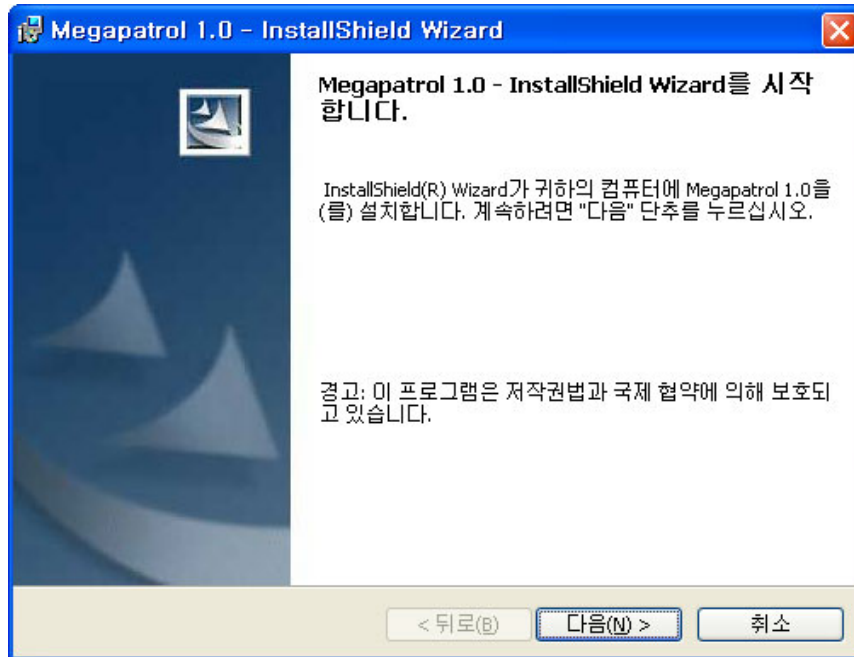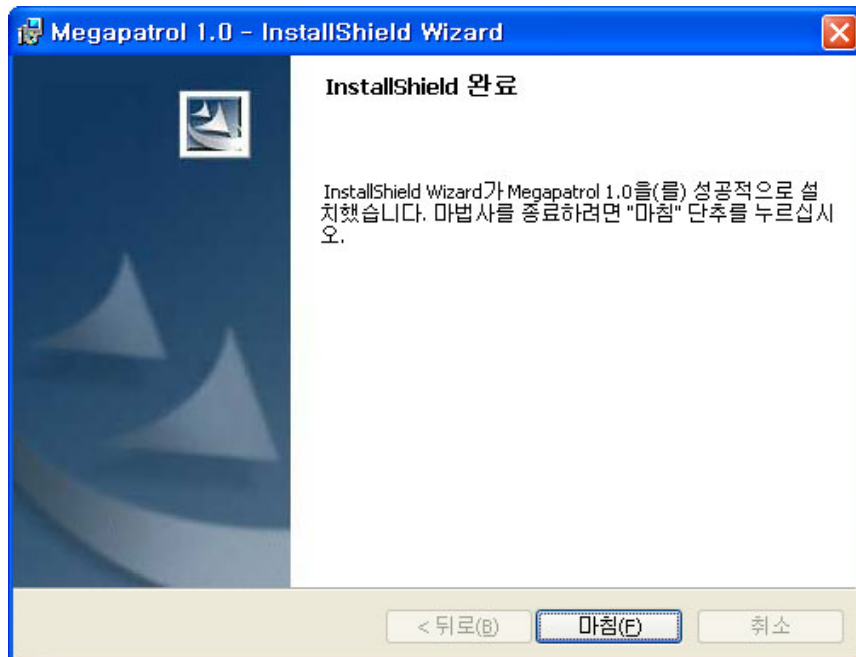

② After entering user informations, click **[Next].**

③ Select the path for the program folder, click on **[Next]**.

④ If you want to review or revise the installation setup, press **[Back]**. If you want to end the wizard, click on **[Cancel]** and if you continue, click on **[Install]**.

⑤ Megapatrol1.0 is installed successfully. If you want to finish the wizard, click on **[Finish]**.

⑥ Program will ask you whether you install the checking machine driver. If this is the first installation or install in a different PC, select **[Yes]** to install the checking machine driver again and if you install the driver in the existing PC again, select **[No]** to finish installation.
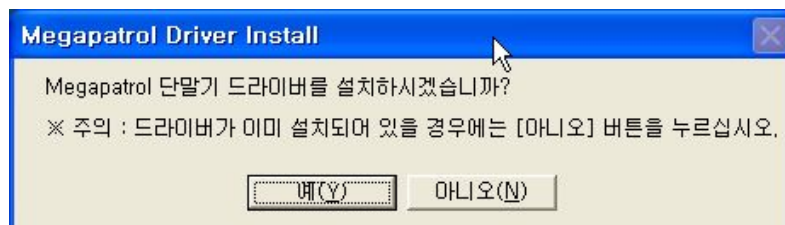
⑦ Start the checking machine driver installation. Press **[Next]** to proceed to the next step.
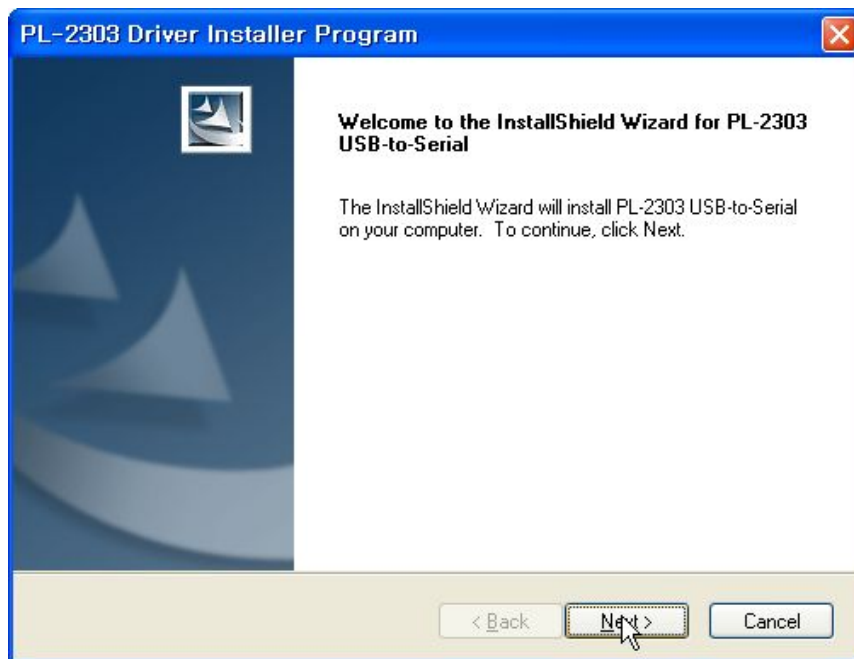
⑧ The program will ask you whether you agree to the terms of the license. Select **[I accept th terms of the license agreement.]** and press **[Next]** to proceed to the next step.
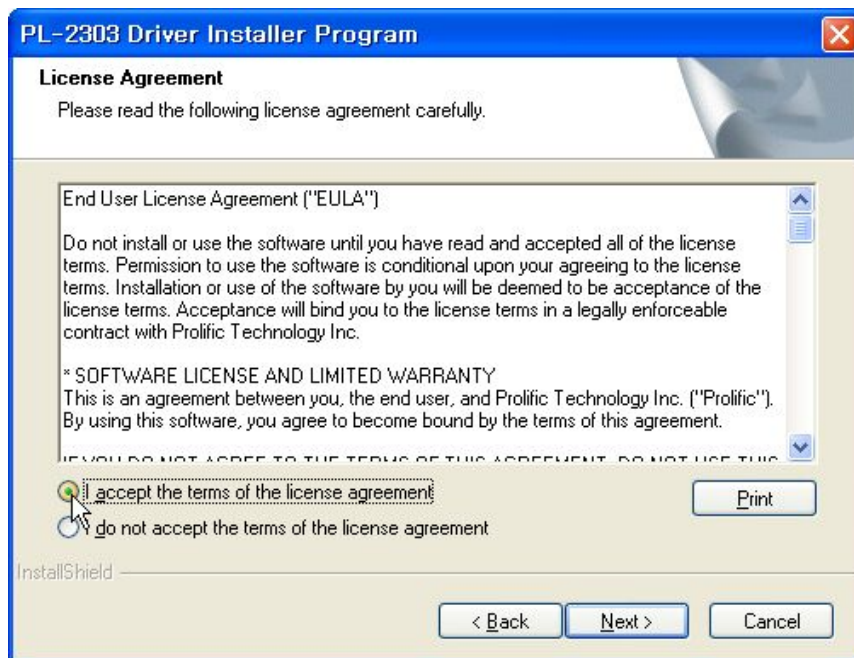
⑨ Press **[Finish]** to finish installation of the checking machine driver.
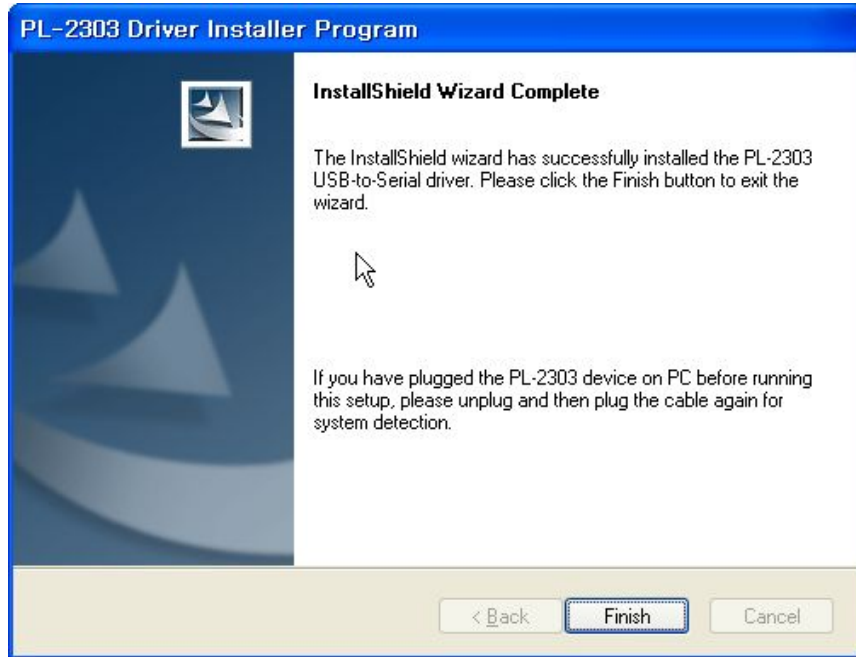
2) Program Uninstallation

※ **When you uninstall the program, the DB file will not be deleted. If you want to initialize the existing DB, you have to delete the existing DB file manually when you re-install the program.**

(DB saving path : C:\Program Files\BIORF\Megapatrol 1.0\patrol.mdb)

① Start → Program → BIORF → Megapatrol 1.0 →Click **[Uninstall]**.

② Click **[Yes]** and Megapatrol 1.0 will be deleted.

◆ **Program Menus**

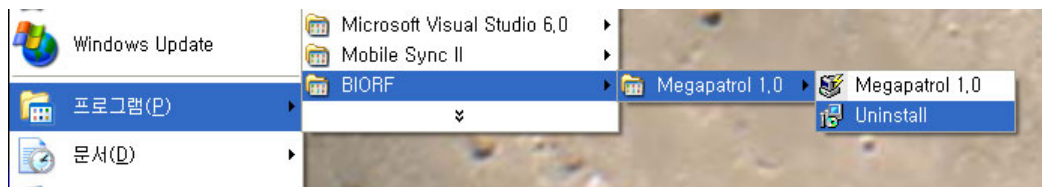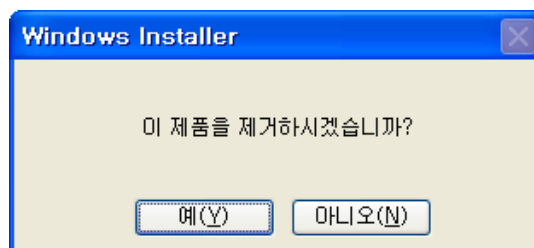※ When you click on Megapatrol 1.0 icon on the wallpaper, you will see the Megapatrol Log In screen. Password for users is **0000** and password for the administrator is **1111**.

File	Patrol Data Management	Reports	Registration of Basic Data	Setup Environment (T)	Information (A)
Open files	Registration of Patrol Data	Single Patrol Report	Guards Registration	User Setup	Homepage
Save as	Viewing the Map	Guard Personnel Report	Patrol Routes Registration	Report Setup	Confirm Firmware Version
Quit		Patrol Path Report	Checkpoints Registration	Standard for Duplicated Data Setup	Version information
		Checkpoint Report	Incidents Registration	Guard Registration Method Setup	
		Incident Report	Authorization Column Registration	Communication Port Setup	
		Exception Report	Deletion of checking machine Data	Buzzer/Vibration Setup	
		Review Basic Data		Import Log Data	

- Users : User accounts for unauthorized users to use setup menus. **Initial Password : 0000**
- Administrator : Administrator account for authorized user to use setup menus. **Initial Password : 1111**
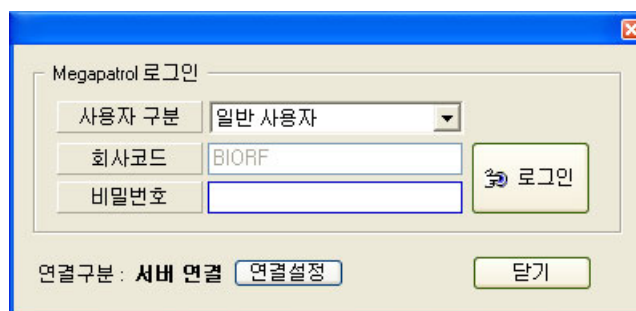
- Setup connection : Initial setup for the program installation is **Local Connection**.
  If you want to use **Server Connection,** you have to enter **Company Code, and Authorization Code** you've been provided with in the **[Connection Setup]** window before you run the program.
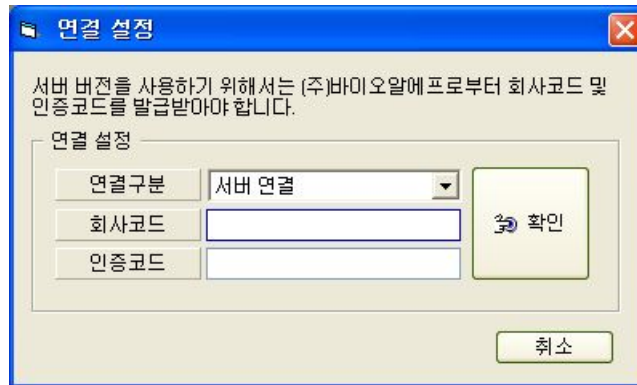
1) Files

   ① Open files (O) : Used to open a backup DB saved under a different name.

   ② Save As (S) : Used to save a DB under a different name for a backup.

   ③ Exit (X) : Used to exit the program.

2) Patrol Data Management

   ① Registration of Patrol Data

     This is a function to read the patrol data stored in the checking machine.

     You can import the patrol data in the checking machine by pressing **[Register]** button and save the data by pressing **[Save]** button. You can write a memo by double clicking on **[Remarks]** column.

   ※ Please make sure to press **[Save]** to save the patrol data in the DB.

   ※ When you press **[Save]** button to save the patrol data, you will see a window asking you whether you want to delete the checking machine data or not.

     You can reduce the time for registration for the next time by deleting them.

순찰 관리 시스템 Megapatrol 1.0 - patrol.mdb

파일(F) 순찰정보 관리 보고서(R) 기초자료 등록(E) 환경설정(T) 정보(A)

순찰자료 등록

단말기에서 순찰자료를 읽어와서 데이터베이스에 저장합니다.

순찰일시	순찰지점명	근무자명	순찰경로명	이상상황	비 고
2008-10-19 17:00:31	1. 아파트 입구	홍길동	순찰경로1		
2008-10-19 17:00:33	2. 지하주차장 기둥	홍길동	순찰경로1		
2008-10-19 17:00:36	3. 관리사무소	홍길동	순찰경로1	화재위험	
2008-10-19 17:00:39	4. 상가 옥상	홍길동	순찰경로1	청소불량	
2008-10-19 17:00:42	5. 오피스텔 매점	홍길동	순찰경로1	시건불량	
2008-10-19 17:00:48	5. 방제실	이순신	순찰경로2		
2008-10-19 17:00:49	1. 관제실	이순신	순찰경로2		
2008-10-19 17:00:51	2. 옥상 소화전	이순신	순찰경로2		
2008-10-19 17:00:52	3. 정화조	이순신	순찰경로2		
2008-10-19 17:00:54	4. 기관실	이순신	순찰경로2	화재위험	
2008-10-19 17:01:00	1. 아파트 입구	홍길동	순찰경로1		
2008-10-19 17:01:01	2. 지하주차장 기둥	홍길동	순찰경로1		
2008-10-19 17:01:02	3. 관리사무소	홍길동	순찰경로1		
2008-10-19 17:01:04	4. 상가 옥상	홍길동	순찰경로1	시건불량	
2008-10-19 17:01:07	5. 오피스텔 매점	홍길동	순찰경로1	화재위험	
2008-10-19 17:01:12	5. 방제실	이순신	순찰경로2		
2008-10-19 17:01:14	1. 관제실	이순신	순찰경로2		
2008-10-19 17:01:15	2. 옥상 소화전	이순신	순찰경로2		
2008-10-19 17:01:17	3. 정화조	이순신	순찰경로2		
2008-10-19 17:01:18	4. 기관실	이순신	순찰경로2		
2008-10-19 17:01:23	1. 아파트 입구	이순신	순찰경로1		
2008-10-19 17:01:24	2. 지하주차장 기둥	이순신	순찰경로1		
2008-10-19 17:01:26	3. 관리사무소	이순신	순찰경로1		
2008-10-19 17:01:27	4. 상가 옥상	이순신	순찰경로1		
2008-10-19 17:01:30	5. 오피스텔 매점	이순신	순찰경로1		

검색 항목 : 0 건   등록 저장 삭제 닫기

(주)바이오알에프 www.biorf.co.kr   INS   NUM   2008-10-19   오후 5:01

② Viewing the Map

You can find checkpoint locations, patrol routes of guards, etc by registering the map of the patrol site.

- Map setup : Registers the map to use and setup the method to show the checkpoints and etc.

- Registering coordinates : After you select a checkpoint for registering coordinates in the checkpoint list and double click on the checkpoint on the map, the coordinate will be registered.

- Start searching checkpoints : Shows checkpoints in order in the Checkpoint. You can find the guard's route.

- Delay : Sets up a searching time for checkpoints. The smaller you set up, the quicker you can search.
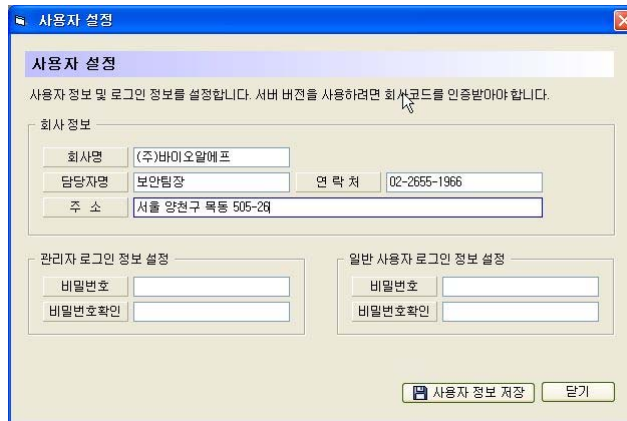
3) Reports

   ① Single patrol report : Finds the comprehensive status of patrol time of each checkpoint, exception, etc by each round of patrol.

   ② Guard report : Finds patrol status by guard.

   ③ Patrol route report : Finds patrol status by patrol route.

   ④ Checkpoint report : Finds patrol status by checkpoint.

   ⑤ Incident report : Finds locations for incidents.

   ⑥ Exception report : Finds status of omitted checkpoints by route and checkpoint.

   ⑦ View basic data : Used to print basic registered data.

4) Registration of Basic Data

   ① Guard : Registers and deletes guard tag / guard checking machine data.

   ② Patrol route : Creates a patrol route.

   ③ Checkpoint : Registers and deletes checkpoint tags.

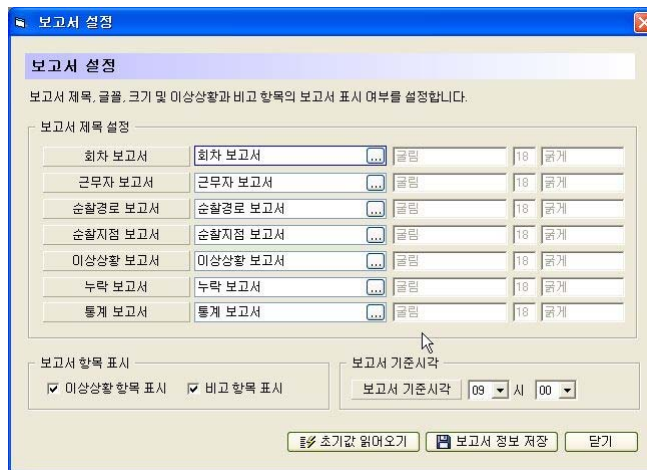   ④ Incident : Registers and deletes incident tags.

5) Environment Setup

   ① User setup

     Setup of company data, **Administrator/User Log In Password**.

② Reports setup

Setup of items related to various reports like report names and their fonts, etc.

③ Standard for duplicated data setup

If a checkpoint tag is recognized repeatedly in a certain period of time, you can set up a base time to ignore these data as a duplicated data when you register them.

Ex) When a guard **[A]** checked a checkpoint **[1st floor lobby] three times consecutively**

1st check time - 01:21:50 June 1, 2009

2nd check time - 01:45:20 June 1, 2009

3rd check time - 01:46:18 June 1, 2009

- If you set the duplicated data base time to **[No Use]** : Save all data

1st check time - 01:21:50 June 1, 2009

2nd check time - 01:45:20 June 1, 2009

3rd check time - 01:46:18 June 1, 2009

- If you set the duplicated data base time to **[10 Minutes]** : Save 1st and 2nd data

1st check time - 01:21:50 June 1, 2009

2nd check time - 01:45:20 June 1, 2009

- If you set the duplicated data base time to **[30 Minutes]** : Save 1st data only

1st check time - 01:21:50 June 1, 2009

④ Guards registration method setup

Sets up whether you register guards by their tags or their checking machines.

If you register them by tags, you will need one tag for each guard.

If you register them by checking machines, you will need one checking machine for each guard.

⑤ Communication port setup

When the checking machine is connected correctly, the program will automatically detect connected communication port with the checking machine when the program starts. If this function does not work properly, you can manually set it up in the Communication Port Setup menu.

- **Search Communication Ports** : Searches communication ports automatically.

- **Device Manager** : Checks if the communication checking machine device is installed properly by running Device Manager.

※ **If you can't find 'Prolific USB-to-Serial Comm Port' device in Ports of Device Manager after you connect the checking machine to the USB port properly, please contact our Customer Support Center.**
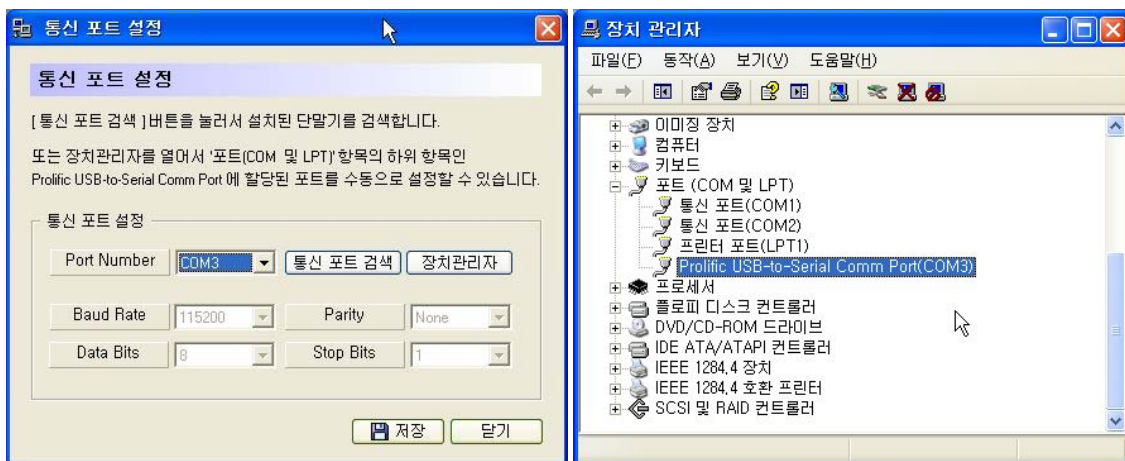
⑥ Buzzer and vibration setup

Sets up the use of buzzer and vibration.

⑦ Import log data

Brings back deleted log data from the checking machine. (To check if the patrol data is correct or not)

No.	카드번호	순찰일시	순찰지점명	근무자명	순찰경로명	이상상황	비 고
1	00046ACC	2000-01-01 00:00:01					
2	00046A51	2000-01-01 00:00:02					
3	00046A51	2000-01-01 00:00:02					
4	00046ACC	2000-01-01 00:00:03					
5	00046ACC	2000-01-01 00:00:04					
6	00046ACC	2000-01-01 00:00:05					
7	00046A51	2000-01-01 00:00:06					
8	00046A51	2000-01-01 00:00:08					
9	00046A51	2000-01-01 00:00:11					
10	00046A51	2000-01-01 00:00:28					
11	00046ACC	2009-03-11 11:52:12					
12	00453C3F	2009-04-15 12:10:32	순찰1		순찰경로명		
13	0019D623	2009-04-15 12:10:33		근무자2			
14	0027F1BF	2009-04-15 12:10:36		근무자1			
15	00455892	2009-04-15 12:10:39	순찰4	근무자1	순찰경로명		
16	00457745	2009-04-15 12:10:40	순찰3	근무자1	순찰경로명		
17	00453CC8	2009-04-15 12:10:43	순찰2	근무자1	순찰경로명		
18	0019D623	2009-04-15 12:11:35		근무자2			
19	00453C3F	2009-04-15 12:11:38	순찰1	근무자2	순찰경로명		
20	00453CC8	2009-04-15 12:11:39	순찰2	근무자2	순찰경로명		
21	00455892	2009-04-15 12:11:41	순찰4	근무자2	순찰경로명		
22	00457745	2009-04-15 12:11:45	순찰3	근무자2	순찰경로명		
23	0019D623	2009-04-15 12:15:10		근무자2			
24	00455892	2009-05-19 11:42:22	순찰4	근무자2	순찰경로명		
25	00453CC8	2009-06-29 09:15:30	순찰2	근무자2	순찰경로명		
26	00453CC8	2009-06-29 09:16:02	순찰2	근무자2	순찰경로명		
27	0027F1BF	2009-06-29 09:18:18		근무자1			

검색 항목 : 45 건

◆ **Patrol Plan Setup and Registration of Basic Data**

※ When you register checkpoint tags, you need to set up plans for the usage of each tag, register the basic data and install them on the spots. You can not register tags repeatedly.

※ **A business site using 20 checkpoint tags**

Item	# of Tags	Details	
Guard(Option)	3	Kim, Lee, Kang	
Patrol Route	N/A	Patrol A Building, Patrol B Building	
Checkpoints	7	A Bldg	Superintendent's office, main gate, old peoples plaza, tennis court, A building lobby, entrance of underground parking lot, rear gate
	6	B Bldg	B building lobby, machinery room, distributing board, hydrant, boiler room, elevator
Incidents (Option)	4	Risk of fire, incident on facilities, bad cleaning, electrical incident	

1) Guards Registration (Select if needed)
   ① Let the patrol tags of the guards by the order recognized by the checking machine.
   ② After connecting the checking machine to PC, press **[Register]** button in **[Register Basic Data]-[Register guards]** window and when you see the tag number from the checking machine, enter names as below and press **[Save]**.

   ③ When you **[Save]** the registration data, you will be asked if you want to delete log data or not. Press **[Delete]** if not an extraordinary case.
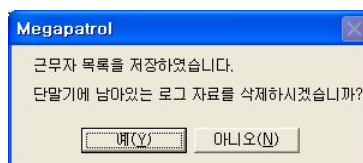

   ※ If you set up to **[Use checking machine Number]** in **[Guard Registration Method]** (please

refer to p.19), when you press **[Register]** button, you will see the number of the connected checking machine instead of the tag number.**(Registering method is same.)**

2) Patrol Routes Registration
   ① To register checkpoints, you have to have one or more patrol routes registered first.
   ② Press **[Register]** button in the **[Register Basic Data]-[Register Patrol Routes]** window and enter patrol routes in the dialogue box and press **[Save]** button.
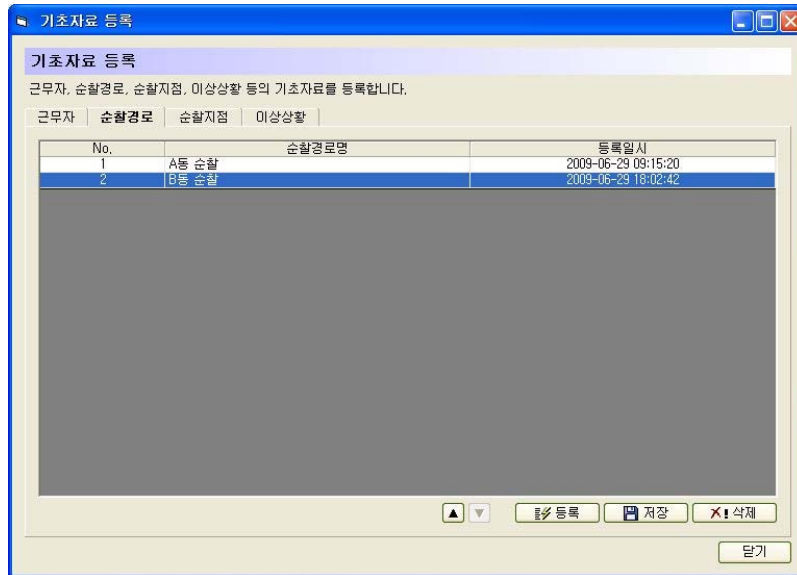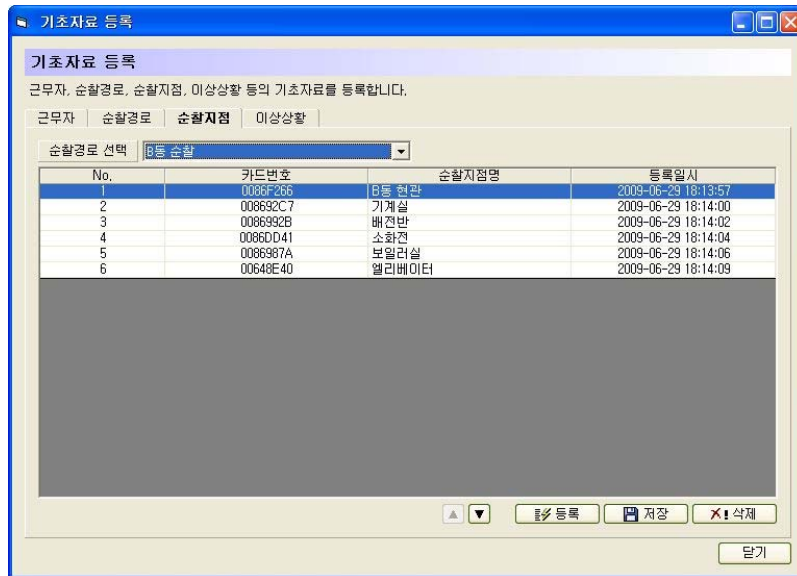

3) Checkpoints Registration
   ① To register checkpoints, you have to have one or more patrol route registered first.
   ② Let the patrol tags of each spot on the patrol route to register recognized in order by the checking machine.
   ③ Connect the checking machine to the PC and select **Patrol Route** to register in the **[Register Basic data]-[Register checkpoints]** window.
   After pressing **[Register]** button, when you see the tag number, enter the names of the checkpoints and press **[Save]** button.
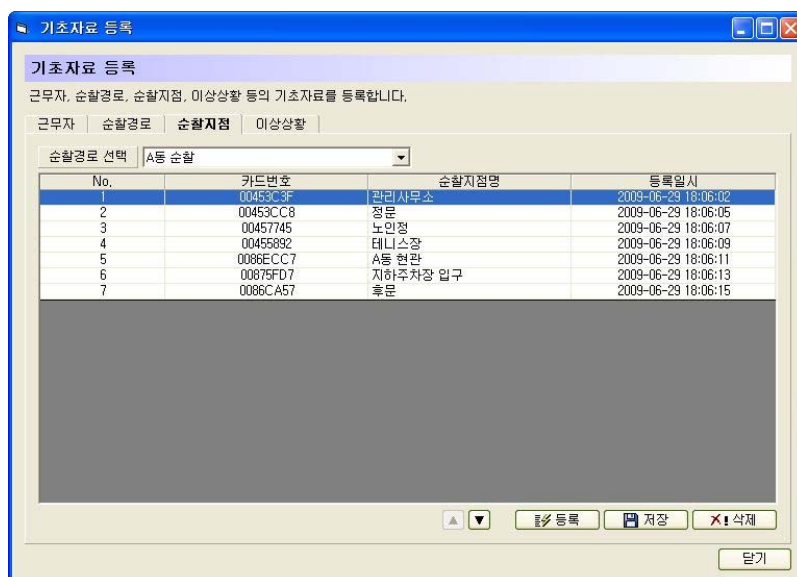
④ In the same manner, register the patrol routes for other patrol routes.

4) Incidents Registration
① Let the patrol tags allocated to the incidents recognized in order by the checking machine.
② After connecting the checking machine to the PC, press **[Register]** button in **[Register Basic Data]-[Register Incidents]** window and when you see the tag number from the checking machine, enter names as below and press **[Save]**.

◆ **Patrolling, Registration of Patrol Data and Viewing Reports**

1) Patrolling

① If you have a guard tag, you have to have your tag recognized first before you start patrolling. If you skip this, it is impossible to make distinction on guards.

② On the patrol, **the first checkpoint** has to be the same all the time to get a correct data when you print your **Single Patrol Report**. The discerning criteria for the round in the **Single Patrol Report** is **the first checkpoint**.

③ You have to keep the incident tags with you together with the checking machine on the patrol, when you find an incident, you have to have the checkpoint tag of the spot recognized first and have the incident tag recognized.

2) Registration of Patrol Data

This is a function to store the patrol data in the checking machine to the PC.

① Connect the checking machine to the PC.

② Run the program and log in.

③ Select **[Patrol Data Management]-[Register Patrol Data].**

④ When you bring the data from the checking machine by pressing **[Register]** button, you will see the patrol details as below on the screen.

⑤ Check if all the data is correct and **[Save]**.
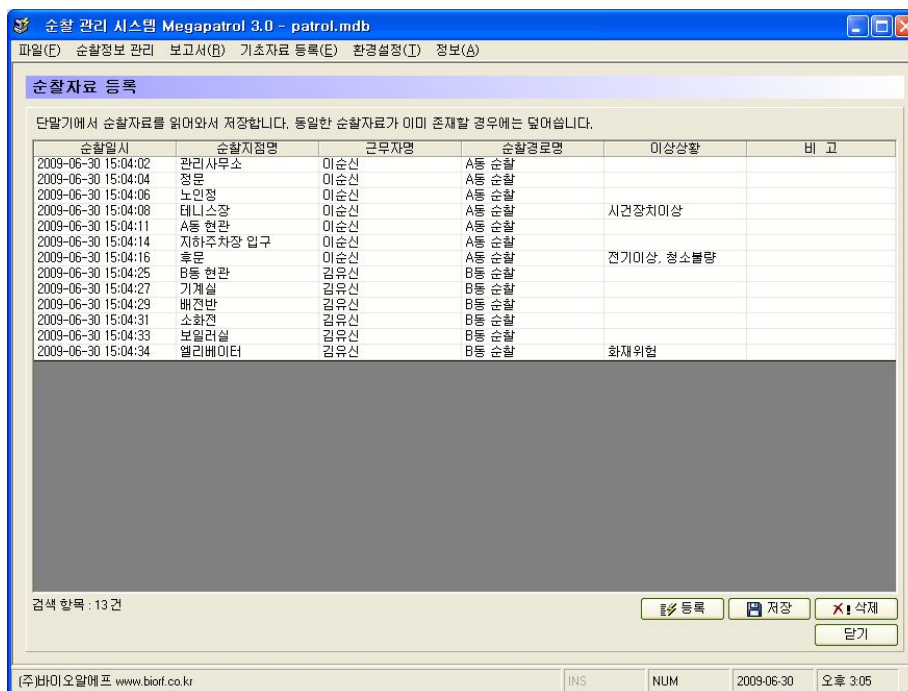
⑥ After you **[Save]** the data**, [Delete]** the remaining log data.
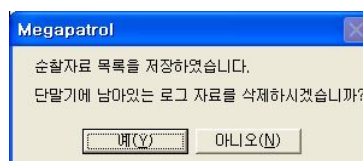
3) Viewing Reports

① When you run **[View Reports]-[Single Patrol Report]**, you will see a set up window like below.

② After selecting the period, patrol route, first checkpoint and press **[Show Reports]** button, you will see a report like the below picture.
- You can choose a format you want among various formats like **HTML, MS Exec, MS word, Picture File**, etc.

③ Print the report by pressing the printer icon on the top of the screen.
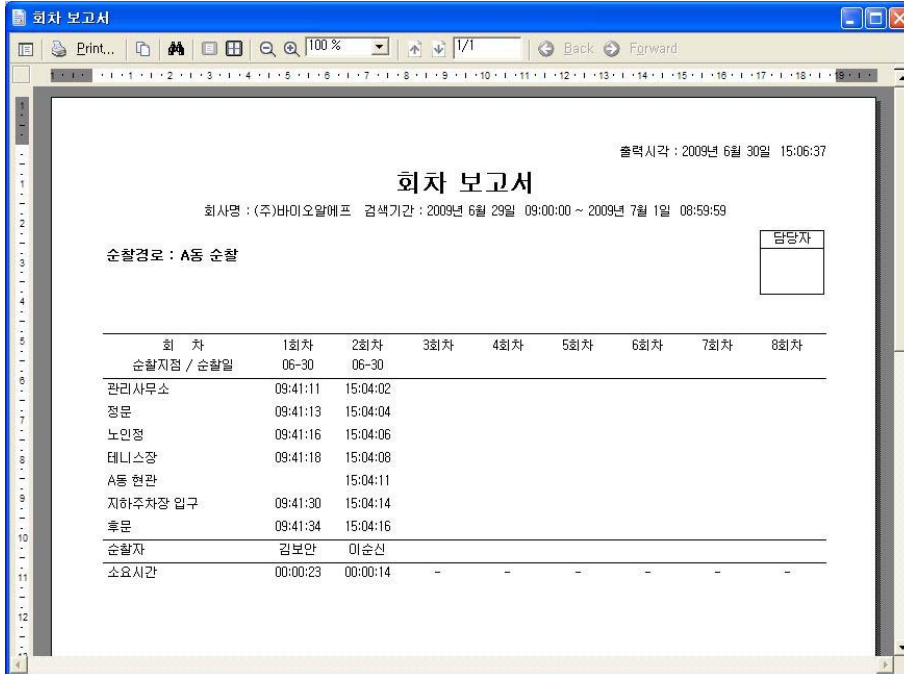
Product Warranty Card

- BioRF(Co.) guarantees our product listed below in accordance with our consumer damage compensation guide by the product.
- If you find any trouble of the product, please contact the store you bought the product from to ask for customer support and service. If the store is not available, please contact our designated service agents listed on our web site(www.biorf.co.kr) to get a proper service.

Product Name	Megapatrol	Model Name	MPE,-100
Manufacturer	BioRF(Co.)	Production Date	DD/MM/YY
Customer Name		Customer Phone #	
Customer Address			
Purchasing Place		Purchasing Date	DD/MM/YY
Warranty Period	One year from the purchase. 6 months for battery (For domestic purchases only)		

◆ **Consumer Damage Compensation Guide**

1. Type of Damage (Natural failures in performance and functions under normal using conditions)		Compensation	
		Within Warranty Period	Out of warranty
A major repair needed within 10 days from the purchase		Product exchange, refund	
A major repair needed within 1 month from the purchase		Product exchange, refund	
A major repair needed within 1 month for the exchanged product		Refund	
Product exchange is not possible			
Possible Repair	Up to 3 times for the same problem	Free Repair	Paid Repair
	Up to 4 times for the same problem	Product exchange, refund	Refund a 10% added price of fixed amount depreciated from the purchase price
Impossible Repair	Parts are available within the parts maintaining period, but impossible to repair		
	Parts are not available within the parts maintaining period		
	Lost the returned product for repair by the service center		

2. Type of Damage (A functional failure by consumer's intention or a fault)	**Compensation**	
	Within Warranty Period	Out of the period
Failures by force majeure (Fire, thunderbolt, sea water damage, storm and flood, earthquake, etc)	Paid Repair	Paid Repair
Exchange of consumable parts during the use		
Failures from abnormal operating currents or connecting device failures		
Failures from the repair or reforming by unauthorized people other than repair staffs in the dealer shop or the service center		
Other external causes other than product failures		

◆ Regarding Our Customer Service

- Customer's Right

  Customers have rights to get important free warranty services for product failures during the use within one year from the purchase.

  But, please be informed that the product failures resulting from customer failures or force majeure are subject to paid services even if the product is within the warranty period.

- Responsibility for the paid service (Customer pays expense)

  The following cases are subject to the paid service even if the product is within the warranty period.

  1) A product failure by foreign substance (water, beverage, coffee, toy, etc) inside the product

  2) A product damages or functional failures by a drop of the product or a shock given to the product

  3) A damage or transformation of product appearance by using organic solvents like thinner or benzene.

  4) A product failure by using unauthorized parts or consumables other than authentic parts provided by BIORF. You may purchase authentic BIORF parts from the nearest service center.

  5) A product failure caused by unauthorized operating voltage.

  6) Parts missed or damaged by customer's unauthorized disassembling of the product

  7) A product failure during the repair made by a person who is not an authorized staff of the service center

  8) Product failures by force majeure (Fire, thunderbolt, sea water damage, storm and flood, earthquake, etc)

  9) Other product failures made by customer failures

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