Apoton Hotel-lock User Manual APHLM8.01

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1 Hotel-lock Summary

Thank you for using Apoton series of electronic locks. Adopting encrypted, stable intelligent card as its key, it incorporates high microcomputer technology, mechanical-electrical technology, advanced mechanical processing techniques and perfect surface finish techniques as an integral whole, and take various users' requirements into consideration, it can completely adapt the complexity of different situation, and it is of significant meaning to strengthen the management and improve the safety of hotels.

1-1 Features

i) Lock latches meet international standard, safety and reliable. ;

ii) Inner real time clock; guest card will terminate automatically when leaving time; the staff card can choose unlocking time.

iii)The card has logistic protection of password.

iv)Imported micro motor are reliable and of low power consumption. Key cards can be used to consumer, entertainment, etc., such one card administrative system function; through card, staff card can realize consumption and attendance function.

v)The lock can memorize the latest 200 entries (including unlocked by mechanical key, Card, door not properly closed etc.) in order to check and print.

vi)Through cipher (system) card, the cipher of the whole lock system can be modified quickly and easily, effectively enhancing the safety of hotel door locks

1-2 Technical parameter and environmental requirements

Shell material: Steel, Copper and Gahnite;

- i) Durable Shock: More than 1000 kg;
- ii) Adaptable door thickness: 38~50 mm;
- iii) Weight: About 3 kg;
- iv) Environmental requirements: -20℃~50℃;
- v) Humidity≤95%, without corrosive gas and powder.
- vi) Power Supply: DC6V, 4 AA alkalescency batteries; Low power alarm at 4.8V±3%

1-3 Lock type^{Oahd Card features}

AP801

Using encrypted IC SLE4442 card of SIMENS Germany as its key. Card features:

- Capacity: 2K bit
- Cipher logistic protection
- Environmental temperature -25~70°C
- Service life 100,000 times
- Time of saving data ≥100 year

AP803 Using MIFARE1 card of Philips as its key. Card features:

- Each card has a only 32 sequence number;
- Divided into 16 sectors with 4 blocks each(one block consists of 16 byte)
- Anti-collision mechanism supports multi-card operation;
- Contactless transmission of data and supply energy(no battery needed);
- Environmental temperature:-20°C~50°C
- Operating frequency:13.56MHz, Fast data transfer:106KBPS;Operating distance:<10mm

● Data retention of 10 years; Write endurance 100,000 cycles Time of saving data ≥100 year

AP809 Using EM radio frequency IC card (125Khz) as its key. Card features :

- Only ID number
- Password protection
- Operating frequency 100~150 KHZ
- Time of keeping data ≥100 year
- Environmental temperature:-40°C~85°C

AP806 Using EM office ID card (125Khz) as its key. Card features:

- Only ID number
- Operating frequency 100~150 KHZ

2 Drill hole and install locks

2-1 A-type, C-type, F-type locks drill hole template.



2-2 B-type locks drill hole template.



2-3 E-type locks drill hole template.



2-4 G-type locks drill hole template.



2-5 Locks installation



3 Apoton Hotel-lock management software

APOTON LOCK MANAGEMET SYSTEM(APHLM8.01), one of the IMS software, Designed by APOTON COMPANY, Sensitive, fast, stability, suitable for different grades hotels, The system base on the managements experience of lots of the hotels, the main function : Front Desk Team/ independent traveler register, check in, check out, change room, extend stay, book management, deposit, account management, issuing/logout various kinds of the function cards, staff management, permission management, report management: issue card record, unlock record, check in record, maintain record, deposit and consumption report, handset management and so on, the classification management function module offer the stable, fast data service and data inquiry, at the same time, it laid the groundwork for improve the service

quality & efficiency, it help hotels to reduce the service cost also. The system supply 32 Windows Interface Library BwMultUsbApi.dll, , It's easier for the secondary development of hotel management system; Software in a CD-R disc, using standard CD wrappers. 8.01 is the common use version of hotel locks, it support the USB reader

3-1 Requirement of the system

The system supports Magnetic Card Encoder(BW700 series); Contact IC Card Encoder(BW701 series); RF Card Encoder(BW703,BW704,BW705 series); TM Card Encoder(BW702 series). Please make sure nine pin connect between the Encoder and PC com port 1 or 2 correctly, this series reader interface library is BwMultUsbApi.dll。

 Software supports USB serial encoder: Contact IC Card Encoder (BW771); RF Card Encoder (BW773, BW774, and BW775); TM Card Encoder (BW772). Please make sure USB cable connect between the Encoder and PC correctly, this series reader interface library is BwMultUsbApi.dll。

3-2 USB Encoder driver installation

Connect the USB to the computer, computer show that : 'found new hardware' as Fig 2-1 showed, select 'No' then click 'Next'; when the 'From the list or the assign position to set up (high-level) 'as Fig 2-2 appeared, 'Next step', Fig 2-3 appear





Please o	hoose your search and installation options.
0 <u>s</u>	earch for the best driver in these locations.
U: pa	e the check boxes below to limit or expand the default search, which includes local ths and removable media. The best driver found will be installed.
	Search removable media (floppy, CD-ROM)
	Include this location in the search:
	E:\diver\winxp\4.Modem\VISTAXP2K Browse
OD Cł th	on't search. I will choose the driver to install. noose this option to select the device driver from a list. Windows does not guarantee th e driver you choose will be the best match for your hardware.

Select the manufacturer and model of your hardware device and then click Next. If you have a disk that cortains the driver you want to install, click Have Disk. Show compatible hardware Model Model This driver is not digitally signed! Have Disk	Select the device driver you want to ir	nstall for this hardware.
Show compatible hardware Model Model This driver is not digitally signed! Have Disk Tell me why driver signing is important	Select the manufacturer and model of y have a disk that cortains the driver you	your hardware device and then click Next. If yo u want to install, click Have Disk.
Model		
Model This driver is not digitally signed! <u>Tell me why driver signing is important</u> Have Disk		
This driver is not digitally signed! <u>Have Disk</u> <u>Tell me why driver signing is important</u>	MIDUSI	

When Fig2-3 appeared, select "don't search", at the same time click "Next Step"; then the Fig2-4 appeared, select "click Have Disk"; when Fig 2-5 appeared, click "browse";

If the computer is 2000 or XP system, select setting CD\BWUSB Driver\ WIN2K_XP\D12TEST.INF; click "open", then click "Confirm" in the Fig2-5; it will appear Fig 2-7,click "next step"; system start setting USB Reader's Driver.

System will remind after the User installation completed, click "finish", the reader stop buzzer, at the same time green light up , the Card can been read and write now.



```
? ×
Locate File
                                                        💌 🗿 🗊 🗁 🛄 •
        Look in: 🔁 WinXP
                D12test
       4
   My Recent
  Documents
      5
    Desktop
 My Documents
  My Computer
                                D12test
                File name:
                                                                      Y
                                                                                  Open
                                                                                 Cancel
               Files of type:
                                Setup Information (".inf)
  My Network
                                                                      1
```



ound New Hardware Wizard	
Select the device driver you want to install for this h	ardware.
Select the manufacturer and model of your hardware de have a disk that contains the driver you want to install, o	vice and then click Next. If you slick Have Disk.
Model	1
Philips PDIUSBD12 SMART Evaluation Board	
This driver is not digitally signed! <u>Tall me why driver signing is important</u>	<u>H</u> ave Disk
< <u>B</u> ack	Cancel
Fig 2-7	



Instructions:

1. If the USB connected with computer without the Driver, the encoder have uninterrupted faint buzzig, when the driver installed successfully, the encoder stop buzz

- 2. Installed success, the encoder will always green light up, if no green light up, please plug the USB cable again, if the green light still not appear, please recheck whether the Driver is installed successful or not.
- 3. If can not enter into the Fig 2-1, you can enter into 'control panel'—'system'—'hardware'-'device manager', then 'USB controller', find the unknown 'USB DEVICE', right click 'unload', then 'Scan Check hardware modify' again, the Fig 2-9 will appear, reinstall the Driver
- 4. If the old install CD lost, or can not find the directory of install Driver, please search the 'BWUSB Drive Directory' under 'BW Lock system'.

e Action View Help	
- • • • • • • • • • • • •	
BONWIN-LUJUN	
🕀 💘 Batteries	
Bluetooth Devices	
🗄 😼 Computer	
🕑 🥌 Disk drives	
Section 2 - S	
BVD/CD-ROM drives	
Em Human Interface Devices	
IDE ATA/ATAPI controllers	
Sign LEEE 1394 Bus host controllers	
• Contraction of the second se	
Mice and other pointing devices	
Masihars	
BO Mohurak adapteer	
B DCMCTA adapters	
Ports (COM & LDT)	
A Secure Digital bost controllers	
Sound, video and pame controllers	
- System devices	
Universal Serial Bus controllers	
Intel(R) ICH8 Family USB Universal Host Controller - 2830	
Intel(R) ICH8 Family USB Universal Host Controller - 2831	
Intel(R) ICH8 Family USB Universal Host Controller - 2832	
- 🕰 Intel(R) ICH8 Family USB Universal Host Controller - 2834	
- ॡ Intel(R) ICH8 Family USB Universal Host Controller - 2835	
- 😴 Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836	
Intel(R) ICH8 Family USB2 Enhanced Host Controller - 283A	
👍 😈 Update Driver	
🚔 us Disable	
🛶 Us Uninstall	
GUS Scan for hardware changes	
Gells Provention	

3-3 Steps of the software installation



Fig 3-1 software installation

	🔍 ΑΡΟΤΟ	DN Hote	el-Lock M	lanage	
APOTO	N INTELLIGENT	LOCK CO.,	LTD. Lo	ain	
(/		
	Login name:	123		~	
	Password:	***			
	_		<u> </u>		
		ΩK	Cancel		

Fig 3-2 Login

i) Insert CD-ROM(supplied) into CD-ROM drive, open CD-ROM, double-click "Setup.exe".(Fig 3-1)

ii) Click [Next], the installation starts.iii) Click [Finish], to complete setup.

iv) Normally "Bonwin Hotel-Lock" folder is created inside the "Program Files"

folder. Start up "BWHLM8.01"Shortcut, or start up "c:\Program Files\ BWHLM8.01.exe" file.

3-4 Login and Setting

3-4-1 Login

Start the" BWHLM8.01.exe", Login Prompt screen appears. (Fig3-2)

3-4-2 Main Interface

Default User code and password was "123", enter into the Fig 3-3 as administrator, it can been revise the user name and the password after login successful.

🏘 【BonVin】 BO	NVIN. Sof	of lock manage			
<u>Basic-operation</u>	ront-Manage	nent <u>C</u> ard-management <u>S</u> taff-	management <u>R</u> eport-Query S	Sys <u>t</u> em-setup <u>H</u> elp Ch <u>i</u> r	reze
FII In I eam In	L'heck o	t Extend stay Change	king Head card Disable	Help	Exit
Hoom-inforn	~	Real-statu Future-statu			00
Room		801 802 803	804 805 80	6 807 808	809
Guest-name:		810			
Leave time:					
Remark:					
Deposit: Price: Room type: Use Cards: Beds Num: Ruilding: Flou. Total of Boom: 1					
Select by status					
Select by type	~ ~				
Select by floor	411 🔍				
Select by Buildir 🗹 /	4∥ ⊗				
Statu of soft: norm	al Lock	type:BW803(rfmifare1) Enco	rd type:USB Operat	tor:Admin OP-G	rade:SystemManage
		Fig 3	-3 Main Form		

- Top of the interface is the system menu and the shortcut button
- The left part is used for choose or input the effective basic info of the room., nether area is the Room Status Statistics and the Room diagram Screening
- Bottom of the main interface is the "statusline" of the software, it including the SW condition. Door Lock Type. Reader Type. operator Name. operator right grade and the version of the software.

- The middle area is the Real Time Room Status and the Future Room Status, right click, you can find the kinds of the Room Status options for choose. Double click, the prior selected option will default started
- When the cursor moved to a room, the rooms status and rooms type showed
- the button which in the right upper area, is the "refresh button "and the "Room Status introduction button ". click the "Room Status Instruction "button , it will appear Fig 3-4

Roon status	sketch ma	ър		
Clean room	Dirty room	Repair room	Lock roo	m
a Tean	n Sar	ve team	8 FIT	
Clock VIP	info (Sree Booking	Arrived	Leave
	Ein 2 4 H			

Basic info System Pa	ssword	
Hotel name:	BonWin	
Lock type:	BW803(rfmifare1)	v
	10.00.00	

3-4-3 Hotel Setting

Select "Setting" item, click "Hotel Setting", Hotel Setting Windows appears (Fig3-5).

1. Basic info

- Lock type: According to provided locks to setting.
- Check-out time: Default check-out time.
- if SN is invalid, Please apply again, otherwise it is not possible to issue cards.

2. System Cipher

Hotel cipher is the basis for security of locks, **The length of hotel cipher must be 8 numbers,**. The cipher is no need revised as normal, if do need revise it, you must find "Bonwin Data maintain", find the current system cipher, then revise the cipher. Confirm success, input the new password (number). Keep your new password carefully.After input current cipher, Click "Check", if it being confirmed successfully, then input new cipher.

At first click "Edit"; Click "save", settings enter into force; If SN is out of date, basic info and the system password can not been revised.

3-4-4 communication parameter

Select "Setting" item, click "communication parameter", Encoder Option Windows appears (Fig3-6). **When SN is being changed, the encoder must be re-set.**

select the reader type

- 1. if it is serial port reader, selected the port, at the same time check whether it is connected with the computer or not, then click "test"
- 2. If it is USB, check the driver is installed or not, then click "test Test: Remind the Reader connected success or not; save it after success.

● USB	<u>E</u> dit
	<u>I</u> est
	Save
	Cance

3-4-5 Room setting

Select "Setting" item, click "Room type / floor setting", display Fig3-7. it including: Building setting, floor setting, room type setting, it can been add, revise, delete, if set up the room already, the related building, floor, and room type can not been deleted, the occupied room is not allow to deleted.

	it up type i	or room	Set up Building	Set up rioor			
	Code		Туре	of Room	Day price	Hour price	~
•	1	1 Economic Room			0	0	
	2	Standa	rd Room		0	0	
	3	Superio	or Room		0	0	
	4	Deluxe	Room		0	0	
	5	Busine :	ss Room		0	0	
		F					
ŕ							~



	Lodifye the room ty	ре
	Code:	1
	Type of Room: Economic R	oom
	Day price:	180
	Hour price:	80

Day price: Automatically produce day's price when check_in;
Hour price: Automatically produce hour's price when check_in;

Set Buillding

Set room belongs buillding,Easily find.

Set Floor

Set room belongs floor,Easily find.

Open the "room setting "of the "system setting", the Fig 3-8 appeared: when Room setting, it need select the information for example: Floor、room type、room number、bed number、mix issue card number and so on. If it is in same building and the same floor, the room number can not been repeated. Selected the "whole day room price" or "hour room price" from the "Room Type". You can add the room by two ways: "one by on add " or "bulk add"

Hoom Lod	le Building	Floor	Туре	Beds	Maximum-carcRoom remark	1
801	1 Building	1 Floor	Economic Room	2	4	
802	1 Building	1 Floor	Economic Room	2	4	
803	1 Building	1 Floor	Economic Room	2	4	
804	1 Building	1 Floor	Economic Room	2	4	
805	1 Building	1 Floor	Economic Room	2	4	
806	1 Building	1 Floor	Economic Room	2	4	
807	1 Building	1 Floor	Economic Room	2	4	
808	1 Building	1 Floor	Economic Room	2	4	
809	1 Building	1 Floor	Economic Room	2	4	
810	1 Building	1 Floor	Economic Room	2	4	
Tot	al 10					
Tota	al 10					1

One by one add

Click button "Add", Open the form of "One by one add "

Room code:	8101	
Beds:	2	•
Maximum-card:	5	8
Туре:	Economic Room	~
Building:	1 Building	~
Floor:	1 Floor	~
Remark:	Has a big bed	
	<u>S</u> ave	<u>C</u> ancel

- Input the room code, beds, maximum-card etc;
- Select Room type, Building, Floor, and you can select "Add..." and add buildi ng, floor, room type;
 Click "Save".

Bulk add

Click button "Bulk add", Open the form of "Bulk add " as fig 3-10 show.

Prefix:	8	Type: Economic Room	~
Maximum-card:	5	Beds: 2	۲
Building:	1 Building	✓ → 1 Building	~
Floor:	1 Floor	✓ → 1 Floor	~
NO.:	1	♣ → 10	۲

- Enter the prefix of the room code, Example '8' or 'A';
- Select room type, maximum-card, beds number;
- Select start's building and end's building, Example: from 1 building to 2 building;
- Select start's floor and end's floor, Example: from 1 floor to 2 floor;
- Enter the room number on each floor, from the first few rooms to the first few rooms, such as from the first one room to the first 20 rooms, it is recommend ed: If there are 20 rooms on each floor you choose from the first one room t o the first 20 rooms;
- Click Save to complete batch adding;
- You can select one or more room to delete or modify.

3-4-6 Other setting:

Open the "other setting" of the "system setting", appeared the Fig 3-9, it including the Staff Department, position, credentials type setting, room status setting, payment method and the Area Setting of the customer source. Room Setting is the default double-click.

Credential type	Guest source	Paymont way
Room Operate	Department	Position
Si Si	et up the 'Double-click defaul	t action.'
Clean room	Independent traveler Check	~
Dirty room	Independent traveler Check	~
Dirty and Used room	Check the guest info	~
ean and Used room	Check the guest info	~
Maintain room	Repair completed	*
Locking room	Unlock.	*
		1

3-4-7 Personnel Management

The personnel management including: operator authority management, operator management and the staff management

1. operator authority

Open the "authority management" of the "staff management", the Fig 3-10 appeared. Select "Setting" item, clicks "Operators", display Fig3-10

Permission name	~	Mandover	Emergency Card	Records of Make cards
SystemManage		Modify Password	🗹 Master Card	🗹 records of Open lock
Superintendent		🗹 Independert-CheckIn	Supervisor Card	ReCords of Lossed
Foreman	- 1	🗹 Team-CheckIn	Floor Card	🗹 Other records
	-	🗹 Booking mananger	Temporary Card	🗹 System log
Uperator	_=	Check out	Unlocking Card	🗹 backup Data
		Check out without card	🗹 Stalf Card	💌 Clear data
		🗹 Change room	🗹 Clear Card	🗹 recovery Data
		🗹 Extend stay	🗹 Query Card	🗹 Dev_Hand info
	_	🗹 Guest room info	Termination Card	🗹 Type/Floor/Building
		🗹 Accounting Managemen	it 🗹 Lock Card	🗹 Room manangei
		🗹 Add Key_card	🗹 Setup Card	🗹 Set-up others
		🗹 Time Card	🗹 Read card	🗹 Hutel infu
		🗹 System Card	🗹 Disable	🗹 Messaging parameter
		🗹 RoomNo Card	🗹 Stalf mananger	
	~	🗹 Disable Card	🗹 Operator mananger	
		🕑 Backup Card	🗹 Rights Management	

Select a Level, click "Modify" Click "save", after "Re-login", settings enter into force.

2. Operator Management

Open the personnel management, then open the "operator management", Fig 3-11 appeared, you can setting the User Name, password, authority.

	Login name	Name	Rights	
•	123	Admin	SystemManage	
			76	-

- ADD: You can set the info: name of the new operator, user name, password, authority. The user name, password, authority must be field.
- **Delete:** cancel the selected operator login name and the password

• **Modify:** modify the selected operator login name, name, authority, password restoration, the restorative password is "123"

Remark:

1. please set a operator who have the management authority at first

2. The operator password can been modified by "modify log password" of "basic operation"

3. Staff Management

open the personnel management, open the staff management, 3-12 appeared, you can add, search the staff info here, the staff info allowed add ,modify, demission, restoration, but it is not allowed to deleted, since may be you need check info in the future.

🏶 Staff 🖿 ananger Staff empID: Lookup Select empID Name ID code Phone number Staff status Registrant Position Department ID Sex Register time Total: 0 <u>R</u>einstated Print Leading-out Add Modify Dimission <u>E</u>xit Fia 3-12

Right click "hold card checking" to check the function card.

3-5 Card Management

3-5-1 Issue Card

Open the "Card Management", click the "issue Function Card", Fig 3-13 appeared. Including make the enactment card、 Cipher Card、 Clock card、 room number card、 locking room card、 backup card、 emergency card、 master card、 multi-floor card、 floor card、 temporary card、 always open card、 staff card、 clear card、 eliminate card、 Query Card、 report the loss card. Select the card type which you need, fill the information, click "issue card" button. Remark: the occupied guest card can not been made into above cards unless the guest check out. Above cards can not been made into guest card unless it logout

ake fuct	ion o	cartd		
Setup Card	Sys	tem Card T	ime I	Card RoomNo Card
Floor Card	Sup	ervisor Card	Em	ergency Card Master Card
Backup Ca	T bre	emporary Card	1	Jnlocking Card
Disable Ca	rd Lo	ock Card Cl	ear (Card Query Card Termination Card
	~		~	ľ
Boom	NO	Boom type	~	Setup CardCode:
•				
		10	Ĩ	Room code:
				0
<		>		
				Make Cancel
			-	

- Enactment Card: the card including the basic information of password, clock, room number and so on, can been one-off set up in the lock. it also can instead of the room number card, clock card to adjust the time of the lock, the card is not influence the symbol of locking room, when the system changed , the card will delete the locking status.
 - Remark: when you want to make the enactment card, just need select the correct room information then you can start issue it.

As for the new locks, it must been make: cipher card、clock card、room number card firstly, or the enactment card must set the lock up before you issue card to unlock the door.

- 2. Cipher card: Is used for pass the "system cipher", find the cipher (system) card Fig, click "issue card", input the card number, display. System shows that the password changed , it can delete the locking status at the meantime.
- 3. **Clock card:** is the medium of the synchronous lock time, the lock time must same to the actual time, then the lock can been worked normally.
- 4. Room number card: set the location and function to the lock
 - if selected "common type", find the left side room list , select the floor and room which you needed, click the room number which you need, click "issue card"

It is suitable for the suite type lock

Lock room Card: used for lock the room, it can not been unlocked except the guest card or emergency card. If it been sweep by guest card or emergency card, the lock status disappeared automatically Remark: Before unlock the room, the occupied room can not been check-out, change room or extension stay, but it can operate the Account Management

6. **Terminating Card:** When found the guest card lost, make a new terminating card then sweep on the room one time, the old card invalid automatically. Once the guest use new guest card, this terminating card will been invalid automatically. Sweep the terminating card when locking, the guest card will invalid and the locking status will also been disappeared automatically.

7. **Backup Card:** when the management software happens any unexpected mistake it can be used as the guest card. We make 1~2 backup card for each lock normally, when the system have problem ,it can been used instead of the guest cards. If the backup card lost, can been made new ones. Once a new back up card issued the old backup card will invalid.

Remark : the guest card, always open card have the same replacement method as the backup card

8. Emergency Card and Master Card

9、 **Emergency Card**: Can open all the locks in emergency occasion, even including deadlocked door. No other card has this function. **Master Card**: Can open all the locks in the unit. except double-locked door. the issue card steps is similar, now use emergency card as example(as Fig 3-16)

- click the button which behind the "staff empID", selected the registered staff, if the staff is not exit but the operator have the operation rights, then the operator can add the staff info; if have time limitation, please select the invalid date and time; if need limit the unlock time, please select the unlock and lock time range.
- "issue card" if selected the registered staff, click issue card, the card reader buzz, and prompt issue card success

FCC Information:

Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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 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 radio or television off and on, the user is encouraged to try to correct 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 another circuit.
- Consult the dealer or an experienced radio/TV technician for help.