

USER GUIDE
RFID LOCKER LOCK
(MODEL : ZP100WR)



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1. Understanding ZP-100WR RFID lock

1.1 What is ZP100WR RFID Locks?

- ZP100WR RFID lock is a locker lock operated by 13,56 Mhz RF keys such as card, tag, key ring or wristband.
- It has the wireless online communication feature that provide the central controlling and remote monitoring (See Esmart ultra user manual)

1.2 Card Type and Functions

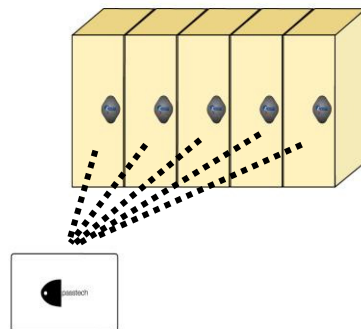
- ◆ Key Card : Load Key to the lock.
- ◆ Owner Card : Delete Master card registration in the lock for new Master card registration.
- ◆ Master Card : Each of the following function can be set
 - ① Alarm Off, User card delete and Locker open.
 - ② Alarm Off and Locker open and close (no user card delete)
- ◆ Time/Master card :
 - ① Set the Time of the lock.
 - Change ② New master card registration
- ◆ User Card : Two types of User Cards can be set by Locker Management System.
 - ① User card for Fixed Mode
 - ② User Card for Free Selection
- ◆ Audit Trail Card : Collect the latest 18 access log data from the Locks.

2. Type of Lock Operation

ZP-100WR RFID lock are designed to work for the various operation requirements by simple set up process. Following operation modes can be programmed before or after lock installation.

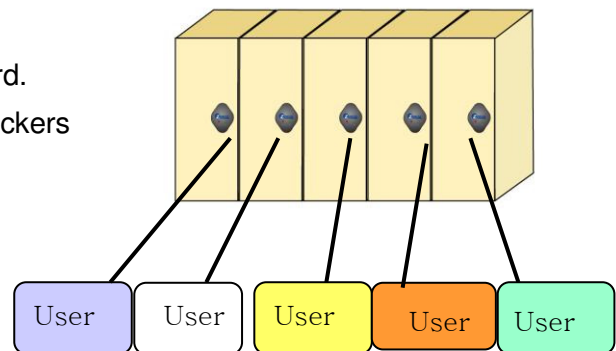
2.1 Free Selection (Day Use)

- User can select any empty locker.
- Red LED lamp is blinked to show the locker is in use (Option. In-use lamp off is recommended to save battery).
- Programmable to use multiple locks with one User card (max. 5 lockers)
- Programmable for Time based operation



2.2 Fixed Mode (Pre-Assigned Mode)

- Each Locker is assigned to each User card.
- Programmable to use multiple assigned lockers with one card (max. 5 lockers in current program).
- Programmable for multiple user mode per a locker (max. 9 users in a locker).



3. Basic operation of the Lock

ZP100WR RF Locker lock is woken up by touch sensor, and read and write the User Card when User card is placed on the Front body.

Once the User Card is authenticated by RF lock, the bolt of the lock will come out (Free Selection mode) or come backward and forward (Fixed Mode).

User card needs to be put on the front body until lock and card complete the authentication process (1 beep sound and green Led lamp is on).



3.1 OWNER CARD

The role of the Owner card is to control the Master card registration. Therefore, Owner card will be used to delete current master card registration in the lock, and makes lock to wait for new Master card registration.

It is simple to delete old Master card registration and to register new master card in the lock :

Put the Owner card to the lock until lock sounds beep (one time) and light red lamp.

Now, all master card registration is deleted from the lock.

☞ If you registered 5 Master cards in the lock, all these 5 Master card registrations are deleted.

3.2 MASTER CARD

3.2.1 Functions of the Master Card

(1) Customer can select the function of the Master card from the following two options. Master card setting will be done by supplier.

- ◆ *Master card I : Alarm Off, User card delete and Locker open.*
- ◆ *Master Card II : Alarm Off and Locker open and close (User remained)*

(2) Maximum five Master cards can be registered in a lock.

3.2.2 Replacing old Master cards with New Master cards

There are two ways to delete the lost Master card and register new Master card in the lock.

(1) Using Time/Master Change Card

- ① Read the master cards (all Master cards to be used in a lock) to register in each lock at Time/master change menu in LOS program (or LIS program).
- ② Put the Time/Master change card to the reader, and download the master card chip numbers to the Card.
- ③ Put the Time/Master change card to the locks, then, new Master cards will be registered to the lock, and lost master card will be blocked.

(2) Using Owner Card

- ① Delete the old master card registrations in the lock (refer to the 3.1) with Owner Card.
- ② Put new master cards to each lock so as to register new master cards. Then, old master card you lost will not be used.

 All existing Master cards needs to be registered again together with new Master card because all master card registrations were deleted if Owner card or Clear card is used.

3.2.3 How do I add new Master card?

The procedure to add new Master card is same as 3.2. All master cards that will be used in locks must be registered to the locks because all Master card registration are deleted from the locks once lock reads the Owner card.

Alternatively, Time/Master change card can be used. It is recommended to register new master cards at many lockers. Please refer to the LOS program manual for Master card registration.

3.2.4 What can I do with Master card?

The function of the Master card is decided when Set up card is generated by lock installer from the following three functions.

- ① Door Open & User Card delete : Turn off the alarms, open the lock and delete old User card registration.
- ② Door Open and Close : Turn off the alarms and open the lock and close only. User card information in the lock is not deleted,

3.2.5 Can I set the Master cards to open all locks or specific group of locks only?

Yes. If a Master card is registered in all group of locks, this Master card can open all locks, and becomes Grand master card. If the other Master cards is registered in any specific group of locks only, this Master card can open this specific group of locks only, and becomes sub master card.

3.3 User Card

3.3.1 Free Selection

The initial status of the lock in Free Selection mode is open (Latch is inside).

- Initial Use -

- ① Select the empty locker.
- ② Put your belongings in the locker.
- ③ Touch softly the front body of the lock to wake up the lock. Red Led is on, then place your card (or any form of user key) to the front body of the lock.
- ④ Wait until the Green LED lights and Beep sounds once.
- ⑤ Bolt will move out, and lock is closed.
- ⑥ Close the door, and the lock will be remained at closed status.

- Open the lock -

- ① Touch softly the front body of the lock.
- ② Red Led is on and put close your card to the front body of the lock.

- ③ Lock will check the lock ID and key of the user card (or any form of user key).
- ④ Lock will emit Green LED and beep sound once.
- ⑤ Bolt will be moved and locker will open.
- ⑥ User information will be erased from the lock so that new user can use the empty lock.

👉 In free selection mode, lock and card needs to read and write the each other's information. So please do not sway the card until the latch is moved.

3.3.2 Fixed Mode (Pre-Assigned Mode)

The initial status of the lock in Fixed Mode is closed status (bolt out)

- Open and close the lock -

- ① Put the User Card to the front body of the assigned lock.
- ② Lock checks the card, and green LED lights and beep sound once. Then, lock will be opened, and closed again in 5 seconds.
- ③ To close the locker, just close the door. Lock will remains the closed status.

3.3.3 Replacing old User card with New User card

(1) Free Selection

- ① Issue new user card by LOS (Locker Operation System) program.
- ② In case the locker is closed, put **Master card** to the lock to open the lock.
- ③ Put new User card to the lock, then lock will accept new User card, and missing card will not be accepted.
- ④ In case the locker is opened, just put the new user card to the lock, and the lock will register this locker number. Old User key will not be accepted.

(2) Fixed Mode

- ① Issue new User card (with assigned locker Number) for Fixed Selection.
- ② Put Master Card to the lock to delete the old user card, and put the new User card to the lock.
- ③ Lock will accept the new user card only, and old user card registration will be deleted.
- ④ In case the lock is set for multiple users, lock revision should be updated when

new user card is issued by LOS program. Then, Lock updates its revision number when new user card is registered. The other user cards which are assigned to this locker also needs to be reissued with updated lock revision by LOS program.

3.4 Low Battery warning and battery change

In the RFID lock, 4 pieces of 1.5V AA alkaline batteries are used.

When battery reaches to low voltage ; ① Beep sounds five times.

② Red LED lights

③ Low battery is recorded in the memory of the User Card (Operator can know the low battery of the lock when the card is read at operator's Program).

When low battery warning sign is displayed, please change the battery.

① Open the battery case at main case.

② Change four batteries.

③ When you pull out the battery, and do not insert the batteries in 3 minute, the clock of the lock returns to default time (2008. 01.01).

CAUTION

**RISK OF EXPLOSION IF BATTERY IS REPLACED
BY AN INCORRECT TYPE.**

**DISPOSE OF USED BATTERIES ACCORDING
TO THE INSTRUCTIONS**

④ Please use [the Time Setting card](#) to set the time of the lock.
(For time setting, please refer to "How to use LOS (Locker Operation System)" or LIS(Locker Installation System).

3.5 Audit Trail

- ① Put Audit Trail Card to the lock.
- ② The latest event data (up to 18 events) will be downloaded from lock to the Card. Wait until melody is on.
- ③ Read the Card at LOS program, and 18 event data will be saved to the PC.

3.6 Open in Emergency

- 1) In case User forget his(her) password, Operator can open the lock by Master Card.
- 2) Once Master card is used to open the lock, the lock reverts to default position
(i.e. lock will stay open for Free Selection, and default code of 1234 for Fixed Selection mode.).
- 3) User Card ID will be erased from the lock if Master Card has the function to delete the User ID. It depends on setting of Master Card.
- 4) When the lock stops working due to low battery, lock can be opened by external emergency battery pack.



ANNEX A Beep & LED Table

Beep	LED	Description
1 x short beep	1 x Green(2sec)	OK
3 x short beep	3 x Red(2sec) flashes	Operation Error
3 x short beep	1 x Red & Green in turn(2sec)	Time over
Do-Re-Mi Melody	1 x Red & Green in turn(2sec)	Successful Set up / mode change / Time setting
5 x short beep	5 x Red & Green	Low battery
Do-Re-Mi Melody	2 x Red & Green	Successful connection between front and back bodies.
1 x short beep	1 x Green	Off the Alarm by Master card
Melody	1 x Green (1.5 sec)	Successful registration of Owner Card/ Master Card
Melody	1xGreen	Read Clear Card and delete the information of O/M/U in the memory of the lock.
	Green and Red on/off	1) Owner Card is not registered. 2) In case of Shift or Week-day operation mode, Alarm for shift or Time due.
	Red on/off	Owner card is registered, but Master card is not registered.
	Green on/off	Owner & Master card are registered, but User card is not registered in Fixed Mode.

short beep : 0.3sec

long beep : 1.5sec

ANNEX B Troubleshooting

Master card registration in the lock was failed.	1) Master card registration should be followed after deleting old master card in the lock by Owner card. 2) Put Master card on the lock before waiting time is out after Owner card.
Cannot open the lock with Master card	Master card is not registered in the lock. Please Register the Master card in the lock.
Cannot open or close the lock by User card	1. Check the Setting of User card by LOS. (1) Free Selection Mode ● Validity / Operation mode / Lock ID / Number of locks this user card can be used. (2) Fixed Selection Mode ● Validity / Operation Mode / Lock ID / Number of locks this user card can be used. 2. Reset the time of the Lock with Time/Master card change card. 3. Old User card may be still in the memory of the lock. Erase the card information from the lock by Clear card, then register again the Owner card and Master Card, then use User card.
When "Touch" button is pressed, five beep sounds with Red lamp.	Low battery sign. Please replace the batteries.
Latch does not move, while Card and lock operates successfully.	Too many goods may press the lock body. Push the locker door to make the space for moving of the latch.

Should you have any questions, please contact your local distributor or our technical support.

USA–Federal Communications Commission (FCC)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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. If not installed and used in accordance with the instructions, it 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 tuning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the distance between the equipment and the receiver.
- Connect the equipment to outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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