

SAFE BOX USER MANUAL



1.HOW TO USE SAFE BOX

SEQ.	Function	Operation
1	Initial setting	Safe box is unlocked entering password "1234" and
2	LOCK	<p>* with password Press "RESET" button Enter 4 digit password and press "LOCK" button.. Press "RESET" to cancel entering password.</p> <p>* with card Press "RESET" button Place Guest Card on the "LOCK" of the safe box.</p>
3	UNLOCK	<p>* With password Safebox is unlocked entering 4 digit password Press "RESET" button to cancel entering password.. The operation is on the halt for 30 minutes after 5 times wrong password entry.</p> <p>* With card Press "RESET" button Place guest Card on the 'LOCK' of the Safe box. Safebox is unlocked. The operation is on the halt for 30 minutes after 5 times wrong password entry.</p>
4	RELOCK	<p>Press "LOCK" button and safe box is locked. Previously entered password is valid within the default set time set by Setup settings after unlocking.</p>

2. HOW TO SET UP SAFE BOX

2.1 . General functions

- Safe box operates with card or password.
- Systems cards for Safe box operation consist of Key Card, System Card, Guest Card and starts with pressing "RESET" button on the safe box.
- Initial password is set as "1234" and new password is set with 4 digit.
- Set necessary operational functions on the Setup Card before operating Safe box.
- 'SEr" displays when the operational functions are missing and system is in the failure
- "Err2" displays when the operation or hardware function fails.

2.2 . Set-Up

- Necessary operational functions are set in the Setup Card.
- Initial password is set as "1234"
- Warning sound beeps and "SEr" displays on the 7 segment when trying to use safe box without complete setup settings.
- Safe box operates in the Free Mode, half-cycle mode..
- Password display is optional when locking (display as default)
- Password display is optional when unlocking (no display as default)
- Operation disabled by the minutes after 5 times wrong password entry (default 15 min)
- Lock the safe box by pressing "Relock" with same password previously entered within the valid time set
 - * set RELOCK lapse time by the minute and as default ,
- Time setting.
- Vender ID corresponds to hotel ID and Customer ID corresponds to Room number.
 - Register Owner, Master Card
 - Register upto 5 Master Cards.

3. SAFE BOX FUNCTIONS

3.1 User's Function

3.1.1 Lock

- 1) Enter password and press "LOCK", when 7 Segment blinks 3 times.
Then confirmation melody of saved password sounds and displays 'CLOS" on the 7 segment. ,
- 2) Lock the safe box by entering password only, without pressing "RESET"..
- 3) More than 5 seconds entry time lapse cancels the password input.
- 4) Pressing "RESET" during password entry cancels the input and have to retry..

- 5) Warning signal sounds and "Err2" display on the 7 Segment if the safe box is not locked successfully.

3.1.2 Unlock

- 1) Enter password and unlocked confirmation sounds and displays 'OPEN' on the 7 segment. ,
- 2) Unlock the safe box by entering password only, without pressing "RESET"..
- 3) More than 5 seconds entry time lapse cancels the password input.
- 4) Pressing "RESET" during password entry cancels the input and have to retry..
- 5) Warning signal sounds and "Err2" display on the 7 Segment if the safe box is not unlocked successfully.

3.1.3 Relock

- 1) Valid with password only
- 2) The safe box is locked with the same password previously entered by pressing "RELOCK" within the set time.
- 3) Warning sounds and display "Err2" on the 7 segment if not locked successfully.

3.1.4 Count Down

- 1) Valid with password only.
- 2) After 5 times wrong password entries, "Err1" displays and warning sounds, when the operation of the safe box is disabled until the set time and displays the time count down for 10 seconds.
- 3) Unlock with Master Card during the safe box disabled.

4. DISPLAY MESSAGE

No	7 Segment Display	Function
1	CLOS	Lock the safe box
2	OPEN	Unlock the safe box
3	bAtt	Low battery
4	SER	Operation failure or no settings
5	rtc	RTC(Real Time Clock) failure
6	Err1	Wrong password
7	Err2	Wrong operation or hardware failure
8	2910	Disabled Time Count down , e.g.) remaining time 29 minutes, 10 seconds
9	----	No display of entering password

5. EMERGENCY MEASURES

No.	Message	Checklist	Action
1	Low battery warning sound	Check "bAtt" display on Check battery power	Replace batteries
2	No power	Check battery power Check the connection between main and Front panels Check Front Keypad status	Replace batteries Connect Main and Front panels Replace Keypad
3	No password entered	Confirm Keypad operation buzzer Check connection between Main and Front panels. Check keypad Check 7 Segment display	Connect Main and Front Replace Front
4	CLOSE failure	Check battery power Check motor operation Check door, latch and stopper	Replace batteries Replace or reinstall lock device
5	OPEN failure	Check if "Err1" displays on Reconfirm password entry Check if safe box is overload. Check Motor operation	Place Master Card when forgets the password Enter password while pressing door Open with emergency battery pack Emergency break
6	Err1 display	Confirm key enter sound on. Check Keypad	Place Master Card when forgets the password Replace Front
7	Ser display		Re-set LOCK with Setup Card Replace LOCK
8	7 Segment Display smash		Replace Front
9	Operation disabled	Check Count Down display	Disabled for 30 minutes after 5 times wrong password entry and Unlock with Master Card

6. Safebox SPECIFICATION

Part	Component		Spec.	Remark
Main	MCU	CPU	8-bit Microcontroller	
		Flash	32KBytes program memory	
		RAM	2KByte SRAM	
		EEPROM	1Kbytes	
		UART	1 programmable Serial	
		Port	32 programmable I/O Lines	
	EEPROM		4kBytes, save 200 history records	
	RF Controller		13.56MHz, ISO 14443A / Mifare	
	RTC(Read Time Clock)		Year, month, date, hour, minute, second	
Front	MCU	CPU	8-bit Microcontroller	
		Flash	8KBytes program memory	
		RAM	1KByte SRAM	
		EEPROM	512Bytes	
		UART	1 programmable Serial	
		Port	23 programmable I/O Lines	
	7 Segment		4 digits	
	Keypad		12Keys (10 number Key, RESET, LOCK)	
Power	Operating Voltage		DC 4.2V (Battery 1.5V * 4)	
	Power Consumption		standby 10uA, max.280mA	

[Safety warning]

There is danger of explosion if the battery is inserted reversely.

Power source: AA 1.5 V, 4 alkaline batteries are used.

FCC Part 15 Class B 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 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.

FCC Information for User

The user's manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.