SHP-DS700

Samsung SDS Door Lock
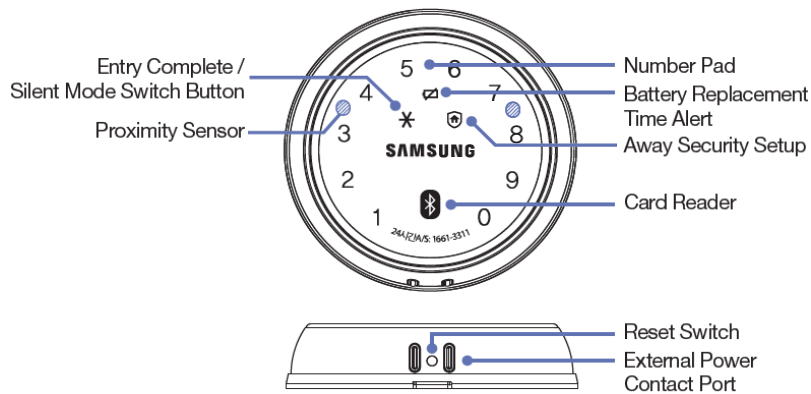
User and Reference Guide

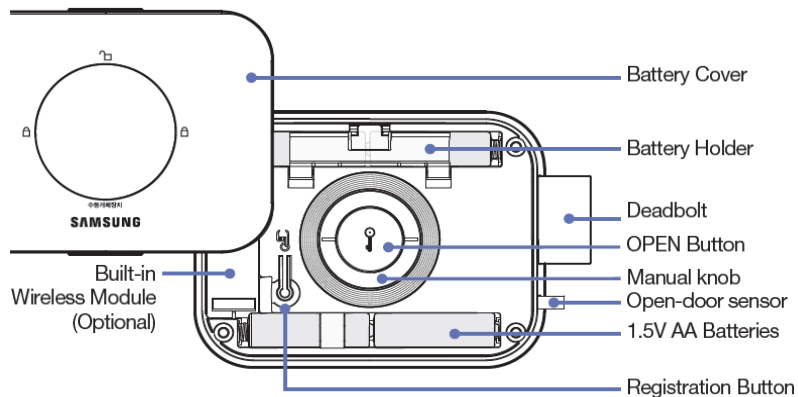**Ver1.0.0**

■ Product Specifications

Item		Spec.
Size	Exterior Unit	41mm (W) X 41mm(H) X 9.5mm(D)
	Interior Unit	70mm (W) X 53mm(H) X 22mm(D)
Voltage		AA Alkaline 1.5V Batteries (LR6) 4EA (6V)
Emergency Power Source		9V Battery(6LF22) (Separately sold)
Battery Life		10 Months (based on an average of 10 uses per day with a wireless module not mounted)
Support Card Standard		ISO14443A (Mifare®)

■ Exterior Parts

■ Interior Parts

The Samsung SDS Z-Wave Door Lock is a security enabled Z-Wave Plus product that is able to use encrypted Z-Wave Plus messages to communicate to other security enable Z-Wave Plus products.

The Samsung SDS Z-Wave Door Lock must be used in conjunction with a Security Enabled Z-Wave Controller in other to fully utilize all implemented functions.

The Samsung SDS Z-Wave Door Lock can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

Z-Wave Specifications

- Device Type   :   Door Lock – Keypad (SPECIFIC_TYPE_SECURE_KEYPAD_DOOR_LOCK)
- Role Type   :   LSS (Listening Sleeping Slave)
- Command Class Support/Control

      Mandatory CC support :

- ○ Z-Wave plus info (MUST be place first in NIF) – (V2)
- ○ Manufacturer Specific (V2)
- ○ Security (V1)
- ○ Device Reset Locally (V1)
- ○ Battery (V1)
- ○ Power Level (V1)
- ○ Version (V2)
- ○ Door Lock (V2)
- ○ User Code (V1)
- ○ Association (V2)
- ○ Association Group Information (V1)

      Recommended CC support

- Notification (V4)
- Configuration (V1)
- Firmware update meta data (V2)
- Schedule Entry Lock (V3)
- Time Parameters (V1)
- Time (V2)

- Z-Wave plus info (V2)

  - Z-Wave Plus Version : 02

  - Role Type : LSS (Listening Sleeping Slave)

  - Node Type : Z-Wave Plus Node

- Manufacturer Specific (V2)

  - Device ID Type : 01(Serial Number)

  - Device ID Data Format : 01 (Binary)

  - Device ID Data Length Indicator : 16

  - Device ID : XX XX XX XX XX XX XX XX XX XX XX XX XX XX XX XX

- Version (V2)

  - Z-Wave Protocol Library Type : 03

  - Z-Wave Protocol Version : 04

  - Z-Wave Protocol Sub Version : 05

  - Firmware 0 Version : 01

  - Firmware 0 Sub Version : 03

  - Hardware Version : 01

- Door Lock (V2)

  - support Unsecure(0x00), Secure(0xFF)

    Note : When using 'Operation_Set' command, lock will execute 'Unsecure(0x00)' then perform 'Auto Re-lock' if door is not open.

    When using 'Operation_Get' command, lock can response after executing 'Operation_Set' command. (take about 2 seconds)

- User Code (V1)

  - Lock will accept maximum 30 pin codes that are 4-10 digits in length.

    ① Supported Users : 30

    ② User Type : Number, Card (Key Tag)

      · Card (Key Tag) : Cannot be registered through Z-Wave

    ③ ID Range

      · Number : 1 ~ 30

· Card (Key Tag) : 1 ~ 20

· Bluetooth : 21 ~ 30

- Association (V2) & Association Group Information (V1)

  - Lifeline between controller and SHP-DS700

  - Supported command classes

    : Battery report, Notification report, and Device Reset Locally notification

  - Maximum supported node is 1EA

- Notification (V4)

Notification Type	Event	Event Parameter
Access Control (0x06)	Manual Lock Operation (0x01)	
	Manual Unlock Operation (0x02)	
	RF Lock Operation (0x03)	
	RF Unlock Operation (0x04)	
	Keypad Unlock Operation (0x06)	User ID
	RF Not Fully Locked Operation (0x08)	
	Auto Lock Loced Operation (0x09)	
	Auto Lock Not Fully Operation (0x0A)	
	Lock Jammed (0x0B)	
	All user codes deleted (0x0C)	
	Single user code deleted (0x0D)	
	New user code added (0x0E)	
	New user code not added due to duplicate code (0x0F)	
	New Program code Entered - Unique code for lock configuration (0x12)	
Home Security (0x07)	Intrusion, Unkown Location (0x02)	
	Tampering, Invalid Code (0x04)	

	Motion Detection, Unknown Location (0x08)	
Emergency (0x0A)	Contact Police (0x01)	
	Contact Fire Service (0x02)	

- Configuration (V1)

Name	Parameter Number	Size	Value	Description
Security Function	0x01	1byte	0x00	Disable (Default)
			0x01	Enable
			0x02	System Disable[1]
			0x03	System Enable[1]
			0x04	Request for Enable[1]
			0x05	Fail[1]
Privacy Mode	0x02	1byte	0x00	Disable (Default)
			0x01	Enable
Registered User ID	0x03	1byte	1 ~130	The number of registered user codes.[2]
Platform	0x0A	1byte	0x00	Common (Default)
			0x01	Samsung SDS[3]

[1] This value can be used when the device is connected with platform of Samsung SDS.

This function is not related to Z-Wave CC.

- 0x02 : Command for disable which is set by platform of Samsung SDS.

After setting, if you try to get value of Security Function , '0x00' will be reported.

- 0x03 : Command for enable which is set by platform of Samsung SDS.

After setting, if you try to get value of Security Function, '0x01' will be reported.

- 0x04 : 'Request for Enable' command which is reported by Doorlock. This cannot be set.

(8th function in manual)

- 0x05 : If the request for 'Request for Enable' command is failed in platform,

this will be set by platform of Samsung SDS.

Value of Security Function is not changed by this command.

[2] This parameter is supported to 'Configuration Get Command' only.

[3] This value set by platform after device connected with platform of Samsung SDS.

- Firmware update meta data (V2)

    - Manufacturer ID : 0x022E (Samsung SDS)

- Schedule Entry Lock (V3)

    - Supported the Number of Slots Week Day : 0

    - Supported the Number of Slots Year Day : 0

    - Supported the Number of Slots Daily Repeating : 30

Glossary

Device or Node	Devices and nodes are all terms to describe an individual Z-Wave device. These are all interchangeable when setting up your Z-Wave network
Unsecure / Unsecured	Unlock / Unlocked
Secure / Secured	Lock / Locked
Inclusion	Add a Z-Wave device to the network
Exclusion	Delete a Z-Wave device from the network
Z-Wave Network	A collection of Z-Wave devices is controlled by primary and secondary controllers operating on the same system. A Z-Wave network has its own unique ID code so that controllers not in the network cannot control the system.
Association	Association is used to organize nodes in different groups allowing the device to identify the nodes by a group identifier. The groups can also be copied to other devices.

Note : Pressing the [REG] button is only available while the door is open. (Deadbolt must be unsecured.)

■ Basic Functions

1. Factory Reset

All registered Master/User data will be deleted, and Master PIN Code is set to '1234'. Also Z-Wave Door Lock is being removed from a network.

① Press the [REG] button for 3 seconds. (Ding dong -> Ding ding)

② Press the [*] button after pressing the [4567890123] button.

(Success : Ding dong dang, Fail : Ding dong Ding dong)

※ Use this procedure only in the event that the network primary controller is missing or otherwise inoperable.

2. Changing the Master PIN Code

You can enter only one Master PIN Code. If changing the Master PIN code, All User PIN Codes are deleted.

① Press the [REG] button. (Ding dong)

② Enter the new Master PIN Code, and press the [*] button.(4~12digits) (Ding dong dang)

3. Registering a User Card

You can register up to 20 User Card. (Supproted ISO14443 A Type)

To register multiple cards, lightly place another card to the card reader within 20 seconds after registering the previous card. Also you can add card later after completing registration.

① Press the [REG] button. (Ding dong)

② Place the card to be registered on the card reader of the exterior body.(Ding dong dang)

③ Place the card on the card reader for the addtional registration or press the [REG] button to quit.

4. Registering a Bluetooth

① Press the [REG] button. (Ding dong)

② Enter the [88] + [*]   (Ding dong)

③ Enter the Password + [*] (Ding dong deng → Ding ding)

④ Check a pairing number from Smart Door Lock App of smartphone.

   (First, please install the Smart Door Lock app in the smart phone.)

⑤ Enter a Pairing number + [*] (Ding dong deng)

5. Inclusion / Exclusion into(from) Z-Wave Network

5.1 Inclusion into Z-Wave Network

① Click [Add] icon in Z-Wave PC Conroller Program.

② Press the [REG] button for 3 seconds. (Ding dong -> Ding ding)

③ Press the [*] button after pressing the [00] button.

   (Success : Ding dong dang, Fail : Ding dong Ding dong)

5.2 Exclusion from Z-Wave Network

After exclusion from Z-Wave Netwokr, it will no longer be remotely-controlled via the controller.

① Click [Remove] icon in Z-Wave PC Conroller Program.

② Press the [REG] button for 3 seconds. (Ding dong -> Ding ding)

③ Press the [*] button after pressing the [00] button.

   (Success : Ding dong dang, Fail : Ding dong Ding dong)

6. Opening the Door with a PIN Code

① Touch the [Number Pad].

② Enter the PIN Code and press the [*] button.

③ The door opens whitin one second.

7. Opening the Door with a Card

① Place the Card on the Card Reader.

② The door opens whithin one second.

8. Opening the Door with a Bluetooth

① Access the door lock from the outside or touch its number pad.

② The number pad will light up.

③ Push message is sent to smartphone through Bluetooth.

④ Press the icon of push message (from smartphone)

⑤ Then push the door handle to open the door.

■ Addtional Function

9. Activation/Deactivation of the Bluetooth Mode

After the Bluetooth mode is activated, accessing the door lock from the outside or touching its number pad can authenticate the registered Bluetooth smartphone to open the door.

The Bluetooth mode is activated by default.

① Open the battery cover, and press the [REG] button shortly..

② Press the [11] or [00] button and the [*] button to activate or deactivate the Bluetooth mode.

[11] button: Activate the Bluetooth mode.

[00] button: Deactivate the Bluetooth mode.

10. Privacy Mode Function

Press and hold the [OPEN] button for more than three seconds. (Ding dong dang)

As it is set from the inside, provides a secure lock for the convenience of the occupant(s). When the privacy mode function is activated, the door cannot be unlocked(unsecured) from the outside, so please be careful.

11. Setting the Security Function

This is a function to prevent any intrusion while you are out. Should the door be opend from the inside while the intrusion prevention function is on, the emergency alert light will flash and the alarm will make "beep beep beep~" sound.

① When the door is closed [] of the exterior body's number pad will light up.

② Press the [] button on the exterior body within 3 seconds while the door is locked. (Ding dong dang)

12. Lockout Mode

When more than 5 failed authentication attempts with unregistered PIN Code/Cards occur, the alarm sound is generated, and the lock is deactivated for 3 minutes.

13. Intrusion Detection Function

When the Interior Unit is forcibly detached while the door is locked, it is detected by the door open/close sensor, the alarm sounds. The Intrution Detection function is a basic function and cannot be disabled.

14. Sound Setting

The sound that is generated when the number buttons are pressed, when the door is locked or when the locked door is unloced, can be set according to the user's preference.

① Press the [REG] button. (Ding dong)

② Enter the Code, and press the [*] button. (Ding dong dang)

[31] + [*] : Mute,   [32] + [*] : Normal,   [33] + [*] : Loud

15. Addtional Function Mode

```
            Welcome Function
 ┌──────┐  ──────────────────────→  ┌───┐
 │ REG. │                           │ 1 │  ON
 └──────┘                           └───┘
                                    ┌───┐
                                    │ 2 │  No Alarm ON
                                    └───┘
                                    ┌───┐
                                    │ 3 │  OFF
                                    └───┘

            Double Authorization
           ──────────────────────→  ┌───┐
                                    │ 4 │  ON
                                    └───┘
                                    ┌───┐
                                    │ 6 │  OFF
                                    └───┘

            Multi-leveled Security
            Code
           ──────────────────────→  ┌───┐
                                    │ 7 │  ON
                                    └───┘
                                    ┌───┐
                                    │ 9 │  OFF
                                    └───┘

            Lock Time
           ──────────────────────→  ┌───┐      ┌─────┐
                                    │ 5 │  →   │ 1~9 │
                                    └───┘      └─────┘

            Auto/Manual Locking
           ──────────────────────→  ┌────┐
                                    │ 21 │  Auto
                                    └────┘
                                    ┌────┐
                                    │ 22 │  Manual
                                    └────┘
```