PSK01 Smart Keypad

The PSK01 support Z-Wave™ Multi-Functions Smart Switch to report key status and setup Arm/ Disarm.
This product can be included and operated in any Z-Wave™ network with other Z-Wave™ certified devices from other manufacturers and/or other applications.
The devices Built-in rechargeable Lithium-ion battery and using DC 5V(Micro USB) charge.

CAUTION

– replacement of a battery with an incorrect type that can defeat a safeguard (for example, in the case of some lithium battery types);

– disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, that can result in an explosion;

– leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas;

– a battery subjected to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas

The marking information is located at the bottom of the apparatus.

Specification

Rated Voltage (rechargeable Lithium-ion battery)	DC3.7V~4.2V
Rated Voltage (Micro USB)	DC5V / 1A
Operating Temperature	0°C - 40°C (85% humidity)
Storage Temperature	-20 C - 60°C
Location	IP44 (indoor and outdoor)
RF Range (distance)	Minimum 40M in door and 100M in outdoor, line of sight

Frequency Range	868.40 MHz, 869.85 MHz (EU) 908.40 MHz, 916.00 MHz (US) 920.9MHz, 921.7MHz, 923.1MHz (TW/KR/Thai/SG)
RF Maximum Power	+5dBm

** Specifications are subject to change and improvement without notice.

Troubleshooting

Symptom	Cause of Failure	Recommendation
The device can not work	Battery is running out of power	Charging the battery by Micro USB.
The device can not join to Z-Wave network	The device may in a Z-Wave network.	Exclude the device then include again.
Button no response	The button will no response when LED is flashing.	Wait for the LED go out and try again.

For Instruction to http:// www.philio-tech.com

Keypad function list

- Multi-Functions Smart Switch to control door lock or other Z-Wave device
- Wireless 500 series Z-Wave module inside
- Leading Code Function
- Invisible Antenna design with good RF range
- Support Security 2 Function
- Beautiful touch panel, changeable white/black color panel
- Built-in rechargeable Lithium-ion battery
- Low battery LED indicator and report to Controller
- Enable and Disable button (programmed with sensors)
- Support 30 sets of user code to unlock door
- Green and Blue LED Indicator on the periphery
- Blue and Green LED Indicator on the buttons
- Long Battery life up to six months

Starting up the device for the first time

The device can not work normally at the first time. Please provide a 5 DC voltage through Micro USB Port to wake the device up before the first using. After the device is activated by connecting to micro USB, the device will start charging and LED will light on with blue color. If the battery is full charged, LED will turn off

Battery Power Check

When any keys around the central key is pressed, the device will check the battery power. If the power level is too low, the Buzzer can beep 3 times. Please charge the device through micro USB immediately.

PSK01 Two KEYPAD Mode

1. Entry Control mode: Need to enter User code in order to go to setting mode.
Entry Control mode: Button LED color is green.

*Tips: If Z-Wave configuration1 being set as 2: Central Scene mode, user can press more than 3 seconds, and it will change to Central Scene mode.

*If Z-Wave configuration3 being set as 1:RAND ON
Whenever PSK01 wakes up from sleeping, no more than four digits of random keys will light on. Users have to press those random keys one by one, and it will go to Entry Control mode.

2. Central Scene mode: Users don't need to enter User code in order to enter setting mode.
Central Scene mode: Button LED color is blue.

*if users want to use Central Scene with Z-wave, need to being in Central Scene mode

*Tips: Users can press 9 and 0 more than 5 seconds, then

mode will change to Entry control mode.

Charging LED Indication

1. In charging period, edge LED will be on as blue light.
2. When charging is finished, edge LED will be off.
3. Edge LED will be on as green light when device is powered by battery.
4. Low battery status will be flashed blue light.

Cut off battery power:

1. Remove USB power when "Entry Control Mode"
2. Press and hold keypad "0"
3. Input USB power then remove it instantly
4. After notice beeps finished, release keypad "0"

PC (Programming code): default is (0000)
UC (User code): default is (1234)
ENTER PC: type 0000(default) then type ENTER

Manual control (Entry Control mode)

Manual control (Entry Control mode)	
function	**description**
Add Programming code default (0000)	1.**ENTER PC** 2. Enter  3.type new PC then type  *code length is 4~10 digit (default programming code is 0000) ex: type 0000 then enter then type 4 then type new programming code
Add User code default (1234)	1.**ENTER PC** 2. Enter  3.type new User code then Enter  *code length is 4~10 digit (default programming code is 0000) ex: type 0000 then enter then type 1 then type new user code
remove User code	1.**ENTER PC** 2. Enter 

	3.type User code then Enter *code length is 4~10 digit (default programming code is 0000) ex: type 0000 then enter then type 2 then type user code
reset	Method1: 1. **ENTER PC** 2. Enter (default programming code is 0000) ex: type 0000 then enter then type 9 Method2: Press tamper key 3 times in 1.5 seconds, 3 long beeps will occur after two seconds to notice reset succeed.
Tamper Alarm	When tamper key been pressed over 10 seconds, tamper alarm will be triggered when tamper key released.

Z-Wave Function

ENTER PC : type 0000(default) **then type ENTER**

function	**description**
Add	1. Have Z-Wave™ Controller entered inclusion mode. 2. .**ENTER PC** then 3. After add successful, the device buzzer will beep twice (default programming code is 0000) ex: type 0000 then enter then type 1 & 0
Remove	1. Have Z-Wave™ Controller entered exclusion mode. 2. **ENTER PC** then 3. After remove successful, the device buzzer will beep twice (default programming code is 0000) ex: type 0000 then enter then type 1 & 0
Reset	1.Press the Restore function in page 2 (reset) 2.Device can send reset locally notification
Add user code	1. Z-Wave™ Controller use Command Class User Code 2. Use Command User Code Set 3. Set User code ID, User code Status, User code

	note: User code ID range is 1~30, User code Status 0x01, User code length is 4~10,
Remove user code	1. Z-Wave™ Controller use Command Class User Code 2. Use Command User Code Set 3. Set User code ID, User code Status, User code note: User code ID range is 1~30, User code Status 0x00, User code length is 4~10
Notification	1.type user code then can send Alarm report 2.Behind the panel it have a tamper key if Disassembly the pad, and release tamper key it can send tamper report
association	The device support one group, group one is for receiving the report message, like 1.Reset 2.Scene report 3.alarm report 4.low battery One group support 5 nodes maximum.
Smart start	1.Product has a DSK string, you can key in first five digit to increment smart start process, or you can scan QR code. Ex: mydsk 10209-46687-52248-13629-04783-07465-15776-56519 2.SmartStart enabled products can be added into a Z-Wave network by scanning the Z-Wave QR
	Code present on the product providing SmartStart inclusion. No further action is required and the SmartStart product will be added automatically within 10 minutes of minutes On in the network vicinity

Entry Control Function

DisArm mode set	1. Make sure keypad in Entry Control mode 2. enter user code then ENTER 3. Keypad will send disarm report, And change to Central Scene mode.
Arm mode set	1. Make sure keypad in Entry Control mode 2. enter 🔒 3. Keypad will send arm report

Central Scene Function

Central Scene report	1.Make sure keypad in Central Scene mode or already type user code. 2.Press 1 or 2 times in 2 sec. or hold on for 2 sec. or release any one of key.

Z-Wave configuration

NO	Name	Def	Valid	description
1	Set KEYPAD mode	2	1~2	1: Entry Control mode 2: Central Scene mode
2	BUZZER	1	0~1	1:BUZZER ON 0:BUZZER OFF
3	RAND MODE	0	0~1	1:RAND ON 0:RAND OFF
4	TOUCH SLEEP	1	0~1	1:TOUCH SLEEP 0:TOUCH NO SLEEP
5	Auto report time tick	30	0~255	Define the time scale for automatic report. This setting will affect Configuration No. 6, the default is 30 minutes Note: Set to 0 to turn off the automatic report function
6	Battery report	12	0~255	The interval time for automatic battery report, 0 means to turn off this function, the default value is 12 scales, the time of each scale
				Can be set by Config No.5

Notice 1: Always remove a Z-Wave device before trying to add it to a Z-Wave network.

Notice 2: This product can be operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network..

Over The Air Firmware Update

The device support the Z-Wave firmware update via OTA.
Let the Z-Wave™ Controller into the firmware update mode, chose the hex file to update. Wait for 10~15 minutes.
At that time, ***please don't remove the battery***, otherwise it will cause the firmware broken, and the device will no function.
Result will show in Z-Wave™ Controller log.

Z-Wave Supported Command Class

Command Class	Version	Required Security Class
Z-Wave Plus Info	2	None
Version	3	Highest granted Security Class

Manufacturer Specific	2	Highest granted Security Class
Security 2	1	None
Device Reset Locally	1	Highest granted Security Class
Association	2	Highest granted Security Class
Association Group Information	1	Highest granted Security Class
Powerlevel	1	Highest granted Security Class
Configuration	1	Highest granted Security Class
Notification	8	Highest granted Security Class
Firmware Update Meta Data	4	Highest granted Security Class
Supervision	1	None
Transport Service	2	None
Entry Control	1	Highest granted Security Class
Central Scene	3	Highest granted Security Class
Battery	1	Highest granted Security Class
User Code	1	Highest granted Security Class
Multi Channel Association	3	Highest granted Security Class

Installation steps

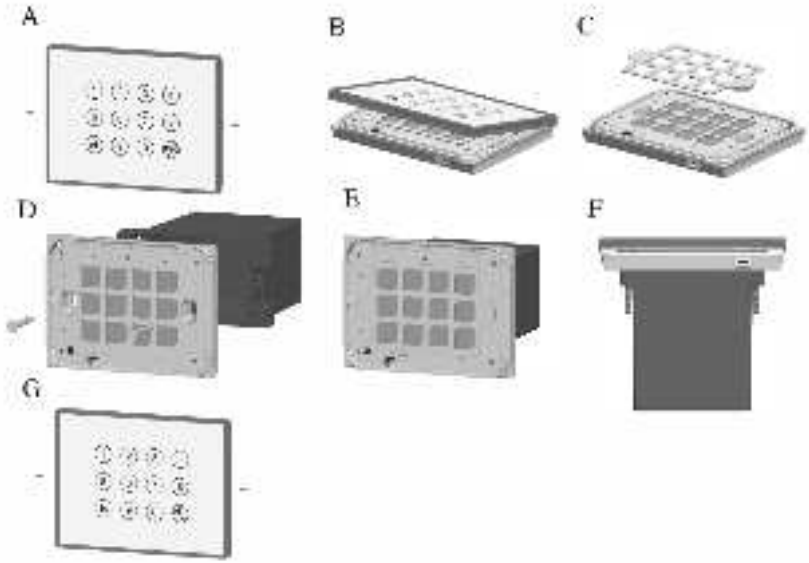
A. Mount the bracket to the rear of the body first.
B. Remove the double-sided adhesive release paper on the bracket and stick it on the wall surface.
C. Push up the PSK01 and remove it. If necessary, lock it.

Screw up, you can take the opposite way of PSK01

How to use the table
Insert the back frame into the screw hole at the rear of the PSK01 to stand at the table.

Install the PSK01 body to the WALL BOX

A. Remove the screws on the left and right sides of the panel
B. Use two removal holes to remove the panel
C. Remove the screw cover
D. Install the PSK01 body to the WALL BOX and lock the screws.
E. Install the screw cover back
F. Install the outer frame. When installing, pay attention to the parallel connection between the panel and the body to prevent the O-ring from coming out.
G. Lock back panel screws



Tamper Switch

If the tamper switch be released, the device will send the alarm report.

CAUTION
Risk of explosion if battery is replaced by an incorrect type.
Dispose of used battery according to the instructions.

Choosing a Suitable Location

1. Do not locate the Module facing direct sunlight, humid or dusty place.
2. The suitable ambient temperature for the Module is 0°C~40°C.
3. Do not locate the Module where exists combustible substances or any source of heat, e.g. fires, radiators, boiler etc.

Disposal

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

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FCC Interference Statement

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 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.

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.
FCC 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 transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.