# Ultraloq U-Bolt Pro Z-Wave

## Z-Wave Specification Manual V1.0

This smart lock is a security enabled Z-Wave Plus™ product that is capable of using encrypted Z-Wave Plus messages to communicate to other security enabled Z-Wave Plus products. It must be used in conjunction with a Security Enabled Z-Wave™ Controller in order to fully utilize all implemented functions.
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. All mains operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

The device can be included in the Z-Wave network using S0 or S2 Access Control security. Inclusion can be via standard inclusion or SmartStart.

**Z-Wave Specifications**

- Device Type :

GENERIC_TYPE_ENTRY_CONTROL (0x40)
SPECIFIC_TYPE_DOOR_LOCK (0x01)

- Role Type :

LSS (Listening Sleeping Slave)

- Command Cass Support

**Add this product into a Z-Wave network(Manually)**

**Step1**

Set the Z-Wave network main controller or hub into inclusion mode.

**Step2**

Press the button 5 on the lock keypad, until you hear beep sound and the indicator light flashes blue.
If your Z-Wave hub is Security 2 enabled and requires the Z-Wave QR code or pin code to add the lock automatically, please find it on the back of the battery cover of your smart lock.

**Step3**

Follow the instructions of your Z-Wave hub to finish the inclusion process.

**Exclude this product from a Z-Wave network(Manually)**

**Step1**

Set the Z-Wave network main controller or hub into exclusion mode.

**Step2**

Press the button 5 on the lock keypad, until you hear the beep sound and the indicator light flashes red.

**Step3**

Follow the instructions of your Z-Wave hub to finish the exclusion process.

**Add this product into a Z-Wave network(Through App)**

This process can only be done once the lock is Set up and connected in the U-tec App.

Step1

Set the Z-Wave network main controller or hub into inclusion mode.

Step2

Open the U-tec App and go to Settings, select Z-Wave Control. The App should state that “Your Ultraloq Smart Lock has not been added to a Z-Wave hub yet”.

If your lock has been added to a hub already, please follow the instructions to exclude your lock from the hub first.

Step3

Tap Add to Z-Wave hub,then follow the App instructions to start the inclusion process. If your Z-Wave hub is Security 2 enabled and requires the Z-Wave QR code or pin code to add the lock automatically, please find it on the back of the battery cover of your smart lock.

When U-tec App states that the connection is successful, please return to your hub interface to complete the setup.

**Exclude this product from a Z-Wave network(Through App)**

This process can only be done once the lock is Set up and connected in the U-tec App.

Step1

Set the Z-Wave network main controller or hub into exclusion mode.

Step2

Open U-tec App， go to Lock Settings, select Z-Wave Control ， tap Remove my lock from

Z-Wave hub, then follow the App instructions to complete the process.

**SmartStart**

SmartStart enabled products can be added into a Z-Wave network by scanning the Z-Wave QR Code present on the product with a controller providing SmartStart inclusion. No further action is required and the StartStart product will be added automatically within 10 minutes of being switched on in the network vicinity.
The DSK and QR code can be found on the back of the battery cover or on the bottom of the packaging.

**Factory Reset**

CAUTION: Resetting a Z-Wave device without notifying the hub may cause performance problems. Use this procedure only when the Z-Wave hub is missing or otherwise inoperable.

If you are using U-tec App as Owner, please click “Delete and Reset” to remove the lock from your U-tec Account, then use a Reset Needle to push the Reset Button (at the bottom of Interior Assembly) for around 3 seconds until you hear one long beep and two short beeps.

If U-Bolt Pro Z-Wave is working as Standalone Mode without the App, please use a Reset Needle to push the Reset Button (at the bottom of Interior Assembly) for around 3 seconds until you hear one long beep and two short beeps.

**Battery Information**

4 AA Alkaline 1.5V Batteries(6V)

**Supported Command Class**

Basic Command Class, Version 2
Door Lock Command Class, Version 4
User Code Command Class, Version 1
Association Command Class, Version 2
Association Group Information Command Class, Version 3
Battery Command Class, Version 1
Device Reset Locally Command Class, Version 1
Firmware Update Meta Data Command Class, Version 5
Indicator Command Class, Version 3
Manufacturer Specific Command Class, Version 1
Multi Channel Association Command Class, Version 3
Version Command Class, Version 2

Z-Wave Plus Info Command Class, Version 2
Security 0 Command Class, Version 1
Security 2 Command Class, Version 1
Supervision Command Class, Version 1
Transport Service Command Class, Version 2
Powerlevel Command Class, Version 1

**Association Group Information**

The product supports one association groups:
Group 1 is the Lifeline group. It can contain up to 5 nodes. The Lifeline group on this lock is used to report door lock operation report, battery lever and device reset locally notifications to nodes on the group list.

**Door Lock(V4)**

Door Lock Operation is used to lock and unlock this product.
1) To Lock : Sending command class = COMMAND_CLASS_DOOR_LOCK, command DOOR_LOCK_OPERATION_SET, mode = 0xFF (DOOR_SECURED) or BASIC_SET value 0xFF will lock the door. Notification Type Access Control, Event 0x03 (RF lock operation) is sent to the Lifeline and then one second later, a Door Lock Operation Report is sent to the Lifeline.
2) To Unlock: Sending command class = COMMAND_CLASS_DOOR_LOCK, command = DOOR_LOCK_OPERATION_SET, mode = 0x00 (DOOR_UNSECURED) or BASIC_SET value 0x00 will unlock the door. Notification Type Access Control, Event 0x04 (RF unlock operation) is sent to the Lifeline and then one second later, a Door Lock Operation Report is sent to the Lifeline.

See table to see how the Door Lock Mode parameter affects the lock.

| | Secured | Unsecured |
|---|---|---|
| Door Lock Mode | 0xFF | 0x00 |

In a Door Lock Operation Report U-Bolt Pro Z-Wave will report.

| Door Status | | Unlocked | Locked |
|---|---|---|---|
| Door Lock Mode | | 0x00 | 0xFF |
| Handles | | 0x00 | 0x00 |
| Door Condition | Bit 0 : Door | 0 : Open, 1 : Close | |
| | Bit 1 : Deadbolt | 0 : Locked, 1 : Unlocked | |
| Lock Timeout Minutes | | 0xFE | |
| Lock Timeout Seconds | | 0xFE | |
| | | | |

**Firmware Update Meta Data(V5)**

U-Bolt Pro Z-Wave supports firmware update of the Z-Wave module over the air. The firmware upgrade takes ~20 min with S0 and ~20 min with S2
Firmware ID = 0x0102.
Firmware 0 ID = 0x0101.

**Manufacture Specific(V1)**

| | Value | Comment |
|---|---|---|
| Manufacturer ID | 0x0452 | U-tec Group Inc. |
| Product Type ID | 0x0004 | U-Bolt Pro Z-Wave |
| Product ID | 0x0001 | DoorLockKeyPad |

**Power Level(V1)**
Can be used under inclusion to test signal strength from the controller and to the device.
**Security 0(V1)**
See Z-Wave documentation.
**Security 2(V1)**
This product support S2_ACCESS security class.
**Supervision(V1)**
See Z-Wave documentation.
**Transport Service(V2)**
See Z-Wave documentation.
**User Code(V1)**
Lock will accept maximum 60 pin codes that has 4-10 digits in length.
Support Users :60
ID Range : 1 ~ 60
**Version(V2)**
This command Class is used to get information about which version of the different command classes the U-Bolt Pro Z-Wave supports and the software version of the U-Bolt Pro Z-Wave.

| Version Report | |
|---|---|
| Z-Wave Library Type | ZW_LIB_SLAVE_ENHANCED(0x03) |
| Z-Wave Protocol Version | 0x07 (SDK v7.14.03) |
| Z-Wave Protocol Sub Version | 0x0E (SDK v7.14.03) |

1) Firmware 0 Version
Version of the firmware on the Z-Wave module

| Version | Subversion | Comments |
|---|---|---|
| 1 | 0 | First Release |

2) Firmware 1 Version

Version of the firmware on the Host

| Version | Subversion | Comments |
|---|---|---|
| 1 | 0 | First Release |

3) Hardware Version

| | |
|---|---|
| 0x01 | U-Bolt Pro Z-Wave |

**Z-Wave Plus Info(V2)**

| Z-WAVE Plus Info | |
|---|---|
| Role Type | 0x07 ROLE_TYPE_SLAVE_SLEEPING_LISTENING |
| Node Type | 0x00 NODE_TYPE_ZWAVEPLUS_NODE |
| Icon Type | 0x0300<br>ICON_TYPE_GENERIC_DOOR_LOCK_KEYPAD |
| User Icon Type | 0x0300<br>ICON_TYPE_GENERIC_DOOR_LOCK_KEYPAD |

**Product Wake up**

1. Touch the keypad on outdoor body.
2. Turn the knob on Indoor body.
3. Touch unlock button in the U-tec App

**Configuration Parameters**

None