

LTA-ML Product Manual

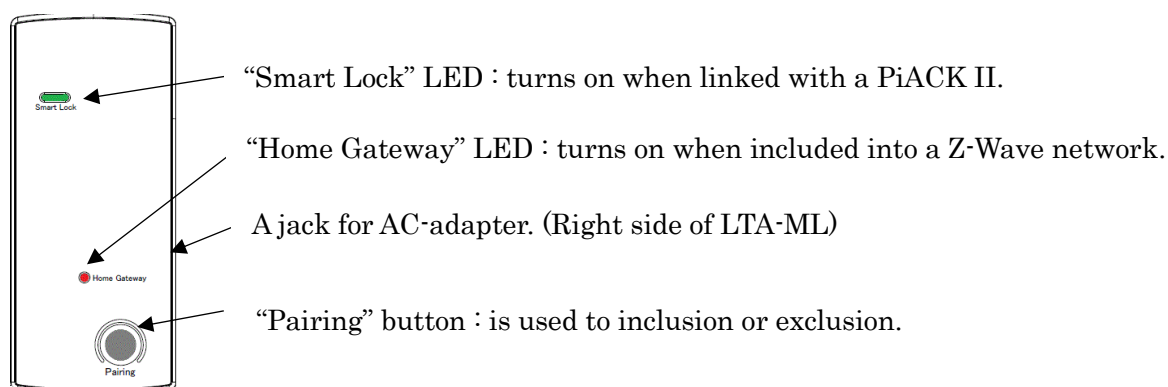
Features:

The LTA-ML is a smart lock communication device which bridges Z-Wave controller/gateway to smart lock PiACK II.

This device must be used in conjunction with a Security Enabled Z-Wave Controller in order to fully utilize all implemented functions.

※PiACK II, which is smart lock working with batteries, has BLE interface to communicate with LTA-ML or door sensor and is manufactured by MIWA LOCK CO., LTD.

Outlook



Z-Wave add/inclusion and remove/exclusion.

To add or include the LTA-ML into a Z-Wave network:

After installing LTA-ML near the PiACK II, and then connecting to the AC Adapter which is included in the same package:

1. Set the controller in inclusion mode.
2. Push the "pairing" button once.
3. Wait 5 seconds.
4. Confirm the "Home Gateway" LED of the front panel is on.

To remove or exclude the LTA-ML from a Z-Wave network:

1. Set the controller in exclusion mode.
2. Push the "pairing" button 3 times.
3. Confirm the "Home Gateway" LED of the front panel is off.

Factory default reset

To factory reset the LTA-ML:

1. Confirm the LTA-ML has been already included into a Z-Wave network.
2. Remove the AC adapter's plug and turn off the LTA-ML.
3. Set the AC adapter's plug again and wait more than 15 seconds but no longer than 75 seconds.
4. Push the "pairing" button for 10 seconds and the "Home Gateway" LED turns off.

※Please use this procedure only when the primary controller is missing or otherwise inoperable.

Contents in a package

LTA-ML adapter

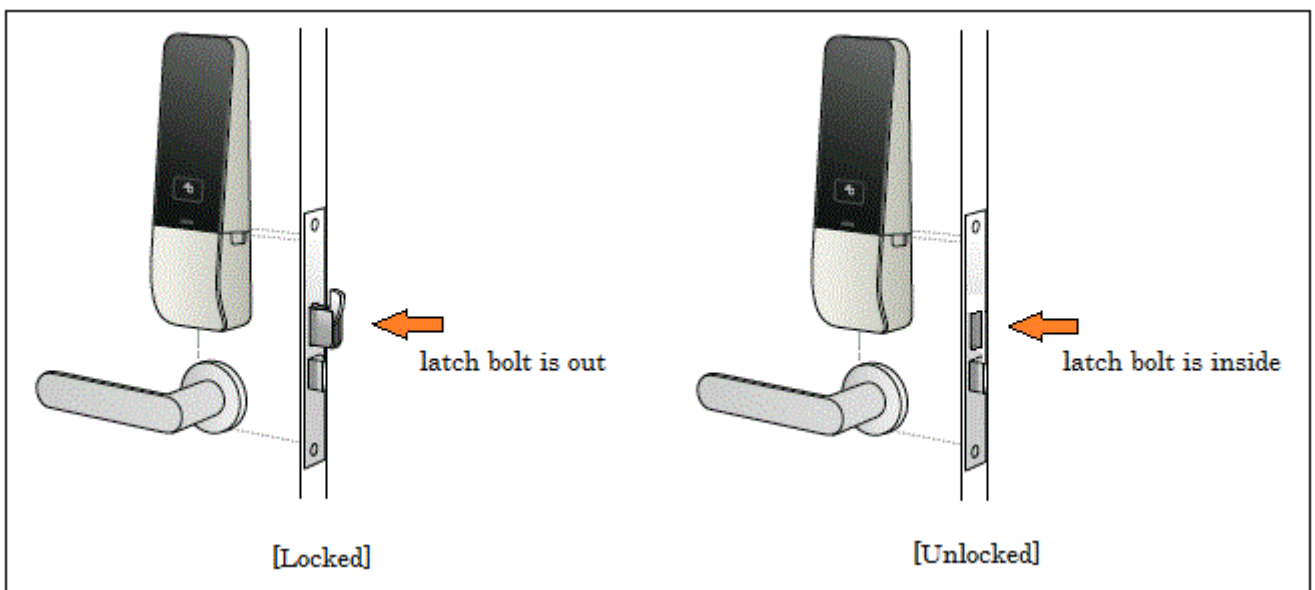
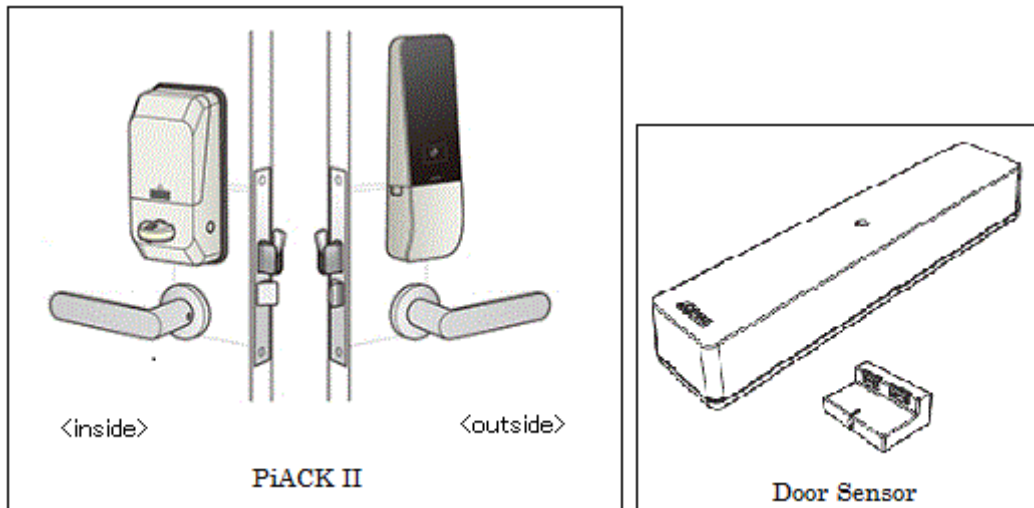
AC adapter

Manual

Other parts

LTA-ML works with optionally available PiACK II.

Door sensor is also optional to check door opening and closing.



Library Type

Library Type	Identifiers
Enhanced 232 Slave	ZW_LIB_SLAVE_ENHANCED

Role Type

Role Type	Identifiers
Always On Slave (AOS)	ROLE_TYPE_SLAVE_ALWAYS_ON

Node Type

Node Type	Identifiers
Z-Wave Plus Node	NODE_TYPE_ZWAVEPLUS_NODE

Icon Type

Icon Type	Identifiers
Door Lock Keypad	ICON_TYPE_GENERIC_DOOR_LOCK_KEYPAD

User Icon Type

Icon Type	Identifiers
Door Lock Keypad	ICON_TYPE_GENERIC_DOOR_LOCK_KEYPAD

Basic Device Class

Basic Device Class	Identifiers
Node is a slave	BASIC_TYPE_SLAVE

Generic Device Class

Generic Device Class	Identifiers
Entry Control	GENERIC_TYPE_ENTRY_CONTROL

Specific Device Class

Specific Device Class	Identifiers
Secure Keypad Door Lock	SPECIFIC_TYPE_SECURE_KEYPAD_DOOR_LOCK

Basic Command Class Implementation

Basic Command Class is not supported.

Support Command Classes

Command Class	Version	Not added	Non-Secure added	Securely added	
				Non-Secure CC	Secure CC
Z-Wave Plus Info	2	Support	Support	Support	-
Transport Service	2	Support	Support	Support	-
Security 0	1	Support	Support	Support	-
Security 2	1	Support	Support	Support	-
Supervision	1	Support	Support	Support	-
Application Status	1	Support	Support	Support	Support
Association	2	-	-	-	Support
Association Group Information	1	-	-	-	Support
Device Reset Locally	1	-	-	-	Support
Battery	1	-	-	-	Support
Door Lock	2	-	-	-	Support
Notification	8	-	-	-	Support
Manufacturer Specific	2	-	-	-	Support
Power level	1	-	-	-	Support
Version	3	-	-	-	Support

Z-Wave Plus Info Command Class

Z-Wave Plus Info Report Command Parameters

Parameter	Value	Description
Z-Wave Plus Version	0x02	Version.2
Role Type	0x05	Always On Slave
Node Type	0x00	Z-Wave Plus Node
Installer Icon Type	0x0300	Door Lock Keypad
User Icon Type	0x0300	Door Lock Keypad

Security 2 Command Class

S2 Access Control Security Class is supported.

Association Group Information Command Class

ID	Name	Node Count	Command/Timing
1	Lifeline	1	• Battery Report : triggered upon the report from PiACK II. • Door Lock Operation Report : triggered upon the report from PiACK II. • Door Lock Configuration Report : when received a Door Lock Configuration Set Command. It is read-only and cannot be changed. • Device Reset Locally Notification : when the device has reset by manual operation. • Notification Report : • When received the lock status “unknown” from PiACK II. • When received the door status from PiACK II. • When LTA-ML detected that it cannot communicate with PiACK II.

Notification Command Class

When received the lock status “unknown” from PiACK II

Parameter	Value	Description
V1 Alarm Type	0x00	V1 Alarm No Supported
V1 Alarm Level	0x00	V1 Alarm No Supported
Notification Status	0xFF	Unsolicited transmissions Enabled
Notification Type	0x06	Access Control
Notification Event / State	0xFE	Unknown event/state
Sequence	0x00	“Sequence Number” field None
Event / State Parameters Length	0x00	“Event / State Parameter” field None

When received the door status from PiACK II

Parameter	Door Status／Value			Description
	Open	Close	Unknown	
V1 Alarm Type	0x00			V1 Alarm No Supported
V1 Alarm Level	0x00			V1 Alarm No Supported
Notification Status	0xFF			Unsolicited transmissions Enabled
Notification Type	0x06			Access Control
Notification Event / State	0x00		0x49	[Open] State Idle Window/door is open [Close] State Idle Window/door is closed [Unknown] Barrier sensor not detected / supervisory error
	0x16	0x17		
Sequence	0x00			“Sequence Number” field None
Event / State Parameters Length	0x01		0x01	[Open or Close] • State Idle : “Event / State Parameter” field 1byte • Window/door is open : “Event / State Parameter” field None [Unknown] “Event / State Parameter” field 1byte
	0x00			
Event /State Parameter 1	0x49		0x00	[Open or Close] Barrier sensor not detected / supervisory error [Unknown] Sensor not defined
	-			

※PiACK II sends its door status when the lock status has changed. In case the door status has changed but the lock status keeps the same condition, this information is NOT sent to the controller.

When LTA-ML detected that it cannot communicate with PiACK II

Parameter	Communication Err Status/Value		Description
	Occur	Recover	
V1 Alarm Type	0x00		V1 Alarm No Supported
V1 Alarm Level	0x00		V1 Alarm No Supported
Notification Status	0xFF		Unsolicited transmissions Enabled
Notification Type	0x09		System
Notification Event / State	0x01	0x00	[Occur] System hardware failure [Recover] State Idle
Sequence	0x00		“Sequence Number” field None
Event / State Parameters Length	0x00	0x01	[Occur] “Event / State Parameter” field None [Recover] “Event / State Parameter” field 1byte
Event /State Parameter 1	-	0x01	System hardware failure

Door Lock Command Class

Door Lock Operation Set Command

Parameter	Value	Description	Remarks
Door Lock Mode	0x00	Door Unsecured	
	0xFF	Door Secured	

Door Lock Operation Report Command

Parameter	Door Lock Status/Value			Description
	Unknown	Unlocked	Locked	
Door Lock Mode	0xFE	0x00	0xFF	
Outside/Inside Door Handles Mode	0x00			Outside/Inside Door Handle All Disabled
Door Condition	0x00			No Support
Lock Timeout Minutes	0xFE			No Unlocked Period
Lock Timeout Seconds	0xFE			No Unlocked Period

Door Lock Configuration Set/Report Command Parameters

Parameter	Value	Description
Operation Type	0x01	Constant operation
Outside/Inside Door Handles Mode	0x00	Outside/Inside Door Handle All Disabled
Lock Timeout Minutes	0xFE	No Unlocked Period
Lock Timeout Seconds	0xFE	No Unlocked Period

Manufacturer Specific Command Class

Parameter	Value	Description
Manufacture ID	0x0412	
Product Type ID	0x0001	
Product ID	0x0001	

Version Command Class

Parameter	Value	Description
Protocol Library Version	0x03	Enhanced Slave
Protocol Version	0x06	SDK v6.81.03
Protocol Sub Version	0x04	
Firmware 0 Version	0x01	First Release
Firmware 0 Sub Version	0x00	
Hardware Version	0xFF	
Number of Firmware Targets	0x00	Z-Wave Chip Only

Devices from multiple manufacturers in one network

This product can be operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers. All non-battery operated nodes.

Controller Integration

When the LTA-ML has been included into the network, the controller should:

- Set the Lifeline. Association group 1.
- Enable Notification for Access Control.