

Z-Wave Network Management Application User Manual

Requirements

- Supported platform: Windows 7, 8, 10
- Locate CommonContoller.dll, CommonLibrary.dll, iRemoconLib.dll, LeoRemoconTool.exe in the same folder.
- iRemocon Wi-Fi (IRM-03WLA) (C/N[#51457])
- Glamo Lock (GSL-01ZW) C/N[#51346] because iRemocon is a “Dedicated Controller” for Glamo Lock.

Preparation – iRemocon + USB Z-Wave communication module (Hardware)

1. Connect Z-Wave communication module (white-box) to iRemocon USB port.
2. Connect iRemocon to your network router via Ethernet (RJ45). iRemocon requires IP address from a router (DHCP server).

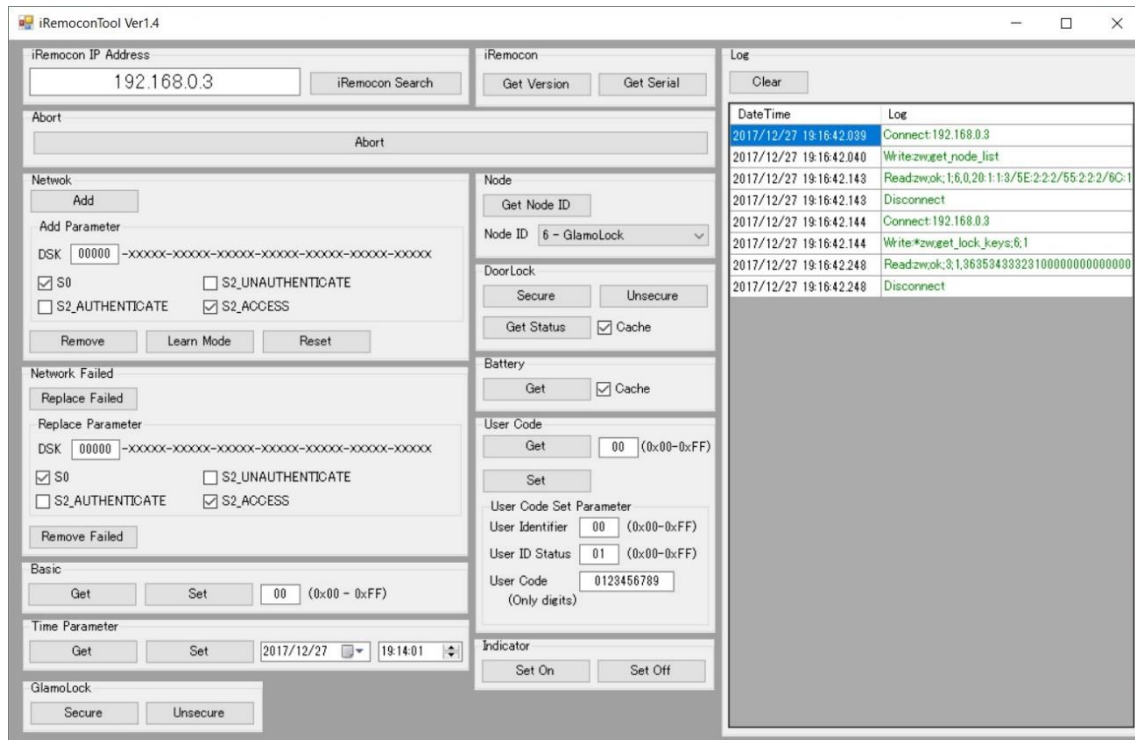


3. Insert DC Power to iRemocon (Power-On). iRemocon starts booting (“Power” LED blinks). It will take about three minutes to complete system initialization.
4. Once iRemocon boot process is finished, you should see; 1) “Power” LED lighting up; 2) “SYNC” LED slowly blinks (no other devices are added yet to its Z-Wave network), or lighting up (a smart lock device has been added to its Z-Wave network already).

Note: If SYNC LED got no light, that means iRemocon failed to get an IP address from DHCP Server. Power off iRemocon, and try again.

Preparation – Windows Application (Software)

1. Double Click “Leo RemoconTool.exe”, and you will see the main window like below.



2. Connect your PC to the same IP network with Leo Remocon.
3. Click “IP Search”, then the application will find iRemocon IP address automatically. If it failed, you can input appropriate IP address manually.

Inclusion

1. Set DSK 5-digit in the DSK text box.
2. Click “Add”, then SYNC-LED (at the bottom of the iRemocon) blinks fast.
3. Carry out the lock device inclusion action.
4. Once the device is joined to the network properly, iRemocon “SYNC-LED” lighting up.

Exclusion

1. Click “Remove”, then SYNC-LED (at the bottom of the iRemocon) blinks fast.
2. Carry out device exclusion action.
3. Once the device is removed, iRemocon “SYNC-LED” blinks slowly.

Reset

1. Click "Reset"
2. Once the lock device is removed, iRemocon "SYNC-LED" blinks slowly.

Note: Please use this procedure only when the network primary controller is missing or otherwise inoperable.

Learn Mode

1. Run network join from Primary controller
2. Make sure iRemocon SYNC-LED blinks slowly.
3. Click "Learn mode"
4. Input DSK 5-digit on the primary controller (e.g. PC Controller) dialog and complete inclusion.

Replication (Replace Failed)

1. Make sure iRemocon SYNC-LED lighting up.
2. Make a (already joined) device node network unreachable.
3. Set DSK 5-digit of the new node (device) in the DSK textbox.
4. Click "Replace Failed". Basic command will be sent 7 times.
5. Wait for failing all 7 Basic commands.
6. The device will be removed, and new device joined.

Remove Failed

1. Make sure iRemocon SYNC-LED lighting up.
2. Make a (already joined) device node network unreachable.
3. Click "Remove Failed". Basic command will be sent 7 times.
4. Wait for failing all 7 Basic commands.
5. The device is removed.

Including the DUT

Supported

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Basic Documentation

1. Make iRemocon join a network by using Learn-mode.
2. Send Basic command to iRemocon from a controller.

Devices from multiple manufacturers in one network

Supported.

Association

Lifeline Association Group: Supported

Group Id: 1

Max number of device in group: 1

This group is used to inform the member that it had been reset & leaving the network.

Association Command Class: Supported

Multi Channel CC

Supported.

S2 Security CC

- ASSOCIATION_GRP_INFO
- SUPERVISION
- POWERLEVEL
- ASSOCIATION
- VERSION

Multiple NIF implementations

Not Supported.

Support Command Class

- Application Status Command Class, Version 1
- Association Command Class, Version 2
- Association Group Information Command Class, Version 1
- Device Reset Locally Command Class, Version 1
- Manufacturer Specific Command Class, Version 2
- Multi Channel Association Command Class, Version 3
- Version Command Class, Version 2
- Z-Wave Plus Info Command Class, Version 2
- CRC-16 Encapsulation Command Class, Version 1
- Security 0 Command Class, Version 1
- Security 2 Command Class, Version 1
- Supervision Command Class, Version 1
- Transport Service Command Class, Version 2
- Inclusion Controller Command Class, Version 1
- Powerlevel Command Class, Version 1
- Z/IP Gateway Command Class, Version 1

Control Command Class

- Basic Command Class, Version 1
- Configuration Command Class, Version 2
- Door Lock Command Class, Version 2
- Indicator Command Class, Version 1
- Notification Command Class, Version 8
- Time Parameters Command Class, Version 1
- User Code Command Class, Version 1
- Association Command Class, Version 2
- Association Group Information Command Class, Version 1
- Battery Command Class, Version 1
- Firmware Update Meta Data Command Class, Version 4
- Manufacturer Specific Command Class, Version 2
- Multi Channel Association Command Class, Version 3
- Version Command Class, Version 2
- Wake Up Command Class, Version 2

- Z-Wave Plus Info Command Class, Version 2
- CRC-16 Encapsulation Command Class, Version 1
- Multi Channel Command Class, Version 4
- Security 0 Command Class, Version 1
- Security 2 Command Class, Version 1

Test Procedure for issuing the control commands below

- Association Command Class, Version 2
- Association Group Information Command Class, Version 1
- Manufacturer Specific Command Class, Version 2
- Multi Channel Association Command Class, Version 3
- Version Command Class, Version 2
- Wake Up Command Class, Version 2
- Z-Wave Plus Info Command Class, Version 2
- CRC-16 Encapsulation Command Class, Version 1
- Multi Channel Command Class, Version 4
- Security 0 Command Class, Version 1
- Security 2 Command Class, Version 1

Those commands can be issued when network join is carried out.

1. Run "iRemoconTool.exe".
2. Input Lock Device DSK. S0 ON, S2_ACCESS ON.
3. Click "Add"
4. Proceed Lock Device network Join action.
5. Network join is done.

Test Procedure for Basic Command Class, Version 1

1. A Lock device has been joined to the Z-Wave network already.
2. Run "iRemoconTool.exe" and find (or input) iRemocon IP address.
3. Click "Get Node ID" and make sure it finds the device Node ID. Then select it.
4. Click Basic "Get" to retrieve value.
5. Input a value in Basic set text box and click "Set".

Test procedure for Configuration Command Class, Version 2

1. A **Glamo Lock** has been joined to the Z-Wave network already.
2. Run "iRemoconTool.exe" and find (or input) iRemocon IP address.
3. Click "Get Node ID" and make sure it finds the Glamo Lock Node ID. Then select it.
4. Click GlamoLock "Secure"
5. Click GlamoLock "Unsecure"

Test Procedure for Door Lock Command Class, Version 2

1. A Lock device has been joined to the Z-Wave network already.
2. Run "iRemoconTool.exe" and find (or input) iRemocon IP address.
3. Click "Get Node ID" and make sure it finds the device Node ID. Then select it.
4. Click DoorLock "Secure"
5. Click DoorLock "Unsecure"
6. Click DoorLock "Get Status"

Test Procedure for Indicator Command Class, Version 1

1. A Lock device has been joined to the Z-Wave network already.
2. Run "iRemoconTool.exe" and find (or input) iRemocon IP address.
3. Click "Get Node ID" and make sure it finds the device Node ID. Then select it.
4. Click Indicator "Set On", then play sound.
5. Click Indicator "Set Off", then stop sound.

Test Procedure for Time Parameters Command Class, Version 1

1. A Lock device has been joined to the Z-Wave network already.
2. Run "iRemoconTool.exe", and find (or input) iRemocon IP address.
3. Click "Get Node ID" and make sure it finds the device Node ID. Then select it.
4. Click Time Parameter "Get" and retrieve time value.
5. Click Time Parameter "Set" with input value.

Test Procedure for User Code Command Class, Version 1

1. A Lock device has been joined to the Z-Wave network already.

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1. Run "iRemoconTool.exe", and find (or input) iRemocon IP address.
3. Click "Get Node ID" and make sure it finds the device Node ID. Then select it.
4. Input a value in User Code Get textbox, and click "Get" to retrieve a value.
5. Input values in User Code Set three textboxes (User Identifier、 User ID Status(0:Delete, 1:Add)、 User Code(4-10 digit numeric only), and click "Set"

Test Procedure for Battery Command Class, Version 1

1. A Lock device has been joined to the Z-Wave network already.
2. Run "iRemoconTool.exe", and find (or input) iRemocon IP address.
3. Click "Get Node ID" and make sure it finds the device Node ID. Then select it.
4. Click Battery "Get" and retrieve a value.

Test Procedure for Notification Command Class, Version 8

1. A **Glamo Lock** has been joined to the Z-Wave network already.
2. Run "iRemoconTool.exe", and find (or input) iRemocon IP address.
3. Click "Get Node ID" and make sure it finds the Glamo Lock Node ID. Then select it.
4. Remove a Glamo Lock AA battery
5. Wait for 90 seconds (or push Glamo Lock wake-up bar several times) to discharge its capacitor.
6. Put AA battery back to Glamo Lock battery chamber.
7. IRemocon plays buzzer.

Test Procedure for Firmware Update Meta Data Command Class, Version 4

1. A **Glamo Lock** has been joined to the Z-Wave network already.
2. Run "iRemoconTool.exe", and find (or input) iRemocon IP address.
3. Click "Get Node ID" and make sure it finds the Glamo Lock Node ID. Then select it.
4. Run firmware update perl script. (script has been uploaded to "file" section of the certification from).
5. Perl command format is as below

perl ./put_zwfrim.pl [iRemocon IP Addr] [Node ID] ZW [Glamo Lock Firmware .otz file path]

Command Example

```
perl ./put_zwfrim.pl 192.168.1.100 6 ZW ./Ver0104_DoorLockKeyPad_slave_enhanced_232_OTA_SSA_ZW050x_JP_Tl.otz
```

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NOTE: iRemocon can upgrade Glamo Lock Z-Wave module firmware. **No support** for controller Z-Wave firmware upgrade [here](#).

Note: iRemocon is Security Enabled Z-Wave Plus Product and support S2 security level.