zigbee\_user\_guide.md 8/13/2019

# **GL-ZIGBEE USER GUIDE**

# 1: Description

This file is a User Guide on how to operate the Zigbee.

It's for *GL-X750 Spitz* and *GL-S1300 convexa S* which has built-in Zigbee module. Before read this PDF, make sure your router has a Zigbee module built in.

# 2: Installation and Start

You have to install a necessary package to use Zigbee.

For GL-X750 Spitz it's gl-zigbee\_1-2\_mips\_24kc.ipk.

For GL-S1300 convexa S it's gl-zigbee\_1-2\_ipq806x.ipk.

#### Install the zigbee packages using commands like this in the SSH:

```
opkg update
opkg install gl-zigbee_1-2_mips_24kc.ipk
```

OR

```
opkg update
opkg install gl-zigbee_1-2_ipq806x.ipk
```

Note that you have to download the package for your router before installation. And make sure your router connect to the network when installing.

### Start zigbee:

Typing command:

```
gl_zigbee
```

It starts successfully when print like this

zigbee user guide.md 8/13/2019

```
root@GL-X750:~# gl_zigbee
Reset info: 11 (SOFTWARE)
ezsp ver 0x06 stack type 0x02 stack ver. [6.3.1 GA build 245]
Ezsp Config: set source route table size to 0x0064:Success: set
Ezsp Config: set security level to 0x0005:Success: set
Ezsp Config: set address table size to 0x0002:Success: set
Ezsp Config: set TC addr cache to 0x0002:Success: set
Ezsp Config: set stack profile to 0x0002:Success: set
Ezsp Config: set MAC indirect TX timeout to 0x1E00:Success: set
Ezsp Config: set max hops to 0x001E:Success: set
Ezsp Config: set tx power mode to 0x8000:Success: set
Ezsp Config: set supported networks to 0x0001:Success: set
Ezsp Policy: set binding modify to "allow for valid endpoints & clusters only":Success: set
Ezsp Policy: set message content in msgSent to "return":Success: set
Ezsp Value : set maximum incoming transfer size to 0x00005200:Success: set
Ezsp Value : set maximum outgoing transfer size to 0x00005200:Success: set
Ezsp Config: set binding table size to 0x0010:Success: set
Ezsp Config: set key table size to 0x0000:Success: set
Ezsp Config: set max end device children to 0x0020:Success: set
Ezsp Config: set aps unicast message count to 0x000A:Success: set
Ezsp Config: set broadcast table size to 0x000F:Success: set
Ezsp Config: set neighbor table size to 0x0010:Success: set
NCP supports maxing out packet buffers
Ezsp Config: set packet buffers to 255
Ezsp Config: set end device poll timeout to 0x0005:Success: set
Ezsp Config: set end device poll timeout shift to 0x0006:Success: set
Ezsp Config: set zll group addresses to 0x0000:Success: set
Ezsp Config: set zll rssi threshold to 0xFF80:Success: set
Ezsp Config: set transient key timeout to 0x00B4:Success: set
Ezsp Endpoint 1 added, profile 0x0104, in clusters: 8, out clusters 20
Ezsp Endpoint 242 added, profile 0xA1E0, in clusters: 0, out clusters 1
Found 0 files
GL ZIGBEE>□
```

## 3: Using Zigbee Commands

Now you can type commands to control the zigbee module.

There are various commands which could implement all zigbee functions.

For example:

#### Get the command list

```
help
```

#### Get current zigbee network info

```
info
```

#### Build a zigbee network

```
plugin network-creator form 1 0x1000 0x10 0x0b
```

zigbee\_user\_guide.md 8/13/2019

plugin network-steering start 0

### **Build a ZCL command**

zcl on-off on

### Send this ZCL command to remote device

send 0x2a2d 1 1

And so on ...

Detail commands and parameters descriptions on Zigbee Commands Descriptions