

# Qether 1.12.10 (Qeedji Ethernet Tools)

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**Qether** is a CLI (Command Line Interface) program running on Windows. It is installed in folder 'C:\Program Files (x86)\Qeedji Qether'. **Qether** needs WinPcap (Windows packet capture library), which is automatically installed by **Qether** setup if missing. At last step of WinPcap setup, please leave the checkbox 'Automatically start the WinPcap driver at boot time' checked.

## USAGE 1

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```
qether.exe [OPTION] [COMMAND FLAG]
```

### OPTION:

```
-v, --verbose    Enable verbosity
```

### COMMAND FLAGS:

```
-h, --help      Prints help information. Use 'qether.exe [SUBCOMMAND] -h' to  
obtain help about a [SUBCOMMAND] (see list in Usage 2).  
-l, --list      Lists available Ethernet interfaces  
-V, --version   Prints version information
```

### EXAMPLES:

```
qether.exe -l
```

## USAGE 2

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```
qether.exe [OPTIONS] <dest_mac> <product_type> [SUBCOMMAND] [SUBCOMMAND OPTIONS]
```

<dest\_mac>            MAC address of the target device. Set it to 'FF:FF:FF:FF:FF:FF' (broadcast) for discover.

                      Shortcut 'FF' is accepted instead of 'FF:FF:FF:FF:FF:FF'

<product\_type>        Product type of the target device (example: 0132 for SBL10e, 0139 for SAP10e)

The <product\_type> is corresponding the 4 first digits of the device's PSN value; For example, if your device has a 0132x-xxxx PSN value, the <product\_type> is 0132.

### OPTIONS:

-v, --verbose        Enable verbosity

-i, --interface <interface>    Number of the Ethernet interface to use. When the option is not specified, the default network interface used is the number 1. Use the COMMAND FLAG -l to view the available network interfaces.

### SUBCOMMANDS:

install            Send a firmware file and install it

configure          Send a configuration file and apply it

reboot            Reboot the target device

discover           Discover Qeedji devices on the local network

info              Get information about the target device

### EXAMPLES:

```
qether.exe -i 2 2E:9C:61:AA:92:BF 0132 reboot
```

[SUBCOMMAND OPTIONS] depend of the [SUBCOMMAND]. Refer to details of each [SUBCOMMAND] below.

## Details of SUBCOMMAND `install`

Send a firmware file and install it

### SUBCOMMAND OPTIONS:

<code>-f, --file &lt;file_name&gt;</code>	File to transfer [Mandatory]
<code>-r, --repeat &lt;wakeup_repeat&gt;</code>	Number of wakeup frames sent before transferring file [default: 50]
<code>-p, --period &lt;wakeup_period&gt;</code>	Time (in ms) between wakeup frames [default: 200]
<code>-b, --bitrate &lt;bitrate&gt;</code>	Mean bitrate (in kbits/s) of the file transfer [default: 200]

### EXAMPLES:

```
qether.exe 2E:9C:61:AA:92:BF 0132 install -f bm0032-smart_busy_light-sbl10e-setup-1.10.10.bin
qether.exe 2E:9C:61:AA:92:BF 0132 install -f bm0032-smart_busy_light-sbl10e-setup-1.10.10.bin -r 500 -p 100 -b 300
```

The product of `<wakeup_repeat>` by `<wakeup_period>` has to be upper than 3000 ms. Increasing the number of wake-up frames delays automatically the firmware upgrade duration.

Before sending the effective command, the `Qether` tools is starting to send a burst of Ethernet wake-up frames so that the device is able to process the command.

When using `Qether` tool to update the firmware version for several devices at a time, thanks to a MS-Windows batch, it is recommended to execute the `Qether` commands the one after the other.

## Details of SUBCOMMAND `configure`

Send a configuration file and apply it. After a configuration file sending, the device will reboot once to apply the configuration.

### SUBCOMMAND OPTIONS:

<code>-f, --file &lt;file_name&gt;</code>	File to transfer [Mandatory]
<code>-r, --repeat &lt;wakeup_repeat&gt;</code> file [default: 50]	Number of wakeup frames sent before transferring
<code>-p, --period &lt;wakeup_period&gt;</code>	Time (in ms) between wakeup frames [default: 200]
<code>-b, --bitrate &lt;bitrate&gt;</code> [default: 200]	Mean bitrate (in kbits/s) of the file transfer

### EXAMPLES:

```
qether.exe 2E:9C:61:AA:92:BF 0132 configure -f configuration.js
qether.exe 2E:9C:61:AA:92:BF 0132 configure -f configuration.js -r 2 -p 100 -b 300
```

You can download the appropriate `configuration.js` file example for your application from the [Qeedji](http://www.qeedji.tech) Web site <http://www.qeedji.tech>. Copy the `configuration.js`, in an appropriate directory on your computer. Adapt the configuration file according to you needs.

## Details of SUBCOMMAND **reboot**

Reboot the target device

EXAMPLE:

```
qether.exe 2E:9C:61:AA:92:BF 0132 reboot
```

## Details of SUBCOMMAND **discover**

Discover Qeedji devices on the local network. Use FF:FF:FF:FF:FF:FF (or just FF) for **<dest\_mac>**

### SUBCOMMAND OPTIONS:

```
-c, --csv      Output in CSV format
-w, --wait <timeout>  Amount of time (in ms) waiting for replies from Qeedji
                    devices [default: 3000]
```

### EXAMPLES:

```
qether.exe FF:FF:FF:FF:FF:FF 0132 discover
qether.exe FF 0132 discover -c -w 5000
```

## Details of SUBCOMMAND **info**

Get information about the target device

### SUBCOMMAND OPTIONS:

```
-c, --csv      Output in CSV format  
-w, --wait <timeout>  Amount of time (in ms) waiting for the reply from the  
target device before aborting [default: 3000]
```

### EXAMPLES:

```
qether.exe 2E:9C:61:AA:92:BF 0132 info  
qether.exe 2E:9C:61:AA:92:BF 0132 info -w 1000 --csv
```