

# BlueZ with MIDI over BLE Support

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This is an installation guide for the latest version of BlueZ, the official Linux Bluetooth protocol stack, on Ubuntu.

I used this to get MIDI over BLE working on Ubuntu 16.04.

## Installing the Dependencies

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Use your package manager to install the following dependencies:

```
$ sudo apt install libudev-dev libical-dev libreadline-dev libdbus-1-dev libasound2-dev
```

You'll also need the usual build tools, so install them as well if you haven't already:

```
$ sudo apt install build-essential
```

## Downloading BlueZ

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You can download the latest version from [www.bluez.org](http://www.bluez.org), or download it directly from the command line. Then extract the file you downloaded.

```
$ cd /tmp
$ wget https://mirrors.edge.kernel.org/pub/linux/bluetooth/bluez-5.50.tar.xz
$ tar -xf bluez-5.50.tar.xz
```

## Building and Installing BlueZ

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Finally, run the configure script and make and install everything. Also reinstall the version from the package manager, as explained [here](#).

```
$ cd bluez-5.50
$ ./configure --enable-midi --with-systemdsystemunitdir=/etc/systemd/system
$ make
$ sudo make install
$ sudo apt-get install --reinstall bluez
```

That's it! After rebooting, MIDI over BLE should work.

The first time after rebooting, my computer seemed kind of slow, but rebooting again solved that problem.

## Shell Script

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Here's a shell script that executes the previous steps for you.

```
1  #!/usr/bin/env bash
2
3  set -ex
4
5  sudo apt-get install -y \
6      libudev-dev libical-dev libreadline-dev libdbus-1-dev libasound2-dev \
7      build-essential
8
9  cd /tmp
10 wget https://mirrors.edge.kernel.org/pub/linux/bluetooth/bluez-5.50.tar.xz
11 tar -xf bluez-5.50.tar.xz
12
13 cd bluez-5.50
14 ./configure --enable-midi --with-systemdsystemunitdir=/etc/systemd/system
15 make
16 sudo make install
17 sudo apt-get install --reinstall bluez
```

You can download it [here](#). Then allow execution and run it:

```
$ chmod +x bluez.sh
$ ./bluez.sh
```

## Tested on

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- Ubuntu 16.04