

# intertooth - Quickstart Guide

## Led Status Display

The following table shows the meaning of the various LED displays:

power	charge	connection	Meaning
On	-	Off	Device ready, no Bluetooth connection established
On	-	On	Bluetooth connection established
On	-	Flashes	Bluetooth connection established and configuration mode active
Flashes	-	-	Battery weak
-	Flashes	-	Battery is charging
Flashes	Flashes	Flashes	Alarm

## Connect to the End Device

The included RJ45 cable allows connection to RJ45 console ports from Cisco, HP, NetApp and more. With the optional USB OTG cable, the intertooth can be used directly on USB console ports from Cisco and other manufacturers. The integrated battery is also charged via the same port. A commercially available USB charger can be used for this purpose. The RS232 interface can also be used via the standardized D-SUB connector. This allows communication with any device that has an RS232 interface. The cable suitable for the respective device can be used.

To switch the intertooth on and off, press and hold the power key for three seconds.

Switch on the intertooth and start the search for Bluetooth devices on your computer. The intertooth will be recognized as "intertooth-NNNN", where NNNN stands for the last four characters of the MAC address. Note that different software is used to manage Bluetooth connections depending on the manufacturer. The following describes the procedure for connecting to the intertooth for the first time for Windows 10 and macOS.

# Windows 10

## 1. Add Bluetooth Device

If an intertooth is already connected to this PC, it will no longer be displayed as a new device. To reinstall a device that has already been paired, it must first be removed.

- Switch on the intertooth
- Press **Win** + **I** to open the settings
- Click on devices
- Add Bluetooth or other device
- Select Bluetooth
- Once the intertooth has been recognized, click to establish the connection
- If the connection was successful, this is indicated with the status Paired
- Exit the wizard

From Windows 11 22H2 on, the "Bluetooth devices discovery" setting must be set to "Advanced".

## 2. Show COM Port

The virtual COM port must be identified so that the serial interface can now be accessed with a terminal program. This process is only necessary once for each connected intertooth, as the COM port doesn't change.

- In the settings for Bluetooth and other devices (see above) click on More Bluetooth options (This is either at the bottom or on the right at the edge under Related Settings)
- Switch to the COM ports tab. Here two COM ports are displayed for each connected intertooth
- To access the serial interface, the COM port with the direction Outgoing and the designation SerialPort must be used.

## 3. Connect Using PuTTY

Establishing the connection is explained here using the example of PuTTY. However, any terminal program can be used.

- Start PuTTY

- Make settings as follows:
  - Connection Type: Serial
  - Serial line: COMxx (Specify the previously identified COM port of the intertooth here)
  - Speed: Not relevant, as the connection to the intertooth is via Bluetooth (the baud rate for the end device connected to the intertooth is set directly on the intertooth.
- Click **Open** to establish the connection
- After the connection has been established, the status message of the intertooth is displayed. The terminal device's console is then available.

## Mac OS

### 1. Add Bluetooth Device

- switch on the intertooth
- Open the system preferences and click on Bluetooth
- As soon as the intertooth is shown in the list, click on Connect
- After a short time the intertooth is shown as not connected, which is normal
- If a connection cannot be established, it helps to delete the following file:

```
cd ~/Library/Preferences/ByHost
ls -lah | grep bluetooth
rm -f com.apple.Bluetooth[...].plist
```

If this does not help, the Mac Bluetooth module must be reset as follows:

- Hold down the **Shift** + **Option** keys and click on the Bluetooth symbol in the menu list at the top right
- Click on the button to reset the Bluetooth module

### 2. Show COM Port

The virtual COM port must be identified so that the serial interface can now be accessed with a terminal program. This process is only necessary once for each connected intertooth, as the COM port no longer changes.

- Click on the Launchpad icon in the Dock, enter Terminal in the search field and click on Terminal. The COM port can then be identified with the following command

```
ls -lah /dev | grep intertooth
```

### 3. Connect Using screen

Establishing the connection is explained here using the example of `screen`. However, any terminal program can be used.

- After installing `screen`, you can use the following terminal command to establish a connection with the Intertooth

```
screen /dev/tty.intertooth-XXXX
```

- After the connection has been established, the status message of the intertooth is displayed. The terminal device's console is then available.

To detach or end the `screen` session, proceed as follows:

- To end the session: `Ctrl` + `a` / `k` / `y`
- To detach the session: `Ctrl` + `a` / `d`
- To reattach the session: `screen -r`

## Configuration Mode

To access the configuration mode, press the `$` key 5 times.

To exit configuration mode, enter `exit`. The settings made are saved automatically.

The configuration mode has an integrated help function. By entering `?`, information about the current command can be displayed at any time.

While entering a command, it can be completed by pressing `Tab`, provided the command is unique.

## Further Information and Contact

Current information about the intertooth as well as the full manual can be found at [www.intertooth.com](http://www.intertooth.com)

You can reach us at [info@intertooth.com](mailto:info@intertooth.com)