Bluetooth Bridge

We have developed a Windows 10/11 computer program that reads how many Bluetooth devices are in the proximity and announces their presence using BT LE.

The Bluetooth Bridge is NOT a universal miracle program / product / interface combining everything. It is a "gimmick" we use to test whether we can read data from Bluetooth devices and send the data to other applications / programs like the LinTronic Configurator or Home Assistant using for example, MQTT.

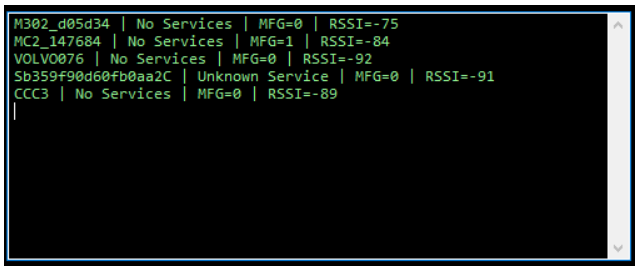
If you own a Bluetooth product that you want to read or communicate with, then let us try to embed it into this program, so you can use it for more fun.

Heartbeat-measuring devices

We started out with a dedicated purpose to read chest belts and get the pulse and the RR-value. We learned that some pulse-devices only detect the pulse, while others detect the pulse and the RR-value and others detect the pulse and calculate the RR-value.

So they really must be investigated closer if you want to rely or depend on the data.

Then we opened the Bluetooth scanner to catch as much as we can, and funny products started to appear. Bluetooth is found in more devices than you think. The RSSI signal is showing how far away the device is. The VOLVO is my neighours car, about 30-40 meters from here and therefore a weak signal.



Sending data by MQTT

Read more here: WIKI link

MQTT is a standardized way of sending data packages between devices. If you follow some simple guidelines then it works very well.

For example, we can read the pulse and the heartbeat-timing from a chest belt and send the data to other programs that do not have Bluetooth interface but are connected to the local network.

Data is sent to a broker, which distributes to all devices that want to subscribe to certain content. We send a telegram as “bluetoothbridge/hrv-pulse/<payload>” and all devices/programs that are listening for telegrams starting with “bluetoothbridge/hrv-pulse/” will receive the data <payload> which is this case is the detected pulse (heart beats pr minute). Se the Home Assistant document on how to set up an MQTT receiver

The LinTronic Configurator is currently able to receive “configurator/trigger” telegrams, from for example Home Assistant.

We are ready to expand the MQTT functionality if you want to send to or receive from our programs.

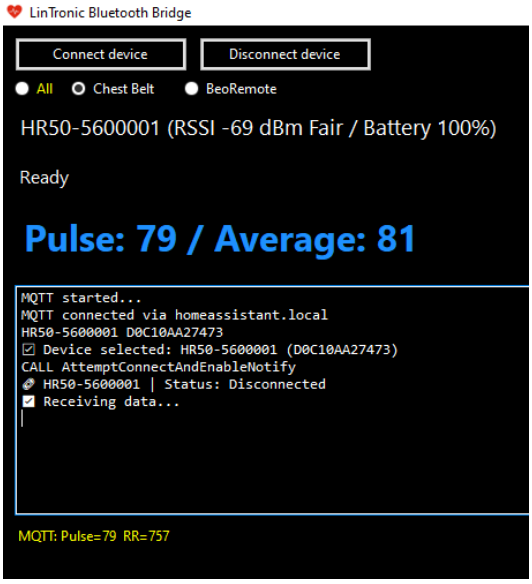
Supported products

The Bluetooth Bridge currently support chest belts and heartbeat devices like:

POLAR H9 (recommended)
POLAR H10
GARMIN HRM200
IGSPORT HR50
MAGENE H803

We are currently working to support more products.

Let us know what you want to have supported.





Using the program

If you want to monitor which products are announcing their presence, select “All” and click connect.

Leave the scanner running and products will turn.

If you want to read your heart beats, then select “Chest Belt” and watch data come in. The shown image is typical – wait up to 60 seconds for Receiving data.

