

Akrapovič Sound Kit -

Operational / Technical Description: Sound Receiver

Basic function is to change the open/close position of the exhaust valve, controlled by Bluetooth keyfob or EXTERNAL input.

Unit is supplied by 12V car battery.

The supply part includes protective components and voltage stabilizer for Bluetooth CC2541 supply.

I/O part includes EXTERNAL input and VALVE output analog front-ends.

Receiver includes LED to signal the activity.

Bluetooth part includes main chip CC2541, crystal oscillator (32 MHz) and RF output with impedance matching balun and loop antenna.

Bluetooth unit is in “advertising mode” all the time – meaning the unit is emitting every 62,5ms, waiting for Bluetooth command signal from keyfob or external command through EXTERNAL input.

When command is received (Bluetooth or EXT. input), VALVE output stage changes. RF output frequency range is 2400 – 2483,5 MHz and is separated into 40 Bluetooth channels (2 MHz each). Channel selection is automatic, determined during receiver and keyfob connection.