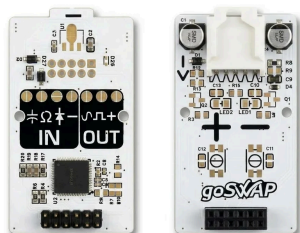
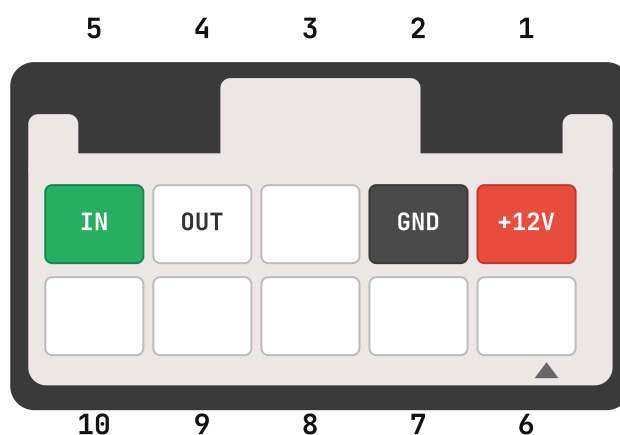


Speedometer / Tachometer "Divider" Adapter



The adapter corrects tachometer and speedometer pulse signals in vehicles with a 12 V supply. Three operating modes: division, multiplication and generation. Every adapter goes through automated testing after assembly.

Connection



1	● Red	[+12V] – +12V from ignition	Power
2	● Black	[GND] – ground	Power
4	○ White	[OUT] – output signal to the dashboard	Output
5	● Green	[IN] – input signal from the sensor or ECU	Input

Not used: 3, 6–10.

Modes

Division

● 1 blink

The needle reads higher than actual: more pulses arrive than the dashboard expects. The adapter divides the frequency.

Multiplication

● 2 blinks

The needle reads lower or does not rise: fewer pulses arrive than the dashboard expects. The adapter multiplies the frequency.

Generation

● 3 blinks

The adapter outputs a signal by itself, no input needed – to check the dashboard and the wiring.

Default

The adapter ships in **Generation** mode and outputs a **100 Hz** signal; both LEDs are on – ● **red** and ● **blue**. Use the **(+)** or **(-)** buttons to change the frequency. This is used to check the dashboard, the power connection and the output signal.

Mode selection

- 1 Disconnect power.
- 2 Hold **both buttons (+) and (-)**.
- 3 Apply power while still holding the buttons.
- 4 Release the buttons.
- 5 The ● **red** LED shows the selected mode with short blinks: **1** – division, **2** – multiplication, **3** – generation.
- 6 Select the desired mode with the **(+)** or **(-)** button.
- 7 To save the selected mode, disconnect power.

Setup

Speedometer from output shaft sensor SP2+

- 1 Power the adapter according to the diagram: **+12V** – from ignition, **GND** – ground.
- 2 Connect the output signal **OUT** to the speedometer wire on the dashboard.
- 3 Turn on the ignition to verify the connection: the speedometer needle should rise and stay at one position.
- 4 Use the **(+)** or **(-)** buttons to change the generated frequency.
- 5 Connect the input signal **IN** to the **SP2+** pin of the transmission output shaft sensor.
- 6 Select **Division** mode.
- 7 While driving, use the **(+)** or **(-)** buttons to adjust the speedometer reading against GPS. Short press – fine adjustment; the longer you hold the button, the larger the step.
- 8 The **blue** LED blinks together with the output signal.

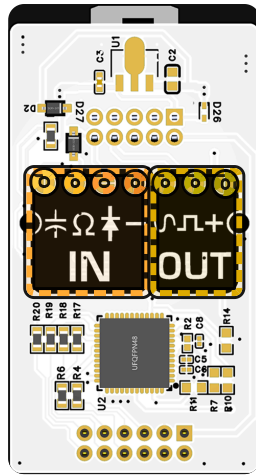
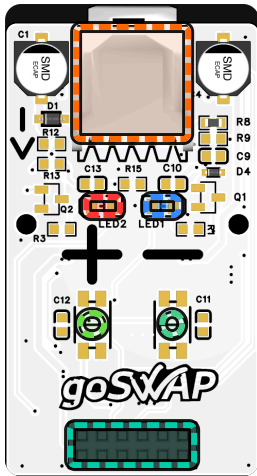
Wait at least 10 seconds before disconnecting power.

Tachometer

- 1 Power the adapter according to the diagram: **+12V** – from ignition, **GND** – ground.
- 2 Connect the output signal **OUT** to the tachometer wire on the dashboard.
- 3 Turn on the ignition to verify the connection: the tachometer needle should rise and stay at one position.
- 4 Use the **(+)** or **(-)** buttons to change the generated frequency.
- 5 Connect the input signal **IN** to the tachometer signal from the ECU or the ignition module.
- 6 Select **Division** or **Multiplication** mode: if the tachometer reads higher than actual – division, lower – multiplication.
- 7 Start the engine.
- 8 Connect a diagnostic scanner and display the engine RPM.
- 9 Use the **(+)** or **(-)** buttons to adjust the tachometer reading. Short press – fine adjustment; the longer you hold the button, the larger the step.
- 10 The **blue** LED blinks together with the output signal.
- 11 Verify the readings at different engine RPMs.

Wait at least 10 seconds before disconnecting power.

Board and jumpers



- Red LED
- Blue LED
- + button
- button
- Programming connector
- Main connector
- IN jumper
- OUT jumper
- IN – Capacitor
- IN – Resistance
- IN – Diode
- IN – Minus
- OUT – Sine
- OUT – Square wave
- OUT – Plus

Buttons

- (+) Increase frequency / adjust reading. Short press – fine adjustment; the longer you hold the button, the larger the step.
- (-) Decrease frequency / adjust reading. Short press – fine adjustment; the longer you hold the button, the larger the step.

Jumpers

Solder pads on the underside of the board. Two are soldered at the factory: OUT «square» and OUT «+». Nothing is soldered on the input – the input is «positive».

Input – how the adapter receives the signal

- IN – capacitor:** smooths the input signal. Used when the signal is noisy. Frequent pulses may be cut off with it.
- IN – resistor (Ω):** lowers the input resistance. Used when the signal source is weak.
- IN – diode:** the input accepts a signal of both polarities, not only positive. Used for a bipolar signal (sine).
- IN – minus:** pulls the input up to plus. Used for sensors that switch the signal to ground (open collector, reed switch). Without the jumper the input expects «positive» pulses.

Output – what signal the adapter sends

- OUT – square:** rectangular unipolar signal. Suits most dashboards and ECUs with a Hall sensor. Soldered at the factory.
- OUT – sine:** a signal without a DC component, for inputs designed for an inductive sensor: Nissan, Mazda, Subaru dashboards, crankshaft and camshaft sensor emulation. **Solder together with «+».** Do not solder with «square» – remove it.
- OUT – plus (+):** pulls the output up to the supply – the receiver gets a signal at vehicle voltage level. Soldered at the factory. Without it the output only switches to ground (open collector).

Question about wiring? Call or message us on WhatsApp: +7 747 505 1212