

Automotive CAN Bus filter

Features

- Suitable for **12 V** automotive systems
- Current consumption less than **30 mA**
- Protection against reverse power connection without blowing an external fuse (*except 5V connection*)
- Overvoltage protection: **+60/-20V** for +12V line
- High Speed CAN bus up to **500 kbps**
- Small size: **26 x 40 x 6 mm**

Connection

- Power +12 V
- Power GND
- Optional Power +5 V

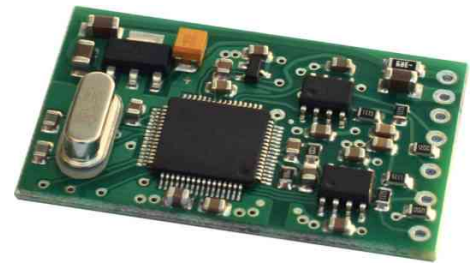
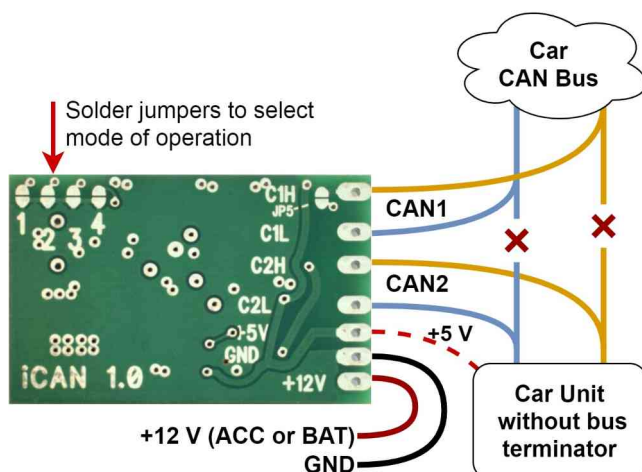
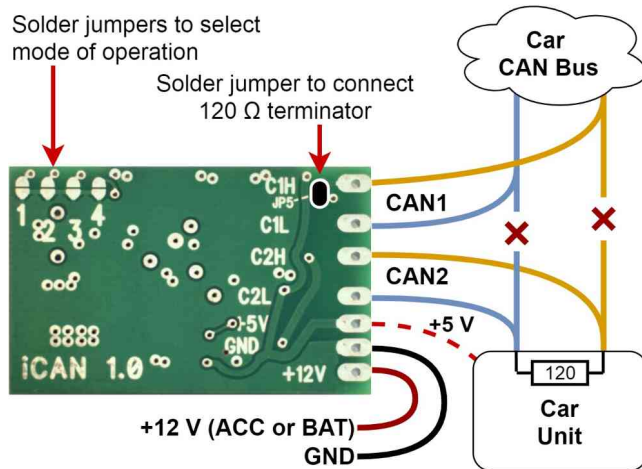
Note: Power up adapter from +12V or +5V but **not both**.

- CAN 1 with switchable 120 Ω terminator (Jumper 5)
- CAN 2 with permanent 120 Ω terminator

Connectors pinout

Information about connectors locations and contacts numbering is shipped with adapter.

Typical Applications



KMTEST 1.0 is shipped as assembled PCB without soldered wires or as specialized device with two connectors for appropriate vehicle

Description

KMTEST 1.0 is an automotive CAN bus filter for testing purposes.

Vehicle selection

Jumpers	FW ver.	Mode
1 2 3 4 5		
○ ○ ○ ○		Inactive
● ○ ○ ○	● a	Toyota Corolla Cross (2023->) ⁽¹⁾
○ ● ○ ○	● a	Toyota RAV4 (2019-2023) ⁽²⁾
○ ○ ○ ○	● a	Toyota C-HR (2017-2023) ⁽²⁾
● ● ○ ○	● b	Toyota Highlander XU70 (2020->) ⁽¹⁾
○ ○ ○ ○		Inactive
● ○ ○ ○		Inactive
○ ● ○ ○		Inactive
● ● ○ ○		Inactive
○ ○ ○ ○		Inactive
● ○ ○ ○		Inactive
○ ○ ○ ○		Inactive
● ○ ○ ○		Inactive
○ ○ ○ ○		Inactive
● ○ ○ ○		Inactive
○ ○ ○ ○		Inactive
● ○ ○ ○		Inactive
○ ○ ○ ○		Inactive
● ○ ○ ○		Inactive

○ – jumper leaved unsoldered

● – jumper shorted by solder

Notes:

(1) Full digital dashboard.

(2) Half digital dashboard.

Operating modes: TOYOTA

<i>Mode</i>	<i>High Beam indicator</i>	<i>Function</i>
100%	1 blink	Filter is off. Odometer accumulates milliage without change
50%	2 blinks	Odometer accumulates only half of current milliage
10%	3 blinks	Odometer increments its reading 10 times slower, counts only 10 %

To change mode the **Cancel button** on steering wheel should be pressed **3 times** at the same pace from 1 to 2 seconds per press. Changing the mode does not change odometer reading but determines increment factor of ongoing miliage.

At mode changing the **High Beam indicator** on dashboard blinks. Number of blinks corresponds to selected mode. This indication does not affect actual state of high beam lamp.

To check current mode without changing it the **Cancel button** should be pressed and held for **4 seconds**.

Document History

Doc. Rev.	H/W	Firmware	Date	Description
1.1		b	18.06.2024	Toyota Highlander XU70 2024
1.0		a	9.12.2024	First release