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
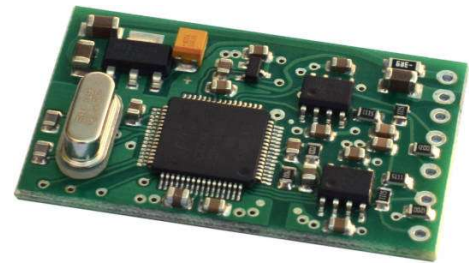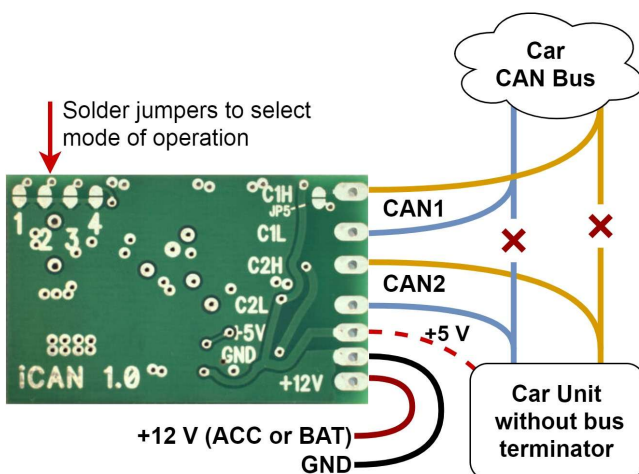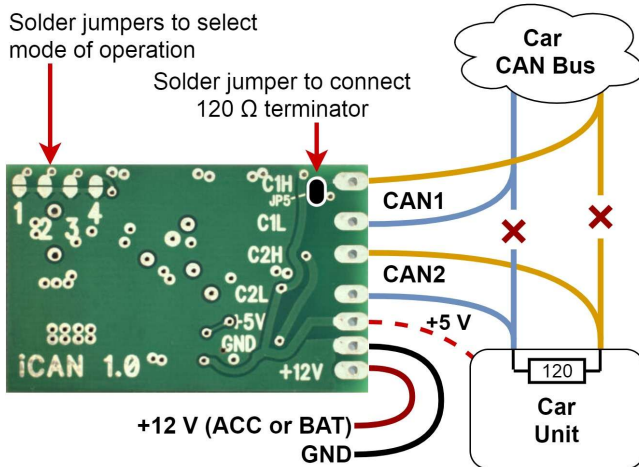- High Speed CAN bus up to **500 kbps**
- Small size: **26 x 40 x 6 mm**

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

ICAN 1.0 is shipped as assembled PCB without soldered wires

Description

ICAN 1.0 is an automotive CAN bus adapter for different purposes such as: change of operational mode of electronic unit connected to bus, integration of unit from different vehicle, measurement units conversion, and so on.

Operating modes

Jumpers 1 2 3 4	5	FW ver.	Mode
○○○○			Inactive
●○○○	○	a	**Chrysler** Video in motion [1]
○●○○	○	a	**Toyota/Lexus** Fahrenheit to Celsius [2]
●●○○			Inactive
○○●○			Inactive
●○●○			Inactive
○●●○			Inactive
●●●○			Inactive
○○○●			Inactive
●○○●			Inactive
○●○●			Inactive
●●○●			Inactive
○○●●			Inactive
●○●●			Inactive
○●●●			Inactive
●●●●			Inactive

○ – jumper leaved unsolded

● – jumper shorted by solder

Notes:

(1) Chrysler Voyager (2014->). Switchover between VIM and Navigation modes is performed automatically.

(2) Climate control panel Fahrenheit to Celsius conversion in:
Toyota: Prius (2010->), Corolla (2013->), Mirai (2014->) and others models;
Lexus (2014->): IS, RC, NX, RX, ES, GS, GX, LC, LS, LX and others models.
Tested in:
Toyota: Mirai (2014->);
Lexus: LX570 (2015->), NX200, NX300 (2014->).
Please note, that US to EU conversion at instrument cluster is NOT performed by iCAN filter.

Document History

Doc. Rev.	H/W	Firmware	Date	Description
1.2			08.11.2020	Solder jumpers for first two modes were missed up in table
1.1			06.07.2020	Adapter→ Filter, List of supported vehicles
1.0	1.0	a	26.05.2020	English version, 500 kbps