

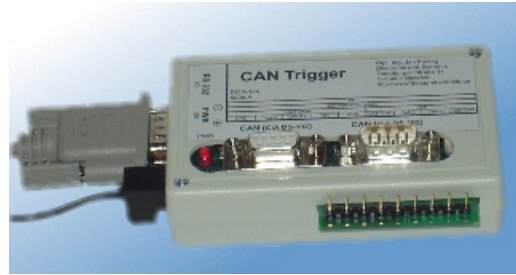
CAN Trigger – Trigger Oscilloscopes on CAN Bus Frames

General

The CAN Trigger is a device that extends the capabilities of (storage) oscilloscopes for debugging and testing CAN Bus systems and ECUs. The device enables the oscilloscope to isolate and trigger on a particular CAN frame content.

This allows you to:

- isolate CAN frames of interest
- view and specify particular CAN frame characteristics
- watch system behavior after reception of specific CAN frames



This is done by defining a trigger condition tailored to your demands:

- Trigger on specific IDs or group of IDs
- Trigger on specific data
- Trigger on Error frames

Once triggered, any other information of interest (CAN physical layer, behavior of DUT outputs, etc.) can be shown on the oscilloscope.

This allows you to measure the reaction time between reception of a CAN message and a specific ECU action.

Various other applications can be thought of, e.g. using a counter to record the number of specific messages per time unit and so on.

Oscilloscope Connectors

- CAN Physical Layer
- CAN Rx
- Trigger Impulse (Software configurable)
- TX1 (Software configurable additional trigger or clock pulse)

(CAN Rx, Trigger and TX1 are galvanically isolated to the CAN Bus physical Layer on the CAN Trigger with optional optical isolation)

Features

- Trigger on CAN 2.0A/B message frames with user-specified IDs and / or data or on Error frames
- Differential CAN interface, optional optically isolated
- Acknowledge on / off (off = Listen only mode)
- Configuration via PC RS-232 (USB with optional adapter)
- Runs in stand alone mode (once configured) without PC, configuration data stored in EEPROM
- supports CiA defined baud rates up to 1MBaud and custom baud rate settings
- can be used additionally as a „mini CAN analyzer“, to generate CAN messages and to view the messages on the bus (with limited bandwidth)
- convenient connection to oscilloscope probes or logic analyzer with standard pinheader posts (0.64x0.64mm)
- Power supply 8 to 18V

Package content

- Basic device CAN Trigger
- User documentation
- 1:1-RS232-Cable 9pin (male-female) for RS232 connections (1,8m long)
- BNC-Cable with binding post connector for easy connection of oscilloscopes trigger channel
- Power supply 9.5V 500mA stabilized, wall plug type for European (Schuko) outlets (230V AC input)

Order Numbers and Options

Order number “CAN Trigger”: Standard setup

Order number “CAN Trigger Iso”: Standard setup plus galvanic isolation

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