

Instruction manual m-CAN

Exclusion of liability

DEVICE HOUSINGS AND ALL OTHER DELIVERED PARTS MUST NOT BE OPENED OR DISMANTLED. IN CASE OF NON-COMPLIANCE ALL GUARANTEE CLAIMS BECOME INVALID. THE DEVICE MUST **ONLY** USED WITH MOTOGADGET INSTRUMENTS. THE USE WITH OTHER INSTRUMENTS WILL DAMAGE THE M-CAN+; ALL GUARANTEE CLAIMS BECOME INVALID. THEREFORE A CHANGE OF A DEFECTIVE M-CAN+ IS ONLY POSSIBLE IF THE USED MOTOGADGET INSTRUMENT WILL BE SEND TOGETHER WITH THE DEFECTIVE M-CAN+. MOTOGADGET ACCEPTS NO LIABILITY FOR DIRECT OR INDIRECT DAMAGE OR SUBSEQUENT DAMAGE OF ANY KIND RESULTING FROM THE USE, INSTALLATION OR CONNECTION OF THE M-CAN+ OR OTHER DELIVERED EQUIPMENT. THIS EXCLUSION OF LIABILITY PARTICULARLY INCLUDES DAMAGE TO PERSONS, MATERIAL LOSSES AND FINANCIAL DAMAGES. THE USE OF THE DEVICE IN AREAS OF PUBLIC TRAFFIC IS UNDERTAKEN AT THE USER'S OWN RISK.

Application Area

m-CAN+ connects all instruments from motogadget directly to the wiring harness of Harley Davidson®, model year 2004 and up. Installation and connection of additional sensors or other equipment is not necessary.

Installation

Remove the original instrument and indicator light cluster regarding the HD work shop manual.

Mount your motogadget instrument and if existing the motogadget indicator lights. Therefore motogadget provide a wide range of mounting accessories for Harley Davidson®.

Connect the HD speedometer instrument plug to the m-CAN+, consider the cut-out on the plug has to show down to the m-CAN+. Now connect the HD indicator light cluster plug to the m-CAN+, consider there are two clip pockets on the plug. The big pocket has to show to the m-CAN+ outside. Fix the m-CAN+ with cable ties to the wiring harness.

Connection

Route the cable of the motogadget instrument and indicator light cluster to the m-CAN+ and shorten the cable. Consider the right cable length due to handle bar movement.

Remove carefully 50mm (2 inches) of the outer cable insulation. Afterwards strip 5mm (1/5 inch) of each wire. Push a cable end sleeve over each striped cable end. Insert the prepared cable ends into the corresponding terminal (see below) and tighten the terminal screw. For a sufficient pull relief fix the instrument and indicator light cable with cable ties on the vehicle wiring harness.

Remarks

Additional cable fuses are not necessary.

The m-CAN+ may damaged if the terminal outlets will be shortcut or a terminal outlet get in contact with earth or +12V .

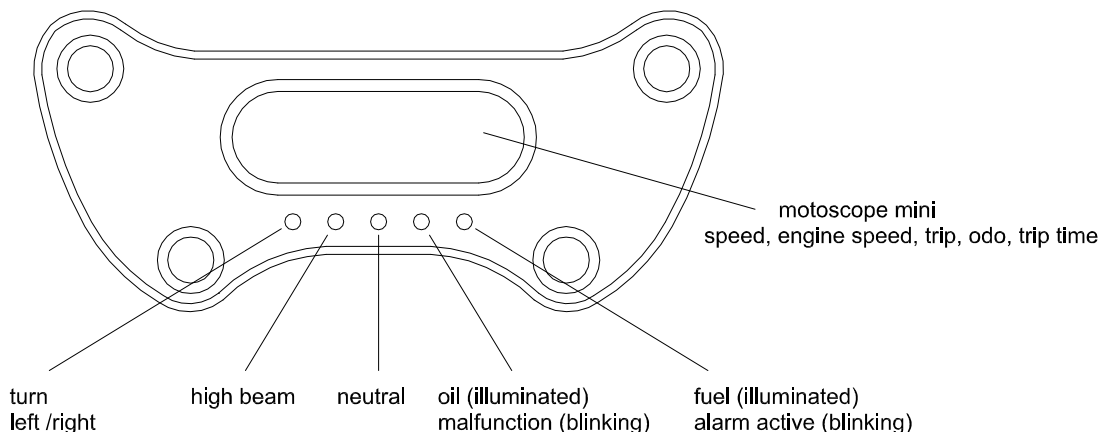
The fuel indicator lamp can not work if the original fuel gauge is still connected to the wiring harness. Therefore disconnect the original fuel gauge or if you like to keep the fuel gauge do not connect the cable on terminal number 12.

Functions

Some of the indicator lights have a multi purpose. The following example shows the indicator light functions at the motoscope mini with the handle bar clamp.

If instruments with less than 5 indicator lights will be used with the m-CAN; the fuel light will not connected. Alternatively the indicator light can be mount separately

In general the m-CAN+ indicator light outlets can be used with any kind of LED. Consider the right LED polarity and the fitting series resistor. The connection of light bulbs is not possible.

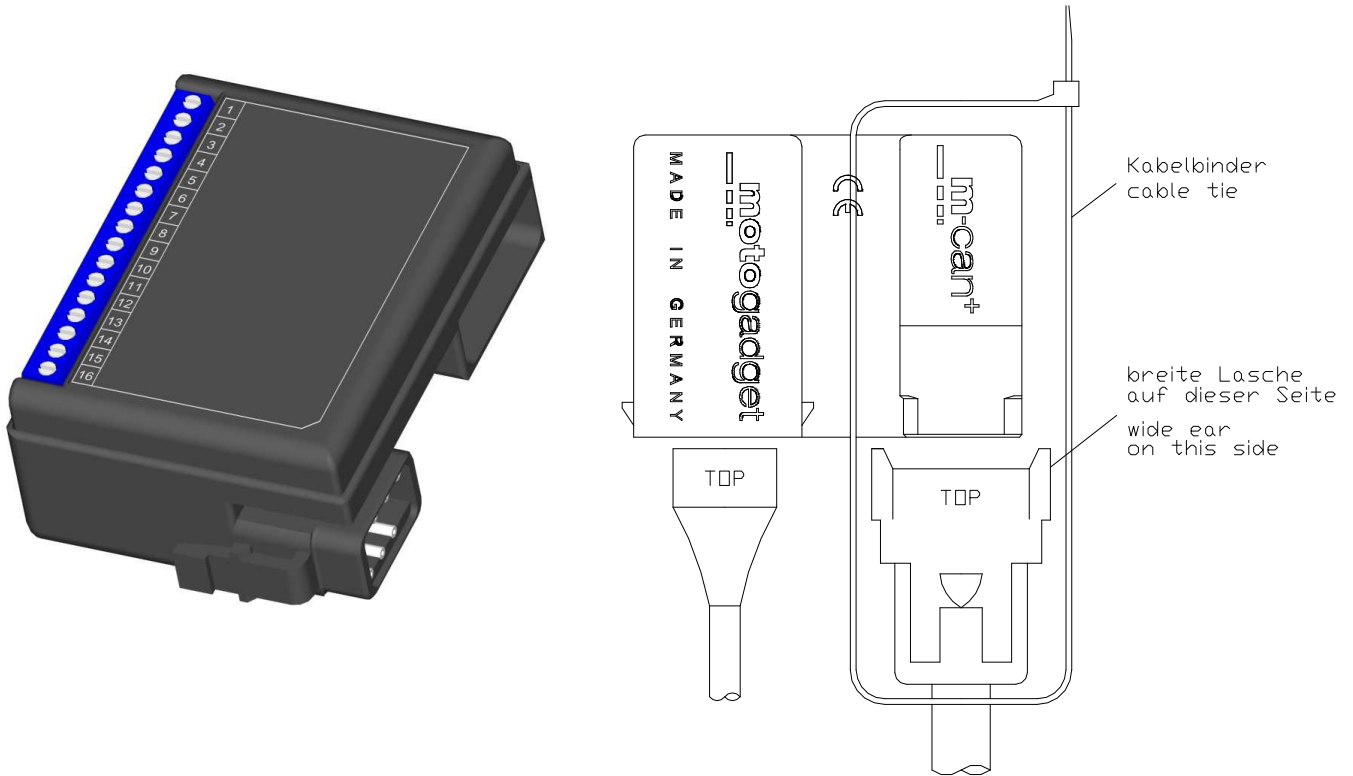


Connection Plan

The m-CAN+ terminals are numbered as shown below.

Plug the vehicle connector into the m-CAN+ as shown below. The wide ear of the 8 pol. connector must show in outside direction. Fix this connector with a cable tie.

If the motogadget adapter cables for VRod or XL Sportster is used, the connector label TOP must show to the top.



Connection of all motogadget indicator lights and instruments to the m-CAN+ referring the table below

	clamp	General	motoscope mini	motoscope classic	motoscope tiny	SureShift	Multiview
Instruments	1	battery +12V	-		red		
	2	ignition lock +12V	red	red	brown	red	red
	3	earth	black	black	black	black	black
	4	push button signal	green	green	green	green	green
	5	engine speed signal	yellow	yellow	-	yellow	yellow
	6	speedometer signal	white	orange	white	white	white
	7	not connected	HD handlebar clamp				motsign / active view
indicator lights	8	turn left / right (+12V)	violet	white/orange	yellow	-	red
	9	high beam (+12V)	white	blue	blue	-	green
	10	neutral (earth)	yellow	grey	white	-	black
	11	oil / malfunction (earth)	green	white/green	violet	-	violet
	12	fuel / alarm (+12V)	black	-	-	-	blue
	13	earth	blue + orange	white/brown	-	-	yellow+orange
	14	ignition lock +12V	red	white/yellow	-	-	brown+white
push button	15	connection to push button	push button	push button	push button	push button	push button
	16	connection to push button	push button	push button	push button	push button	push button

Instrument Setup

Please adjust following settings: ImpW=4, ImpE=1 and Circ=2000mm (for motoscope light 200cm).