

CAN-bus Interface

Steering wheel control

Interface-box
Harnesses vehicle-specific
CHMERC

Harnesses device-specific (sold
seperatly)

PL101 - Alpine
PL104 - Clarion/JVC
PL105 - Kenwood
PL107 - Pioneer/Sony

Product features

- **Conversion of digital CAN-bus signals into analogue signals**
ACC, speed, lights, reverse gear, park distance control (optional cable PLxxx necessary)
- **Adaptation of vehicle-specific radio ports to female ISO-connectors**
(for some vehicles only a universal harness with open ends available)
- **Support/Starting of factory sound systems**
(not at all vehicles)
- **Steering wheel control for after-market devices (optional)**
Alpine, Clarion, JVC, Kenwood, Pioneer, Sony
- **With USB update-port for software-updates by consumer**

Contents

1. Prior to installation

- 1.1. Delivery contents
- 1.2. Check compatibility of vehicle
- 1.3. Setting the dip switches

2. Installation

- 2.1. Assignment of the 12pin Connector
- 2.2. Connection example
- 2.3. Installation with vehicle-specific harness PLxxx

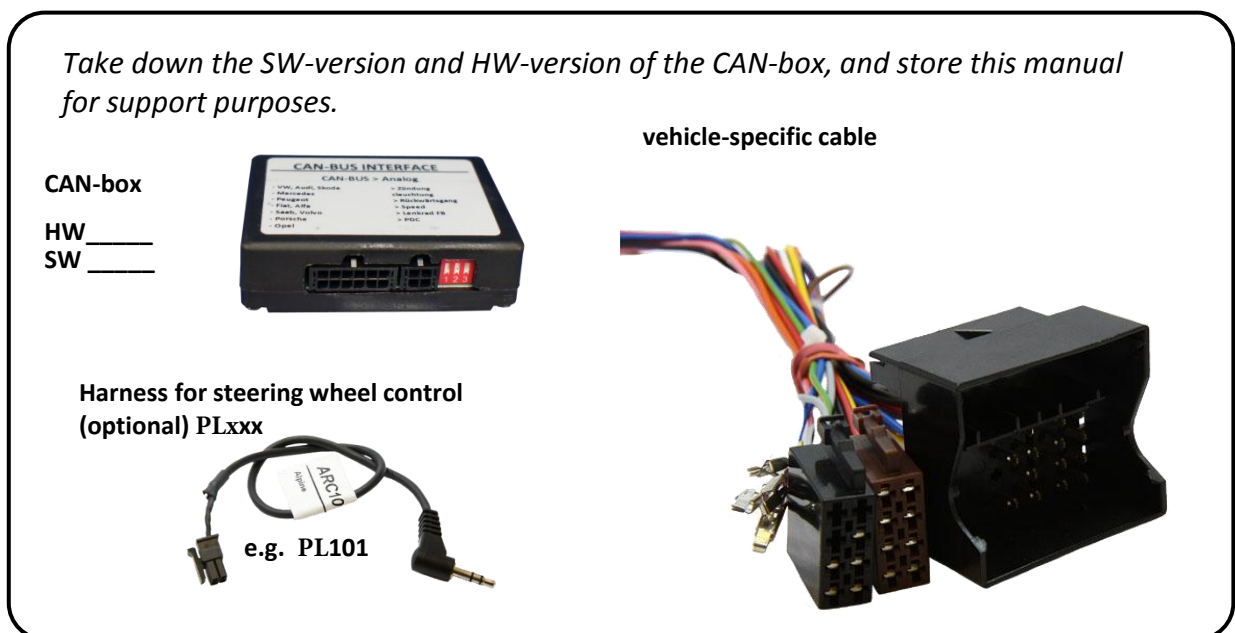
3. Vehicle-specific assignments CAN-bus

4. Specifications

1. Prior to installation

Read the manual prior to installation. Technical knowledge is necessary for installation. The place of installation must be free of moisture and away from heat sources.

1.1. Delivery contents



1.2. Check compatibility of vehicle

The CHMERC provides, depending on the vehicle, ACC (A), speed signal (S), reverse gear (R), lights (L), it powers up an existing factory sound-system (SS) and supports the control of after-market devices by steering wheel (SWC).

The below table shows which which functions of the will be supported for this vehicle.

Mercedes Benz	C-Class (W203) till year 03/04, E-Class (W210), CLK-Class (W208), CLK-Class (W209) till year 03/04, SL-Class (R230) till year 07/04, Viano (W639),Sprinter (W906) - with 10pin ISO	A,L,R,S,SWC	CX-027
----------------------	---	--------------------	---------------

1.3. Setting the dip switches

To use the steering wheel control is dependent on the manufacturer of the after-market device a device-specific IR control cable PLxxx needed. The dip switches of the CAN-box CHMERC have to be set on the manufacturer/ port.



The following table shows the IR control cable and the dip switch settings for the supported manufacturers.

Harness	Description	Dip1	Dip2	Dip3
PL101	Control cable set for Alpine	off	off	off
PL104		on	on	off
	Control cable set for JVC	on	off	on
PL105	Control cable set for Kenwood, with open ends	on	on	on
PL107	Control cable set for Pioneer and Sony	off	on	on

2. Installation

Switch off ignition and disconnect the vehicle's battery! If according to factory rules disconnecting the battery has to be avoided, it is usually sufficient to put the vehicle in sleep-mode. In case the sleep-mode does not show success, disconnect the battery with a resistor lead.

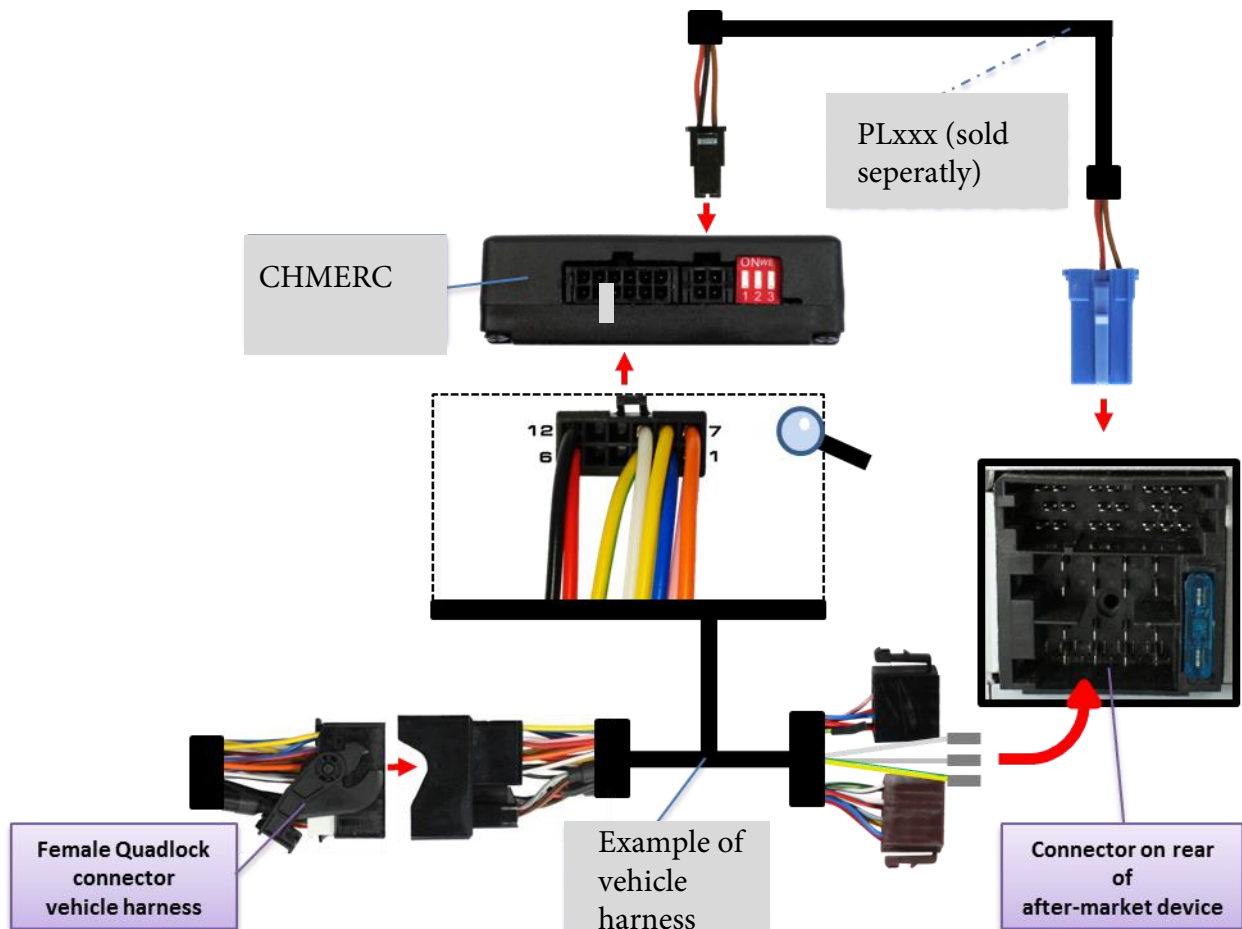
Place of installation of the CHMERC is usually in the radio slot on the vehicle's radio port.

2.1. Assignment of the 12-pin connector

Cable colour	Assignment
Pin 1 ● pink	+12V ACC (Output) max.1.5A
Pin 2 ● blue	CAN-LOW (Input)
Pin 3 ● ● yellow/green	Tachometer signal (Output)
Pin 5 ● red	+ signal PDC
Pin 6 ● red	+12V Permanent (Input)
Pin 7 ● orange	Lights (Output) max. 0.1A
Pin 8 ● yellow	CAN-HIGH (Input)
Pin 9 ● white	Reverse gear (Output) max. 1.5A
Pin 11 ● black	Ground signal PDC
Pin 12 ● black	Ground

2.2. Connection example

Example of vehicle-specific harness and IR control cable to a Blaupunkt head-unit.

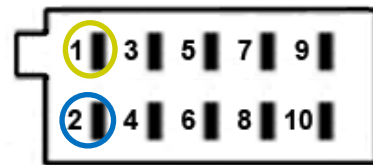


2.3. Installation with vehicle-specific harness

- a.) Persistent current, Ground, ACC signal (Z) and lights signal (L) are pinned in the female ISO-connector. If supported connect speed signal (S) and reverse gear signal (R) to the corresponding pins of the after-market device.
- b.) Depending on equipment/vehicle the grey cable is occupied with the analogue phone mute signal. Connect to the corresponding pins of the after-market device.
- c.) Connect vehicle's female radio connector(s) to the corresponding male connector(s) of harness.
- d.) Connect harness to the CAN-Box via 12pin connector.
- e.) Connect female ISO-connectors of harness to the ISO-connector of the after-market device.
- f.) Optional: Connect IR-control input of the after-market device to the 4pin Molex IR-control output of CAN-box via the optional control cable PLxxx.

MERCEDES BENZ

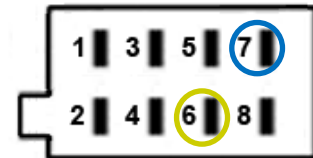
CLK W208 after facelift, **CLK W209** till 03/04,
E-Class W210 from 09/99, **Viano**, **SL W230** from 07/04
Female 10pin ISO-connector in radio slot
CAN High – Pin 1
CAN Low – Pin 2



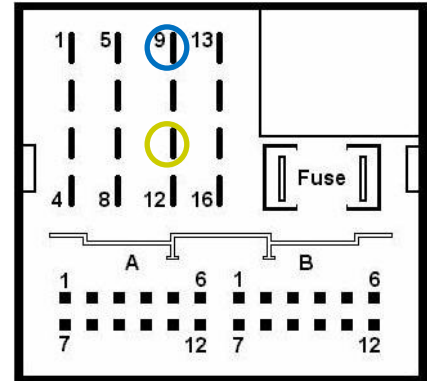
3. Vehicle-specific assignments - CAN-bus

As additional support the following information about other Mercedes vehicle-specific CAN-bus pin definitions. This **information** is **subject to change** and must be verified by the installer.

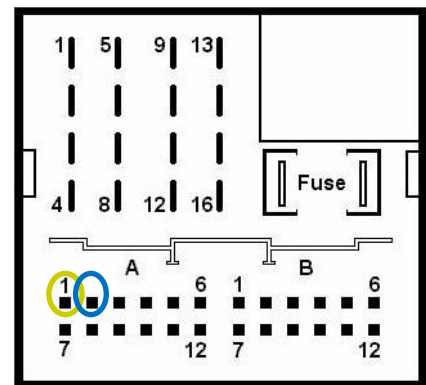
A-Class W169 and **B-Class W245** with Audio5,
 all MERCEDES with indoor CAN-bus
 Female 8pin ISO connector in radio slot
 CAN High – Pin 6
 CAN Low – Pin 7



A-Class W169 and **B-Class W245** with Audio20,
C-Class W203 and **CLK W209** from 04/04,
Viano W693
 Female Quadlock-connector in radio slot
 CAN High – Pin 11
 CAN Low – Pin 9

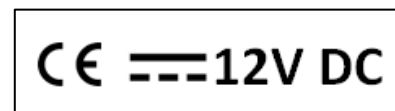


E-Class W211 from 04/03, **CLS W219**, **SLK R171**
 Female Quadlock-connector in radio slot
 CAN High – Pin 1 (Kammer A)
 CAN Low – Pin 2 (Kammer A)



4. Specifications

Operation voltage	10.5 – 14.8V
Stand-by power drain	<1mA
Operation power drain	~50mA
Power consumption	0.07-40W
Temperature range	-30°C till +80°C
Weight	38g



Capacitance

ACC	max. 1.5A
Reverse Gear	max. 1.5A
Lights	max. 0.1A