CAN-bus Interface

Interface-box
CX-400

Harnesses vehicle-specific
CX-0xx

Product features

- Conversion of digital CAN-bus signals into analogue signals
  ACC, speed, lights, reverse gear
- 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)
- With USB update-port for software-updates by consumer

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Changes/updates of the vehicle's software can cause malfunctions of the interface. We offer free software-updates for our interfaces for one year after purchase. To receive a free update, the interface must be sent in at own cost. Labor cost for and other expenses involved with the software-updates will not be refunded.

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.

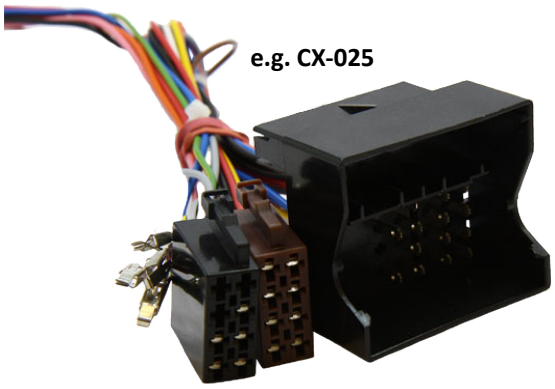
1.1. Delivery contents

Take down the SW-version and HW-version of the CAN-box, and store this manual for support purposes.

There is always a universal or vehicle-specific cable set CX-0xx needed.

CAN-box
CX-400
HW_____
SW _____

e.g. CX-025



1.2. Check compatibility of vehicle

The CX-400 provides depending on the vehicle ignition (I), speed signal (S), reverse gear (R), lighting (L), it powers up an existing factory sound-system (SS) and allows the using of on-board computer system control (OCS).

The link to the table shows which harness CX-0xx can be used for which vehicles and which functions of the CX-400 will be supported for this vehicle.

→ http://www.caraudio-systems.de/can_bus_compatibility.pdf

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 CX-400 is usually in the radio slot on the vehicle's radio port.

2.1. Assignment of the 12-pin Molex on CX-400

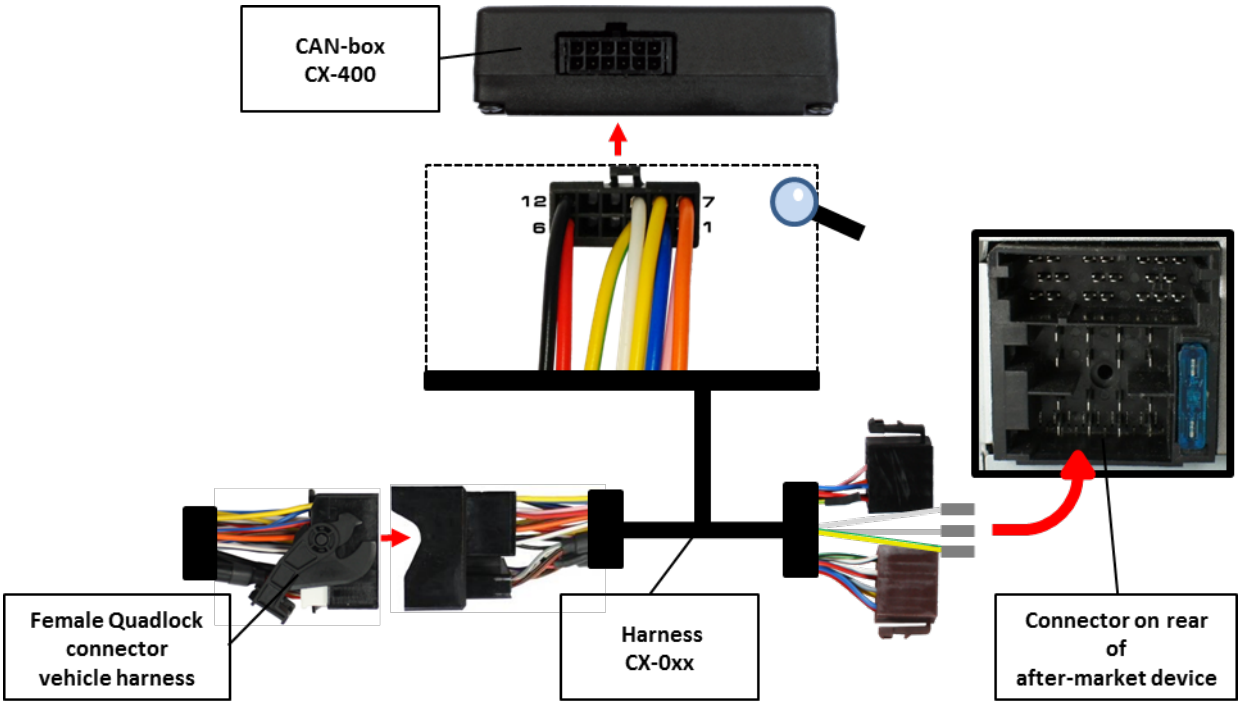
Cable colour		Assignment
Pin 1	pink	+12V ACC (Output) max.1.5A
Pin 2	blue	CAN-LOW (Input)
Pin 3	yellow/green (yellow/red)	Speed signal (Output)
Pin 6	red	+12V Permanent (Input)
Pin 7	orange	Lights (Output) max. 0.1A
Pin 8	yellow	CAN-HIGH (Input)
Pin 9	white	Reverse gear (Output) max. 1.5A
Pin 12	black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

2.2. CX-400 LED functions

LED	Status	Funktion
Red	Lights	Ignition is ON
Blue	Flashes	CAN Bus is searched
Blue	Lights	CAN Bus found

2.3. Connection example

Example of vehicle-specific harness CX-025.



2.4. Installation with vehicle-specific harness CX-0xx

a.) Persistent current, Ground, ACC signal (Z) and lights signal (L) are pinned in the female ISO-connector of the CX-0xx. If supported by the CX-401 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 CX-0xx.
d.) Connect harness CX-0xx to CAN-Box CX-401 via 12pin Molex.
e.) Connect female ISO-connectors of harness CX-0xx to the ISO-connector of the after-market device.

Note for CX-035 (Ford): ACC and illumination are not digital but analogue signals on some vehicles. In this case connect ACC (Quadlock, chamber A, pin 16; pink wire) and illumination (Quadlock, chamber A, pin 13; orange wire) between female 12pin MicroFit connector and female ISO connectors, using the plugs of the harness.

2.5. Installation with universal harness CX-010

a.) Connect universal harness CX-010 according to **assignment of 12pin Molex on CX-400** to harness of the after-market device and to vehicle harness.

2.6. Onboard computer control Citroen and Peugeot for after-market radios

To control the onboard computer in Citroen and Peugeot vehicles the following functions can be selected by steering-wheel buttons:

Select Menu	long pressing "Source" (4s)
ESC	short pressing "Source"
OK	Vol+
Menu up	Wheel up
Menu down	Wheel down
Menu Right	Track+
Menu Left	Track-
Mode	long pressing "Tr+" (4s)
Dark	long pressing "Tr-" (4s)

Assignment of the steering-wheel buttons:

Tr+	pick up phone
Tr-	hang up phone
Wheel up	Tr+
Wheel down	Tr-

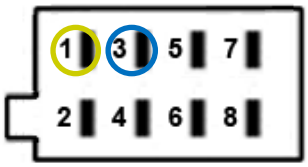
The assignments of the remaining steering-wheel buttons are identical to the label!

3. Vehicle-specific assignments - CAN-bus

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

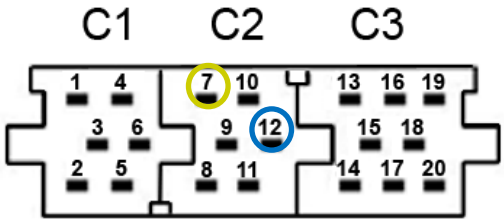
ALFA ROMEO

147
Female 8-Pin ISO connector in radio slot
CAN High – Pin 1
CAN Low – Pin 3



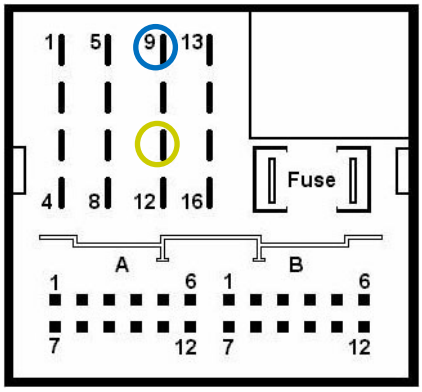
AUDI

A2, A3, A4, A6 till 01/05
Female Mini-ISO connector in radio slot
CAN High – Pin 7
CAN Low – Pin 12



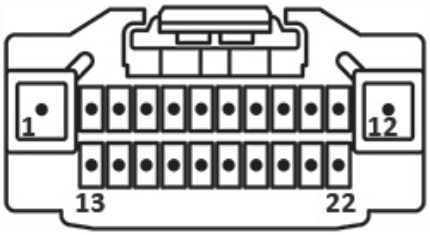
BMW

1series E81, 3series E90, 5series E60
Female Quadlock-connector in radio slot
CAN High – Pin 11
CAN Low – Pin 9

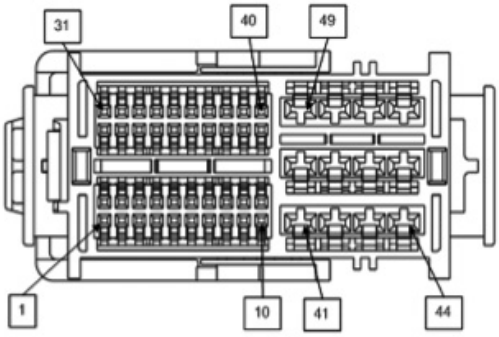


Chrysler

Chrysler cars with female 22pin connector in radio slot
CAN High – Pin 10
CAN Low – Pin 13

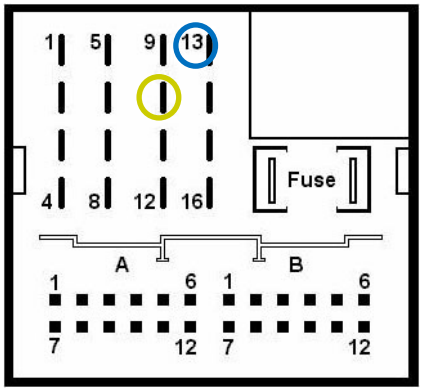


Chrysler cars with female 52pin connector in radio slot
CAN High – Pin 2
CAN Low – Pin 12

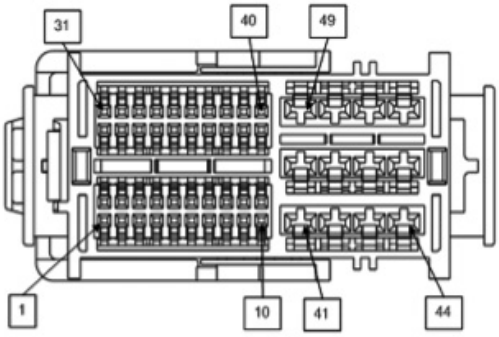


CITROËN

C4, C5 from 10/04
Female Quadlock-connector in radio slot
CAN High – Pin 10
CAN Low – Pin 13

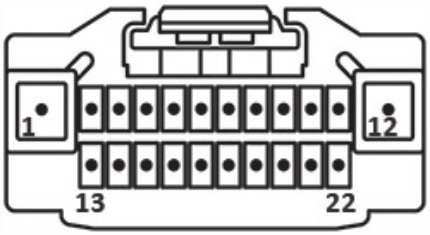


Jumper II
Female 52pin connector in radio slot
CAN High – Pin 2
CAN Low – Pin 12

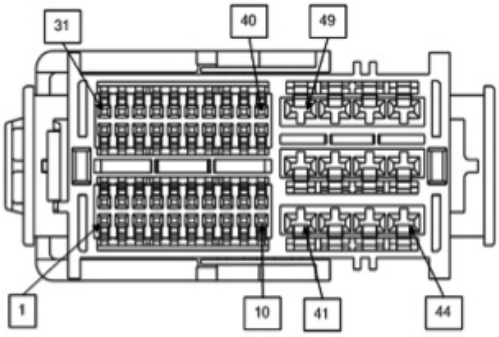


Dodge

Dodge cars with female 22pin connector in radio slot
CAN High – Pin 10
CAN Low – Pin 13

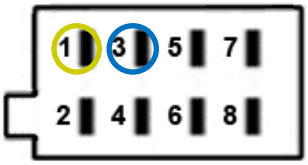


Dodge cars with female 52pin connector in radio slot
CAN High – Pin 2
CAN Low – Pin 12

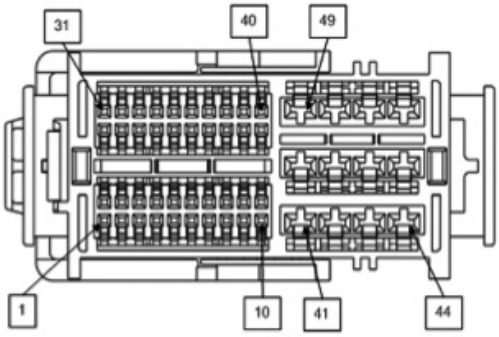


FIAT

Stilo, 500
Female 8pin ISO connector in radio slot
CAN High – Pin 1
CAN Low – Pin 3

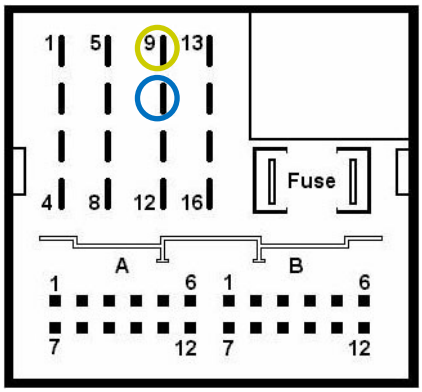


Ducato as of 2013
Female 52pin connector in radio slot
CAN High – Pin 2
CAN Low – Pin 12

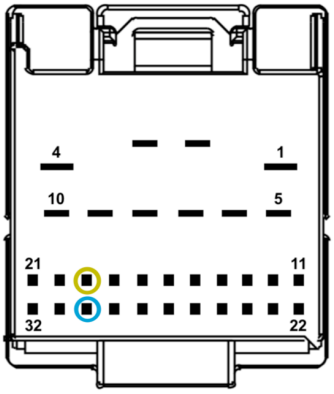


FORD

Focus, Focus C-MAX, S-MAX, Mondeo
Female Quadlock connector in radio slot
CAN High – Pin 9
CAN Low – Pin 10

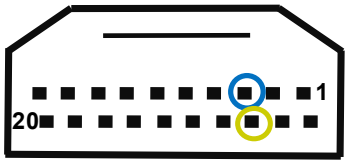


Fiesta, Transit, Transit Custom, Transit Connect
Female 32pin connector in radio slot
CAN High – Pin 19
CAN Low – Pin 30



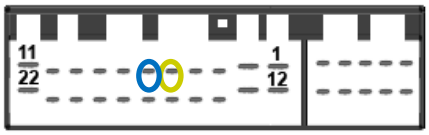
Honda

Accord (8G), CR-Z, Jazz (2G)
Female 20pin connector in radio slot
CAN High – Pin 13
CAN Low – Pin 3



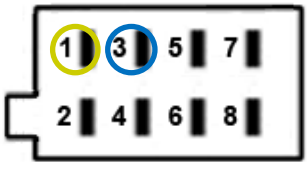
JEEP/CHRYSLER

Grand Cherokee, 300C
Female 22-pin connector in radio slot
CAN High – Pin 5 (white / red)
CAN Low – Pin 6 (white)



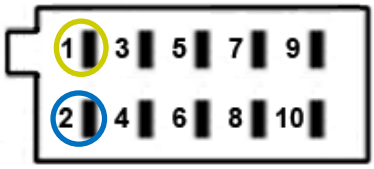
LANCIA

Ypsilon from 11/03
Female 8-pin ISO connector in radio slot
CAN High – Pin 1
CAN Low – Pin 3

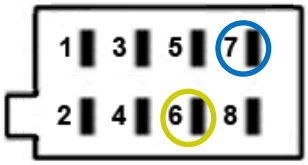


MERCEDES BENZ

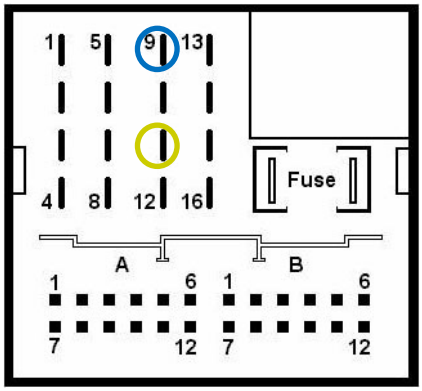
CLK W208 after facelift, **CLK W209** till 03/04,
E-Class W210 from 09/99, **Viano**, **SL W230** from 07/04
Female 10pin ISO-connector in radio slot
CAN High – Pin 1
CAN Low – Pin 2



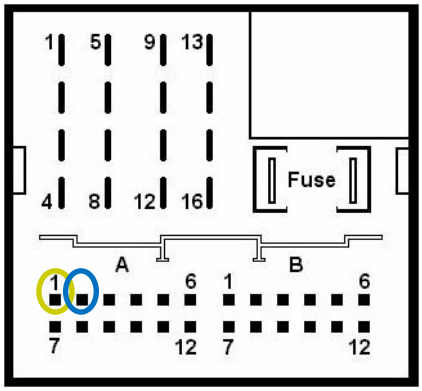
A-Class W169 and **B-Class W245** with Audio5,
all MERCEDES with indoor CAN-bus
Female 8pin ISO connector in radio slot
CAN High – Pin 6
CAN Low – Pin 7



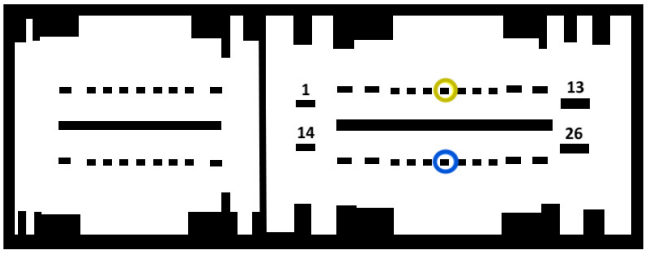
A-Class W169 and **B-Class W245** with Audio20,
C-Class W203 and **CLK W209** from 04/04,
Viano W693
Female Quadlock-connector in radio slot
CAN High – Pin 11
CAN Low – Pin 9



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)

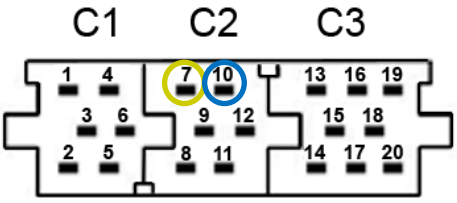


Sprinter W907/W910 from 12/07
Female 26pin connector in radio slot
CAN High – Pin 7
CAN Low – Pin 20

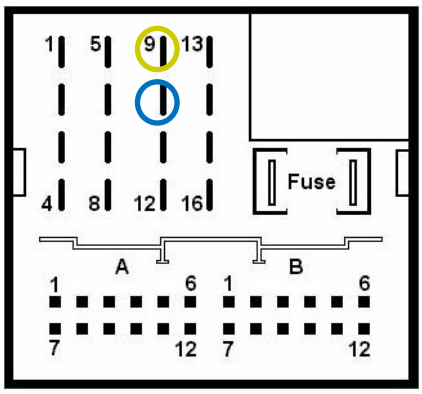


OPEL

Vectra C till 07/04
Female Mini-ISO connector in radio slot
CAN High – Pin 7
CAN Low – Pin 10

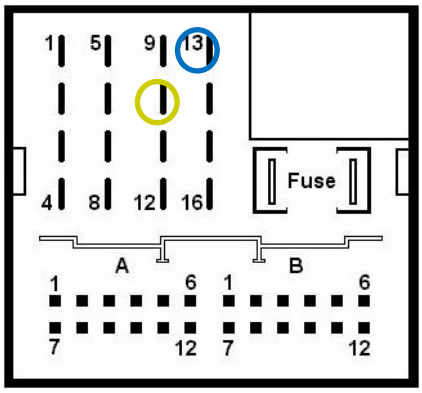


Astra H , Corsa C, Meriva, Tigra Twin Top, Vectra C from 08/04
Female Quadlock-connector in radio slot
CAN High – Pin 9
CAN Low – Pin 10



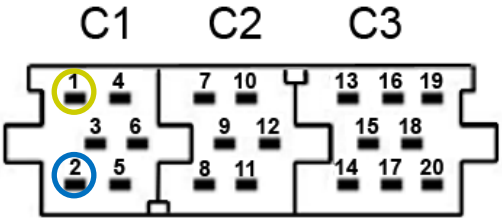
PEUGEOT

307, 407
Female Quadlock-connector in radio slot
CAN High – Pin 10
CAN Low – Pin 13

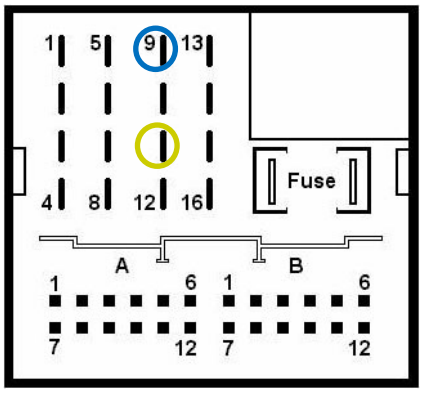


PORSCHE

Cayenne (9PA), Boxster (987), 911 (997)
Female Mini-ISO connector in radio slot
CAN High – Pin 1
CAN Low – Pin 2

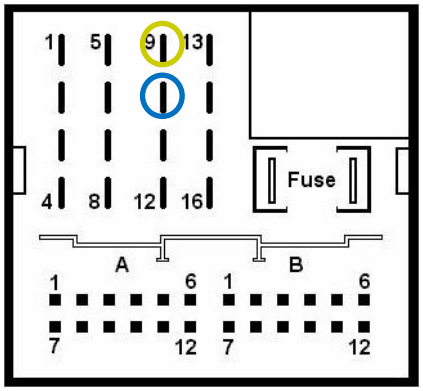


Cayenne (92A), Panamera (970)
Female Quadlock-connector in radio slot
CAN High – Pin 11
CAN Low – Pin 9

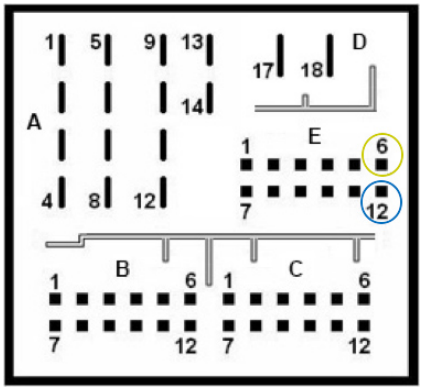


SEAT

Altea
Female Quadlock-connector in radio slot
CAN High – Pin 9
CAN Low – Pin 10

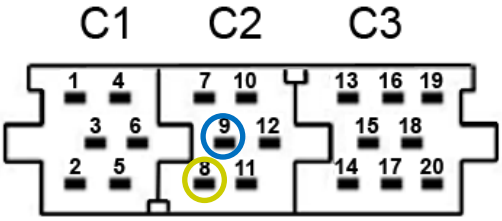


Leon III
Female Quadlock-connector in radio slot
CAN High – Pin 6
CAN Low – Pin 12

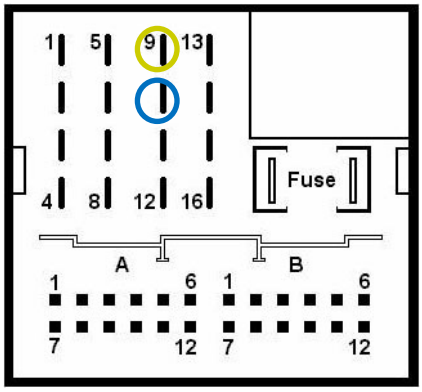


ŠKODA

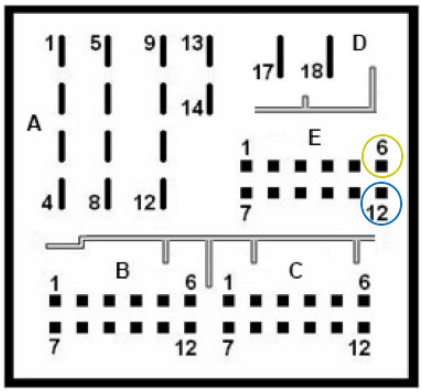
Superb, Octavia I
Female Mini-ISO connector in radio slot
CAN High – Pin 8
CAN Low – Pin 9



Octavia II
Female Quadlock-connector in radio slot
CAN High – Pin 9
CAN Low – Pin 10

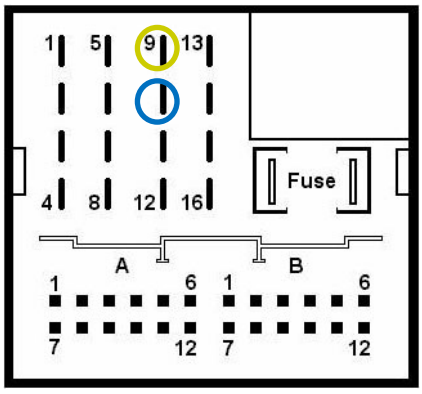


Fabia III
Female Quadlock-connector in radio slot
CAN High – Pin 6
CAN Low – Pin 12

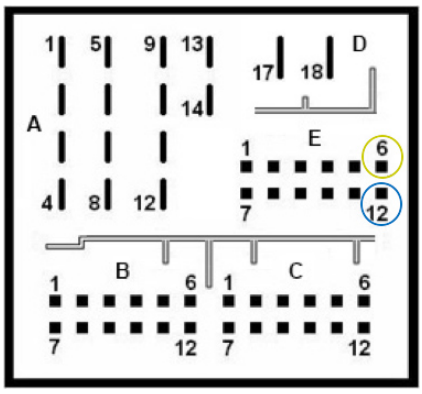


VOLKSWAGEN

Golf 4, Golf 5, Passat 3B, Caddy, Touran, Touareg, T5
Female Quadlock-connector in radio slot
CAN High – Pin 9
CAN Low – Pin 10

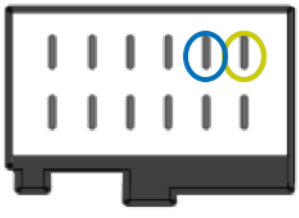


Golf 7
Female Quadlock-connector in radio slot
CAN High – Pin 6
CAN Low – Pin 12



VOLVO

S60, V70
Female 12pin connector in radio slot
CAN High – Pin 7 (white)
CAN Low – Pin 8 (green)



XC90
Female 10-Pin connector in radio slot
CAN High – white cable (double occupied)
CAN Low – green cable (double occupied)

4. Specifications

Operation voltage	10.5 – 14.8V
Stand-by power drain	<3mA
Operation power drain	~50mA
Power consumption	0.07-40W
Temperature range	-30°C till +80°C
Weight	38g
Measurements (box only) W x H x D	71 x 22 x 50 mm

CE ⎓ 12V DC

Capacitance

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

5. Technical Support

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