



# CAN-bus Interface CX-311-BP Steering wheel control

Compatible with Blaupunkt
New York 800
Chicago 600

# **Product features**

- Connection of Blaupunkt New York 800 or Chicago 600 head-unit in vehicles with CAN-bus
- Output of analogue ACC, lights and reverse gear signals
- Plug and play adaption
- Support of factory sound systems (only VW and Skoda Octavia II)
- Steering wheel controls

Version 24.11.2011 CX-311-BP



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# Information

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.

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# 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 CX-311-BP converts digital signals from the vehicle's CAN-bus to analogue ACC (**Z**), reverse gear (**R**) and lights (**L**) signals and on Volkswagen and Skoda Octavia II it powers up existing factory sound-systems (**SS**). Furthermore, it gives the possibility to control the Blaupunkt New York 800 and Chicago 600 head-units by steering wheel buttons (**MFL**). The below table shows which vehicle-specific harness CX-0XX-BP can be used for which vehicles.

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brand/	compatible vehicles	functions	harness	Blaupunkt Art.no.
make				
Alfa Romeo	159, Brera	Z,L,R,MFL	CX-034-BP	1 101 116 634 001
Audi	<b>A2</b> and <b>A3</b> from year 07/01 till 12/06, <b>A4</b> from year 01/00 till 10/06, <b>A6</b> from year 07/01 till 01/05, <b>TT</b> from year 07/01 till 07/06	Z,L,R,MFL	CX-023-BP	1 101 116 623 001
	<b>A1</b> , <b>A3</b> from year 01/07, <b>A4</b> from year 11/06 till 11/07, <b>TT</b> from year 08/06	Z,L,R,MFL	CX-025-BP	1 101 116 625 001
BMW	1series (E81/82/87/88), 3series (E90/91/92/92)	Z,L,R,MFL	CX-028-BP	1 101 116 628 001
Citroen	<b>C3</b> , <b>C4</b> , <b>C5</b> from year 10/04, <b>Jumper</b> from year 09/06 (only S)	Z,L,R,MFL	CX-030-BP	1 101 116 630 001
Fiat	Stilo, Grande Punto	Z,L,R,MFL	CX-034-BP	1 101 116 634 001
	Sudo	Z,L,R,MFL	CX-030-BP	1 101 116 630 001
Ford	Focus, C-Max, Mondeo, S-Max, Galaxy - with Quadlock	Z,L,R,MFL	CX-035-BP	1 101 116 635 001
Maserati	Quattroporte	Z,L,R,MFL	CX-025-BP	1 101 116 625 001
Mercedes Benz	All with radiopreparation , <b>A-Class</b> (W169), <b>B-Class</b> (W245) with Audio5	Z,L,R,MFL	CX-026-BP	1 101 116 626 001
	-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	Z,L,R,MFL	CX-027-BP	1 101 116 627 001
	A-Class(W169),B-Class(W245) with Audio20,R-Class(W251),C-Class (W203) from year 04/05,CLK-Class(W209) from year 04/04,M-Class(W164),C-Class(W204),SLK (R171) from year 06/08,E-Class (W211) from year 06/08,E-Class (W212),E-Coupe (W207),CLS-Class (W219) from year 06/08,Viano (W639),Sprinter (W906)  – with Quadlock	Z,L,R,MFL	CX-028-BP	1 101 116 628 001
	<b>E-Class</b> (W211) from year 04/03, <b>CLS-Class</b> (W219) till 06/08, <b>SLK -Class</b> (R171) till 06/08	Z,L,R,MFL	CX-029-BP	1 101 116 629 001
Opel	Astra H,Corsa C/D,Vectra C from year 08/04,Meriva,Tigra Twin Top,Vivaro,Antara	Z,L,R,MFL	CX-021-BP	1 101 116 621 001
Peugeot	207, 307, 407, 4007 (without LB) - with Quadlock	Z,L,R,MFL	CX-030-BP	1 101 116 630 001
Porsche	Cayenne, Boxster, Cayman, 911 - with Quadlock	Z,L,R,MFL	CX-028-BP	1 101 116 628 001
	Cayenne, Boxster, 997 with ISO	Z,L,R,MFL	CX-024-BP	1 101 116 624 001
Renault	Megane III	Z,L,R,MFL	CX-036-BP	1 101 116 636 001
Saab	<b>9-3</b> , <b>9-5</b> from year 07/98	Z,L,R,MFL	CX-031-BP	1 101 116 631 001
	9-3 with Quadlock Stecker	Z,L,R,MFL	CX-032-BP	1 101 116 632 001
Smart	ForFour with ISO	Z,L,R,MFL	CX-026-BP	1 101 116 626 001
	ForFour with Quadlock	Z,L,R,MFL	CX-028-BP	1 101 116 628 001
Seat	Altea, Leon	Z,L,R,MFL	CX-025-BP	1 101 116 625 001
Skoda	Octavia I, Superb with indoor CAN-bus	Z,L,R,MFL	CX-022-BP	1 101 116 622 001
	Octavia II, Superb (3T), Fabia (5J)	Z,L,R,MFL,S S	CX-025-BP	1 101 116 625 001
vw	Caddy,Golf 4/5/6/Plus,Passat 3B/3C,Polo 6N/9N, Phaeton D1, Tiguan 5N, T5,Touran,Touareg - Quadlock	Z,L,R,MFL,S S	CX-025-BP	1 101 116 625 001
Volvo	S60, V70	Z,L,R,MFL	CX-033-BP	1 101 116 633 001

Z = ACC, L = lights, R = reverse gear, MFL = steering wheel control, SS = sound-system

**Note:** The Blaupunkt New York 800 merely switches to rear-view camera, if the rear-view camera input is activated in the settings **and** the CAN-bus interface CX-311-BP is correctly installed **and** there is a video-signal on the rear-view camera input of the New York 800.

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# 2. Installation

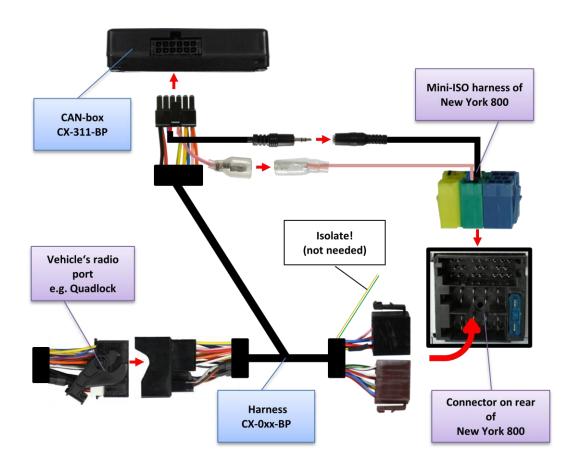
Switch off ignition and disconnect the vehicle's battery! If according to factory rules disconnecting the battery has to be avoided, it is usually sufficient to put the vehicle in sleep-mode. In case the sleep-mode does not show success, disconnect the battery with a resistor lead.

Place of installation of the CX-311-BP is in the radio slot on the vehicle's radio port.

**Note:** After installation you have to configure the steering wheel buttons in the Blaupunkt Head-Unit in menu "Settings", submenu "General", menu item "SWC". Otherwise the steering wheel control doesn't work!

### 2.1. Connection schema

Example for connection with harness CX-025-BP to Blaupunkt New York 800.







# 2.2. Installation with vehicle-specific harness CX-0xx-BP

- a.) Remove female Mini-ISO connector of Blaupunkt head-unit.
- b.) Connect jack plug 3.5mm IR control input of the Blaupunkt device, to 3.5mm phone jack IR-control output at the CX-0xx-BP.
- c.) Connect pink female connector of "Reverse" cable of the Blaupunkt head-unit to male pink male connector of harness CX-0xx-BP.
- d.) Connect harness CX-0xx-BP to CAN-box CX-311-BP by 12pin Molex.
- e.) Connect vehicle's female radio connector(s) to the suitable male connector(s) of harness CX-0xx-BP.
- f.) Connect female ISO-connectors of harness CX-0xx-BP to male ISO-harness of the Blaupunkt head-unit.
- g.) Connect female Mini-ISO connector of Blaupunkt head-unit to it again.
- h.) 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.
- i.) The yellow/green wire is an analogue speed-signal which is not needed. It must be isolated.

**Note for CX-035-BP (Ford):** ACC and illumination are not analogue but digital 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.

# 3. Vehicle-specific assignments - CAN-bus

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

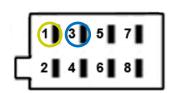
# **ALFA ROMEO**

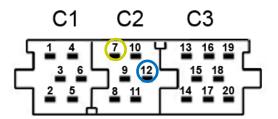
## 147

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





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### **BMW**

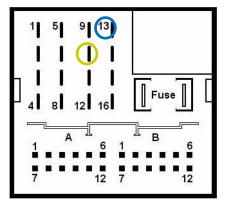
# 1series E81, 3series E90, 5series E60

Female Quadlock-connector in radio slot CAN High – Pin 11 CAN Low – Pin 9

# 1 5 9 13 Fuse Fuse 7 12 7 12

# CITROËN

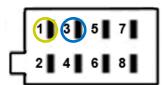
C4, C5 from 10/04
Female Quadlock-connector in radio slot
CAN High – Pin 10
CAN Low – Pin 13



# **FIAT**

### Stilo

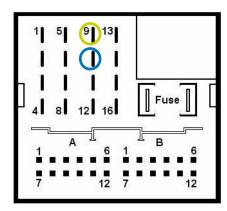
Female 8pin ISO connector in radio slot CAN High – Pin 1 CAN Low – Pin 3



# **FORD**

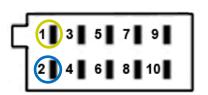
# Focus, Focus C-MAX, S-MAX, Mondeo

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



# **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

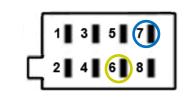


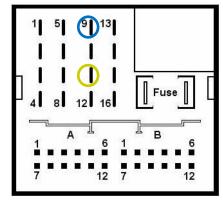


A-Class W169 and B-Class W245 with Audio5, all MERCEDES with indoor CAN-bus
Female 8pin ISO connector in radio slot
CAN High – Pin 6
CAN Low – Pin 7

**A-Class W169** and **B-Class W245** with Audio20, **C-Class W203** and **CLK W209** from 04/04, **Viano W693** 

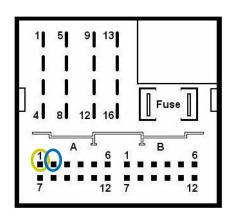
Female Quadlock-connector in radio slot CAN High – Pin 11 CAN Low – Pin 9





## **MERCEDES BENZ**

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)



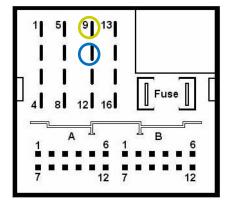
# **OPEL**

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

C1 C2 C3

1 4 7 10 13 16 19
3 6 9 12 15 18
2 5 8 11 14 17 20

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, Boxster, 997

Female Mini-ISO connector in radio slot CAN High – Pin 1 CAN Low – Pin 2

# **SAAB**

# 9-3, 9-5

Female 10pin ISO-connector in radio slot CAN High – Pin 4 CAN Low – Pin 2

# 9-3 after facelift

20pin control unit connector, CAN High – Pin 1 or Pin 2 CAN Low – not connected

# SEAT

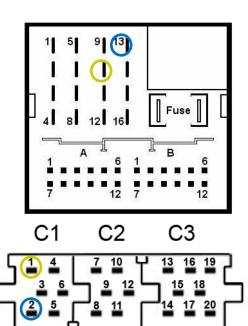
### Altea

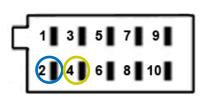
Female Quadlock-connector in radio slot CAN High – Pin 9 CAN Low – Pin 10

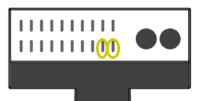
# ŠKODA

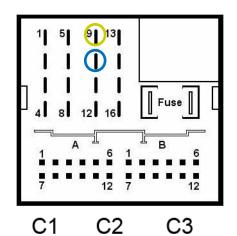
# Superb, Octavia I

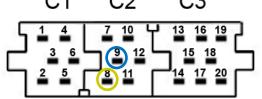
Female Mini-ISO connector in radio slot CAN High – Pin 8 CAN Low – Pin 9







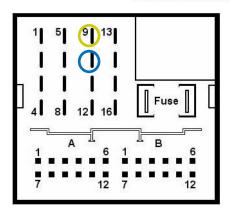






# Octavia II

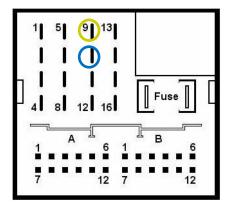
Female Quadlock-connector in radio slot CAN High – Pin 9 CAN Low – Pin 10



# **VOLKSWAGEN**

Golf 4, Golf 5, Passat 3B, Caddy, Touran, Touareg, T5

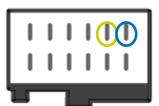
Female Quadlock-connector in radio slot CAN High – Pin 9 CAN Low – Pin 10



# **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. Steering wheel control

The control options by the steering wheel buttons vary depending on the available steering wheel buttons. In general, they include volume control and track jumps.

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# 5. Specifications

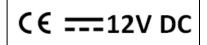
Operation voltage 10.5 – 14.8V

Stand-by power drain <1mA
Operation power drain ~45mA
Power consumption 1-27W

Temperature range -30°C till +80°C

Weight 41g

Measurements (box only) B x H x T 70 x 22 x 50 mm



# 6. Technical Support

# Caraudio-Systems Vertriebs GmbH manufacturer/distribution

In den Fuchslöchern 3 D-67240 Bobenheim-Roxheim

email support@caraudio-systems.de

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