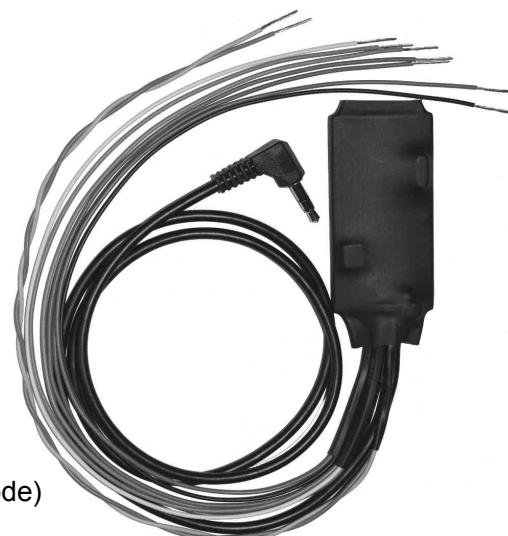


CAN-OUT Steering Wheel Audio Control Interface Adapter

Wiring

Red:	Power +12 V (BAT)
Black:	Power GND
Pink:	CAN HIGH
Gray:	CAN LOW
Blue:	Amplifier activation (12 V input)
Gray/Black:	Optional resistive buttons input SW1
Brown:	Optional resistive buttons ground SWG
Yellow:	Accessory (ACC) *
White:	Light *
Violet:	Reverse *
Green:	Speed pulse (1 km/h → 1 Hz) *
Orange:	Current output for external optional IR diode (anode)
Brown:	Ground for external optional IR diode (cathode)

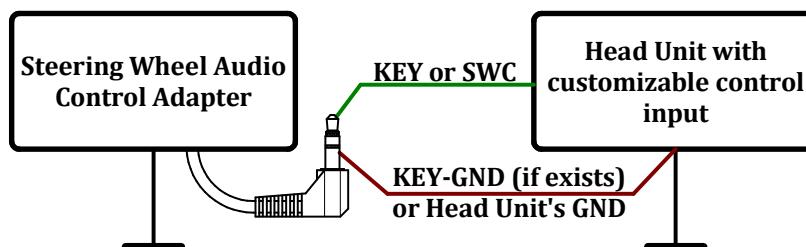


* All 12 V outputs have short circuit and over temperature protection and current limit not less than 700 mA.

Optional plug adapters for Blaupunkt, Kenwood, Panasonic, JVC2 and “Android” head units:



Connection to head unit equipped with resistive steering wheel control input:



Note:

1) An optional plug adapter is required to connect Jack 3.5 equipped steering wheel adapter to Blaupunkt, Kenwood and Panasonic head units.

2) To configure adapter for certain head unit brand use steering wheel buttons to type appropriate programming sequence listed in [table](#) on next page of this document. Configuration will not be cleared after power off. **Programming is possible only if steering wheel has all necessary buttons: “vol+”, “vol-”, “seek+”, “seek-”**

Uzmanību:

1) Adaptera pieslēgšanai pie magnetolām Blaupunkt, Kenwood un Panasonic ir nepieciešamas atsevišķas pārejas priekš spraudna Jack 3.5.

2) Lai konfigurētu adapteri priekš konkrētas magnetolas izmantojot stūres vadības pogas, nepieciešams ievadīt attiecīgo kombināciju rindu, kas paredzēta konkrētajai magnetolai. [Tabula](#) atrodas lapas otrajā pusē. Konfigurācija saglabājas arī pēc barošanas atslēgšanas. **Programmēšana ir iespējama, ja ir visas pogas, ko izmanto programmēšanas procesā, tās būtu, “vol+”, “vol-”, “seek+”, “seek-”.**

Внимание:

1) Для подключения адаптера, оснащенного разъемом Jack 3.5, к магнитолам марок Blaupunkt, Kenwood и Panasonic, требуется дополнительный переходник.

2) Чтобы сконфигурировать адаптер для работы с требуемой маркой магнитолы нужно, используя кнопки на руле, набрать соответствующую последовательность из [таблицы](#) на следующей странице этого документа. Конфигурация сохраняется и после выключения питания. **Программирование возможно только при наличии всех необходимых кнопок: “vol+”, “vol-”, “seek+”, “seek-”.**

Programming Sequences

Alpine	:	- + ↑ + ↓	+ ↓ ↑ ↓	↑ + ↑ ↓	↑ ↓ + ↓
Pioneer	:	- + ↓ ↑ ↓	+ ↑ + ↓	↑ + ↑ ↓	↑ ↓ + ↓
Pioneer2	:	- + ↓ ↑ ↓	+ ↑ + ↓	↑ + ↑ ↓	+ ↓ + ↓
Kenwood	:	- ↑ + ↑ ↓	↑ ↓ + ↓	↑ + ↑ ↓	+ ↓ ↑ ↓
Kenwood2	:	- ↑ + ↑ ↓	↑ ↓ + ↓	↑ + ↑ ↓	+ ↓ + ↓
Sony	:	- ↑ ↓ + ↓	↑ + ↑ ↓	↑ + ↑ ↓	+ ↓ ↑ ↓
JVC	:	- + ↓ + ↓	↑ ↓ ↑ ↓	↑ + + ↓	+ ↓ ↑ ↓
JVC2	:	- + ↓ + ↓	↑ ↓ ↑ ↓	↑ + + ↓	↑ ↓ + ↓
Blaupunkt	:	- ↑ ↓ ↑ ↓	+ ↑ + ↓	+ ↓ ↑ ↓	↑ + ↑ ↓
Blaupunkt2	:	- ↑ ↓ ↑ ↓	+ ↓ + ↓	+ ↑ + ↓	↑ + ↑ ↓
Blaupunkt3	:	- ↑ ↓ ↑ ↓	+ ↓ + ↓	↑ ↓ + ↓	+ ↓ ↑ ↓
Panasonic	:	- + ↑ + ↓	↑ ↓ ↑ ↓	↑ + ↑ ↓	+ ↓ ↑ ↓
Clarion	:	- + ↓ ↑ ↓	+ ↓ + ↓	↑ ↓ + ↓	+ ↑ + ↓
Clarion2	:	- + ↓ ↑ ↓	+ ↓ + ↓	↑ ↓ + ↓	↑ + ↑ ↓
Clarion3	:	- + ↓ ↑ ↓	+ ↓ + ↓	↑ ↓ + ↓	↑ ↓ ↑ ↓
AmplifierCAN	:	- + ↑ + ↓	↑ ↓ ↑ ↓	+ ↓ ↑ ↓	↑ ↓ + ↓
SeekPreSwap*	:	- ↑ ↓ ↑ ↓	↑ + ↑ ↓	↑ ↓ + ↓	+ ↓ + ↓
UsePhoneBtn*	:	- ↑ + ↑ ↓	↑ ↓ ↑ ↓	+ ↓ + ↓	+ ↑ + ↓
Alpine	:	- + ▶ + ◀	+ ◀ ▶ ◀	▶ + ▶ ◀	▶ ◀ + ◀
Pioneer	:	- + ◀ ▶ ◀	+ ▶ + ◀	▶ + ▶ ◀	▶ ◀ + ◀
Pioneer2	:	- + ◀ ▶ ◀	+ ▶ + ◀	▶ + ▶ ◀	+ ◀ + ◀
Kenwood	:	- ▶ + ▶ ◀	▶ ◀ + ◀	+ ▶ + ◀	+ ◀ + ▶ ◀
Kenwood2	:	- ▶ + ▶ ◀	▶ ◀ + ◀	+ ▶ + ◀	+ ◀ + ▶ ◀
Sony	:	- ▶ ◀ + ◀	▶ + ▶ ◀	+ ▶ + ◀	+ ◀ + ▶ ◀
JVC	:	- + ◀ + ◀	▶ ◀ ▶ ◀	+ ▶ + ◀	+ ◀ + ▶ ◀
JVC2	:	- + ◀ + ◀	▶ ◀ ▶ ◀	+ ▶ + ◀	▶ ◀ + ◀
Blaupunkt	:	- ▶ ◀ ▶ ◀	+ ▶ + ◀	+ ◀ ▶ ◀	▶ + ▶ ◀
Blaupunkt2	:	- ▶ ◀ ▶ ◀	▶ ◀ + ◀	+ ▶ + ◀	▶ + ▶ ◀
Blaupunkt3	:	- ▶ ◀ ▶ ◀	+ ◀ + ◀	▶ ◀ + ◀	+ ◀ + ▶ ◀
Panasonic	:	- + ▶ + ◀	▶ ◀ ▶ ◀	▶ + ▶ ◀	+ ◀ + ▶ ◀
Clarion	:	- + ◀ ▶ ◀	▶ + ◀ ◀	▶ ◀ + ◀	+ ▶ + ◀
Clarion2	:	- + ◀ ▶ ◀	▶ + ◀ ◀	▶ ◀ + ◀	▶ + ▶ ◀
Clarion3	:	- + ◀ ▶ ◀	▶ + ◀ ◀	▶ ◀ + ◀	▶ ◀ + ▶ ◀
AmplifierCAN	:	- + ▶ + ◀	▶ ◀ ▶ ◀	+ ◀ ▶ ◀	▶ ◀ + ◀
SeekPreSwap*	:	- ▶ ◀ ▶ ◀	▶ + ▶ ◀	▶ ◀ + ◀	+ ◀ + ▶ ◀
UsePhoneBtn*	:	- ▶ + ▶ ◀	▶ ◀ ▶ ◀	+ ◀ + ◀	+ ▶ + ▶ ◀

↑ , ▶ = Seek + ;

↓ , ◀ = Seek - ;

“+” = Volume Up ;

“-” = Volume Down.

* (en)

- SeekPreSwap: Reassignment of buttons functions: swap around commands “Seek/Track” and “Preset/Disk/Folder”. In case of presence of only “Seek+/-” buttons, initially short pressing is translated to “Seek/Track” command and prolonged pressing – to “Preset/Disk/Folder” command.
- UsePhoneBtn: Send phone control commands. By default “On-hook/Off-hook” buttons on steering wheel causes sending of “Mute” command to head-unit.

* (lv)

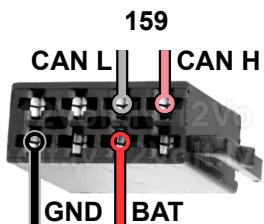
- SeekPreSwap: Pogu funkciju atkārtota iestatīšana: apmainīt vietām komandas “Seek/Track” un “Preset/Disk/Folder”. Gadījumā, ja stūre aprīkota tikai ar “Seek +/-” pogām, sākotnēji ūsi pogas spiedieni izpildīs “Seek/Track”, bet garie spiedieni “Preset/Disk/Folder” funkciju.
- UsePhoneBtn: Tāluņa vadības komandu pārraide. Pēc noklusēšanas, “On-hook/Off-hook” stūres pogas izsauc komandu “Mute”.

* (ru)

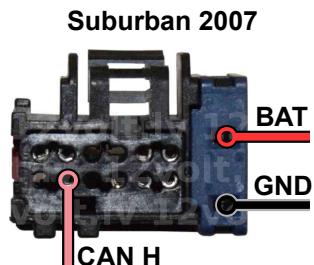
- SeekPreSwap: Переназначение функций кнопок: обмен местами команд “Seek/Track” и “Preset/Disk/Folder”. Если присутствуют только кнопки “Seek+/-”, изначально, короткое нажатие передает команду “Seek”, а длинное — “Preset”.
- UsePhoneBtn: Переключение режимов работы кнопок управления телефоном. Единственная кнопка “Phone” может работать как “Mute”. В случае наличия двух кнопок управления телефоном в альтернативном режиме кнопка поднятия трубки Off-Hook коротким нажатием поднимает, длинным кладет трубку, а кнопка опускания On-Hook работает как Mute.

Pinouts

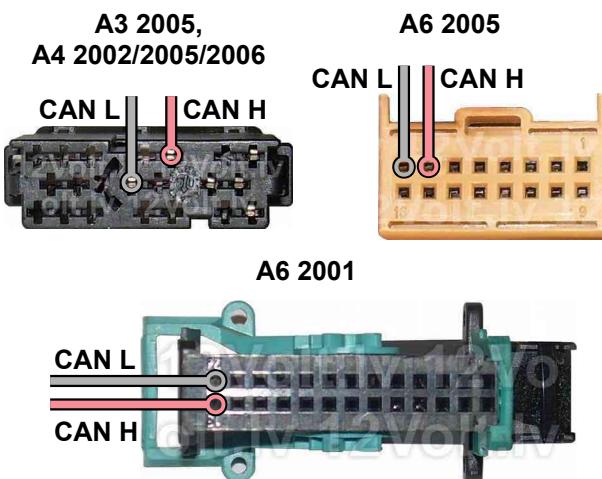
Alfa Romeo



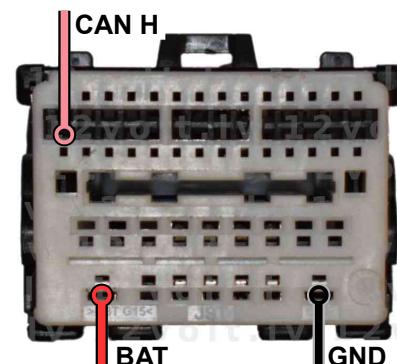
Chevrolet



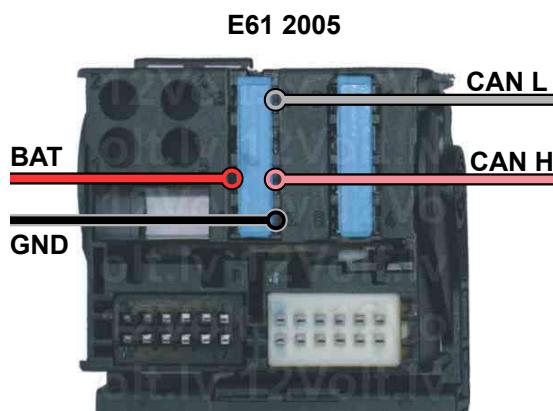
Audi



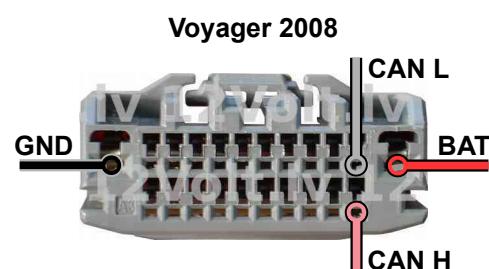
Explorer 2013



BMW

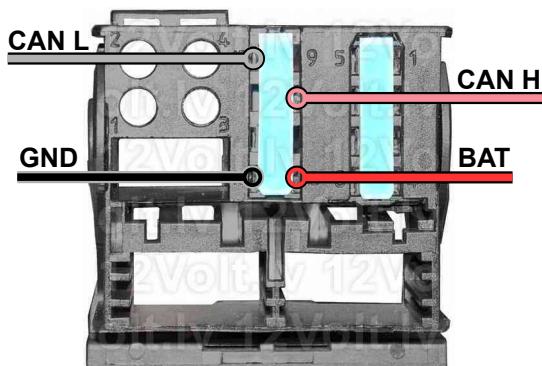


Chrysler



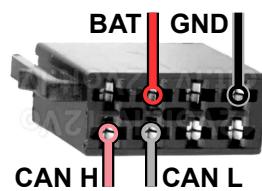
Citroën

C4 2006/10/13, Jumpy 2011, Berlingo 2013/15 *

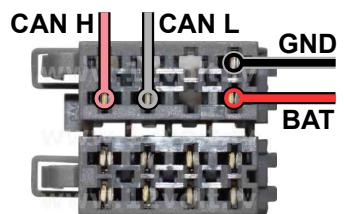


Fiat

Ducato 2012

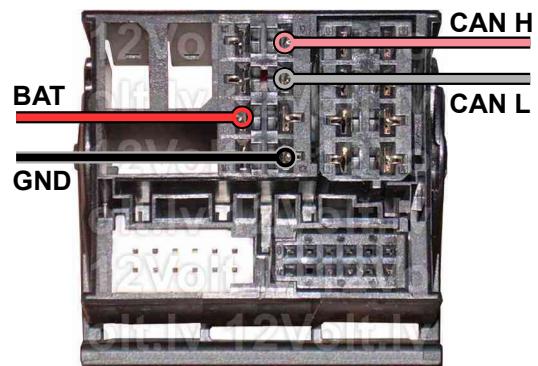


Bravo 2011



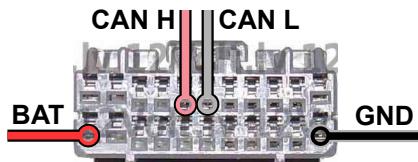
Ford

Focus 2006, S-MAX 2006

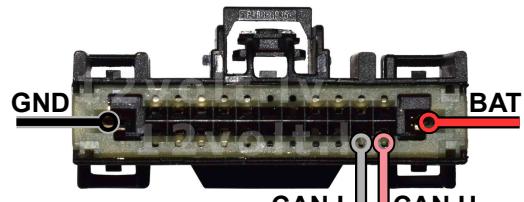


Dodge

Caliber SXT 2012, Durango 2004

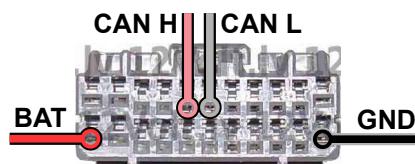


Focus 2011

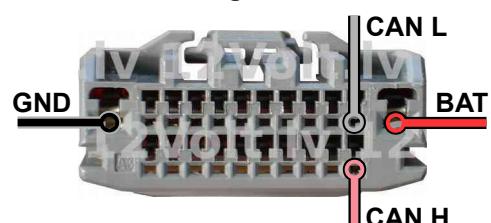


Jeep

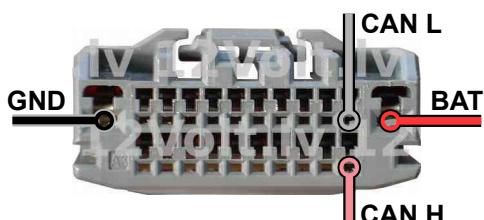
Grand Cherokee 2006



Wrangler 2011



Avenger 2006/2007, Nitro SXT 2007

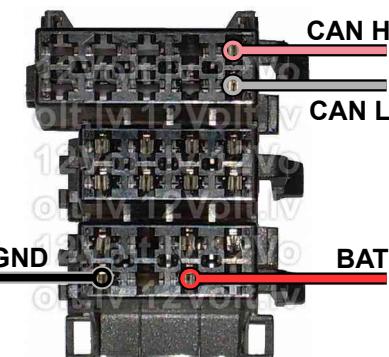


Honda

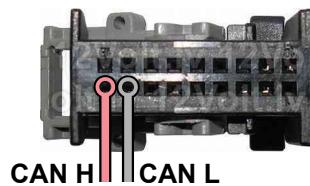
Honda Civic 5d 2012, Honda CR-V 2013

**Mercedes Benz**

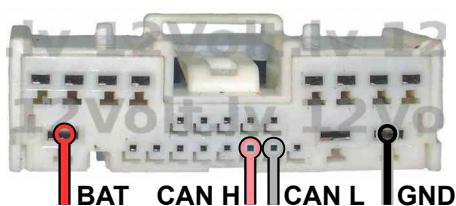
C class, W210



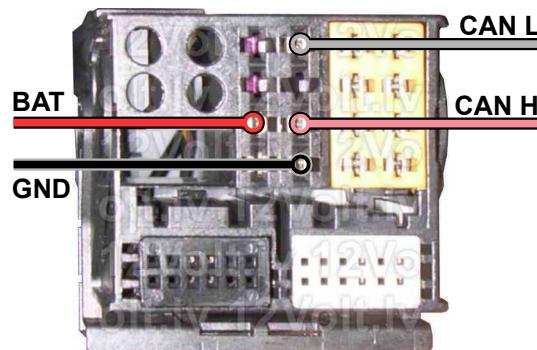
G class 2003

**Mazda**

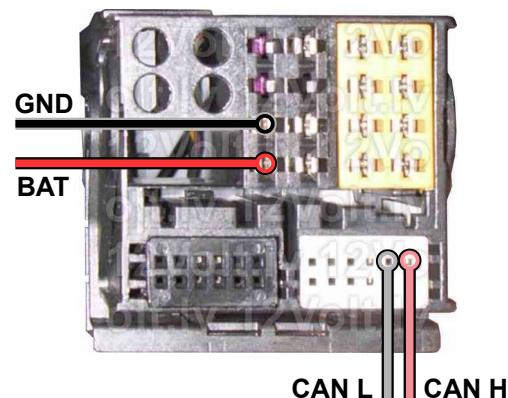
5 2006



B class, ML class



SLK R171 2006

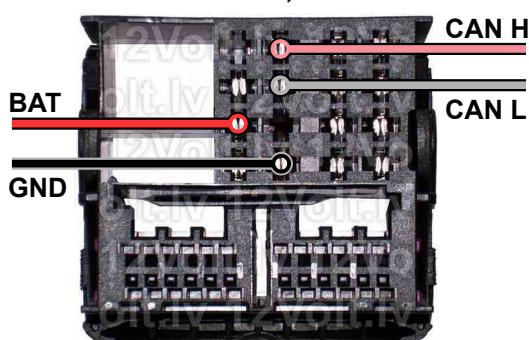
**Nissan**

Primastar



Opel

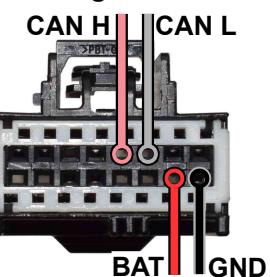
Astra 2006/2012, Zafira, Vivaro 2007,
Vectra 2006, Meriva A



Vivaro 2012

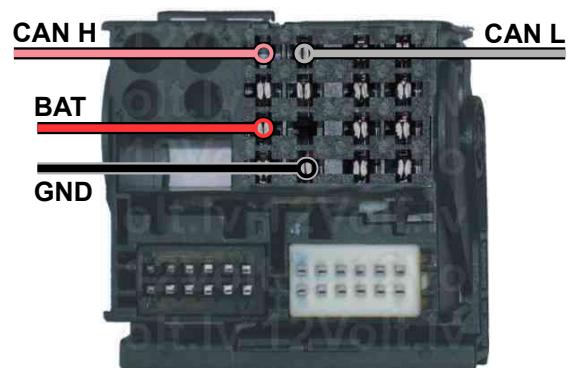


Insignia 2015



Renault

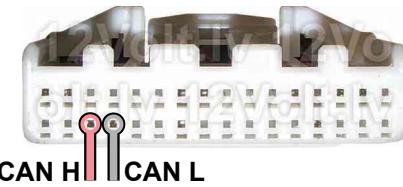
Megane 2010



Megane 2018



Scenic 2012, Master 2014



Scenic 2020

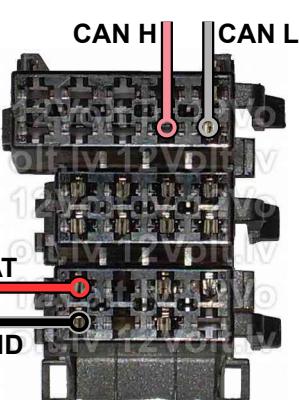


Trafic 2012

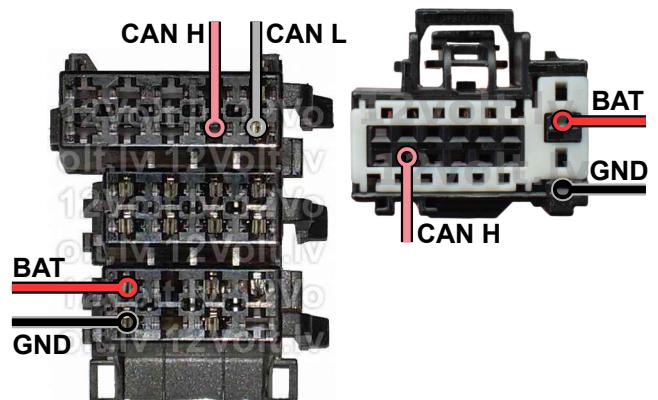


Saab

9-3, 9-5

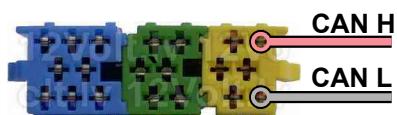


9-5 2007



Porsche

Cayenne 2003

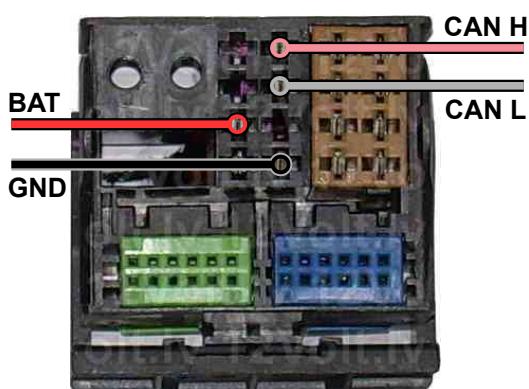


Cayenne S 2007



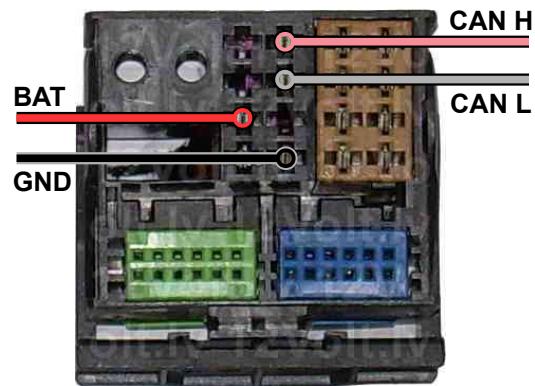
Seat

Leon 2007



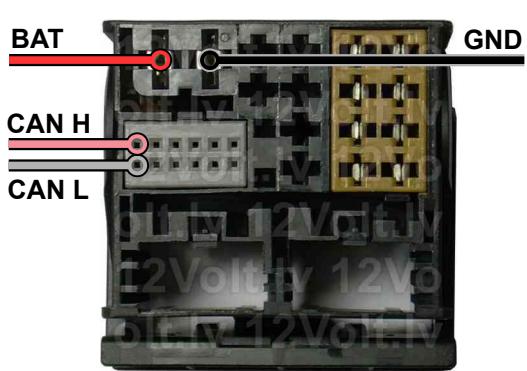
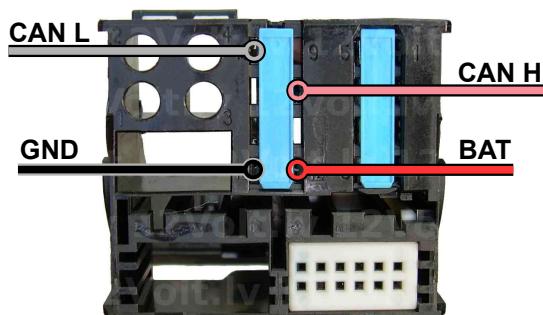
Volkswagen

Multivan 2009/2011, Golf MK6 2012,
Sharan 2007, Touareg 2006, Passat 2008



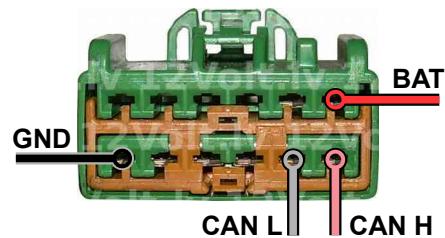
Toyota

Proace 2014



Volvo

S60 2003, V70XC 2006, V70 2003, S80 2001



Appendix A: Citroën Berlingo 2013 Display Menu buttons emulation

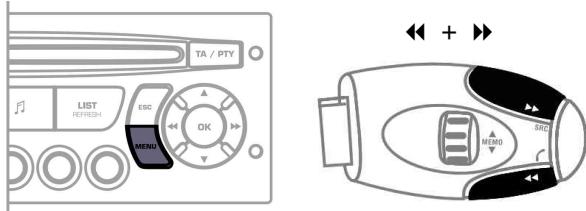
Oriģinālā displeja iestatījumu vadības emulācija ar radioaparātastūres vadības pogu palīdzību, lai iestatītu laiku, datumu, valodu uz displeja, gadījumos, kad oriģinālais radioaparāts tiek nomainīts pret citu vai nav pieejams.

Emulation of Menu buttons by using of combination of Steering Wheel Controls to set up date, time, language etc. on display if original head unit is replaced or missing.

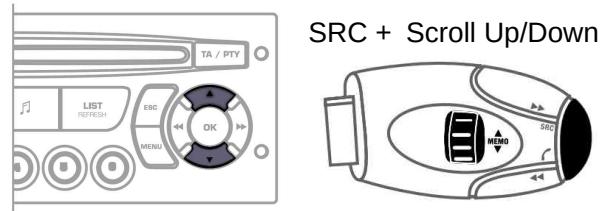
Эмуляция кнопок управления меню с помощью комбинации кнопок подрулевого пульта управления для установки даты, времени, языка на дисплее в случае замены или отсутствия оригинального головного устройства.



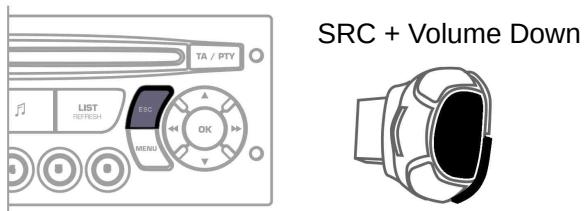
Enter MENU



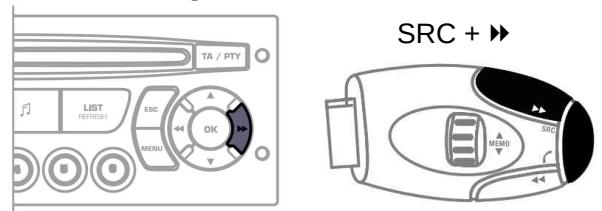
Up / Down



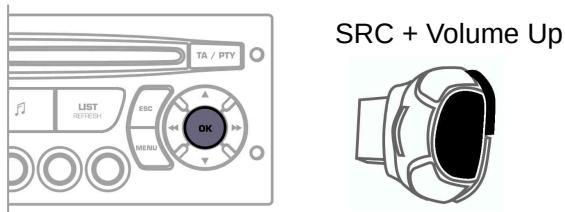
ESC / Back



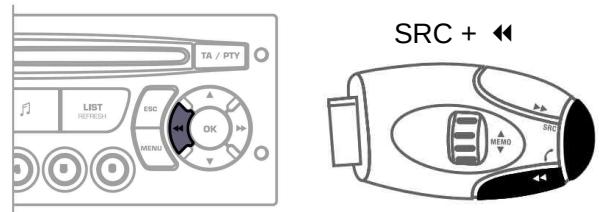
Right / Increase



OK / Confirm



Left / Decrease



Document History

Doc. Rev.	Firmware	Date	Description
1.38	#1712	21.07.2020	Opel Insignia 2015
1.37	#1446	21.07.2020	Opel Vivaro 2012
1.36	#1490	13.07.2020	Renault Scenic 2020
1.35	#1689	10.06.2020	Chevrolet Explorer 2013
1.34	#1582	06.06.2019	Volvo S80 2001
1.33	#1569	04.06.2019	Seat Leon 2007
1.32		07.02.2019	Citroën C4 Picasso 2010, 2013 pinout
1.31	#1539	07.02.2019	Citroën Berlingo 2013/2015; Appendix A with display menu buttons emulation map
1.30	#1518	02.01.2019	A4 2005/2006
1.29	#1492	29.08.2018	Volvo V70 2003
1.28	#1490	29.08.2018	Renault Megane 2018
1.27	#1416	29.08.2018	Opel Meriva A 2003-2010
1.26	#1451	02.07.2018	Clarion3; Connection diagram for Blaupunkt3 (Android, adaptive resistive inputs); New photo of adapter;
1.25	#1446	02.07.2018	Renault Master 2014
1.24	#1413	26.04.2018	Saab 9-5 2007
1.23	#1398	07.02.2018	Chevrolet Suburban 2007
1.22		02.12.2017	Ford Focus 2011
1.21	#1381	03.11.2017	Fiat Bravo 2011, Honda Civic 5d 2012
1.20		17.07.2017	Mercedes-Benz ML class 2005-2011
1.19		14.06.2017	Change colors of wires: Blue→Violet, Red→Blue, CAN is now Pink and Gray.
1.18	#1111	22.09.2016	Chrysler Voyager 2008
1.17	#1223	22.09.2016	Dodge Nitro SXT 2007
1.16	#1046	02.08.2016	Citroën Jumpy 2011
1.15	#1046	05.07.2016	Toyota Proace 2014; translation to Latvian on first page
1.14	#1209	20.06.2016	Honda CR-V 2013; actual limit is 700 mA per output
1.13	#1166	12.02.2016	Dodge Durango
1.12	#1150	29.01.2016	Citroën Jumper, VW Passat, Dodge Avenger
1.11	#1126	11.01.2016	Blaupunkt3: adaptive to resistive buttons: control through Jack
1.10		30.10.2015	Sort connectors alphabetically
1.9		30.10.2015	Add connectors: Volkswagen, Mercedes, Volvo, Renault, Jeep, Alfa Romeo, Mazda, Audi, Porsche, Ford, Peugeot; unification of connection lines.
1.8	#1078	22.08.2015	JVC2
1.7	#1066	08.04.2015	AmplifierCAN: SW buttons control VOLUME and FADER settings of original audio amplifier (if it exists) by CAN packets instead of HU parameters by Jack connection
1.6	#989	26.11.2014	Kenwood2 and Clarion2, Document History