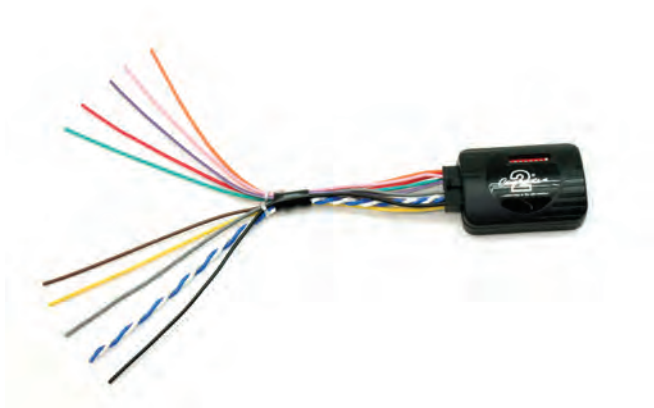




UNI-SWC.2

Universal Steering Wheel Control for CAN-Bus & Resistive Vehicles



INSTRUCTION MANUAL

www.aerpro.com.au

Designed and
Engineered
in the UK. 

ABOUT

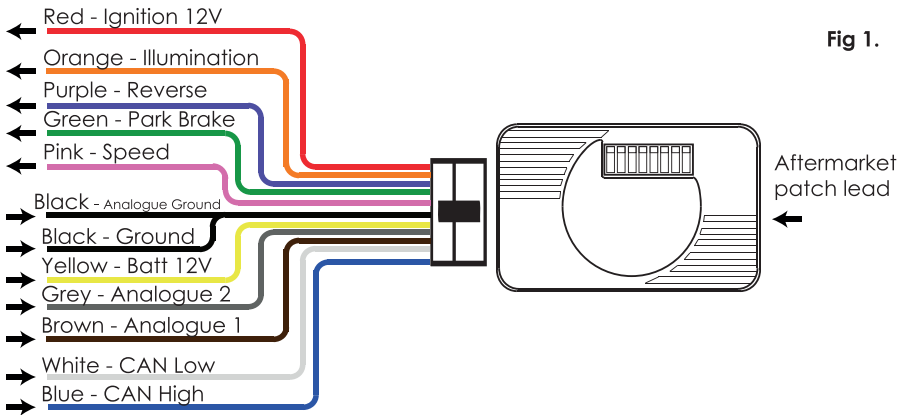
The Aerpro APUNISWC covers a wide range of both CAN-Bus and resistive vehicles, allowing steering wheel control retention with almost every steering wheel control compatible head unit on the market.

Installation

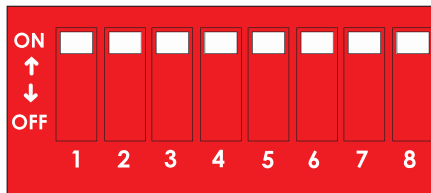
- 1: Remove and disconnect the original head unit.
- 2: Connect the Universal patch lead to the APUNISWC interface.
- 3: Set the correct dipswitch settings on the APUNISWC(see Fig 2.) according to the vehicle it is being fitted into. See car specific diagrams for further information.
4. Install into the vehicle using Interface Connections (Fig 1.), the car specific wiring information overleaf and patch lead config (ref back page)

NOTE: Car manufacturers can change wiring specifications without notice. Ensure that the correct wires are located before commencing installation.

Interface Connections



Dipswitch Settings



Set the dipswitches 1-7 according to the car specific settings overleaf.

Set dipswitch 8 to ON when fitting the APUNISWC interface with a Pioneer head unit.

Car Specific Dipswitch Settings

Make	Model	Year From	Year To	Dipswitch Settings							Phone Button Support	CAN/Analogue
				1	2	3	4	5	6	7		
Audi	A1	2010		On	On		On	On	On		✓	CAN
	A3	2003		On	On		On	On	On		✓	CAN
	A4	2002		On	On		On	On	On		✓	CAN
	A6	2004		On	On		On	On	On		✓	CAN
	TT	2006		On	On		On	On	On		✓	CAN
Alfa Romeo	147	2000	2007		On	On	On	On			✗	Analogue
	156	2000			On	On	On	On			✗	Analogue
	GT	2004	2008		On	On	On	On			✗	Analogue
	159	2006			On	On		On	On		✓	CAN
	Brera	2007			On	On		On	On		✓	CAN
	147	2007			On	On	On		On		✗	CAN
	GT	2008			On	On	On		On		✗	CAN
	Giulietta	2010			On	On	On	On	On		✓	CAN
Mito	2008			On	On	On	On	On		✓	CAN	
BMW	3 Series	1999	2005	On		On	On		On		✓	i-Bus
	5 Series	1996	2004	On		On	On		On		✓	i-Bus
	7 Series	1994	2001	On		On	On		On		✓	i-Bus
	Mini	2001	2006	On		On	On		On		✓	i-Bus
	Z4	2002	2008	On		On	On		On		✓	i-Bus
	X3	2004		On		On	On		On		✓	CAN
	X5	1999	2006	On		On	On		On		✓	CAN
	1 Series	2004		On	On		On	On	On		✓	CAN
	3 Series	2005		On	On		On	On	On		✓	CAN
	5 Series	2004		On	On		On	On	On		✓	CAN
	6 Series	2003		On	On		On	On	On		✓	CAN
	7 Series	2002		On	On		On	On	On		✓	CAN
	Mini	2006		On	On		On	On	On		✓	CAN
Z4	2009		On	On		On	On	On		✓	CAN	
Chery	Tigo	2013			On		On	On			✗	Analogue
Citroen	C2	2005			On			On	On		✗	CAN
	C4	2004			On			On	On		✗	CAN
	C5	2005			On			On	On		✗	CAN
	C8	2005			On			On	On		✗	CAN
	DS3	2009			On			On	On		✗	CAN
	C3 Picasso	2009			On			On	On		✗	CAN
	C4 Picasso	2006			On			On	On		✗	CAN
	C3	2006			On			On	On		✗	CAN
Chevrolet	Captiva	2006				On	On		On		✓	Analogue
	Aveo	2002	2011			On	On		On		✓	Analogue
	S10	2012		On	On			On			✓	Analogue
	Spark	2013				On	On				✓	Analogue
	Sonic	2013				On	On				✓	Analogue
Fiat	500	2007			On	On	On	On	On		✓	CAN
	Punto	2005			On	On	On	On	On		✓	CAN
	Ducato	2011			On	On	On	On	On		✓	CAN
	Idea	2006			On	On	On	On	On		✓	CAN
	Doblo	2009			On	On	On	On	On		✓	CAN
	Qubo	2007			On	On	On	On	On		✓	CAN
	Bravo	2007			On	On		On	On		✓	CAN
	Stilo	2001	2007		On	On		On	On		✓	CAN
	Panda	2007	2012		On	On			On		✗	CAN

Car Specific Dipswitch Settings

Make	Model	Year From	Year To	Dipswitch Settings							Phone Button Support	CAN/Analogue	
				1	2	3	4	5	6	7			
Ford	Fiesta		2003			On			On		✗	Analogue	
	Galaxy		2006			On			On		✗	Analogue	
	Puma	1997	2002			On			On		✗	Analogue	
	Transit	1996	2005			On			On		✗	Analogue	
	Focus		2004			On			On		✗	Analogue	
	Mondeo		2004			On			On		✗	Analogue	
	C-Max	2004	2011		On		On	On	On		✗	CAN/Analogue	
	Falcon AU	1998	2002							On		✗	Analogue
	Fiesta	2005	2008		On		On	On	On		✗	CAN/Analogue	
	Fusion	2005			On		On	On	On		✗	CAN/Analogue	
	Galaxy	2006			On		On	On	On		✗	CAN/Analogue	
	S-Max	2006			On		On	On	On		✗	CAN/Analogue	
	Transit	2005			On		On	On	On		✗	CAN/Analogue	
	Kuga	2008	2012		On		On	On	On		✗	CAN/Analogue	
	Transit Connect	2004			On		On	On	On		✗	CAN/Analogue	
	Focus	2004	2011		On		On	On	On		✗	CAN/Analogue	
	Mondeo	2004			On		On	On	On		✗	CAN/Analogue	
	Fiesta	2006	2008		On	On					✗	Analogue	
Fusion	2002	2005		On	On					✗	Analogue		
Great Wall	Steed	2011		On		On			On		✗	Analogue	
	Wingle	2011		On		On			On	On	✗	Analogue	
Holden	Commodore VT-VX	1997	2002	On	On	On			On	On	✗	Analogue	
	Commodore VY-VZ	2002	2007						On	On	✗	Analogue	
Honda	Astra, Barina, Vectra		2004	On		On			On	On	✗	Analogue	
	City	2008		On	On	On		On	On		✗	Analogue	
	Civic	2005	2012	On	On	On		On	On		✗	Analogue	
	CR-V	2007	2009	On	On	On		On	On		✗	Analogue	
	S2000	2005		On	On	On		On	On		✗	Analogue	
	Amaze	2012		On	On	On		On	On		✗	Analogue	
	Civic	2012		On		On					✓	CAN	
Hyundai	i30	2007	2009					On			✓	Analogue	
	Santa Fe	2006	2010					On			✓	Analogue	
	i10	2009						On			✓	Analogue	
	i20	2009						On			✓	Analogue	
	i30	2009						On			✓	Analogue	
	IX20	2010						On			✓	Analogue	
	Santa Fe	2010						On			✓	Analogue	
	i40	2011						On			✓	Analogue	
	ix35	2010						On			✓	Analogue	
	i800	2007						On			✓	Analogue	
	Santa Fe	2013						On			✓	Analogue	
	IX45	2013						On			✓	Analogue	
	i30	2012						On			✓	Analogue	
	i40	2012						On			✓	Analogue	
Isuzu	D-Max	2012		On	On			On			✓	Analogue	
Jac Motors	J3	2013		On	On		On				✗	Analogue	
Jaguar	XJ8	1998	2003			On		On			✓	Analogue	
	X Type			On					On		✓	Analogue	
	S Type			On					On		✓	Analogue	
Kia	Cee'd	2007	2009	On	On	On	On	On	On		✓	Analogue	
	Cee'd	2009	2012	On	On	On	On	On	On		✓	Analogue	
	Soul	2009	2011	On	On	On	On	On	On		✓	Analogue	
	Sorento	2009	2011	On	On	On	On	On	On		✓	Analogue	
	Venga	2009		On	On	On	On	On			✓	Analogue	
	Sportage	2010		On	On	On	On		On		✓	Analogue	
	Soul	2012		On	On	On	On		On		✓	Analogue	
	Picanto	2011		On	On	On	On		On		✓	Analogue	
	Cee'd	2013		On	On	On	On		On		✓	Analogue	
	Rio	2011		On	On	On	On		On		✓	Analogue	

Car Specific Dipswitch Settings

Make	Model	Year From	Year To	Dipswitch Settings							Phone Button Support	CAN/Analogue	
				1	2	3	4	5	6	7			
Land Rover	Discovery	2001	2004						On		✘	Analogue	
	Freelander	2001	2003						On		✘	Analogue	
	Discovery	2003							On		✘	Analogue	
	Freelander	2006							On		✓	CAN	
	Range Rover Sport	2005	2013				On				✓	CAN	
Lifan Motors	620	2009		On		On		On			✘	Analogue	
	720	2012		On		On		On			✘	Analogue	
Mahindra	Scorpio	2006		On		On		On	On		✓	Analogue	
Mercedes	A Class	2004		On		On	On	On	On		✓	CAN	
	B Class	2005		On		On	On	On	On		✓	CAN	
	C Class	2004	2007	On		On	On	On	On		✓	CAN	
	Sprinter	2006		On		On	On	On	On		✓	CAN	
	Viano	2004		On		On	On	On	On		✓	CAN	
	R Class	2005		On		On	On	On	On		✓	CAN	
	Vito	2004		On		On	On	On	On		✓	CAN	
	Viano	2004		On		On	On	On	On		✓	CAN	
	Vito	2004		On		On	On	On	On		✓	CAN	
E Class	2002	2008	On		On	On	On	On		✓	CAN		
	SLK	2002		On		On	On	On	On		✓	CAN	
Mitsubishi	Lancer	2007	2010	On			On	On			✓	Analogue	
	Outlander	2007	2010	On			On	On			✓	Analogue	
	ASX	2010			On	On		On			✓	Analogue	
	Lancer	2010			On	On		On			✓	Analogue	
	Outlander	2010			On	On		On			✓	Analogue	
	Pajero	2013			On	On		On			✓	Analogue	
	Shogun	2013			On	On		On			✓	Analogue	
	Outlander	2013		On			On				✓	CAN/Analogue	
Mazda	2	2007			On		On				✘	Analogue	
	6	2007	2009		On				On		✘	CAN/Analogue	
	3	2004	2008		On		On	On			✘	CAN/Analogue	
	CX-7	2008			On			On			✘	CAN/Analogue	
	CX-9	2007			On			On			✘	CAN/Analogue	
Nissan	Dualis	2007					On		On		✓	Analogue	
	X-Trail	2009					On		On		✓	Analogue	
	Navara	2010					On		On		✓	Analogue	
	Micra	2007	2010				On		On		✓	Analogue	
	Juke	2010		On		On	On				✓	Analogue	
	Micra	2010		On		On	On				✓	Analogue	
	Pulsar	2012		On		On	On				✓	Analogue	
	March	2010		On		On	On				✓	Analogue	
	Pulse	2011		On		On	On				✓	Analogue	
	Evalia	2013		On		On	On				✓	Analogue	
	Versa	2008		On		On	On				✓	Analogue	
Note	2009		On	On	On	On				✓	Analogue		
	X-Trail				On	On	On				✘	Analogue	
Peugeot	206	1998	2002		On						✘	Analogue	
	306	1998	2002		On						✘	Analogue	
	3008	2009			On			On	On		✘	CAN	
	807	2005			On			On	On		✘	CAN	
	407	2004			On			On	On		✘	CAN	
	207	2006			On			On	On		✘	CAN	
	308	2008			On			On	On		✘	CAN	
	307	2005			On			On	On		✘	CAN	
	607	2004			On			On	On		✘	CAN	
	208	2012			On			On	On		✘	CAN	
	5008	2009	2013		On			On	On		✘	CAN	
		RCZ	2010			On			On	On		✘	CAN

Car Specific Dipswitch Settings

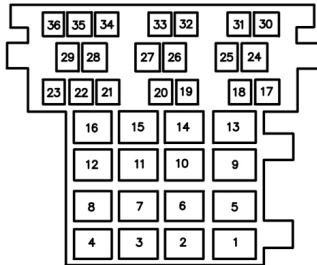
Make	Model	Year From	Year To	Dipswitch Settings							Phone Button Support	CAN/Analogue
				1	2	3	4	5	6	7		
Porsche	Cayenne	2002		On	On		On	On	On		✘	CAN
	Cayenne	2007	2010	On	On		On	On	On		✘	CAN
Proton	GEN-2	2004		On	On	On			On		✘	Analogue
Renault	Clio	2005					On	On	On		✘	CAN
	Megane	2005	2008				On	On	On		✘	CAN
	Modus	2005					On	On	On		✘	CAN
	Twingo	2007					On	On	On		✘	CAN
	Scenic	2005					On	On	On		✘	CAN
	Laguna	2005	2007				On	On	On		✘	CAN
	Clio	2009						On	On		✓	CAN
	Megane	2008	2012					On	On		✓	CAN
	Wind	2010						On	On		✓	CAN
	Fluence	2010						On	On		✓	CAN
	Scenic	2009						On	On		✓	CAN
	Trafic	2010	2013					On	On		✓	CAN
	Laguna	2008						On	On		✓	CAN
	Rover	75		2003						On		✘
Saab	9-3	2008		On	On	On	On	On	On	On	✓	CAN
	9-5	2008		On	On	On	On	On	On	On	✓	CAN
Scania	Use APUNISW2	2004										
Skoda	Octavia	2008	2013	On	On			On	On		✘	CAN
	Fabia	2013		On	On			On	On		✘	CAN
	Rapid	2010		On	On			On	On		✘	CAN
	Yeti	2010		On	On			On	On		✘	CAN
	Superb	2004	2013	On	On			On	On		✘	CAN
Seat	Altea	2004		On	On			On	On			CAN
	Ibiza	2008		On	On			On	On			CAN
	Leon	2005		On	On			On	On			CAN
	Toledo	2004		On	On			On	On			CAN
	Exeo	2009		On	On		On	On	On		✓	CAN
Subaru	Forester	2007		On				On	On	On	✓	Analogue
	Impreza	2007	2012	On				On	On		✓	Analogue
	Impreza	2012		On				On			✓	Analogue
	XV	2012		On				On			✓	Analogue
	Forester	2012		On				On			✓	Analogue
	Outback	2012		On				On			✓	Analogue
SsangYong	Actyon	2006					On	On			✘	Analogue
	Rexton	2007					On	On			✘	Analogue
	Korando Sport	2012					On	On			✘	Analogue
	Rodius	2013					On	On			✘	Analogue
	Korando	2010		On		On	On	On			✓	Analogue
	Korando	2010					On	On			✘	Analogue
	Korando Sport	2012				On	On	On			✓	Analogue
	Rexton	2007				On	On	On			✓	Analogue
	Rexton W	2013				On	On	On			✓	Analogue
	Actyon	2012				On	On	On			✓	Analogue
	Rodius Turismo	2013				On	On	On			✓	Analogue

Car Specific Dipswitch Settings

Make	Model	Year From	Year To	Dipswitch Settings							Phone Button Support	CAN/Analogue
				1	2	3	4	5	6	7		
Suzuki	Swift	2006		On			On		On		✓	Analogue
	Grand Vitara	2005		On			On		On		✓	Analogue
	SX4	2006		On			On		On		✓	Analogue
	Dzire	2008	2010	On			On		On		✓	Analogue
	Ritz	2009		On			On		On		✓	Analogue
	Splash	2009		On			On		On		✓	Analogue
	Ertiga	2012		On			On		On		✓	Analogue
Tata	Vista	2012			On		On		On		✓	Analogue
	Manza	2012			On		On		On		✓	Analogue
	Indigo	2006			On		On		On		✓	Analogue
Toyota	Avensis	2001	2011	On	On	On		On			✓	Analogue
	Corolla	2001		On	On	On		On			✓	Analogue
	RAV4	2001		On	On	On		On			✓	Analogue
	Yaris	2001		On	On	On		On			✓	Analogue
	4Runner	2002		On	On	On		On			✓	Analogue
	Avanza	2003		On	On	On		On			✓	Analogue
	Estima	2006		On	On	On		On			✓	Analogue
	Previa	2006		On	On	On		On			✓	Analogue
	Fortuner	2005		On	On	On		On			✓	Analogue
	Innova	2006		On	On	On		On			✓	Analogue
	Landcruiser	2007		On	On	On		On			✓	Analogue
	Prado	2007		On	On	On		On			✓	Analogue
	Matrix	2003		On	On	On		On			✓	Analogue
	Vios	2006		On	On	On		On			✓	Analogue
VW	Passat	2005		On	On		On		On		✓	CAN
	Golf	2004	2012	On	On		On	On			✓	CAN
	Transporter	2005		On	On		On	On			✓	CAN
	Polo	2004		On	On		On	On			✓	CAN
	Jetta	2005		On	On		On	On			✓	CAN
	EOS	2006		On	On		On	On			✓	CAN
	Tiguan	2007		On	On		On	On			✓	CAN
	Amarok	2011		On	On		On	On			✓	CAN
	Passat	2005		On	On		On	On			✓	CAN
	Touran	2004		On	On		On	On			✓	CAN
	Scirocco	2008		On	On		On	On			✓	CAN
	Touareg	2003		On	On				On		✘	CAN
	Multivan	2003		On	On				On		✘	CAN
	Gol	2012				On					✓	CAN
Vauxhall/Opel	Astra		2004			On		On	On		✘	Analogue
	Meriva	2003	2007			On		On	On		✘	Analogue
	Zafira		2005			On		On	On		✘	Analogue
	Vivaro	2002	2007			On		On	On		✘	Analogue
	Corsa	2000	2006			On		On	On		✘	Analogue
	Omega	2000	2004			On		On	On		✘	Analogue
	Vectra		2004			On		On	On		✘	Analogue
	Antara	2007	2010			On	On	On	On		✓	CAN
	Astra	2004	2010			On	On	On	On		✓	CAN
	Meriva	2007	2010			On	On	On	On		✓	CAN
	Signum	2005				On	On	On	On		✓	CAN
	Tigra	2005				On	On	On	On		✓	CAN
	Zafira	2005	2012			On	On	On	On		✓	CAN
	Corsa	2006	2009			On	On	On	On		✓	CAN
	Vectra	2004				On	On	On	On		✓	CAN

Car Specific Wiring Information

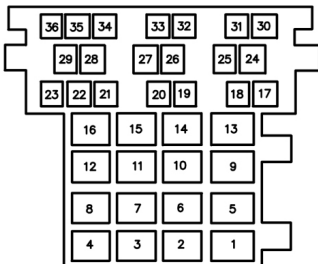
All connectors are shown from the terminal side and NOT the wire side



147/156/GT Analogue	
Interface Wire	Pin Number
Analogue 1	20
Analogue 2	33
Analogue Ground	27
Batt 12V	2
Ground	4

147/GT CAN-Bus	
Interface Wire	Pin Number
Analogue 1	20
Analogue 2	33
Analogue Ground	27
CAN High	5
CAN Low	6
Batt 12V	2
Ground	4

159/Brera/Guilietta/Mito	
Interface Wire	Pin Number
CAN High	5
CAN Low	6
Batt 12V	2
Ground	4



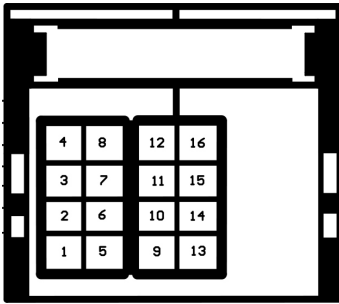
Mini-ISO Vehicles

CAN-Bus Vehicles	
Interface Wire	Pin Number
CAN High	32
CAN Low	27
Batt 12V	2
Ground	4

Car Specific Wiring Information

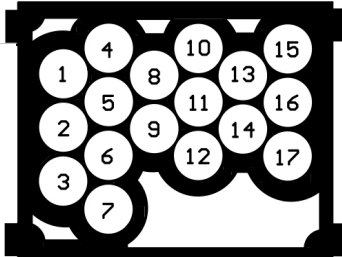
All connectors are shown from the terminal side and NOT the wire side

Audi Continued...



Audi CAN-Bus Quadlock

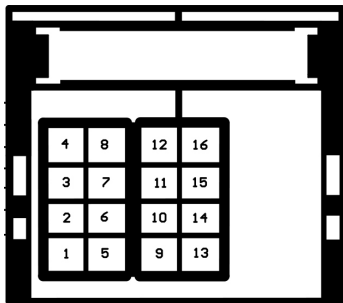
Audi CAN-Bus Quadlock	
Interface Wire	Pin Number
CAN High	9
CAN Low	10
Batt 12V	15
Ground	12



17 Way Round Pin
i-Bus Vehicles

17 Way i-Bus Vehicles	
Interface Wire	Pin Number
Analogue 2	14
Batt 12V	11
Ground	10

*Note that BMW i-Bus vehicles require a 4k7 resistor putting between the Batt 12V wire and the i-Bus wire (Analogue 2).



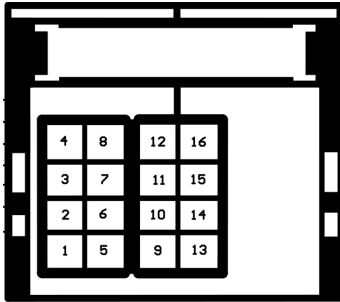
40 Way Flat Pin Quadlock
i-Bus Vehicles

40 Way i-Bus Vehicles	
Interface Wire	Pin Number
Analogue 2	9
Batt 12V	15
Ground	12

Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side

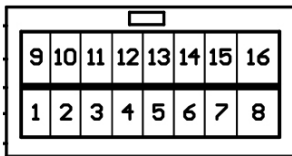
BMW Continued...



Quadlock
CAN-Bus Vehicles

Quadlock CAN-Bus Vehicles	
Interface Wire	Pin Number
CAN High	11
CAN Low	9
Batt 12V	To Battery*
Ground	12

*Note that the Batt 12V wire should be connected directly to the vehicle battery as the vehicle connector does not have a permanent 12V feed.

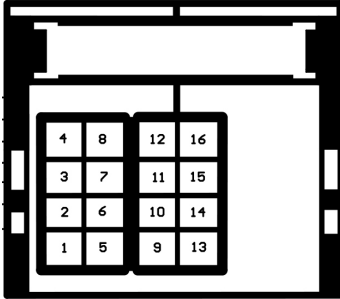


16 Way Kenwood
Connector

Chery Tigo	
Interface Wire	Pin Number
Analogue 1	2
Analogue Ground	5
Batt 12V	8
Ground	16

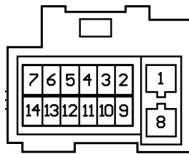
Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side

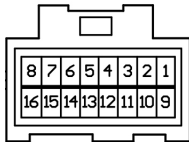


Quadlock
CAN-Bus Vehicles

Quadlock CAN-Bus Vehicles	
Interface Wire	Pin Number
CAN High	10
CAN Low	13
Batt 12V	12
Ground	16

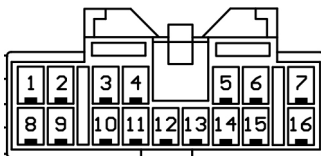


A



B

Aveo, Captiva	
Interface Wire	Pin Number
Analogue 2	B12
Analogue Ground	A12
Batt 12V	A1
Ground	A8

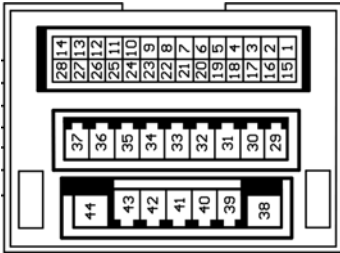


S10	
Interface Wire	Pin Number
Analogue 1	5
Analogue Ground	13
Batt 12V	14
Ground	10

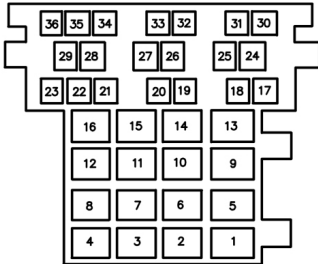
Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side

Chevrolet Continued...



Spark, Sonic	
Interface Wire	Pin Number
Analogue 2	19
Analogue Ground	5
Batt 12V	44
Ground	38



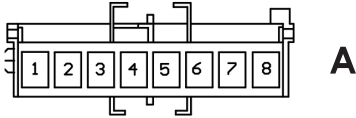
Mini-ISO Connector

500, Bravo, Punto, Ducato, Idea, Doblo, Stilo	
Interface Wire	Pin Number
CAN High	5
CAN Low	6
Batt 12V	2
Ground	4

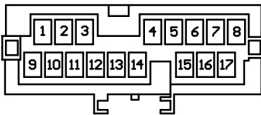
Panda	
Interface Wire	Pin Number
CAN High	5
CAN Low	6
Analogue 1	20
Analogue 2	33
Analogue Ground	27
Batt 12V	2
Ground	4

Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side



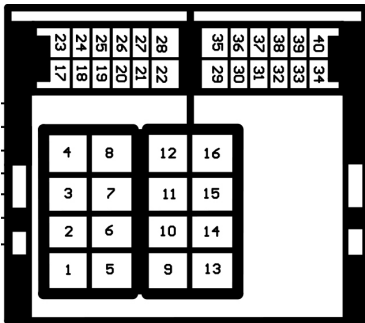
A



B

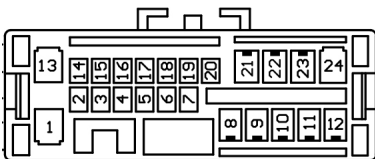
Old Style Analogue Vehicles

Old Style Analogue	
Interface Wire	Pin Number
Analogue 1	B5
Analogue Ground	B6
Batt 12V	A3
Ground	A8



Quadlock CAN-Bus Vehicles

Quadlock CAN-Bus Vehicles	
Interface Wire	Pin Number
CAN High	9
CAN Low	10
Analogue 1	22
Analogue Ground	24
Batt 12V	15
Ground	12

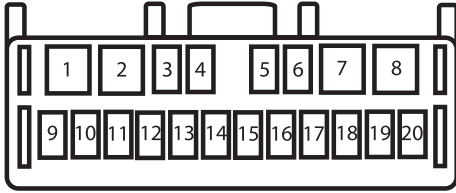


Fiesta/Fusion

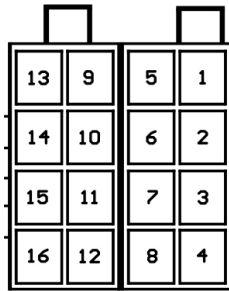
Fiesta/Fusion Analogue	
Interface Wire	Pin Number
Analogue 1	18
Analogue Ground	19
Batt 12V	1
Ground	13

Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side
 Ford Continued...



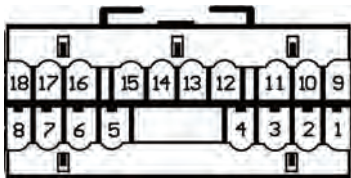
Ford AU series I, II & III	
Interface Wire	Pin Number
Analogue 1	19
Analogue 2	20
Batt 12V	1
Ground	8



Steed, Wingle	
Interface Wire	Pin Number
Analogue 2	1
Analogue Ground	5
Batt 12V	8
Ground	4



HOLDEN



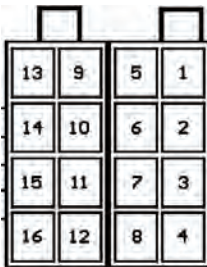
Holden VT, VX	
Interface Wire	Pin Number
Analogue2	9
Analogue Ground	16
Batt 12V	18
Ground	16

Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side
 Holden Continued...

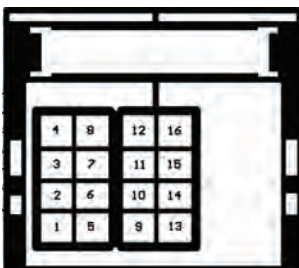


Holden VY, VZ, Monaro	
Interface Wire	Pin Number
Analogue 1	20
Analogue Ground	27
Batt 12V	8
Ground	4



Astra Barina
Analogue

Astra / Barina Analogue	
Interface Wire	Pin Number
Analogue 1	1
Analogue Ground	7
Batt 12V	8
Ground	4



Astra Barina CAN-Bus

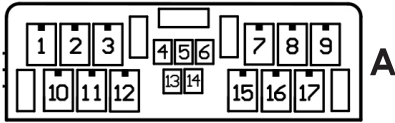
Astra / Barina CAN-Bus	
Interface Wire	Pin Number
CAN High	9
CAN Low	10
Batt 12V	15
Ground	12

Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side

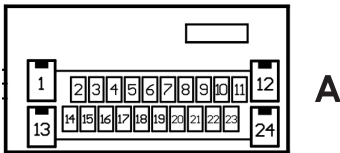


HONDA



Analogue Vehicles

Analogue	
Interface Wire	Pin Number
Analogue 1	B4
Analogue Ground	B5
Batt 12V	A10
Ground	A1



Civic CAN-Bus 2012>

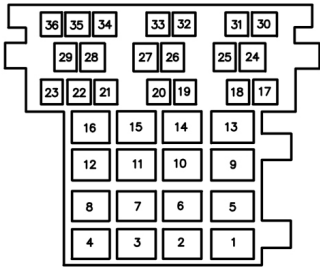
Civic CAN-Bus 2012>	
Interface Wire	Pin Number
CAN High	B13
CAN Low	B3
Batt 12V	A13
Ground	A1

Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side

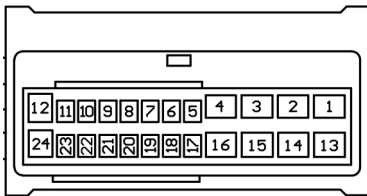


HYUNDAI



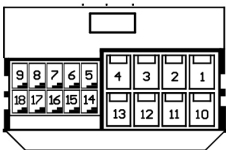
Mini-ISO Connector

Mini-ISO Vehicles	
Interface Wire	Pin Number
Analogue 2	19
Analogue Ground	20
Batt 12V	8
Ground	4

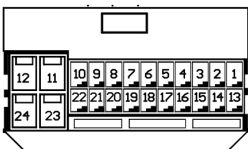


Santa Fe 2006-2010

Santa Fe 2006-2010	
Interface Wire	Pin Number
Analogue 2	6
Analogue Ground	18
Batt 12V	12
Ground	24



A



B

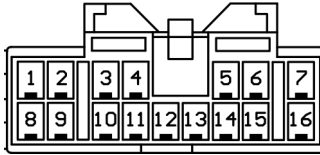
Hyundai White Connector

Hyundai White Connector	
Interface Wire	Pin Number
Analogue 2	B4
Analogue Ground	B17
Batt 12V	B12
Ground	B24

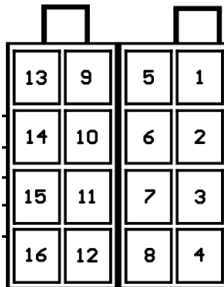
Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side

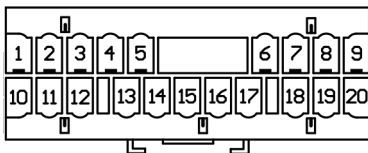
ISUZU



D-Max 2012>	
Interface Wire	Pin Number
Analogue 1	5
Analogue Ground	13
Batt 12V	14
Ground	10



J3 2013>	
Interface Wire	Pin Number
Analogue 1	1
Analogue Ground	6
Batt 12V	8
Ground	4

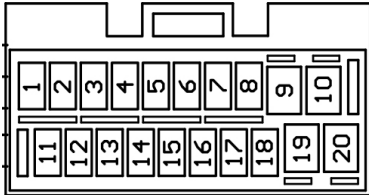


XJ8 1998-2003	
Interface Wire	Pin Number
Analogue 2	2
Analogue Ground	To vehicle chassis
Batt 12V	10
Ground	To vehicle chassis

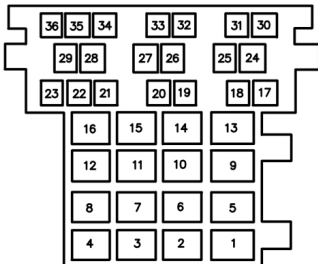
Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side

Jaguar Continued...

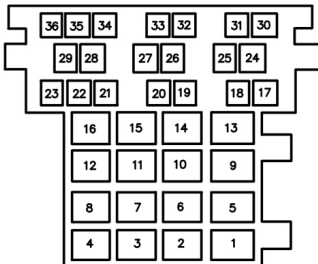


S/X Type	
Interface Wire	Pin Number
Analogue 1	13
Analogue Ground	To vehicle chassis
Batt 12V	20
Ground	10



Cee'd 2007-2009

Cee'd 2007-2009	
Interface Wire	Pin Number
Analogue 2	19
Analogue Ground	26
Batt 12V	8
Ground	4



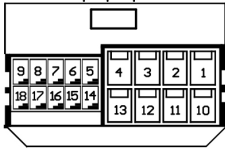
Mini-ISO Vehicles

Mini-ISO Vehicles	
Interface Wire	Pin Number
Analogue 2	19
Analogue Ground	20
Batt 12V	8
Ground	4

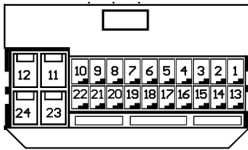
Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side

Kia Continued...



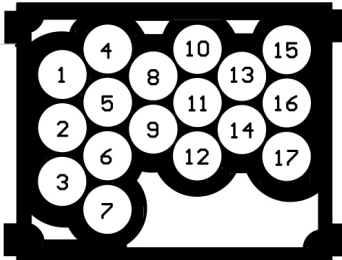
A



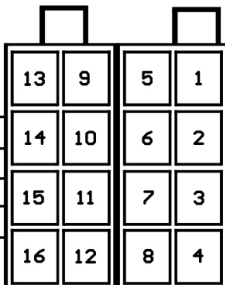
B

Kia White Connector	
Interface Wire	Pin Number
Analogue 2	B4
Analogue Ground	B17
Batt 12V	B12
Ground	B24

Kia White Connector



Land Rover Discovery/ Freelander with 17 way BMW Connector	
Interface Wire	Pin Number
Analogue 1	16
Analogue Ground	10
Batt 12V	11
Ground	10



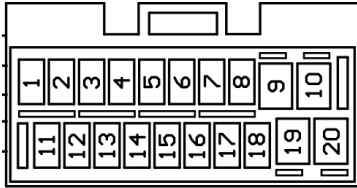
Land Rover Discovery 2003>

Land Rover Discovery 2003>	
Interface Wire	Pin Number
Analogue 1	1
Analogue Ground	To vehicle chassis
Batt 12V	2
Ground	4

Car Specific Wiring Information

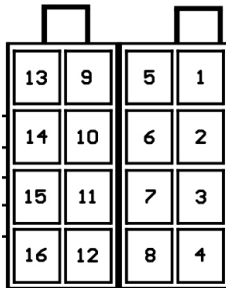
All connectors are shown from the terminal side and NOT the wire side

Land Rover Continued...



Freelanders/Range Rover Sport
CAN-Bus

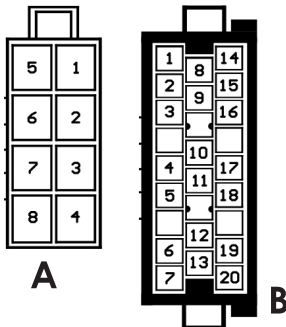
Freelanders/Range Rover Sport CAN-Bus	
Interface Wire	Pin Number
CAN High	2
CAN Low	1
Analogue 2	13
Analogue Ground	10
Batt 12V	20
Ground	10



Lifan Motors 620/720	
Interface Wire	Pin Number
Analogue 1	5
Analogue 2	1
Analogue Ground	4
Batt 12V	8
Ground	4



Mahindra



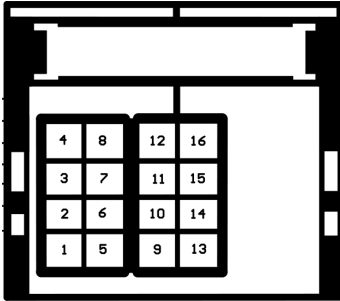
Scorpio	
Interface Wire	Pin Number
Analogue 1	A1
Analogue Ground	A6
Batt 12V	A8
Ground	A4

Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side

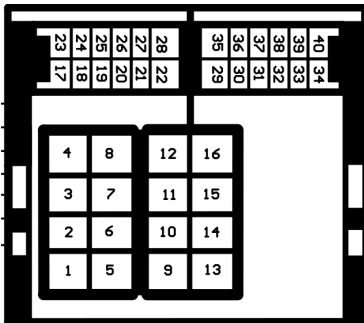


Mercedes-Benz



A, B, C, Sprinter,
Viano, R Class
Quadlock

A, B, C, Sprinter, Viano, R Class Quadlock	
Interface Wire	Pin Number
CAN High	11
CAN Low	9
Batt 12V	15
Ground	12



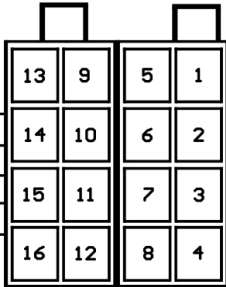
E Class/SLK
Quadlock

E Class/SLK Quadlock	
Interface Wire	Pin Number
CAN High	17
CAN Low	18
Batt 12V	16
Ground	15

Car Specific Wiring Information

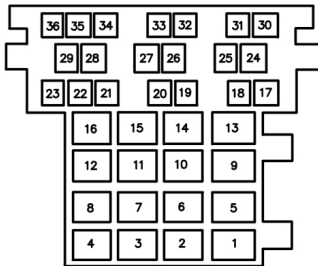
All connectors are shown from the terminal side and NOT the wire side

Mercedes Continued...



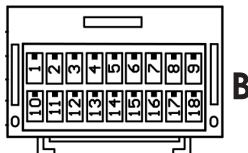
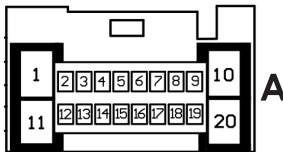
8 Way ISO CAN-Bus
Vehicles

8 Way ISO CAN-Bus	
Interface Wire	Pin Number
CAN High	3
CAN Low	8
Batt 12V	2
Ground	4



Mini-ISO CAN-Bus
Vehicles

Mini-ISO CAN-Bus	
Interface Wire	Pin Number
CAN High	17
CAN Low	30
Batt 12V	2
Ground	4



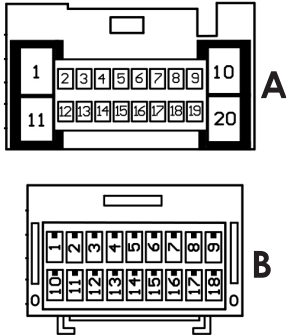
Lancer, Outlander 2007-2010	
Interface Wire	Pin Number
Analogue 1	A9
Analogue Ground	To vehicle chassis
Batt 12V	A1
Ground	To vehicle Chassis

Outlander/Lancer 2007-2010

Car Specific Wiring Information

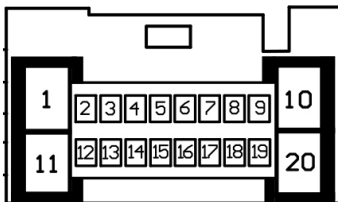
All connectors are shown from the terminal side and NOT the wire side

Mitsubishi Continued...



ASX, Lancer, Outlander 2010>, Pajero, Shogun 2013>	
Interface Wire	Pin Number
Analogue 1	A9
Analogue Ground	To vehicle chassis
Batt 12V	A1
Ground	To vehicle Chassis

ASX, Lancer, Outlander 2010>
Pajero, Shogun 2013>



Outlander 2013>

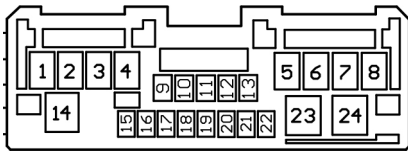
Outlander 2013>	
Interface Wire	Pin Number
CAN High	8
CAN Low	18
Analogue 1	9
Analogue Ground	11
Batt 12V	1
Ground	11

Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side

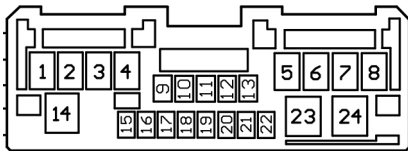


mazda



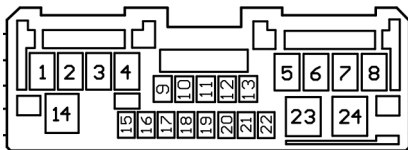
2 2007>

2 2007>	
Interface Wire	Pin Number
Analogue 1	12
Analogue Ground	13
Batt 12V	14
Ground	24



6 2007-2009

6 2007-2009	
Interface Wire	Pin Number
CAN High	20
CAN Low	21
Analogue 1	12
Analogue Ground	13
Batt 12V	14
Ground	24



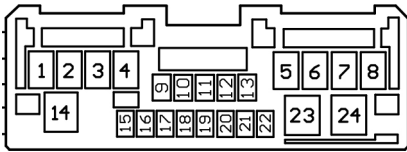
3 2004-2008

3 2004-2008	
Interface Wire	Pin Number
Analogue 1	12
Analogue Ground	13
Batt 12V	14
Ground	24

Car Specific Wiring Information

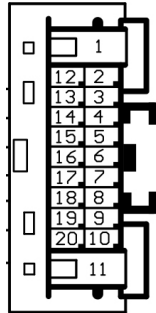
All connectors are shown from the terminal side and NOT the wire side

Mitsubishi Continued...



CX-7, CX-9

CX-7, CX-9	
Interface Wire	Pin Number
Analogue 1	12
Analogue Ground	13
Batt 12V	14
Ground	24

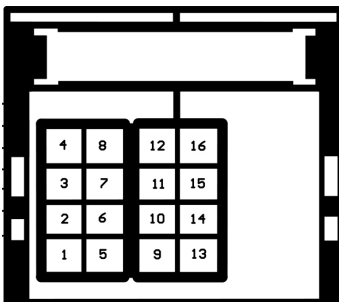


All Models

All Models	
Interface Wire	Pin Number
Analogue 1	8
Analogue 2	17
Analogue Ground	7
Batt 12V	1
Ground	To vehicle chassis



PEUGEOT

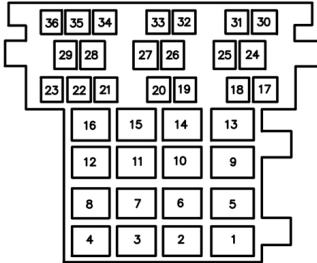


Quadlock
CAN-Bus Vehicles

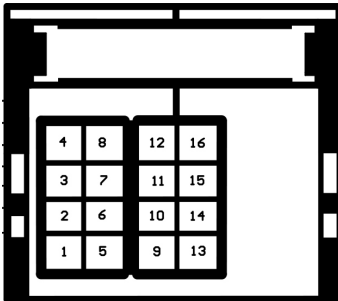
Quadlock CAN-Bus Vehicles	
Interface Wire	Pin Number
CAN High	10
CAN Low	13
Batt 12V	12
Ground	16

Car Specific Wiring Information

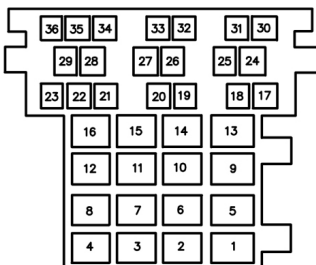
All connectors are shown from the terminal side and NOT the wire side



Cayenne 2002-2007 Mini-ISO	
Interface Wire	Pin Number
CAN High	30
CAN Low	17
Batt 12V	2
Ground	4



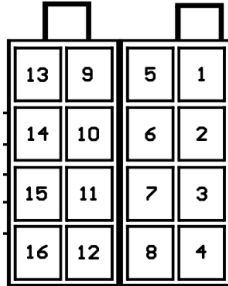
Cayenne 2002-2007 Quadlock	
Interface Wire	Pin Number
CAN High	11
CAN Low	9
Batt 12V	12
Ground	15



GEN-2	
Interface Wire	Pin Number
Analogue 1	20
Analogue 2	33
Analogue Ground	27
Batt 12V	2
Ground	4

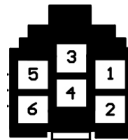
Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side



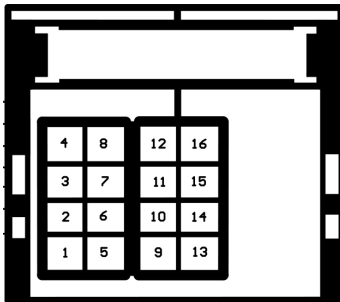
A

Mini-ISO with 'Update List' OEM head unit	
Interface Wire	Pin Number
CAN High	B6
CAN Low	B2
Batt 12V	A2
Ground	A4



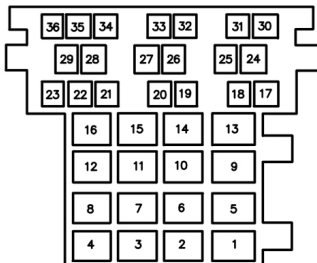
B

Mini-ISO with 'Update List' OEM head unit



CAN-Bus Quadlock

Renault CAN-Bus 2009> with Quadlock Connector	
Interface Wire	Pin Number
CAN High	13
CAN Low	9
Batt 12V	15
Ground	12

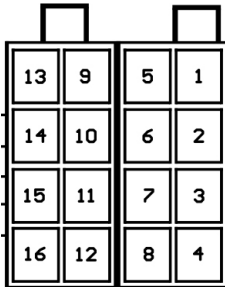


CAN-Bus Mini-ISO

Renault CAN-Bus 2009> with Mini-ISO Connector	
Interface Wire	Pin Number
CAN High	17
CAN Low	30
Batt 12V	2
Ground	4

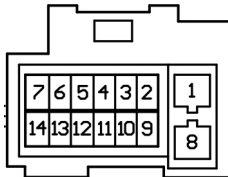
Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side



Rover 75 with Highline	
Interface Wire	Pin Number
Analogue 1	1
Analogue Ground	To vehicle chassis
Batt 12V	2
Ground	4

Rover 75 with Highline OEM head unit

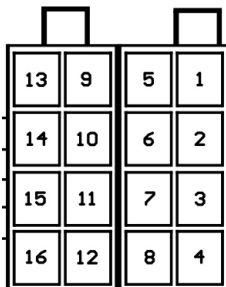


Saab 9.3/9.5 2008>	
Interface Wire	Pin Number
CAN High	13
CAN Low	Not connected
Batt 12V	1
Ground	8

Saab 9.3/9.5 2008>



SCANIA

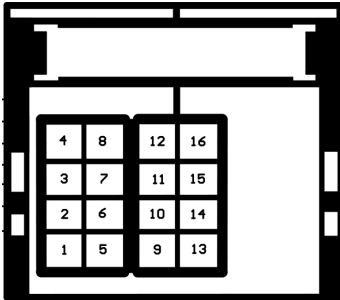


Scania R Series	
Interface Wire	Pin Number
CAN High	5
CAN Low	1
Batt 12V	2
Ground	4

Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side

ŠKODA

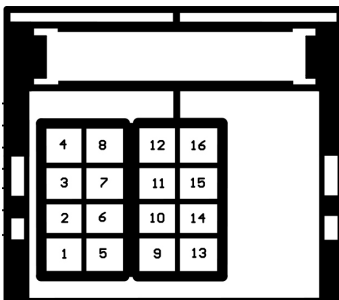


Skoda CAN-Bus Quadlock

Skoda CAN-Bus Quadlock	
Interface Wire	Pin Number
CAN High	9
CAN Low	10
Batt 12V	15
Ground	12



SEAT

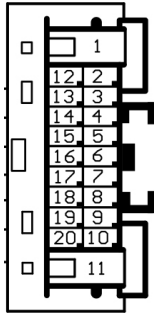


Seat CAN-Bus Quadlock

Seat CAN-Bus Quadlock	
Interface Wire	Pin Number
CAN High	9
CAN Low	10
Batt 12V	15
Ground	12

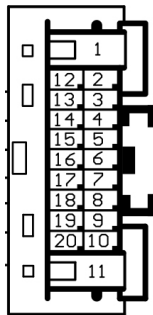
Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side



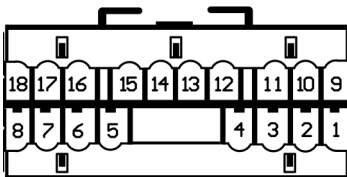
Forester/Impreza
2007-2012

Forester/Impreza 2007-2012	
Interface Wire	Pin Number
Analogue 1	17
Analogue Ground	7
Batt 12V	1
Ground	11



Impreza, Forester,
Outback, XV 2012>

Impreza, Forester, Outback, XV 2012>	
Interface Wire	Pin Number
Analogue 1	17
Analogue 2	8
Analogue Ground	7
Batt 12V	1
Ground	11

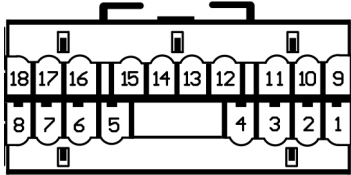


Actyon 2006>, Rexton 2007>, Korando Sport 2012, Rodius 2013>	
Interface Wire	Pin Number
Analogue 1	16
Analogue Ground	14
Batt 12V	5
Ground	14

Car Specific Wiring Information

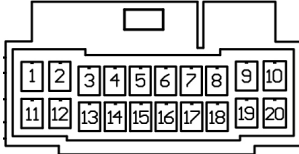
All connectors are shown from the terminal side and NOT the wire side

Ssangyong Continued...

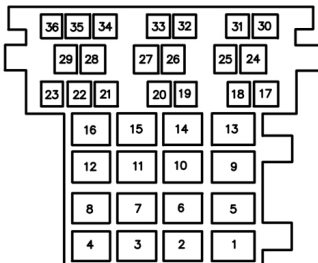


All other Ssangyong models

All other Ssangyong models	
Interface Wire	Pin Number
Analogue 2	16
Analogue Ground	13
Batt 12V	5
Ground	14



Suzuki all models	
Interface Wire	Pin Number
Analogue 1	19
Analogue 2	8
Analogue Ground	20
Batt 12V	1
Ground	11



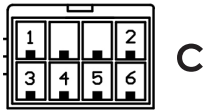
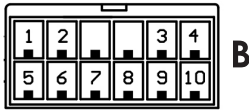
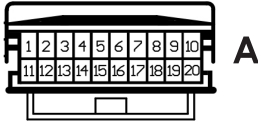
Tata Vista, Manza, Indigo	
Interface Wire	Pin Number
Analogue 2	20
Analogue Ground	27
Batt 12V	2
Ground	4

Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side

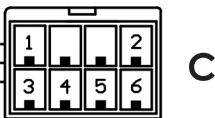
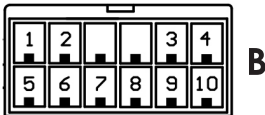
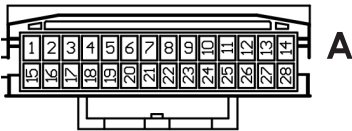


TOYOTA



Toyota <2011

Toyota <2011	
Interface Wire	Pin Number
Analogue 1	A8
Analogue 2	A7
Analogue Ground	A6
Batt 12V	B4
Ground	B7

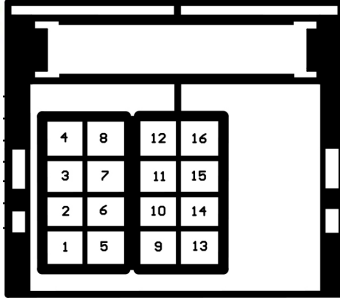


Toyota 2011>

Toyota 2011>	
Interface Wire	Pin Number
Analogue 1	A21
Analogue 2	A22
Analogue Ground	B4
Batt 12V	B4
Ground	B7

Car Specific Wiring Information

All connectors are shown from the terminal side and NOT the wire side

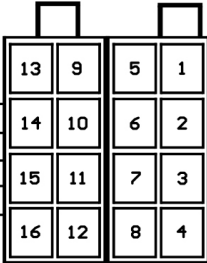


VW CAN-Bus Quadlock	
Interface Wire	Pin Number
CAN High	9
CAN Low	10
Batt 12V	15
Ground	12

VW CAN-Bus All Models
Quadlock

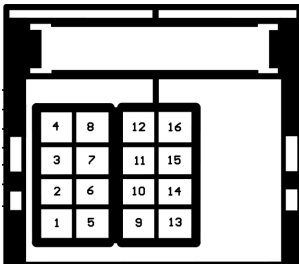


VAUXHALL



Vauxhall/Opel Analogue

Vauxhall/Opel Analogue	
Interface Wire	Pin Number
Analogue 1	1
Analogue Ground	7
Batt 12V	8
Ground	4



Vauxhall/Opel CAN-Bus










Vauxhall/Opel CAN-Bus	
Interface Wire	Pin Number
CAN High	9
CAN Low	10
Batt 12V	15
Ground	12

Universal Patch Lead

Configuration Assignments (1=Link made, 0=No Link)

J1	J2	J3	Systems	Connector
1	0	0	JVC	Jack/Key1
0	1	0	BEAT/Philips/Nakamichi	Key1
1	1	0	Clarion	Jack
0	0	1	Kenwood	Key1
1	0	1	Alpine	Jack
0	1	1	Panasonic	Key1
1	1	1	Sony/LG/Pioneer	Jack
1 (Pin12)	1 (Pin10)	0	Zenec	Key1
1	1	1	Chinese Learning Brands	Key1, Key2, GND

Pin Configuration

Pin 1	Description
1	Reserved
2	Reserved
3	Reserved
4	Analog 2 Swc 
5	GND Swc 
6	Analog 1 Swc 
7	Link J3 
8	Link J3 
9	Link J2 
10	Link J2 
11	Link J1 
12	Link J1 

Here are some Examples of how to make various patch Leads:

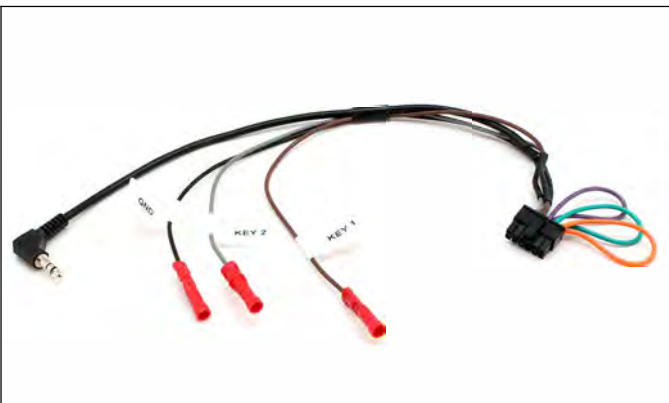
Example 1: Alpine - Remove Link J2 then use the Jack connector into radio.

Example 2: Kenwood - Remove Link J1 and J2, use the wire connector to Radio.

Example 3: Zenec - Remove Link J3, Cut Orange and Green then solder top row (Pin 12 & 10) together and insulate. Use the Wire connector to Radio.



Universal Patch Lead



Examples:

