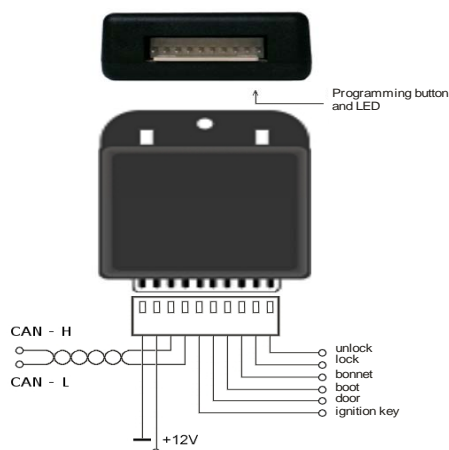


MCB-01 CAN BUS module installation

The module is intended for connection to a CAN-BUS data interface in motor vehicles with a 12V voltage and a negative ground connected to chassis. The module converts digital information to analogue form, thus providing interconnectivity to the inputs of Athos, Akcent and other car alarms.



Installation:

The module is intended for professional installation and therefore we recommend having it installed by a professional service. Improper installation may result in damage to your car. The manufacturer shall not be held responsible for damage caused by improper installation or misuse. The product is not intended for installation in an engine compartment.

Disconnecting the battery before the installation is recommended. If your vehicle is equipped with an airbag, nobody should be inside during manipulation of the battery (disconnecting, connecting). Keep in mind that some car equipment's memory functions (e.g. a radio) can be erased when the battery is disconnected.

Bond newly installed wires to the original bundles. For crimped connections use tools designed exclusively for this purpose. If possible, try to avoid drilling into metal parts of the vehicle during installation. Before you start drilling holes, make sure that you will not damage other parts of the vehicle. When the installation is finished, attach the module through the hole in its upper part using a wire tie

Module programming:

If you want the module to function properly, it is necessary to select the type of vehicle in which it is to be used. The programming is carried out by setting a corresponding programming number (see below) which you will find in the attached table using the PRG button and an LED on the bottom side of the module. Use an item which is thin and not too sharp (a pin, toothpick, etc) to press the PRG button.

1. Press and hold the button for 5 seconds until the LED lights up. Release the button within 2 seconds and the LED will fade. Thus you have started the CAN-BUS interface set-up process.
2. The LED starts flashing and thus indicates the first digit of the programming number. You can confirm it by pressing the button after the corresponding number of flashes. The LED subsequently starts indicating the second digit which you can confirm after the corresponding number of flashes again. Both digits can range from 1 to 9.

When you confirm the second digit of the requested programming number, the data is stored in an EEPROM memory. This should be confirmed by three short flashes of the LED.

Example of module programming for the Audi Q7:

You can find out in the table that the Audi Q7 corresponds to programming number 15.

1. Press and hold the button for 5 seconds, until the LED lights up. Release the button within 2 seconds and the LED will fade.
2. The LED will start flashing and thus indicates the first digit of the programming number. After **one** flash briefly press the programming button. The LED will start flashing and indicating the second digit. Press the button again after the **fifth** flash.
3. The module saves the requested programming number into an EEPROM memory, which is **confirmed by three flashes** of the LED.



Description of module wires:

Black	Earth
Red	+12 V
Orange/brown	CAN L
Orange/green	CAN H
Blue	ignition key signal output; +12V, 800mA
Grey	open door information output, GND, 10mA
White/yellow	open boot information output, GND, 10mA
White	open bonnet information output, GND, 10mA
White/black	arming impulse output, GND, 10mA
White/blue	disarming impulse output, GND, 10mA

The CAN H and CAN L access points description can be downloaded from <http://www.jablotron.cz/downloads/canbus/mcb-01.pdf>

The arming and disarming outputs switch on and off when they receive a signal signifying the locking and unlocking of the whole car with an original remote control. In combination with **ATHOS** car alarms it is possible to use them as signals in RESET 2 mode. In such a case, do not connect the INP1 wire and set the **E** parameter to 2 when setting the SET parameters – reaction to disconnection of GND. This setting is valid up to ATHOS software version 6, for higher software versions it is possible to set INP1 as an alarm input.

The firmware allowing the selection of brands and models is regularly updated. Up-to-date information about supported vehicle models can be found at www.jablotron.com in the Car Alarm product range section in the MCB-01 product description (a sub-section of Product Range). In the case that a new model is added, the new software version can be downloaded into the module through a BL-MCB Bootloader device. First you download an up-to-date software version from www.jablotron.cz/download.php (a .hexfw extension file) to your computer. Then you connect a BL-MCB Bootloader to your computer via a USB interface, run the Bootloader program and connect the MCB-01 module. Then you simply transfer the new version to the module using the program. A successful transfer is then confirmed on the screen. More detailed information is available in the BL-MCB Bootloader manual.

Specifications:

Supply voltage	10 - 16 VDC
Current consumption	8 mA
Operational temperature range	-40 to +85 °C
Dimensions without wiring	54x 46x18 mm
Weight	20g



(E8) 10R-02 4901

This product is identical to the type certified by the Ministry of Transport of the Czech Republic under E8 10R-02 4901.

Note: Although the product does not contain any harmful substances, do not throw it away with ordinary waste. Dispose of it at an electronic waste collection point instead. Additional information can be found at www.jablotron.com in the Technical Support section.

Product manufactured and service provided by: **JABLOTRON ALARMS a.s.** Pod Skalkou 33, Jablonec n.N., Czech Republic

Table of programs for individual vehicle brands and types

1 number	2 number	Brand	Program description (version 4HA)
1	1	Audi:	A2 2002<, A3 2004<, A4 2002-2004, TT 2006<, R8 2007<
		Lamborghini:	Gallardo 2006<
		Porsche:	911 2006-2007, Cayenne 2006
		Skoda:	Fabia 2001<, Fabia II 2007, Octavia 2001<, Octavia II 2004<, Roomster 2006<, SuperB 2001<
		Seat:	Altea 2004<, Altea XL 2007<, Cordoba 2002<, Ibiza 2002<, Leon 2000<, Toledo 2005<
		VW:	Caddy 2005<, EOS 2006<, Golf IV 2002<, Golf V 2004<, Golf Plus 2004<, Jetta 2004<,Passat 2001-2005, Passat 2006<, Polo 2001-2005, Polo 2006<, Touran 2003<, Tiguan 2007<
1	2	VW:	Transporter T5 2005<
1	3	VW:	Touareg 2004<
1	4	Audi:	A4 2004 - 2007
1	5	Audi:	A6 2005<, A6 AVANT 2007<, A8 2007<, Q7 2006<
1	6	Toyota:	RAV4 2005<,
1	7	Toyota:	Yaris 2006<, Auris 2007<, Corolla 2007<, Camry 2006<
1	8	Subaru:	Legacy 2004<, Outback 2004<, Tribeca 2005<
1	9	Alfa Romeo:	159 2005<,
		Citroen:	Jumper 2006< (installed car alarm must be set by the diagnostics)
		Fiat:	Bravo 2007<, Croma 2005<, Ducato 2006<, Idea 2003<, Panda 2004<,Stilo 2001-2005, Stilo 2006<
		Iveco:	Daily 2007<
		Peugeot:	Boxer 2006< (installed car alarm must be set by the diagnostics)
2	1	Fiat:	Grande Punto 2006<, 500 2007<
2	2	Mercedes:	A (W169) 2005<, B (W245) 2006<, C (W203) 2001-2006, CLK (W209) 2004-2006, CLS (W219) 2006<,E (W211) 2005<, G (W463) 2006-2007, GL (X164) 2007<, M (W164) 2006<, R (W251) 2006<,SLK (R171) 2004-2
2	3	Mercedes:	C (W204) 2007<, S (W220) 2000-2005, S (W221) 2006<
2	4	Mercedes:	Vito 2003<, Viano 2004<, Sprinter 2005<
		VW:	Crafter 2006<
2	5	Mercedes:	E (W211) 1996-2004
2	6	BMW:	1 (E87) 2005<, 3 (E90) 2005<, 3 Coupe (E92) 2006<, 5 (E60) 2005-2007, 5 (E61) 2006<,X5 (E70) 2007<, 7 (E65) 2006<
2	7	Chrysler:	300 C 2004<, PT Cruiser 2007<
		Dodge:	Caliber 2006<,
		Jeep:	Grand Cherokee 2006<, Wrangler 2007<
		Mitsubishi	Outlander 2007<, Lancer 2008<
		Peugeot:	4007 2007< (installed car alarm must be set by the diagnostics)
2	8	Suzuki:	Grand Vitara (version without the key remote control only) 2006< , SX4 (version without the key remote control only) 2007<, Swift 2007<
		Fiat:	Sedici (version without the key remote control only) 2007<
2	9	Volvo:	S 40, V40
3	1	Volvo:	V50 2006<, V70 2004<, S60 2001<, XC90 2003<
3	2	KIA:	Carnival 2006<
3	3	Ford:	Focus II 2005<, Focus II C-MAX 2005-2007, Focus II ST 2006<
3	4	Volvo:	S80 2007<
3	5	Dodge:	Nitro 2007<
3	6	Ford :	S-Max, Galaxy 2007<, Mondeo 2007<
3	7	Audi:	A4 2008<, A5 2008<
3	8	Ford:	Fiesta 2006<, Focus II 2005<, Fusion 2007<
3	9	Subaru:	Impreza (version without the key remote control only) 2007<, Forester (version without the key remote control only) 2008<
8	1	Citroen	C2, C4, (installed car alarm must be set by the diagnostics)
		Fiat:	Scudo 2007< (installed car alarm must be set by the diagnostics)
		Peugeot	207 2006<, 307 2005<, 407 2005<, Expert 2007< (installed car alarm must be set by the diagnostics)
8	3	Nissan:	Note 2007<, X-Trail 2007<, Micra 2005<
8	4	Nissan:	QUASHQAI 2007<
8	5	Nissan:	Tida 2007<
9	5	Saab:	9.3 2006 - 2007
9	6	Saab:	9.3 2004 - 2006, 9.5 2004>,
9	7	Opel:	Astra H 2004<, Corsa D 2006<, Signum 2002<, Vectra C 2002<, Zafira 2006<
9	8	Honda:	Accord 2004<, Civic 2006<

Note:

2007< ... year of production after 2007

2007> ... year of production before 2007