

# **Kombi Protocol Converter**

**Revision 2 11/2015**

**2015**

**[www.carsystems.com.ua](http://www.carsystems.com.ua)**

## Designation

Module for interfacing facelifted instrument clusters with pre facelifted Mercedes Benz W230, W203, W463 with Head Unit COMAND 2.0

Module converts protocol of facelifted instrument cluster (Figure 2) that works with the COMAND NTG2.5 to a protocol of instrument cluster that works with head units COMAND 2.0 (Figure 1), and allows installing the facelifted instrument clusters on a pre facelifted cars with preserving full instrument cluster functionality.

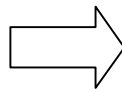


Figure 1 Pre facelifted instrument cluster

Figure 2 Facelifted instrument cluster

Module provides:

- data transmission from telephone menu, audio and navigation menu of COMAND 2.0 to instrument cluster.
- protocol matching between instrument cluster and other parts of car for correct mileage display

## Connection

Module should be connected in series of CAN bus between instrument cluster and car. CAN1H (yellow) and CAN1L (blue) wires of the module should be connected to the car side of CAN, and CAN2H (yellow/black), CAN2L (blue/black) pair – to instrument cluster side. Module is powered from +12V power network of the car. Pinout and switches of the module are shown on Figure 3.

Switches designations are shown on the Table 1.

Wiring diagram is shown on Figure 4.

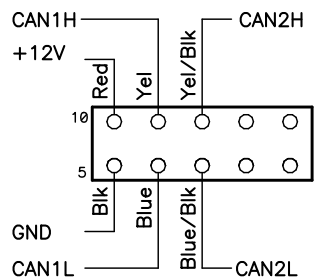


Figure 3 Pinout and switches of the module

Table 1 Switches designation

Switch \ State	SW0	SW1..SW7
ON (closed)	Facelifted instrument cluster protocol conversion on (when installing only instrument cluster)	RFU*
OFF (opened)	Facelifted instrument cluster protocol conversion off (when installing instrument cluster and COMAND NTG 2.5)	RFU*

\*reserved for future use

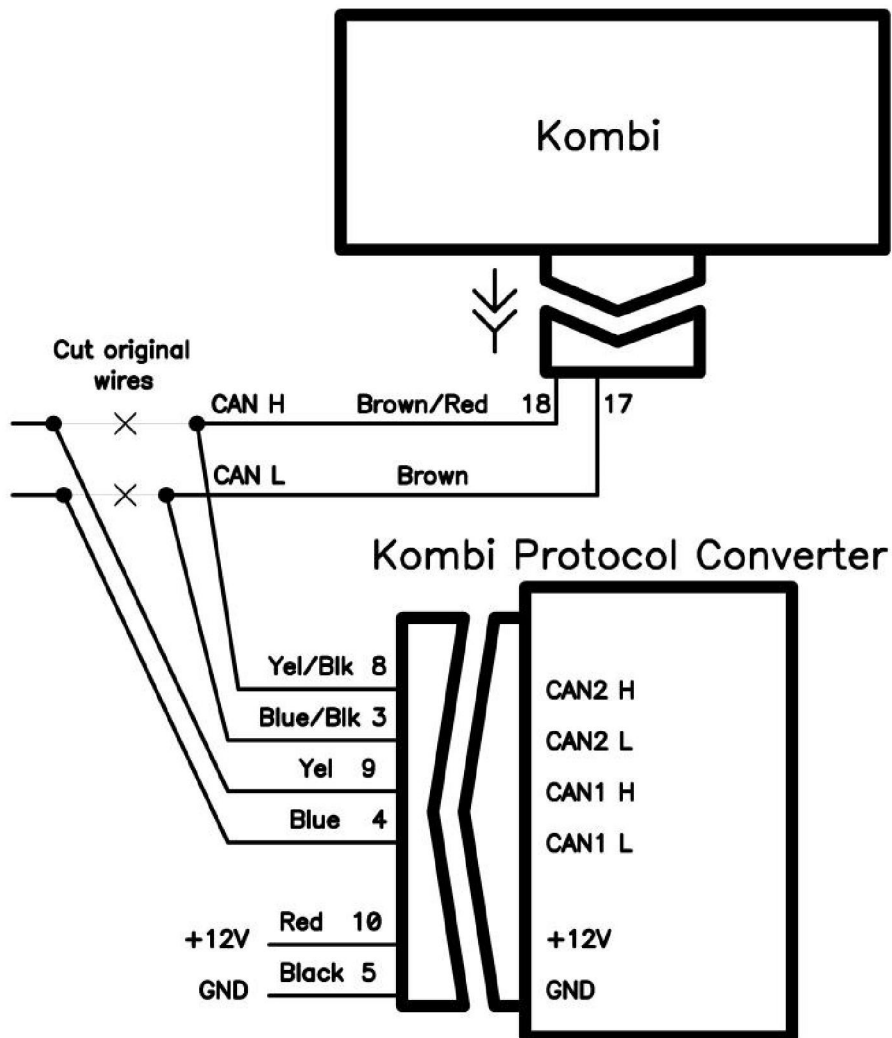


Figure 4 Wiring diagram