



IBUS Gateway

BMW:

I/K bus to K-Line:

**E38, E39, E46, E53, E83
etc.**

Device is a gateway between diagnostic line (K-line) and I-bus (or K-bus). Designed for diagnostic, coding and programming purposes. Makes possible to work with single I/K-bus control unit without having a complete car. Examples of usage: EWS alignment, key testing, navigation head unit recoding and reprogramming, additional heater testing on the bench etc.

Operation:

- **Any** message from diagnostic tester (connected to K-line) is recoded for Ibus and transferred to I/Kbus when bus is free.
- Any message from I/K-bus **addressed for diagnostic tool** is converted to K-line format and transferred to diagnostic tester.

Status LEDs:

- **YELLOW**: lights on when valid communication takes place between both channels.
- **RED**: error occurred - not possible to transfer message from one channel to another.

Possible error causes:

- I-bus overload – current message not transferred yet, but new message already arrived from K-line,
- K-line overload – message from I-bus not transferred to K-line, new I-bus message for tester already arrived. Usually this situation is not possible, because communication between diagnostic tester and control unit is based on request / response basis.

You must note that gateway isn't filtering any addresses. That means any message addressed to any control unit (ECU for example) is transferred to I-bus too. This can cause error state, ignore it. Sometimes this allows to access some not I-bus units via I/K-bus on car too...

Legend how to attach wires is located on the opposite side of board.

Power supply: up to 15v DC max, laboratory grade.

