BMW MOTO BMSK(P)

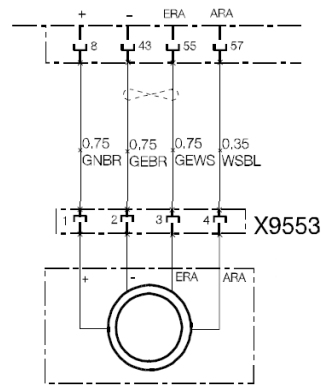## immobilizer emulator

BMW bikes with BMSK(P) ecu: 2004 up

Designed for:

All BMW bikes with Hitag-2 keys, BMSK(P) ecu. Replaces antenna reader / amplifier and key itself.
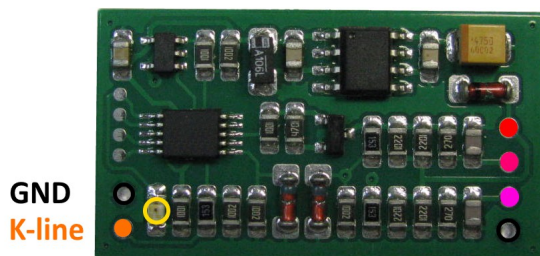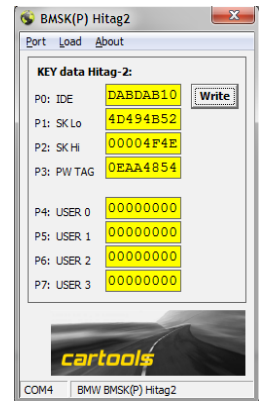
Preparation:

Must store key data into emulator using any K-line adapter and configurator software.
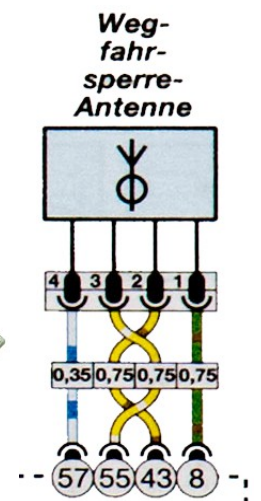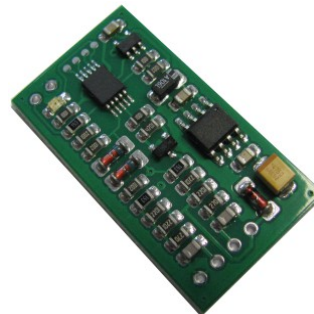
- Read flash from ECU, get KEY DATA (only P0...P3 are important for "USED / registered KEY").
- Store KEY DATA into emulator using any suitable K-line adapter. Proceed as follows:
  - power emulator from stabilized **+12v** power supply.
  - attach K-Line adapter to **GND** and **K-Line** pins,
  - use configurator software to store key data into emulator.
- LED on emulator board must blink 8x - data accepted and stored.

L9553
EWS Antenna Ring

BMSK(P) Hitag2

KEY data Hitag-2:

P0: IDE	DABDAB10	Write
P1: SK Lo	4D494B52	
P2: SK Hi	00004F4E	
P3: PW TAG	0EAA4854	
P4: USER 0	00000000	
P5: USER 1	00000000	
P6: USER 2	00000000	
P7: USER 3	00000000	

COM4   BMW BMSK(P) Hitag2

GND
K-line

+12v
DATA
SCLK
GND

Weg-fahr-sperre-Antenne

Installation:

- disconnect original antenna amplifier or cut ERA / ARA wires,
- connect emulator according to wiring diagrams (**X9553**: amplifier, **ECU**: BMSK(P) 58 pin connector-2):
  - **+12v**: **X9553** pin1 / **ECU** pin8, +12v supply,   **+**
  - **GND**: **X9553** pin2 / **ECU** pin43, signal ground, **-**
  - **DATA**: **X9553** pin3 / **ECU** pin55, data line,   **ERA**
  - **SCLK**: **X9553** pin4 / **ECU** pin57, serial clock, **ARA**

Typical LED behaviour:

- -*-*-*-*-*-*-*-*   8x short blinks: new KEY data stored (configurator - confirmation);
- ------**--**--**   3x longer blinks after pause: ECU authorized;
- *******------**--**--**   3x longer blinks after longer blink: KEY ID / SK ok, possibly wrong P3;
- *---------------   1x short blink at startup: emulator powered ON, no ECU requests;
- -**-***-*--*-*-*   erratic blinking for some seconds (while immo active): wrong KEY ID;
- -**-*--**-*--***   erratic blinking, approx. 1/2 second: KEY ID known, wrong SK.

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