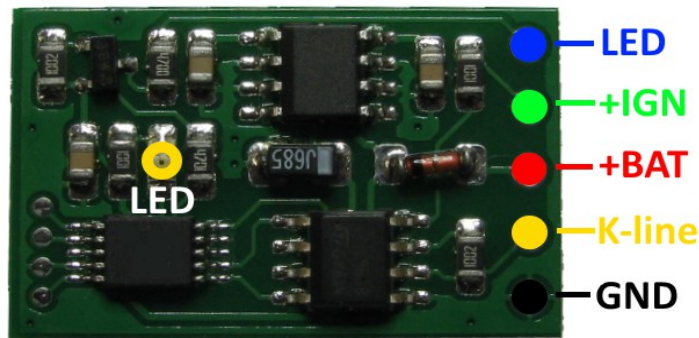# Yamaha IMMO emulator

OLD systems (MORIC),

ver. 3

Features:
- software: 2025 edition, for compatibility with late systems;
- Plug & Play, no alignment necessary;
- can personalize factory new (virgin) ECU.

Connections - for MORIC immobilizer bypass:
- **+BAT** - +battery: RED/GRN wire,
- **+IGN** - +ignition ON/RUN: RED/WHT wire,
- **GND** - ground: BLK wire,
- **K line** - immo line (K-line), YEL/BLU wire,
- **LED** - dashboard LED output, GRN wire,

When +IGN goes high, emulator is active for 3 seconds.
LED output – active: HIGH (+5v), blinks once in 2 seconds if IGN is off.

Connections - for SKU / later systems:
- **+BAT / +IGN** – both together to IGN_ON/RUN;
- **GND**
- **K-line**
- **LED** (optional)

When IGN_ON/RUN goes high, emulator is active for 3 seconds, otherwise silent. Usable if emulator is installed as an additional option (original IMMO is working but not matched to ECU). Must disconnect K-line wire from original IMMO.

LED on emulator board / LED output:
- **LED on board:**
  - ON at startup / wake-up,
  - 8 blinks - authorization fail (no ECU / wrong ECU type etc.),
  - long blink – ECU authorized.

- **LED output:**
  - ON at startup, goes OFF if ECU authorized,
  - ON at startup, 4 short blinks, then OFF: ECU authorization fail,
  - short blinks each 2 seconds (MORIC): IGN_OFF.

(c) RobinDAB 2024