

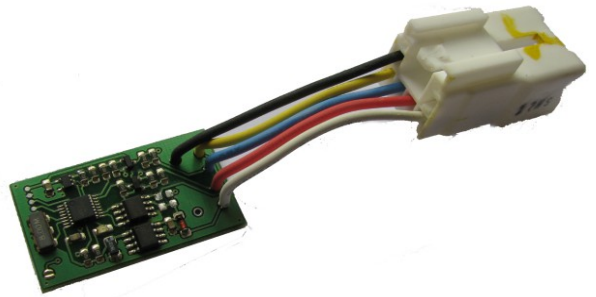
KIA / Hyundai ESCL emulator for Hitag-2 based keyless systems

Purpose:

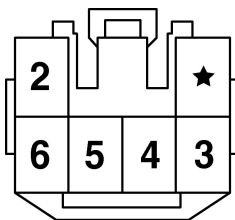
For KIA / Hyundai cars, original ESCL (electronic steering column lock) replacement. Self teaching (plug & play), no alignment / teaching necessary.

Installation:

Designed for original ESCL connector. You can desolder it from from broken ESCL and solder directly on to emulator board. Or you can use connector from original extension cable (installed on some cars).



ESCL connector pinout:



Pin No.	Description
1	-
2	Ground
3	Power (+12V)
4	ESEL ENABLE
5	ESCL UNLOCK
6	Serial Comm. Line

Things to know / troubleshooting:

- ESCL is not powered permanently, both GND and +12v are switched on by PDM for short time to allow LOCK / UNLOCK actions.
- ESCL operation is managed by IPM which communicates through serial comm line and additionally allows ESCL operation by pulling ESEL_ENABLE pin to +12v.
- Both ESCL outputs (serial comm. line and ESCL_UNLOCK are open collector outputs without pullups on board. ESCL_UNLOCK goes low if ESCL is unlocked.
- LED on emulator board blinks if any action is performed (request for lock / unlock received or ESCL is powered on).