Tango+ Toyota: Smart Systems 2018+

I. Overview

Supported Smart System types

In current Tango software version (1.125), dozens of Toyota/Lexus locked Smart ECUs (2017-2022) are supported for "All Keys Lost". These span between 2017-2022 and apply to Toyota/Lexus DST AES smart systems using Page 1 **A8**, **A9** & **AA** keys. Coverage of vehicle models like, but not limited to, Camry, CH-R, Land Cruiser, Lexus ES, LX570, Prius, RAV4, RH450, RX350, etc.

All functions of Tango+ Toyota are performed **directly through the OBD port** of the vehicle via J2534 PassThru, **without need for physical access** to separate ECUs or additional wiring.
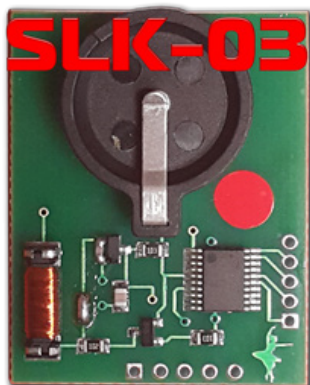
Requirements

- Tango programmer
- J2534 compliant PassThru OBD Adapter
- SLK-03/03E/04/04E/07 emulator
- Toyota maker*
- SLK-03/04/07 maker*
- Corresponding additional activation for the paid models (CHR, Prius, subscription, etc…)

* Functionality **is included** in Tango annual subscription.

SLK Emultators

Page1	Logic	Orig. Chip	Emulator	Color Code
A8	DST AES	TMS37200	SLK-03	Red
A9	DST AES	RF430	SLK-04	White
AA	DST AES	RF430	SLK-07	Gold

II. Procedure

How To make a Smart Key

Briefly explained the goal of this software is to create a "dummy key" and get permission by the vehicle to register new Smart Keys in All Keys Lost situation.

The learning procedure consists of the two steps:

- Make the dummy key (emulator)
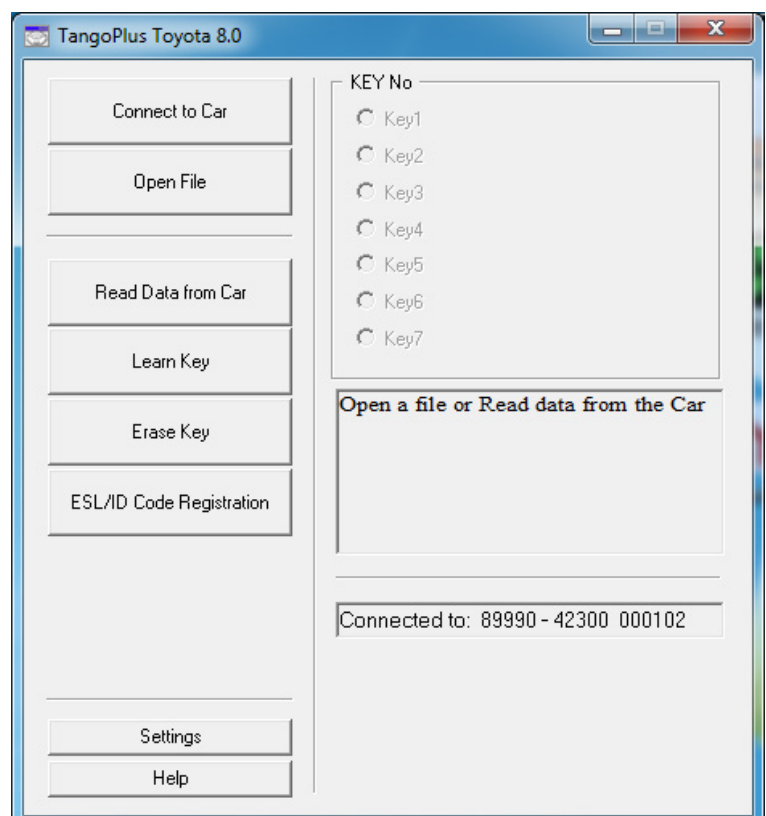- Register new SmartKey(s)

Operating Procedure

1. Connect the **J2534 Pass Thru** adapter **directly** to the vehicle's **OBD port** and to a PC
2. Connect Tango to the PC
3. Run the Tango+ Toyota.exe (double click on the icon, or start from Tango main software)
4. Click the **Connect to Car** button
5. **Press **Read Data from Car**
6. Select Key position (KEY No: KEY1/KEY2/etc..)
7. Place the SLK-0x Emulator in Tango coil (make sure it has a battery)
8. Press **Write Emulator**
9. Once emulator is written it can be used to authorize the standard diagnostic procedure for Key addition Tango+ Toyota-> Connect to Vehicle->Learn Key.

III. Additional functions

After connection to vehicle with Tango+ Toyota through the OBD plug, the following additional functions are available:

- Key Learn (including online types)*
- Erase Keys(including online types)*
- Register ID code & ESL

For online models read data from a Smart Box using TangoPlus is required.

IV. Appendix

Alternative Connection diagrams

As of Tango+ Toyota update ver. 9.0 (October 2022) connection to vehicle is done **directly** through the **OBD** port of the vehicle. The following connection methods, remain alternative, particularly if on hand is only the Smart ECU and work on bench is needed.

1. Connection on bench

Ground
Power (+12V)
CAN Low
CAN High

120 Ohm
Resistor