

# UST V1.2



TOYOTA / LEXUS EMERGENCY ENGINE START TOOL

FOR ALL MODELS MY2017 - MY2023



## ➤ FEATURES

### IN SIMILAR DEVICES

- Turning off/on standard Toyota/Lexus car alarm
- Opening the central lock

### IN THE UST v1.2 DEVICE - SUPER NEW OPTIONS, NEW !!!

- Opening/**CLOSING** all doors ( the central locking )
- Emergency **AUTOSTART** of the engine ( immediately after opening the central lock ) **without any additional connections**
- **BLOCKING** other non-standard systems connected to **CAN-bus** interface
- Vehicles **without a Gateway** module can be connected **via OBD** connector for **opening** and **starting**
- Turning off/on standard Toyota/Lexus car alarm
- After using UST v1.2 **all working keys remain functional** ( **NO NEED TO RESTORE !!!** ) and all systems operates in standard way ! **NO NEED to carry out** diagnostics, programming or registering ( binding ) procedures!

**Attention!!! UST v1.2 is not intended for permanent use, only for a temporary solution in an emergency!**

➤ **SUPPORTED MODELS**

Toyota / Lexus: **All models** of MY2017- **MY2023**

➤ **SUPPORTED KEY TYPES** - **AA, A8, A9, 39, 88\***

\* For **88 key type**, the device has **only** the function of **opening/closing** the central lock.

☑ After using UST v1.2 **all working keys remain functional** ( **NO NEED TO RESTORE !!!** ) and all systems operates in standard way! **NO NEED to carry out** diagnostics, programming or registering ( binding ) procedures!

➤ **THE KIT**

- UST v1.2 device;
- The cable with the needles ( **for connection via CAN** );
- The cable with adapters A8, A9/AA, 39 types ( **connection via Smart ECU** );
- OBD cable ( **connection via OBD port** ).



➤ **CONNECTION VARIANTS**

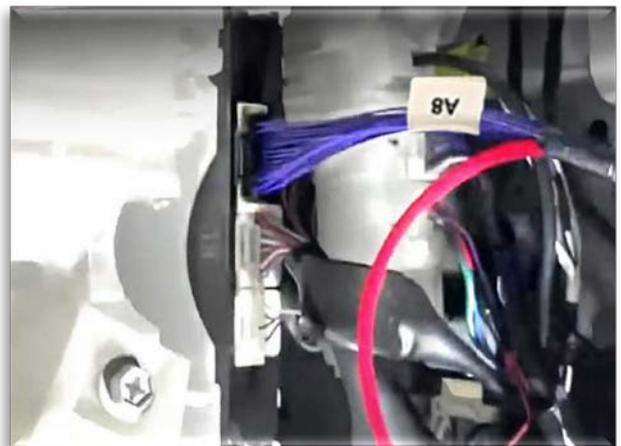
Depending on the car equipment, UST v1.2 operates via the CAN-bus interface of the following units:

- **Headlight ECU Sub Assembly** (use the cable with needles);
- **Main Body ECU** (use the cable with needles);
- **Smart ECU** ( Certification ECU ) (use the cable with adapters A8, A9/AA, 39 types);
- **Skid control ECU (ABS), Millimeter Wave Radar Sensor Assembly,** etc. (use cable with needles);
- **OBD port** (use OBD cable).

☑ **Connection via OBD connector is possible if the vehicle doesn't have a Gateway module.**



Connection to CAN  
using the cable with needles



Connection to Smart ECU using  
the cable with adapters A8, A9/AA, 39 types

➤ **OPERATION SEQUENCE** ( Step-by-step instruction )

1. Depending on the selected connection variant, **plug UST device** using:

- **the cable with needles to CAN** ( Headlight ECU Sub Assembly, Skid control ECU (ABS), Millimeter Wave Radar Sensor Assembly, etc. ) **or**
- **the cable with adapters** ( A8, A9/AA, 39 types ) **to Smart ECU or**
- **the OBD cable to OBD port** ( for vehicles **without gateway** module ).

\* **Connection points of the device are shown in Table #1.**

2. **Turning on the device.** Press and hold the **RED** button until the LED lights up.

The LED flashes **green** once and then starts blinking **red**.

3. **Connect the USB cable to USB port of the device.** The LED will blink **green** and then glow green permanently. Standard car alarm system will be deactivated automatically.

4. **Deactivation of central locking.** Briefly press the **RED** button on the device. The doors and steering column will be unlocked.

5. **Activation central locking.** Press the **BLACK** button on the device.

6. After disabling the central lock and standard car alarm, **disconnect the USB cable** from the device.

7. **To start the engine, you need to wait until backlight of the dashboard and information LEDs go out.** Then **push the brake pedal and press the START button.** The engine will be started.

**To restart the engine again, you need to repeat the procedure of connecting and turning on the device ( Nos. 1-7 ) !!!**

8. **Activation central lock after starting the engine.** Re-switch UST device on, connect the USB cable and press the device **Black** button.

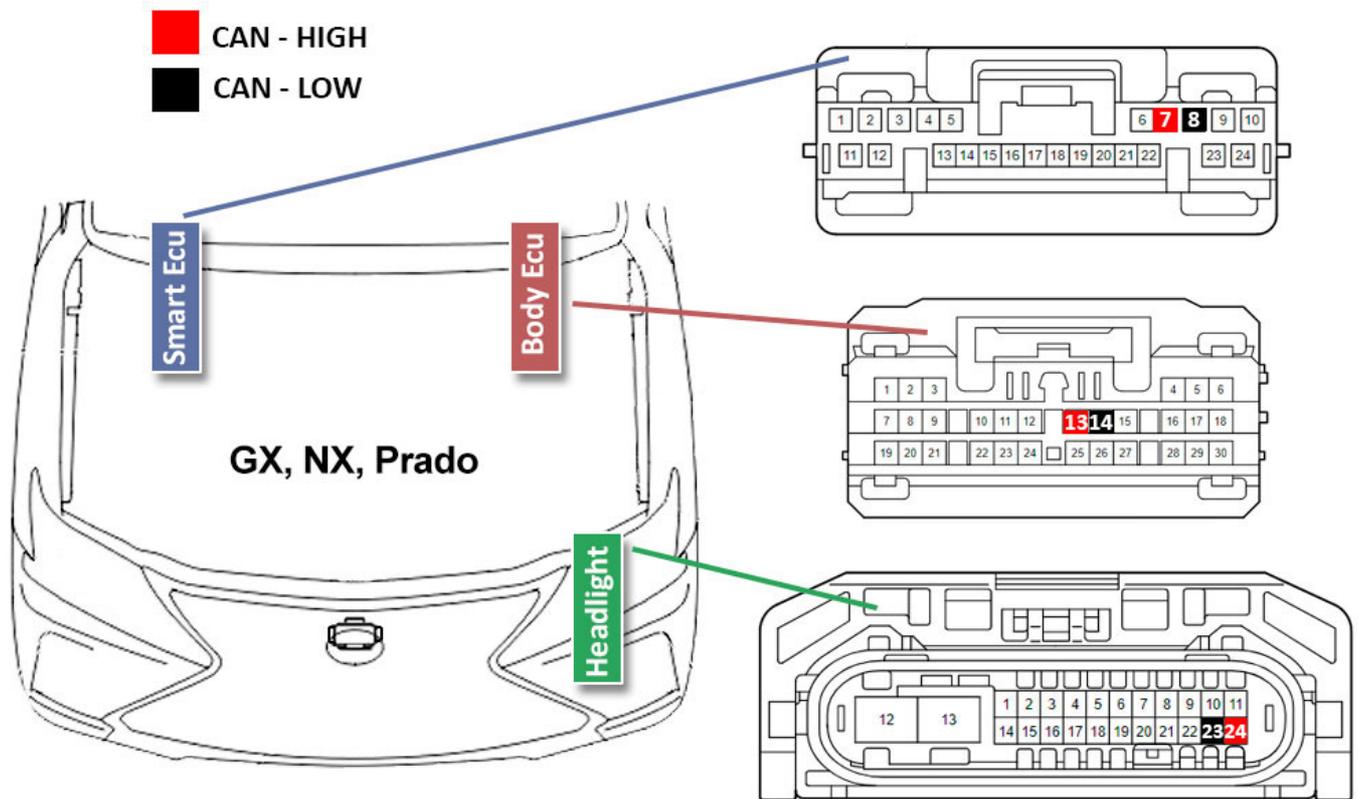
**Attention!!!**

- ☑ The device allows turn on the ignition and start the engine **only once**. To **start again**, you need to repeat the procedure of connecting and turning on the device ( **Nos. 1-7** ).
- ☑ Connection via **OBD connector** is possible if the vehicle **doesn't have a Gateway module**.
- ☑ After using UST v1.0, all working keys remain functional and all systems operates in standard way. No need to carry out diagnostics, programming or registering (binding) procedures!
- ☑ To connect to Smart ECU in a car with **AA key, use adapter A9/AA type !!!**

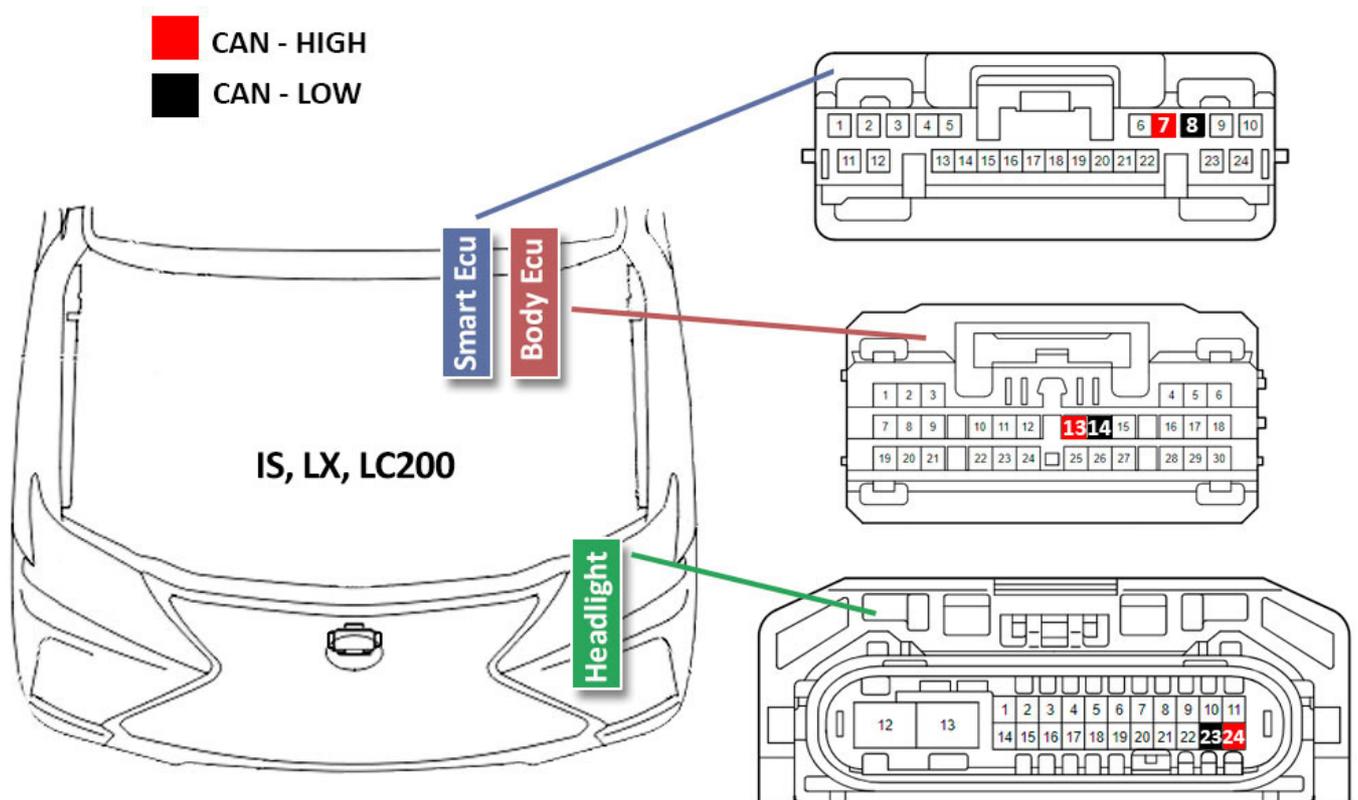
➤ **TABLE #1**

- ☑ Use a cable with **needles to connect via CAN (High, Low)** of Body Ecu, Headlight, ABS, Radar, etc. ;
- ☑ Use **adapter** of the appropriate type (**A8, A9/AA, 39**) to connect via **Smart ECU**;
- ☑ Use OBD cable to **connect via OBD port**.

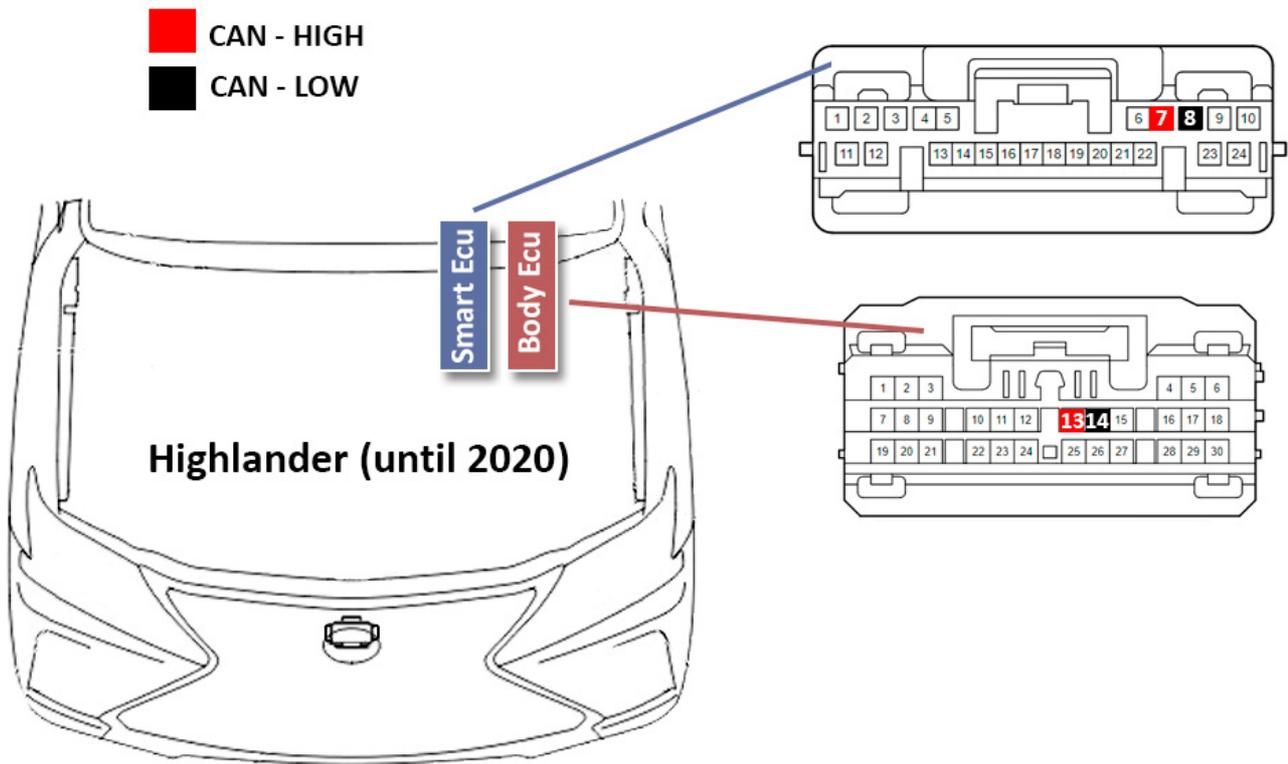
**A1) Connection points for Alphard, GX, NX, Prado - ( key A8 )**



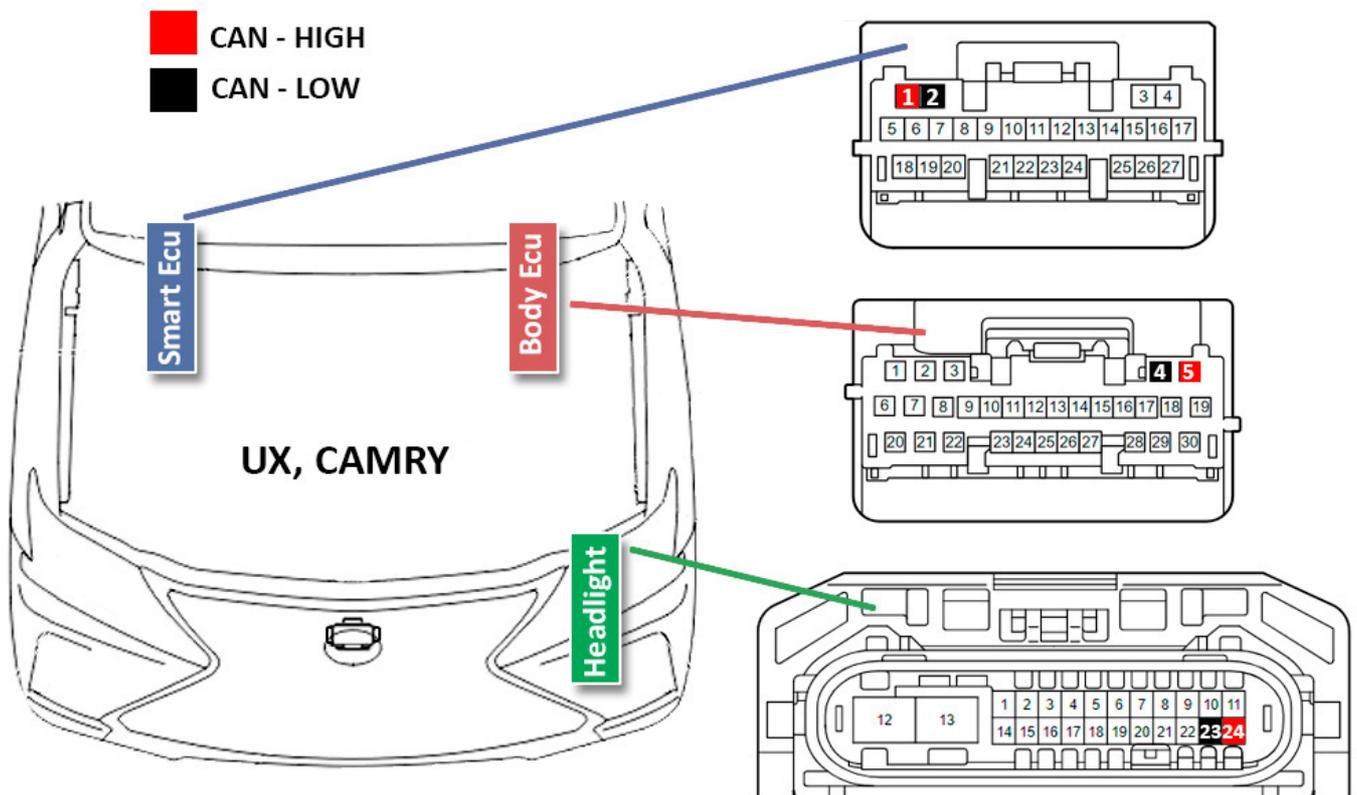
**A2) Connection points for IS, LX, LC200 - ( key A8 )**



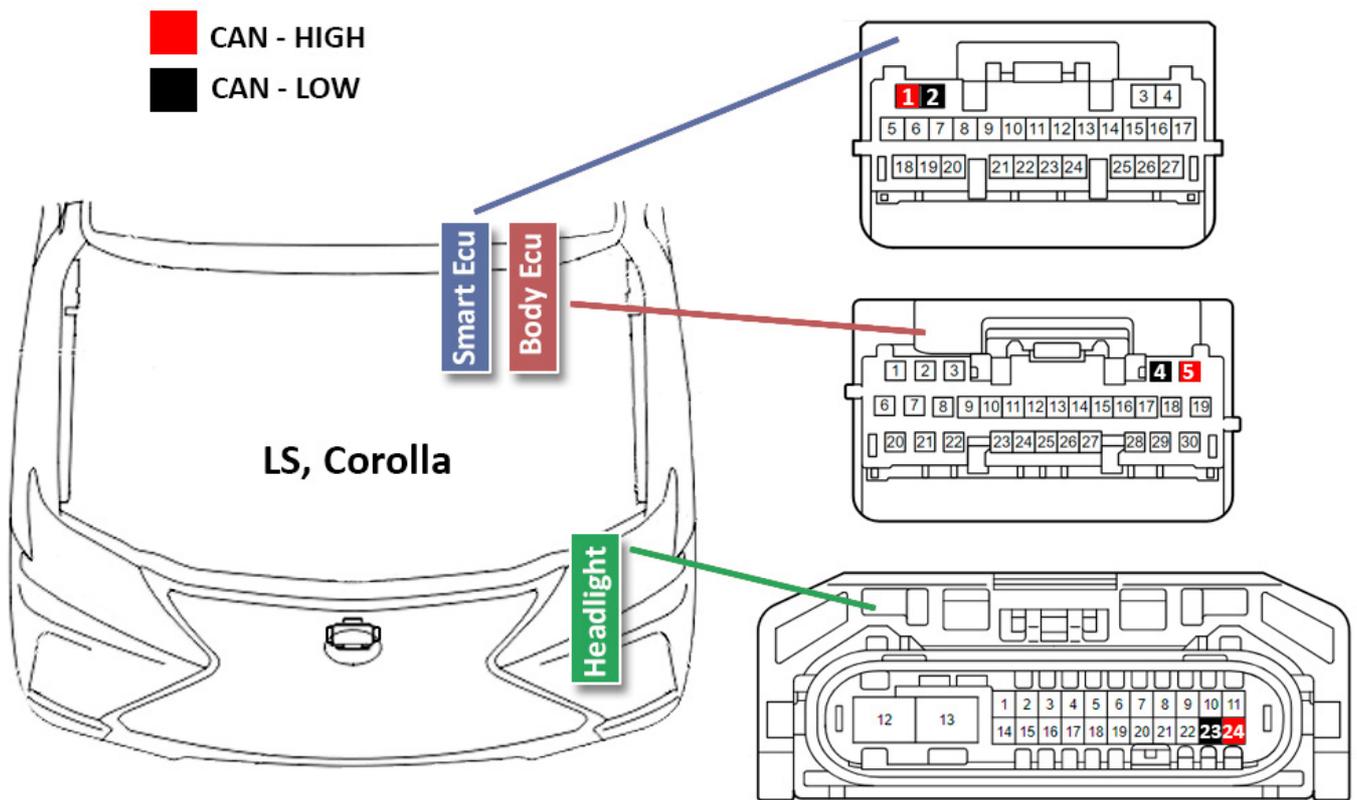
**A3) Connection points for Highlander ( until 2020 ) - ( key A8 )**



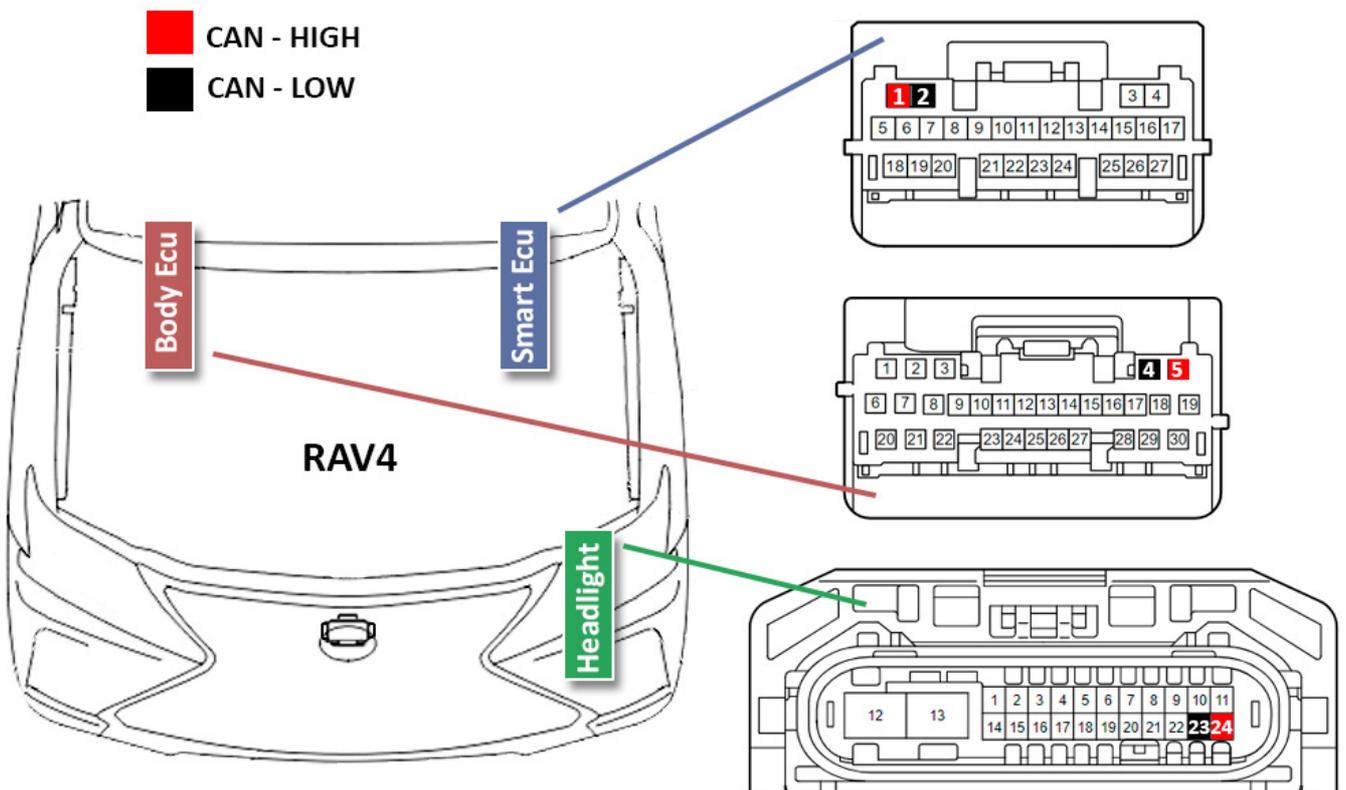
**B1) Connection points for UX, Camry - ( key A9, AA )**



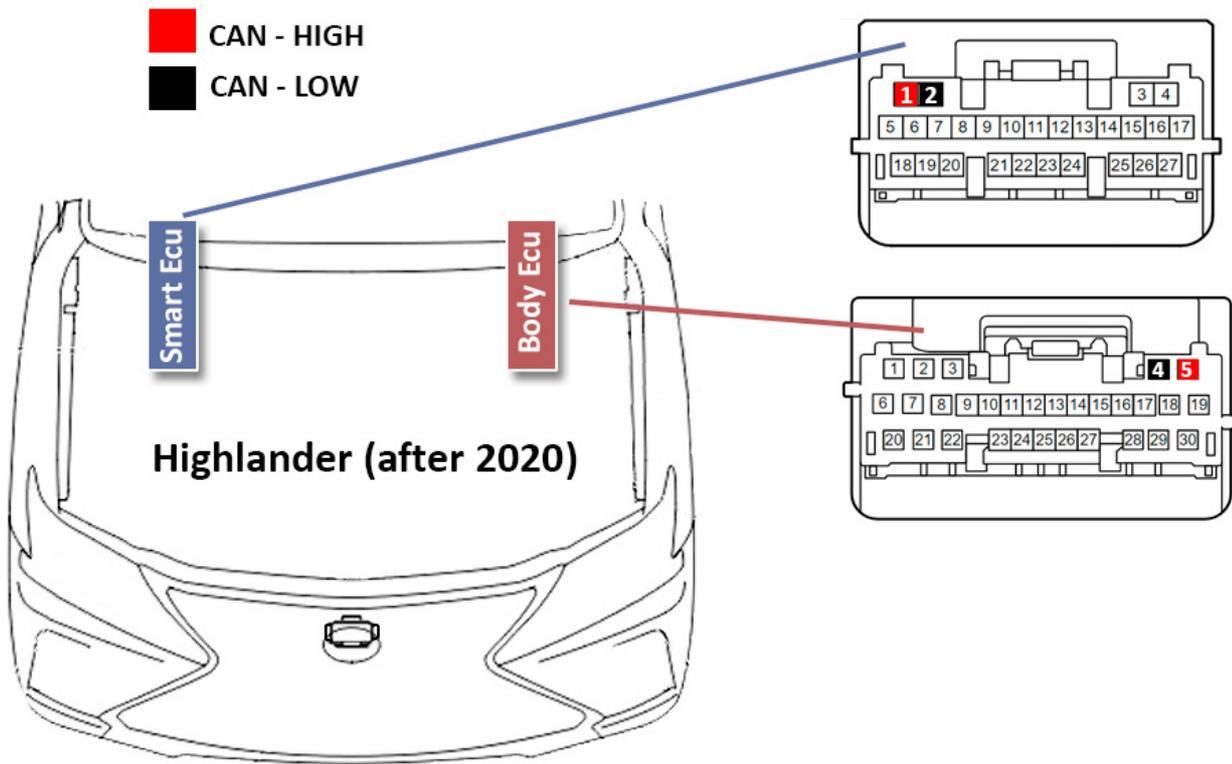
**B2) Connection points for LS, Corolla - ( key A9, AA )**



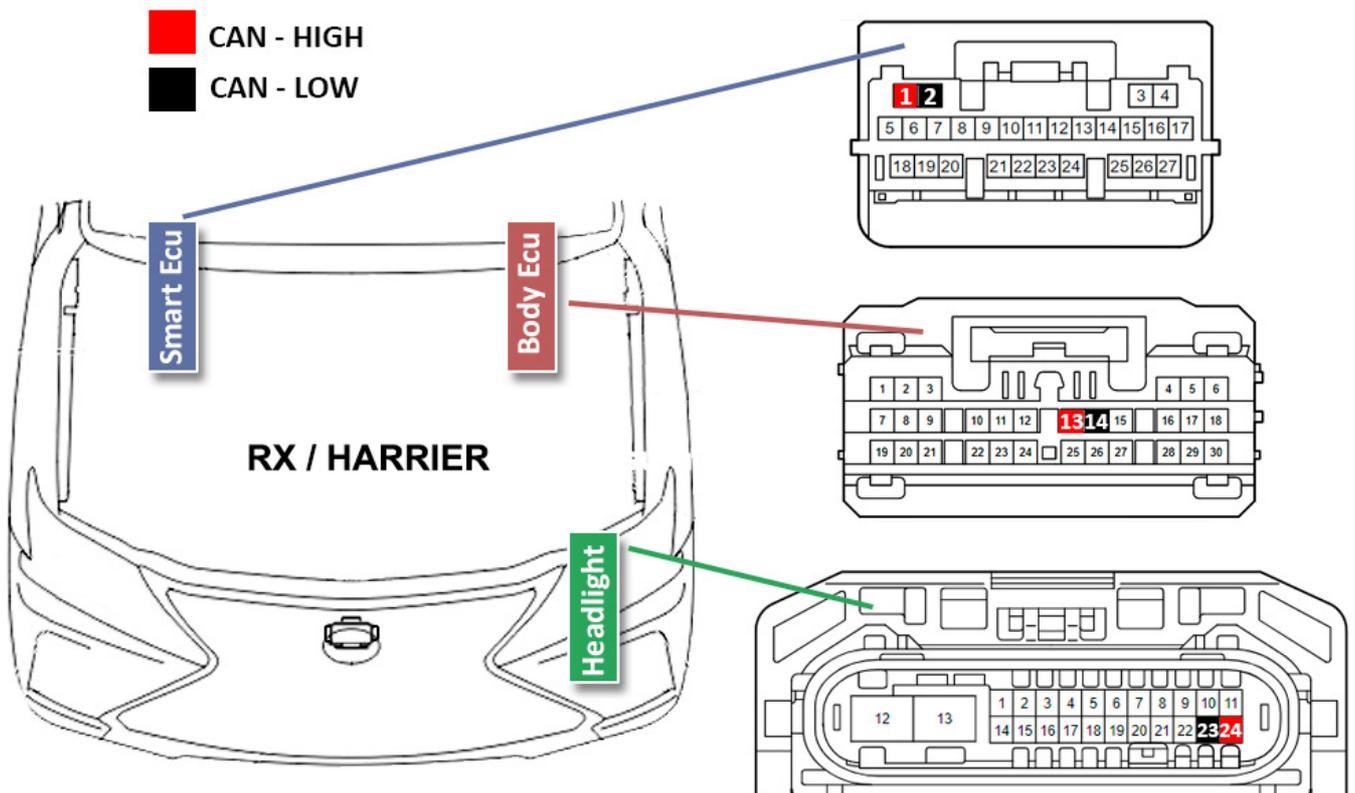
**B3) Connection points for RAV4 - ( key A9, AA )**



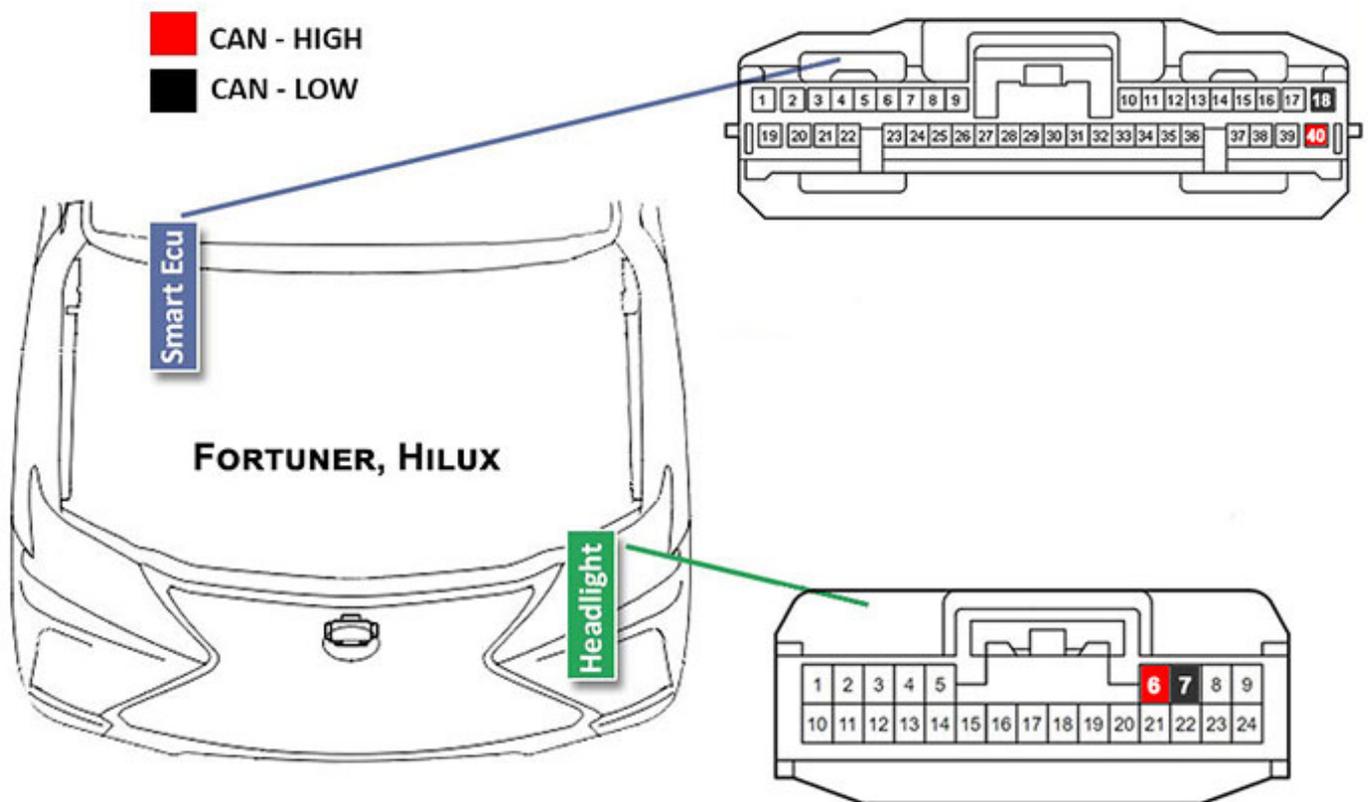
**B4) Connection points for Highlander ( after 2020 ) - ( key A9, AA )**



**B5) Connection points for RX, Harrier - ( key A9, AA )**



**C1) Connection points for Fortuner, Hilux - ( key 39 )**



➤ **TYPES of ADAPTERS for SMART ECU**

*Adapters for Smart ECU unit differ by key type – **AA, A8, A9, 39, 88.***

**Key AA** - ( LS, UX, ES, RAV4 after 2018, Highlander after 2020 ) – **adapter A9/AA** type

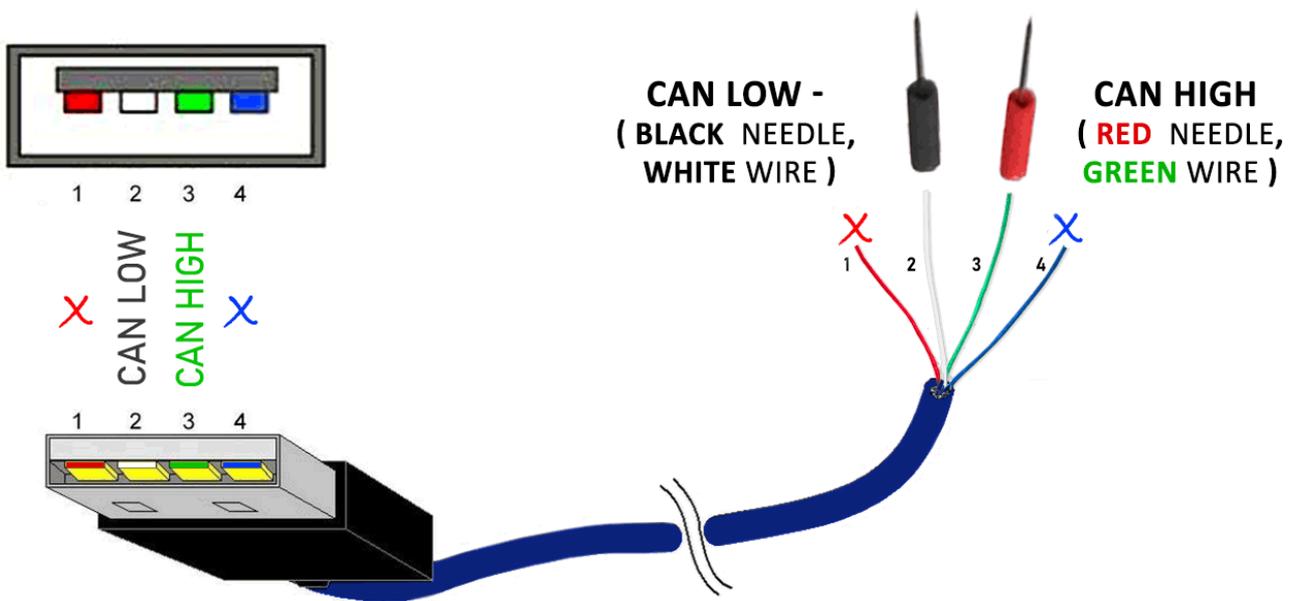
**Key A8** - ( LX, NX, Alphard, Highlander, LC200, Prado ) – **adapter A8** type

**Key A9** - ( RX, LS500, CH-R, Camry, RAV4 after 2018 etc. ) – **adapter A9/AA** type

**Key 39** - ( Fortuner, Hilux (from 2015 until 2021 ) – **adapter 39** type

**Key 88** - ( ES, GS, Rav4, Camry ( until 2018 ) – no adapter

➤ **THE SCHEME OF MANUFACTURE AND REPAIR OF THE CABLE FOR UST DEVICE**



➤ **TABLE #2**

USB CABLE PINOUT FOR CONNECTION VIA CAN BUS

* SKU NUMBERS of SMART ECU NEW GENERATION 2017-2023				
Model	Petrol	Diesel	Hybrid	Key
<b>Lexus ES</b>	89990-33412 (2018) 89990-33411 (2017)	-	-	88
<b>Lexus GS</b>	89990-30441	-	-	88
<b>Lexus IS</b>	89990-53381	-	-	A8
<b>Lexus LS 500</b>	899H0-50010	-	899H0-50020	A9
<b>Lexus LX 570</b>	89990-60291	(until 07/2017) 89990-60470 (from 08/2017) 89990-60471	-	A8
<b>Lexus NX</b>	89990-78080	-	89990-78100	A8
<b>Lexus RX</b>	(from 2015-21) 89990-48430 (from 2017-21) 89990-48431	-	(from 2015-21) 89990-48450 (from 2017-21) 89990-48451	A9
<b>Lexus UX</b>	-	-	89990-76190	AA
<b>Toyota Alphard</b>	89990-58110, 89990-58210 89990-58240	-	-	A8
<b>Toyota Camry</b>	89990-33400, 89990-33690	-	89990-33480	A9
<b>Toyota CH-R</b>	89990-F4010	-	89990-F4050	A9
<b>Toyota Hilux</b>	89990-0K081, 89990-0e080	-	-	39
<b>Toyota Highlander</b>	89990-0E081	-	89990-0E150	A8
<b>Toyota LC 200</b>	89990-60471	89990-60280	-	A8
<b>Toyota Prado</b>	89990-60196, 89990-60430	89990-60205, 89990-60440	-	A8
<b>Toyota RAV4</b>	89990-42112	89990-42112	89990-42091	88

➤ **CHARGING AND ADDITIONAL FEATURES**

- ☑ **Attention!!!** To use UST v1.2, the device's **batteries must be charged!!!**

The device is charged via micro-USB connector located on UST back panel. You can use charge power adapter from your phone/tablet.

- ☑ UST v1.2 device can also be used as an external battery (Power Bank) for mobile devices. The "Power Bank" mode is activated by ON/OFF button located on the back of the device.

\* The device uses rechargeable batteries **18650 type !!!**

\* Charger adapter, micro USB cable and USB cable for mobile devices are **NOT INCLUDED** in the kit !!!

