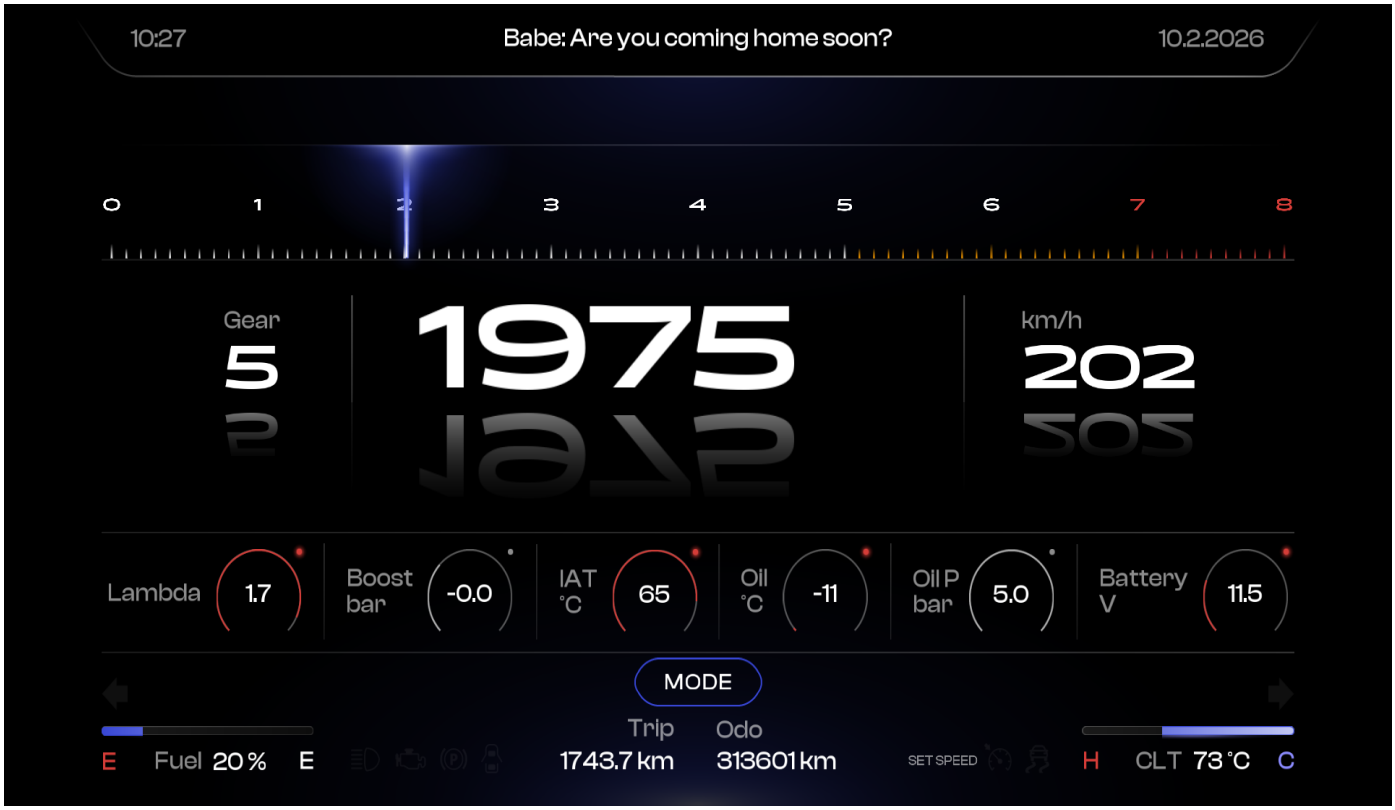
DashBox User Guide

Modern Digital Dashboard Interface for RealDash



DashBox connects real vehicle signals directly to RealDash, turning any Android or Windows device into a fully customizable, high-resolution digital instrument cluster.

Quick Start

1. Connect +12V ignition power (2–5A fused).
2. Connect ground to chassis.
3. Connect at least one sensor or signal.
4. Pair DashBox via Bluetooth.
5. Open RealDash and add DashBox connection.

Critical Safety Warning

DO NOT connect +12V to Ai1, Ai2, or Ai5–Ai8.
Only Ai3 and Ai4 support battery voltage up to +18V.
Incorrect wiring will permanently damage the device.

Analog Inputs

Ai1–Ai2: 0–5V sensors (TPS, lambda).
Ai3–Ai4: 0–18V inputs (battery voltage, indicators).
Ai5–Ai8: Internal 5V pull-up for temperature and pressure sensors.

Digital Inputs

7 digital inputs accept 0–18V signals, ideal for turn signals, high beam and warning lights.

RPM Input

Supports ECU RPM output or Hall sensor signals. Sensitivity selectable via internal jumper.

CAN Bus

500 kbps CAN interface. Reads ECU data and broadcasts DashBox inputs.

Bluetooth & RealDash Setup

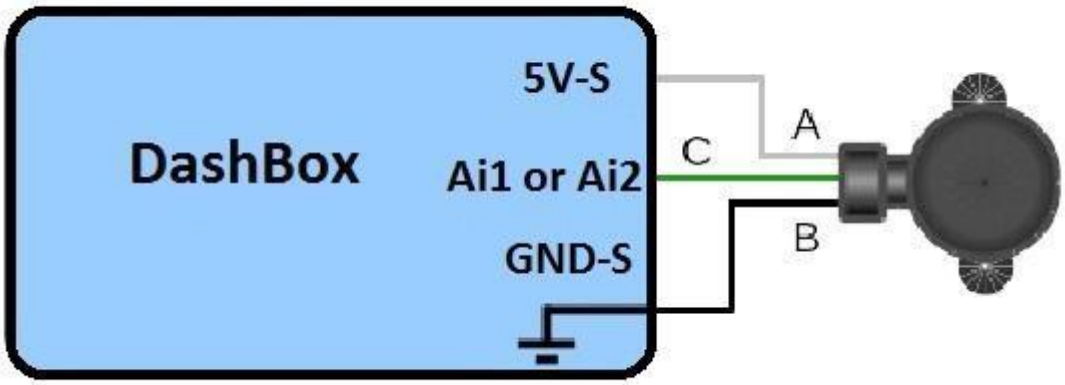
Pair device as 'SP DashBox' using the PIN on enclosure. In RealDash: Garage → Connections → Add → DashBox → Bluetooth.

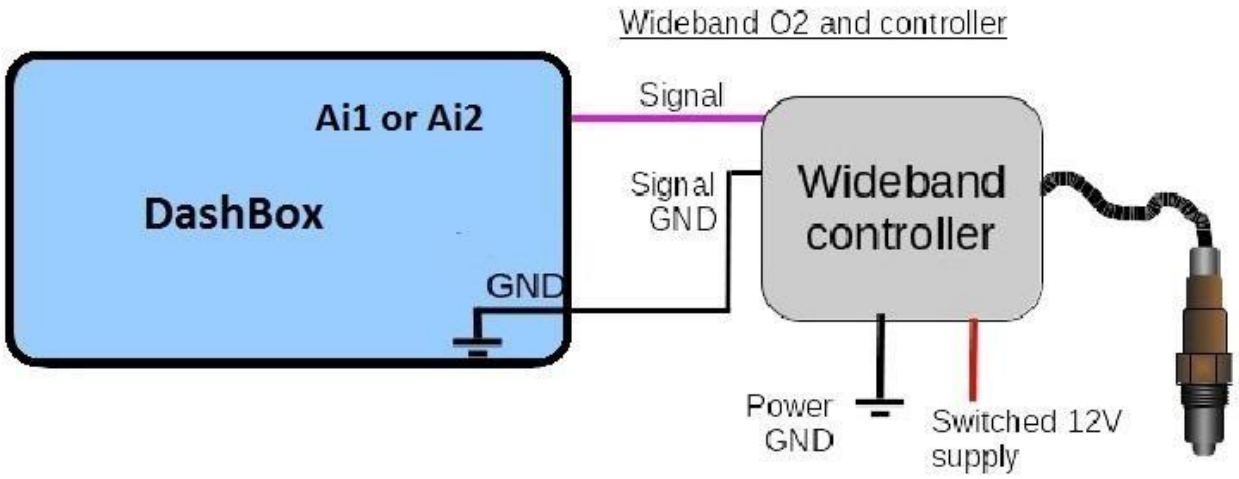
DashBox installation manual

Connect +12V to ignition key 1 or external switch so DashBox have a little time for start up. Use 2-5A fuse online from voltage supply to DashBox.

Analog inputs

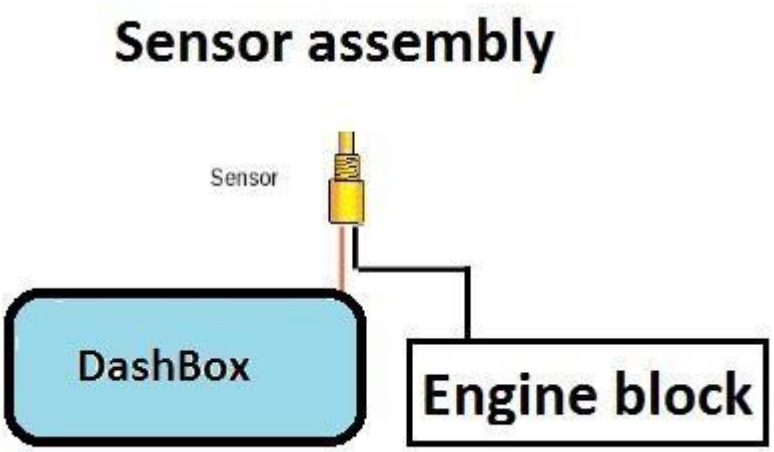
Ai1 and Ai2 is used for sensors like lambda or tps. 5V-S gives reference supply for sensor and GNDS is sensor ground. Sensor signal is connected to Ai1 or Ai2.





Ai3 and Ai4 can connect to battery + up to +18V. User can have higher voltage input to DashBox with these inputs. User can make battery voltage gauge or use these inputs for signal light.

Ai5-Ai8 have internal +5V pullup so user can connect 1- or 2-pin temperature sensor straight in them and have gauge in RealDash.



Also 1-wire pressure sensors or switches can be connected in these inputs.

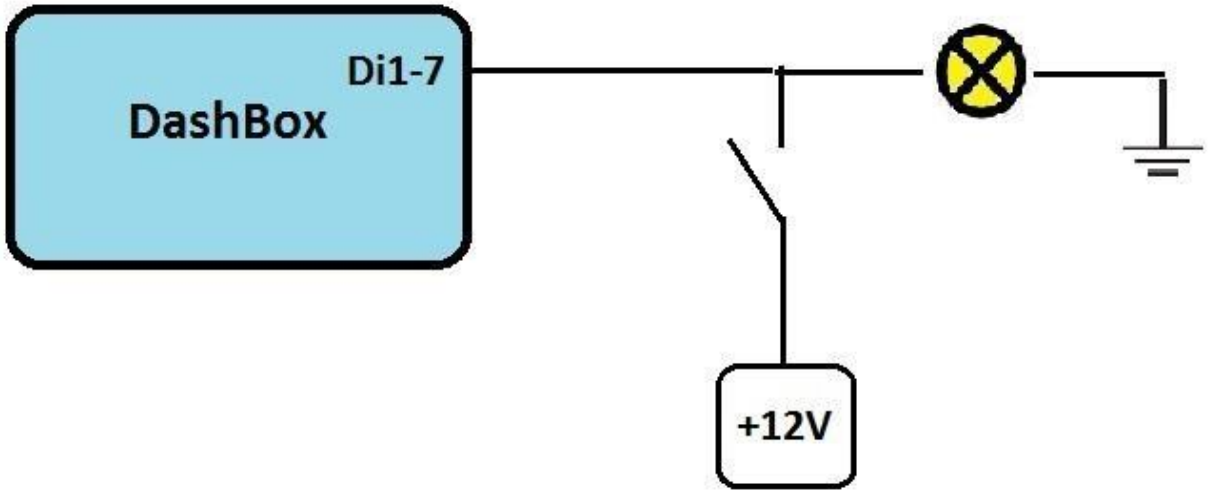
Ai1, Ai2 and Ai5-8 must NOT connect to +12V source!!!

It will damage device!!!

Only Ai3 and Ai4 can handle battery voltage up to +18V.

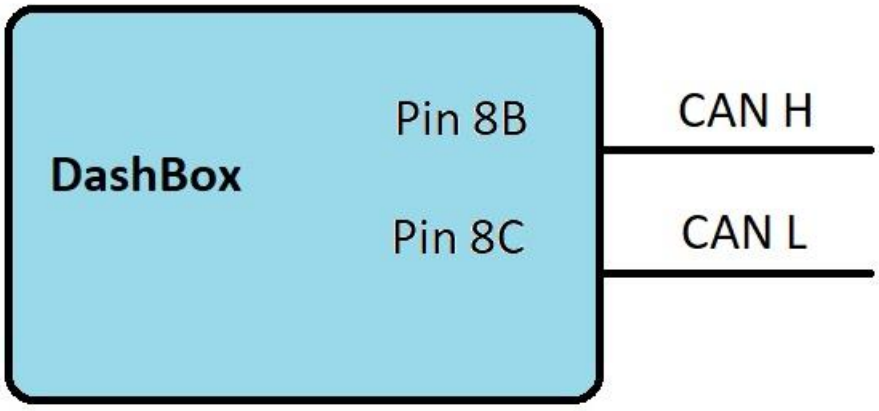
Digital inputs

All DashBox digital inputs can be connected to battery voltage up to +18V. When voltage is found in input user can make signal lights to them. Like turn signal light, high beam etc.



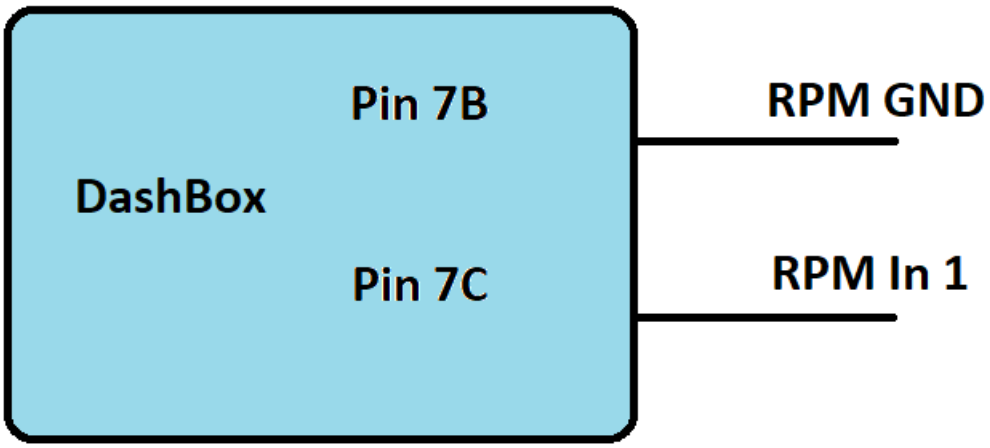
CANBUS

DashBox have CAN in and out function. Speed is 500kbs. It can write all inputs to CAN bus and those can be used in RealDash or other devices like ecu input expander. Inside DashBox is jumper for 120ohm terminal resistor what can be connected on/off. Note: Start DashBox before ECU to make sure that CAN bus wake up right. If there is small lag in display restart ECU.



RPM input

DashBox have also RPM input. It have also jumper inside which affects the input sensitivity. With jumper ON DashBox can read +5-12V square signal like Hall-sensor and with jumper OFF signal can be taken even from injector. Coil negative is NOT supported.

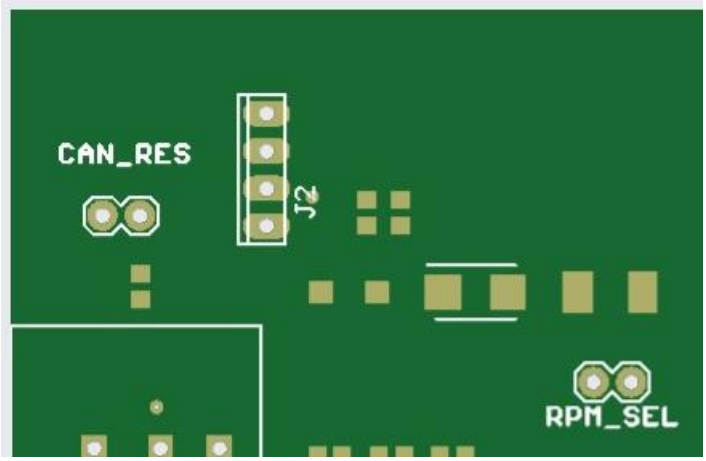


On board jumpers

There is a jumper on board what position might need to change. Remove 2 screws from front panel to get inside.

CAN_RES: Jumper ON-> 120ohm terminal resistor ON

CAN_RES is ON by default.



Pairing with display device

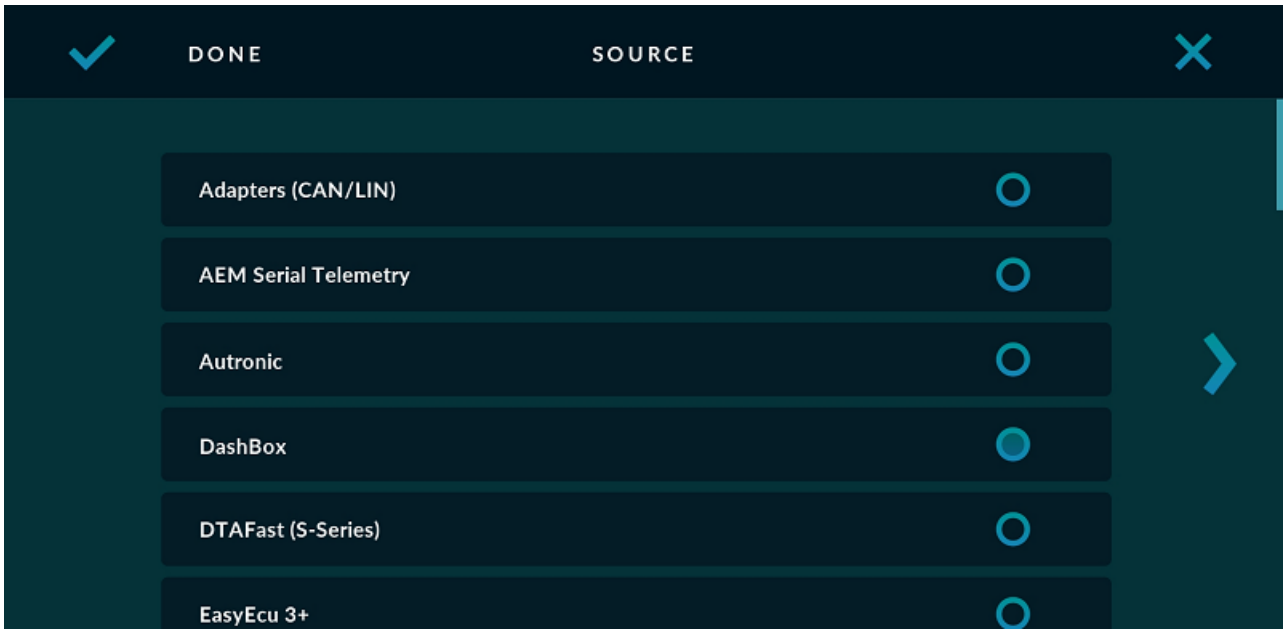
DashBox can be used with Android and Windows device and use Bluetooth connection. Pairing is done same way as all bluetooth devices and enclosure contains 4 digit pin code what need add to Android device. Select ”SP DashBox” from list and give pin number.

When pairing done start RealDash and tab upper section of the screen and You get many view. Next tab garage.

Next tab drivers door of the Cuda to get inside view of the car.

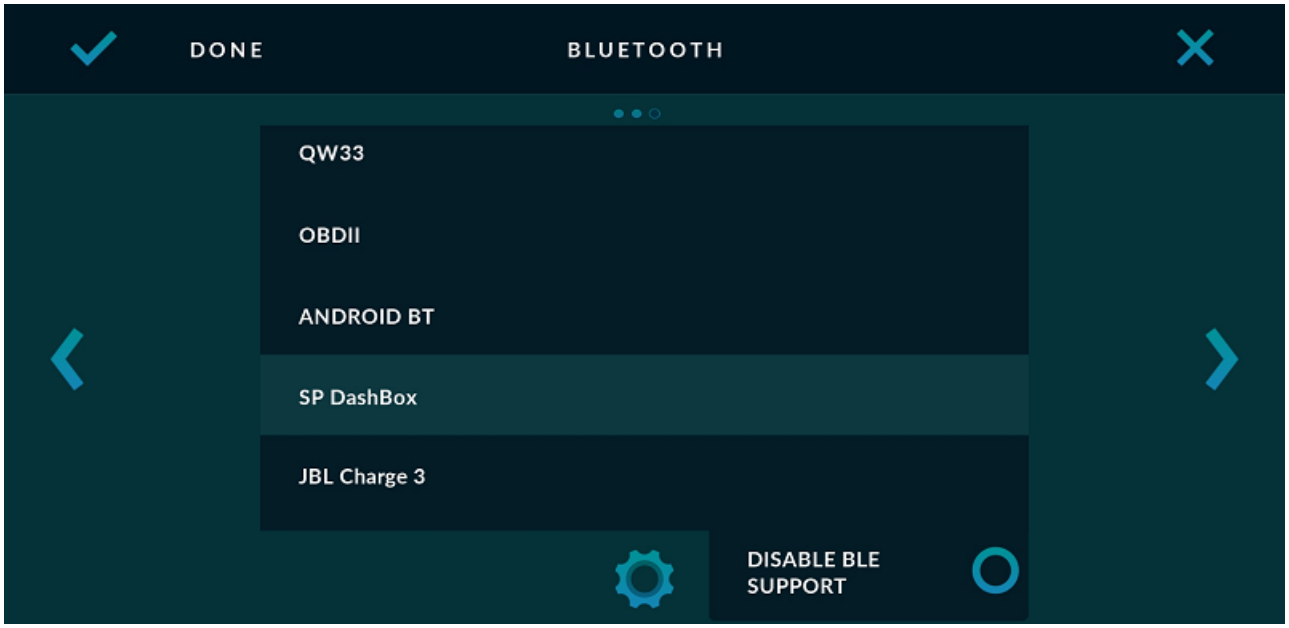
Tab gauge gluster to open connections and tab ”ADD”

Select ”DashBox” from list and and tab arrow to right.

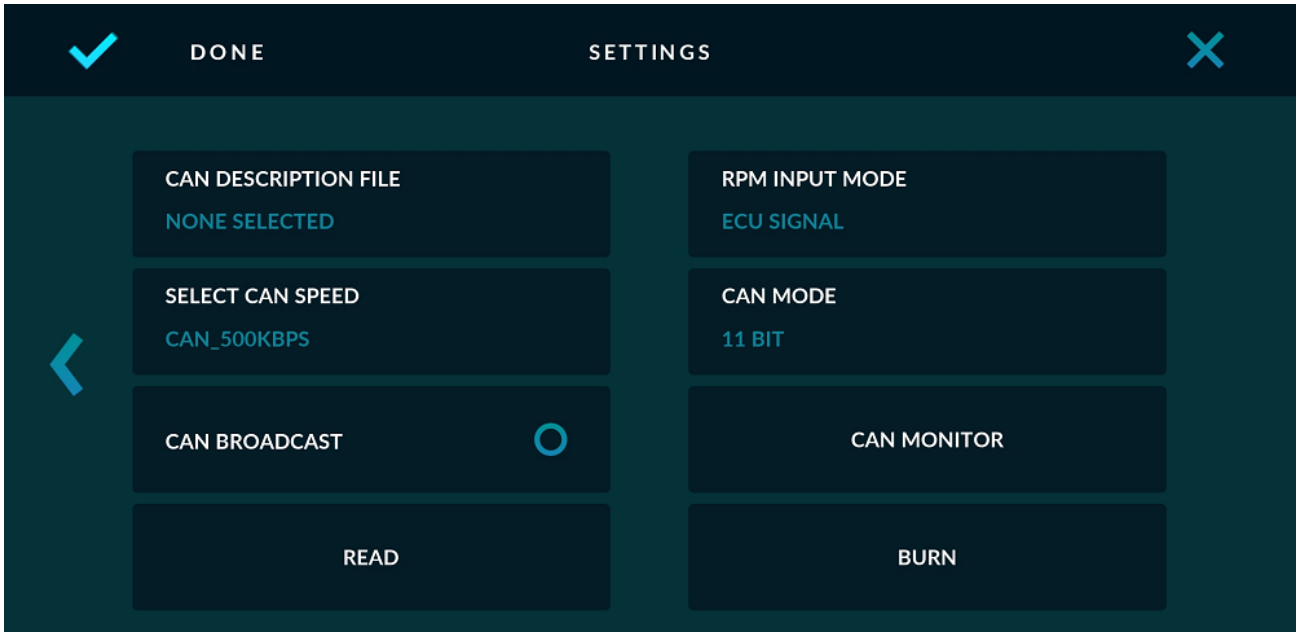


Select ”BLUETOOTH” for connection and arrow to right.

Select ”SP DashBox” and arrow to right.



Now You get connection to DashBox and You should see some text in the boxes. You can also change RPM input etc by tab each box.
Push ”DONE” and You are ok to go.



DashBox CAN Frames

This page describes the CAN frames transmitted by DashBox at 500 kbps. All analog and digital inputs are continuously broadcast on the CAN bus and can be used by RealDash or other CAN devices.

CAN ID	Byte 7–6	Byte 5–4	Byte 3–2	Byte 1–0
0x6EC	RPM	RPM	Digital Inputs	Analog Input 1
0x6ED	Analog Input 2	Analog Input 3	Analog Input 4	Analog Input 5
0x6EE	Analog Input 6	Analog Input 7	Analog Input 8	Received CAN Frames

Notes:
• All values are transmitted as raw data without scaling.
• RPM value is sent as a 16-bit value across two bytes.
• CAN termination (120Ω) can be enabled or disabled via internal jumper.