MM4X4 VEHICLE ELECTRONICS

lockup-mate® MX

- **ISUZU D-MAX, M-UX**
- **MAZDA BT-50**

CarScanner Phone App Programming for MM4X4 Parameter IDs (PIDs)

Version 1 – 10/25

This document provides instructions to setup a CarScanner phone App (with OBD2 ELM327 dongle) so that it can display lockup kit and vehicle internal data. The lockup kit can be queried with custom PIDs just like any other ECU on the vehicle CANBus.

This feature is active even if the lockup kit is switched OFF (using the LED/Switch), so the gauge can continue to display useful information rather than "ERROR", or "No Data".

The OBD2 reader must be programmed with the MM4X4 PIDs in order to display the parameters.

This document is applicable to lockup-mate® MX ONLY.

The lockup kit can provide the following data for display:

Mode	Lockup kit ON or OFF (OFF = 0 ON=1)
Lockup Status	Torque converter full lockup status (unlocked= 0 Fully locked= 1) When the lockup kit is ON, this is the same as the LED status, which is ON when the lockup kit has the torque converter locked. When the lockup kit is OFF the LED is OFF, so this is then the lockup status from the factory ECU computer.
Torque Converter Slip	Actual amount of slip (in rpm) inside the torque converter. Approx value, as it fluctuates: 0 = fully locked ~50 is flex lockup >100 is unlocked
Pedal Position %	Accelerator pedal position - *cool feature!* When using Cruise Control even if the accelerator pedal isn't being pressed, it displays the equivalent pedal position that the cruise control system is demanding. (Range 0-100%)
Transmission Temperature (PAN sensor)	Range - 40° and up
Transmission Temperature (Torque Converter Sensor)	Range - 40° and up
Current Gear	0=P,R, or N 1-6 in both DRIVE and MANUAL
Front Wheel Steering Angle	Actual of the front wheels (Range +/- 35°) (-ve is steering left direction, +ve is right)
Steering Wheel Angle - raw	Raw angle from steering wheel sensor (Range +/- 650°) (-ve is anti-clockwise from 0)
Steering Wheel Angle - qtr turn	Angle reduced to 90° increments (quarter turns). Every 90 degrees of rotation if changes by 1. 0=straight ahead. (Range +/- 6) (-ve is anti-clockwise/left from 0, +ve is right)

NOTE: These instructions address the loading of the MM4X4 PIDs into the app.

Programming the CarScanner App

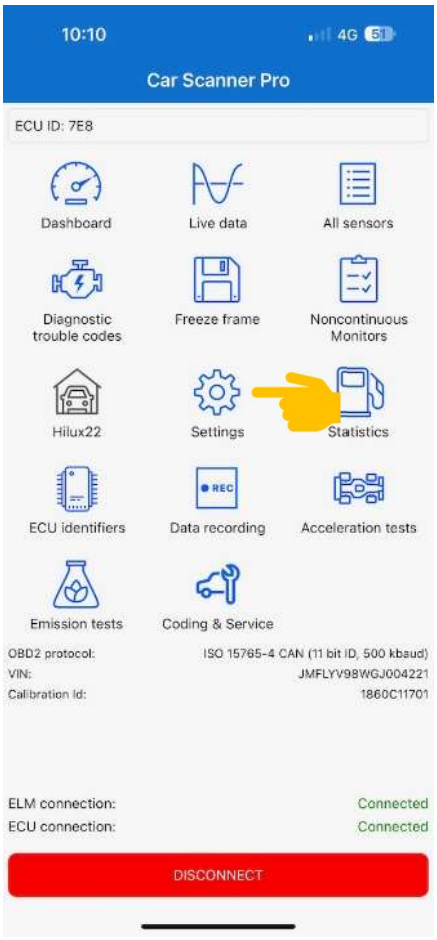
These instructions assume you are familiar with how to use the App and how to setup a page to display your preferred vehicle parameters onto the screen. If not, please refer to the App manual for more detail.

STEP 1

Launch CarScanner and connect to the car ECU.

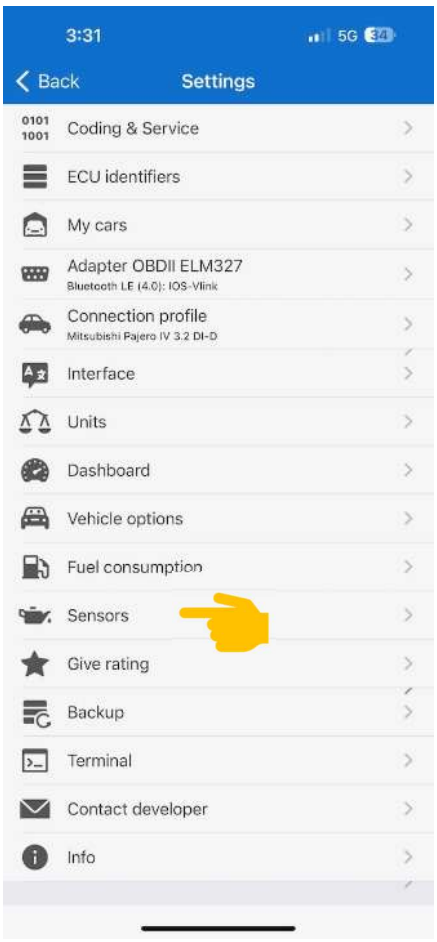
STEP 2

Select Settings



STEP 3

Select Sensors



Import PIDs

We have a file available to download which contains the PIDs. Email us at enquiries@mm4x4.com.au and we'll send the file by return email.

STEP 4

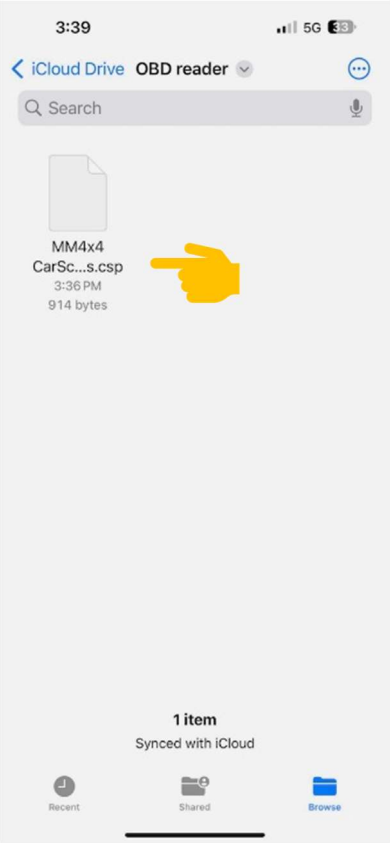
Save the file **MM4X4 CarScanner PIDs (LM8MX) Ver1.csp** provided by us and store on your phone at a location of your choice.

STEP 5

Import the file

STEP 6

Select the file from the saved location.



STEP 7

Select Custom filter to easily display the imported PIDs.

Select the PIDs to display in the Gauge DashBoard.
We recommend you replace any already displayed transmission PIDs with the MM4X4 equivalent. See the CarScanner App manual for instructions on customising the dashboards.
FINISH

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