

THE EAS KICKER USER GUIDE



VERSION 6.0

BLACKBOX SOLUTIONS

ITEMS REQUIRED

To use the EAS kicker you will require an OBDII lead (LD027 or LD033) for P38 (94 -02) Vehicles or a 14CUX/Classic Air Suspension lead (LD024) and a Cigar lighter power lead (LD006) for Classic Range Rovers.

CONNECTING

For P38 Vehicles connect the EAS kicker via the OBDII lead to the OBDII socket located under the main dash panel on the passenger side. For Communications the engine may or may not be running but the Ignition must be switched on.

For Classic Range Rovers connect the EAS Kicker to the Black Plug found behind the cover of the front right hand seat, (this will have a short loop and plug in already which must be removed).

In addition for Classic, the cigar lighter adaptor must be plugged in and the ignition switched on.

INITIALISATION

After you power up the EAS Kicker it will momentarily show an information screen.



Fig 1

Fig 1 shows the EAS KICKER Software Revision of V0.6 on line 1, the Serial Number of EK1111 on line 2 followed by Language setting of ENG which means English and the current feature authorization level appointed to this EAS KICKER of 1

Standard features authorization level is 0

UPGRADING FEATURES

As standard EAS Kickers have a feature authorization level of 0 which allows them to Read and Clear Fault Codes. An upgrade to feature level 1 is available which provides additional capability to read the current height sensor values and to read and edit the 16 stored height sensor values (vehicle height calibration / customization. This requires a minimum software version of 0.6 and feature authorization level of 1 or more to access. The feature authorization level update can be purchased on line at www.blackbox-solutions.com/shop after which software that will enable the new level can be upgraded by downloading and installing the software download found at <http://blackbox-solutions.com/downloads/category/eas-kicker>

INSTALLING NEW SOFTWARE

To install new software on to your EAS KICKER you will need to run some software from us on your PC. This software however requires that you already have installed on your computer the "Microsoft.net Framework 2.0" In most cases this will be the case, however if not you will get an error message and you will need to download and install this first. A link to it is also available on <http://blackbox-solutions.com/downloads/category/eas-kicker>

Double click on the EAS_Kicker_Programmer.exe installer.

Once the installer finished, the EAS Kicker Programmer will be launched.

Connect the EAS Kicker to your PC's serial port using the Programming lead. This may be via a USB to serial adaptor Power up the EAS Kicker using, Either a 12V DC power supply with a 2.1 DC plug wired centre positive, LD006 to a cigar lighter socket or the OBDII lead. A 12V DC power supply can be purchased from our on line web shop under the Accessories section.

Click on **Load File** and select the DAT file that you wish to transfer (ENG for English, etc.).

Select the COM port number where the EAS Kicker is connected.

Write the EAS Kicker serial number into the box when requested Click on **Program**.

At the end of programming you will notice that the LCD screen resets and show the new version.

See also the help provided by the EAS Kicker Programmer.

MENUS & NAVIGATION

The EAS Kicker starts by providing a main menu with a left facing arrow on the right hand side of the screen showing the currently selected option of the two options shown. See Fig 2 Below. To accept that option the operator can press the “A” button on the left hand side of the EAS KICKER, or alter the selection to another option by utilizing the up and down arrows to the right hand side of the EAS KICKER.



Fig 2



Fig 3

In some cases menu options exceed the two visible, in which case further pressing of the up or down arrow will shift the display of options up or down in the list. Typically the last (lowest) item on any menu list will be the option to go back as shown in fig 3 (above).

READING FAULTS

Select **FAULT CODES** from the main menu as seen in Fig 2, then select **READ FAULTS** from the fault codes menu as shown in Fig 4.

The resultant will either show that there were no faults found in the EAS systems ECU or a menu which includes a choice to view the number of faults found will be presented.



Fig 4

CLEARING FAULTS

Select **FAULT CODES** from the main menu as seen in Fig 2, then select **CLEAR FAULTS** from the fault codes menu. The option to clear the faults is also present in other Menu's

After a small delay, the screen will show a message to confirm that the fault codes have been cleared successfully. Please note however that THE EAS ECU may still re log faults that have not actually been fixed. In some cases the text for the fault displayed can be quite general, this is due to the EAS system not being able to more accurately determine the exact cause of the symptom it has detected. However based on experience, the likely cause of faults being logged is discussed in great detail in many places on the Internet and on various specialized Land Rover forums.

READING CURRENT SENSOR VALUES

Select **HEIGHTS** from the main menu as seen in Fig 2. Then select **SENSOR VALUES** from the heights menu. The EAS KICKER then constantly reads all four corner values of the height sensors as seen by the EAS ECU and displays them in real time as shown in fig 5 (right)

Pressing the A button cancels this immediately or you can Scroll down to the back option with the down arrow.



Fig 5

READING STORED HEIGHTS

Select **HEIGHTS** from the main menu as seen in Fig 2. Then select **ADJUST HEIGHTS** from the heights menu. After the EAS KICKER reads the values from the EAS ECU This will give you a Menu of the 16 stored height values for Each of the 4 height levels, Access, Low, standard and High As shown in Fig 6 (right)



Fig 6

ADJUSTING STORED HEIGHTS

Read the stored heights as above. From the menu of height values shown in Fig 6, select the height value you wish to adjust and press A. This will Give you a value adjusting screen as shown in Fig 7 (Right) Press up to increment by 1 and down to decrement by 1 until desired value is reached. Then press A to end the edit.



Fig 7

Should you decide to abort the adjustment, a final confirmation menu allowing cancellation or writing of the value is provided. See fig 8 (Right)



Fig 8

TROUBLESHOOTING

In some circumstances the EAS kicker may give a COMMS FAILURE message (as in Fig 9 right) with a numeric value.

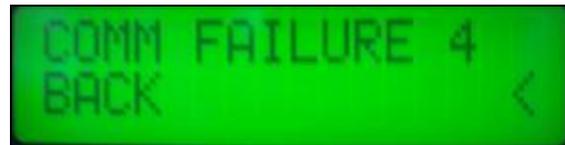


Fig 9

A lookup table is provided below for aiding in finding the source of possible problems. Usually the fault is due to something simple like the IGN being off or the Diagnostic socket being dirty or badly connected. However, sometimes the fault may lie in the wiring of the Vehicle or even the ECU itself.

This requires that the vehicles wiring and connectors to be extensively checked over and validated against the vehicles wiring diagram. If a fault persists and you are unable to find a problem with a vehicle, try the EAS KICKER on other vehicles. Alternately should you become convinced that the EAS Kicker is faulty, it can be returned for repair by requesting an RMA form for the unit by writing to support@blackbox-solutions.com.

COMMUNICATION FAILURE LOOK UP TABLE

- 1 or 4 = No reply in wakeup
- 2 or 5 = Wakeup reply indicates timer relay problem
- 3 or 6 = Bad reply in wakeup
- 7 = No reply to Read faults command
- 8 = Bad reply to read faults command
- 9 = Fault code memory did not clear properly
- 10 = Bad reply to clear fault codes command