

## **Matching Single Button Remotes To LandRover Discovery and Range Rover Classic**

This process applies to vehicles made between 1992 and 1996, fitted with the original remote shown below:



*Original part, all frequencies*



*Replacement part, 433MHz*



*Replacement part, 418MHz*

### **Ensure that the alarm system is disarmed before starting.**

The procedure described below won't work if the alarm / immobiliser system is armed, or has been bypassed as an emergency "get you home" measure. If the system is armed, and any remotes have failed or been lost, then send the alarm ECU (Electronic Control Unit) to us for disarming.

### **Ensure that the replacement remote has the same frequency as the original.**

In the UK, two frequencies were used: 418 and 433 Mhz. The replacement must transmit on the same frequency as the original, or it won't work. This document assumes that we've already sent you the correct part for your car.

### **Follow the process below to enter 'learn' mode.**

The 17VT Security Control Unit can learn up to 2 remotes at any one time. Once this learn process has been completed, it will 'forget' any previously matched remotes.

Note: The following sequence needs to be completed within 8 seconds, so using an assistant (to operate the bonnet switch) is recommended:

#### **Start with the bonnet shut, the alarm disarmed, and ignition off.**

Just for convenience, wind the window down, and shut the driver's door.

#### **If you're using an assistant, get them to depress the bonnet switch.**

This makes the alarm unit think that the bonnet is shut



The bonnet switch location is shown on the right. This is on an earlier (smaller headlamps) model. On later models, with 'face lift' headlamps (1995 onwards) the switch was moved backwards, and is mounted on the inner wing

**Turn ignition on for about 1 second, and then turn it off again.**

You don't actually need to start the engine, just turn the key until the warning lights in the instrument pack come on.

**Lock the doors, by pushing the sill button on the driver's door down.**

The sill button is shown on the right

**Unlock the doors, by pulling the sill button on the driver's door up.**

**Open the bonnet, or preferably just get your assistant to release the bonnet switch.**

**Turn ignition on again for about 1 second, and then turn it off once more.**

**The horn should 'bleep' once, and the security LED on the dashboard should come on continuously.**

This signifies that 'Learn Mode' has been successfully entered. See the next page for what to do next.



If this process hasn't worked, don't worry. The process is deliberately convoluted, and trying again a number of times won't cause the vehicle any harm.

Generally, some perseverance pays off, but if the vehicle still won't enter Learn mode after a number of attempts, then see the '*Troubleshooting*' section later in this document.

## **Once in Learn Mode...**

Once this mode has been entered:

**Take the first remote control to be matched. Press and hold down the button until the LED on the remote comes on for a second time, and then goes out.**

If the 17VT Unit has successfully received data from the transmitter, then the security LED on the car will blink on and off for a few seconds, as a confirmation.

**If only one remote is to be matched, then turn ignition on and off now, to stop learn mode. If a second remote is needed, then proceed as follows:**

**Take the second remote control, and again press and hold down the button until the LED on the remote comes on for a second time, and then goes out.**

If the 17VT unit has successfully received data from the transmitter, this time the security LED on the car will go off and stay off, as a confirmation that the transmitter has been learnt, and that the 17VT's memory is now full.

**Now turn ignition on, and off again, to terminate the process**

Your remotes should now be functional, and matched to the vehicle.

## **Troubleshooting**

If after repeatedly trying, you still can't get the car into Learn Mode, there are a number of things to look out for:

**Is the car fitted with an additional aftermarket immobiliser?** Some aftermarket immobilisers cut the ignition feed to the 17VT security unit, and when ignition is turned on, they delay the signal for a moment. Refer back to us for advice in this case.

**Is the bonnet switch still working?** Because of its location, the bonnet switch tends to corrode, or become sticky. The one shown in our photos had a tendency to stick down, and would only pop up when waggled from side to side. The easiest way of testing is to open the bonnet, and get an assistant to hold the switch down. Then lock the car either with the remote, or with the key in the driver's door. Either way the hazard lights on the car should flash 3 times to confirm that the alarm is armed. Wait a few seconds and then get your assistant to release the bonnet switch. The alarm should sound. If it doesn't then the bonnet switch is probably the culprit. Try some WD40, but our experience is that they can't be revived. Replacements cost about £28 from LandRover (!) or alternatively the switch can also be found on Rover 800s. Breakers yards tend to have more of these than Discoverys.