

P38 Range Rover Remote Controls Replacement: Reseller Fact Sheet

Applicable to: Range Rover (P38 Series), 1995 to 2002

We now have the capability to supply replacement remote controls for this model by post. Although our replacement looks physically different to the original 'flick key', electronically it will function in the same way, with a few additional enhancements, which are detailed later. What's more, you don't need any diagnostic equipment, as will be explained below.

Our replacement consists of a two button 'key fob' or 'key chain' style remote control handset, with a separate plastic headed mechanical key blank. See the photo below.

Ordering Process:

The remotes on P38 Range Rover work in a different manner to most other vehicles: i.e. the remote control needs to be pre-programmed to suit a particular vehicle. You can't make a vehicle 'learn' a particular remote that you've obtained at random.

For this reason you need a 'good' working remote to copy for this process to work. The word 'good' is a little misleading here. As long as you can get 4 transmissions out of a remote, we should be able to supply a copy.

When you place an order, we'll send you a Radio Data Recorder unit. This is the device shown on the photo. It's self powered and is about the size of a cigarette packet

Once you've received the Radio Data Recorder, turn it on, and operate the existing remote control near to it four or five times. A green light on the Recorder will tell you that it's been able to capture enough data. A set of instructions is supplied, and the whole process shouldn't take more than a couple of minutes.



Original Equipment P38 remote / key, together with Radio Data Recorder, replacement remote and key blank

Post the Radio Data Recorder back to us. We'll supply a return envelope for this purpose. We should then be able to programme a replacement remote for your customer's car. This needn't be the same key number as the current one, for example, if your customer has a Key 2, we can post back a Key 1, just let us know what you want.

We'll then post you a new remote control out, together with the plastic headed key blank which can be seen in the photo. You need to get this cut locally by a key cutter capable of cutting 4 track laser keys. We'd aim to post the programmed remote out on the same working day that we received the Radio Data Recorder back. We normally use Recorded Delivery for keys in the UK, but if you need something different, please let us know.

Once you receive the remote from us, it will need resynchronising to the customer's car in exactly the same way as an original equipment part. This is usually straight forward, but instructions are always supplied.

Other Details

The replacement remote incorporates a number of enhancements over the original. These include:

- The rolling code is now stored in the remote's flash memory. This means that once a remote is synchronised to the car it won't need resynchronising even if the batteries are taken out.
- The microprocessor in the replacement takes far less current than the original. This means greatly extended battery life expectancy.
- There's also a host of physical details that make our remote more robust. These are common with all our other two-button remotes. If you've seen our existing product, you'll know about these already.

Frequently Asked Questions

Q: Is there any other information you need when ordering a replacement remote?

A: Yes, we need the full VIN. It should start "SALL...."

Q: If we sent you the customer's spare, but non-functioning key, could you copy the blade from that?

A: Yes.

Q: What's the reception range of the Recorder?

A: About 2 feet.

Q: Can I order a Radio Data Recorder to sit on my counter, so that I don't have to wait a day for you to post me one out when I have a customer?

A: Yes. The Recorder doesn't drain its battery when switched off, so its 'shelf life' won't be an issue, within reason. We invoice for the cost of a remote when we send you the Recorder out, so this acts as a deposit.

Q: How do I know that the Recorder has stored a 'good' transmission?

A: When you turn the Recorder on, the green LED will blink slowly, to show that it's waiting. When it receives a good transmission, the LED will come on continuously for a couple of seconds, whilst the data is being saved. It'll then go back to blinking. Full instructions are supplied, and operation is quite simple.

Q: One button on our customer's original remote is knackered. Does it matter which button I use when recording?

A: No, you can use either.

Q: I know that you need at least 4 transmissions captured to reproduce a remote, what's the maximum you might want?

A: Anything up to 6 is helpful, but not essential. The Recorder can store a maximum of 15 transmissions, after that it's full, and so it puts the green LED on permanently and goes 'deaf'.

Q: What's in the box?

A: An RF receiver, a PP3, and a Microchip PIC micro. The PIC isn't powerful enough to decode the encrypted transmissions; instead it just checks them for the right number of bits and saves them if they're OK. We then select 'playback' mode when we receive the Recorder back. It's a bit like a radio frequency tape recorder.

Q: When you first sent us the Recorder, I was playing with it, and accidentally recorded a transmission from another P38 Range Rover, before the ones from the real customer's car. Is this a problem?

A: No, but, importantly, you must tell us that only the last x transmissions are valid. Otherwise our decoding computer will go into meltdown, trying to find a relationship between a number of transmissions that aren't linked.

Q: Our customer has a remote which looks OK, but won't resynchronise into the car at all (and so won't work) but when we check it on a 433MHz Radio signal tester, it seems to be sending something. Can you help with this?

A: Assuming that the RF receiver on the car is OK, it's likely that the memory has been corrupted in your remote in this case. This means that both the fixed code and the rolling code will be wrong for the vehicle. We can try supplying you with a copy, but it may be a copy of something that's wrong in the first place.

Q: Our customer has a remote which works his car OK, but your Recorder can't seem to capture a signal.

A: It's likely that the car has a 315MHz system fitted. This may be because it's a Japanese re-import, or sometimes Landrover dealers would swap systems to solve customer's problems of localised radio interference. Check the output of your customer's remote with a 433MHz signal tester.

Q: Do you have any further developments planned for this system?

A: We're currently developing a method CNC cutting of the key blank to profile, from a scan of the original. You can use a flat bed scanner to scan the side of the key with the blade folded in. We may also look at producing a desktop Recorder that plugs into a PC, so that you can e-mail us the data. This depends on demand.

Finally:

It's always worth taking a deposit for the full amount from the customer when ordering a remote. This protects you from the customer who never comes back.

It's your responsibility to validate that the customer is the legitimate keeper or owner of the vehicle being presented to you.