

Shimano 105 di2 experience

The Shimano 105 di2 groupset consists of bluetooth wireless connectivity between the shifters and the derailleurs, batteries in the shifters, a large battery in the seatpost and a new derailleur. Shifting is based on buttons (attached to levers) and wireless technology rather than levers pulling wires and is consequently quicker and crisper.

Having recently replaced a chain I decided to check the shifting and I noticed that I could not reach the smallest cog. I spent quite a bit of time checking the settings on the B-screw and high screw to no avail. I decided to replace the cassette and as expected this did not fix the problem.

I decided to bite the bullet and check the hanger and derailleur itself. I don't have the tool to check the hanger accurately but it looked ok visually so that left me with the derailleur. This looked like it might be bent so I decided to replace it. A non-electric one would have cost £35 and the di2 one cost me £159 so that was the first bit of bad news. Replacing a non-electric one takes me about half an hour including reattaching the chain. Attaching the new derailleur went ok including reconnecting the electric cable but the whole process took hours.

The problems start with configuring it and this is based on one tiny button on the base of the derailleur and one LED. Between them they cover three functions and getting the right function requires you to press the button for the precise time as follows:

- Less than 0.5 sec to check the battery level
- Between 0.5 sec and 2.0 sec to enter bluetooth connection mode
- Between 2.0 sec and 5.0 sec to enter derailleur adjustment mode

The LED changes colour to reflect the function. This is quite fiddly.

Replacing the derailleur means you have to enter bluetooth connection mode to reconnect the shifters to the new derailleur. This then requires you to use the E-TUBE PROJECT mobile app which in turn requires you to use the camera to read the tiny QR codes stamped on the inside of the shifters. The mobile app works fine but is very difficult to read unless you have very good eyesight - there is plenty of room on the mobile screen to use a font size bigger than 1. Overall this bluetooth step does work but it is very fiddly. Once that was done the derailleur adjustment works very well.

So what are my overall thoughts on 105 di2? The main advantage from the marketing is that shifting is quicker and slicker. This is true for professionals but it is marginal for amateur cyclists. Another advantage is that shifting is easier for anyone with hand or wrist issues and again this is true. It is also true that reindexing is required less often. The first disadvantage that I hit is the significant price differential. The other disadvantage and to me the big one is maintenance is much more complex. Another minor disadvantage is that the new style shifters will be more difficult to operate with bulky winter gloves. I am sure if I had to do it again things would go much better.

The biggest problem that I witnessed on the various continental tours that I did was for someone who had a very expensive, boutique bike with Ultegra di2 just after it was

announced. He broke the derailleur and it was 5 days before he got the bike back, normally one of the guides can fix most things over a lunch break.

If I was buying the bike again I would go for the manual groupset and keep the hydraulic brakes.