

TECHNICAL MANUAL

# SUPER RECORD 13 WIRELESS

**PROCEDURES** 

· BLUETOOTH COUPLING WITH THE COMPONENTS

· FITTING

· ADJUSTMENTS

· DIAGNOSTICS



## **CAUTION!**

ALWAYS wear protective gloves and glasses while working on the bicycle.



#### THIS TECHNICAL MANUAL IS INTENDED FOR USE BY PROFESSIONAL MECHANICS.



Anyone who is not professionally qualified to assemble bicycles should not attempt to install and operate on the components because of the risk of carrying out incorrect operations that could cause the components to malfunction with the consequent risk of accidents, physical injury or even death.

The actual product may differ from what is illustrated, as the specific purpose of these instructions is to explain the procedures for using the component.

# BLUETOOTH COUPLING WITH THE COMPONENTS

# 1 - LEGEND

LEDS ON CONTROLS ERGOPOWER	0	LEDS ON REAR DERAILLEUR AND FRONT DERAILLEUR	O
CONTINUOUS PRESSURE		FAST PRESSURE	
HIGH FREQUENCY FLASHING	((O))	LOW FREQUENCY Flashing	(0)
SINGLE FLASHING	(O) x 1	FIXED LED	0
LED OFF	<i>\( \text{\tint{\text{\tin}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tex{\tex</i>	TIME LIMIT / ACTIVATION TIME	Xs

### 2 - INITIALIZATION

### 2.1 - PRELIMINARY OPERATIONS

Remove the components from their boxes and place them next to each other.









#### IMPORTANT!

The rear derailleur and front derailleur are delivered without the battery inserted; batteries are sold in a dedicated package. Insert the batteries according to the sequence shown on page 5. Ergopower shifters are delivered with the batteries already inserted.





### 2.2 - CHARGING THE FRONT DERAILLEUR AND REAR DERAILLEUR BATTERIES

#### IMPORTANT!

Be sure to remove the battery protection cover (if present on the rear derailleur / front derailleur) and store it in a safe place.







#### IMPORTANT!

- Before using the device for the first time, be sure to remove the protection ring (if there is one on the battery) and fully charge the rechargeable battery until the charging LED turns off.
- If you are transporting or storing the battery in a high-humidity environment (e.g., a spare battery in your pocket while on a bike), be sure to put the protection ring on the contacts. This will help protect them from oxidation.





- Be sure to properly position the magnetic charging connector, which comes with the battery.
- Use only 5V, 2A battery chargers certified according to IEC 62368-1.
- The approximate time required for a full battery charge is 1 hour.



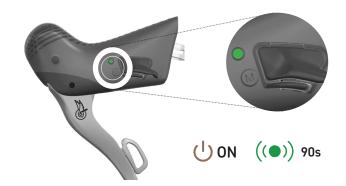
### 3 - BLUETOOTH COUPLING WITH THE COMPONENTS

#### IMPORTANT!

During the Bluetooth pairing procedure with the components, ensure you keep them active by moving them and operating the control levers.

#### 3.1 - SWITCHING ON THE ERGOPOWER CONTROLS

• Activate the Ergopower shifters by pressing a lever or button: the GREEN LED will flash in high frequency for 90 sec in the search status.



### 3.2 - INSERTING THE BATTERY AND SWITCHING ON THE FRONT DERAILLEUR

- Use only the Campagnolo battery designed for this component, identified by PU02.
- Insert the lower battery tab into the front derailleur, then close the locking lever. The BLUE LED will flash in high frequency for 90 sec in the search status.



#### DANGER!

Risk of fire or explosion if the battery is replaced by an incorrect type.



#### 3.3 - INSERTING THE BATTERY AND SWITCHING ON THE REAR DERAILLEUR

- Use only the Campagnolo battery made for this component, identifiable by the PU02.
- Insert the battery into the rear derailleur by sliding it from the bottom to the top.
- Lock the battery by sliding the locking button until the line on the button aligns with the lines on the battery body.
- At this point, the BLUE LED on the rear derailleur will light up steadily for 45 seconds in search mode.





#### 3.4 - LED BEHAVIOUR DURING AN ATTEMPT TO COUPLE THE BLUETOOTH WITH THE COMPONENTS



The LED remains on fixed for 45 s in any case, regardless if the other 3 components are being coupled or if one or more components are not coupled.



The LED remains flashing in high frequency until the front derailleur is coupled to the rear derailleur: after 90 s, if it is not coupled, the LED turns off.



The LED remains flashing in high frequency until the control is coupled to the rear derailleur: if after 90 s it continues to flash, and therefore it is not coupled, the LED turns off.

#### If all the components have been coupled, the LEDs behave as follows:



The rear derailleur LED is off.



The front derailleur LED is off.



The Ergopower control LEDs are off and only light up when a lever is operated or a button is pressed.

#### IMPORTANT!

If a component, such as one or both shifters or the front derailleur, has not been paired correctly with the rear derailleur, its LED will flash at a high frequency.

In this situation, it is important to clear the memory of all components and try pairing again (refer to chapters 3.5 - 3.6 - 3.7). If no component has paired with the rear derailleur, refer to chapter 3.8.

### 3.5 - ERASING THE REAR DERAILLEUR MEMORY

IMPORTANT! The component must be switched ON.

• Hold down the MODE button on the rear derailleur (for at least 10 seconds). After 5 seconds, the LED flashes in orange.



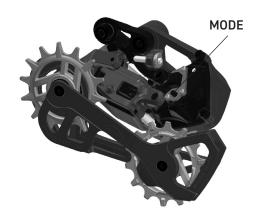
• Continue to hold the Mode button until the LED switches on alternately for 3s, with the following colour sequence, starting with yellow, for 45s.



• When the yellow LED is on, quickly press the MODE button.



Disconnect the battery to confirm the rear derailleur memory erasure.





### 3.6 - ERASING THE FRONT DERAILLEUR MEMORY

IMPORTANT! The component must be switched ON.

• Hold down the MODE button on the front derailleur (for at least 10 seconds). After 5 seconds, the LED flashes in orange.

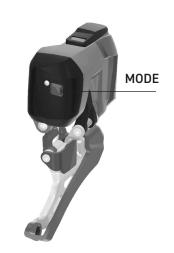


• Continue to hold the Mode button until the LED switches on alternately for 3s, with the following colour sequence, starting with yellow, for 45s.



• When the yellow LED is on, quickly press the MODE button.





#### 3.7 - ERASING THE MEMORY OF THE ERGOPOWER CONTROLS

#### IMPORTANT!

The component must be switched ON.

• Hold down the MODE button on the relevant Ergopower control (for at least 10 seconds). After 5 seconds, the LED flashes in orange.



• Then, the LED comes on alternately for 3s, with the following colour sequence starting from yellow, for



• When the yellow LED is on, quickly press the MODE button.





Now you can refit the battery in the rear derailleur and attempt to connect to the other components again. IMPORTANT! Make sure the components are not in standby.

#### 3.8 - NO COMPONENT COUPLED TO THE REAR DERAILLEUR

If no component is coupled to the rear derailleur, the LEDs behave as follows:









The rear derailleur LED flashes (yellow) in high frequency, for 120 seconds.

The front derailleur LED flashes (blue) in high frequency, for 90 seconds.

The control LEDs flash (green) in high frequency, for 90 seconds, to indicate the failed coupling.

In this case, simply remove the rear derailleur battery and refit it: the rear derailleur will reattempt connection with all the components.

# INSTALLATION

### 1 - ERGOPOWER SHIFTERS

Install the controls on the handlebar following the installation procedure given in the "Ergopower 12s/13s Shifters" technical manual.

- $\boldsymbol{\cdot}$  The controls must be correctly oriented in order not to negatively affect the bike's aerodynamics
- Fix the control to the handlebar, tightening the screw to **8 Nm (71 in.lbs)**, using a Torx T25 bit.



### 2 - HYDRAULIC SYSTEM

Install the brake callipers and make the hydraulic connection to the controls, following the installation procedure "Hydraulic system assembly - Ergopower shifters with J-Bend / Super Record 13" given in the "11s-12s-13s Disc Brake Hydraulic System" technical manual.





# 3 - CUPS

Install the Qck-Tech cups in accordance with the installation instructions given in the "Qck-Tech / Pro-Tech / Ultra torque / Power Torque Cups" technical manual.



### 4 - CRANKSET

Install the crankset as specified in the "Ultra Torque 12s / 13s Crankset" technical manual.



## 5 - FRONT DERAILLEUR

Install the front derailleur as specified in the "12s / 13s front derailleur" technical manual.





# 6 - REAR DERAILLEUR

Install the rear derailleur following the procedure given in the "12s / 13s rear derailleur" technical manual.





## 7 - CHAIN / SPROCKETS

Install the chain as described in the "11s / 12s / 13s Chain" technical manual. Install the sprockets as described in the "Super Record 13s sprocket" user manual.

# **ADJUSTMENTS**

### 1 - ADJUSTMENT OF THE REAR DERAILLEUR

**IMPORTANT!** Make sure when making the adjustment that the <u>rear derailleur is not disengaged</u>. It can be re-engaged manually or by operating the levers of the Ergopower controls.

COMPONENT	PROBLEM	DESCRIPTION	SOLUTION
	Disengagement towards the outside	The rear derailleur does not move on the larger sprockets.	Move it down to the smallest sprocket, continuing to operate the rear derailleur multiple times until it reengages. Then check that it functions correctly.
	Disengagement towards the inside	The rear derailleur does not move on the smallest sprockets.	Move it up to the largest sprocket, continuing to operate the rear derailleur multiple times until it re-engages. Then check that it functions correctly.

1) To perform the adjustment procedure, position the rear derailleur on the 6th sprocket and on the largest chainring.







2) Press the MODE button on the right Ergopower shifter for 5 seconds.

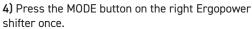
The LED will flash orange.

Release the mode button on the Ergopower control. The rear derailleur LED will light up orange.

DX 5 s



3) Adjust the position of the rear derailleur until the chain is aligned with the sprocket.



The LEDs on the Ergopower shifter and rear derailleur will turn off.





# 1.1 - ADJUSTMENT OF THE REAR DERAILLEUR ON THE SINGLE SPROCKET

- 1) Position the rear derailleur on the sprocket to be adjusted.
- 2) Hold down the rear derailleur MODE button for approx. 7s until the orange led turns on. Release the button.

The rear derailleur LED turns on flashing orange at a low frequency.

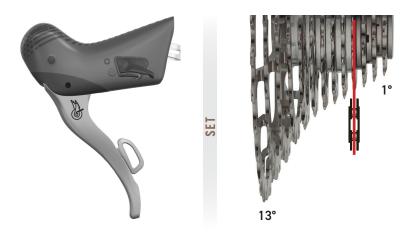




#### IMPORTANT!

The operation indicated below must be carried out if the rear derailleur adjustment was not performed correctly.

3) Adjust the position of the rear derailleur until the chain is aligned with the sprocket.



**4)** Press the MODE button on the rear derailleur to confirm the position.

The LED will turn off.



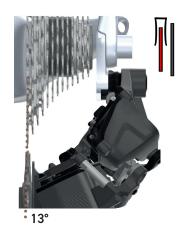
### 2 - RESETTING THE FRONT DERAILLEUR

### 2.1 - INTERNAL PHASE

- 1) Position the chain on the 13th sprocket and on the smallest chainring.
- 2) Press the MODE button on the left Ergopower shifter for 5 seconds

The LED will flash orange.
Release the mode button on the Ergopower control.

The front derailleur LED will light up orange.

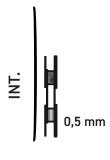






- **3)** Position the inner semi-cage 0.5 mm from the chain.
- **4)** Press the MODE button on the left Ergopower shifter once.

The LEDs on the Ergopower shifter and front derailleur will turn off.

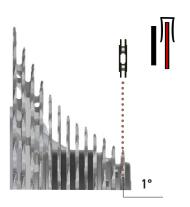


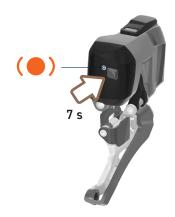


### 2.2 - EXTERNAL PHASE (ADJUSTMENT)

- 1) Position the chain on the 1st sprocket and on the largest chainring.
- 2) Hold down the front derailleur MODE button for approx. 7s until the orange led turns on. Release the button.

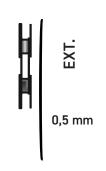
The front derailleur LED turns on flashing orange at a low frequency.





- 3) Position the external semi-cage  $0.5\ \mathrm{mm}$  from the chain.
- 4) Press the front derailleur MODE button to confirm the position.

The front derailleur LED turns off.





# **DIAGNOSTICS**

# 1 - DIAGNOSTICS

### 1.1 - ERROR MESSAGES ON THE REAR DERAILLEUR / FRONT DERAILLEUR

COMPONENT	LED COLOUR	LED SWITCH-ON FREQUENCY	PROBLEM	SOLUTION
	RED			
	( ) x1	SINGLE FLASH  (it switches on by activating one of the two Ergopower controls, or by pressing the component MODE button)	<ul> <li>Movement error due to a low battery voltage</li> <li>Mechanical motor block.</li> </ul>	Charge the battery. Check whether you can remove the cause of the mechanical block. Remove and refit the battery to switch the component off and back on again.
	((•))	HIGH FREQUENCY (it switches on by activating one of the two Ergopower controls, or by pressing the component MODE button)	Communication error of the position sensor (when turning on) Positioning error due to a short-circuiting motor or due to excessive current absorption (during movement) Positioning error due to a motor with open circuit (during movement)	Check whether you can remove the cause of the mechanical block. Remove and refit the battery to switch the component off and back on again.

### 1.2 - ERROR MESSAGES ON THE REAR DERAILLEUR / FRONT DERAILLEUR BATTERIES

COMPONENT	LED	PROBLEM	SOLUTION
	The battery LED is FLASHING.	• Internal battery error	Try to charge the battery with a 5V, 2A battery charger, as devices with an output value lower than 2A could cause a temporary internal battery error. If the LEDs continue to flash, replace the battery.

### 1.3 - ERROR MESSAGES ON ERGOPOWER SHIFTERS

COMPONENT	LED COLOUR	LED SWITCH-ON FREQUENCY	PROBLEM	SOLUTION
	ORANGE	SINGLE FLASH (it is switched on by activating one of the two Ergopower controls)	No communication with rear derailleur	Make sure the rear derailleur is turned on and proceed with clearing the Bluetooth memory of the components. Once done, repeat the pairing procedure.
	( ) x1			
	RED	SINGLE FLASH		
	( ) x1	(it is switched on by activating one of the two Ergopower controls)	Battery voltage too low	Replace the battery with a charged battery.
			<ul> <li>Communication error of the position sensor (when turning on)</li> <li>One or more levers are</li> </ul>	Turn the control off and back on
		(it switches on by holding and pressing the activation levers)	pressed for longer than 15 s (when the system no longer detects that the lever is pressed, the LED turns off)	Remove and refit the battery to switch the component off and back on again.