



SERVICE INSTRUCTIONS

SI-7B40B



SHIMANO NEXAVE C810

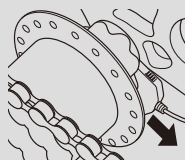
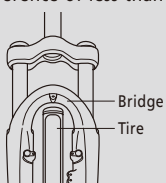
Di2
DIGITAL INTEGRATED INTELLIGENCE

**For safety, be sure to read these instructions,
and follow them for correct use.**

General Safety Information

⚠ WARNING

- Do not press the FLIGHT DECK (cycle computer) switch while riding, otherwise you might lose control of your bicycle and have an accident. Stop the bicycle before operating any of the switch.
- Do not pay excessive attention to the computer data while riding, otherwise you might have an accident.
- Do not disassemble the front suspension fork, otherwise the outer tube and the inner tube will come apart and serious injury may result.
- Use tires with an outside circumference of less than 730 mm, so that the tire does not touch the bridge of the front suspension fork. If a fender has been fitted, make sure that the tire does not touch the fender when the tire is installed.
- Install the handlebar and the handlebar stem correctly while referring to the Service Instructions for these parts. If they are not installed correctly, you might lose control of your bicycle and have an accident.
- The FS-C810 does not include a hanger on the front suspension fork, and so only cantilever brakes that are designed to be installed to the front suspension fork without a hanger can be used.
- Keep used batteries out of the reach of children, and dispose of them in accordance with local waste regulations. If batteries are swallowed by mistake, seek medical advice immediately.
- Use a neutral detergent to clean the chain. Do not use alkaline or acidic detergents that are designed to remove things such as rust, as they can damage the chain and cause the chain to break.
- When removing the rear wheel, disconnect the cable from the rear hub and then place the chain onto the top (smallest sprocket) of the cassette sprocket first. Make sure the rotor temperature has decreased sufficiently when removing the cord if the disc brake is mounted. Touching the rotor immediately after riding the bicycle may result in burns.



Note

- The front derailleur shifts gears by the operation of the manual shift switches, regardless of whether the mode setting is automatic or manual. However, the rear derailleur will not shift gear in automatic mode, even when the manual shift switches are operated.
- Turn the pedals when carrying out both front and rear gear shifting.
- Do not turn the pedals backward.
- Do not clean the bicycle with high-pressure sprays. If moisture gets into the components, it may cause operating problems or rust.
- Do not disassemble any of the units, otherwise they may not operate correctly.
- A beep will sound when gear shifting occurs.
- The various units are designed to be water-resistant so that they can be used for riding in wet weather. However, they should not be immersed in water.
- Do not leave the FLIGHT DECK exposed to extremely hot weather, and do not subject it to shocks.
- To clean the units, wipe with a dry cloth or a cloth that is lightly moistened with neutral detergent. Substances such as thinner will damage the unit surfaces.
- Roughly 1 minute after stopping the bicycle, the energy saving function is activated and the liquid crystal display turns off. The backlight turns off about 5 seconds after stopping the bicycle.
- For any questions regarding methods of handling or maintenance, please contact the place of purchase.

SHIMANO
NEXAVE
C810
Di2
DIGITAL INTEGRATED INTELLIGENCE

The rotation of this bicycle's free hub generates power used to switch gears and control the suspension.



What is automatic shifting mode?

This is a riding mode in which the gears are selected automatically according to the riding speed.

What is manual shifting mode?

This is a riding mode in which the gears are selected according to the preferences of the rider.

**Tips
on use**

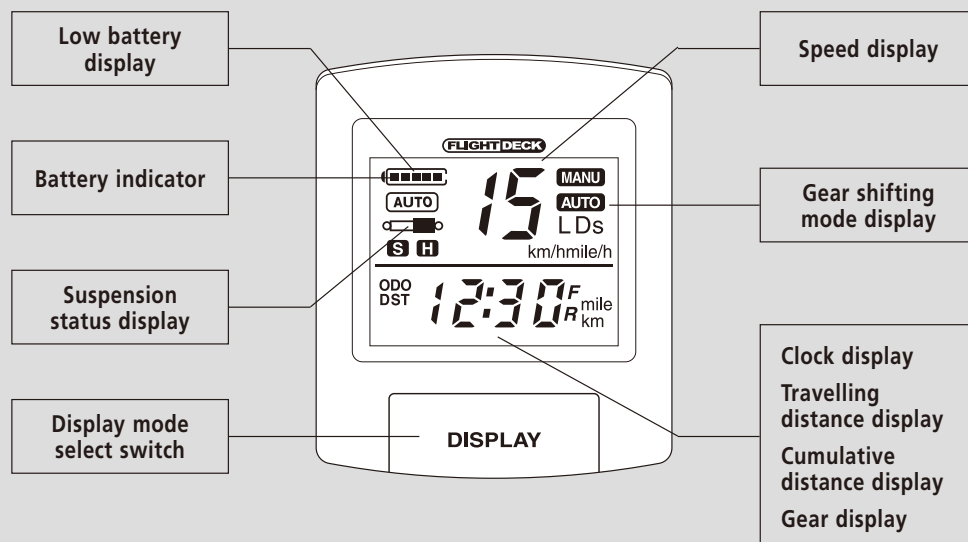
In order to get better results in automatic mode

The shifting points can be changed to any one of five different points both before and after the standard shifting points. You can change the settings to find the shifting points that best suit your preferences. (Page 10)

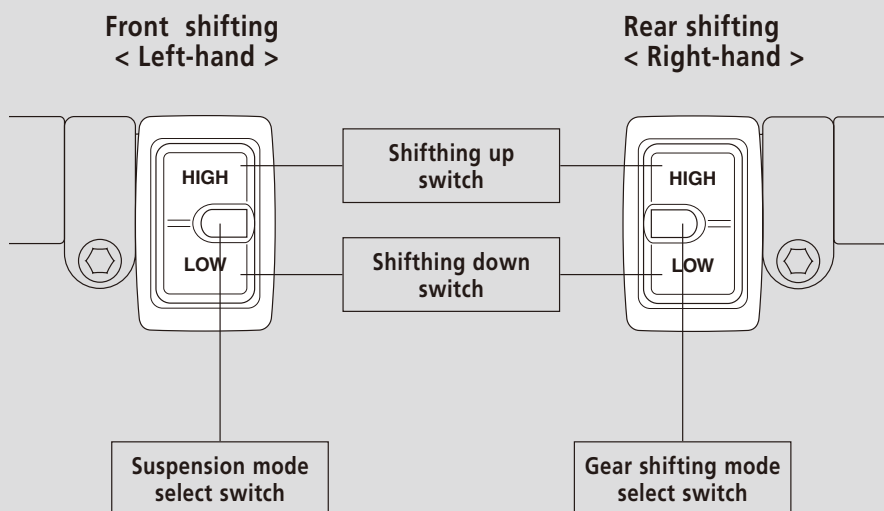
Specifications

Front derailleur (with computer unit)	FD-C810
Rear derailleur	RD-C810
Manual shift switches	SW-C810
FLIGHT DECK (cycle computer)	SC-C810
Electronic wire cable	EW-C810
Front chainwheel	FC-C810
Front suspension fork	FS-C810
Rear suspension	RS-C810
Chain	CN-HG73
Cassette sprocket	CS-LG60 (11-13-15-17-21-25-29-33T)
Freehub (Hub dynamo)	FH-C810 / C811

FLIGHT DECK (SC-C810)

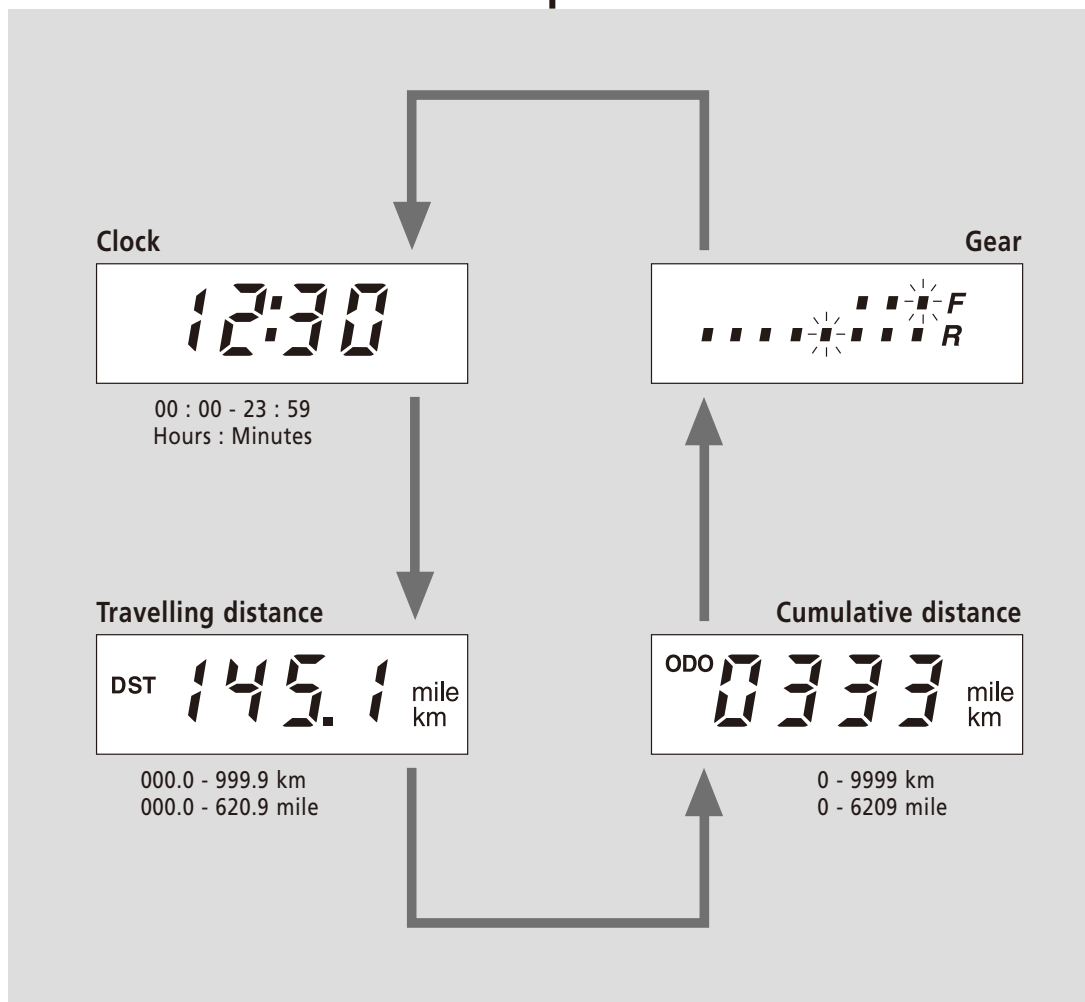
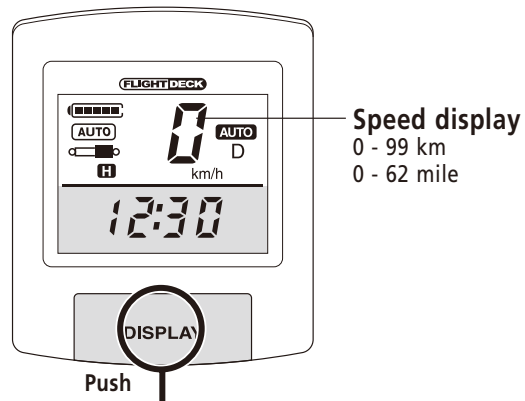


Manual shift switches (SW-C810)



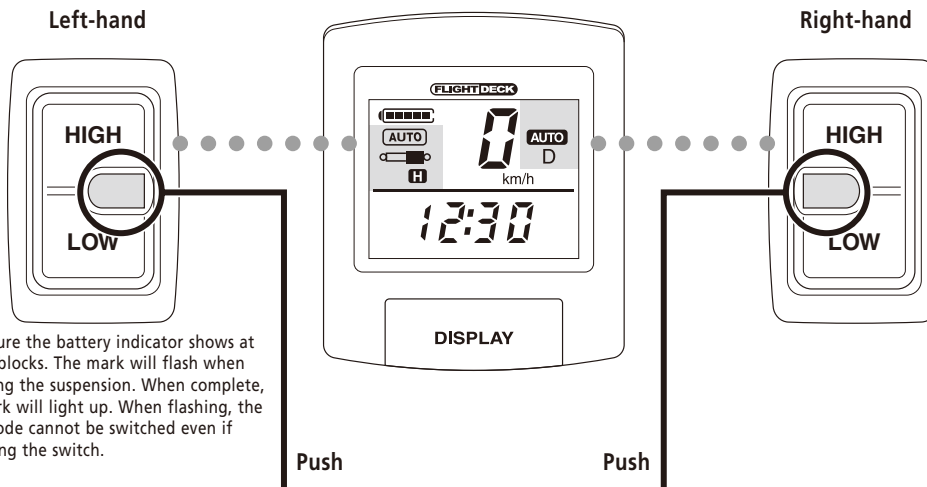
Mode selection operations

< Display select switch >



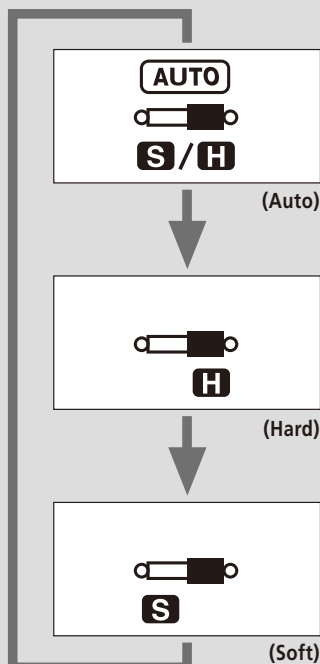
< Suspension mode select switch >

< Gear shifting mode select switch >

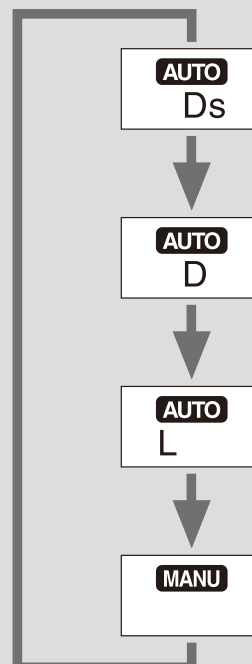


* Make sure the battery indicator shows at least 4 blocks. The mark will flash when switching the suspension. When complete, the mark will light up. When flashing, the next mode cannot be switched even if operating the switch.

Select the desired suspension mode. If the suspension is set to AUTO, the suspension changes between H (hard) mode and S (soft) mode depending on the speed and the front and rear gear positions.



Select the desired riding mode. When set to L, D or DS, automatic gear shifting is carried out in accordance with the riding speed. When selecting MANU, manual gear shifting is carried out with the front and rear derailleurs shifting when the shift switches are operated.



Manual shift switches (Manual shifting mode)

Rear gear shifting is basically carried out automatically, but manual shifting is also available for riders who would like to make use of it.

Press the mode select switch to set the mode to manual (MANU).

■ Front gear shifting operation



When the HIGH switch is pressed, the chain moves from a smaller to a larger chainring. This is for using during normal riding and when riding downhill.

When the LOW switch is pressed, the chain moves from a larger to a smaller chainring. This is for using when riding uphill or riding into headwinds.



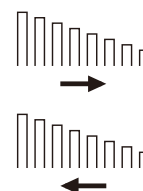
* The front derailleur momentarily shifts gears when the switch is pressed even in automatic shifting mode. However, after that it may return to the original gear depending on the riding speed.

■ Rear gear shifting operation



When the HIGH switch is pressed, the chain moves from a larger to a smaller sprocket. This makes the pedals a bit harder to turn but allows the feet to turn more slowly.

When the LOW switch is pressed, the chain moves from a smaller to a larger sprocket. This makes pedaling easier.



Tips
on use

Selecting automatic shifting mode

Powerful Ds mode

Select Ds mode for more dynamic riding

AUTO
Ds

Basically,
choose
D mode

AUTO
D

* Adjust the shifting points evenly for a smoother ride.

Relaxed L mode

Select L mode for hilly terrain.

AUTO
L

* The shifting points can be adjusted to one of 11 different points. (Page 10)

Tips
on use

Selecting AUTO mode

Basically, use AUTO mode.



D mode is set for normal riding.

When riding up slopes or into headwinds and pedaling becomes more difficult, press the switch to shift to the L mode. If pedaling is too fast, press the switch to shift to D or Ds mode.

If changing gears does not improve your ride, use the front shifting switch to shift to the small chainring. The front gears can be shifted manually even in auto mode.

The front derailleur can be set to manual shifting mode even when the rear derailleur is set to automatic shifting mode.

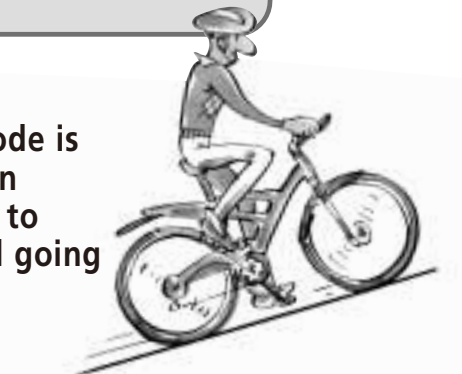
Tips
on use

Selecting the suspension

Basically, use AUTO mode.



Hard mode is set when starting to ride and going up hills.



Manual Setting

Set either S (SOFT mode) or H (HARD mode) as desired.

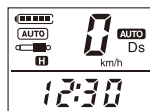
Changing the entry data

Switch the suspension from AUTO mode to either HARD or SOFT mode when inputting new data. After the bicycle stops, the battery indicator located on the FLIGHT DECK will display no blocks after roughly 5 seconds even if there is power remaining in the battery in order to save energy. The backlight is off when changing data.

Method

(1) Preparation of Set up

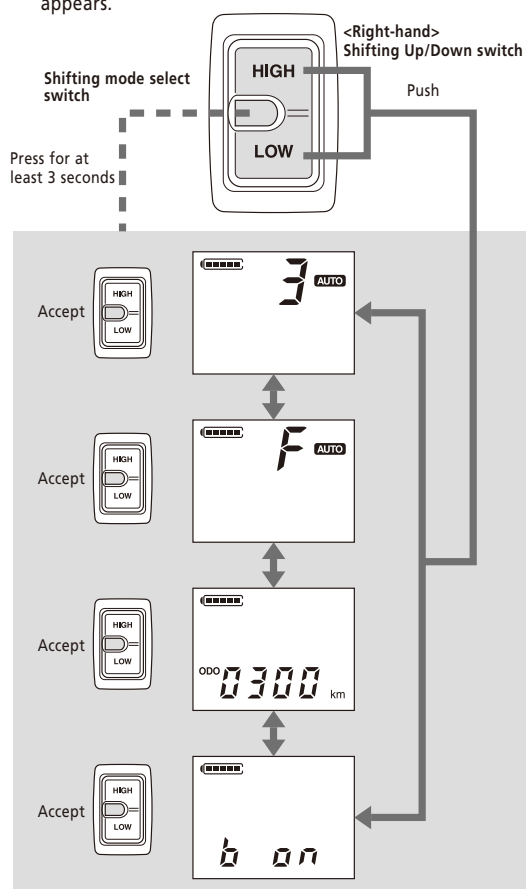
Make sure the battery indicator shows at least 4 blocks and the speedometer reads 0km/h.



Rotate the crank if the battery indicator is low. Then, apply the brakes and check the display making sure the speedometer reads 0km/h (mph) with the battery indicator showing sufficient power. Turn the crank again to recharge the battery if power runs out while inputting new data.

(2) Start of Set up

After having completed preparations, press the shifting mode select switch of the right shifting switch (Up/Down) for at least 3 seconds. Check that the display only shows the battery indicator, a numerical value, and the "AUTO" mark. Select the items to be changed using the right shifting switch (Up/Down). Press the shifting mode select switch to set when the desired value appears.

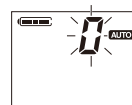


- Adjust shifting points
- Selecting Front : Auto/Manual
- ODOmeter clear
- Buzzer On/Off

■ Adjust shifting points

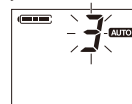
After confirming that the number flashes, change to the number you want by operating Shifting Up/Down switch. Adjustable range : -5 to +5

Default level is "0"



If you want to make the shifting timing earlier. ➔ Change to bigger number.
If you want to make the shifting timing later. ➔ Change to smaller number.
When the desired setting appears, press the shifting mode select switch to set.

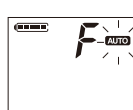
Ex. In case of "3" you want



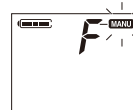
■ Seletion of Front : Auto/Manual

You can select whether Front gear is shifted by Automatic or manual operating.
Selection of F : AUTO / MANU mode is like below.
After confirming display shows Battery, "F" and "AUTO" or "MANU", push Shifting mode select switch.

Ex. In case of F : AUTO



Ex. In case of F : MANU

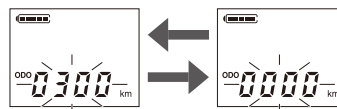


If you want to select F : Auto
➔ Set that "AUTO" flashes.
If you want to select F : Manual
➔ Set that "MANU" flashes.
When the desired setting appears, press the shifting mode select switch to set.

■ ODOmeter clear

Verify that the display is flashing. Press the right shifting switch (Up/Down) to clear the display (km/mile). The travelling distance is also cleared.

Ex. In case of odometer is 300 km



If you want to clear data
➔ Set that "0000 km" flashes.
If you don't want to clear data
➔ Set that "0300 km" flashes.
When the desired setting appears, press the shifting mode select switch to set.

■ Buzzer On/Off

Buzzer On/Off mode is like below.

After confirming display shows Battery and "b on" or "b off", push Shifting mode select switch.

Confirm the number flashes.

Ex. In case of buzzer on.



Ex. In case of buzzer off.



If you want to buzzer ➔ Set that "b on" flashes.

If you don't want to buzzer ➔ Set that "b off" flashes.

When the desired setting appears, press the shifting mode select switch to set.

- Clock setting (24hours)
- Travelling distance Clear

■ Clock setting (24hours)

Condition of setting

- (1) Wait 5 seconds after stopping or remove the FLIGHT DECK from the bicycle.
- (2) Verify that the low battery display is not flashing.

Display select switch

Press for at least 3 seconds

Method of setting

ex. Adjust to 12:30

- Set the display on the FLIGHT DECK to clock mode.
- Push the the display switch and hold for 3 seconds or more at clock.
- After confirming left side digit flashes, change to 1 by pushing switch on the FLIGHT DECK.
- And then, push it and hold for 3 seconds or more to shift to next digit.
- Adjust each digit in order from left side to right side.
- After adjusting all digits, the display goes back to normal mode.
- If not inputting setting in the FLIGHT DECK for more than two minutes, the microcomputer stops and all values already inputted are deleted.



■ Travelling distance Clear

Condition of setting

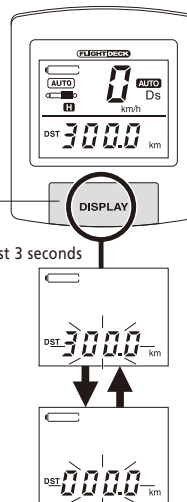
- (1) Wait 5 seconds after stopping or remove the FLIGHT DECK from the bicycle.
- (2) Verify that the low battery display is not flashing.

Display select switch

Press for at least 3 seconds

Method of setting

- Set the display on the FLIGHT DECK to "DST" mode.
- Push the the display switch and hold it for 3 seconds or more.
- After confirming present distance blinks, change to 0 km or 0 mile by pushing switch on the FLIGHT DECK.
- Every time you push the display switch the present distance and the clearing indication (0 km or 0 mile) are indicated.
- When you want to clear the present distance, push the display switch for more than three seconds.
- If not inputting setting in the FLIGHT DECK for 3 minutes or more when the display conditions make it possible for the travelling distance to be cleared, the travelling distance will not be cleared.

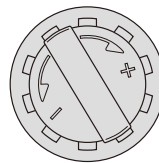


Suspension adjustment

■ Front suspension adjustment

< Pre-load adjuster adjustment >

- (1) Press the suspension mode select switch on the FLIGHT DECK to set the suspension mode to "S".
- (2) Apply the front brake or place some weight on the handlebars to move the front suspension up and down in order to check the hardness. Adjust the pre-load adjuster to obtain the desired hardness.
If turned in the reverse direction, the suspension becomes softer, and when turned in the forward direction, the suspension becomes harder.

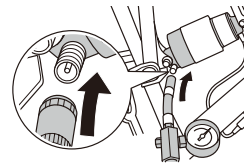


Pre-load adjustment:
10 mm (40 clicks)
1.5 mm (67 clicks): 1 cycle

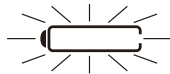
■ Rear suspension adjustment

< Air priming >

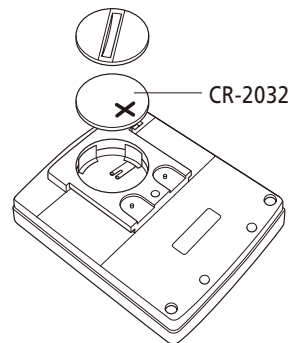
- (1) Press the suspension mode select switch on the shifting switches to set the suspension mode to "S".
- (2) The air pressure varies depending on factors such as the shape and size of the frame, the rider's weight and the riding method.
Adjust the air pressure to the optimum level max.1.5 MPa. {max.15 bar}
The valve is a Schrader valve.
As a guide, in "S" (soft) mode, the bicycle should move down by 5 - 10 mm when the rider sits on it.
 - After priming with air, securely tighten the cap, otherwise the air will leak out.
 - For optimum functioning of the rear suspension, check the pressure in the rear suspension once a month.



Battery replacement

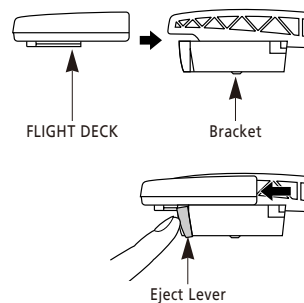


When the low battery display appears (battery indicator flashes), replace the battery (CR-2032) with a new one as soon as possible. If the battery is completely spent, the FLIGHT DECK display will appear while riding, however, it will disappear and the clock will return to 00:00 with the travelling distance reading 0 when the bicycle stops. The battery has polarity (+ / - sides), so be sure to install the battery with the + side outward as shown in the diagram at right.



FLIGHT DECK Mounting/ Removal

As per the figure, set the FLIGHT DECK securely onto the bracket until you hear a snap. When removing the FLIGHT DECK, pull it out while pressing firmly on eject lever at the front of the bracket.



Other function

- When the speed has dropped to zero and the backlight and the charging indicator switch off 5 seconds later, the power save function will start operating 1 minute after that. The display turns off at this time.
To return to normal mode, press the display select switch on the FLIGHT DECK, or rotate the rear wheel.

- Buzzer operation**

The buzzer operates in the following ways to convey information.

	Condition	Type of sound	Remarks
1	Before gear shifting starts	1 short beep	Gear shifting starts immediately after the buzzer sounds.
2	Switch request cancelled	Two short beeps	A gear shifting request or other request was cancelled because the pedals were not rotating. (See *1)
3	When normal operation starts	1 long beep	Sounds when the flight deck changes from parking mode to normal mode.

*1 Gear shifting operations are cancelled under the following conditions:

- When a request is made to shift to a non-existing gear
For example, if an upshift request is made when the chain is on the smallest sprocket
- If the battery charge is low (FD/RD : 0 boxes; Suspension: 3 boxes or less)
- If there is a problem with the rear derailleur
- If the suspension select switch is pressed while suspension mode is in the process of changing

Normally gear shifting and suspension adjustment will be possible if the above limiting conditions are resolved.

Front gear range when in AUTO mode

	Shifting mode	Front chainring
AUTO mode	L	Large, Middle, Small
	D	Large, Middle
	Ds	Large, Middle
Manual front shifting	L	Large, Middle, Small
	D	Large, Middle, Small
	Ds	Large, Middle, Small

Problem solver

The following operations are examples of normal operations that the user can sometimes mistake for problems. You should first refer this table to check if the problem is actually normal operation or not.

Condition	Description
Speed display is incorrect.	Tire circumference setting is incorrect. Change the setting to the correct number.
Buzzer does not sound.	The buzzer has been set to off. Set it to on.
Manual shifting of the rear derailleur is not possible when automatic gear shifting mode is set.	Manual gear shifting is disabled during automatic gear shifting mode. If you would like to enable manual shifting, change the mode to "MANU".
Gear shifting does not occur when the manual shift switches are pressed in manual gear shifting mode. (Pedals are not turning)	Gear shifting is not carried out when the pedals are not turning. Press the manual shift switches while turning the pedals.
A component such as the rear derailleur does not operate.	Malfunction of the component or wiring problem → Check the wiring from the flight deck to the component that does not operate. If a wire is disconnected, not fully connected or connected to the wrong place, fix the connection.

If the problem is not solved by carrying out the suggestions above, the cause of the problem may be:

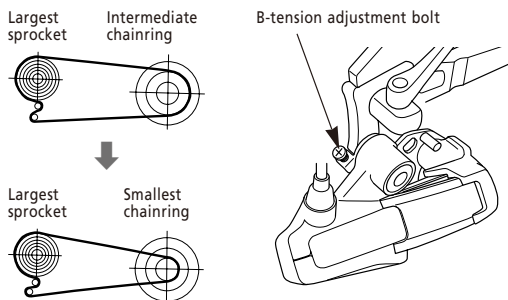
- A problem with the FLIGHT DECK
 - Broken internal wiring
 - Malfunction of component that is not operating
- Ask an authorized bicycle dealer for repairs.

(Make the adjustment with the bicycle standing upright.)

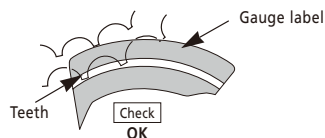
1. B tension bolt adjustment

First set Front:MID Rear:LOW .

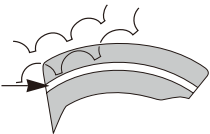
Then, shift Front:MID to LOW.



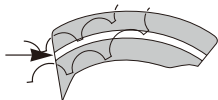
Adjust the B-tension adjusting bolt so that the slit of this gauge labelsticker moves to the LOW gear. Tighten B-tension adjustment bolt clockwise so that the distance between gear and puley gets bigger. Loosen the bolt so that the distance gets smaller.



If the teeth are above the section indicated by the arrow, loosen the B tension bolt.

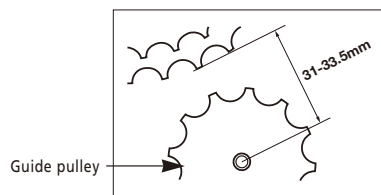


If the teeth are below the section indicated by the arrow, tighten the B tension bolt.



After adjusting B-tension adjustment bolt, once shift the front to MID and then to LOW again. Then, check the distance.

If there is no gauge label attached, adjust the distance between center of guide puley and top of the LOW gear tooth to 31mm-33.5mm.

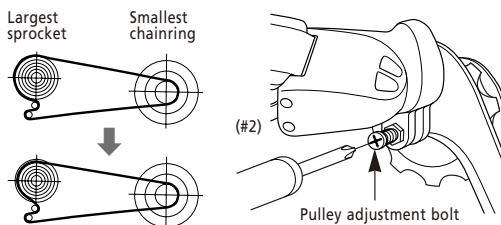


2. Rear derailleur fine shifting adjustment

Use the adjustment bolt used in part1.

Set Front:LOW Rear:LOW.

Then, shift Front:LOW Rear:2nd (second one from LOW).

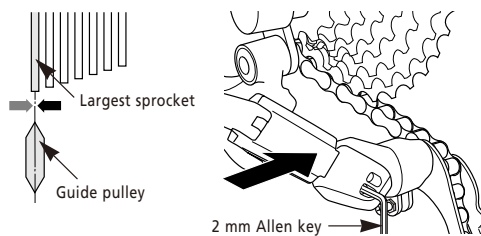


- Tighten the adjustment bolt until you hear any noise.
- Loosen 180 degrees after the noise starts.
- Shift from TOP to LOW and check that there is no shifting delay. (A shifting delay is, when the chain does not move to the next sprocket after the pedal has been turned for about two turns.) In case a shifting delay occurs at any gear, repeat the adjustment procedure.

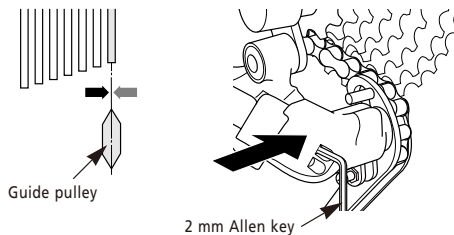
3. Top and Low Stopper Adjustment

Push the link to LOW side with hand.

Then, tighten 2mm hexagonal screws until chain does not fall from LOW gear.



Move the link to the TOP side with the hand and turn the allen key to adjust, so that the guide pulley is right below the TOP gear. In case shifting from the TOP gear is not possible, loosen the bolt in steps of 90 degrees.

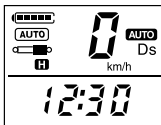


Switch the suspension from AUTO mode to either HARD or SOFT mode when inputting new data. After the bicycle stops, the battery indicator located on the FLIGHT DECK will display no blocks after roughly 5 seconds even if there is power remaining in the battery in order to save energy. The backlight is off when changing data.

Method

(1) Preparation of Set up

Make sure the battery indicator shows at least 4 blocks and the speedometer reads 0km/h.



Rotate the crank if the battery indicator is low. Then, apply the brakes and check the display making sure the speedometer reads 0km/h (mph) with the battery indicator showing sufficient power. Turn the crank again to recharge the battery if power runs out while inputting new data.

- Tire circumference
- Speedometer / odometer display units (km/mile)
- Suspension mounting status
- AD value

Operate when changing the tire circumference (5mm steps) and switching speedometer/odometer display units (km/mile).

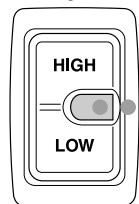
Note

Do not change the suspension mounting status or the AD value.

(2) Start setting

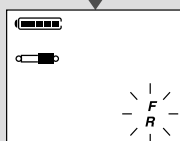
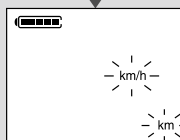
Press the suspension mode select switch of the left shifting switch for at least 3 seconds. Make sure the display shows only the battery indicator and a numerical value.

< Left-hand >
Shifting switch



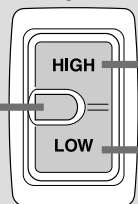
Suspension mode select switch

* Verify that the display is flashing



Normal display mode

< Right-hand >
Shifting switch



Right Shifting Up/Down switch

Shifting mode select switch

Push

Push

■ Changing the tire circumference

Measure the tire circumference and use the right shifting switch (Up/Down) to set the new value. When the desired value is displayed, press the gear shifting mode select switch of the right shifting switch to set.

Ex.: Setting 2000mm

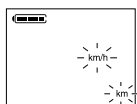


(Unit : mm)

■ Selecting speedometer/odometer units (km/mile)

Use the right shifting switch (Up/Down) to select either "km" or "mile" and, when the desired setting is displayed, press the gear shifting mode select switch of the right shifting switch to set.

Ex.: km



Ex.: mile

