SUPERSTRATA

USER MANUAL

2021

MEET YOUR SUPERSTRATA

To ensure the safety of yourself and others, we recommend that you obey all road regulations and wear a protective helmet. For a safe and enjoyable use of your Superstrata, please read and follow all instructions in this user manual.

If you have any questions you can contact us at heidi@superstrata.bike for further assistance.

Enjoy the ride.
The SUPERSTRATA Team.

Scan this code to visit
our online support page

NOTE: This manual is not intended to be a comprehensive use, service, repair or maintenance manual. Please visit your local bike shop for all service, repairs or maintenance. The bike shop may also be able to refer you to classes, clinics or books on bicycle use, service, repair or maintenance.

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1. WHAT'S IN THE BOX?

- 1 x Superstrata bike
- 1 x Superstrata toolbox

In the tool box:

- 1x Mini hand pump
- 1x Charger
- 1x Bike Multitool
- 1x User manual

SUPERSTRATA C

1	Saddle	10	Chain	19	Fork
2	Seat post	11	Crankset	20	Switch
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2. SAFE RIDING

2.1. Techniques and tips

Following these techniques and tips can ensure you have a safe and fun riding experience on the Superstrata.

2.1.1 Mechanical Safety Check

A. Nuts, Bolts Screw & Other Fasteners

• Make sure all nuts and bolts are correctly tightened. The torque specifications are attached for reference (see section 3).

• Make sure nothing is loose. Lift the front wheel off the ground by two or three inches, then let it bounce on the ground. Anything sound, feel or look loose? Do a visual and tactile inspection of the whole bike. Any loose parts or accessories? If so, secure them. If you're not sure, ask someone with experience to check.

B. Tires & Wheels

• Ensure tires are correctly inflated. Check by putting one hand on the saddle, one on the intersection of the handlebars and stem, and then bouncing your weight on the bike while looking at tire deflection. Compare what you see with how it looks when you know the tires are correctly inflated; and adjust if necessary.

• Ensure tires are in good shape. Spin each wheel slowly and look for cuts in the tread and sidewall. Replace damaged tires before riding the bike.

• Ensure the wheels are true. Spin each wheel and check for brake clearance and side-to-side wobble. If a wheel wobbles side-to-side even slightly, or rubs against or hits the brake pads, take the bike to a qualified bile shop to have the wheel trued.

C. Brakes

• Check the brakes for proper operation. Squeeze the brake levers. Are the brakes' quick releases closed? Can you apply full braking force on the levers without having them touch the handlebar? If not, your brakes need adjustment. Do not ride the bike until the brakes are properly adjusted.

• Check to make sure your brakes are fully intact for proper operation, pedals are securely installed, and handlebars are locked in place.

D. Wheel Retention System

Ensure the front and rear wheels are correctly secured.

E. Seat post

Ensure the seat post clamp are correctly aligned and tightened ***(see section 3.4 Saddle and seat post).***

F. Handlebar and Saddle Alignment

Ensure the saddle and handlebar stem are parallel to the bike's center line and clamped tight enough so that you can't twist them out of alignment.

G. Gears

Ensure you read section **3.10 Shifting Gears in Superstrata C** and **3.11 Superstrata Solo Gear** to fully understand gear operation and safety.

2.1.2 The basics

• Always wear an approved helmet and protective gear to avoid possible injury. Ensure your helmet meets the latest certification standards and is appropriate for the type of riding you do – and if there are any special requirements for riding a bike.

• Make sure your feet are always on the pedals. Taking your feet off the pedals while riding is dangerous.

• Ensure the vehicle speed is safe to yourself and others and be ready to stop at any time.

• When riding with friends, keep a safe distance between your vehicles to prevent collisions.

• Always be aware of your surroundings to ensure a safe ride. Your eyes are your best tools for safely avoiding obstacles and slippery surfaces. Never ride with headphones. They mask traffic sounds and emergency vehicle sirens, and they can distract you from concentrating on what's going on around you.

• If possible, avoid riding in bad weather, when visibility is obscured, or when extremely tired. Each of these conditions increases the risk of accidents.

• Composite components should be stored and operated in an ambient temperature range between -20°C to 45°C.

• Only ride the Superstrata where permitted. You must comply with local laws and give way to pedestrians.

WARNING:

• Never ride at inappropriately high speeds on uneven terrain or slopes.

• Never perform stunts or turn abruptly without checking your surroundings.

• Never carry passengers on the bike with you. Superstrata is designed for one passenger only. DO NOT carry any additional passengers on the front or rear of the bike.

• Never carry heavy items while riding. Superstrata is designed with a maximum weight capacity of 275lbs (125kg) for all models. Exceeding the maximum weight capacity can result in damage to the bike, which can lead to serious injury or death.

• Never use the bike to do anything that may cause personal injury or property damage.

• Never get off the bike when it is in motion.

• Never ride your bike while under the influence of alcohol or drugs.

• Never retrofit Superstrata bikes with any bike components that are not recommended by Superstrata. Unauthorized retrofitting of your bike can result in serious injury or death.

FAILURE TO USE COMMON SENSE AND HEED THE ABOVE WARNINGS INCREASES THE RISK OF SERIOUS INJURY, OR IN VERY RARE CASES, DEATH. USE WITH APPROPRIATE CAUTION AND SERIOUS ATTENTION TO SAFE OPERATION.

2.2. Wet weather riding

Under wet conditions, the stopping power of your brakes (as well as the brakes of other vehicles sharing the road) is dramatically reduced and your tires do not grip nearly as well. This makes it harder to control speed and easier to lose control. To make sure that you can slow down and stop safely in wet conditions, ride more slowly and apply your brakes earlier and more gradually than you would under normal, dry conditions.

2.3. Night riding

A rider is very difficult for motorists and pedestrians to see at dusk, at night, or at other times of poor visibility. If you must ride under these conditions, check and comply with all local laws about night riding. Follow the rules of the road even more carefully, and you must take the following additional precautions.

Before riding at dusk or at night, take the following steps to make yourself more visible:

• Make sure that your bike is equipped with correctly positioned and securely mounted reflectors.

• Be sure the headlight and taillight are operational.

• Wear light colored, reflective clothing and accessories, such as a reflective vest, reflective arm and leg bands, reflective stripes on your helmet, flashing lights ... any reflective device or light source that moves will help get the attention of approaching motorists, pedestrians and other traffic.

• Make sure your clothing or anything you may be carrying on the Bike does not obstruct a reflector or light.

While riding at dusk or at night:

• Ride slowly.

• Avoid areas of heavy traffic, dark areas, and roads with high speeds.

• Avoid road hazards.

• If possible, ride on routes already familiar to you.

2.4. Disposal at end-of-life

This product must not be disposed of by incineration, landfilling, or mixing with household trash. Improper disposal of the battery contained within this product may result in the battery heating up, rupturing, or igniting which may cause serious injury. The substances contained inside the battery present chemical risks to the environment.

Local regulations and laws pertaining to the recycling and disposal of lithium-ion batteries and/or products containing them will vary according to country, state, and local governments. You must check laws and regulations corresponding to where you live in order to properly dispose of the battery and/or unit.

2.5. Off Road Safety

We recommend that children do not ride on rough terrain unless they are accompanied by an adult.

• The variable conditions and hazards of off-road riding require close attention and specific skill.
• Wear safety gear appropriate to the kind of riding you plan to do.
• Don't ride alone in remote areas. Even when riding with others, make sure that someone knows where you're going and when you expect to be back.
• Always take along some kind of identification, so that people know who you are in case of an accident; and take along some cash for food, drinks, or an emergency phone call.
• Yield right of way to pedestrians and animals. Ride in a way that does not frighten or endanger them and give them enough room so that their unexpected moves don't endanger you.
• Be prepared. If something goes wrong while you're riding off-road, help may not be close.
• Respect the rights of others when sharing the trail with hikers, equestrians, and other cyclists. Don't contribute to erosion by riding in mud or with unnecessary sliding. Don't disturb the ecosystem by cutting your own trail or shortcuts through vegetation or streams. It is your responsibility to minimize your impact on the environment. Leave things as you found them, and always take out everything you brought in.

2.6. Extreme, stunt or competition riding

• Whether you call it Aggro, Hucking, Free Ride, North Shore, Downhill, Jumping, Stunt Riding, Racing or something else: if you engage in this sort of extreme, aggressive riding, you voluntarily assume a greatly increased risk of injury or death.
• We recommend against this type of riding because of these increased risks, but if you choose to do so regardless:
• Take lessons from a competent instructor first.
• Start with beginner learning exercises and slowly develop your skills before trying more difficult and dangerous riding.
• Use only designated areas for stunts, jumping, or racing fast downhill.
• Wear a full-face helmet, safety pads and other safety gear.
• Understand and recognize that the stresses imposed on your bike by this kind of activity may break or damage parts of the bicycle and void the warranty.
• Take your bicycle to your dealer if anything breaks or bends. DO NOT ride your bicycle when any part has been damaged.

IF YOU RIDE DOWNHILL AT SPEED, DO STUNT RIDING OR RIDE IN COMPETITION, KNOW THE LIMITS OF YOUR SKILL AND EXPERIENCE. ULTIMATELY, AVOIDING INJURY IS YOUR RESPONSIBILITY.

2.7. Transportation

When transporting your bike, be sure to take the proper safeguards to protect it from damage. For example, when attaching your bike to a bike rack, do not overtighten the clamps which hold the bike frame in place. Overtightened clamps can cause damage to the frame.

3. ASSEMBLY AND ADJUSTMENTTO YOUR SUPERSTRATA

It is important that you read this owner's manual before you start to assemble your bicycle. We recommend that you consult a professional bicycle mechanic if you have doubts or concerns as to your ability to properly assemble, repair or maintain your bicycle.

3.1. Preparation

Tools required (included in tool box)**:**

- 4, 5, 6, 8mm Allen keys.
- 15mm Open wrench.

Optional tools:

- 3mm Allen keys.
- Torque wrench.
- Grease oil.

Caution: Ensure all mounting surfaces are clean and greased.

1. Hexagonal wrench 2mm.
2. Hexagonal wrench 2.5mm
3. Hexagonal wrench 3mm.
4. Hex wrench 4mm.
5. Hex wrench 5mm.
6. Hexagonal wrench 6mm.
7. Socket wrench 8,9,10mm each.
8. Phillips screwdriver.
9. Flat-head screwdriver.
10. External hexagonal flat spanner.
11. 8, 12, 15mm 14G spoke spanner.

3.2. Front wheel

Step 1:

- Slip the front wheel into the fork dropout.
- Install the front axle in the dropout hole.
- Screw the axle tight.
- Tool: **6mm/8mm Allen key.**
- Recommended torque: 9 - 13.5 Nm.

Step 2:

- Install the brake caliper again.
- Tool: **5mm Allen key.**
- Recommended torque: 8 Nm.

CAUTION: ADJUST THE BRAKE CALIPER TO AVOID MAKING NOISE.

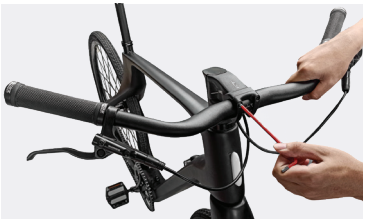
Step 3:

- Spin the wheel to make sure that it is centered in the fork and does not wobble.
- If the wheel is not centered, loosen the axle, add the spacer and try again.

3.3. Handlebar installation

Step 1:

Take out the stem clamp, insert the handlebar into the stem.

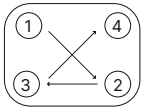


Step 2:

Adjust the middle position and angle of the handlebar and tighten the stem clamp bolt.

- Tool: **4mm Allen keys.**
- Torque requirement: 5-6 Nm.

Recommend: Cross tighten the bolt (see picture beside)



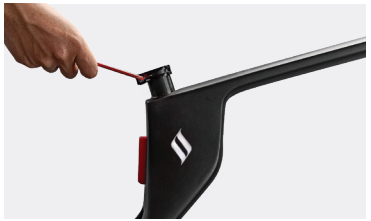
Cross Tighten

Step 3:

Check the handlebar for tightness. If you can move it forward or backward, the clamp bolt is not tight enough.

CAUTION: ALWAYS TIGHTEN FASTENERS TO THE CORRECT TORQUE. BOLTS THAT ARE TOO TIGHT AND CAN STRETCH AND DEFORM. BOLTS THAT ARE TOO LOOSE CAN MOVE AND FATIGUE. EITHER MISTAKE CAN LEAD TO A SUDDEN FAILURE OF THE BOLT, CAUSING YOU TO LOSE CONTROL.

3.4.Saddle and seat post



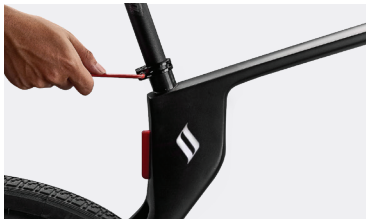
Step 1:

- Loosen the seatpost clamp.
- Tool: **4mm allen key.**

CAUTION: ONCE THE SADDLE IS AT THE CORRECT HEIGHT, MAKE SURE THAT THE SEAT POST DOES NOT PROJECT FROM THE FRAME BEYOND ITS "MINIMUM INSERTION" OR "MAXIMUM EXTENSION" MARK.

Step 2:

- Insert the seat post into the frame.
- Slide the seat post down until it is to the desired height for riding.
- If your saddle height is correct, your heel should just graze the pedal at the bottom of your pedal stroke.
- Align the nose off the saddle to run parallel with the top tube of the frame.



Step 3:

- Tighten the seatpost clamp.
- Tool: **4mm Allen keys.**
- Recommended torque: 6 Nm.

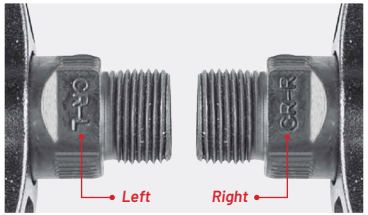
CAUTION: A LOOSE SADDLE CLAMP OR SEAT POST CLAMP CAN CAUSE DAMAGE TO THE SEAT POST, OR CAN CAUSE YOU TO LOSE CONTROL.

CAUTION: AFTER ANY SADDLE ADJUSTMENT, BE SURE THAT THE SADDLE ADJUSTING MECHANISM IS PROPERLY SEATED AND TIGHTENED BEFORE RIDING.

Step 4:

- Re-adjust the saddle.
- The saddle can be adjusted forward or back to help you get the optimal position on the bike.
- You can also loosen the bolts that clamp the saddle rails to adjust the tilt and the position of the saddle rail. Tighten the bolts when you are happy with the saddle angle.
- **Tool: 5mm Allen keys.**
- Recommended torque: 8 Nm.

3.5. Pedals



Step 1:

- Identify Left and Right pedals.
- There is an “L” or “R” stamped into the axle.

CAUTION: THEY ARE NOT THE SAME WITH ONE HAVING COUNTER-CLOCKWISE AND THE OTHER WITH CLOCKWISE THREADS.

Step 2: Install the left side pedal

- Apply high quality grease into the thread (optional).
- Screw it counter-clockwise because the threading is the reverse of a normal screw.
- Tool: **15mm open end or an adjustable wrench**.

CAUTION: DO THIS BY SLOWLY PEDALING THE CRANKS BACKWARDS. IF THE PEDAL IS STIFF - STOP AND THEN RE-TRY, IT SHOULD FEEL LIKE A SMOOTH MOTION. DO NOT USE THE WRENCH UNTIL YOU ARE READY TO TIGHTEN FOR THE FINAL TURNS.

Step 3: Install the right side pedal

This one threads clockwise (a normal screw).

Follow the principles of Step 2.

3.6. Disc brake

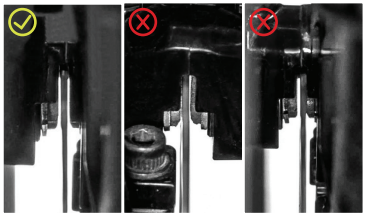
We suggest that if your bike comes equipped with a disc brake that you consult a professional bicycle mechanic for any adjustments or repair needed for this brake.

Hydraulic disc alignment

Hydraulic brake alignment is a relatively simple procedure, but there are several other things that can cause the pads to rub. Start with diagnosing the problem, then walk step by step through the alignment process if needed.

Step 1: Make sure your wheel is seated properly.

Step 2: Check the additional factors that can also cause the pads and rotor to rub like a bent rotor or sticky pistons.



(Left: No rub, Middle: Slight rub, Right: Clear rub)

Step 3: Check for pad/rotor rub. Elevate the bike, spin the wheel, and look at the gaps between the rotor and pads. Backlight the caliper to make it easier to see.

Figure 1

Figure 2

Step 4: Disc alignment

- Loosen both mounting bolts until the caliper body is able to freely move from side to side. **(figure 1)**
- Squeeze the brake lever. This centers the caliper body over the rotor. **(figure 2)**
- Release the brake lever and spin the wheel to test for pad rub. If there is no rubbing, the pads are aligned. Secure the mounting bolts to full torque 8 Nm.

Safety precautions

• The calipers and rotor will become hot when the brakes are operated, so do not touch them while riding or immediately after dismounting from the bicycle, because you may get burned. Check that the brake components have cooled down before attempting to adjust the brakes.

• Always make sure that the front and rear brakes are working correctly before you ride the bicycle.

• Before riding the bicycle, check that the pad thicknesses are 0.5mm or more.

• If noise occurs when the brakes are operated, it may indicate that the brake pads have worn down to their usage limit. After checking that the brake system has cooled down sufficiently, check the brake pad thickness. Replace the brake pads if the wear indicators are visible. Brakes may also produce a high pitched noise when they are very new. This will usually go away after the brakes are worn in and produce optimal contact.

• Be careful not to allow any oil or grease to get onto the rotor and brake pads, otherwise the brakes may not work correctly.

• The required braking distance will be longer during wet weather. Reduce your speed and apply the brakes early and gently.

• If the road surface is wet, the tires will skid more easily. If the tires skid, you may lose control of the bicycle. To avoid this, reduce your speed and apply the brakes gently.

• Check that the quick release lever is on the right side (the opposite side to the rotor). If the quick release lever is on the same side as the rotor, there is a danger that the lever may interfere with the rotor causing a sudden stop, which may result in a serious accident. Make sure that it does not interfere by rotating the wheel and making sure it rotates freely. Make sure the wheel is securely tightened to the forks. It is important to completely understand the operation of your bicycle's brake system. Improper use of your brake system may result in loss of control or an accident, which could lead to severe injury. Because each bicycle may handle differently be sure to learn proper braking technique (including brake lever pressure and bicycle control characteristics) and operation of your bicycle. This can be done by consulting a professional bicycle mechanic and referring to the disk brake instruction sheet included with your bike. This can also be done by practicing your braking technique in a safe area before hitting the trails.

CAUTION: DISC BRAKES HAVE A BURN-IN PERIOD, AND THE BRAKING FORCE WILL GRADUALLY INCREASE AS THE BURN-IN PERIOD PROGRESSES. MAKE SURE THAT YOU ARE AWARE OF ANY SUCH INCREASES IN BRAKING FORCE WHEN USING THE BRAKES DURING THE BURN-IN PERIOD. THE SAME THING WILL HAPPEN WHEN THE BRAKE PADS OR ROTOR ARE REPLACED.

3.7. Stem and Handlebar alignment

3.7.1. Stem

Your Superstrata is equipped with a “threadless” stem, which clamps on to the outside of the steerer tube, and with a compression plug, which clamps inside the steerer tube by way of an expanding binder bolt.

3.7.2. Handlebar alignment

Step 1.

• Remove plastic packaging covering the expander wedge **(figure 1)**.

• Loosen the compression plug **(figure 2)**, if necessary, so the wedge nut is in line with the stem body. Loosen the stem bolt **(figure 3)**.

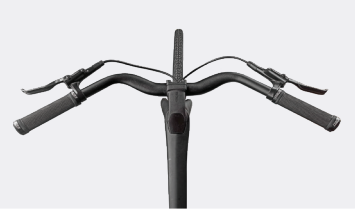
Step 2.

Adjust the stem to align with the front wheel.

Face the handlebar stem forward directly in line with the front wheel. Make sure the fork is in the correct position (facing forward) before tightening the expander bolt.

Figure 1 *Figure 2* *Figure 3*

CAUTION: THE HANDLEBAR STEM MUST BE INSERTED INTO THE HEAD TUBE UNTIL THE MINIMUM INSERTION LINE INDICATED ON THE STEM IS COMPLETELY COVERED.



Step 3.

• Tighten the stem bolts (figure 3) with 4mm allen key - torque requirement 5-6 Nm.

• Tighten the compression plug bolt (figure 2) with 6mm/5mm allen key - torque requirement 8-10 Nm.

• Finally, tighten the bolt that connects plastic packaging covering the expander wedge (figure 1) with 4mm allen key - torque requirement 5-6 Nm.

3.8. Tires and Tubes

After assembling your bike, it will be necessary to inflate the tires. Check the sidewall of the tire for the correct tire pressure (PSI) and inflate tires accordingly with a MANUAL BICYCLE PUMP. Improper inflation is the biggest cause of tire failure. Due to the slightly porous nature of bicycle inner tubes, it is normal for your bike tires to lose pressure over time. For this reason it is critically important to maintain the proper tire inflation on your bike.

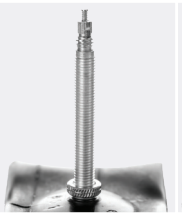
Your Superstrata has been equipped with tires which were deemed the best balance of performance and value for the use for which the bike was intended. The tire size and pressure rating are marked on the sidewall of the tire.

CAUTION: PENCIL TYPE AUTOMOTIVE TIRE GAUGES AND GAS STATION AIR HOSE PRESSURE SETTINGS CAN BE INACCURATE AND SHOULD NOT BE RELIED UPON FOR CONSISTENT, ACCURATE PRESSURE READINGS. INSTEAD, USE A HIGH QUALITY DIAL GAUGE.

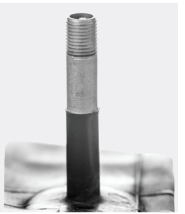
WARNING: NEVER INFLATE A TIRE BEYOND THE MAXIMUM PRESSURE MARKED ON THE TIRE'S SIDEWALL. EXCEEDING THE RECOMMENDED MAXIMUM PRESSURE MAY BLOW THE TIRE OFF THE RIM, WHICH COULD CAUSE DAMAGE TO THE BIKE AND INJURY TO THE RIDER AND OTHERS. THE BEST WAY TO INFLATE A BICYCLE TIRE TO THE CORRECT PRESSURE IS WITH A BICYCLE PUMP. NEVER USE A SERVICE STATION AIR HOSE TO INFLATE A BICYCLE TIRE. IT IS DESIGNED FOR LARGER TIRES AND IT CAN EXCEED THE RECOMMENDED MAXIMUM PRESSURE AND IT MAY BLOW THE TIRE OFF THE RIM.

Tire pressure is given either as maximum pressure or as a pressure range. How a tire performs under different terrain or weather conditions depends largely on tire pressure. Inflating the tire to near its maximum recommended pressure gives the lowest rolling resistance, but also produces the harshest ride. High pressures work best on smooth, dry pavement. Very low pressures, at the bottom of the recommended pressure range, give the best performance on smooth, slick terrain such as hard-packed clay, and on deep, loose surfaces such as deep, dry sand. Tire pressure that is too low for your weight and the riding conditions can cause a puncture of the tube by allowing the tire to deform sufficiently to pinch the inner tube between the rim and the riding surface.

The tire valve allows air to enter the tire's inner tube under pressure, but doesn't let it back out unless you want it to. There are primarily two kinds of bicycle tube valves: the Schrader Valve and the Presta Valve. The bicycle pump you use must have the fitting appropriate to the valve stems on your bicycle.



Presta Valve



Schrader Valve

3.9 Reflectors and light

3.9.1 Reflectors

Your bike is supplied with one front reflector (white), one rear reflector (red), two wheel reflectors (orange) and four pedal reflectors (orange). These are an important safety and legal requirement, and should remain securely fitted and in good condition at all times. Periodically inspect all reflectors, brackets and mounting hardware for signs of wear or damage. Replace immediately if damage is found.

WARNING! REFLECTORS ARE IMPORTANT SAFETY DEVICES WHICH ARE DESIGNED AS AN INTEGRAL PART OF YOUR BICYCLE. FEDERAL REGULATIONS REQUIRE EVERY BICYCLE TO BE EQUIPPED WITH FRONT, REAR, WHEEL, AND PEDAL REFLECTORS. THESE REFLECTORS ARE DESIGNED TO PICK UP AND REFLECT STREET LIGHTS AND CAR LIGHTS IN A WAY THAT HELPS YOU TO BE SEEN AND RECOGNIZED AS A MOVING CYCLIST. CHECK REFLECTORS AND THEIR MOUNTING BRACKETS REGULARLY TO MAKE SURE THEY ARE CLEAN, STRAIGHT, UNBROKEN AND SECURELY MOUNTED. REPLACE DAMAGED REFLECTORS AND STRAIGHTEN OR TIGHTEN ANY THAT ARE BENT OR LOOSE.

3.9.2. Light

These lights are intended to be daytime running lights. They are intended to draw attention to you while riding and increase the chance of other cyclists, pedestrians and motorists seeing you. They are “be seen” lights, not lights designed to illuminate the road or hazards in the road.

If you want to turn on/off the light, you could use the switch on the frame.

The mini USB gate is used to charge the battery 5V-0.5A which is put inside at the bottom of the frame.

NOT INTENDED:

BECAUSE THESE LIGHTS ARE NOT AS BRIGHT OR INTENSE, THEY ARE NOT A REPLACEMENT FOR HIGHER INTENSITY LIGHTS INTENDED TO ILLUMINATE THE ROAD OR HAZARDS IN THE ROAD.

CAUTION:

BE SURE TO CLOSE THE MINI USB CABLE COVER TO AVOID WATER AND MOISTURE FROM CAUSING DAMAGE TO THE CHARGING PORT.

3.10 Shifting Gears in Superstrata C

For multi-gear Superstrata, please read the information below to familiarize yourself with the basics of shifting gears.

With a derailleur drivetrain, the gear-changing mechanism will have:

- a rear cassette or freewheel sprocket cluster.
- a rear derailleur , usually a optional front derailleur.
- one or two shifters.
- one, two front sprockets called chainrings.
- a chain.

A. A brief note about shifting gears

There are several different types and styles of shifting controls: levers, twist grips, triggers, combination shift or brake controls, pushbuttons, and so on. The vocabulary of shifting can be pretty confusing. A downshift is a shift to a “lower” or “slower” gear, one which is easier to pedal. An upshift is a shift to a “higher” or “faster”, harder to pedal gear. What’s confusing is that what’s happening at the front derailleur is the opposite of what’s happening at the rear derailleur (for details, read the instructions on Shifting the Rear Derailleur and Shifting the Front Derailleur below).

For example, you can select a gear which will make pedaling easier on a hill (make a downshift) in one of two ways: shift the chain down the gear “steps” to a smaller gear at the front, or up the gear “steps” to a larger gear at the rear.

So, at the rear gear cluster, what is called a downshift looks like an upshift. The way to keep things straight is to remember that shifting the chain in towards the centerline of the bike is for accelerating and climbing and is called a downshift. Moving the chain out or away from the centerline of the bike is for speed and is called an upshift. Whether upshifting or downshifting, the bicycle derailleur system design requires that the drive chain be moving forward and be under at least some tension. A derailleur will shift only if you are pedaling forward.

CAUTION: NEVER MOVE THE SHIFTER WHILE PEDALING BACKWARD, NOR PEDAL BACKWARD IMMEDIATELY AFTER HAVING MOVED THE SHIFTER. THIS COULD JAM THE CHAIN AND CAUSE DAMAGE TO THE BICYCLE.

B. Shifting the rear derailleur

The rear derailleur is controlled by the right shifter. The function of the rear derailleur is to move the drive chain from one gear sprocket to another. The smaller sprockets on the gear cluster produce higher gear ratios. Pedaling in the higher gears requires greater pedaling effort, but takes you a greater distance with each revolution of the pedal cranks. The larger sprockets produce lower gear ratios. Using them requires less pedaling effort, but takes you a shorter distance with each pedal crank revolution. Moving the chain from a smaller sprocket of the gear cluster to a larger sprocket results in a downshift. Moving the chain from a larger sprocket to a smaller sprocket results in an upshift. In order for the derailleur to move the chain from one sprocket to another, the rider must be pedaling forward.

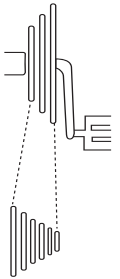
C. Shifting The Front Derailleur

The front derailleur, which is controlled by the left shifter, shifts the chain between the larger and smaller chainrings. Shifting the chain onto a smaller chainring makes pedaling easier (a downshift). Shifting to a larger chainring makes pedaling harder (an upshift).

D. Which gear should I be in ?

The combination of largest rear and smallest front gears is for the steepest hills; the smallest rear and largest front combination is for the greatest speed. It is not necessary to shift gears in sequence. Instead, find the “starting gear” which is right for your level of ability (a gear which is hard enough for quick acceleration but easy enough to let you start from a stop without wobbling) and experiment with upshifting and downshifting to get a feel for the different gear combinations. At first, practice shifting where there are no obstacles, hazards or other traffic, until you’ve built up your confidence. Learn to anticipate the need to shift, and shift to a lower gear before the hill gets too steep. If you have difficulties with shifting, the problem could be mechanical adjustment. See your dealer for help.

WARNING! NEVER SHIFT A DERAILLEUR TO THE LARGEST OR THE SMALLEST SPROCKET IF THE DERAILLEUR IS NOT SHIFTING SMOOTHLY. THE DERAILLEUR MAY BE OUT OF ADJUSTMENT AND THE CHAIN COULD JAM, CAUSING YOU TO LOSE CONTROL AND FALL.



WARNING! DO NOT FORCE THE SHIFT LEVERS. SHIFT ONLY WHEN PEDALING FORWARD AND WITHOUT STRONG FORCE. DO NOT BACKPEDAL. BACKPEDALING AND SHIFTING WHILE NOT PEDALING CAN DAMAGE THE SPROCKETS AND STRETCH THE CABLE WIRE.

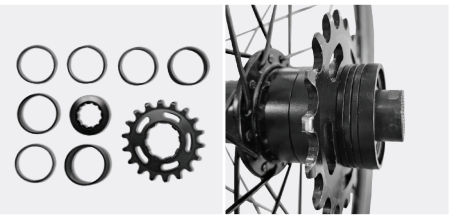
E. What if it won’t shift gears?

If moving the shift control one click repeatedly fails to result in a smooth shift to the next gear chances are that the mechanism is out of adjustment. Take the bike to your bike mechanic to have it adjusted.

3.11. Gear in Superstrata Solo

Superstrata Solo is a single speed bike using a single-speed drivetrain that has only one gear ratio – a single chainring and only one rear sprocket.

Rear gear of Solo includes:



A single speed chain and spacers

A chain tensioner

• A single speed could help you easily control your bike because of its fundamental simplicity. Riding Solo allows you dramatically improved maneuverability.

• A chain tensioner makes sure your chain is not dropped and is useful when the chain becomes longer.

3.12. Battery charging

WARNING: ENSURE THE BIKE IS TURNED OFF BEFORE CHARGING AND REMAINS OFF WHILE CHARGING.

Step 1. Connect the charging adapter and cable together then remove the rubber stopper covering the charging port. Charging adapter for Classic bike.
Step 2. Insert one end of the charging cable into the charging port and connect the other end to a wall outlet. Charging Port Rubber Stopper Charging Cable.
Step 3. Allow at least 5 hours when charging for the first time. After this initial charge, average charging time is 4-5 hours.
Step 4. While the Bike is charging, the adapter's indicator light will turn red.
Step 5. When the Bike is fully recharged, the adapter's indicator light will turn green. You may then disconnect the Bike from the charger.

4. MAKE SUPERSTRATA FIT

Make sure the Superstrata fits. A bike that is too big or too small for the rider is harder to control and can be uncomfortable.

4.1. Standover height

The first check for correct size is standover height. Standover height is the distance from the ground to the top of the top tube at that point where your crotch would be if you were straddling the bike by standing halfway between the saddle and the handlebar stem.
To check the stand over height, straddle the bike while wearing the kind of shoes you will wear while riding **(See Figure 5)**.
Bounce vigorously on your heels. Minimum standover height clearance is one to two inches (5cm). If your crotch touches the frame, the bike is too big for you. Do not even ride the bike around the block.

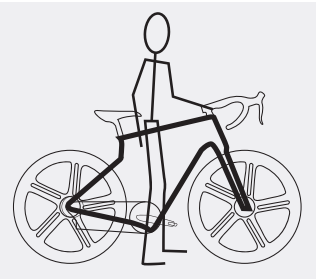


Figure 5

4.2. Saddle position

Corrected saddle adjustment is an important factor in getting the most performance and comfort from your bike. A regular biker will have positioned the saddle where experience tells him most people find it comfortable. If you find the saddle position is not comfortable, there are three adjustments you can make (Follow the below instructions).

4.2.1. Up and down adjustment

To check for correct saddle height:
1. Sit on the saddle, and place one heel on a pedal.
2. Rotate the crank until the pedal with your heel on it is in the down position and the crank arm is parallel to the seat tube.
3. If your leg is not completely straight, your saddle needs to be adjusted. If your hips must rock the heel to reach the pedal, the saddle is too high. If your leg is bent at the knee with your heel on the pedal, the saddle is too low.
(See the section 3.4 for the details of saddle height adjustment).

CAUTION: IF YOUR SEAT POST PROJECTS FROM THE FRAME BEYOND THE MINIMUM INSERTION OR MAXIMUM EXTENSION MARK THE SEAT POST MAY BREAK, WHICH COULD CAUSE YOU TO LOSE CONTROL AND FALL. THE DISTANCE BETWEEN THE SADDLE AND THE SEAT POST CLAMP MUST BE LESS THAN 10 INCHES.

4.2.2. Front and back adjustment

The saddle can be adjusted forward and back to help you get the optimal position on the bike (See the section 6 for the details of Front and back adjustment). Make sure the clamp mechanism is clamping on the straight part of the saddle and is not touching the curved part of the rail.

4.2.3. Saddle tilt adjustment

Most people prefer a horizontal saddle; but some riders prefer to have the saddle nose tilted slightly up or down. Very small changes in saddle position can have a substantial effect on performance and comfort. Consequently, whenever you make a change to your saddle position, make only one directional change at a time, and make the changes in small increments until you have found the position at which you are most comfortable.
(See the section 3.4 for the details of Saddle tilt adjustment)

WARNING: AFTER ANY SADDLE ADJUSTMENT, BE SURE TO TIGHTEN THE SADDLE ADJUSTING MECHANISM PROPERLY BEFORE RIDING. A LOOSE SADDLE CLAMP OR SEAT POST BINDER CAN CAUSE DAMAGE TO THE SEAT POST OR CAN CAUSE YOU TO LOSE CONTROL AND FALL. A CORRECTLY TIGHTENED SADDLE ADJUSTING MECHANISM WILL ALLOW NO SADDLE MOVEMENT IN ANY DIRECTION. PERIODICALLY CHECK TO MAKE SURE THAT THE SADDLE ADJUSTING MECHANISM IS PROPERLY TIGHTENED.

If, despite carefully adjusting the saddle height, tilt, and fore-and-aft position, your saddle is still uncomfortable, you may need a different saddle design. Saddles, like people, come in many different shapes, sizes, and resilience. Your dealer can help you select a saddle which, when correctly adjusted for your body and riding style, will be comfortable.

CAUTION: EXTENDED RIDING WITH A SADDLE WHICH IS INCORRECTLY ADJUSTED, OR WHICH DOES NOT SUPPORT YOUR PELVIC AREA CORRECTLY CAN CAUSE SHORT-TERM OR LONG-TERM INJURY TO NERVES AND BLOOD VESSELS. IF YOUR SADDLE CAUSES YOU PAIN OR NUMBNESS, ADJUST THE SADDLE POSITION AND YOUR RIDING POSITION. IF PAIN OR NUMBNESS PERSIST, TALK TO YOUR DEALER ABOUT FITTING A DIFFERENT SADDLE TO YOUR BIKE.

4.3. Handlebar position and angle

On the bike, you can adjust the handlebar position (See the section 3.3 for the details of Adjusting handlebar position and angle). After adjusting the stem position as desired, retighten the binder bolt tight enough so that you cannot twist the stem and handlebars out of alignment.
Check to make sure that the handlebars rotate freely in both directions without the brake cables catching or binding on anything.

You can change the angle of the handlebar or bar end extensions by loosening their binder bolt, rotating the bar or extension to the desired angle, recentering it and retightening the binder bolt tight enough so that the bars or extensions cannot move in relation to each other and the stem.

WARNING: FAILURE TO PROPERLY TIGHTEN THE STEM BINDER BOLT, THE HANDLEBAR BINDER BOLT OR THE BAR END EXTENSION CLAMPING BOLTS MAY COMPROMISE STEERING ACTION, WHICH COULD CAUSE YOU TO LOSE CONTROL AND FALL. PLACE THE FRONT WHEEL OF THE BIKE BETWEEN YOUR LEGS AND ATTEMPT TO TWIST THE HANDLEBAR/STEM ASSEMBLY. IF YOU CAN TWIST THE STEM IN RELATION TO THE FRONT WHEEL, TURN THE HANDLEBARS IN RELATION TO THE STEM, OR TURN THE BAR END EXTENSIONS IN RELATION TO THE HANDLEBAR, TIGHTEN THE BOLTS.

Control position adjustments: The brake and shifting controls on your bike are positioned where they work best for most people. The angle of the controls and their position on the handlebars can be changed. Ask a bike expert or your local bike shop to show you how, or to make the adjustments for you.

5. MAINTENANCE

Follow the tips and reminders below to keep your bike running at top performance.

5.1. Cleaning

Proper cleaning of your bike can guarantee a longer lifespan and a smooth riding experience.
• Wipe the outer body of your bike with a soft, dry microfiber cloth.
• Use water or mild-detergent soap water to clean your bike. If needed, you can use automotive care (i.e. wax, cleaning supplies) to maintain the paint.
• Do not use a high pressure washer.
• Do not let water and liquids get into the bike's electric parts or battery.

5.2 Storage

Below are some tips to consider when storing your Bike.
• Cover the bike to keep dust out. Do not store in a dusty environment as this may cause damage over time.
• Before storing, fully charge the Bike to prevent battery over-discharge due to non-use.
• If storing the Bike for more than one month, discharge and recharge the battery at least once a month.

5.3 Maintenance

• We recommend you tighten the bolts after about 1 month after receipt under normal use. This is to ensure all parts have settled in and tightened to manufacturers' recommendation values.

• We recommend you lubricate your bike's gear wheels and chain on a regular basis using appropriate products.

• We recommend you have your bike be inspected by a professional bicycle repair shop semiannually for tune-ups (brakes, control cables, bearing adjustments, and wheel adjustments).

• Prior to riding, make sure to inspect for any oil leaks, brakes are functioning correctly, there's no visible damage/cracks on body, fork, or any components of the bike, or if there are any abnormal noises.

• Bicycles should only be serviced by a qualified professional bicycle repair shop. Any attempts to rewire or perform major maintenance work on the bike will void the warranty.

• Perform an inspection before or after the use of the bicycle and look for cracks, leaks, damaged or loose components, and foreign objects in parts/components of the bike.

• Please make sure to only use the charging cables provided by Superstrata.

• Do not perform any kind of maintenance while the bike is charging.