OWNER'S MANUAL



ELECTRIC BALANCE BIKE



12" Xtreme <u>Eko 12</u> 16" Xtreme 16S

www.getpurspeed.com



INTRODUCTION

PŪR-SPEED KIDS ELECTRIC BALANCE BIKE. FOR AGES 3-12

Congratulations on your purchase! This manual will guide you through the proper techniques to assemble, adjust, operate, and maintain your new Pūr-Speed electric balance bike.

For any additional information, please visit www.getpurspeed.com

NOTE: Manual illustrations are for demonstration purposes only. Illustrations may not reflect the exact appearance of the actual product. Specifications are subject to change without notice.

WARNING: Riding an electric balance bike does present potential risks, and caution is required. Like any riding product, an electric balance bike has inherent hazards associated with its use. RIDE AT YOUR OWN RISK. If this bike was purchased for a child, it is the responsibility of the purchaser to verify that the bike has been properly assembled, and that the user has been properly trained in its use. Pūr-Speed urges you to read this manual carefully and be sure to follow all instructions and warnings. With proper assembly and maintenance, your bike will provide years of enjoyable recreation!

The user or consumer assumes all risk of personal injuries, damage, or failure of the bicycle or system, and all other losses or damages which may result.

<u>Introduction</u>

This manual contains important safety, performance, and service information. It is provided for assistance, and is not intended to be a comprehensive manual covering all aspects of maintaining and repairing your bicycle. Your bike must be properly assembled and maintained for maximum durability and rider safety.

DO NOT DISASSEMBLE, MODIFY, OR REPLACE ELECTRICAL PARTS WITHOUT FIRST CONTACTING A PÜR-SPEED AUTHORIZED DEALER!!



DANGER: Failure to properly assemble and maintain your bike could result in serious injury to the rider!!

Always wear a properly fitted helmet when riding!

***Prior to your bike's first use:

-Charge the battery according to the charging instructions on page 8.
-Be sure that the speed switch is set to the "low" position.

PLEASE RETAIN THIS OWNER'S MANUAL FOR YOUR FUTURE REFERENCE

INTRODUCTION

▲ WARNING!!!

Always use a D.O.T. Approved Helmet and Appropriate Riding Gear



NEVER Ride On Public Roadways



NEVER Carry Passengers



DO NOT use your bike for freestyle and stunt riding, jumping, or competitive events. For your safety, Pūr-Speed recommends that you consult with a Pūr-Speed authorized dealer for any questions about repairs or maintenance.

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RIDING SAFETY

The condition of the riding surface is VERY important to riding safety. If the riding surface is wet, sandy, covered with leaves, small rocks, or debris, ride at SLOWER SPEEDS and with EXTRA CAUTION. Do not attempt sharp turns. Stopping distances will likely be increased by such conditions. Apply the brakes sooner and with less force. Always apply the rear brake first, allowing time for braking action to occur before applying the front brake (if applicable). RAPID FRONT BRAKE APPLICATION ON ANY SURFACE MAY CAUSE A FRONT "PITCH OVER" CRASH. Learn to use the brake(s) properly under controlled conditions until you learn proper braking under all conditions.

While riding, watch for road hazards such as drain grates, pot holes, ruts, loose gravel, leaves, uneven pavement, manhole covers, debris, and obstructions.

**Always wear shoes and avoid wearing loose fitting clothing when riding. Long sleeves, long pants, gloves, eye protection, a well fitting helmet, and elbow and knee pads are recommended at all times while riding. Do not ride while using headphones. Avoid wearing any items which limit your ability to see or hear clearly.

Pūr-Speed does not approve or encourage riding after sunset or during darkness. Vision during these times is quite limited for bike riders, motorists, and bystanders. If you MUST ride at night, use front and rear lighting, wear reflective clothing, and plan your route to remain in well-lit areas while avoiding heavy traffic areas.

RIDER CONSIDERATIONS

Riding readiness varies widely from one person to another, and age and size are not the only factors to consider. Riders must be big enough to hold the bike up, mount the bike, and sit on the seat while placing both feet on the ground. Riders must be able to operate the brake lever(s), throttle, and all other controls.





NOTE: Pūr-Speed bikes were NOT designed to carry a passenger or cargo. DO NOT ATTEMPT TO CARRY A PASSENGER OR CARGO ON YOUR BIKE! Doing so may alter the bike's handling characteristics, braking ability, and/or stability. In addition, passengers, cargo, and added accessories reduce the maximum load that the bike can carry. DO NOT EXCEED THE MAXIMUM WEIGHT LIMIT OF 120 LBS. FOR YOUR BIKE!! Maximum weight limits are also found on the bottom cover of your bike, or at www.getpurspeed.com.

<u>ACCESSORIES AND MODIFICATIONS</u>

MODIFYING YOUR ELECTRIC BALANCE BIKE USING NON PŪR-SPEED PARTS AND ACCESSORIES MAY MAKE YOUR BIKE UNSAFE!

We strongly recommend that you use only Pūr-Speed genuine parts and accessories that have been specifically designed or approved and tested for your balance bike. You must be personally responsible for proper selection, installation, and use of any non Pūr-Speed accessories. Check with your dealer for assistance and always follow these guidelines:

Make certain that the accessory:

- -Does not reduce ground clearance and lean angle
- -Does not limit steering travel
- -Does not alter your riding position or ability to see the riding surface clearly
 - -Does not interfere with the operation of any controls

NOTE: We strongly advise you not to remove any original equipment or modify your electric balance bike in any way that would change its design or operation. Such changes could seriously impair your bike's handling, strength, stability and braking, making it unsafe to ride. Do not make any modifications or remove any equipment that would make your bike illegal in your riding area.

<u>Charging your bike</u>

Please follow these instructions to charge your new electric balance bike before its first use, and anytime the battery indicator light is down to the "red" level, or the bike's motor stops working:

Be sure to charge the bike in a cool, dry environment. <u>Do not charge the bike in freezing temperatures (32°F or below)</u>. Charging time is approx. 2 to 3.5 hours, depending upon the level of the battery when charging begins.

Be certain that the power switch on the throttle is "off". Plug the charger into a 110v outlet. The green light on the charger should come on.

Insert the plug from the charger into the charging port on the frame of the bike. (A SMALL spark or "pop" sound is normal.)

When connected to the bike, the light on the charger will turn to red, indicating that the battery is charging.

When the battery is fully charged, the light on the charger will turn from red to green.

(If the light on the charger does not turn red when plugged into the bike, the bike is either fully charged, or the charger has malfunctioned and should be replaced immediately.)



WARNING: Leaving the bike in direct sunlight for an extended period of time (5-8 hours) may damage the battery, and may cause the battery to explode.

CAUTION:

Modifying, or attempting to modify, the electronic components, and/or wiring, adding components which were not installed by the factory, removing safety components, or any other modifications not approved by Pūr-Speed will void your warranty!!

If any components become loose while riding, **STOP IMMEDIATELY** and tighten, or bring your bike to a repair facility before riding further!



Note: When applying the Pūr-Speed decals to your bike, be sure the application area is clean and dry. Wipe all areas with rubbing alcohol, allow the alcohol to evaporate, then apply the decal. This will ensure that the decals adhere properly and will not peel.

ASSEMBLY

NOTE: Before Assembly, Do The Following:

- -Turn the power switch on the throttle to the "OFF" Position
- -Read these assembly instructions COMPLETELY
- -Remove contents from the carton and inspect for damage
- -Always exercise caution around exposed electronic parts

STEP ONE

INSTALL THE FRONT WHEEL:

NOTE: The axle and other important parts/tools are located in the **tool kit**. The washers and spacers are installed on the axle in the proper order in which they should be mounted on the bike. Be sure to keep the spacers in the proper order when installing the wheel. (See photos on the following pages)

Remove the Axle Nut and the spacers, washers, etc. from the axle. Place the axle through the spacers and/or washers, then through the wheel hub, ensuring that the brake rotor/disc is centered in the brake caliper (if equipped). Hold the proper spacers/washers on the opposite side of the wheel and push the axle completely through the spacers/washers and the frame hook. Screw the nut onto the end of the axle. Bikes with nonsuspension type forks have washers with a tab on them which go on the axle, outside of the forks. Please be sure that the tabs are seated in the small notches on the fork, just above the axle hooks. The tabs ensure that the axle is installed correctly, and ensure that the axle will not fall out of the frame hooks.

Tighten the axle by holding the head of the axle bolt with a socket while tightening the nut very firmly.

ASSEMBLY

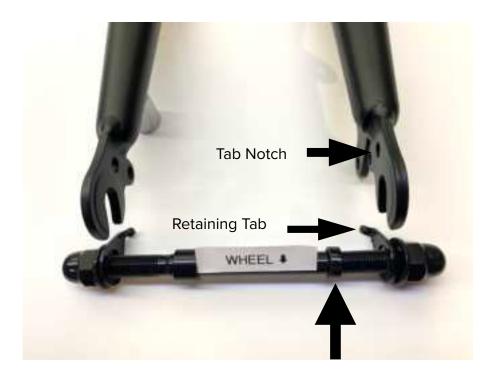
AXLE WASHERS AND SPACERS

12" Xtreme



ASSEMBLY

16S, **Ēko** 12 and 16" Xtreme



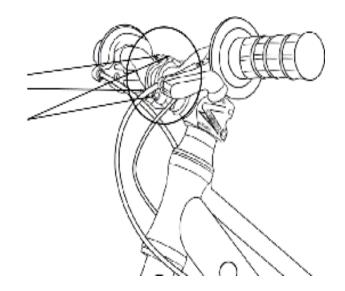
For Ēko 12 and 16" Xtreme

<u>assembly:</u>

STEP TWO

INSTALL THE HANDLEBAR:

Remove the four mounting screws from the handlebar clamp as shown. Insert the handlebar in the clamp and re-install the four screws.



NOTE: The power switch should be mounted slightly upward, approximately 30-40 degrees from level. This positioning will allow the rider to easily twist the throttle through its full range.

After mounting the handlebar, check the handlebar end caps and tighten, if necessary. Also, check that the throttle turns freely and returns to the "off" position quickly when the throttle is released. Check that the rubber handlebar grip is clear of the handlebar end cap and does not interfere with the operation of the throttle.

Once the handlebar is mounted, plug the throttle wire into the existing wire harness on the bike.

ASSEMBLY:

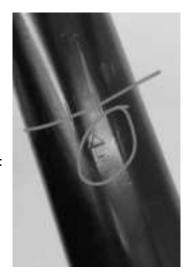
STEP THREE

ADJUST THE SEAT

The seat may be adjusted by opening the quick release lever on the seat post and loosening the clamp until the seat can be moved. Raise or lower the seat into the desired position for the rider (The rider's weight should be evenly distributed between the seat and the handlebars.) **Do not over-tighten.** The lever should require considerable force to close by hand, but should not be so tight as to require any tools or objects to close!

NOTE: Be certain to tighten the seat mounting brackets at the top of the seat post before the first ride. Failure to do so may result in seat damage!

CAUTION: The seat post has an inscribed arrow and series of hash marks. The ARROW represents the MAXIMUM allowable seat height. DO NOT RAISE THE SEAT TO THE POINT THAT THE ARROW IS ABOVE THE TOP OF THE SEAT TUBE OF THE BIKE. DOING SO MAY CAUSE THE BIKE'S SEAT TUBE TO BREAK, RESULTING IN A CRASH AND/OR INJURY TO THE RIDER.



<u>assembly</u>

STEP FOUR

INSPECT YOUR BIKE

During shipping and handling, nuts, bolts, and screws, may loosen. Before the first ride, be sure to inspect all nuts, bolts, and screws on your new bike to be sure they are tight. Pay special attention to the wheel axles, seat, seat post, and handlebars. Lift the front of the bike, spin the wheel, and check the brake to ensure that it does not drag heavily against the rim. Apply the brake and check that the wheel stops appropriately. Lift the rear of the bike and repeat the above brake check.

Next, stand in front of the bike and face the front wheel. Hold the wheel between your knees and attempt to turn the handlebar to the left and right. Attempt to lift the bike by the handlebar. The steering components should be tight, with no movement or free play.

Check that the front and rear wheels are installed tightly in the frame hooks and have no side-to-side or vertical movement. The wheels should have clearance and should not contact any other parts of the bike or accessories when freely spinning.

12" BIKE FEATURES

All of Pūr-Speed's 12" models come from the factory with speed limiters and safety features enabled. This allows the rider to start at a beginner level, with less abrupt starts and a low maximum speed. The KICK START feature is turned ON from the factory, and the speed switch on the bottom of the bike is pre-set to the slowest setting.

It is highly recommended that the speed not be increased until the rider has practiced, and become proficient in, balancing, braking, and moving the bike forward with the power switch turned off, or with the throttle wire unplugged from the bike.

16" BIKE FEATURES

Pūr-Speed's 16" models have a three speed switch (High, Medium, Low) on the bottom of the bike. **16" models do NOT have the "kick start" feature enabled.** This means that the bike will immediately begin moving forward when the power switch is "on" and the throttle is turned. It is highly recommended that the speed not be increased until the rider has practiced, and become proficient in, balancing, braking, and moving the bike forward with the power switch turned off, or with the throttle wire unplugged from the bike. <u>Pūr-Speed Balance Bikes have surprising performance</u>. Be prepared for the bike to start forward quickly! It is crucial to teach all riders how to release the throttle and apply the brakes BEFORE using the power of the bike's motor!

INCREASING THE BIKE'S SPEED

WARNING:

MAKE ONLY ONE ADJUSTMENT AT A TIME. NEVER REMOVE THE "KICK START" FEATURE AND INCREASE THE SPEED SWITCH SETTING AT THE SAME TIME!!

CAUTION: After increasing speed settings or removing the kick start feature of the bike, be sure to closely supervise any child during their first few rides. Supervision should be maintained until the child has gained experience and is accustomed to the new settings.

When the rider has gained enough experience and is ready for increased speed, the speed switch on the bottom of the bike may be moved from "low" to "medium".

Similarly, when the rider is comfortable on the "medium" speed setting, the speed switch may be moved from "medium" to "high".

To remove the kick start feature (on applicable models), be sure that the rider is experienced and ready for the change. Follow the instructions on the next pages to remove the bottom cover and disconnect the kick start feature. **DO NOT REMOVE THE KICK START FEATURE WITHOUT FIRST MOVING THE SPEED SWITCH BACK TO THE LOWEST SETTING!!**

BOTTOM COVER REMOVAL

To remove the bottom cover, locate and remove the four screws holding the plastic rock protector in place.



Rock Protector

With the rock protector removed, use a small, flat screwdriver to gently pry the FRONT of the bottom cover. (the rounded end). See the diagram on page 20.

DO NOT PRY THE SIDES OR THE BACK OF THE COVER, AS THE LOCKING TABS WILL BREAK.

The bottom cover is hinged in the rear and should be removed by lifting the front edge first, similar to opening a book.

BOTTOM COVER REMOVAL

Bottom Cover



NOTE: The three speed switch and its wiring are attached to the bottom cover. Remove the cover gently, taking care not to damage the connecting wires!

UNDER THE BOTTOM COVER

The controller and various wiring connections are found under the bottom cover of your bike. Always use caution not to damage any wires or electronic components when the bottom cover is removed! (The wires found on your bike may vary, depending upon your bike's available features). Look for light blue and black wires labeled "Zero Start", or "KSM". (Kick Start Mode). When these wires are connected together, the "KICK START" feature of the bike is turned "ON", and the bike must be propelled forward manually (by the rider kicking the legs) before the motor will engage.

Also found under the cover are various wiring harnesses which go to the handlebar, battery, and motor. These wires should not be handled unless replacing some of the components on your bike with approved Pūr-Speed genuine parts, and with proper guidance from getpurspeed.com.

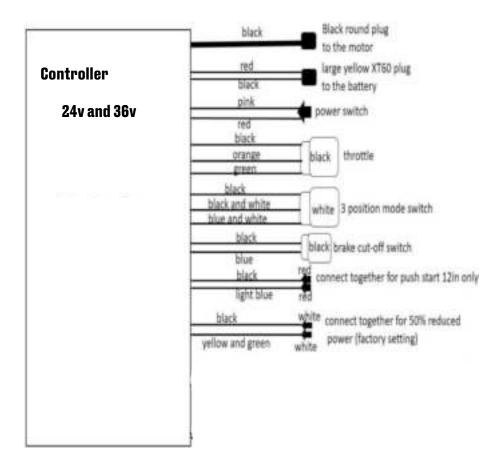
WIRING/VOLTAGE CHART

FUNCTION	WIRE COLOR	WIRE VOLTAGE REFERENCE
Connect to Battery	Red	24/36/48V
	Black	Negative
Connect to Motor	Yellow 1.5MM	When motor running, 12v. Stop 0v
	Green 1.5MM	
	Blue 1.5MM	
	Orange 0.3MM	5v with Power ON
	Yellow 0.3MM	When motor running, 12v.
	Green 0.3MM	Stop 0v
	Blue 0.3MM	
	White 0.3MM	Exchange from 0 to 5v when running
	Black 0.3MM	Negative
Connect to Power	Pink	24/36/48v
Switch	Red	Will have 24/36/48v when PWR SW is ON
Connect to Throttle	Black	Negative
	Orange	4.3v
	Green	Will have 0.8v when at 0 throttle position and go to 3.5v at full throttle
Connect to Mode Switch. White 3p connector	Black and White	5v when not switched to GND
	Black	Negative
	Blue and White	5v when not switched to GND

WIRING/VOLTAGE CHART

Connect To Brake Cut-Off	Black	Negative
	Blue	Has 5v without a brake. Goes to 0v when brake
Connect together for KSM, Kick Start, Red 2p connector	Black	Negative
	Light Blue	Has 5v when not connected to GND

WIRING DIAGRAM



Note: The exact wiring of your model may vary, depending upon your bike's available features

BEFORE EVERY RIDE

Before each ride, or if the bike should be crashed, check that the bike is in proper working order. The bike should be maintained and repaired in accordance with Pūr-Speed's specifications, using only Pūr-Speed authorized replacement parts, and should not be modified from its original design and configuration.

To avoid injury, please be sure that the power switch on the throttle housing is turned OFF while inspecting or repairing your bike!

- -Inspect the throttle. Be sure that the throttle rotates freely and returns to the "off" position when it is released. Check for cracks, dirt, or other visible damage that may cause the throttle to stick open. Be sure that the rubber grip is not in contact with the handlebar's end cap.
- -Inspect the brake(s). Check for proper brake function. Ensure that the brake is not dragging heavily on the brake rotor. When the brake lever(s) is squeezed, the brake should provide positive braking action.
- -Inspect both tires. Inspect the tires for excess tread wear. Check the sidewalls for defects or damage and check/adjust the air pressure as needed.
- -Inspect the frame, forks, handlebar, and handlebar clamp.
 Look for any cracks or deformities. If any crack or deformity is found, no matter how small, do not use the bike until proper repairs have been made.

BEFORE EVERY RIDE

- -Inspect the bike for loose hardware or parts. Check all nuts, bolts, cables, fasteners, etc. to ensure that they are tight and secure. Check that the wheels are securely seated in the frame hooks. There should be no unusual rattles or other sounds from broken or loose components.
- -Know the riding surfaces and the forecasted weather conditions for the area you will be riding. Do not ride if inclement weather or other dangerous conditions exist or may develop during your ride.
- -Always check and obey local laws and regulations in the area you will be riding.

<u>Cleaning and appearance care</u>

To prevent damage to your bike or components, If your bike is still warm from recent operation, please allow time for it to cool before washing and/or maintenance is performed.

To clean your bike, you may use:

- -Water
- -A mild, neutral detergent and water
- -A mild "spray and wipe" cleaner/polisher
- -A mild spray and rinse cleaner/degreaser and water

Avoid products that contain harsh detergents or chemical solvents that could damage the metal, paint, or plastic on your bike.

Do not use high pressure water or air to clean your bike. Doing so may allow water into electronic components and damage bearings or other components of your bike.

<u>Cleaning and appearance care</u>

- 1. Rinse your electric balancer thoroughly with cool water to remove loose dirt.
- 2. Fill a bucket with cool water. Mix in a mild, neutral detergent (such as dish washing liquid).
- 3. Wash your bike with a sponge or a soft towel. If it is necessary to remove heavy grime, use a mild cleaner/degreaser on those areas. Use extra caution around your bike's decals, as heavy scrubbing or chemicals may damage them.
- 4. After washing, rinse your bike thoroughly with plenty of clean water.
- 5. Dry your electric balancer with a chamois or a soft towel. Leaving water on the surface to air dry may cause dulling and water spots. As you dry your bike, inspect the frame for abnormalities, damage, and cracks.

Use caution when riding immediately after washing and drying your bike. Wet brake parts will extend your stopping distance. Ride slowly to ensure that brake components are completely dry and apply the brakes several times until the brakes stop normally.

TROUBLESHOOTING GUIDE

Be sure that the battery is fully charged or replaced before performing any troubleshooting.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Power Switch does not work, or light flickers	Faulty switch or bad wire connection.	Malfunctioning Power Switch. Replace switch or throttle assembly.
when turned on	Battery not fully charged	Verify that battery is fully charged
	Bad wiring harness connection	Follow the throttle wire down until it enters the frame. Remove frame plug and carefully pull on the wire until the connector comes through. Unplug the connector and check for corrosion. Clean contacts and reconnect. Try switch. If still not working, remove controller box cover and find solid dark blue and black wires. Unplug the connector then plug it back in. If switch still does not work properly, unplug the connector again. Connect a voltmeter (ohm function) to red and blue wires that go to switch. When switch is turned on, voltmeter should show "0" if the switch is GOOD (This means the controller is BAD). If meter does not show "0", the switch is bad, and the throttle assembly should be replaced

TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	SOLUTION
Bike stopped while riding	Loose battery or wire connectors	Recharge or replace battery
	Battery Drained	Recharge Battery
	Power switch faulty	Replace throttle assembly
	Throttle bad	Replace throttle assembly
	Motor or electrical system damaged	Contact Pūr-Speed for further diagnosis
	Rider weight too high or terrain is too steep	Do not exceed max. Weight capacity and choose terrain with less steep hills.
Short run time or bike running slowly	Battery not fully charged	Recharge battery and try again
	Old or damaged battery	Replace battery
	Tire(s) not properly inflated	Check tire pressure and inflate to pressure listed on sidewall of tire

WARRANTY

PÜR-SPEED LIMITED WARRANTY

Pūr-Speed warranties these products to be free from material and manufacturing defects from the date of purchase as described below:

FRAME: 3 Years

ELECTRICAL COMPONENTS (Including battery and charger): 180 Days

MOTOR: 180 days

This limited warranty will be void if the product is not used in accordance with the owner's manual, such as:

- -Damage in an accident, crash, or loss of control incident
- -Used in a manner other than for recreation
- -Poorly or incorrectly maintained
- -Used in a manner in which the product was not specifically designed
- -Failure to follow owner's manual instructions or warnings
- -Exposure of electronics or battery to water or moisture
- -Modified in any way, except with Pūr-Speed approved parts
- -Damaged by unauthorized service or parts
- -Used for commercial purposes

This limited warranty does not cover any damage, failure, or loss caused by improper assembly, maintenance, or storage.

WARRANTY

PŪR-SPEED is not liable for incidental or consequential loss
or damage due directly or indirectly to the use or misuse of
this product.

For your records, SAVE YOUR ORIGINAL SALES RECEIPT WITH THIS MANUAL. Write the serial number in the space below. Your bike's serial number is located on the rear motor/wheel hub.

SERIAL NUMBER:
MODEL NUMBER/WHEEL SIZE:
DATE OF PURCHASE:
PURCHASED FROM:

DISCLAIMER

PŪR-SPEED will not be held liable under any circumstance for incidental or consequential loss, damage, or injury, due directly or indirectly to use of this product, including any malfunction or defect.

Parents and/or guardians of minors assume all responsibilities associated with the use of these products by minors. These products are not suitable for handicapped persons or persons with limited mental or physical capacities. Customers understand that the use of these products can cause injury or death to themselves or others. To reduce the risks of any such injury, we strongly recommend the use of safety equipment such as an approved helmet and kneepads when riding.

The buyer holds Pūr-Speed and its agents and affiliates harmless from any liability arising out of or relating to the use or ownership of any product. The purchaser fully accepts responsibility and releases the seller for any and all personal injuries, fatal injuries, losses, costs, and damages incurred as a result of the operation of this product.

The purchaser is solely responsible when permitting other riders to ride this product, and assumes all responsibility in the event of damages or injuries due to its use, or the failure to properly secure the product and prevent its use by unauthorized and/or untrained person(s).

The purchaser is responsible for understanding and obeying all local and state laws for operation of this product.

<u>Disclaimer (Continued)</u>

By submitting payment for this item, the purchaser agrees to release the seller of any and all responsibility of the product as stated in this disclaimer, and acknowledges that they have read, understood, and agree to the terms and conditions of this Agreement, and that they are of legal age to enter this Agreement and become bound by its term(s).

While Pūr-Speed makes an extensive effort to ensure that this owner's manual, as well as the information found at <u>getpurspeed.com</u> is complete, accurate, and comprehensive, any errors or omissions in this manual or at getpurspeed.com are unintentional. Therefore, Pūr-Speed cannot be held liable for any errors or omissions in this manual or at getpurspeed.com

If you have any questions about the assembly, maintenance, repair, or specifications of your Pūr-Speed bike, please contact Pūr-Speed through our website's contact page at getpurspeed.com

The latest updates about our products, informational videos, and complete specifications of our products may be found at getpurspeed.com

Pür-Speed Electric Balance Bikes



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