RIDING ETIQUETTE

ELECTRIC MOTORBIKE ETIQUETTE & TIPS
Whether you are a seasoned cyclist or new to the electric two-wheeled scene, riding an ONYX Motorbike is an awesome experience every time and everywhere you get to ride one. Pedaling your heart out is great exercise and gets the blood flowing, but twisting the throttle to nimbly and silently speed forward gives a one-of-a-kind thrill! However, there are some general riding considerations to understand and keep in mind with electric motorbikes that will keep you and others around you safe and happy.

CONSIDERATIONS WHEN BUYING YOUR ONYX MOTORBIKE
Before or just after you buy your ONYX Motorbike, consider the following items:

Research and understand your local laws and restrictions where you live as well as where you intend to ride! Check YOUR Country, State, AND City/Town/Municipality for each and all of their latest and greatest laws, restrictions, and regulations. It is also important to pay attention to any posted signs and even unposted general requirements for areas such as bike path, trail, and public land where you intend to ride. Different public lands such as National Forests, Bureau of Land Management, parks, townships, neighborhoods, and even homeowner associations can have their own regulations that differ from State and Federal classifications and restrictions. So no matter what and where you are riding, it is YOUR responsibility to know and understand any laws and restrictions WHERE you are riding!

ONYX Motorbikes recommends that you register and insure your motorbike if you want to and if required in your locale. Some motor vehicle registration agencies (DMV or other) will allow you to register your vehicle using just the frame and motor serial numbers only. For example, you can register your ONYX Motorbike as a moped California by mail without an in-person inspection simply using ONYX's frame serial number and motor serial number. However, note that if you do register it as a moped, you will be required to make sure that your bike is compliant with Department of Motor Vehicles requirements. AND, as is the case with California, you will be required to have an M1 or M2 level driver's license. So be sure you consider all points and responsibilities before registering your ONYX!

Register your ONYX Motorbike whenever possible helps to avoid any hassles about whether your ride is legit or not. Should you be stopped and questioned by law enforcement, it is best to know your rights, local laws and have the registration to support that. Most will think your ONYX Motorbike is cool, but some may not understand what it is and what to do with it, especially if it is not registered in any way. So registering and insure your ONYX Motorbike will also give you peace of mind knowing that will protect you and your investment, in addition to you riding responsibly. However, please note that some agencies or insurance companies will only accept or recognize standard full 17-digit VINS (vehicle identification numbers), just like most cars, trucks, and motorcycles. Basically, then it can lead to stalemate issues where:

- Without a VIN, you may not be able to register your bike.
- Without registration, you may not be able to get your bike inspected.
- Without an inspection, you may not be able to use your bike as a motor vehicle on public roads.
Riding without proper credentials and documentation in some places can hit you financially! For example, in Pennsylvania, driving (riding) without a license is a $200 fine + costs, which can push it upwards of $300! Driving or riding an unregistered vehicle yields a citation with a $25 fine + costs, which can push it upwards of $100! So in some cases, you may only be able to ride on private property or another designated trail, track, or off-road area! Not that it would be a bad thing, but it is important to know...

BEFORE YOUR FIRST RIDE...

Before you actually ride your ONYX Motorbike for the first time, consider the following items

Learn about your ONYX Motorbike by reading the Owner’s Manual! You can find it on your
Before you go out for a ride, perform a basic safety check on your ONYX Motorbike to ensure
that it is in proper working order and safe to ride. Contact ONYX Motorbikes for a pre-ride safety
checklist if you need help.

Wear properly fitting protective gear on every ride, including: full-face helmet, eye protection,
gloves, long pants, long sleeve bright colored shirt, close-toe boots, and a reflective vest. Do not
wear loose fitting pants or shoes that can get caught in the chain, pedals, or wheels. Additional
items that make your ride safer, better, and more comfortable might include sunglasses (that
will fit with your helmet) and an armored jacket. Do not wear anything that can limit your flexibil-
ity, mobility, or vision.

If your locale does not require you to obtain and maintain a valid motorcycle/moped driver’s
license, ONYX Motorbikes strongly recommends that you do so anyway. In addition to learning
more about and being tested on knowing the rules of the road for safety reasons, having a mo-
ped/motorcycle driver/rider license will help put any law enforcement agent at ease in case they
question your ride or ability to ride...

Additionally, even if your locale does not require you to complete any formal training, ONYX
Motorbikes strongly recommends that you take a moped or motorcycle riding course for proper
training, especially if you are new to motorbikes in general. Contact your local Department of
Motor Vehicles or law enforcement agency for any recommendations or suggestions on training
programs or courses. These courses will often include Class M licensing upon successful com-
pletion and can lower your insurance rate on your bike.

Even if your region does not require them, you should consider installing some common road
safety items on your bike. The following items can help or enhance your riding experience, safe-
ty, and visibility on public roads with other drivers:

• Front & Rear Turn Indicator Lights
• Rearview Mirrors
• Front and/or Rear Wheel Fender(s)
• License Plate (with a light to illuminate the license plate)
• Front & Rear Side Reflectors

Make sure you and your ONYX Motorbike are appropriately outfitted for use in the intended
riding area(s). For example, if you are planning to ride on trails, understand that knobby tires,
fenders, and a headlight grill are most appropriate...Seems obvious, but it’s important.
WHEN RIDING YOUR ONYX MOTORBIKE...

When you do go for a ride on your ONYX Motorbike, act as an ambassador for the electric vehicle community by doing the following:

RIDE RESPONSIBLY AND OBEY ALL TRAFFIC LAWS AND REGULATIONS WHEREVER YOU ARE RIDING

Be aware of any extra or even posted temporary restrictions due to new conditions. Keep in mind that some locations may require you to install additional safety gear on your bike, such as turn indicators, rearview mirrors, etc. If you are not sure, you must check before riding.

Respect the environment, and tread lightly. Don’t tear up or ride off of designated roads and trails. It is cool to blaze your own trail sometimes, but make sure it is OK to do so without damaging the local vegetation or animal population! And always, leave the woods, trail, or area better than you found it.

On the street, we realize that ONYX’s powerful motor makes quick work of the rear tire, burnouts and whatnot. While it’s cool to smoke out your tire, burning rubber isn’t good for the environment, disrespects the laborers who made your tires, and wastes the earth’s limited resources.

Be aware. Always look in front of you, on both sides, and behind you to make certain that you yield when you should yield. Pass considerably and safely when you can. Be aware of other cyclists, cars, joggers, skaters, people pushing strollers, or animals that may be on or near the paths and lanes that you may be using. It is YOUR responsibility to pass others safely and effectively so that it does not endanger them or yourself. You can alert people using your horn, use an old school handlebar bell and kindly say, “On your left...” as you approach and pass people.

Be considerate of others and make sure that you give people around you proper space and respect so that they have nothing to complain about with you or your riding. Things to consider:

- How fast you’re going. If you go blasting by people cruising at 10 mph while you are doing 40 mph, you may surprise or startle them, causing an accident. They are all going to remember you blowing by them if they crash and talk to medical or law enforcement personnel...
- How close you get to people. If you are weaving in and out of people, they are going to remember that if you are involved in any altercation...
- Whether they perceive that you should/shouldn’t be riding your bike there. You will look out of place riding your ONYX on a horse trail. Horses and their riders won’t appreciate you sneaking up on them on your quiet bike. They may just kick you off your bike, which will HURT you and, importantly, may hurt your ONYX too.
- What your bike looks like. You will look very out of place riding your big ONYX Motorbike on a bike path crowded with children. Choose a different route to ride instead of risking running into a kid. Not that you don’t have a right to use the path too (assuming you are allowed...), but you have the power to ride other routes. With great power, comes great responsibility.

ONYX Motorbikes are best enjoyed on open private land and roads where there are no speed or other restrictions and you are limited by your riding ability and your own confidence level. You can ride within the known and understood limitations of your ONYX Motorbike AT YOUR OWN RISK without worrying about running into unsuspecting people or animals.
WAIT, I'M CONFUSED NOW... WHAT IS THE BOTTOM LINE?

Unless people start riding irresponsibly enough to damage trails and/or injure folks on paths and roads, enforcement of inappropriate and confusing state laws will continue to be low priority. However, due to the surge in electric vehicle and bike ridership due to the pandemic, these regulations carry more urgency. We encourage all riders to do their homework; research and understand laws, regulations, safety precautions for your community and your ONYX Motorbike.

DO NOT go zipping down paths, trails, and freeways where you aren't allowed. Avoid crowded streets, refrain from stunt-riding, avoid weaving in and out of cars, and avoid riding above the speed limit. If you do, you are risking injuring yourself, others, damaging property and the integrity of the larger riding community! That is NOT a cool way to represent yourself or ONYX Motorbikes.
BATTERY STUFF

HOW TO READ THE BATTERY GAUGE OR VOLTMETER

It is easy to see how much battery power (charge voltage) you have at any given time by looking at your LCD Speedometer dashboard display. Read below for more information about these display readings.

LCD Dashboard Display

Battery Voltage Reading

The LCD Display shows the current real-time battery “juice” (voltage reading) in the upper right corner of the screen when the bike is turned on. This is your key battery indicator! The battery’s instantaneous voltage reading actively changes while riding based on the battery’s output power demand, power output available (at rest), and power input from regenerative braking.

As stated in the RCR User Manual, the voltage will **cut off your battery at more than 60 volts** when riding an RCR Model.

Charge Level Gauge

The LCD Display shows a 10-tick (roughly 10% increments) visual representation of the battery charge level in the lower right corner of the screen when the bike is turned on. Use this as an indicator to know generally how much charge you have left.

At lower states of charge, the Battery Management System (BMS) of will limit power output to prevent damage to the battery. When the battery is close to being fully depleted, the last bar will begin to flash, warning the user to charge the battery as soon as possible. If you’ve been riding, let the battery cool down for 20 minutes before charging. In order to maintain a healthy battery, charge the battery as soon as possible when only one tick is left on the battery gauge.
BATTERY RANGE

The battery gives the bikes an expected range of between 20-75 miles on a single charge for the ONYX RCR Model (15-40 miles for the CTY Model) depending on the mode you use, the amount of pedaling you do, the terrain, and your size/weight. All of these things affect your overall range. For example, only using the throttle consumes the most battery power, but you can help increase your range by pedaling whenever possible to conserve battery power.

As a basic reference, take a look at the graphic below to get an idea about how far you can go on a single charge with the (standard) 72 Volt / 23Ah battery in the RCR Model:

ECO MODE
MAX SPEED: 20 MPH
75 miles

NRM MODE
MAX SPEED: ~38 MPH
40 miles

SPT MODE
MAX SPEED: ~55 MPH
20 miles

NOTE: The throttle-only estimates above are based on a 170 pound rider riding a standard RCR model on flat paved roads with nominal stops and starts with no pedaling assistance.

BATTERY CHARGING TIME

When properly maintained, the 5 Amp battery charger that ONYX provides will quickly and efficiently charge your lithium ion battery in the best manner possible to maintain the life and performance of the battery. A simple equation is used to quickly calculate how long a given battery charger will charge a particular battery from fully discharged to fully charged. Here is the basic equation:

\[
\frac{\text{Battery Amp-Hours Rating (Ah)}}{\text{Battery Charger Output Current (Amps)}} = \text{TOTAL CHARGE TIME (Hours)}
\]

For example, with the standard 23Ah RCR battery charging on the 5A charger, the total charge time is 4.6 hours.
Below is a table that provides a basic idea of typical charge times that can be expected to fully charge a battery from fully discharged to full:

<table>
<thead>
<tr>
<th>ONYX MOTORBIKES LITHIUM ION BATTERY</th>
<th>ONYX BATTERY CHARGER</th>
<th>FULL CHARGE VOLTAGE</th>
<th>ESTIMATE TIME FOR A FULL CHARGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCR 72V / 23Ah Battery</td>
<td>STANDARD 5 Amp Charger</td>
<td>84.0 V</td>
<td>4 to 5 Hours</td>
</tr>
<tr>
<td></td>
<td>RAPID 10 Amp Charger *</td>
<td>84.0 V</td>
<td>2 to 3 Hours</td>
</tr>
<tr>
<td>CTY 48V / 16Ah Battery</td>
<td>STANDARD 2 Amp Charger</td>
<td>54.2 V</td>
<td>6 to 8 Hours</td>
</tr>
<tr>
<td></td>
<td>RAPID 8 Amp Charger *</td>
<td>54.2 V</td>
<td>2 to 3 Hours</td>
</tr>
</tbody>
</table>

*Optional accessory sold separately. Do not use any other battery charger without approval from ONYX Motorbikes. Contact ONYX Motorbikes for availability and more information.

However, while the equation gives a good general idea of how long it can take, actual battery charging times may vary depending on various factors related to your battery including the battery’s age, battery’s SoC, battery's internal temperature, ambient temperature, etc.

**BEST PRACTICES FOR BATTERY CHARGING**

It is really easy to charge your ONYX Motorbike battery. The battery pack in your ONYX Motorbike is removable, which allows you to remove and take the battery with you to charge or store the battery to prevent theft. However, you can charge the battery with it installed in the bike if that is more convenient. If charging the battery IN the bike, you can leave the battery switch (RCR only) in the ON position, but make sure that your e-bike is system is turned completely off before beginning charging using the kill switch button on the right side controls in the OFF position and/or by disconnecting the battery.