## LEARNING TO SAIL YOUR WINDRIDER™ TRIMARAN

Sailing your WindRider<sup>TM</sup> Trimaran is as easy as climbing aboard, sheeting in the sail and heading of in any direction but straight into the wind. WindRider's simple design eliminates several obstacles every new sailor faces:

•WindRider doesn't require you to use a tiller. With foot controls, you push right to go right, and push left to go left.

NOTE: There is an accessory tiller for WindRider. If you choose to use it (when sailing the boat from the trampolines, for example), the tiller has an opposite effect on steering. If you are seated on the right-side trampoline, pushing on the tiller causes you to steer to the left. Pulling the tiller steers the boat to the right. The following sailing instructions assume you are using the rudder foot pedals.

- •WindRider's stability reduces heel. There's no need to hike out to balance the boat.
- A single sheet minimizes the demands of sail trim and allows you to concentrate on wind direction and your surroundings.

If you know how wind direction affects your WindRider $^{TM}$ , you'll enjoy more control over your craft. Let's look at each direction you can sail.

#### Learn to Reef Before You Go

Before you leave the beach, learn to reef your sail. Reefing is a simple operation that allows you to maintain control as the wind speed increases; however, you shouldn't try to learn under pressure. Don't be afraid to reef; you'll go fast and maintain control.

To know when to reef,

pay attention to WindRider's bow and lee-ward ama; when they begin to "nose dive" it's time to begin reefing. Use your battens as reference points, reefing to each batten as required by wind conditions.

Refer to page 13 for instructions on reefing WindRider's sail.

# The Wind Rose: Understanding Points of Sail

The wind rose illustrates wind direction, and how it relates to your direction of travel. Think of the wind rose as a compass face. The true wind direction is always from straight ahead, or 0°.

The **No Go Zone** is the part of the wind rose from about 45° port to 45° starboard. Trying to sail this close to the wind causes the sail to luff and the boat to lose drive. While tacking you will travel through this

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UPWIND

zone, but you should never try to sail within it.

The **Upwind Zones** cover areas between 45° and 90° off the wind. Within these zones you are making progress in the wind's direction.

The **Reaching Zones** are between 90° and 170° off the wind. On this point of sail, wind direction is perpendicular to your boat. Heading up brings you into the upwind zone. Falling off takes you to a broad reach, then into the downwind zone.

The **Running Zone** is between 170° and 180° off the wind. On this point of sail the wind is literally pushing your boat.

#### The No Go Zone

A sailboat cannot sail closer to the wind than approximately 45°. If you try to sail within the No Go Zone, the sail will begin to luff, power is lost, and eventually the boat stalls and stops, while the sail flaps ineffectively.

While you cannot sail within the No Go Zone, you must pass through it in order to tack. You may also sail into the No Go Zone in order to heave to, or halt WindRider's headway. This is useful when you need to reef the sail, or are approaching a mooring buoy or dock. Practice heaving to in an open area, clear of obstructions, until you learn to judge how quickly your WindRider slows down.

Sailing's Golden Rule

Don't try to sail directly into the wind.

#### How to Tell Wind Direction.

Knowing where the wind is coming from is an important skill, but it can be deceptively difficult for many new sailors. Take a cue from man's best friend, and get your face out into the wind! Feel the wind on your face, and turn your head until you can feel the wind on both ears. That's it — you're facing the direction the wind is coming from.

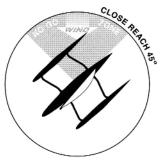
Sailing To Windward

The ability to sail upwind and tack is a fundamental skill of sailing, and the first step toward leaving your home base, exploring, and knowing you can return home.

Identify the wind direction. In our illustration, we'll start with the wind off the port

beam. Ease the sheet so the sail luffs.

Sheet in until the sail begins to fill. Your WindRider will accelerate. As you gain speed continue to sheet in and apply pressure to the left rudder pedal to head up. As boat speed increases, you'll notice that you are able to sheet in the boom closer and point higher.





Pay attention to the shape of the sail; it should follow a smooth, foil shape. If it wrinkles, ease the sheet slightly until the distortion disappears. If the sail begins to luff, apply gentle pressure to the right rudder pedal to fall off. Continue to correct until the sail is generating power.

## **How to Tack Right Every Time**

At some point along your windward course you'll need to change direction. You might be trying to reach a particular place, there might be an obstacle in your way, or you might just be tired of looking at the scenery on that tack. So follow these guidelines for performing reliable tacks.

**First, look around.** Before you start to tack, make sure you're not about to sail into the path of another water craft.

**Head up and maintain your speed.** Sail close to the wind to shorten the arc you must travel through when tacking. Speed gives you the momentum and control you need to tack properly. If you're moving slowly, wait until you can accelerate before tacking.

Apply steady, gradual rudder pressure. Too much pressure, too soon can stall the boat. Ease your boat into the tack, and steadily increase the rate of turn by adding more rudder pressure. Think of driving a car through a curve, instead of around a corner at an intersection.

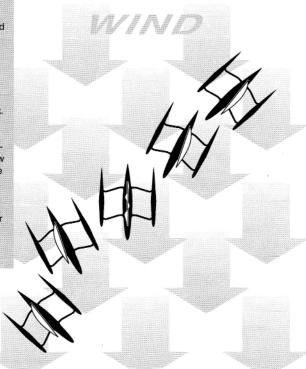
**Don't oversheet the sail.** The sail needs to maintain an efficient shape to provide enough drive to carry Windrider™ through a tack. Excessive sheet tension distorts and de-powers the sail. Start the tack with the boom close to your shoulder. As the boat turns and the sail begins to luff, release the sheet. Oversteer past the new tack, and as the sail fills sheet in and head up to your planned course.

#### What to Do When You're "In Irons"

Sooner or later, you'll fail to complete a tack and find yourself in irons, or luffing into the wind.

If the boat is moving forward very slowly or not at all, the simplest tactic is to grab a paddle and power your way on to the new tack.

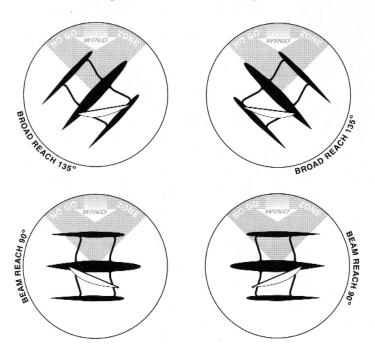
If the boat begins moving backwards, ease the mainsheet, push the opposite rudder pedal and allow the boat to turn so that the sail begins to receive the wind on the new side. Let the boat continue to drift until you are perpendicular to the wind. Then, sheet in, resume sailing, and begin to head up.



TACKING

### Sailing On A Reach

WindRider comes alive on a reach. This is where you generate the greatest speed, and experience the sensation of flying along the water. The reach is divided into two points of sail, the beam reach and the broad reach. At this point of sail, you can easily maneuver WindRider back and forth through these zones, with minor adjustments in sail trim.



The beam reach begins at  $90^{\circ}$  off the wind. At this point of sail, the boom is sheeted in until it is about  $35^{\circ}$  off the boat's centerline. Watch the luff of the sail; sheet in until it begins to distort, and then ease the sheet slightly.

The broad reach begins at about 135° off the wind. To go from a port beam reach to a port broad reach, as illustrated, apply gentle pressure to the right rudder pedal and bear off. At the same time, ease the sheet gradually until the boom angles away from the hull centerline about 65°. Trim the sail in the same way you would for a port reach.

## The Drama-Free, Controlled Gybe

Now, it's time to make a major change of direction away from the wind. Instead of tacking, as you would to beat to windward, you gybe. Gybing is best done carefully. An uncontrolled gybe can cause damage to WindRider's rig. In this illustration, we'll demonstrate gybing from a port reach to a starboard reach.

Start with a look around you. As with a tack, you don't want to steer into the path of another water craft.

Apply steady pressure to the rudder pedal. Again, you don't want to stall the boat. Steer through the downwind zone, and begin to apply opposite rudder as you approach your new course.

Sheet in as you approach the downwind zone! Keep the boom close to the boat; if allowed to move freely it can damage the gooseneck. Keep the sheet tight until the boom crosses the centerline of the boat. Then, ease the sheet and trim it as you continue to your new course.







## Running

The name says it all; you're sailing with the wind directly at your back (or very near it). Often, it feels like you're hardly moving. Because you're moving with the wind, at its speed, even on a breezy day the air is still and there's little sensation of movement. However, a look at the passing scenery tells you that you're covering distance very quickly.

When running downwind, ease the sheet until the boom is 90° off the boat's centerline. Steer to keep the wind at your back; be aware of sudden wind shifts that can turn a downwind run into a reach — or an unexpected gybc.

# Tips to Remember for Staying Out of Trouble.

#### When in doubt, let go.

If faced with an emergency and you can't decide what to do, let go of the sheet. This allows the sail to luff and lose power; WindRider will slow and then stop, buying you time to make a decision.

#### Always err to the downwind side of an obstacle.

When trying to avoid an obstacle, always stay to it's downwind side. This gives you greater room and speed to maneuver.

#### De-power in surf to avoid a pitchpole.

If sailing in surf or breaking waves, ease the sheet to reduce the sail's power. If necessary, release the sheet entirely and allow it to luff. This will prevent you from powering into the wave's trough and pitchpoling.

## In storm conditions, de-power the boat and head downwind.

Ease or release the sheet and steer downwind. WindRider is stable in this position, and unlikely to run into trouble. If running toward a beach, you must judge whether it is safer to attempt to land in surf, or sail across the face of the waves.

#### Know when to reef.

Reefing the sail in strong winds gives you greater control over your boat. Your WindRider™ Trimaran will tell you when it's time to reef. If you are consistently burying the bow or leeward outrigger, you should reef the sail. Generally, you will need to begin reefing at wind speeds of around 12-15 mph.

The corollary to knowing when to reef is:

# If the wind is blowing hard, reef before you leave the beach.

It's easier to unfurl the sail while underway than to try to reef in difficult conditions.