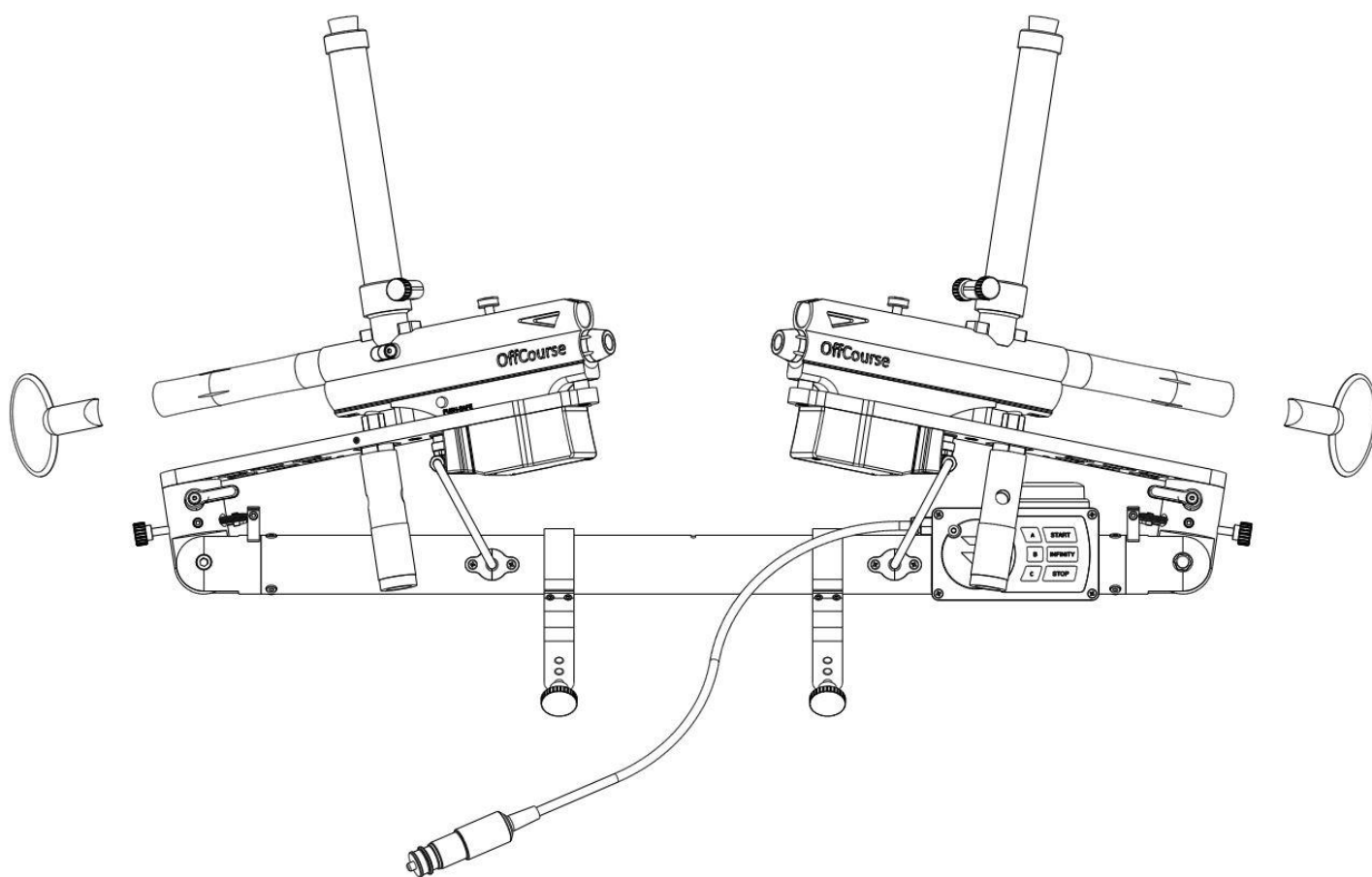


# OffCourse™

## USER'S MANUAL



**WARNING!**  
READ MANUAL BEFORE USE

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## OVERVIEW

The purpose of the OffCourse™ is to revolutionize the water ski slalom experience by providing a location free slalom course. It is first and foremost designed to make your free-skiing sessions more entertaining but can also be used as a training tool to increase timing. Just make sure to find the best spot on the lake and the OffCourse™ will build you an instant temporary slalom course.

The OffCourse™ mounts on top of your boat-window header and instead of using buoys, the OffCourse™ shows you where to turn with a splash on the water surface. Two pressurized markers fires projectiles that make a splash where the buoy normally would be.

The OffCourse™ is powered by standard 12g CO2 cartridges and via the boats internal 12-volt outlet. The biodegradable projectiles break upon impact with the water and dissolves.

The control systems program is based on GPS data and makes sure that the markers fire at the exact right time.

The standard magazines contain 24 projectiles, the skier can choose to ski six turns at a time or all 24 at once.

The OffCourse™ only works within the speed range of 22mph to 38mph.

## WARNING SYMBOLS

The following warning symbols will be used in this manual.



**WARNING!** = Death or serious bodily injury could result from not following this warning.



**CAUTION!** = Serious damage to the product including partial or total loss, can result from not following this warning.

**NOTICE.** = Minor damage to the product or the boat can result from not following this warning.

## SAFETY RULES



### **WARNING!**

1. Read user's manual before use
2. Do not use the OffCourse™ unless everyone within range is wearing eye and ear protection designed to stop paintballs.
3. Never carry passengers in or on the bow of the boat when the OffCourse™ is installed.
4. Always install the barrel-plug and activate the safety-switch on both markers after every ski set.
5. Always keep a safe distance to other vessels and to shore when using the OffCourse™.
6. Do not modify the OffCourse™ in any way.
7. Never leave the OffCourse™ pressurized with CO2 for more than a ski set.
8. Always store the OffCourse™ without CO2 cartridges in CO2 cartridge-adaptors.
9. Never touch used CO2 cartridges without gloves to avoid frostbite.
10. Always push the STOP button when a ski set is done.
11. A skier shall never pull out alongside the boat when a ski set is finished but let go of the handle straight behind the boat and wait for barrel plugs to be installed and safety-switches to be activated before pickup.
12. Never look down the barrel of any of the markers.
13. Follow instructions on CO2 source for safe handling and storage.
14. If your boat has a windshield that opens, always make sure that the hatch is in the locked position before installing the OffCourse™.
15. Never let the OffCourse™ distract the boat driver, always ski with a spotter who can operate the OffCourse™.



### **CAUTION!**

1. Make sure that the use of the OffCourse™ is legal in the area you intend to use it.
2. Always remove projectiles from magazines before storage.
3. Never use other projectiles than the ones recommended by Rodics Innovation.
4. Never use other CO2 cartridges than the ones recommended by Rodics Innovation.
5. Never reload projectiles or CO2 when the boat is in motion.
6. Never leave the OffCourse™ unattended on the boat.
7. Always store the OffCourse™ in its case in a room-temperature, dry environment.

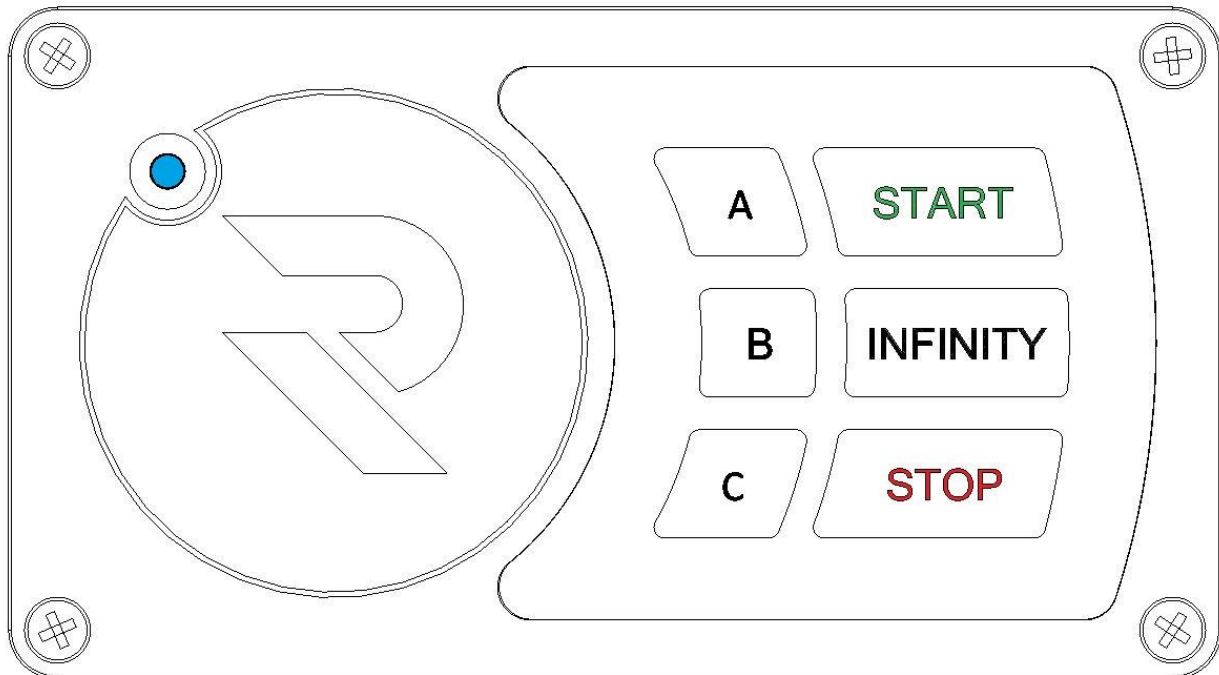
### **NOTICE.**

1. Clean leaked content from broken projectiles immediately, it might leave stains on gelcoat, upholstery or carpet.
2. Do not leave used CO2 cartridges on the gelcoat, upholstery or carpet. It might leave stains.

#### Disclaimer:

It is not possible for Rodics Innovation to warn the consumer about every possible danger related to use of the OffCourse™ and the consumer must use his or her own common sense and good judgement when using the OffCourse™.

## CONTROL PANEL GUIDE



## BUTTONS

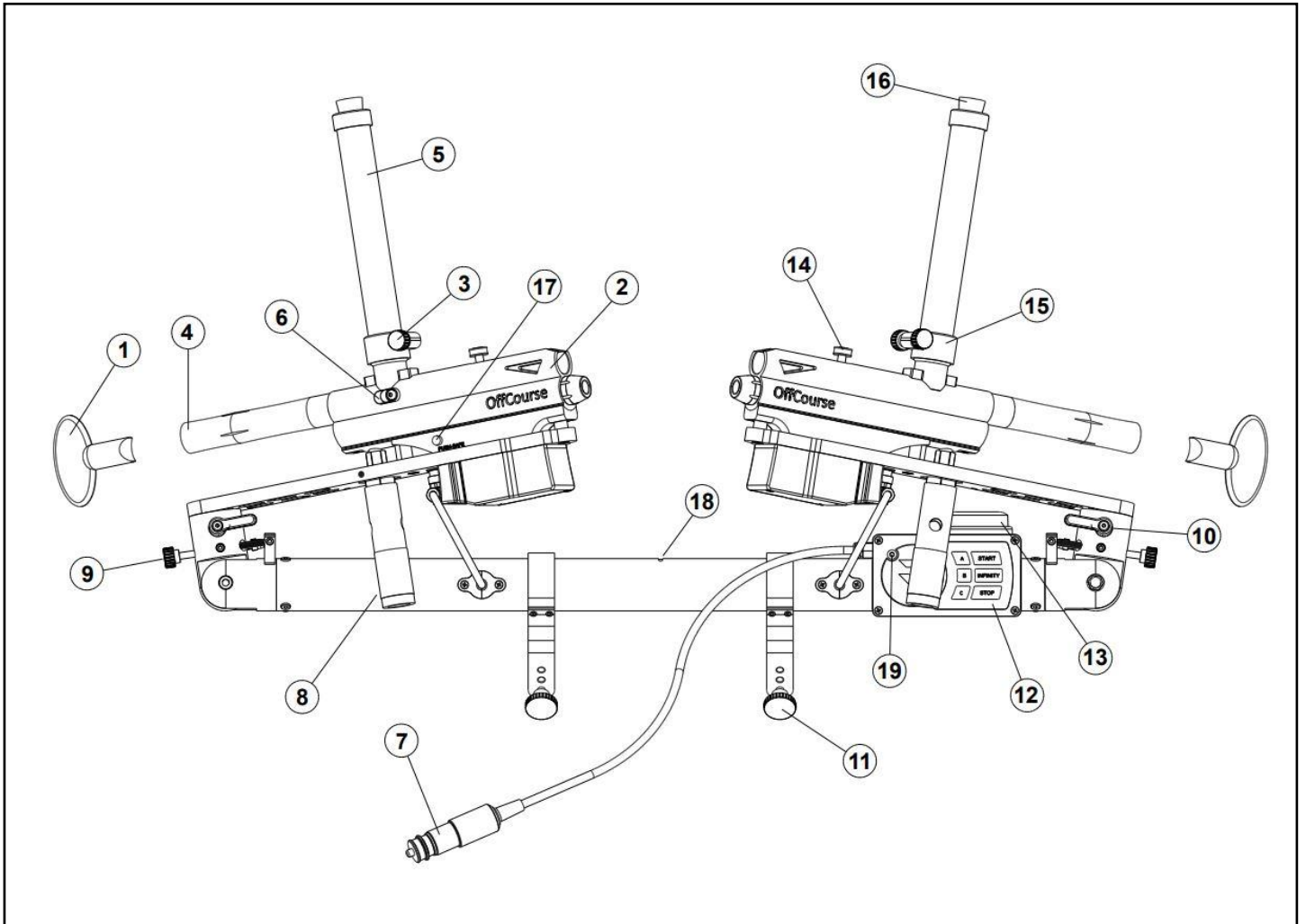
Buttons:	Functions:
A	Sets a regular slalom course. (134 feet distance between markings)
B	Sets 1,25 times a regular slalom course. (168 feet distance between markings)
C	Sets 1,5 times a regular slalom course. (201 feet distance between markings)
START	Starts the OffCourse™
INFINITY	Disengage the default setting of 7 markings in a row and allows the OffCourse™ to continue to mark until magazines are empty or until the user pushes the STOP button.
STOP	Stops the OffCourse™

## BLUE LED

Flashing light: The OffCourse™ has 12-volt power.

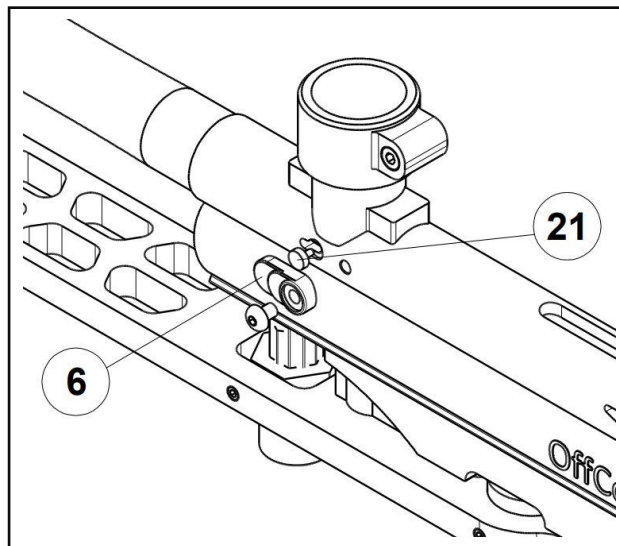
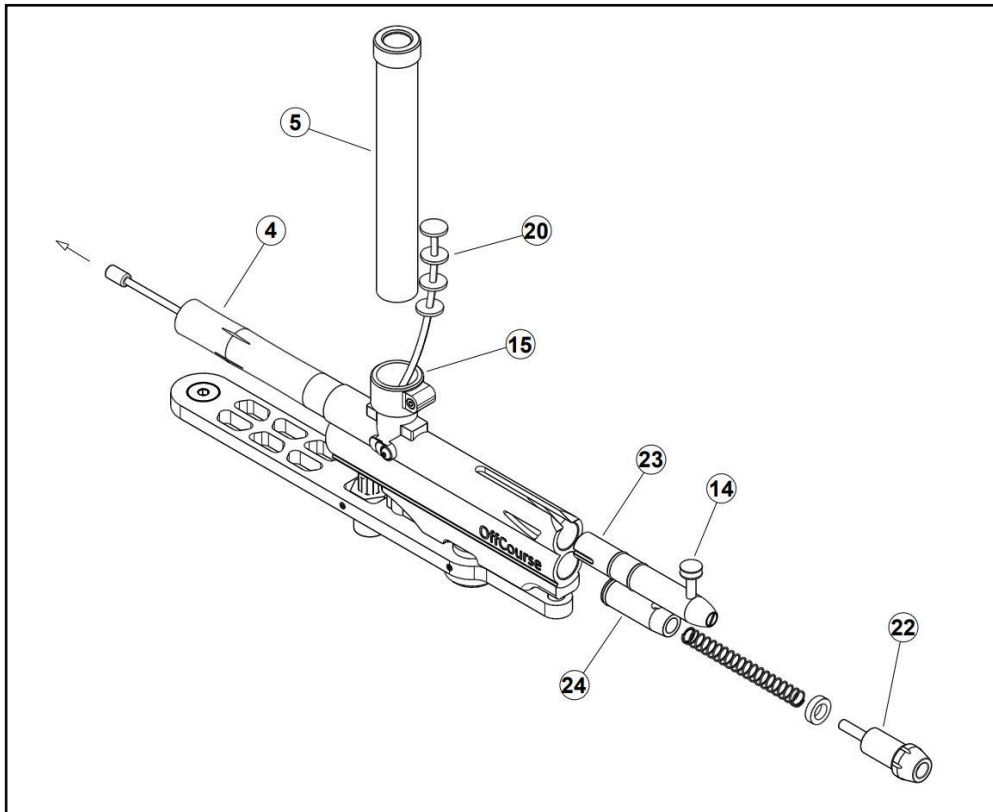
Fixed light: The GPS-antenna has signal and the OffCourse™ is ready to use.

## OFFCOURSE™ SCHEMATICS








- |                          |                   |
|--------------------------|-------------------|
| 1. BARREL-PLUG           | 11. THUMBSCREW    |
| 2. MARKER                | 12. CONTROL PANEL |
| 3. MAGAZINE LOCK SCREW   | 13. GPS-ANTENNA   |
| 4. BARREL                | 14. COCKING PIN   |
| 5. MAGAZINE              | 15. FEEDNECK      |
| 6. BALL LATCH CAP        | 16. MAGAZINE PLUG |
| 7. 12-VOLT PLUG          | 17. SAFETY-SWITCH |
| 8. CO2 ADAPTOR           | 18. CENTER-MARK   |
| 9. WIDTH ADJUSTMENT KNOB | 19. LED           |
| 10. PAN LOCK-LEVER       |                   |

## OFFCOURSE™ SCHEMATICS



- |                   |                     |
|-------------------|---------------------|
| 4. BARREL         | 20. BARREL SQUEEGEE |
| 5. MAGAZINE       | 21. BALL LATCH      |
| 6. BALL LATCH CAP | 22. BACK CAP        |
| 14. COCKING PIN   | 23. BOLT            |
| 15. FEEDNECK      | 24. HAMMER          |

## OPERATION INSTRUCTIONS

1.  **WARNING!** EYE AND EAR PROTECTION, make sure that everyone within range is wearing eye and ear protection designed to stop paintballs.
2.  **CAUTION!** Mount the OffCourse™ to the boat window header and secure it by tightening the *Thumbscrews*. (PIC 1) Make sure the OffCourse™ is centered on the boat, the *Center-Mark* shall line up with the boat centerline. (PIC 2) The *Thumbscrews* must be checked regularly and re-tightened if needed.
3. Install *Magazines* and lock them in place by tightening the *Magazine Lock Screw* (PIC 3)
4. Pan both markers forward towards the bow of the boat, once they hit the built-in stop, secure them in the forward position by tightening the *Pan Lock Lever*. (PIC 4-5 ) The *Pan Lock Lever* must be checked regularly and re-tightened if needed.
5. Cock the markers by pulling the *Cocking Pins* back until they lock in their rear position. (PIC 6-7)
6. Put 12-gram CO2 cartridges in the *Cartridge Adaptors*. Tighten the cartridge adaptor clockwise, once the cartridge punctures tighten adaptor rapidly to avoid CO2 leakage. (PIC 8)
7. Pull out the *Magazine Plugs* and load projectiles in the *Magazines*, never keep more than 12 projectiles in each magazine at a time. Reinstall the *Magazine Plugs*. (PIC 9)
8. Turn the boat ignition on, connect the *12-Volt Plug* to the boats 12-Volt socket. Wait until the blue LED on the control panel shines with a fixed light, indicating that the *GPS- Antenna* has a signal.
9. Remove *Barrel-Plugs* and deactivate *Safety-Switches*. (PIC 10)
10. Make sure the boat is leveled. Get the boat up to speed, once the skier is up on the water and the boat speed exceeds 22mph the OffCourse™ is ready to start.
11. Choose program, A, B or C, then press START.  
(After two seconds the OffCourse™ will mark one time on the left as an indication for the skier before it starts marking the actual course sequence.)
12. If the infinity mode is desired, press INFINITY between the choice of program and START. A normal button pattern might look like this:  
B – INFINITY - START. This gives a course with 24 markings with a distance of 168 feet between the markings.
13.  **WARNING!** Make sure to watch your hands since this operation is made close to the barrels. Adjust course width with the *Width Adjustment Knobs* on each side. (PIC 11) See course width calibration instructions on page 10-11.
14.  **WARNING!** Once the skier releases the handle straight behind the boat, press the STOP-button and stop the boat.
15.  **WARNING!** Re-install *Barrel-Plugs* and activate *Safety-Switches*. (PIC 12)
16. Pick up skier





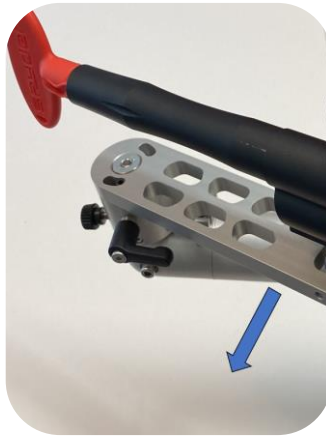
PIC 1



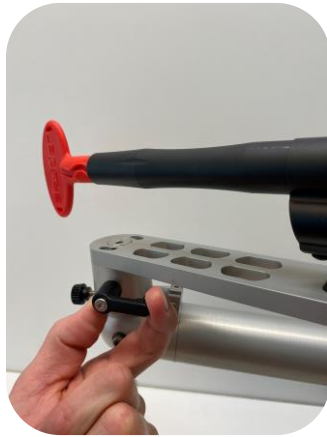
PIC 2



PIC 3



PIC 4



PIC 5



PIC 6



PIC 7



PIC 8



PIC 9



PIC 10



PIC 11

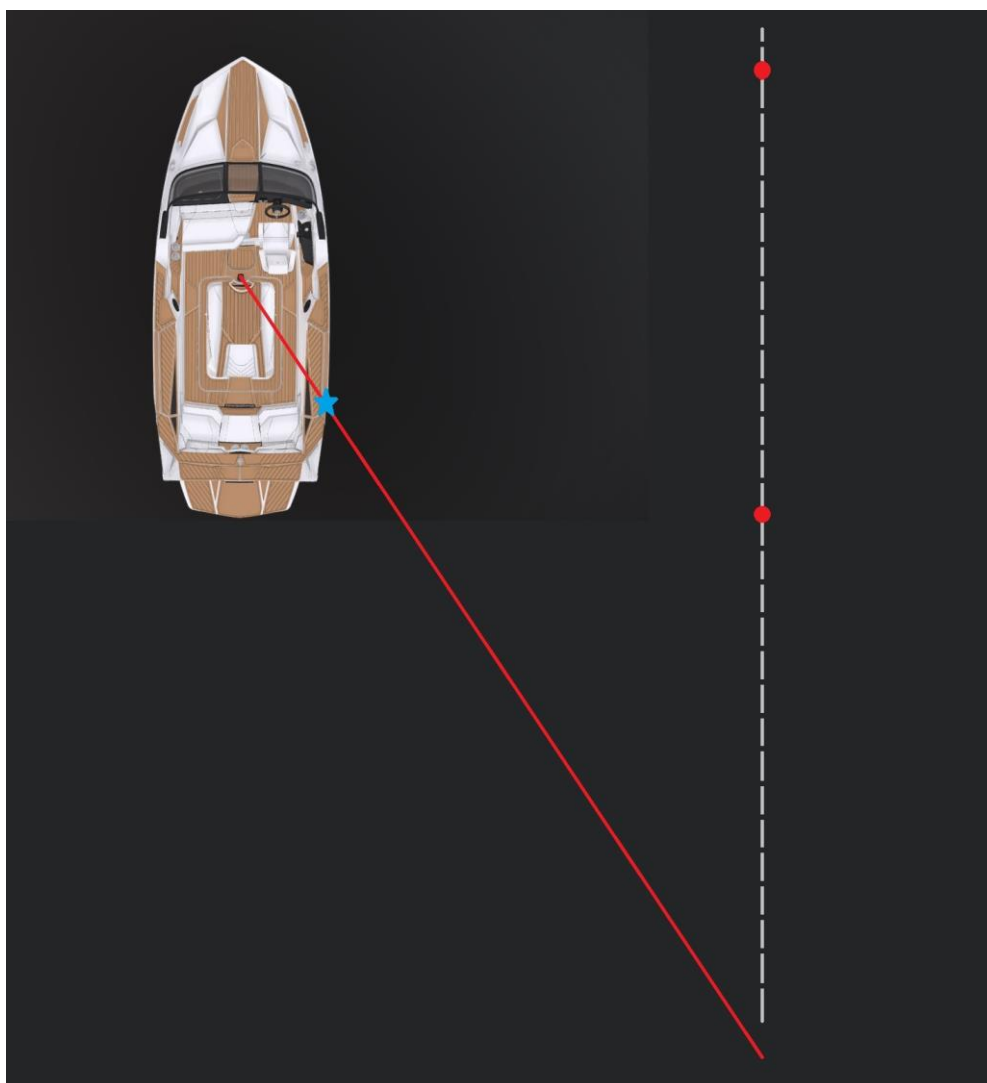


PIC 12

## SETTING COURSE WIDTH FIRST TIME PREPARATION




This operation is best performed with the boat on a trailer.

1. Position two objects of choice 37,5 feet out from the boat centerline, one that tangents the bow and one that tangents the stern. (Red dots in the picture)
2. Attach a 60 feet long rope to the pylon.
3. Grab the handle and straighten the rope, now walk out until the two objects line up in your sight.
4. Make a mark where the rope crosses the gunwale on your boat. We recommend fluorescent tape. (Blue star in the picture)
5. Put a piece of tape at the same spot on the gunwale on the other side of the boat using a tape measurer.
6. Once on the water, using the same rope length, the skier pulls out until the rope tangents the tape and holds it there. Once out there the skier looks for the calibration marks that are being described on the next page.



## SETTING COURSE WIDTH ON THE LAKE CALIBRATION

The calibration program is used when calibrating course width. There are two separate calibration programs, one for each side of the boat. The calibration program marks a rapid sequence of 3 markings in a row.

1.  **WARNING!** EYE AND EAR PROTECTION, make sure that everyone within range is wearing eye and ear protection designed to stop paintballs.
2.  **WARNING!** Watch your hands since this operation is made close to the barrels. Adjust course width with the *Width Adjustment Knobs* on each side.
3.  **WARNING!** Increase the angle of the markers on both sides by rotating the width adjustment knobs so that the first markings will appear close to the boat. This is to make sure no unnecessary wide marks are made.
4. Before taking off, make sure that the boat is leveled by using the bubble level on top of the control box. A leveled boat helps keep the course width consistent between sets.
5. **Left side calibration:**  
The skier pulls out to the left side. Start the left side calibration program by using the buttons on the left side of the membrane keyboard, pushing the sequence: C-B-A-START. The OffCourse™ will make 3 markings in a row on the left side. Communicate with skier and adjust course width using the width adjustment knob on the left side. Repeat until the skier runs straight through the calibration markings.
6. **Right side calibration:**  
The skier pulls out to the right side. Start the right side calibration program by using the buttons on the right side of the membrane keyboard and push the sequence: STOP-INFINITY-START. The OffCourse™ will make 3 markings in a row on the right side. Communicate with skier and adjust course width using the width adjustment knob on the right side. Repeat until the skier runs straight through the calibration markings.




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## INSTRUCTION VIDEO







Watch instruction video on how to set course width  
by scanning the QR-Code or visit:  
[rodicsinnovation.com/instructions](https://rodicsinnovation.com/instructions)

## RELOAD INSTRUCTIONS

1.  **WARNING!** EYE AND EAR PROTECTION, make sure that everyone within range is wearing eye and ear protection designed to stop paintballs.
2.  **WARNING!** HAND PROTECTION: Always wear gloves when removing used CO2 cartridges to avoid frostbite.
3.  **WARNING!** Unscrew the *CO2 Adaptor* counterclockwise, slowly, and let any leftover CO2 leak out through the evacuation holes in the sides of the *CO2 Adaptor*. (PIC 1) When all CO2 is evacuated from the cartridge, re-tight the *CO2 Adaptor* again before removing it completely. This prevents the CO2 seal in the marker from sticking to the tip of the CO2 cartridge. (PIC 2-3)
4. **NOTICE.** Always inspect the tip of the used cartridges to make sure that the seal in the markers does not sit on top of them. (PIC 2 and 3) Put new 12-gram CO2 cartridges in the *CO2 Adaptors*. Tighten the *CO2 Adaptors*, once the cartridge punctures tighten *CO2 Adaptors* rapidly to avoid CO2 leakage.
5. Remove *Magazine Plugs*, load projectiles in the magazines, never keep more than 12 projectiles in each magazine at a time. Reinstall *Magazine Plugs*. (PIC 4)
6. The magazines can be reloaded without being empty. One set of CO2 cartridges normally last for a total of 40-45 projectiles.

## AFTER USE INSTRUCTIONS

1.  **WARNING!** EYE AND EAR PROTECTION, make sure that everyone within range is wearing eye and ear protection designed to stop paintballs.
2.  **WARNING!** HAND PROTECTION: Always wear gloves when removing used CO2 cartridges to avoid frostbite.
3.  **WARNING!** Unscrew the *CO2 Adaptor* counterclockwise, slowly, and let any leftover CO2 leak out through the evacuation holes in the sides of the *CO2 Adaptor*. (PIC 1) When all CO2 is evacuated from the cartridge, re-tight the *CO2 Adaptor* again before removing it completely. This prevents the CO2 seal in the marker from sticking to the tip of the CO2 cartridge. (PIC 2-3)
4. **NOTICE.** Always inspect the tip of the used cartridges to make sure that the seal in the markers does not sit on top of them. (PIC 2 and 3)
5. Pan the markers back into rear position and lock them slightly with the *Pan Lock Lever*.
6. Disconnect the *12-Volt Plug* from the 12-Volt socket.
7. Remove *Magazines* and make sure there are no projectiles left in the markers.
8.  **WARNING!** Re-install *Barrel Plug* and activate *Safety Switch* on both markers.
9. Unscrew the *Thumbscrews* and remove the OffCourse™ from the boat window header.
10. Wipe the OffCourse™ with a soft cloth to make sure it is dry before putting it back in the case for storage.
11. Store the OffCourse™ in its case in a room-temperature, dry environment.



PIC 1



PIC 2



PIC 3



PIC 4

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## FEEDBACK AND COMPLAINTS

If you have feedback, questions or complaints about the OffCourse™ please let us know.  
To submit your thoughts or schedule a phone call please email us at [info@rodicsinnovation.com](mailto:info@rodicsinnovation.com)

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## INSTRUCTION-VIDEOS AND MANUAL



Watch instruction videos or download the latest version of the User's Manual by scanning the QR-Code or visit: [rodicsinnovation.com/instructions](https://rodicsinnovation.com/instructions)  
Rodics Innovation retains the right to modify the manual as it deems appropriate, the consumer is charged with the knowledge of the User's Manual set forth in any modifications.

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## TERMS & CONDITIONS



Read our Sales Terms and Conditions by scanning the QR-Code or visit:  
[rodicsinnovation.com/terms-and-conditions/](https://rodicsinnovation.com/terms-and-conditions/)

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## LIMITED WARRANTY





Read our Limited Warranty by scanning the QR-Code or visit:  
[rodicsinnovation.com/limited-warranty/](https://rodicsinnovation.com/limited-warranty/)

## ON LAKE MAINTANANCE

### (BALL BREAKAGE CLEAN UP)

1.  **WARNING!** EYE PROTECTION, make sure everyone within range is wearing eye protection designed to stop paintballs.
2.  **WARNING!** Make sure there are no CO2 supply attached to the markers.
3. Remove *Magazine*.
4. Remove *Bolt* by pulling the *Cocking Pin* up and pull the *Bolt* backward. (PIC 1-3)  
Wipe *Bolt* with a cloth.
5. Use a *Barrel Squeegee* to clean the *Barrel*, push the squeegee through the *Feedneck* and out the *Barrel*. (PIC 4)
6. Remove the *Ball Latch Cap* and remove the rubber *Ball Latch*, wipe *Ball Latch* with a cloth and make sure no rests of shells from broken balls are left in the hole/slot. (PIC 5-6)
7. Re-install *Ball Latch*, *Ball Latch Cap*, *Bolt* and *Magazine*.
8. **NOTICE.**  
Clean leaked content from broken projectiles immediately to avoid stains on gelcoat, upholstery and carpet.

## BASIC MAINTAINENCE

1.  **WARNING!** EYE PROTECTION, make sure everyone within range is wearing eye protection designed to stop paintballs.
2.  **WARNING!** Make sure there are no CO2 supply attached to the markers.
3. Examine *Ball Latch* on each marker for wear and scratches, replace if there is any sign of cracks in the rubber. (PIC 5-6)
4. Remove *Bolt* by pulling the *Cocking Pin* up and pull the *Bolt* backwards. Wipe *Bolt* with a cloth. Examine *Bolt* and replace O-rings if needed. (PIC 1-3)
5. Remove *Back Cap* and pull the *Hammer* out. Wipe *Hammer* with a cloth. Examine *Hammer* and replace O-ring if needed. (PIC 7-9)  
Lubricate O-rings with mineral oil. Attn: *Back Cap* is spring-loaded.
6. **NOTICE.**  
Hammer reassembly:  
Make sure that the hole in the *Hammer* for the *Cocking Pin* is facing upwards. (PIC 10)  
Use a flat head screwdriver to push down the sear in the hammer-chamber to allow the *Hammer* to slide in without damaging the O-ring. The sear is reached thru the slot on top of the *Marker*. (PIC 11)
7. Reinstall *Back Cap*, *Bolt* and *Ball Latch*. (PIC 12)





PIC 1



PIC 2



PIC 3



PIC 4



PIC 5



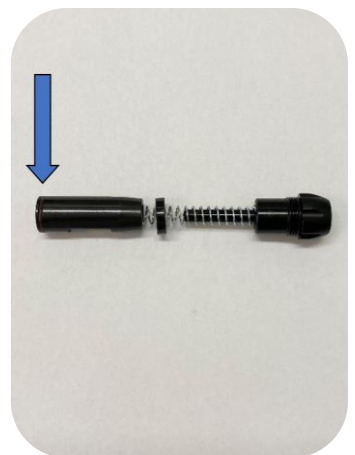
PIC 6



PIC 7



PIC 8



PIC 9



PIC 10



PIC 11



PIC 12

## TROUBLESHOOTING GUIDE

### **One marker does not fire at all while the other one works perfectly.**

- Is the marker cocked after reloading CO2?  
If not, recock the marker and try again.
- Have you put in a new CO2 cartridge?  
(One cartridge is good for approximately 25 firings per side)  
If not, put in a new cartridge and try again.
- Is the safety switch deactivated?  
The red O-ring should be visible on both markers, see pictures.



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### **I can't uncock the markers when done using the OffCourse™.**

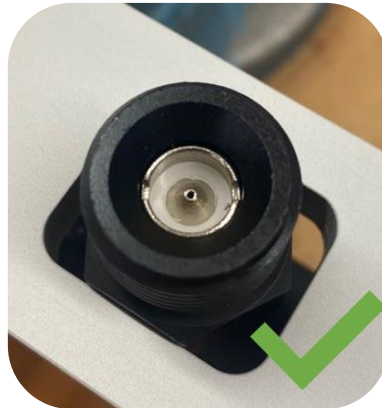
The markers can't be uncocked manually, the only way to uncock them is to run out of CO2. It does not damage the markers to store them cocked.



## TROUBLESHOOTING GUIDE

### **One marker lacks pressure, it fires but the projectile rolls out of the barrel.**

- Have you put in a new CO2 cartridge?  
If not, put in a new one and try again.
- Inspect the needle that punctures the cartridge when it enters the marker.  
There might be a small metal piece stuck in the hole from the previous cartridge as seen in the pictures.  
Remove the debris, insert a new CO2 cartridge and try again.



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### **The course width is inconsistent during a set.**

This is usually related to expired projectiles, once stored for too long they become oval and their trajectory starts to vary, order new projectiles.

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### **Marker leaks gas.**

Can you hear the leak, or does it drain over time?

#### I can hear the leak.

Does it leak from the cartridge area?

If yes, replace CO2 seal.

(There are spare ones in the included tool kit.)

#### It drains over time:

Paintball markers always have small internal leakage, if left pressurized for a few hours or overnight you should replace the CO2 cartridges.

#### Can you hear the leak out of the barrel?

If yes, replace the marker.