

ODYSSEY

O2



WWW.ODYSSEY.TV

Safety First!



WARNING



Paintball markers are not toys!

Misuse or careless use can cause *serious injury* or *death*.

ANY person located in the range of an actively used paintball marker must wear **eye protection** that is approved and designed for paintball use.

Read the operation manual.

Always use a barrel blocking device.

Always ensure the marker is not pointed at anyone when it is being handled outside the confines of an actual paintball game and where proper **eye protection** is being used.

It is recommended to be at least 18 Years of age to purchase. Children 14 or under should only use paintball markers under adult supervision or on paintball fields meeting ASTM standard F1777-97.

Introduction

Congratulations on your purchase of the O2™ paintball marker. This marker was designed for you, the avid paintball enthusiast. The O2™ Series offers the most advanced and desirable features along with options for future upgrades.

Features

- **FASOR™** - Forward Aired Spring Operated Return hammer system. This unique design allows O2 to be small and compact due to the single sided air driven design
- **225-300 PSI Operating pressure** – Allows O2 to get 1700+ shots out of a 68/4500. Low-pressure operation enables the marker to handle the most brittle paints the industry can throw at it.
- **SE™** – SE (Sensor Element) System™
- **LCD user interface** – provides many software features complete with tournament lockout.

Getting Started

Carefully read all user notices placed on the device. See **labels** on Marker.

Install a 9V alkaline battery in the grip using a Phillips screw driver.

Introduction

Air Sources

The O2 series of markers will work with both CO2 and Compressed Air.

- CO2 - On the O2™, the tank **must** have an **anti-siphon** tube correctly installed. Liquid should not enter the paintball marker. **USE A CERTIFIED AIRSMITH TO INSTALL THE ANTI-SIPHON SYSTEM SPECIFICALLY FOR YOUR MARKER.** If not installed properly, CO2 in liquid form will damage components of the O2. Damage caused by the introduction of Liquid CO2 will not be covered under warranty.
- Compressed Air – Compressed air is recommended for best results with your O2™. The compressed air system must be able to provide adequate flow of air at 550 – 700 PSI. Fixed or adjustable regulator systems may also be utilized. **With the O2's bottom line regulator you MUST use a pin valve type air source!**

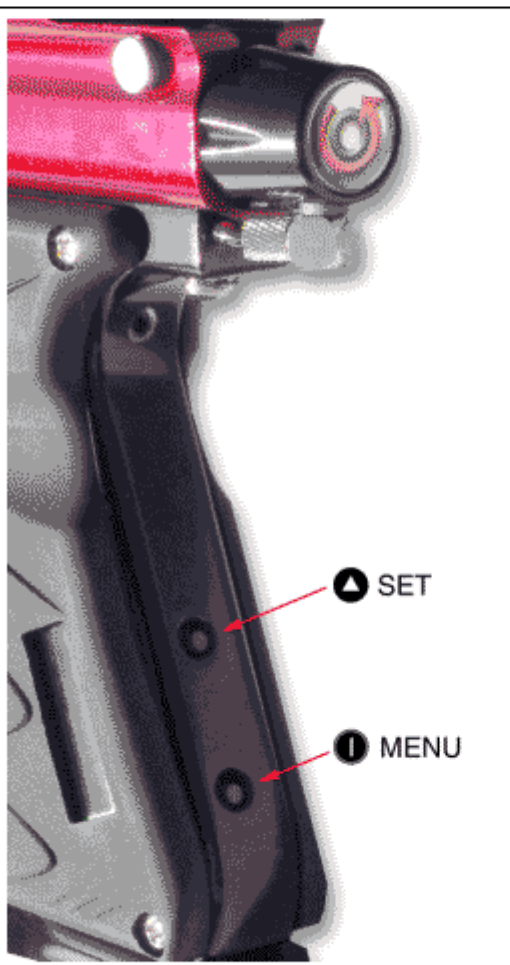
ALWAYS USE AN INLINE OR OTHER SUITABLE REGULATOR TO ENSURE AN OPERATING PRESSURE OF 225 - 300 PSI.

Odyssey recommends maintaining the factory regulator setup for optimal performance of your O2™.

Operating Instructions

Two buttons are used to control the electronic functions of the marker.

- 1) Menu Button – Press and hold 4 seconds to activate or deactivate the marker. Momentarily pressing this button toggles from menu to menu
- 2) Set Button – Used to toggle between menus



WARNING

ANY TIME YOU ARE IN
“VALUE CHANGE
MODE”
OR
“OPTIONS MODE”,
O2 WILL REMAIN **LIVE**
AND WILL FIRE IF THE TRIGGER IS
ACTUATED

**MAKE SURE YOU HAVE A BARREL BLOCKING
DEVICE INSTALLED!**

Operating Instructions

SETTING THE SAFETY ON

- Press and hold the **BOTTOM/MENU** button for four (4) seconds to turn the O2 ON or OFF.
- Press the **SET** button to go ACTIVE.
- **HOLD** the **SET** button for four (4) seconds to enter **SAFE** mode.

**The Display reads “SAFETY”
when the SAFETY is ON.**



Represents the upper button



Represents the lower button

ACTIVE MENU



AUTO



SEMI

The O2 has two modes:

AUTO

SEMI

To adjust the **RATE OF FIRE** for the **CURRENT MODE** (auto or semi):



PRESS the MENU button ONE time



PRESS the SET button ONE time

Operating Instructions

ADVANCED MENU


COUNTER


TIMER




POWER


SENSOR






TRIGGER


DWELL



  PRESS POWER BUTTON TWICE to enter the OPTIONS MENU.

To adjust OPTIONS MENU values:

-  to select the value you want to adjust
-  to enter "change value" mode
-  to change/reset the value
-  to save the changes

COUNTER = how many shots fired
TIMER = countdown timer
POWER = select power save features
SENSOR = select sensor mode
TRIGGER= trigger sensitivity
DWELL= dwell in milliseconds.



WARNING



When FIRING your marker always wear appropriate eye protection!

Operating Instructions

ADVANCED MENU - Details

PRESS THE MENU BUTTON TO GO TO:

COUNTER

The trip counter displays the number of times a firing sequence has been activated with the power on.

- To reset the counter press the *set button* and the counter will begin to blink
- Press the set button again and the counter will RESET to ZERO.
- Pressing the *MENU button* to return to active mode.

PRESS THE MENU BUTTON TO GO TO:

TIMER

Timer counts down from 1 to 99 minutes and displays minutes and seconds.

- To edit the time, press the set button and the display will blink
- press the *set button* to increment the timer to the desired time
- press the menu button to start the timer and return to active mode.

PRESS THE MENU BUTTON TO GO TO:

POWER

Allows you to select the type of power feature.

Once the POWER feature is displayed, the feature parameter can be changed by pressing the *set button*.

- AUTO – Shuts marker down after **20 minutes** with no user input.
- ON - Marker will stay on continuously until turned off.

Operating Instructions

PRESS THE MENU BUTTON TO GO TO:

SENSOR MENU:

Pressing the set button will make value blink.

Pressing the set button again will toggle between sensors ON and sensors OFF.

ON – Sensor Element is on to detect properly loaded paintballs prior to letting the O2™ initiate a firing sequence.

OFF – Sensor Element is deactivated. The O2 will not look for a properly loaded paintball before firing.



FORCE MODE



If paint breaks during a game the Sensor can be turned off QUICKLY by pulling the trigger and holding it down for 5 seconds.

PRESS THE MENU BUTTON TO GO TO:

TRIGGER MENU:

Pressing the set button will make the value blink

Press the set button repeatedly allows you to select a value between 1 and 30. The lower the number, the more sensitive the trigger becomes.

PRESS THE MENU BUTTON TO GO TO:

DWELL MENU:

Pressing the set button will make the value blink

Pressing the set button repeatedly will select a value between 1 and 15.

This is the amount of Dwell in milliseconds. The lower the number, the shorter period of time the firing valve remains open.

Stock setting is 7 milliseconds

Operating Instructions

Operating Pressure Adjustments

WARNING – DO NOT adjust your O2™ operating pressure any higher than 400 psi.

Operating pressure adjustments are made by using the ASA Style regulator included with your O2™. The operating pressure should be set between 225 – 300 psi.

- Increasing the pressure on your regulator – Use the included **HEX** tool to turn the adjusting nut. **IN** or clockwise (if viewing from the front). Watch the input pressure gauge supplied on the side of your regulator to get the desired setting.
- Decreasing the pressure – Turn adjusting nut **OUT** or counterclockwise. When decreasing the pressure the indicator gauge will not drop. *The marker must be fired to relieve this pressure before an accurate reading can be achieved.*
- Always recheck the velocity of the gun when adjusting operating pressures.

Low Pressure Adjustments

The regulator installed on the front of your O2 makes LPR adjustments.

- The adjustment for initial tuning should be made with **no paint** in the marker and the **SENSOR** system set to **OFF**.
- With the operating pressure set at 280psi and the LPR totally screwed out, begin to turn in the adjustment screw with the supplied **HEX** tool. This will allow stepped down pressure to be supplied to the solenoid when the marker is fired.
- Without paint in the marker, **FIRE** the marker while increasing the LPR to increase pressure. At first the marker will not fire.

Operating Instructions

LPR continued...

- Once the marker is firing, place a couple of paintballs in the marker and fire them measuring the velocity.
- The marker must be FIRED to relieve this pressure before accurate results can be achieved.
- To adjust the pressure: Turn clockwise to increase pressure, counter-clockwise to reduce pressure.
- If the solenoid begins to leak, **reduce the pressure adjustment immediately**. After firing the solenoid should stop leaking.

Velocity

- Velocity is a balance of Operating Pressure and LPR Pressure. When you have the LPR within range adjust the operating pressure regulator to achieve proper velocity.
- Always recheck the velocity of the gun when adjusting the LPR or bottom line regulator.

Tournament Lock Out Mode

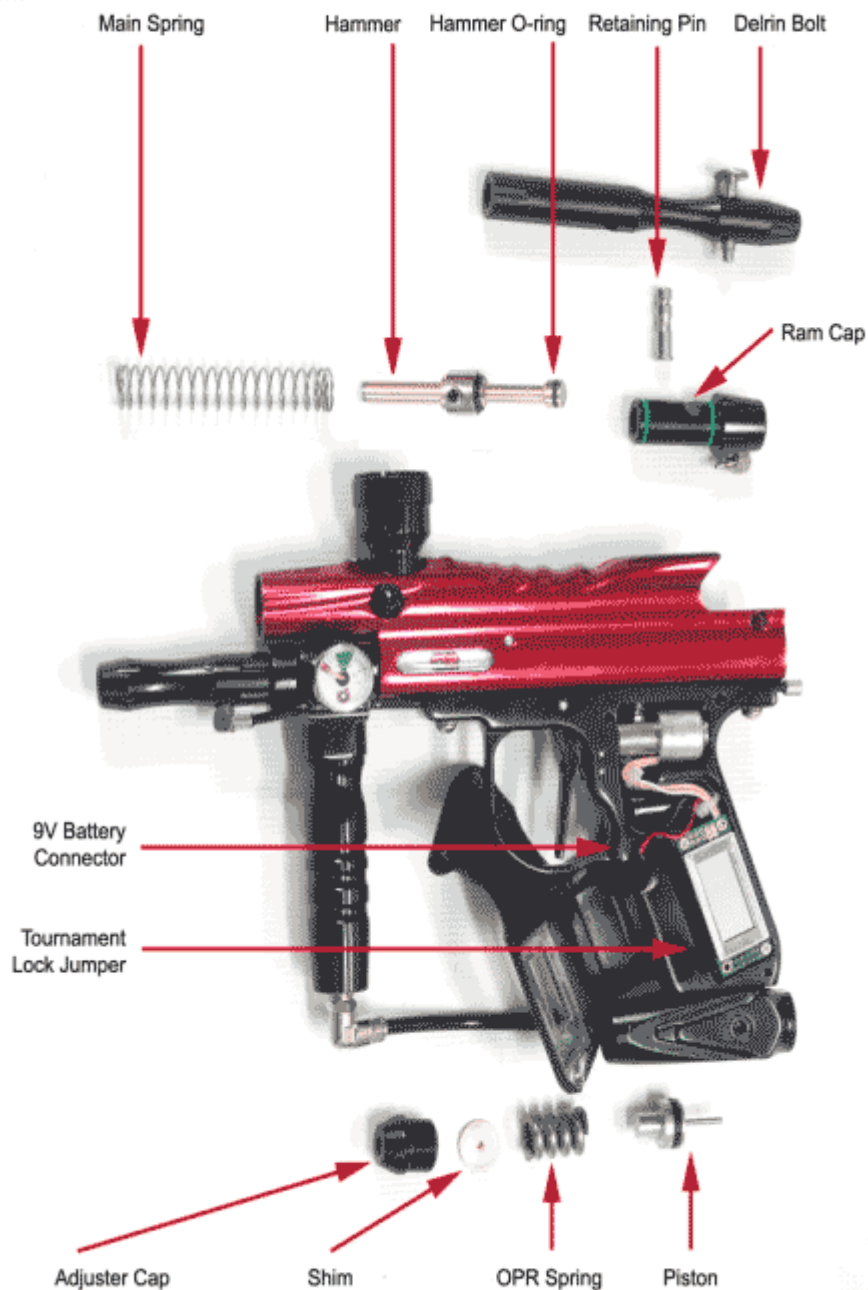
To adjust your maker using the tournament lockout mode you must access the inside of the grip.

BEFORE utilizing tournament lock out mode, insure your O2 is configured in the software to your legal tournament standards!

1. Remove the screws located on the LCD side of the grip panel and lift up the grip.
2. On the lower circuit board on the "AUX" plug, there is a jumper.
3. Remove the jumper.
4. Replace screws in reinstalled grip to close. Ensure no wires have become pinched when putting grip back on marker.

NOTE – When in tournament mode, the marker will only fire in the selected active mode. Your LCD Features will be limited. You will **not be able to change** rate of fire, semi/auto mode, trigger sensitivity or dwell until the jumper is re-installed.

Maintenance



Maintenance



WARNING



BEFORE ANY MAINTENANCE IS PERFORMED ON YOUR O2 SERIES MARKER IT MUST BE CLEAR OF PAINTBALLS AND MUST NOT HAVE AN AIRSOURCE CONNECTED!

Bolt Maintenance

Your O2™ is equipped with a Delrin quick-strip bolt to reduce friction. To ensure O2™ fires properly, the bolt must be kept clean. **It does not require lubrication!** If the surface becomes sticky follow these simple instructions.

- Remove bolt and clean thoroughly with a dry cloth. Soap and warm water may be used to remove contaminants.
- Dry thoroughly while making sure the pin locking system works freely.
- The pin lock system should be oiled to ensure it is acting correctly. **NOTE** - Do this very lightly while minimizing the amount of oils on the bolt itself.
- Clean bore of marker with squeegee and ensure no contaminants are present. This is very important!
- Replace bolt in marker and check movement. Bolt should now move freely in the bore.

Maintenance

Sensor Maintenance:

The sensor eyes must be kept clean for optimal performance.

Remove the sensor cover with the provided HEX tool.

Remove the sensor and the sensor shield. (small clear plastic piece).

Clean area thoroughly with a cotton swab and/or rubbing alcohol.

Re-assemble.

Striker Maintenance

Your O2™ is equipped with an extended ram cap designed for tool-free maintenance.

- 1) Remove quick strip pin
- 2) Unscrew the rear air line connector from the ram cap
- 3) Remove the ram cap

Removal of the ram cap will allow the striker and return spring to be removed. The striker slides out of the ram cap for inspection of the only active o-ring in the assembly.

Apply a gel type lubricant to the active o-ring.

The front of the striker contains a white Teflon impact bumper.

Inspect this bumper for wear, replace if necessary.

Make sure the striker and the body are clean and free of contaminants.

Re-assemble.

Troubleshooting

O2 will not turn on.

Hold the Power button for more than 4 seconds.

Replace the battery.

Make sure battery is connected properly

O2 will not fire.

If sensors are on, ball needs to be present – is your loader turned on?

Battery voltage is too low to fire.
Change battery

LPR pressure is too low. Adjust LPR while shooting WITHOUT PAINT.

Air leak from barrel area

Usually barrel leaks are due to lack of lubrication. Drop some oil into valve area. If this does not fix it the cup seal is worn and needs to be replaced or the valve o-rings need to be replaced.

Air leak from LPR area

Tighten properly or replace o-ring

Check front block retaining screw has proper thread-lock.

Air leak from hose fittings

Make sure hose fittings are properly tightened and/or sealed with thread sealant.

Troubleshooting

O2 will not completely cycle.

O2 is breaking paintballs out the barrel

O2 is chopping paintballs in the breach

Air pressure is too low. Operating pressure is 225-300 PSI.

Change the battery – voltage is too low.

Lubricate the Sealing Ring on the Striker. Check for wear on the sealing ring, it may need to be replaced.

LPR pressure may be too low. Adjust LPR while shooting WITHOUT PAINT.

Striker or Bolt could be dirty causing slow action.

Air pressure is too high. Adjust the operating pressure to 225-300 PSI.

Paintballs could be too large for the barrel. Stock Barrel size is .693

Ball detent is excessively worn or dirty and may need to be replaced.

Make sure the sensors are turned ON.

Check that the sensors are clean from debris or paint.

Battery voltage is low – change battery.

Safety First!

Play Hard! Play Fast! Play Safe!

Always remember that to have fun with any paintball related device, you must keep SAFETY FIRST. Please read all SAFETY warnings and obey the local rules and guidelines of any paintball facilities you visit.

WARRANTY INFORMATION

ODYSSEY warrants for one (1) year that this paintball marker is free from defects in materials and workmanship. Disposable parts (batteries, o-rings, seals, etc.) are not included. This warranty does not cover surface damages (scratches and nicks), misuse, improper disassembly and re-assembly, attempts made to drill holes or remove metal from the external surfaces which could reduce the safety of the marker. Do not make changes to the basic marker parts without written approval. Paintball markers are non-refundable. This warranty is limited to repair or replacement of defective parts excluding shipping costs. Do not attempt to alter the trigger assembly in any way as this will void your ODYSSEY warranty and may result in serious injury.



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