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## **Specifications**

## **General**

CAPACITY: 2,000 Paintballs

FEED RATE: 22 BPS depending on battery status and ball type

EMPTY WEIGHT: 7.7lbs (3.5 kg)

DIMENSIONS: 17.7 x 11.9 x 7.8 Inches (450 X 302 X 197 MM)

## **Technical**

POWER SUPPLY: Lithium-Ion battery with charger unit (12VDC, 1.0A, 2.1/5.5mm plug)

OPERATING TEMPERATURE: 5 to 30 °C (41 to 86 °F)

OPERATINGAIR HUMIDITY: 0 to 70 %

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## **Usage Instructions**



- Please read, understand and follow the directions in this instruction manual
- If you read these instructions and are unsure of your ability to make necessary adjustments properly, ask Maxxloader™ for help at customerservice@maxxloader.com
- Only use dry and new paintballs. Broken or deformed paintballs can cause the Maxxloader™ to malfunction
- Low batteries may cause the Maxxloader™ to not function properly. Use a fully loaded battery in every game and only use original Maxxloader™ battery
- Connecting the charger to the Maxxloader™ and re-charging of the battery must only occur in a dry environment and indoors.

  Ensure that all connectors are dry and clean
- Keep the Maxxloader<sup>™</sup> away from water
- Clean the Maxxloader™ before and after every game, feed adapter and its sensors in particular. Dirt and heavy dust can create excess friction and cause the Maxxloader™ to malfunction
- The overfilling of the Maxxloader™ with paintballs and forcing the lid to close will cause paintball jams
- Do not store any paintballs in the loader when it is not in use, empty the container after each game
- Remove the hose from Maxxloader™ when not in use and store it without any bends or twists, roll it out straight
- Tighten axle screws below the upper and lower rotor on a regular basis, they can get loose after intensive use

## Warnings



- The misuse of paintball equipment can cause serious injury or death
- Eye protection must be used by all players and persons within range of a loaded paintball gun
- Maxxloader™ recommends all players using its product to be 18 years or older; Person under 18 must have adult supervision to use Maxxloader™

### Sign explanation



The sign indicates important functional, usage or safety information. Please always read and follow this information. Noncompliance could lead to damage and/or malfunction. Any warranty is void if instructions have not been followed.

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## Maxxloader™ Standard Set

Thank you for purchasing the Maxxloader™. This instruction manual covers all aspects of your Maxxloader™. It is recommended that you read and understand the instruction manual before using the Maxxloader™ as it contains important product and safety information.

Maxxloader™ is a backpack paintball loader powered by an electronic engine, which conveys paintballs from a container through a hose to the marker.

The standard Maxxloader™ package contains the following:

1x Maxxloader™ main unit (container)

1x Ergonomic belt system

1x Flexible hose 800mm (31.5 Inches)

1x Hose cover

2x Hose connector (each consisting of one upper part, one lower part and two screws)

1x Feed Adapter

1x Connection wire 100 cm

1x Charger (12VDC, 1.0A, 2.1/5.5mm plug)

1x 18650 Lithium-Ion rechargeable battery

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## **Maxxloader™ Composition**

The Maxxloader<sup>™</sup> consists of the following main parts:

- 1: Top Cover
- 2: Upper Rotor
- 3: Hose Connector
- 4: Upper Tray
- 5: Syphon
- 6: Axle
- 7: Tube
- 8: Backboard
- 9: Back Cover
- 10: Lower Rotor
- 11: Lower Tray
- 12: Battery Door
- 13: Front Cover
- 14: Feed Adaptor
- 15: Hose (not shown)
- 16: Hose Cover (not shown)
- 17: Battery (shown on lower end of front cover (13))
- 18: Connection Wire (not shown)





Don't open and disassemble parts of the Maxxloader™ except as shown in chapter "Assemble the Maxxloader™" on page 5. Only certified Maxxloader™ retailers are authorized to fully disassemble the Maxxloader™. Non-specified use will violate your guarantee.

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### Assemble the Maxxloader™

#### General

The Maxxloader™ Set is delivered with the components shown on page 4. The assembling of the Maxxloader™ is done in a few steps:

- 1) Mount the Belt System to the Maxxloader™: See details on page 7
- 2) Fix the hose: The hose and its connectors are fully assembled with delivery. On one end there is the feed adapter to connect the hose to the marker. For connection, slightly push the open feed adapter end into the feed neck of your marker. On the other side of the hose there is the connector for the Maxxloader™ container. Carefully screw this end into the open port on the containers back side at the left top.
- 3) Fix the wire: The wire is already attached to the feed adapter. In order to attach the other end of the wire to your Maxxloader™, connect it to the cable junction which is right below the hose junction. Be gentle when connecting since the cable only fits in one specific position. Always use two hands to avoid damage and do not pull with force at any time. The wire itself can loosely be wrapped along the hose.
- 4) Fix the hose cover: Pull the hose cover over the hose, the cover side without an adjustment strap needs to be at the feed adapter. The other one with adjustment strap at the container.







Related to 2)

#### Hose

With the Maxxloader™ comes the flexible hose. Through this hose the Maxxloader™ main unit is connected with the marker. All paintballs are transported through the hose. To avoid any damage, the hose should be disconnected from the loader when it is not in use. Do not roll up the hose while storing, roll it out straight.

#### Hose Adjustment

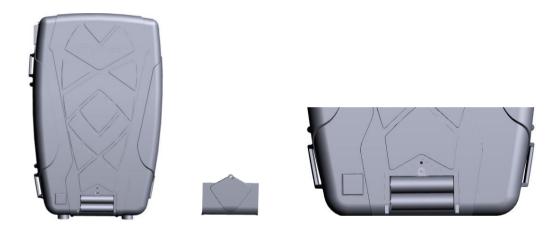
Every player should adjust the hose to their preferred, personal arm length. It should fit your body dimensions perfectly without generating extra loops. The length of the standard hose is 31.5" (800mm). Cut the hose with a clean and sharp knife at one of the hose rings to your optimal length. To do so you need to disassemble the hose connector which goes into the Maxxloader™ by opening the screws and gently pulling the two-part-connector apart. Check that you don't leave sharp edges when cutting. External pressure on the hose must be avoided. After adjustment put the hose connectors on both ends back together and tighten the screws.

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## Start of the Maxxloader™

## **Battery Installation**

One battery pack is required to operate the Maxxloader<sup>™</sup> and is part of the standard set. Loosen the screw of the door of the battery chamber with a screwdriver and remove the cover. Connect the battery pack to the cable inside the battery chamber and put the battery pack inside the battery chamber. Now close the door and secure it with the screw.



A fully charged Maxxloader™ battery pack lasts for up to 100'000 shots without recharging. Battery endurance varies depending on temperature, environment and usage conditions. The firing rate of the marker and the sequences can also impact battery endurance. The overall battery life under average playing condition should exceed one year. Always use a fully charged battery if you play, not fully charged batteries might result in malfunction.



For the best results always use a fully charged Maxxloader™ battery pack. Don't use battery packs other than the Maxxloader™ battery pack. The voltage of other batteries can damage or destroy the Maxxloader™ engine. You can purchase Maxxloader™ battery packs on our website www.maxxloader.com.

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## **Battery Recharging**

Use the charger in your Maxxloader<sup>™</sup> set to recharge the battery. Connect the charger to the battery charge socket in the battery chamber. A red LED light indicates that the battery is not yet fully charged. If the LED light shows green, the battery is fully charged. Remove the charger and close the lid of the battery chamber. Tighten the screw with a screwdriver. Recharging the battery takes about 4.5 hours. In any event, the battery should be re-charged at least every six months.

In case the battery runs low during a game, the player can simply replace the battery. Make sure the Maxxloader™ is completely turned off before opening the battery chamber. An additional battery pack can be ordered from www.maxxloader.com.



Connecting the charger to the Maxxloader<sup>™</sup> and re-charging of the battery must only occur in a dry environment and indoors. Ensure that all connectors are dry and clean.



## Mounting the Belt System to the Maxxloader™

The Maxxloader™ belt system is an ergonomic backpack transport system. With the belt system, the Maxxloader™ can we worn comfortably and safely. It has pads at the back and straps at the waist, shoulder and belly to adjust it to individual dimensions.

Four straps are used to connect the belt system to the Maxxloader<sup>™</sup> container. Each side of the container has two plastic strap holders and the belt system has two straps per side. Pull the straps through the plastic holders on the container and tighten them. The straps should be tightened properly and the Maxxloader<sup>™</sup> will stay comfortable on you back. Make sure the Maxxloader<sup>™</sup> is in a secure position while connecting it to the belt system to avoid damage. After attaching belt system and Maxxloader<sup>™</sup> with the four straps, put the vertical strap around the loader and lock it on top of the lid. Pull tight until the strap has a tight fit around the loader.







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### Filling the Maxxloader™ Container with Paintballs

Open the locks at both sides of the lid and take to lid off. Store the lid in a safe place to avoid it being stepped on or broken. Hold the Maxxloader™ slightly diagonal to the floor to make it easier for the paintballs to run down into the container. Fill paintballs into the container of the Maxxloader™ until full capacity is reached. You can fill up to 2'000 paintballs into the container. Close the lid with the two locks and ensure that the locks are properly fixed.



Overfilling the Maxxloader™ with paintballs and forcing the lid to close may cause paintball jams. Do not fill more than 2´000 paintballs into the Maxxloader

### **Paintball Transport Technology**

The Maxxloader™ has a patented paintball transport technology. Within the container two rotors work to transport paintballs from the container into the hose and directly into the marker. The lower rotor pushes paintballs inside the container upwards into a transport tube. At the top of the container, the second rotor feeds the paintballs into the hose and directly into the marker.

Sensors in the feed adapter detect if paintballs are shot, activating the engine to deliver more paintballs.

#### **Feed Adapter Sensors**

Sensors within the feed adapter indicate to the Maxxloader™ that paintballs have to be delivered. These sensors need to stay clean to be able to give the right indications. Keep the tube of the feed adapter clean with a wet towel. On the feed adapter entry there is one sensor to be found on each side.



Sensor position inside feed adapter. Second sensor across

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#### **LED Indicators**

There are four LED lights at the feed adapter to indicate the status of the Maxxloader™.

Scenario	Maxxloader™ status	Green LED indicator on the feed adapter
1	Balls in transit	LED: 1sec ON / 1sec OFF
		(8-10 seconds loading period after switching on the Maxxloader™ to fill the tubes and hose with paintballs)
2	Balls in position	LED: ON
3	Ball jam	LED: 0.25sec ON / 0.25sec OFF
4	No balls in the loader	LED: 0.25sec ON / 1.75sec OFF
5	Battery low	Scenario 1 + Scenario 5: LED 1sec ON / 3sec OFF
		Scenario 2 + Scenario 5: LED 2sec ON / 2sec OFF
		Scenario 3 + Scenario 5: LED 0.25sec ON / 0.25sec OFF / 0.25sec ON / 0.25sec OFF / 0.25sec ON /
		Scenario 4 + scenario 5: LED 0.25sec ON / 3.75sec OFF

#### **Paintballs**

The Maxxloader™ is designed to be very reliable and easy on paintballs. However, make sure to use good quality, dry and clean paintballs. Wet paintballs or re-balls may cause jamming.

Remove the paintballs after your day on the playing field. Don't store paintballs in the Maxxloader™ container.



Results may vary depending on the quality of paintballs used in your Maxxloader™. Paintballs are always deformed to some degree. It can happen, that a paintball is so heavily deformed that it blocks the Maxxloader™ transport system. In that case Maxxloader™ will stop working and the heavily deformed ball needs to be removed.

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## Maxxloader™ Usage

## **Intended Usage**

Your Maxxloader<sup>™</sup> has been developed in such way that it fully functions to common paintball game requirements. Its construction and used materials ensure solid protection against paintball game common forces (light hits, light rain etc.). Only use your Maxxloader<sup>™</sup> for its intended use. Extreme forces of any kind (mechanical, chemical, environmental) can lead to malfunction or defect of the Maxxloader<sup>™</sup>.



Any malfunction which occurred as a result of wrong usage or any noncompliance to the information given in this user manual lead to termination of any warranty claims.

## Mounting the Maxxloader<sup>™</sup> to your Back

Put the Maxxloader™ onto your back and fix it with the straps. You have straps to fix the Maxxloader™ at your waist, your shoulders, your chest and straps to fix the position on the back. All straps are adjustable so that the Maxxloader™ can fit perfectly to your body. The best setup for the belt system is to have the Maxxloader weight on your waist area before tightening all other straps. A stable position is essential for quick movements in the paintball game.

## **Turning the Maxxloader™ ON/OFF**

Once the battery pack has been installed, the battery chamber has been securely closed, and the Maxxloader™ is fully assembled, simply press the power button at the lower left rear of the Maxxloader™ container. After that, there is an approximately 8-second loading period, during which the Maxxloader™ pulls paintballs into its inner tubes as well as into the hose to the marker. It will stop when the entire transportation system is filled with paintballs. After the filling sequence, the LED at the feed adapter indicates a constant green light. Now the Maxxloader™ is ready to go. In order to turn the Maxxloader off, simply press the power button again.



### **Paintball Transport**

As soon as the LED on your feed adapter signals a constant green light, you can shoot your marker. As soon as a shot has been fired, the sensors within the feed adapter notice the need for more paintballs and initiate the Maxxloader™ to feed the marker from the container in real time. As soon as you stop shooting the Maxxloader™ stops feeding your marker.

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### **Shooting in Lying Position**

You are able to shoot in lying position. Paintballs can be shot when a player is lying on the ground down to an angle of approximately 35 degrees in relation to the ground. When the Maxxloader™ is operated in this position, fewer paintballs may be conveyed than in standing position, and the clutch of the rotor may start working. This is a normal procedure and will not affect the functionality of the Maxxloader™. At volumes <250 paintballs and a lying angle <50 degrees, not all paintballs can reach the lower rotor anymore. Briefly raise straight up to increase the angle and deliver the remaining balls to the lower rotor.

## **Cleaning and General Maintenance**

#### Maxxloader™ Container

- 1. Clean the Maxxloader™ before and after each use and whenever it is dirty or covered with paint. The rotors can be removed and cleaned with water. You can wipe the container with a soft wet towel. Clean only with plain water. Chemical cleaners contain alcohol and detergents which can weaken the Maxxloader™.
- 2. Keep container free of water.
- 3. Two small drainage holes at the Maxxloader™ bottom will drain any potential moisture.
- 4. The screws on the axle need to be tightened regularly, best after each longer game. They are located below the upper and lower rotor. These rotors can be removed. The screws might get a bit loose through the vibrations of the axle and need to be fixed properly at all times.
- 5. To avoid damage due to a potential leaking battery, it is recommended to replace the battery pack if you don't use it for more than six months.
- 6. When the loader is not in use, the user needs to disconnect it from the marker and remove all the paintballs from the hose and container.
- 7. Never store the Maxxloader™ in areas that may have chemical fumes. Gasoline, kerosene, alcohol and other chemicals and fumes will weaken the Maxxloader™. Always store in dry environment.
- 8. Never store the Maxxloader™ in areas of extreme heat or cold. Temperature extremes will damage the Maxxloader™. Store the Maxxloader™ in a cool, well-ventilated place

#### **Feed Adapter and Hose**

The sensor that indicates to the Maxxloader™ that paintballs have to be delivered is placed within the feed adapter. It needs to stay clean to be able to give the right indications. Make sure that no dirt gets into the hose when it is not connected to the marker to avoid dirt in the sensor area.

Clean the hose thoroughly on a regular basis. Remove it from the container, disassemble the feed adapter and run water through the hose until all paint and dirt particles are removed. Fully dry the hose before next usage.

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For general cleaning we recommend the Maxxloader™ - Barrel Maid. Gently push it through the hose as often as needed to get the best cleaning result. The barrel maid can be ordered on our website www.maxxloader.com.

In case the hose receives any twists due to usage and/or storing, please put it into warm water. This will solve any twists. Make sure that wire and feed adapter with sensors do not get in contact with water. Remove before if necessary.

## **Belt System**

The belt system can be cleaned like the belt system of a regular backpack. Depending on the dirt grade it can be cleaned with a damp cloth or even soap water. Make sure you disconnect the belt system from the Maxxloader before applying any water to clean it to avoid water damage.

## **Error Handling**

## **No Paint Delivery**

If your Maxxloader™ does not deliver paintballs when the on/off button is pressed check the following steps:

- 1. Make sure the Maxxloader™ is not empty of paintballs
- 2. Check that the upper and lower rotors are inserted correctly and that the transport tube is connected to both rotors
- 3. Make sure that the axle is inserted into the lower rotor
- 4. Check that the battery pack is charged and installed the correct way
- 5. Make sure the wire is connected to container and feed adapter
- 6. Ensure no paint residuals are in the tunnels or elsewhere in the Maxxloader™

### Maxxloader™ unusually noisy

If your Maxxloader™ sounds unusually loud while running, please undergo a thorough cleaning of all parts. Dirt and dust can cause excessive sound.

#### **Paint Residuals**

In the very unlikely event that paint bursts within the Maxxloader™, follow these steps:

- 1) Stop playing and leave the game area to clean the paint residuals
- 2) Switch the Maxxloader™ off and open the locks on both sides of the lid and remove it. Store the lid in a safe place to avoid damage
- 3) Loosen the hose and the wire
- 4) Take out the upper tray with the upper rotor and put it aside

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- 5) Remove the paintballs from the container
- 6) Take the lower rotor out
- 7) Take a towel that absorbs the paint and clean the inner part of the container
- 8) After proper cleaning reassemble the Maxxloader™ with the parts that you took out and fill new paintballs into the Maxxloader™. Don't use paintballs that have any residual on them

#### **Ball Block**

Under normal conditions no ball block should occur. In the very unlikely event that a ball blocks the engine, the rotor will turn backwards for a short moment to solve the block. You can keep on playing. This happens rarely, but we implemented that functionality to handle even bad quality paint that could get stuck.

## **Legal Information Limited Warranty**

Maxxloader Limited warrants that your Maxxloader™ will be free from defects in materials and workmanship for the time that applies by law. Any product determined by Maxxloader Limited to be defective in materials or workmanship in accordance with the above warranty will be repaired or replaced, at the option of Maxxloader™, free of charge when received at the factory freight prepaid, together with proof of purchase. This warranty is expressly in lieu of all other warranties. Please register online for your guarantee.

Any implied warranties of merchantability for a particular purpose are limited to the same duration as this expressed warranty. This warranty does not cover incidental or consequential damages. Maxxloader Limited shall not be liable for any incidental or consequential damages. Some states e.g. in the US do not allow the exclusion or limitation of implied warranties, incidental or consequential damages, so the above limitations and exclusions may not apply. This warranty does not cover any problems resulting from misuse, abuse, neglect, alteration, failure to perform maintenance as instructed, unauthorized repair or service, or damage caused by contaminants. In case the warranty sticker at the bottom of the Maxxloader™ is damaged, no warranty will be granted. This warranty does not cover any representation or warranty made by dealers beyond the provisions of this warranty. This warranty does not cover costs incurred for normal repair, inspection and preventive maintenance. You must establish proof of purchase to obtain warranty service or replacement and you must have activated your guaranty on the maxxloader.com website. You may also establish proof of purchase by completing the Warranty Registration Card and registering to Maxxloader Limited on www.maxxloader.com. This warranty gives you specific legal rights and you also have other rights which vary from state to state e.g. in the US.

If you have any questions about your Maxxloader™ product, please contact Maxxloader Limited under customerservice@maxxloader.com

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## **Technical Information**

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -Reorient or relocate the receiving antenna
- —Increase the separation between the equipment and receiver
- —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- —Consult the dealer or an experienced radio/TV technician for help

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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Maxxloader™ User Manual Status as of: August 2015

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