EMPIR3
BATTLE TESTED

RIP CLIP™

CONTENTS

1. Rules for Safe Marker Handling

• Treat every marker as if it were loaded.
• Never look down the barrel of a paintball marker.
• Keep your finger off the trigger until ready to shoot.
• Never point the marker at anything you don't wish to shoot.
• Keep the marker on "SAFE" until ready to shoot.
• Keep the barrel-blocking device in/on the marker's muzzle when not shooting.
• Always remove paintballs and propellant source before disassembly.
• After removing propellant source, point marker in safe direction and discharge until marker is degassed.
• Store the marker unloaded and degassed in a secure place.
• Follow warnings listed on propellant source for handling and storage.
• Do not shoot at fragile objects such as windows.
• Every person within range must wear eye, face, and ear protection designed specifically to stop paintballs and meeting ASTM standard F1776.
• Always measure your marker's velocity before playing paintball and never shoot at velocities in excess of 91.44 meters (300 feet-per-second).

NOTE: Eye protective devices designed specifically for paintball use must be worn by the operator and anyone within range.

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READ OWNER'S MANUAL BEFORE USING.

2. Introduction and Specifications

Empire Battle Tested Paintball would like to thank you for your purchase of the Empire BT Rip-Clip™. At Empire Paintball, our mission is to build products that exceed our customers' highest demands. We aim to shake the foundations of the status quo and set unprecedented standards in value, design, service, and quality.

Specifications
• Power Requirements: 4AA batteries (not included)
• Capacity: 200+ paintballs
• Feed Rate: 15bps+
• Construction: Composite

Features
• Upgradable to RF (Radio Frequency)
• Adjustable Speed
• Automatic Ball Stack Monitoring
• Auto-Off 1 Hour
• Adjustable Sound Sensitivity
• Low Battery Indicator
• Ultra-Quiet Belt Drive

3. Getting Started

Rip-Clip Setup

The Rip-Clip™ comes with 2 different adapter plates and 2 different length rail locking screw sets for use on all TM, BT-4, and Omega Series markers.

- For BT-4 and Omega Series markers, use the shorter screws to attach the Rip-Clip™ to the paintball marker.
- For the TM-7 and TM-15 Series markers, use the longer screws to attach the Rip-Clip to the paintball marker.
- Select the adapter plate for your marker, they are labeled either TM-15 or TM-7. Do not use any of the adapter plates for the BT-4 or Omega Series markers.
- Put both screws with thumb nuts attached into the Picatinny rail locking arm.
- Place the correct adapter onto the Rip-Clip body if needed.
- Install the rail locking arm with screws and thumb nuts onto the Rip-Clip body using a flathead
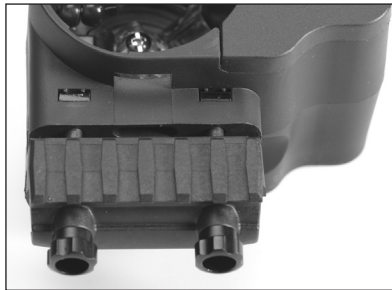
Fig. 3.1

screwdriver (Fig.3.1).
- Make sure the screws are fully seated into the body.

Battery Installation

- Using a Phillips-head screwdriver, remove the screw on top of battery door and lift off door.

Fig. 3.2

- Install (4) AA alkaline batteries following the polarity markings (Fig. 3.2).
- Reinstall the door and battery door screw.

Note: For best results, only use quality name-brand alkaline batteries. When replacing batteries, used batteries should be recycled.

Rip-Clip Installation

- Loosen up the thumb nuts (Fig. 3.3).

Fig. 3.3

- Install the Rip-Clip onto the marker's Picatinny rail (Fig. 3.4).
- Check the position on the Picatinny rail and make sure the Rip-Clip is aligned with the feed hole on the side of the marker (Fig. 3.5).
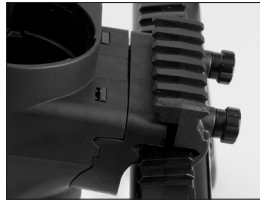- Tighten up the thumb nuts and you're ready to go.

Hopper Installation
- You will notice that the loader has an alignment tab on the left side.
- Locate the slot for the tab within the Rip-Clip.
- Insert the loader into the slot and turn the loader Counter-clockwise until it is locked firmly into the Rip-Clip. (Fig. 3.6)

Fig. 3.4
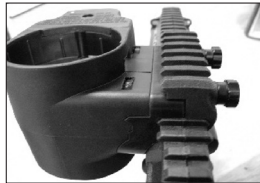
Fig. 3.5

Fig. 3.6

Activating the Rip-Clip
- Locate the power button on the rear of the Rip-Clip. Tap the power button once to turn the Rip-Clip on (Fig. 3.7). The motor will spin for a second and the loader is now ready to use.
- The green LED will flash repeatedly while the unit is on to show it is ready. If the LED flashing changes to red, then the batteries are low and need to be replaced.

Fig. 3.7

- To turn off the Rip-Clip, press and hold the power button until the LED changes to Red. Release the button and the loader will turn off. If the loader is left on, it will shut off after 1 hour of inactivity.

Rip Drive
The Rip Drive is the thumbwheel located under the Rip-Clip and has several uses.

- Manually load up to 6 paintballs into your paintball gun for every revolution of the thumbwheel. This can be done to chronograph your marker without the need to turn on the hopper, or to feed paintballs if your batteries should happen to die during a game.
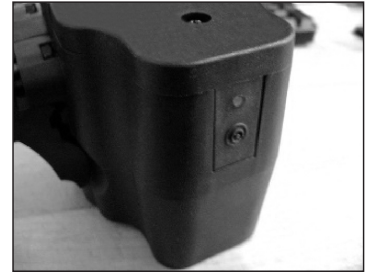- Clear a ball jam in your loader during a game by rotating the Rip Drive backwards and clearing the jam, then forwards again to load the ball stack.
- Use smaller thumb wheel to replace the factory installed Rip Drive wheel if necessary.

4. General Maintenance

Emptying the Loader for Storage
With the Rip-Clip turned off, turn it upside down to dump the paintballs out. While upside down, rotate the Rip Drive backwards from the feeding direction to release paintballs. Do not store your Rip-Clip loader with any paintballs left inside.

NOTE: When storing the Rip-Clip for an extended period of time, remove the batteries and store it in a dry place.

Cleaning The Loader
To clean the loader, use only a clean, dry cloth, or apply a small amount of goggle lens cleaner to a clean, dry cloth and wipe clean. Do not apply goggle lens cleaner directly to loader surfaces, as too much contact will deteriorate plastic and cause damage.

If any paintballs break inside the hopper; do not use any liquids or chemicals to rinse out the hopper; doing so will cause severe damage to the loader electronics.

Preloading the Drive Carrier Spring
If you remove the drive carrier for cleaning it will be necessary to preload the drive carrier spring. Follow the instructions below.

- Install the spring cup, drive spring, and drive carrier onto the drive shaft. Make sure the spring sits in the spring cup correctly.
- Rotate the drive carrier clockwise until its tab hits the spring housing tab. You should now have both spring tabs pressed together.
- Lift the drive cone slightly and rotate it clockwise up and over the spring cup's tab, taking the upper spring tab with it.
- Snap the drive carrier down with the drive spring tab on the right side of the drive cup's tab.
- The drive cone spring is now pre-loaded and will snap back properly when wound up.

5. Board Functions

Programming

There are two functions which can be adjusted in programming mode. The default settings should be good for your marker.

• Motor Speed– 3 levels of adjustment, level (1) being the slowest motor speed and level (3) being the fastest.

Note: It is recommended that you do not set the speed higher than needed. Using higher speeds than needed will only shorten the life of your batteries.

• Sound Sensitivity– 3 levels of adjustment, level (1) being the least sensitive and level (3) being the most sensitive. This setting is only used in sound activation mode.

Note: It is better to have the microphone setting less sensitive and still able to detect the marker firing. Do not set it to 3 if setting 1 detects the marker firing. Only use a higher setting if the lower setting does not detect the marker firing.

	Functions	LED Color	Default Value	Range
1	Motor Speed	Solid Green	2	1 - 3
2	Sound Sensitivity	Solid Orange	2	1 - 3

Entering Programming Mode
• Make sure the loader is turned off.
• Press the power button, and then quickly release the power button.
• A solid green LED will appear, while the LED is a solid green, press the power button one time.

Current Settings

Once in programming mode the loader will display the current settings.
• The green LED will flash the motor's current speed setting (1 slowest; 3 fastest).
• The orange LED will flash the current sensitivity setting (1 less sensitive; 3 most sensitive).

Adjusting Settings

After the Rip-Clip displays the current settings, you can enter the new setting that you desire.

- The green LED will come on for 1 second. If changing the speed setting, press the power button while the LED is a solid green. When the LED turns to red the new setting can be entered. Now press the power button the number of times necessary based on the new setting. Each time the button is pushed an orange LED will appear. After the new setting is entered the green LED will flash the new setting.
- The orange LED will come on for 1 second. If changing the sensitivity level setting, press the power button while the LED is a solid orange. When the LED turns to red the new setting can be entered. Now press the power button the number of times necessary based on the new setting. Each time the button is pushed an orange LED will appear. After the new setting is entered the orange LED will flash the new setting.
- The Rip-Clip will automatically exit programming mode.

6. RF (Radio Frequency)

RF Installation
The Rip-Clip comes ready to accept an Empire RF (Radio Frequency) Transmitter (not included). Once a transmitter is installed the Rip-Clip will be ready to receive an RF signal from your marker.

- Remove the battery cover and set aside.
- Carefully plug the RF transmitter into the Rip-Clip's harness (Fig. 6.1).
- Install the RF Transmitter into the Rip-Clip's body as pictured (Fig. 6.2).
- Make sure the harness wires are not in the way of the battery door before re-installing it.
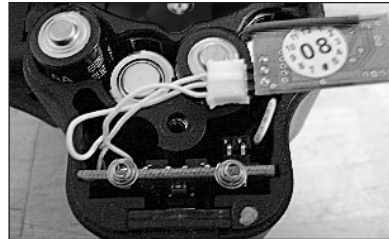

Fig. 6.1

Using the Rip-Clip in RF Mode
To use the Loader in RF mode, an Empire RF Transmitter or compatible RF transmitter must be installed in you marker.

Fig. 6.2

The Rip-Clip will automatically switch to RF Mode when a signal is received from your marker. If no signal is received the loader will activate with sound. It is recommended that you test that the Rip Clip is receiving the RF signal, by turning the eyes of on a de-gassed marker and check that the Rip-Clip spins for each marker solenoid activation.

In RF mode, you can switch back to Sound Mode by pushing the power button one time and the LED will change from a double flashing green LED to a single flashing green LED. If the power button is pushed 3 times in a row within 10 seconds after the loader is turned on it will lock into sound mode until the loader is turned off.

Synchronizing Loader to your Marker

It is recommended that you synchronize your loader to your marker for optimal performance when using RF Mode. Also, synchronizing your loader will prevent other RF signals from interfering with your signal. It is possible to synchronize two markers with the Empire RF Transmitter to your Empire BT Rip Clip Loader.

1) Make sure your marker is degassed and unloaded.
2) Turn your marker on with the eyes turned off. Read your markers manual for eye operation if you are having problems turning them off.
3) Turn on the Empire BT Rip Clip Loader
4) Press power button and hold in until the solid red LED turns to orange.

5) Release power button and while the orange LED is lit, pull the trigger on your marker. This must be done within 2 seconds of the LED changing to orange.
6) If done correctly the LED will change from orange to green if a signal is received from your marker. You are now ready to use your Empire BT Rip Clip Loader in RF Mode.

7. Parts List and Diagram

REF Nº	DESCRIPTION	PART #
1	TM-15 Adapter Plate	17852
	TM-7 Adapter plate	38449
2	Rip Drive 2 Wheel	31023
3	Battery Cover Assembly	38413
4	Bottom Cover	38416
5	Ball Sleeve	38421
6	Motor w/ Harness	38423
7	Bottom Cover Screw	38425
8	Battery Cover Nut	38426
9	Anti Jam Assembly	38427
10	Drive Shaft	38428
11	Spring Housing	38429
12	Drive Carrier	38430
13	Rail Locking Thumb Nut	38433
14	Battery Cover Screw	38435
15	Battery Cover Washer	38436
16	On/Off Button Pad	38442
17	Rail Locking Screw Long TM Marker	38445
	Rail Locking Screw Short BT-4 & Omega Markers	38432
18	TM Circuit Board	38448
20	Anti Jam Spring	38800
21	Bearing	38803
22	Drive Cone Spring	38814
23	Drive Belt	38820
24	Drive Shaft Screw	38822
25	E-Clip	38823
26	Pulley Gear Pin	38828
27	Sprocket Gear	38830
28	Pulley Gear	38837
29	Picitinny Locking Rail	38395
30	Locking Rail Nut	38396
31	Rip-Clip RF Body	38397
not shown	Battery Polarity Sticker	38438
not shown	Battery Spring Tab Screw	38440
not shown	Battery Spring Tab	38441
optional	Empire RF Transmitter Link Kit	38926
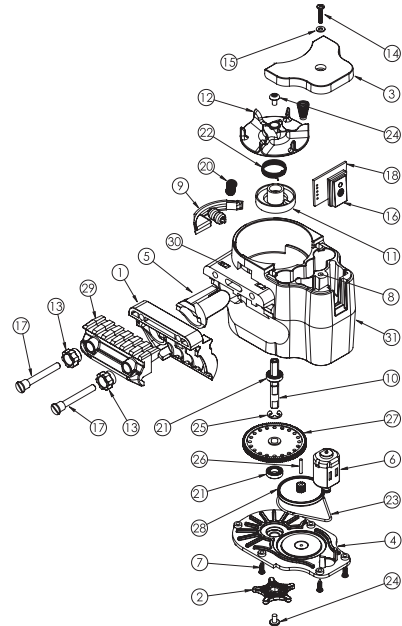
8. Rip-Clip Limited Lifetime Warranty

LIMITED LIFETIME WARRANTY INFORMATION
(ORIGINAL PURCHASE RECEIPT REQUIRED)

Empire BT Paintball warrants that this product is free from defects in materials and workmanship for as long as it is owned by the original purchaser, subject to the terms and conditions set forth below. Empire BT Paintball will repair or replace with the same or equivalent model, without charge, any of its products that have failed in normal use because of a defect in material or workmanship.

Empire BTPaintball is dedicated to providing you with products of the highest quality and the industry's best product support available for satisfactory play.

Purchaser should register product to activate warranty. Register your product by:
1. Online at www.paintballsolutions.com
2. Complete the product registration card (if applicable) and mail along with a copy of your receipt to Paintball Solutions, 11723 Lime Kiln Rd., Neosho, MO 64850.

WHAT THIS WARRANTY DOES NOT COVER

This warranty does not cover problems resulting from abuse, the unauthorized modification or alteration of our product, problems resulting from the addition of aftermarket products and scratches or minor superficial imperfections. Due to the nature of paintball products it is important that the product be maintained by the user as indicated in the product manual to remain in good operating condition. Your Limited Lifetime Warranty will be void if you fail to maintain the product as recommended in the product instruction manual. In addition, certain parts of a product may be subject to wear through regular usage. Replacement and repair of such parts is the responsibility of the user throughout the life of the product. These parts are not covered under the Limited Warranty. Examples of this type of part include (but are not limited to) goggle lens, straps, O-ring seals, cup seals, springs, ball detents, batteries, hoses, drive belts, gears and any part of a product subject to continuous impact from paintballs. Hydrotesting of air cylinders is not covered under this warranty.

The Limited Lifetime Warranty also does not cover incidental or consequential damages. This warranty is the sole written warranty on Empire's product and limits any implied warranty to the period that the product is owned by the original purchaser.

Some states, provinces and nations do not allow the limitation of implied warranties or of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from

state to state, province to province, nation to nation.

If you should encounter any problems with your product and you have added aftermarket parts on your product, please test it with the original stock parts before sending it in. Always unload and remove air supply before shipping markers. Do not ship your air supply tank if it is not completely empty. Shipping a pressurized air supply tank is unsafe and unlawful. Remove all batteries from products prior to shipping.

This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion of incidental or consequential damages.

For warranty parts, service or information in the U.S., contact:
Paintball Solutions • www.paintballsolutions.com
E-mail: tech@paintballsolutions.com • Phone: 1-800-220-3222

In Canada, contact:
Paintball Solutions
98 Bessemer Ct.
Unit 4
London, ON N6E 1K7
1-866-685-0030

WARRANTY REGISTRATION

To assist us in providing the best customer service possible, complete and mail this to:

11723 Lime Kiln Rd., Neosho, MO 64850

Name: _____

Address: _____

City: _____State: _____ Zip:_____

Country: _____

E-mail Address: _____

Serial Number (located on bottom of Rip-Clip):_____

Date of Purchase: _____

Place of Purchase: _____

Or register online at www.PaintballSolutions.com

⚠ WARNING!

PAINTBALL GUNS AND PAINTBALL GUN ACCESSORIES ARE NOT TOYS!

- Careless use or misuse may result in serious bodily injury or death!
- Eye protection designed for paintball must be worn by the user and all persons within range.
- Must be 18 years of age or older to operate or handle any paintball gun and paintball gun accessories without adult or parental supervision.
- Read and understand all cautions, warnings, and operating manuals before using any paintball gun or paintball gun accessory.
- Do not aim paintball gun at eyes or head of people or at animals.
- Paintball guns are to be used with Paintballs only.
- To prevent fire or shock hazard, do not expose unit to rain or moisture.
- To prevent fire or shock hazard, do not immerse unit in liquids.
- To prevent fire or shock hazard, do not disassemble any electronic paintball device.
- The disposal of the battery used to power this product may be regulated in your area.
- Please conform to all local or state regulations with regard to battery disposal.
- Use common sense and have fun.

Any tampering with the unit voids your warranty. There are no consumer serviceable parts inside the unit. The use of non factory authorized components within this product may cause a critical failure, fire or shock hazard.

IN NO EVENT SHALL SELLER BE LIABLE FOR ANY DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE, OR LOSSES OR EXPENSES RESULTING FROM ANY DEFECTIVE PRODUCT OR THE USE OF ANY PRODUCT.

WARNING: This product contains one or more chemicals that are known to the State of California to cause cancer and birth defects or other reproductive harm. *Wash hands after handling.*

EMPIRE PAINTBALL
11723 Lime Kiln Rd., Neosho, MO 64850
www.empirepaintball.com