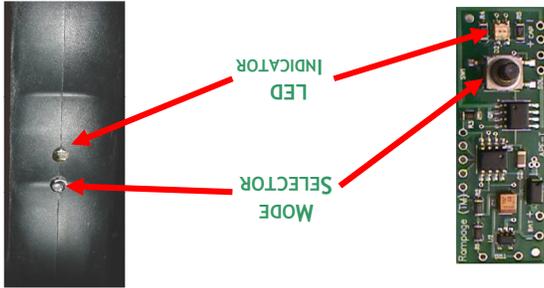
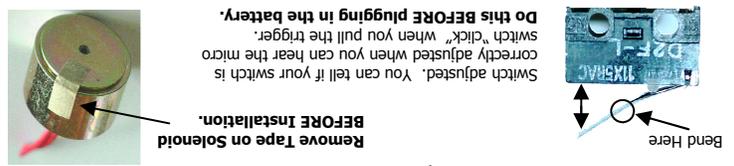


MODE	LED INDICATOR	DESCRIPTION
Semi-Automatic	Flashes 1 shot per each trigger pull	
Turbo+	Semi-automatic until a 5 trigger-per-second pull rate, then transitions to Response Mode until the default TTP value). Maintains Response Mode until the trigger pull rate drops below 5 per second.	
Full Automatic	Continues to fire as long as the trigger is held (the default MGRF value is 15bps).	
3-Round Burst	Fires 3 shots per each trigger pull	
Response	Releases 1 shot for each trigger pull and 1 shot on trigger release.	
Rampage	Semi-automatic until a 5 trigger-per-second pull rate, then transitions to the MGRF (15 BPS default) on the 5th trigger pull (default RTP value). Maintains MGRF until the trigger pull rate drops below 5 per second.	
X-Mode	Semi-automatic for the first 3 shots, then Full Automatic on the 4th pull and hold.	
Idle	Ignores trigger pull until next mode change—no firing operation. Setup mode is accessed from this mode only.	



SELECTING YOUR FIRING MODE
 Your Rampage™ board comes preloaded with 7 firing modes. To change modes, press the Mode Selector Button. Each time the Mode Selector Button is pressed, the LED indicator will blink, indicating what mode is selected. Each mode has a corresponding LED blink sequence.



middle of the leaf. See example below.
 use a pair of needle nose pliers and GENTLY bend the leaf upward at the leaf on the micro switch to work properly with your trigger. To do so, configured with the most optimal default settings. You must adjust the Your Rampage™ board requires NO programming and comes pre-

USING YOUR NEW RAMPAGE™ BOARD
 The Rampage™ board is a high-performance upgrade for your marker. We recommend you use a fresh battery before any major tournament or event to ensure peak performance.

- ✓ Push Button Mode Selection
 - ✓ Higher Rates of Fire
 - ✓ Extended Battery Life
 - ✓ User Programmable Fire Modes
 - ✓ Weather Resistant Conformal Coating
 - ✓ The Most Optimized/High Performance Programming
- You will notice many new and improved features with your Rampage™ board.

CONGRATULATIONS!
 Thank you for purchasing the Rampage™ board. We have taken every effort to provide you with a high-quality, high-performance product. Your purchase of the Rampage™ board is a high-performance upgrade for your marker. We recommend you use a fresh battery before any major tournament or event to ensure peak performance.

WARNING - ALL PERSONS WITHIN RANGE OF A PAINTBALL MARKER MUST USE PROPER EYE PROTECTION. NEVER DISASSEMBLE A MARKER WHILE IT IS UNDER PRESSURE WITH COMPRESSED AIR OR CO2. ALWAYS REMOVE THE AIR SOURCE BEFORE WORKING ON YOUR MARKER. ALWAYS FOLLOW THE MANUFACTURER'S INSTRUCTIONS WHEN USING OR WORKING ON YOUR MARKER. NOT FOLLOWING PROPER INSTRUCTION MAY CAUSE PERSONAL INJURY AND/OR POSSIBLE DAMAGE TO YOUR MARKER. USE THIS PRODUCT AT YOUR OWN RISK.



For technical support or help with your product, please contact
SUPPORT@GOAPEONLINE.COM

Advanced Paintball Electronics
 P.O Box 125
 Odessa, Florida 33556-0125

PRODUCT WARRANTY

Factory installed circuit boards and Drop-in versions of the Rampage boards are covered against manufacturer defects for a period of 1 year. User-installed circuit boards are covered for a period of 90 days. We DO NOT warrant the trigger switch, solenoid, capacitor, external wiring, or battery clip. If you have any questions, please ask before you purchase our product.

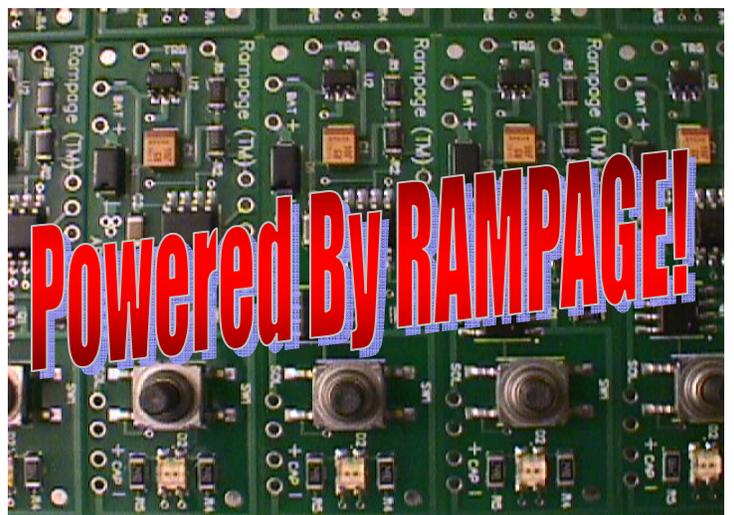
VOIDING YOUR WARRANTY

- Improper Installation (Professional Installation Is Available)
- ANY alteration to the Circuit Board or Code
- Improper use, misuse, abuse or physical damage
- Mishandling and/or Electro-Static-Discharge (ESD) damage

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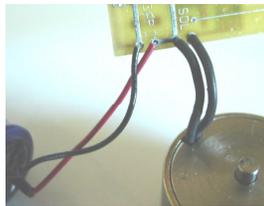
RAMPAGE™ USERS GUIDE
 A5 VERSION PRO-E VERSION



INSTALLATION

Before disassembling your grip, be sure you have a clean, clear workspace. Refer also to the installation video available on our web site. If you are uncomfortable performing this installation or lack the proper tools, **PLEASE STOP!** Send your Grip and Rampage™ board to us and we will install it for you for a small charge. Contact Support@GoApeOnline.com for more information.

1. A5 owners must first remove the grip from your marker including the ASA attachment.
2. Remove the screws holding the grip/Pro-E body together.
3. Disconnect the battery and separate the grip/Pro-E Halves.
4. Remove the entire circuit board assembly.
5. De-solder the solenoid from your old circuit board assembly if reusing the stock solenoid. If not skip to step 7.
6. Re-solder the solenoid onto your new Rampage™ board (the wires can go into either hole)
7. Re-place your new Rampage™ board assembly and re-assemble.
8. Now attach the battery. (Note: Your marker will start in Semi-Automatic firing mode)
9. Insert the push rod and trigger assembly then attach the safety.
10. Attach to your marker (A5 owners only)
11. GO PLAY!!



PROGRAMMING YOUR RAMPAGE™ BOARD

Although most users will find the default operation sufficient, your Rampage™ board has unmatched flexibility when it comes to customization. Your Rampage™ board allows you to adjust 6 setpoints:

FIRING MODE SETPOINTS

● MGRF - Max Global Rate of Fire

This setpoint controls the maximum number of shots that can be fired per second. You cannot surpass this rate regardless of trigger pulls.



WARNING! - THE STOCK CYCLONE WILL NOT FEED RELIABLY AT HIGH SPEEDS. YOU MUST HAVE AN AFTERMARKET FEEDER OR OTHER MODIFICATIONS TO REACH HIGHER RATES OF FIRE. IN ADDITION, INTERNAL WORKINGS OF YOUR CYCLONE FEED AND YOUR MARKER MAY WEAR MORE QUICKLY AT HIGHER RATES OF FIRE.

● RTP - Rampage™ Trigger Pulls

This setpoint controls the number of 5-Hz trigger pulls required to transition from Semi-Automatic operation to the Max Global Rate of Fire (MGRF) while in the Rampage Mode. At the default RTP value of 5, if you pull the trigger at a 5-Hz rate, you will fire 4 Semi-Automatic shots then transition to the MGRF on the 5th shot. MGRF operation is maintained until the trigger rate drops below 5 Hz.

● TTP - Turbo+ Trigger Pulls

This setpoint controls the number of 5-Hz trigger pulls required to transition from Semi-Automatic operation to Response operation while in the Turbo+ Mode. At the default TTP value of 5, if you pull the trigger at a 5-Hz rate, you will fire 4 Semi-Automatic shots then transition to Response mode on the 5th shot. Response Mode operation is maintained until the trigger rate drops below 5 Hz.

TIMING OPERATION SETPOINTS

● SDP - Solenoid Dwell Period

This setpoint controls the solenoid dwell or on-time (in milliseconds) for each shot fired by the marker. Lowering the dwell period will conserve battery power but may not reliably trip the marker sear. Raising the dwell period may be required to reliably trip the marker sear due to mechanical issues or higher rates of fire.

● ADP - Auto Debounce Period

This setpoint controls the trigger debounce time (in milliseconds) for Full Automatic operation. Full Automatic operation can induce mechanical bounce and increasing this value will prevent inadvertent triggering.

● TDP - Trigger Debounce Period

This setpoint controls the trigger debounce time (in milliseconds) for all firing modes (except Full Automatic). Lowering the debounce time can potentially cause erratic firing operation. Increase the debounce time if required until the erratic trigger operation ceases.

SETPOINT TABLE

Setpoint	LED ID Color	Default	Min Value	Max Value
MGRF	Solid Yellow	15	15	25
RTP	Solid Green	5	2	10
TTP	Solid Red	5	2	10
SDP	Yellow Flash	6	4	10
ADP	Green Flash	10	10	25
TDP	Red Flash	10	2	20

TO ENTER PROGRAMMING MODE:

- Select IDLE mode with the Mode button.
- Pull & hold the trigger, then push the Mode button again.
- The LED will then flicker brightly for 2 seconds.
- Release the trigger.

PROGRAMMING MODE

The first programmable setpoint is the MGRF (the LED will be solid yellow). Each trigger pull advances to the next setpoint indicated by the corresponding LED ID color (refer to the Setpoint Table). When you have reached the setpoint you wish to verify or adjust, press the Mode button again. The LED will now repeatedly “blink” corresponding to the current setpoint value, allowing verification. Pulling the trigger again will advance to the next setpoint. To change the setpoint value, press the Mode button once again. The LED will give you a long “flash” indicating it’s ready for a new setpoint value. Pull the trigger accordingly to enter the new setpoint value (the LED will blink for each trigger pull). Press the Mode button one more time. The LED will give you another long “flash” indicating it has accepted the new setpoint value. The LED will revert back to “blinking” the new setpoint value. Verify your new value, then pull the trigger again to advance to the next setpoint.

To change a setpoint back to its default, perform the same steps used to change a value (as previously described) *without entering any trigger pulls*. It’s important to note that all setpoint values start at 1 with the exception of the MGRF which starts at 15. Therefore to change the MGRF to 20 BPS, you need only to pull the trigger 5 times (15+5=20).

PROGRAMMING MODE EXIT

While in Programming mode, advance through the setpoints by pressing the trigger until the LED brightly flickers red and green. Exit the Programming mode (and return to IDLE mode) by pressing the Mode button. Otherwise, pull the trigger again to return to the MGRF setpoint.

NEVER LEAVE YOUR BOARD IN PROGRAMMING MODE... DOING SO WILL PREMATURELY DRAIN YOUR BATTERY. ALWAYS EXIT TO IDLE MODE!

NOTE: REPLACING THE BATTERY *MAY* CAUSE YOUR BOARD TO RESET ALL SETPOINTS BACK TO DEFAULT VALUES. THIS IS A RARE OCCURRENCE. THERE IS ADEQUATE POWER RESERVE IN THE CAPACITOR TO KEEP THE BOARD ACTIVE WHILE SWAPPING BATTERIES. RE-ENTER YOUR CUSTOM SETPOINT VALUES IF NECESSARY.

HELP IS ALWAYS AVAILABLE AT WWW.GOAPEONLINE.COM OR EMAIL OUR TECH SUPPORT AT SUPPORT@GOAPEONLINE.COM

