FIRING MODE TABLE

Your Rampage™ board comes preloaded with 8 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.

MODE	LED INDICATOR	MODE DESCRIPTION
Semi	1x Slow Yellow	Fires 1 shot per each trigger pull.
Burst	3x Fast Green	x rounds fired per trigger pull (x = 2 to 5).
Reactive	2x Fast Red	1 round fired per trigger pull and 1 round fired per trigger release.
Full Auto	6x Flicker Green	Fires continuously while the trigger is held.
Turbo+	1x Slow Red	Semi-Automatic until a x trigger-per-second pull rate, then transitions to Reactive Mode. Maintains Reactive Mode until the trigger pull rate drops below x per second (x = 4 to 10).
Rampage	2x Fast Green	Semi-Automatic until a x trigger-per-second pull rate, then transitions to programmable burst rate. Maintains burst firing until rate drops below x per second (x = 4 to 10)
PSP3	3x Fast Red	Three shots in Semi-Automatic then transitions to 3 Round burst. Resets to Semi-Automatic after 1 sec. of inactivity.
NXL	6x Flicker Yellow	Three shots in Semi-Automatic then Full Automatic on the 4th pull & hold. Resets to Semi-Automatic after 1 sec. of inactivity.
Idle	3x Fast R/G/Y	Prevents the marker from firing when the trigger is pressed.

USING YOUR NEW RAMPAGE™ BOARD

The Rampage™ board is a high-performance upgrade for your marker. We recommend using a fresh battery before any major tournament or event to ensure peak performance.

QUICK STARTUP OF THE RAMPAGE™ BOARD

Although the Rampage board offers the most comprehensive set of marker controls available, your Rampage™ board requires NO programming and comes pre-configured with the most optimal default settings. Once installed, just Select a mode and GO PLAY!

SELECTOR SWITCH PROGRAMMING

With the Rampage X7 board, both Select Fire switch positions can be reprogrammed on the fly. To change the firing mode of a Select Fire switch position, first move the Select Fire switch to the position you want to change. Next, choose a firing mode via the Mode Selector button (refer to the Firing Mode Table). THAT'S IT! The Rampage board will remember the last mode you chose for both Select Fire switch positions.

MODE SELECTOR BUTTON

SELECT FIRE SWITCH

To prevent your marker from firing, switch to the SAFE position on your Select Fire switch. You will physically safe the trigger and the board will go into sleep mode.

For technical support or help with your existing product, please contact
SUPPORT@GOAPEONLINE.COM
OR
VISIT OUR FORUMS AT WWW.GOAPEONLINE.COM

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

PRODUCT WARRANTY
Rampage boards are covered against manufacturer defects for a period of 1 year. We DO NOT warrant the solenoid OR external wiring. If you have any questions, please ask before you purchase our product.

VOIDING YOUR WARRANTY
• Improper Installation
• ANY alteration to the Circuit Board or code
• Improper use, misuse, abuse or physical damage
• Mishandling and/or Electro-Static-Discharge (ESD) damage

RAMPAGE™ USERS GUIDE X7

Powered by RAMPAGE!

INSTALLATION
BE SURE TO FIRST REMOVE THE TAPE FROM THE SOLENOID. ALSO REMOVE AIR SOURCE FROM YOU MARKER BEFORE ATTEMPTING INSTALLATION

Before disassembling your grip, be sure you have a clean, clear workspace. If you have questions about installation or need help, **PLEASE STOP** and contact Support@GoApeOnline.com. You will need to make two slight modifications to your grip before installing the Rampage X7 board. These modification can be done with simple tools and will not affect the performance of the stock board if you wish to reuse it.
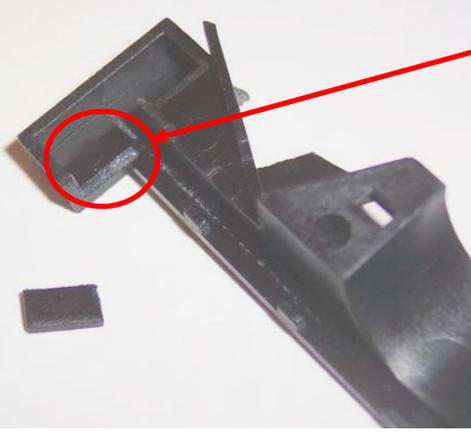
Step One — Remove this part of the circuit board clamshell as shown.

Step Two — Using a razor knife, relieve this tab on the inside of the right grip clamshell to allow the trigger sensor to fit inside.

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 has 9 adjustable setpoints. To Enter/Exit Programming mode, Press and Hold the Mode button for 2 full seconds. The LED will Flash Red/Green 10 times.

RAMPAGE™ BOARD SETPOINTS

SETPOINT	RANGE	LED INDICATOR	DEFAULT
MGRF	5-30bps	Red	15bps
Debounce	1-20ms	Green	10ms
Dwell	1-20ms	Yellow	6ms
Burst Rounds	2-5 shots	Fast Red	3 Shots
Rampage Rounds	2-5 shots	Fast Green	3 Shots
Turbo+ Pull Rate	4-10 Pulls	Fast Yellow	5 Pulls
Rampage Pull Rate	4—10 Pulls	Red Flicker	5 Pulls
Base Group Enable	1-16	Green Flicker	15
Ramp Group Enable	1-32	Yellow Flicker	31

PROGRAMMING MODE

The first programmable setpoint is the MGRF (the LED will be solid Red). 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 "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 "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.

MGRF - MAX GLOBAL RATE OF FIRE
Sets the maximum BPS Rate the marker can fire in all firing modes.

DEBOUNCE
Sets the trigger debounce time (in milliseconds) for all firing modes. Lowering the debounce time can potentially cause erratic firing operation. Increase the debounce time if required until the erratic trigger operation ceases.

DWELL
Sets the solenoid dwell (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.

BURST MODE ROUNDS
Sets the number of rounds fired for each trigger pull in Burst Mode.

RAMPAGE MODE ROUNDS
Sets the number of burst rounds fired in Rampage Mode.

TURBO+ PULL RATE
Sets the trigger pull rate required to ramp from Semi-Automatic operation to Reactive operation while in the Turbo+ Mode. Reactive Mode operation is maintained until the trigger rate drops below the pull rate setpoint.

RAMPAGE™ PULL RATE
Sets the trigger pull rate required to ramp from Semi-Automatic operation to Burst operation while in the Rampage Mode. Burst Mode operation is maintained until the trigger rate drops below the pull rate setpoint.

BASE GROUP ENABLE
Allows you to enable/disable the Base Firing Modes. Refer to the Base Group Firing Mode Table for values.

RAMP GROUP ENABLE
Allows you to enable/disable the Ramp Firing Modes. Refer to the Ramp Group Firing Mode Table for values.

Base Group				
Value	Auto	Reactive	Burst	Semi
1	No	No	No	Yes
2	No	No	Yes	No
3	No	No	Yes	Yes
4	No	Yes	No	No
5	No	Yes	No	Yes
6	No	Yes	Yes	No
7	No	Yes	Yes	Yes
8	Yes	No	No	No
9	Yes	No	No	Yes
10	Yes	No	Yes	No
11	Yes	No	Yes	Yes
12	Yes	Yes	No	No
13	Yes	Yes	No	Yes
14	Yes	Yes	Yes	No
15	Yes	Yes	Yes	Yes
16	No	No	No	No

Ramp Group					
Value	Idle	NXL	PSP3	Rampage	Turbo+
1	No	No	No	No	Yes
2	No	No	No	Yes	No
3	No	No	No	Yes	Yes
4	No	No	Yes	No	No
5	No	No	Yes	No	Yes
6	No	No	Yes	Yes	No
7	No	No	Yes	Yes	Yes
8	No	Yes	No	No	No
9	No	Yes	No	No	Yes
10	No	Yes	No	Yes	No
11	No	Yes	No	Yes	Yes
12	No	Yes	Yes	No	No
13	No	Yes	Yes	No	Yes
14	No	Yes	Yes	Yes	No
15	No	Yes	Yes	Yes	Yes
16	Yes	No	No	No	No
17	Yes	No	No	No	Yes
18	Yes	No	No	Yes	No
19	Yes	No	No	Yes	Yes
20	Yes	No	Yes	No	No
21	Yes	No	Yes	No	Yes
22	Yes	No	Yes	Yes	No
23	Yes	No	Yes	Yes	Yes
24	Yes	Yes	No	No	No
25	Yes	Yes	No	No	Yes
26	Yes	Yes	No	Yes	No
27	Yes	Yes	No	Yes	Yes
28	Yes	Yes	Yes	No	No
29	Yes	Yes	Yes	No	Yes
30	Yes	Yes	Yes	Yes	No
31	Yes	Yes	Yes	Yes	Yes
32	No	No	No	No	No