| 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 firing. 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 | 1x Fast R/G/Y | Prevents the marker from firing when the trigger is pressed. |

## 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.

## 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!

## TOURNAMENT LOCK (BT USERS ONLY)

Since the BT grip does not need a tool to change modes, there is a tournament lock switch located on the board. To use the Tournament lock feature, simply select the firing mode and the settings you want, open the grip, slide the tournament switch to the "on" position. When the tournament lock is switched to the "on" position, you will be prevented from switching modes via the rear mode switch.

TOURNAMENT LOCK SWITCH

## 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 (we can install your product for you)
- 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

## A5 / PRO-E / BT

Powered by RAMPAGE!

## INSTALLATION

Before disassembling your grip, be sure you have a clean, clear workspace.   If you have questions about installation or need helps, **PLEASE STOP** and contact Support@GoApeOnline.com

*Before Installing your Rampage board, be sure to first remove the tape from the solenoid.  Also remove Air source from you marker before attempting installation*

### A5/PRO-E USERS

You must adjust the leaf on the micro switch to work properly with your trigger.  To do so, use a pair of needle nose pliers and GENTLY bend the leaf slightly upward at the middle of the leaf.  See example.

After installation, you can tell if your switch is correctly adjusted if you can hear the micro switch "click" when you pull the trigger.  If you do not hear the "click" try re-adjusting the bend in the leaf.  You can also use your stock board as a guide as to how much bend is required.

**Do this BEFORE plugging in the battery**

Bend Here

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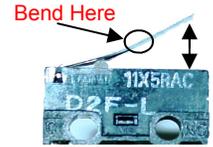
### PROGRAMMING YOUR RAMPAGE™ BOARD

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.

### 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.

### 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 |

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### 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 |

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