



Dangerous Powers G3/IQ Stock Board

BASE FIRING MODES

Mode	Description
Semi	Fires 1 shot for each trigger pull
PSP3	Three shots in Semi then transitions to 3 Round Burst. Returns to Semi after 1 Second of no activity.
NXL	Semi for the first 3 shots, then Full Automatic on the 4th pull and hold. Resets to Semi after 1 second of no Activity
Millennium	Fires required three shots in Semi, then Semi until transition to double rate of fire when trigger pull rate >= Ramp Point. Resets to Semi after trigger release or pull rate < Ramp Point.

MARKER CONTROL SETPOINTS

Feature	LED	Default Value	Min/Max Value
MGRF	Red	13	5/25
Firing Mode	Green	1	1/4
Ramp Point	Yellow	3	1/10
Trigger Debounce	Red Flash	7	1/31
Solenoid Dwell	Green Flash	15	5/25
ABS Dwell	Yellow Flash	4	1/4

MARKER CONTROL SETPOINT DEFINITIONS

MGRF – This sets the “Eyes On” **Max Global Rate of Fire** (in Balls per second) of all firing modes. A setting of 25 operates the marker in “Uncapped” mode for NPPL semi tournament play. PSP and NXL formats require 13 BPS, Millennium requires 12 BPS. User is responsible for legal program settings.

Firing Mode – This value determines the Power On Firing Mode of the marker. 1 = Semi, 2 = PSP3, 3 = NXL, 4 = Millennium. User is responsible for legal program settings.

Ramp Point – Determines the ramping point of the currently assigned Firing Mode. Tournament legal setting is 3 for PSP/NXL modes / 6 for Millennium Mode. User is responsible for legal program settings.

Trigger Debounce – This value sets amount of time (in milliseconds) the trigger must remain inactive prior to accepting a new trigger pull. It can also control the trigger optical sensitivity. A debounce value of 1-15 provides the most sensitive optical trigger operation, and a debounce time proportional to the setpoint. A value of 16-31 provides a less sensitive trigger (requiring more physical travel across the optical sensor), and a debounce time equal to the setpoint value minus 15 (example: setpoint value of 25 = debounce of 10ms / 25-10 = 10).

Solenoid Dwell – This value controls the amount of time (in milliseconds) the solenoid is energized. If too low, the marker will not cycle. If the value is too high, the solenoid remains on too long, wasting battery power and air.

ABS Dwell – Adds an additional 1-3 milliseconds of dwell time to the programmed solenoid dwell setpoint on the first shot of any string of shots after a fixed 20 seconds of shooting inactivity. A value of 4 disables the ABS Dwell feature.

NON-ADJUSTABLE FEATURES (ALWAYS ON):

MGRF Eyes OFF – When the Eyes are shutoff, the **MGRF** is overridden to 10 BPS.

Breach/Eye Delay – This value controls the amount of time (in milliseconds) the eyes must see a ball in the breach prior to cycling the bolt. This will be a fixed 3 milliseconds and will compensate for different paint grades and feed methods. This delay will be run in series with all the bolt related timing.

Auto Shutoff – The marker will shut off automatically after 20 minutes of NO firing activity.

Trigger Buffering - This buffers a trigger pull during the bolt cycle, resulting in your marker firing more smoothly in all modes.

Battery Monitor – Sampled only when Power Button is pressed to conserve overall battery life.

LED

POWER ON

BATTERY LEVEL OK (GREEN FLICKER), LOW BATTERY LEVEL (RED FLICKER)

FIRING OPERATIONS

SOLID GREEN (BALL IN BREACH / MARKER LOADED)
SLOW GREEN (EMPTY BREACH / MARKER NOT LOADED)
FAST GREEN (EYES OFF)

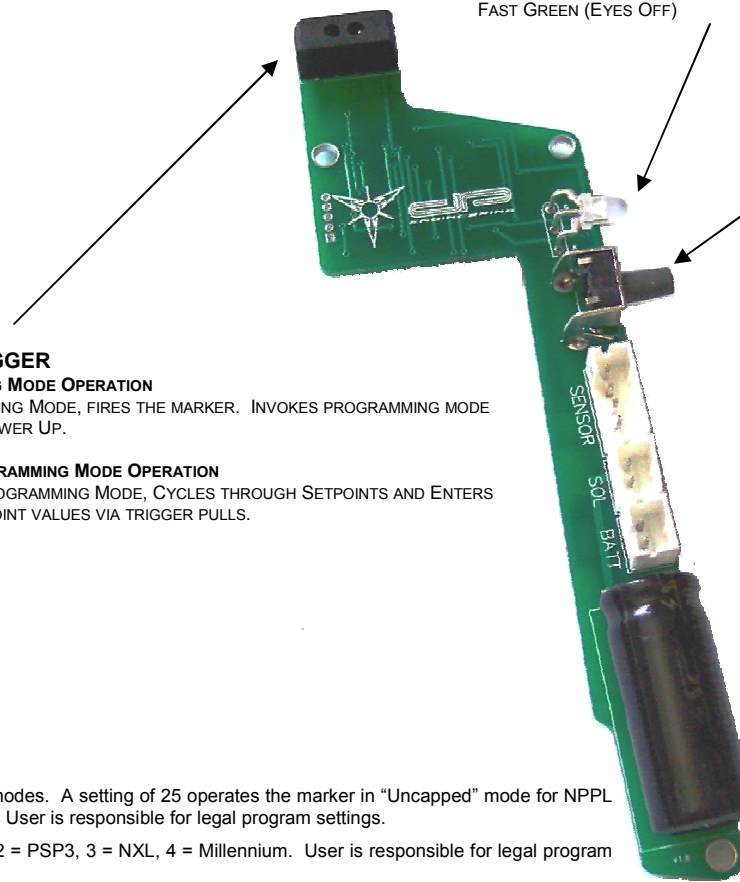
TRIGGER

FIRING MODE OPERATION

IN FIRING MODE, FIRES THE MARKER. INVOKES PROGRAMMING MODE AT POWER UP.

PROGRAMMING MODE OPERATION

IN PROGRAMMING MODE, CYCLES THROUGH SETPOINTS AND ENTERS SETPOINT VALUES VIA TRIGGER PULLS.



POWER BUTTON

POWER ON

PRESS/HOLD UNTIL LED ILLUMINATES (DISPLAYS BATTERY LEVEL). RELEASE AND MARKER IS READY TO FIRE.

POWER OFF

PRESS/HOLD 2 SECONDS UNTIL LED TURNS OFF. RELEASE AND MARKER IS OFF.

EYE CONTROL

TAP TO TOGGLE EYE DISABLE/ENABLE.

PROGRAMMING EXAMPLE

Setting the Firing Mode to PSP3 from Default SEMI mode:

1. Start Programming Mode
2. LED is SOLID RED (MGRF setpoint). Pull trigger to scroll to next setpoint.
3. LED is SOLID GREEN (Firing Mode setpoint). Tap the power button to select this setpoint.
4. LED flashes current value repeatedly. Tap power button again to reprogram this setpoint.
5. Pull the trigger 2 times, observing 1 LED flash per pull
6. Tap the power button once more to save the new setpoint value.
7. Returns to Step 4.
8. Pull trigger to scroll to another setpoint or power off marker.

FOR HELP WITH YOUR NEW DANGEROUS POWER G3/IQ BOARDS, PLEASE CONTACT US AT:

SUPPORT@DANGEROUSPOWER.COM
OR CALL (909)869-7800

