



OPERATING INSTRUCTIONS
V 6.0

DM '06/'07/'08
EGO '06/'07/'08
Fusion '7/'8
Intimidator 2k4/'05/'06
ION®/SP8/
MINI
Proto Matrix '07/'08
Proto Rail
Proto SLG
Shocker SFT/NXT

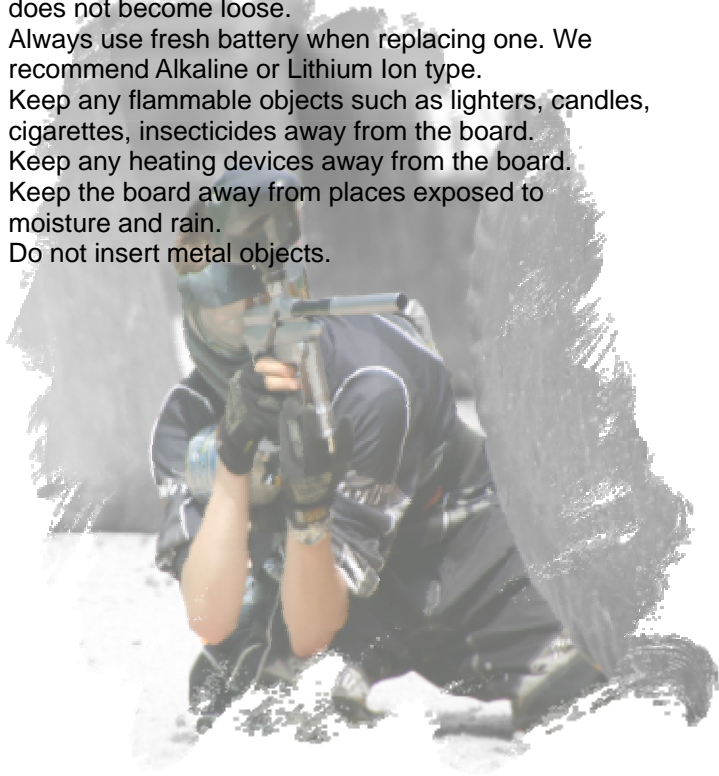
Seventh Element, Inc

www.thesevthelement.com

WARNING

Failure to follow directions may result in damage to board.

- ❧ Do not pull the battery harness by the wire nor touch the harness with wet hands.
- ❧ Insert the battery harness firmly to battery so that it does not become loose.
- ❧ Always use fresh battery when replacing one. We recommend Alkaline or Lithium Ion type.
- ❧ Keep any flammable objects such as lighters, candles, cigarettes, insecticides away from the board.
- ❧ Keep any heating devices away from the board.
- ❧ Keep the board away from places exposed to moisture and rain.
- ❧ Do not insert metal objects.



PRODUCT INFORMATION

- NINE firing modes:

- ① Semi
- ② PSP Ramping
- ③ Millennium Ramping
- ④ NXL Full Auto
- ⑤ User Defined Ramping
- ⑥ Auto Response
- ⑦ Full Auto
- ⑧ Full Auto/User Defined Ramping
- ⑨ Three Round Burst

- Multi Color LED
- Sound Alert
- Low Battery Alert
- Eye Malfunction Alert
- Auto Shut Down
- Tournament Lock
- 15 BPS Lock
- Adjustable Debounce
- Adjustable Ramp Activation Shots
- Adjustable Ramp Percentage
- Adjustable Rate of Fire
- Adjustable Dwell Setting
- Adjustable Eye Delay
- Anti Bolt Stick Mechanism
- LIFE TIME WARRANTY *

* As used herein, "lifetime of the product" is defined as a period ending five (5) years after Seventh Element discontinues manufacturing the product (as determined by Seventh Element), but the warranty period shall be at least ten (10) years from the date of purchase of the product by the original purchaser from Seventh Element or an authorized Seventh Element distributor. This limited lifetime warranty only applies to the original purchaser and is not transferable.

OPERATING INSTRUCTION

INSTALLATION

- ☞ Please refer to your original manual for instruction on removal of stock board and installation of new Seventh Element board. Your new Seventh Element board requires ZERO modification to install.

LED Indicator:

- | | |
|--------------------|-------------------------------------|
| 1. Green | - Eye Enabled and ball in breach |
| 2. Red | - Eye Enabled and no ball in breach |
| 3. Orange | - Eye Disabled |
| 4. Flashing Green | - Eye Malfunction |
| 5. Flashing Orange | - Low Battery |

Sound Indicator:

- ☞ Seventh Element has incorporated a sound device for your convenience.
 - During on/off Sequence
 - Low Battery Alert
 - Toggling Menu
 - Selecting New Settings
 - Confirming New Value

Low Battery Indicator

- ☞ When the battery is low on power, the LED will flash ORANGE followed by a single chirp. The Low battery alert will continue until you replace with a new battery. If the trigger is active, the sound alert will be temporarily disabled and will resume once the trigger movement resumes.

Eye Malfunction Indicator

- ☞ If your eye sensors are continuously blocked, the LED will rapidly flash GREEN to indicate an eye malfunction. Your rate of fire will be reduced to minimize any potential harm to your marker.
Please check the sensors immediately.

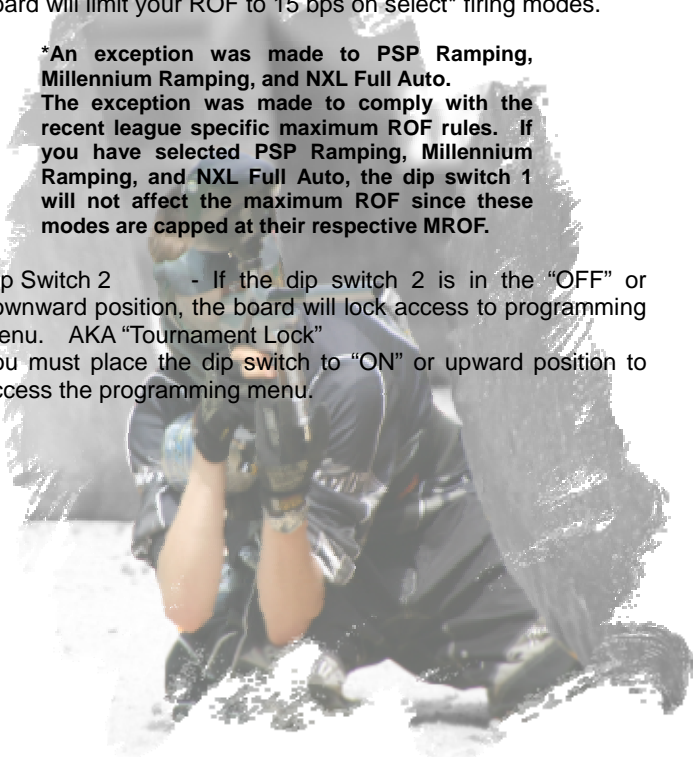
Dip Switches (Except ION® and MINI, explained in page 10)
There are two DIP SWITCHES mounted on your new board.

- ☞ Dip Switch 1 - By turning the dip switch to “ON” or upward position, the board will automatically adjust ALL your firing modes to your selected Rate of Fire (ROF). Turning the dip switch 1 to “OFF” or downward position, the board will limit your ROF to 15 bps on select* firing modes.

***An exception was made to PSP Ramping, Millennium Ramping, and NXL Full Auto.**

The exception was made to comply with the recent league specific maximum ROF rules. If you have selected PSP Ramping, Millennium Ramping, and NXL Full Auto, the dip switch 1 will not affect the maximum ROF since these modes are capped at their respective MROF.


- ☞ Dip Switch 2 - If the dip switch 2 is in the “OFF” or downward position, the board will lock access to programming menu. AKA “Tournament Lock” You must place the dip switch to “ON” or upward position to access the programming menu.



To Change the Value of a Setting:

1. Make sure your marker is turned off and your dip switch 2 is in the "ON" position.
2. While holding down the trigger, turn the marker ON
3. The LED will go through sequence of different colors and stop at purple color to confirm you are in the programming menu.
4. Select your desire mode (color) by toggling with the trigger.
5. Once you reach your desire mode (color), hold down the trigger for two seconds.
6. Your new board will sound a single chirp and the current value will start to flash
7. Once the flashing ends, you have approximately five seconds to enter a new value.
8. The new value can be entered by pulling and releasing the trigger. A single value equates with single pull and release. For each value entered, a single chirp will sound that will correspond with each trigger pull.
9. Once the new setting(s) has been entered, the board will chirp once and LED will go through sequence of different colors. Once the sequence stops, the LED will begin to flash the new value.
10. Once the flashing ends, you will be directed to main menu.
11. If you wish you leave the programming mode, simply turn the marker off; otherwise, if you wish to adjust other settings, simply toggle through the main menu via trigger pull.

Factory Reset

-  When required, you may reset your board to original factory setting.
1. Make sure your marker is turned off and your dip switch 2 is in the "ON" position.
 2. While holding down the trigger, turn the marker ON
 3. LED will go through sequence of different colors and stop at purple color to confirm you are in the programming menu. Once in the programming menu, hold down the trigger for 10 seconds until the RED LED appears to confirm the board has been reset to factory settings.
 4. If you wish you leave the programming menu, simply turn the marker off; otherwise, if you wish to adjust other settings, simply toggle through the main menu via trigger pull.

Programming Mode ● = LED color ▲ = Setting Parameter
● = Stock Setting

☞ Firing Modes ● , ▲ 1-9, ● 1

1. Semi Automatic = your marker will shoot one trigger pull at a time up to your selected rate of fire.
2. PSP Ramping = Paintball Sports Promotion Ramping. The first 3 shots are in semi automatic mode. Beginning with 4th shot, your marker will add artificially added shots up to 13 balls per second (no sense in risking w/13.33bps). After one second of non action, the sequence will restart.
3. Millennium Series Ramping = European Millennium Series Ramping. The start/sustain ROF is 6bps with first 3 shots in semi auto mode. The Maximum Rate of Fire is 12bps.
4. NXL Full Automatic = National X-ball League Full Automatic. The first 3 shots are in semi automatic mode. Beginning with 4th shot, as long as you hold down your trigger, your marker will shoot full automatic up to 15 balls per second. After one second on non-action, the sequence will restart.
5. User Adjustable Ramping = By selecting desired "Ramp Activation Shots," your marker will add artificially added shots up to your selected rate of fire. After one second of non-action, the sequence will restart.
6. Automatic Response = At the pull of your trigger, the marker will fire a single shot. On the release of trigger, another single shot will be fired.
7. Full Automatic = Once you pull and hold your trigger, your marker will fire full automatic up to your selected rate of fire.
8. Full Automatic Ramp = Your marker will shoot full automatic as long as you hold down the trigger. Once the trigger is released, your marker will be in "User Adjustable Ramping" mode. Please make sure you preselect the "Ramping Percentage" and "Ramping Activation Shots." Sequence will restart by turning the power off and on again.
9. Three Round Burst = Three sequential shots will be fired on every pull and release of your trigger.

⚙️ Debounce   1~30  5






You can adjust amount of time between trigger pull and release, further controlling shot rate of your marker. If the setting is too low, you will run the risk of having your marker shooting uncontrolled shots.

⚙️ Ramp Activation Shots   5~15  5

Ramp Activation Shots are number of required shots before ramping can be applied. Ramping Activation Shots are only applied to “User Adjustable Ramping” and “Full Automatic Ramping” mode.







⚙️ Ramp Percentage   1~12  1





Ramp Percentage is multiplied by number of shots you shoot to create artificial shots. For example, if you select 50% as your ramp percentage, for every one trigger pull, 0.5 artificial shot is created, thus adding to shots you have actually made and resulting in greater rate of fire.



					
1	Loader Cap	5	40%	9	80%
2	10%	6	50%	10	90%
3	20%	7	60%	11	100%
4	30%	8	70%	12	200%

⚙️ Rate of Fire (ROF)   1~22  1





This is your maximum rate of fire indicated in balls per second (bps)





							
1	UNCAPPED	7	13.7	13	15.2	19	19
2	10	8	14	14	15.5	20	20
3	11	9	14.2	15	15.7	21	21
4	12	10	14.5	16	16	22	22
5	13	11	14.7	17	17		
6	13.5	12	15	18	18		





 Dwell   [Marker Specific]  [Marker Specific]
 Dwell is the amount of time how long your marker solenoid stays open, which is indicated in milliseconds. Too low of dwell will prevent your marker from fully cycling.





Marker		
DM6/7/8	5~30	18
EGO 6/7/8	5~30	9
Fusion 7/8	5~30	9
Intimidator4/5/6	5~30	10
ION	5~40	30
MINI	5~30(1/2ms)	15
Proto Matrix	5~40	18
Proto Rail	5~40	25
Proto SLG	5~30	10
Shocker	5~30	12

 Eye Delay Time  1~50  5
 Described in milliseconds, Eye Delay Time is the amount of delayed time your eye sensor detects paintball in breach. Use the low settings for forced fed hoppers.

 Anti Mechanical Bounce   1~10  3
 To prevent mechanical bounce, you can adjust your trigger setting to filter out undesired shots.

 Auto Shut Down   1~50  20
 Indicated in minutes, you can turn off your marker automatically by selecting desired time of your choice.

 Anti Bolt Stick   1~20  10
 To prevent "first shot drop off" during play, dwell time is added to compensate for bolt sticking.

 Break Beam/Reflective EYE   1~2  1
 For Shocker Boards Only.
 Choose between break beam eye sensor and reflective eye sensor.

“1” Flash for break beam.

“2” Flashes for reflective eye.

LED Selection 1~3 1

For Shocker Boards Only.

You can select to use power button LED only, or main board only, or both main board LED and power LED.

Main board LED and Power Button LED	1
Main Board LED ONLY	2
Power Button LED ONLY	3

Power button LED Indicator:

Blue	Eye enabled, no ball in breech
Delayed Blue	Eye disabled
Solid Blue	Eye enabled, ball in breech
Flashing Blue	Eye Malfunction

Closing Dwell 10~30 18 (in 1/2ms)

*For MINI only

MINI's solenoid can be adjusted for opening and closing, further controlling how fast/slow the marker performs.

If the setting is too low, you will run the risk of solenoid not closing.

ION ® and MINI Tournament Lock

Open your grip panel and locate the “programming button” near the bottom of your new board. This is the same button used on your stock board to program the different settings.

While holding down the programming button, press the power button. Your new board will chirp 3 times while flashing RED LED 3 times to confirm you are in the tournament lock mode.

In order to disable the tournament lock, repeat the above process.

Your sound indicator will only chirp once and flash RED LED 1 time to confirm the tournament lock has been disabled. Once the confirmation is finished, your marker will turn off automatically.

To access the programming menu, follow the instruction from page 3 of “To Change the value of a setting” step 2.

WARRANTY INFORMATION

Seventh Element, Inc ("Seventh Element") warrants to the original end user purchaser ("original purchaser") of the product listed below that the product will be free from defects in materials and workmanship for the lifetime of the product. **As used herein, "lifetime of the product" is defined as a period ending five (5) years after Seventh Element discontinues manufacturing the product (as determined by Seventh Element), but the warranty period shall be at least ten (10) years from the date of purchase of the product by the original purchaser from Seventh Element or an authorized Seventh Element distributor. This limited lifetime warranty only applies to the original purchaser and is not transferable.** In the event of a warranty claim under the limited lifetime warranty, the purchaser must provide satisfactory evidence of the date of purchase from Seventh Element and that it is the original purchaser.

If the product proves defective during the applicable warranty period, Seventh Element, at its option, either will repair the defective product without charge for parts and labor, or will provide a replacement of an equivalent product (as determined by Seventh Element) in exchange for the defective product. Parts, modules and replacement products used by Seventh Element for warranty work may be new or reconditioned to like new performance. All replaced parts, modules and products become the property of Seventh Element.

As used hereafter, "Customer" refers to the person or entity asserting rights under this warranty. In order to obtain service under this warranty, Customer must notify Seventh Element of the defect before the expiration of the applicable warranty period and make suitable arrangements for the performance of service. Customer shall be responsible for packaging and shipping the defective product to the service center designated by Seventh Element, shipping charges prepaid and with a copy of proof of purchase by the original purchaser. Seventh Element shall pay for the return of the product to Customer if the shipment is to a location within the country in which the Seventh Element service center is located. Customer shall be responsible for paying all shipping charges, duties, taxes, and any other charges for products returned to any other locations.

This warranty shall not apply to any defect, failure or damage caused by accident, ordinary wear and tear of mechanical components, use outside of the product's specifications, improper use or improper or inadequate maintenance and care. Seventh Element shall not be obligated to furnish service under this warranty a) to repair damage resulting from attempts by personnel other than Seventh Element representatives to install, repair or service the product; b) to repair damage resulting from improper use or connection to incompatible equipment; c) to repair any damage or malfunction caused by the use of non-Seventh Element supplies; or d) to service a product that has been modified or integrated with other products when the effect of such modification or integration increases the time or difficulty of servicing the product.

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