



1

OPERATING INSTRUCTIONS
V 7.3

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
G3/IQ



Seventh Element, Inc

www.theseventhelement.com

WARNING

Failure to follow directions may result in damage to the board.

- ⚠ Do not pull the battery harness by the wire nor touch the harness with wet hands.
- ⚠ Connect the battery harness firmly to the 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, and insecticides away from the board.
- ⚠ Keep any heating devices away from the board.
- ⚠ Keep the board away from places exposed to moisture or rain.
- ⚠ Do not insert metal objects.

2



PRODUCT INFORMATION

- TEN firing modes:
 - ① Semi
 - ② PSP Ramping with Three Round Burst
 - 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
 - ⑩ Training Mode
- Multi Color LED
- Sound Alert
- Sound Alert On/Off
- Low Battery Alert
- Eye Malfunction Alert with One Second Force Shot
- Auto Shut Down
- Tournament Lock
- 15 BPS Lock
- Adjustable Debounce
- Adjustable Ramp Pull Number
- Adjustable Ramp Sustain Rate
- Adjustable Ramp Activation Rate
- Adjustable Ramp Percentage
- Adjustable Rate of Fire
- Adjustable Rate of Fire with Sensor Off
- Adjustable Dwell Setting
- Adjustable Eye Delay
- Adjustable Empty Breech Delay
- Anti Bolt Stick Mechanism
- LIFE TIME WARRANTY

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

4

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 stops.

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 10 bps to minimize any potential harm to your marker.
Please check the sensors immediately.

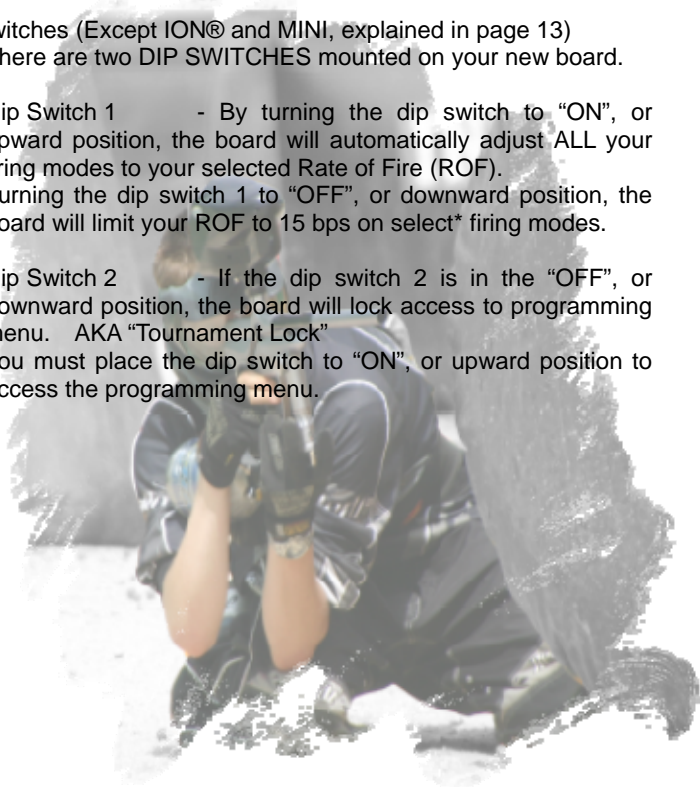
One Second Force Shot

- ☞ With eye sensor on and the breech empty, you can force the marker to shoot a single shot by holding down the trigger for one second. The process ensures you receive a continuous ball feed.

Dip Switches (Except ION® and MINI, explained in page 13)

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.
- ☞ 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 a 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 to a 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 the LED will flash the new value of the setting. Once the LED flashes the new setting, it will go through a sequence of colors to confirm that the new value has been saved.
10. Once the flashing ends, you will be directed to the 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 the 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 a sequence of different colors and stops at Solid White 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 the 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

✂ User Profile ○ ▲ 1~7 ● 7 (Solid White)

You can select up to SEVEN personal profiles. Factory reset will only apply for the selected profile when resetting the board.

✂ Firing Modes ○ ○ ▲ 1~10, ● 1 (Blinking White)

1. Semi Automatic = your marker will shoot once per trigger pull 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 your selected rate of fire. 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. You can select your MROF.

4. NXL Full Automatic = National X-ball League Full Automatic. The first 3 shots are in semi automatic mode. Beginning with the 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 of non-action, the sequence will restart.

5. User Adjustable Ramping = Here you can adjust the required pull number, the activation shot speed, the sustain speed, and the ramp percentage to fine your ramping mode. 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.

10. Training Mode = Enhance your trigger walking speed with this mode. With Semi Auto firing mode and the eye sensor off preselected, the board will indicate, in Balls per Second (bps), your trigger pulling speed. You can begin pulling the trigger when the Orange LED begins to flash.




For each two digit bps, the Green LED will flash once.

For each single digit bps, the Red LED will flash once.

For example- **28 bps** = two green LED followed by eight Red LED. The sequence will restart once the result has been indicated.

 Debounce  1~30  5 (Green)
You can adjust  amount of  between trigger pull and release, further controlling the shot rate of your marker. If the setting is too low, you will run the risk of having your marker shooting uncontrolled shots.

 Anti Mechanical Bounce  1~10  3 (Blinking Green)
To prevent mechanical bounce  you can  just your trigger setting to filter out undesired shots.

 Ramp Required Pull Number  1~15  5 (Blue)
Required number of trigger pulls to start the ramping process. The required pull number must be pulled at the ramp activation rate. Only applies to User Adjustable Ramping and Full Auto/ Ramping.

Ramp Activation Rate 1~16 1 (Blinking Blue)
 The trigger speed in which ramping will be activated. Ramping Activation Rate is only applied to User Adjustable Ramping” and Full Automatic Ramping mode.

1	4	7	7	13	12	
2	4.5	8	7.5	14	13	
3	5	9	8	15	14	
4	5.5	10	9	16	15	
5	6	11	10			
6	6.5	12	11			

Ramp Sustain Rate 1~16 1 (Fast Blinking Blue)

The trigger speed in which to maintain the ramping. Ramp Sustain Rate is only applied to User Adjustable Ramping and Full Automatic Ramping mode.

1	4	7	7	13	12	
2	4.5	8	7.5	14	13	
3	5	9	8	15	14	
4	5.5	10	9	16	15	
5	6	11	10			
6	6.5	12	11			

Ramp Percentage 1~12 1 (Fast Double Blinking Blue)

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





























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			

Max Rate of Fire with Eye Sensor Off 1~5 1
 (Blinking Red)
 MROF with Eye Sensor off can be adjusted. Indicated in BPS.

1	UNLIMITED	
2	10	
3	13	
4	15	
5	17	

Dwell [Marker Specific] [Marker Specific] (Fast Blinking Red)
 Dwell is the amount of time how long your marker solenoid stays open, which is indicated in milliseconds. Too low of a 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
G3/IQ	5~30	9

-  **Breach Delay Time**   1~50  5 (Solid Teal)
 Empty breach delay time to be exact. Described in milliseconds, breach delay time allows how long the eye sensor stays connected before the breach is considered empty.
-  **Eye Delay Time**   1~50  3 (Blinking Teal)
 Described in milliseconds, Eye Delay Time defines how long a paintball must rest in the breach before it is considered ready to fire. Use the low settings for forced feed hoppers
-  **Auto Shut Down**   1~50  20 (Solid Yellow)
 Indicated in minutes, you can turn off your marker automatically by selecting the desired time of your choice.
-  **Sound Alert On/Off**   1~2  1 (Slow Blinking Yellow)
 The speaker can be turned on and off.
-  **Anti Bolt Stick**   1~20  10 (Fast Blinking Yellow)
 To prevent the "first shot drop off" during play, dwell time is added to compensate for the bolt sticking.
-  **Closing Dwell**   10~30  18 (in 1/2ms) (Purple)
*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.
-  **LED Selection**   1~3  1 (Blinking Purple)
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:

Blinking Blue	Eye enabled, no ball in breech
Fast Blinking Blue	Eye disabled
Solid Blue	Eye enabled, ball in breech
Double Fast Blinking Blue	Eye Malfunction

- ☞ Break Beam/Reflective EYE   1~2  1 (Fast Blinking Purple) *For Shocker Boards Only.*
Choose between break beam eye sensor and reflective eye sensor.
"1" Flash for break beam.
"2" Flashes for reflective eye.

- ☞ 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.

THIS WARRANTY IS GIVEN BY SEVENTH ELEMENT WITH RESPECT TO THE PRODUCT IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED. SEVENTH ELEMENT DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SEVENTH ELEMENT'S RESPONSIBILITY TO REPAIR OR REPLACE DEFECTIVE PRODUCTS IS THE SOLE AND EXCLUSIVE REMEDY PROVIDED TO THE CUSTOMER FOR BREACH OF THIS WARRANTY. SEVENTH ELEMENT WILL NOT BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IRRESPECTIVE OF WHETHER SEVENTH ELEMENT HAS ADVANCE NOTICE OF THE POSSIBILITY OF SUCH DAMAGES.

www.theseventhelement.com

© copyright 2007, Seventh Element, Inc. All rights reserved

www.theseventhelement.com