





"Where your Dreams become Reality."

## Scenario Dreams Ion T-Board Manual

### Eye Mode

The EYE button is on the lower side of the T-Board. It is only accessible with the grips open. If you have installed a membrane pad, the EYE button is the lower button on the membrane pad. When the marker is in live mode, tapping the EYE button cycles through the available eye modes. The LED will flash the eye mode color once (see below), then return to the fire mode color.

- RED** Eyes Off Rate of fire capped at 13bps regardless of settings
- BLUE** Eyes Off Rate of fire determined by settings
- GREEN** Eyes On Rate of fire determined by settings

### Settings

With your ION T-Board, you have full control over how your marker shoots. Below are the instructions for changing your settings. Please refer to the chart and examples for a better understanding.

- 1) Turn Off marker.
- 2) Press and hold the EYE button.
- 3) While still holding the EYE button, tap the POWER button.
- 4) Continue to hold the EYE button, the LED will flash red once, pause, then flash once again. At this time you can let go of the EYE button and you are now in Setup1. If you continue to hold the EYE button after the first LED blink, and the second LED blink, it will then blink twice together. If you let go now, this will bypass Setup1 and shortcut you straight to Setup2. If you hold the EYE button until the LED blinks 3 times together and then release the EYE button, this will restore the default settings. If you hold the EYE button until the LED blinks 4 times together and then release the EYE button, this will start the eye alignment tool.
- 5) Once you are in your desired Setup Menu, the LED color will indicate which setting you are currently in. Pull the trigger X amount of times to set your setting. The first pull of the trigger sets the value at it's minimum, each pull after that increases the value based on the increment value in the chart.
- 6) Tap the EYE button to move on to the next setting. You can also ignore a setting and bypass to the next setting by not pulling the trigger, and just tap the EYE button until the LED indicates the setting you desire.
- 7) When finished with your settings, tap the POWER button to enter Live mode. If you cycle through all the settings, the marker will automatically exit the menu, and enter live mode.
- 8) The LED will cycle through colors very quickly (Disco) to indicate your settings were saved.

Shortcut	Setting	Color	Default	Minimum	Maximum	Increment
Setup1	Rate of Fire	RED	15 bps	9 bps	50 bps	1 bps
	Dwell	GREEN	34 ms	6 ms	256 ms	1 ms
	Debounce	BLUE	5 ms	0 ms	256 ms	1 ms
	Eye Delay	PURPLE	15 ms	1 ms	256 ms	1 ms
	Force Semi	WHITE	2 sec	0.5 sec	none	0.5 sec
Setup2	Shot Queue	TEAL	ON	ON	OFF	toggle
	Anti Bolt-Stick	YELLOW	0 ms	0 ms	256 ms	1 ms
	After Nitro	PURPLE	Semi	n/a	n/a	cycle
	Activation Speed	RED	5 bps	5 bps	none	1 bps
	Activation Pulls	BLUE	4 pulls	2 pulls	256 pulls	1 pull
	Training Mode	TEAL	OFF	ON	OFF	toggle
	Training Dwell	GREEN	10 ms	1 ms	256 ms	1 ms
Setup3	Restore Default	n/a	n/a	n/a	n/a	n/a
Setup4	Eye Alignment	RED	n/a	n/a	n/a	n/a

### Rate of Fire - RED

Firing speed of the marker. This applies to all modes except NPPL Semi. If Switch1 is ON or the eye mode is red, this setting does not apply. If your eyes are on and your hopper is not feeding fast enough, you may not achieve the ROF setting. The Eye Delay and Dwell directly affect your Max ROF. With Default Dwell(34ms) and eye Delay (15ms), the Max ROF is around 20bps, if you try to raise the ROF setting higher, it will cause an error and drop the ROF to 5-7bps to prevent damage to the marker. In order to get higher ROFs, you must decrease the dwell (Install a QEV) and lower the eye delay (Faster Hopper). Then you can reach 20+ ROF.

### Dwell - GREEN

Defines the time that the solenoid is activated. This roughly corresponds to the time that the bolt is forward and propelling the paintball. A dwell that is too low will cause velocity inconsistency, shoot-down and improper cycling. A dwell that is too high will be gas inefficient. You must tune your dwell over a chrono for ideal operation. Your aiming for the lowest dwell with acceptable velocity consistency. A good starting point for markers without a QEV is 34ms. A good starting point for markers with a QEV is 16ms.

### Debounce - BLUE

When the electrical contacts are closed, tiny spikes are created. The processor can read these spikes as extra trigger pulls. The debounce setting allows you to define a time period that the processor will ignore the spikes and filter out the switch bounce.

### Eye Delay - PURPLE

Eye Delay adds a period of time between the moment the break-beam eyes are triggered to the start of the dwell time when the bolt closes. This delay allows enough time for the paintball to fully load in the breech. If you are experiencing chops in the breech/feedneck, you should increase this setting.

### Force Semi - WHITE

If the trigger is pulled and held for the time defined in this setting, the marker is automatically set to semi fire mode, the eyes disabled, and ROF set to 13bps. This is to guarantee the marker will function if the eyes malfunction. This feature is disabled on any mode that requires you to hold the trigger (NXL Auto, Nitro, Full Auto).

### Shot Queue - TEAL

If enabled, when the trigger is pulled and no ball is in the breech, the marker will wait up to 0.25 seconds for a ball to enter the breech and will AUTOMATICALLY fire. This feature prevents "lost" shots because your fingers are faster than your hopper, and is still legal on most fields since it does not add shots.

### Anti Bolt-Stick - YELLOW

If enabled, the first shot will have the ABS dwell (Dwell setting + ABS setting). All other shots will have the standard dwell. If the marker is not fired for 10 sec, the first shot will have the ABS setting again. Adjust this when your first shots have a low velocity.

### After Nitro - PURPLE

Only applies to Nitro mode. When you navigate to this setting, the LED will flash purple, then change to the color of the mode that the board will activate after nitro. Press the trigger to cycle through the modes (see Fire Modes).

### Activation Speed - RED

Only applies to PSP Ramping and NXL Auto modes. Trigger pulls per second that will cause the mode to kick in.

### Activation Pulls - BLUE

Only applies to Ramping and NXL Auto modes. Number of trigger pulls at the defined Activation Speed that will cause the mode to kick in.

### Training Mode - TEAL

Allows the marker to be aired up and fired without actually firing a ball provided the Training Dwell is properly set. This is useful for trigger setup and testing (Avail on board purchased or re-flashed after 06/10/06).

### Training Dwell - GREEN

Dwell used for Training. It should only be enough to hear the marker partially cycle. Should not be able to actually fire a ball.

### Restore Default - N/A

Restore factory defaults.

### Eye Alignment - RED

When in the Eye Alignment Tool, the LED will light up when the eye is properly aligned. If the eye is blocked or misaligned, the LED will NOT light. This tool is used to verify that your eyes are clean and functioning.