



Sci-Fi Board Manual

For

J4 Torque

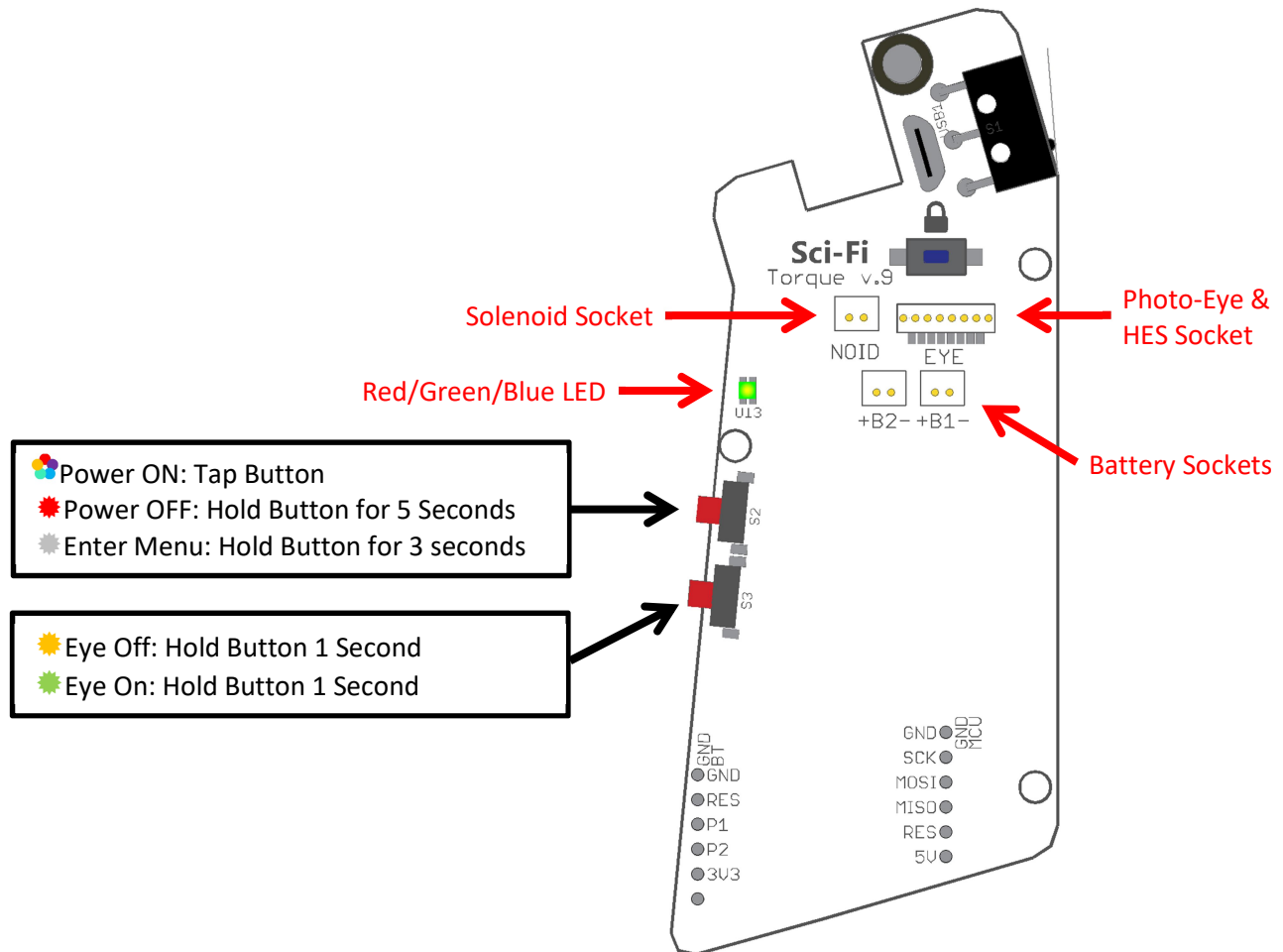
Software v2.3 & v2.4

Attention:

- A Paintball Marker is NOT a toy. Misuse can result in injury or death.
- Please understand the operation of this board before using it.
- Test your marker using safe practices to ensure proper board settings.
- Always make sure your board uses settings approved by the paintball field or event.
- ALWAYS wear eye protection that is specifically designed for paintball & conforms to the ASTM / CE standards.

There is a software update available for your board!
Visit the www.SciFi-Paintball.com to download the latest board software. The update can be installed a from a PC via usb.

FIRING READY MODE:



Turn on board: Tap Top Button

 The board boots up with a rainbow cycle of led colors, then enters FIRING MODE

The marker is now ready to fire

A PURPLE led will flash every 8 seconds while in firing mode

Turn off board: Hold Top Button for 5 seconds

 RED led is solid

Turn off the Photo-Eye: Hold Bottom Button for 1 second

 YELLOW led flashes once

Turn on the Photo-Eye: Hold Bottom Button for 1 second

 GREEN led flashes once

Navigate the menu: Tap the Bottom Button

Tapping the Bottom Button moves to the next parameter.

The led will flash a sequence of colors to indicate the current Setup Parameter

Edit a parameter: Tap the Top Button and Trigger

Tap the Top Button to select a parameter for editing

The led will turn off.

Pull the trigger (X) number of times to change the parameter value

When done pulling the trigger wait 5 seconds, the current value will be saved and the board will return to the MENU.

If the trigger is not pulled, no changes will be made. The board will return to the menu after 5 seconds.

This chart shows all of the Setup Parameters and the led flash sequence for each parameter.

Example: Setting Eye Debounce On

Enter MENU

Tap the Bottom Button until you see 3 quick BLUE flashes (● ● ●)

3 quick BLUE flashes (● ● ●)
= Eye Debounce On Parameter

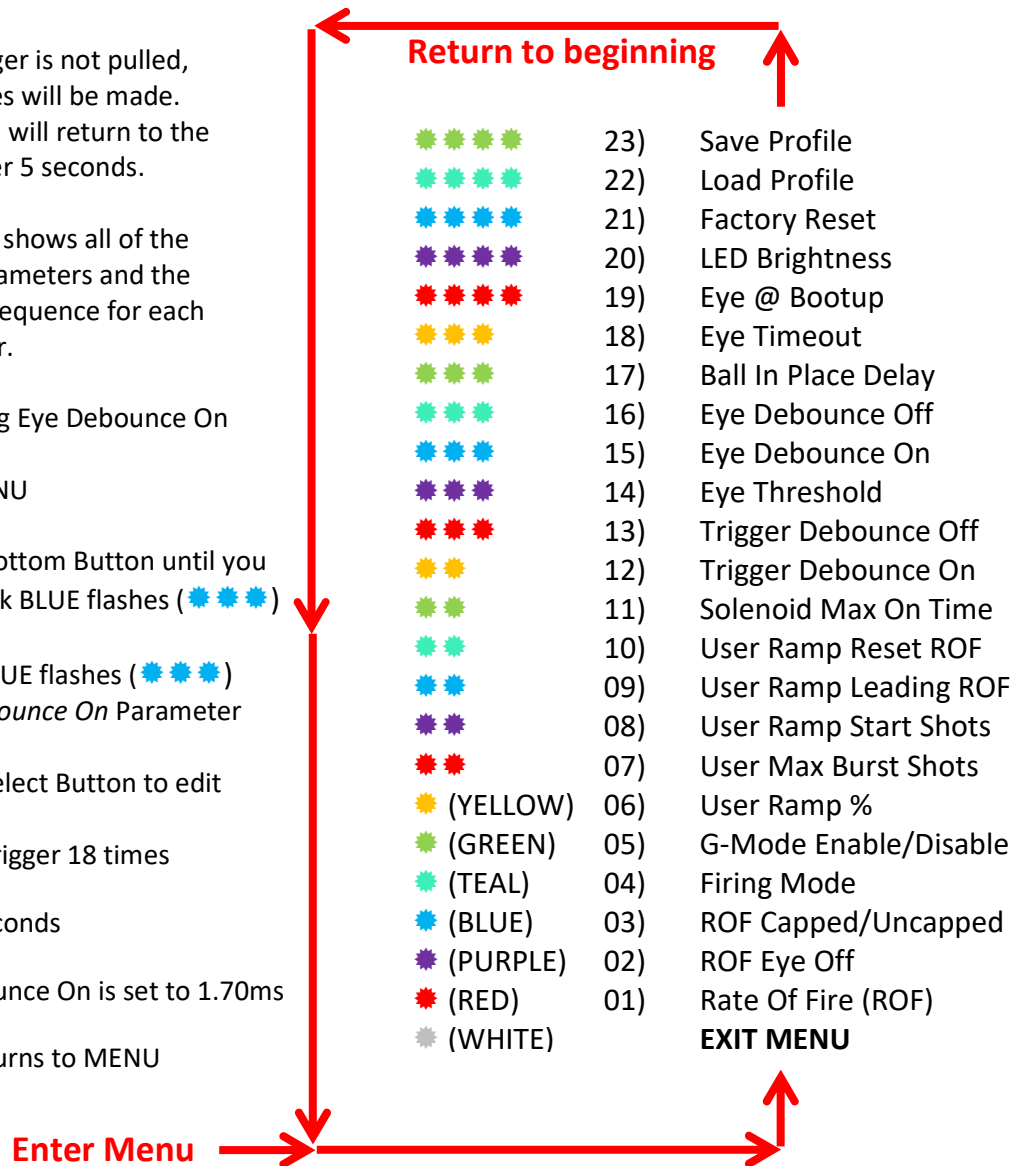
Tap the Select Button to edit

Pull the Trigger 18 times

Wait 5 seconds

Eye Debounce On is set to 1.70ms

Board returns to MENU



☀ 1) Rate Of Fire (balls per second)

This is the maximum shots per second the marker will fire. All firing modes are limited by this setting. This setting will be bypassed if the Rate Of Fire Cap/Uncapped setting is set to Uncapped.

***Default: 9.00 bps

Trigger Pulls	1	2	3	4	5	6	7	8	9	10
Value	9.00	10.00	10.20	10.50	11.00	11.50	12.00	12.20	12.50	13.00
Trigger Pulls	11	12	13	14	15	16	17	18	19	20
Value	13.50	14.00	14.50	15.00	15.50	16.00	16.50	17.00	17.50	18.00
Trigger Pulls	21	22	23	24	25	26	27	28	29	30
Value	18.50	19.00	19.50	20.00	20.50	21.00	21.50	22.00	22.50	23.00

☀ 2) ROF Eye Off (balls per second)

This is the maximum shots per second the marker will fire while the Eye is turned Off. All firing modes are limited by this setting.

***Default: 9.00 bps

Trigger Pulls	1	2	3	4	5	6	7	8	9	10
Value	8.50	9.00	9.50	10.00	10.50	11.00	11.50	12.00	12.50	13.00
Trigger Pulls	11	12	13	14	15	16	17	18	19	20
Value	13.50	14.00	14.50	15.00	15.50	16.00	16.50	17.00	17.50	18.00
Trigger Pulls	21	22	23	24	25	26	27	28	29	30
Value	18.50	19.00	19.50	20.00	20.50	21.00	21.50	22.00	22.50	23.00

☀ 3) Rate Of Fire Capped/Uncapped

If set to Capped, the marker rate of fire will be limited to the Rate Of Fire setting.

If set to Uncapped, the marker will not be limited and will fire as fast as it is capable of firing.

***Default: Capped

Trigger Pulls	1	2
Value	Uncapped	Capped

4) Firing Mode

***Default: Semi Auto

Trigger Pulls	Firing Mode
1	Semi Auto
2	Full Auto
3	3 Shot Burst
4	Auto-Response
5	PSP Ramping
6	Millennium Ramping
7	NXL Ramping
8	User % Ramping
9	God Mode
10	User Burst

1 shot fired for each trigger pull.

Shoots for as long as the trigger is held down.

3 shots fired for each trigger pull. Trigger must be held down.

Shot fired when the trigger is pulled and also when released.

Ramps to 3 shot bursts @ max ROF, per PSP rules.

Ramps to 1 extra shot @ max ROF, per Millennium rules.

Ramps to 1 extra shot @ max ROF, per NXL rules.

Ramps to 1 extra shot up to max ROF with custom settings.

Fully adjustable burst style ramping with custom settings.

Adjustable burst fires (2 to 5) shots fired for each trigger pull.

5) G-Mode Enable/Disable

When Enabled, the marker will boot up into Full Auto firing mode for the first trigger pull.

***Default: Disabled

Trigger Pulls	1	2
Value	Disabled	Enabled

6) Ramp % (only for User % Ramping Firing Mode)

While in User % Ramping firing mode, this setting controls the ramping rate of fire.

If the Ramp % is set to 250 %, and if the trigger is pulled 5 times per second, the marker will fire at 12.5 balls per second.

***Default: 200 %

Trigger Pulls	1	2	3	4	5	6	7	8	9	10	11
Value	100	150	200	250	300	350	400	450	500	550	600

7) User Max Burst Shots (only for God Mode & User Burst Firing Mode)

While in User Ramping firing mode, this setting controls how many times the trigger must be pulled within 1 second to sustain ramping.

***Default: 2.00 bps

Trigger Pulls	1	2	3	4	5	6	7	8	9	10
Value	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50

Trigger Pulls	11	12	13	14	15	16	17
Value	7.00	7.50	8.00	8.50	9.00	9.50	10.00

8) User Ramp Start Shots (only for God Mode & User % Ramping Firing Mode)

While in User Ramping & God Mode firing mode, this setting controls how many shots must be fired before ramping is enabled

***Default: 4 shots

Trigger Pulls	1	2	3	4	5	6	7	8	9	10	11
Value	2	3	4	5	6	7	8	9	10	11	12

9) User Ramp Leading ROF (only for God Mode & User % Ramping Firing Mode)

This setting controls how fast you must pull the trigger before ramping is enabled.

***Default: 1.00 bps

Trigger Pulls	1	2	3	4	5	6	7	8	9	10
Value	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50

Trigger Pulls	11	12	13	14	15	16	17	18	19
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10) User Ramp Reset ROF (only for God Mode & User % Ramping Firing Mode)

This setting controls how fast you must maintain to pull the trigger or ramping will disabled.

***Default: 2.00 bps

Trigger Pulls	1	2	3	4	5	6	7	8	9	10
Value	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50

Trigger Pulls	11	12	13	14	15	16	17	18	19
Value	6.00	6.50	7.00	7.50	8.00	8.50	9.00	9.50	10.00

11) Solenoid Max On Time (milliseconds)

This setting controls how long the Sear Solenoid will be energized.

The HES sensor will override this value.

***Default: 20.00 milliseconds

Trigger Pulls	1	2	3	4	5	6	7	8	9	10
Value	0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50

Trigger Pulls	11	12	13	14	15	16	17	18	19	20
Value	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00	9.50

Trigger Pulls	21	22	23	24	25	26	27	28	29	30
Value	10.00	10.50	11.00	11.50	12.00	12.50	13.00	13.50	14.00	14.50

Trigger Pulls	31	32	33	34	35	36	37	38	39	40
Value	15.00	15.50	16.00	16.50	17.00	17.50	18.00	18.50	19.00	19.50

Trigger Pulls	41	42	43	44	45	46	47	48	49	10
Value	20.00	20.50	21.00	21.50	22.00	22.50	23.00	23.50	24.00	24.50

Trigger Pulls	51	52	53	54	55	56	57	58	59	60	61
Value	25.00	25.50	26.00	26.50	27.00	27.50	28.00	28.50	29.00	29.50	30.00

☀☀ 12) Trigger Debounce On Time (milliseconds)

This setting controls how long the trigger must be held before a trigger pull is registered.

Default: 2.00 milliseconds

Trigger Pulls	1	2	3	4	5	6	7	8	9	10
Value	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90

Trigger Pulls	11	12	13	14	15	16	17	18	19	20
Value	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90

Trigger Pulls	21	22	23	24	25	26	27	28	29	30
Value	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90

Trigger Pulls	31	32	33	34	35	36	37	38	39	40
Value	3.00	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	3.90

Trigger Pulls	41	42	43	44	45	46	47	48	49	50	51
Value	4.00	4.10	4.20	4.30	4.40	4.50	4.60	4.70	4.80	4.90	5.00

☀☀☀ 13) Trigger Debounce Off Time

This setting controls how long the trigger must be released before a trigger release is registered.

Default: 2.00 milliseconds

Trigger Pulls	1	2	3	4	5	6	7	8	9	10
Value	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90

Trigger Pulls	11	12	13	14	15	16	17	18	19	20
Value	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90

Trigger Pulls	21	22	23	24	25	26	27	28	29	30
Value	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90

Trigger Pulls	31	32	33	34	35	36	37	38	39	40
Value	3.00	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	3.90

Trigger Pulls	41	42	43	44	45	46	47	48	49	50	51
Value	4.00	4.10	4.20	4.30	4.40	4.50	4.60	4.70	4.80	4.90	5.00

☀☀☀ 14) Eye Threshold

This setting controls how much light is required to activate the photo-eye

***Default: 350

Trigger Pulls	1	2	3	4	5	6	7	8	9	10
Value	200	250	300	350	400	450	500	550	600	650

Trigger Pulls	11	12	13	14	15	16	17
Value	700	750	800	850	900	950	1000

15) Eye Debounce On Time

This setting controls how long the eye must be activated before a ball is detected.

Default: 2.00 milliseconds

Trigger Pulls	1	2	3	4	5	6	7	8	9	10
Value	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90

Trigger Pulls	11	12	13	14	15	16	17	18	19	20
Value	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90

Trigger Pulls	21	22	23	24	25	26	27	28	29	30
Value	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90

Trigger Pulls	31	32	33	34	35	36	37	38	39	40
Value	3.00	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	3.90

Trigger Pulls	41	42	43	44	45	46	47	48	49	50	51
Value	4.00	4.10	4.20	4.30	4.40	4.50	4.60	4.70	4.80	4.90	5.00

16) Eye Debounce Off Time

This setting controls how long the Eye must be de-activated before an empty breech is detected.

Default: 2.00 milliseconds

Trigger Pulls	1	2	3	4	5	6	7	8	9	10
Value	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90

Trigger Pulls	11	12	13	14	15	16	17	18	19	20
Value	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90

Trigger Pulls	21	22	23	24	25	26	27	28	29	30
Value	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90

Trigger Pulls	31	32	33	34	35	36	37	38	39	40
Value	3.00	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	3.90

Trigger Pulls	41	42	43	44	45	46	47	48	49	50	51
Value	4.00	4.10	4.20	4.30	4.40	4.50	4.60	4.70	4.80	4.90	5.00

17) Ball In Place Delay

After a ball is detected, how much time the marker waits before de-energizing the Cocking Solenoid.

***Default: 2.00 milliseconds

Trigger Pulls	1	2	3	4	5	6	7	8	9	10
Value	0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50

Trigger Pulls	11	12	13	14	15	16	17	18	19	20	21
Value	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00	9.50	10.00

☀☀☀ 18) Eye Timeout (NOT USED ON OPEN BOLT MARKER)

When the Eye is enabled, this is how long the marker will look for a ball before de-energizing the Cocking Solenoid.

***Default: 1000 milliseconds

Trigger Pulls	1	2	3	4	5	6	7	8	9	10
Value	100	150	200	250	300	350	400	450	500	550

Trigger Pulls	11	12	13	14	15	16	17	18	19	20
Value	600	650	700	750	800	850	900	950	1000	1050

Trigger Pulls	21	22	23	24	25	26	27	28	29	30
Value	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550

Trigger Pulls	31	32	33	34	35	36	37	38	39
Value	1600	1650	1700	1750	1800	1850	1900	1950	2000

☀☀☀☀ 19) Eye Hardware

Bounce & Break indicate the type of eye hardware.

Enable & Disable indicate if the eye will be "ON" when the board boots up.

Default: Break/Enabled

Trigger Pulls	1	2	3	4
Value	Bounce/Disabled	Bounce/Enabled	Break/Disabled	Break/Enabled

☀☀☀☀ 20) LED Brightness

This setting controls the brightness of the Red/Green/Blue LED.

The LED is always at 80 % while in Menu Mode.

***Default: 70 %

Trigger Pulls	1	2	3	4	5	6	7	8	9	10
Value	10	15	20	25	30	35	40	45	50	55

Trigger Pulls	11	12	13	14	15	16	17	18	19
Value	60	65	70	75	80	85	90	95	100

******* 21) Factory Reset**

Factory Reset will change every setting to its default value. User Profiles will not be affected.

Trigger Pulls	1	2
Value	Cancel	Reset

******* 22) Load Profile**

Load stored settings from one of the 5 available profiles.

Trigger Pulls	1	2	3	4	5
Value	1	2	3	4	5

******* 23) Save Profile**

Save the current marker settings in to one of the 5 available profiles.

Trigger Pulls	1	2	3	4	5
Value	1	2	3	4	5