BASIC BOARD OPERATION:

Press the Power button. The marker will instantly turn on in Live Mode. While in Live Mode, you can turn the Paintball Detection System (Eyes) off and on by tapping the Eye button/Power button*.

If the eyes are enabled, and marker does not detect paintballs in the breech, you can hold the trigger for 1 second to fire a shot. If the board detects a problem with either the eyes or the bolt cycle, it will signal it by changing the color of the LED to yellow.

* Depending on marker model.

As the battery is gradually depleted, the LED will begin to blink, at first slowly and then faster, to indicate this. You should exchange the battery when the LED blinks fast to avoid problems with the marker not cycling or experiencing drop-off. Using a high capacity battery will increase the amount of time before you need to replace the battery.

LED INDICATORS:

🟩	Marker ready to fire.	⬜	Eyes Turned Off
🟥	No ball in breech	🟦	Training Mode
🟨	Error	🟪	Demonstration Mode

TRAINING / DEMONSTRATION MODE:

Training Mode simulates the current Firemode but with limited air use and potentially a smaller sound signature. To enter Training Mode, turn the marker on while holding the trigger and release when the LED displays blue.

While in Training Mode, you can enter Demo Mode by tapping the eye/power button.*
Demonstration Mode fires at full dwell and allows you to check out how the marker shoots without paintballs.
Both modes feature a built-in safety that prevents the marker from firing if any object is detected in the breech.
* Depending on marker model.

RATE-OF-FIRE INDICATOR:

Activate by holding the Power button while the marker is turned off. The LED will blink white a number of times to indicate the highest recorded Rate Of Fire. In order to reset the rate of fire record, pull the trigger while ROF is displayed. To cancel the display, release the Power button.

TO ENTER PROGRAMMING MODE:

Hold the trigger and turn the marker on. Wait until the LED cycles through the full spectrum of colors repeatedly. If you wish to reset the board to the default settings, continue to hold the trigger until the LED stops cycling, otherwise release the trigger to enter programming menu. The programming menu shows a different pattern on the LED for each adjustable value.

Tournament Lock is activated by setting Dipswitch 1 into OFF position. This will prevent the user from accessing the Programming Mode on the board without opening the gripframe.

🟪	FIREMODE	🟥	DWELL
🔴🔴🔴	MROF EYES ON	🟦	ABS
⬜	MROF EYES OFF	🔵🔵🔵	ABS TIMEOUT
🟡🟡🟡	RAMP ACTIVATION	🟩	DBOUNCE
⚪⚪⚪	RAMP BUFFER	🟢🟢🟢	MBOUNCE
🟩	FIREMODE SAFETY	🔵🔵🔵	FILTER SENSITIVITY
🟦	HOPPER SETTING	🟪🟪🟪	SAVE CURRENT FIREMODE

TO CHANGE A SETTING:

Cycle through the settings in the programming menu by pulling the trigger. Once you find the setting you wish to modify, hold the trigger. The LED will go off, and then flash the value of the current setting.

If you wish to enter a new value, pull the trigger the same number of times as the new value you want to enter. The LED will confirm your new setting by flashing back to you the value you just entered, and return to the programming menu.

To return to the programming menu without entering a new value, release the trigger and wait for 1 second.

IN **PROGRAMMING MODE**, YOU WILL FIND THE FOLLOWING SETTINGS:

🟪   **FIRE MODE** - Adjusts the overall behaviour of the gun

1. SEMI (1 shot per trigger pull, ROF unlimited/12 BPS - Eyes OFF)
2. PSP (3 shots Semi, 13 BPS Ramp/3 shots per pull, 1s timeout)
3. MILLENNIUM (3 shot Semi at 6bps, 12bps Ramp)
4. NXL (3 shots Semi, 13 BPS Full Auto, 1s timeout)
5. UNCAPPED PSP (3 shots Semi, Unlimited Ramp/3 shots per pull, 1s timeout)
6. RESPONSE (Fires on pull and release of the trigger, 20bps cap, 1s timeout)

7. PERCENTAGE RAMPING MODE (+50% Ramp, 22bps cap)
8. BURST (3 shot burst at 22bps, no safety shots)
9. FULL AUTO (Full Auto 20bps, no safety shots)
10. BREAKOUT MODE (22bps Ramp, reverts to Semi after 0.5s timeout)
11 USER FIREMODE 1*
12 USER FIREMODE 2*
13 USER FIREMODE 3*
14 USER FIREMODE 4*
15 USER FIREMODE 5*
*(see Save Current Firemode)

🔴🔴🔴   **MROF ON** - The maximum rate of fire the marker can shoot with eyes ON. Increasing this setting will allow your gun to fire faster but because the eyes are enabled it will not shoot faster than the hopper can feed.

⬜   **MROF OFF** - The maximum rate of fire the marker can shoot with the eyes disabled. Increasing this setting will allow your marker to fire faster but because the eyes are disabled, you risk chopping paintballs.

RATE-OF-FIRE CHART (measured in Balls per Second)

1. ∞	6. 13.2	11. 11	16. 16	21. 21
2. 11.5	7. 13.3	12. 12	17. 17	22. 22
3. 12	8. 8	13. 13	18. 18	23. 23
4. 13	9. 9	14. 14	19. 19	24. 24
5. 13.1	10. 10	15. 15	20. 20	25. 25

🟡🟡🟡   **RAMP ACTIVATION** - Rate of trigger pulls per second needed to activate assisted fire modes.
Note: A certain number of semi shots are needed to activate assisted modes.

⚪⚪⚪   **RAMP BUFFER** - Amount of shots that will be fired, per trigger pull when in Ramp Modes.

🟨   **FIREMODE SAFETY** - Number of shots required in semi, before the marker will enter Ramp Mode.

🟦   **HOPPER SETTING** - Controls the timing of the eye logic. Force feed hoppers can use a lower setting. Gravity feed hoppers will need a higher setting.

🟥   **DWELL** -The duration of the pulse (in milliseconds) sent to the solenoid on each shot. Consult your markers' instruction manual when selecting a proper dwell value.

🟦   **ABS** - Controls the amount of time added to the dwell, when the gun hasn't been shot for some time, to combat bolt stick. If you are experiencing very low velocity on the first shot, you may want to increase this value.

🔵🔵🔵   **ABS TIMEOUT** - Controls the amount of time that the gun hasn't been shot for, in increments of 30 seconds, before the dwell is increased to combat bolt stick. If you are experiencing low velocity on the first shot, you may want to decrease this value.

🟩   **DEBOUNCE** - Sets how strong the anti electronic bounce filters are. Increasing this setting will make the board filter bounce more aggressively when you are shooting fast.

🟢🟢🟢   **MBOUNCE** - Sets how strong the anti mechanical bounce filters are. Increasing this setting will make the board filter bounce more aggressively when you are shooting slowly.

🔵🔵🔵   **FILTER SENSITIVITY** - Defines what filter the board uses to combat trigger bounce. Increasing this setting will mean trigger bounce is more likely to be filtered. Decreasing it will increase the chances of trigger bounce.

🟪🟪🟪   **SAVE CURRENT FIREMODE** - Firemodes 1 to 10 contain the fire modes we created, Firemodes 11 to 15 are slots where you can save the firemodes you create by modifying the parameters FIREMODE, MROF ON, MROF OFF, RAMP ACTIVATION, RAMP BUFFER, FIREMODE SAFETY.

Once you have created your own Firemode, enter value 1-5 to save the current settings into the chosen User Firemode slot. You can then load this Firemode at any time from the Firemode setting.

PROGRAMMING EXAMPLE

To adjust the maximum rate of fire to 13.3 follow these simple steps:

– Enter the programming menu by turning the gun on with the trigger held, and releasing the trigger when the LED starts to cycle through the full spectrum of colors.
– The LED will now show Purple (the Firemode setting). Tap the trigger, the LED will change from solid purple to blinking red. This is the MROF ON option.
– Hold the trigger, the LED will now flash the current value for MROF.
– After the current value is flashed back, tap the trigger 7 times. This will change the MROF setting to 7.
– The LED will now flash back 7 to confirm your current setting.

The MROF is now set to 13.3 bps.

FOR EXPANDED INFORMATION, GO TO WWW.HYPERDRIVEPB.COM AND VISIT THE SUPPORT SECTION.