

Predator Free Style Code

Operation, Functionality and Troubleshooting

LED:

Solid - ball in breech
Blink slow - breech clear
Blink fast - eyes disabled

Dip Switches:

None

Activation:

Move the on/off switch to the ON position. The gun will fire at this point if you pull the trigger and if there are paintballs in the breech.

Tournament lock (software based): This is new as of 7/20/05

Turn gun on with trigger pulled. Hold the trigger for 5 seconds or until the LED flashes. At this point you must pull the trigger 4 times fast (within 1 second) to enter program mode. If you do not pull within the 1 second period the gun will activate as normal and NOT enter program mode.

NOTE: The eyes MUST BE BLOCKED to enter program mode. This can be done by removing the AIR from the gun so the BOLT is in the forward position.

Example for programming your Predator:

1. Enter program mode by using the steps above.
2. Pull trigger the appropriate number of times to go to register. Example: 2 pulls will take you to the MROF register (register 2)
3. LED will flash the current setting of the register you selected
4. You are now in MODE select area
5. You can now pull the trigger to insert the new setting.
6. The LED will flash 2 times to indicate it has taken the new setting
7. You are now back in the REGISTER select area
8. You can now move to a new register by simple pulling the trigger the appropriate number of times or turn the gun off and back on to use the new settings

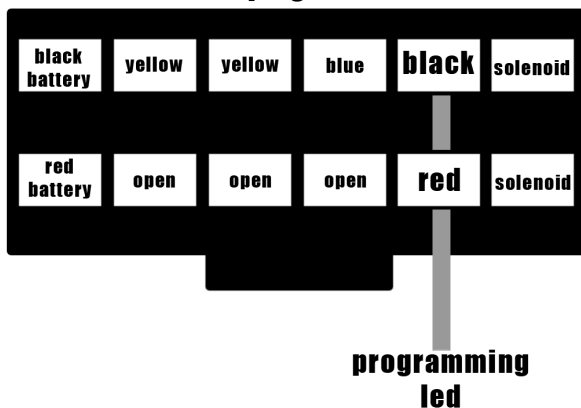
NOTE: If you select Register 1, you are expected to enter a fire mode, again in trigger clicks. After you have made a selection, the light will flash and *remain on*. The gun is now prepared to fire. We suggest you make the fire mode the last register you select as the board will reboot after it has been selected.

Programming advanced firing mode example on Predator board:

Player wishes his or her marker to ramp once they reach 6 bps but NOT start ramping until they have fired 10 shots.

1. Go into programming mode
2. Pull trigger 5 times to enter the RAMPING ROF register (register 5)
3. LED will flash the current setting
4. Pull the trigger 6 times to set this register to 6bps
5. LED will flash 2 times to indicate it took the new setting
6. Pull trigger 6 times to enter the RAMPING SHOT COUNT register (register 6)
7. LED will flash the current setting
8. Pull the trigger 10 times to indicate you wish the ramping to start after you have fired 10 shots
9. LED will flash 2 times to indicate it took the new setting.
10. Pull trigger 1 time to enter the FIRING MODE register
11. LED will flash the current setting
12. Pull trigger 6 times to enter FAST RAMPING mode
13. LED will flash 2 times to indicate that it took the new setting AND the gun will reboot and be ready to fire. The gun reboots automatically after you set register 1. This does not happen after any of the other registers.

looking at front of connector (the side that plugs into the board)



INSTALLING THE PROGRAMMING LED LIGHT

Since the Freestyle does not have an LED indicator you will need to install the one that we included with your newly flashed board. We have shipped a small RED LED with BLACK and RED wires attached. (Black and White wire shown in the image above.)

These wires should be placed into the stock ICD header as shown in the illustration above. If you are looking at the front of the connector you will notice that the BLUE solenoid wires are on the right hand side of the connector. You will place the BLACK LED wire on the top row next to the BLUE wire and the RED LED wire on the bottom row next to the BLUE wire.

This will allow you to see the LED light that is necessary to program our Predator code. We have included enough wire so you can place your LED in the grip frame or in another location on the frame.

NOTE: Turning the gun on with the trigger pulled will place your board into program mode.

Some boards do not need this extra LED for programming since the LED light is already in the switch.

5.0 Registers

Register	Default	Description
1		Firing Mode: 1. Semi 2. Auto Response 3. Full Auto 4. Smooth Ramp (debounce slowly drops) 5. Assisted Ramp (turbo style ramping where it adds shots based on the rate of fire. Slower trigger pulls add less shots. Faster trigger pulls will add more shots.) 6. Fast Ramping (Shots are added as soon as you reach the settings in register 5 and 6) 7. Triplet Shot Ramping (fires 3 shots every time the trigger is pulled. This speeds up the faster you pull the trigger) 8. PSP1 (3 shots semi then fast ramping) (no need to set register 6 as this feature is built in. However, you can set the AFA ROF in register 5) 9. PSP2 (3 shots semi then super-fast ramping) (no need to set register 6 as this feature is built in. However, you can set the AFA ROF in register 5) 10. PSP3 w/Triple Shot ramping (3 shots semi then fires 3 shots every trigger pull) (no need to set register 6 as this feature is built in. However, you can set the AFA ROF in register 5) 11. NXL (3 shots then full auto) 12. Breakout (Full Auto then fast ramping. Settings in registers 5/6 are honored) 13. OMFG (cant really explain it but it is amazing) WARNING: Don't stand behind your own players when using this one. 14. NXL Breakout First shot is full auto then 3 shots semi then full auto again. We have no idea why we do this stuff
2		Rate of Fire: This is the GLOBAL rate of fire. This controls the MROF in all modes with the eye on. IF register 11 is set to 1 this will also be your EYE off MROF. Otherwise your eye off MROF is controlled by the number you enter in register 11
3		Electronic and Mechanical Anti Bounce: A higher setting will keep the gun from firing extra shots with each trigger pull. The board monitors the noise and firing rate then adjust the mechanical debounce to work best with the electronic bounce settings.
4		Dwell: Bolt Forward Duration. Length of time the bolt stays forward
5		AFA ROF: 1 = off, 2 and above is the rate of fire that must be reached and maintained before the advanced firing modes activate.
6		AFA Shot Count: Actual number of trigger pulls before ramping activates
7		Fire Hold Off: Delay before the gun will fire again after cycling, in ms
8		Eye Hold Off: Delay before the gun will fire after seeing a ball, in ms. If you are using a slow hopper it might be necessary to increase this to avoid chopping.
9		Anti Bolt Stick: This is the time the board waits before increasing the dwell to compensate for a gun that has an issue with bolt stick. NOTE: Using this feature on a gun without this issue will result in the first shot being hotter. 1 = off 2 = 5s 3 = 10s 4 = 15s
10		Anti Bolt Stick Time: This is the increase in dwell when register 9 is engaged.
11		Eye Off Rate Of Fire: 1 = rate set in register 2, 2 and above equals the maximum rate of fire when the eyes are turned off. Example: If this register is set to 1 then the rate of fire you select in register 2 will be the same with the eyes on or off. If this is set to 11 then your eye off rate of fire will be a maximum of 11 bps.
12		ROF Additions in .20 of a second: 1 = off, 2 = .20, 3 = .40, 4 = .60, 5 = .80
13		Disable Eye thru trigger: 1 = yes, 2 = no (this feature allows you to turn the eyes off by holding the trigger back for 2 seconds)
14		Clearing Shot: 1 = yes, 2 = no (This allows you to fire a ball if you hold the trigger back for ¼ of a second in the event the eyes do not see a ball)
15		DM4/WMD board: Not used Shocker Board: Eye Type: 1 = Break Beam, 2-20 = Reflective with sensitivity control) 2 = most sensitive 20 being the least. YES we can see black paint with our new reflective eye logic. Currently our shocker board is the only one that uses a reflective eye system. NME/Interceptor Board: Eye sensitivity: 1 - 20 (20 being more sensitive). If your eyes are not "seeing" each other increase this setting.