DM4/5/C Predator Chip

LED:
Blue - Breech is empty
Teal/Light Blue - Ball in breech (eyes blocked)
Red Flashing - Eyes off
Green - Program mode

Dip Switches:
1 = Anti Bolt Stick on (this is predetermined in your register settings)
2 = Tournament lock (with this in the on position you will not be able to enter program mode)
3 = Factory reset feature (with this turned on you can turn the power on while holding down the eye button to reset all of the defaults to factory settings)
4 = unused

Activation:
Push the top of your membrane pad and hold until the LED activates.

Eye Operation:
Push and hold the bottom of your membrane pad to activate or deactivate the eyes.

Example for programming your Predator:

1. Your tournament LOCK must be off if your board has that feature. We strongly suggest you turn your tournament lock on while playing.
2. Pull and hold the trigger then turn the gun on by using the button on the back of the gun
3. Release trigger
4. You are now in the REGISTER select area
5. Pull trigger the appropriate number of times to go to register. Example: 2 pulls will take you to the MROF register (register 2)
6. LED will flash the current setting of the register you selected
7. You are now in MODE select area
8. You can now pull the trigger to insert the new setting.
9. The LED will flash 2 times to indicate it has taken the new setting
10. You are now back in the REGISTER select area
11. 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.
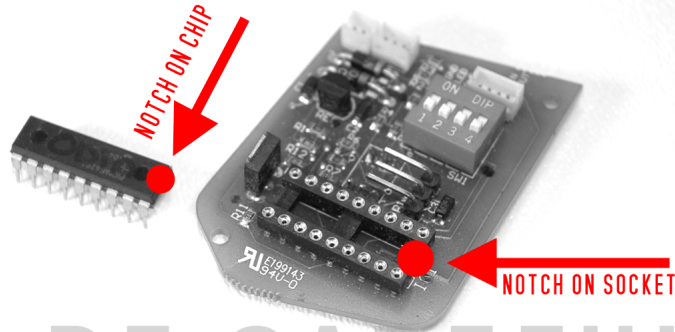
Programming advanced firing mode example on Predator board:
Player wishes his or her marker to ramp once they reach 6 bps but NOT start ramping until they have fired 10 shots.

1. Go into programming mode by turning your board on while holding the trigger back
2. LED will flash once to indicate you are in program mode
3. Release the trigger
4. Pull trigger 5 times to enter the RAMPING ROF register (register 5)
5. LED will flash the current setting
6. Pull the trigger 6 times to set this register to 6bps
7. LED will flash 2 times to indicate it took the new setting
8. Pull trigger 6 times to enter the RAMPING SHOT COUNT register (register 6)
9. LED will flash the current setting
10. Pull the trigger 10 times to indicate you wish the ramping to start after you have fired 10 shots
11. LED will flash 2 times to indicate it took the new setting.
12. Pull trigger 1 time to enter the FIRING MODE register
13. LED will flash the current setting
14. Pull trigger 6 times to enter FAST RAMPING mode
15. 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.

Register	Default	Description
1	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	18	**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	10	**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	18	**Dwell:** Bolt Forward Duration. Length of time the bolt stays forward
5	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	3	**AFA Shot Count:** Actual number of trigger pulls before ramping activates
7	15	**Fire Hold Off:** Delay before the gun will fire again after cycling, in ms
8	1	**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	1	**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	5	**Anti Bolt Stick Time:** This is the increase in dwell when register 9 is engaged.
11	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	1	**ROF Additions in .20 of a second:** 1 = off, 2 = .20, 3 = .40, 4 = .60, 5 = .80
13	1	**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	1	**Clearing Shot: 1 = yes, 2 = no (This allows you to fire a ball if you hold the trigger back for ¾ of a second in the event the eyes do not see a ball)**
15	n/a	**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/Intercepter Board:** **Eye sensitivity**: 1 - 20 (20 being more sensitive). If your eyes are not "seeing" each other increase this setting.

ALIGN THE NOTCHES AND INSTALL

NOTCH ON CHIP

NOTCH ON SOCKET

BE CAREFUL

PLACING THE CHIP IN THE BOARD BACKWARDS WILL VOID YOUR WARRANTY
DAMAGING THE PINS DURING THE INSTALL WILL VOID YOUR WARRANTY

DISCONNECT THE BATTERY BEFORE REMOVING/INSTALLING THE CHIP

We suggest using a Chip extractor when removing the chip from the stock DYE board. This can be purchased from Radio Shack or any other electronics store for as little as $2.00 usd. If this is not available you can use a small flathead (blade) screwdriver to pry up the chip.

Be extremely careful not to damage the pins on the chip when removing it. It is best to raise up one side a slight amount then move to the other side and repeat this until the chip has been completely removed from the socket on the board.

When installing your new Predator chip it is best to align the pins with the socket paying close attention to the notch on the chip and board. These must be on the same side before installing. We find it best to slightly place one side of the pins into the socket then move to the opposite side. You might need to slightly bend the pins to fit correctly. Once the chip has been seated firmly in the socket you can turn your board on and begin the programming sequence if needed.

NOTE: It is always best to turn your board on 1 time then turn it off. This makes sure that the Predator program has been rebooted and will run correctly. You can also perform a reboot by following the directions in your manual for "resetting the board back to factory defaults". This is done by turning DIP switches 2 and 3 on, hold the eye button and power up the board. You will see a the LED flash about 5 times to indicate everything has been reset to defaults and the board has been rebooted.

If you are not certain you can install the chip correctly simply send your board and chip to us and we will be more than happy to do it for you.