

under the conditions of CO2 the results may not be as expected.

**REMEMBER:** CO2, compressed air or nitrogen systems can be extremely dangerous if misused or improperly handled. Use only D.O.T. certified tanks.

Before pressurizing your B2K, check to make sure that you have a barrel plug in place and there is no paint in the gun. The on-off switch should be OFF. Air can now be applied, the gun will become pressurized and the bolt will move backwards.

### Paintball and Loader Usage

The B2K comes equipped to accept 1.03" OD standard-gravity feed loaders. Fit the loader directly into the vertical feed tube. Always twist it down in a CLOCKWISE direction. Always twist it off in a CLOCKWISE direction as well. The B2K uses .68 caliber, water-soluble paint pellets. The pellets are gravity fed from the loader through the direct vertical feed nipple and into the breech of the gun.

### DIP Switch settings - Modes - Rate of Fire -

The B2K features 8 different modes of fire.

Mode selection is dependant on the switch settings of the DIP switches on the Printed Circuit Board.

Modes are:

1. Semi-auto (one single shot per trigger pull),
2. 2 shot (2 shots if the trigger is pulled and not released, with single shot capabilities)
3. 3 shot burst (3 shots if the trigger is pulled and not released, with single shot capabilities)
4. 6 shot burst (6 shots if the trigger is pulled and not released, with single shot or any amount between capabilities).
5. Auto Response mode fires once the trigger is pulled and once when it is released.
6. Turbo mode (emulated trigger reaction). To engage this mode you must maintain a sequence of cycles within a pre-determined timing rate, and as long as this repetition is maintained, the mode will remain engaged.
7. Zip mode (a ramping cycle) starts at 8 BPS and increases to 12 BPS within a 6 shot burst if the trigger is pulled and not released, with single shot or any amount between capabilities.
8. Full auto (as long as the trigger is pulled it will cycle).

Mode selection is accomplished using switches 1 thru 3. The following configurations will give you the desired modes.

Modes	Switch numbers		
	#1	#2	#3
Semi-Auto	off	off	off
2 shot Burst	on	off	off
3 shot Burst	off	on	off
6 shot Burst	on	on	off
Auto-Response	off	off	on
Turbo Mode	on	off	on
Zip (ramp)	off	on	on
Full Auto	on	on	on

Rate of Fire and timing is as follows:

Dip switch #4 and #5	(registers Solenoid on times in milliseconds)	
#4	#5	
off	off	= 06 ms (.006 seconds)
on	off	= 08 ms (.008 seconds)
off	on	= 10 ms (.010 seconds)
on	on	= 12 ms (.012 seconds)

Dip switch #6, #7 and #8	(registers Solenoid off (delay before re-cycle) times in milliseconds)		
#6	#7	#8	
off	off	off	= 70 ms (.070 seconds)
on	off	off	= 80 ms (.080 seconds)
off	on	off	= 90 ms (.090 seconds)
on	on	off	= 100 ms (.100 seconds)
off	off	on	= 110 ms (.110 seconds)
on	off	on	= 120 ms (.120 seconds)
off	on	on	= 130 ms (.130 seconds)
on	on	on	= 140 ms (.140 seconds)

Calculating the cycles per second is easy and precise. For instance, if, S4 is off & S5 is on, S6 & S7 are off and S8 is on the rate is calculated as  $.010 + .110 = .120$ . The total cycle times for  $.120 = 8.33$  cycles per second (1 divided by  $.120$ ).

This is the calculation for **Balls Per Second**.