

## DC100 Overview

### Variable Speed and Drill Instructions

**Motor**

- Variable speed control knob is located on the top of the motor. It is a dial numbered 1-5
- Inside the motor, just under the variable speed dial, is a circuit board that senses torque overloads, and when tripped will stall the motor
  - This prevents damage to the gears and forces the user to make the optimal cut
  - When this sensor is tripped, simply push the red button on the start/stop switch, and then push the green again to resume drilling
- The motor has 2 gears. The gear change slide is located on the side of the motor
  - When this black slide is in the down position, you are in the lower gear (40-130 RPM)
  - When in the up position, you are in high gear (160-450 RPM)
  - To select proper gear and dial refer to this chart (Diameters assume HSS or Cobalt cutting mild steel. For harder steels, decrease RPM)

Dial#	Low gear (Black slide in down position)	High gear (black slide in up position)
1	50 rpm (3-1/4 -4)	160 rpm (1-9/16 -1-3/4)
2	70 rpm (2-3/4 – 3-3/16)	230 rpm (1-13/16 -1-1/2)
3	90 rpm (2-3/8 – 2-11/16)	305 rpm (1-1/16 – 1-1/8)
4	110 rpm (2-1/16 – 2-3/16)	380 rpm (13/16 -1)
5	130 rpm (1-13/16 – 2)	450 rpm (7/16 – 3/4)

**Figure 1- Speed Control Dial**



**Figure 2- Gear Change Slide**



Higher Gear (160-450 RPM)  
Lower Gear (40-130 RPM)

**To operate:** Turn magnet on. If there is a fwd/rev toggle switch, click up into 'fwd' setting. Make sure you are in proper gear (do NOT try and change gear when motor is running). Push green 'ON' button. Adjust speed with top dial.

**For cutting guidelines, refer to our "Guide to Good Drilling" handbook found inside the drill case**