

## Technical Note 28: Manual Test of Cropscan Power Supply Board



1. Remove its box cover of the Power Supply Module.
2. Get a bench power supply which has dual supply of 30v and 5v of DC.
3. Set the 30v output to 19v with current clamp at 500mA , then connect to +IN (J7) of the power supply board and its ground to –IN(J6).
4. Plug in a jumper to short pin5 and pin6 of 12-way ribbon connector which normally plug into keypad board to turn on the power supply board.
5. Turn On the bench power supply and check the current displayed the bench supply . It should read around 200mA @19V.
6. Turn the bench supply off, then plug in a 4-way connector into 4-way pin header (J9) in the power supply board. Please make a connection as the following:
  - pin1 not connected
  - pin2 should be connected to +5V of bench power supply through 1Kohm resistor.
  - pin 3 should be connected to +5V of bench power supply directly for motor reverse direction, otherwise it should be left floating.
  - pin 4 should be connected to Gnd (J6).
7. Turn back the bench power supply ON with motor connected to power supply board. Then check how much current displayed on 19V of the bench power supply. It is supposed to read around 220mA @19V when the motor turn on in either direction.