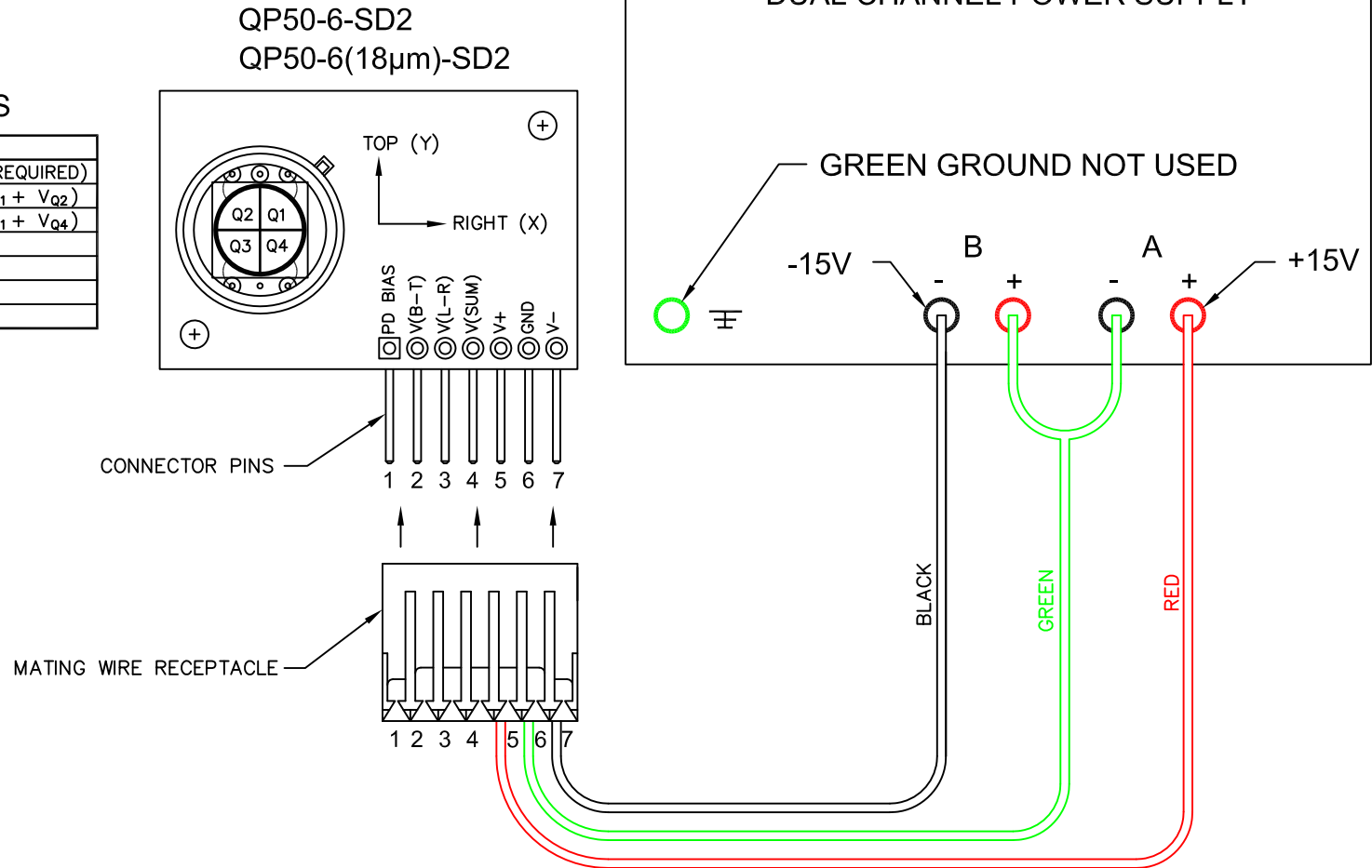


SERIES 6 QUADRANT MODULE HOOK UP NOTES

PIN CONNECTIONS

PIN	FUNCTION
1	PD BIAS VOLTAGE (V+) (NOT REQUIRED)
2	Y DIFFERENCE $(V_{Q3} + V_{Q4}) - (V_{Q1} + V_{Q2})$
3	X DIFFERENCE $(V_{Q2} + V_{Q3}) - (V_{Q1} + V_{Q4})$
4	SUM $(V_{Q1} + V_{Q2} + V_{Q3} + V_{Q4})$
5	+V SUPPLY VOLTAGE
6	GROUND
7	-V SUPPLY VOLTAGE



TO OPERATE THE QP50-6-SD2, OR QP50-6(18 μ m)-SD2 QUADRANT MODULES YOU WILL NEED A DUAL OUTPUT POWER SUPPLY OR TWO SINGLE OUTPUT POWER SUPPLIES. THE CURRENT REQUIREMENT IS ABOUT 15 mA FOR EACH VOLTAGE POLARITY. MOST LAB BENCH TOP DUAL SUPPLIES WILL WORK. A DUAL SUPPLY WILL HAVE TWO SETS OF VOLTAGE CONNECTIONS, EACH WITH THREE PLUG-INS, "+" (RED), "-" BLACK AND GROUND (GREEN). IN SOME CASES THERE WILL ONLY BE ONE GREEN GROUND PLUG-IN FOR BOTH CHANNELS. THE GREEN GROUND SET PLUGS ARE NOT USED. YOU WILL NEED TO SHORT THE "+" OF ONE CHANNEL SET TO THE "-" OF THE OTHER CHANNEL SET AND THIS WILL BE THE GROUND TO THE QUADRANT MODULE'S (PIN 6). THE REMAINING "+" GOES TO THE QUADRANT MODULE'S "+" (PIN 5), AND THE REMAINING "-" GOES TO THE QUADRANT MODULE'S "-" (PIN 7).

THE MODULE WILL NOT WORK WHEN POWERED BY A SINGLE OUTPUT POWER SUPPLY. WE DO NOT RECOMMEND POWERING THE QUADRANT MODULE WITH BATTERIES BECAUSE THE CURRENT LEVELS ARE USUALLY INSUFFICIENT AND/OR DIMINISH OVER TIME.