

SPECIFICATIONS

Input Voltage: 6.0VDC to 8.5VDC, reverse battery protected
 Output Voltage: 5.0VDC \pm 5%, thermally protected
 Output Current: 425mA maximum at 7.5V operation
 Size/Weight: 1.18" x 0.83", 7 grams

BILL-OF-MATERIALS

QTY	PART TYPE	REF	DIGIKEY PART No.
1	1N4004	D1	1N4004RLOSCT
1	10uF	C1	493-1767
1	100uF	C2	493-1695
1	4-Pin Connector	J6	WM7622CT
1	LM2940S-5.0	U1	LM2940S-5.0
1	HS227	U1-Assy	HEATSINK

ASSEMBLY NOTES

1. If the Lawmate 200mW 5V Video Transmitter will be used then install J6. Otherwise omit it.
2. U1's heatsink tab solders directly to thermal pad on PCB. Do not omit this!
3. The aluminum heatsink is mounted on U1 using CA adhesive or JB Weld Epoxy. Use sparingly and ensure a good bond.

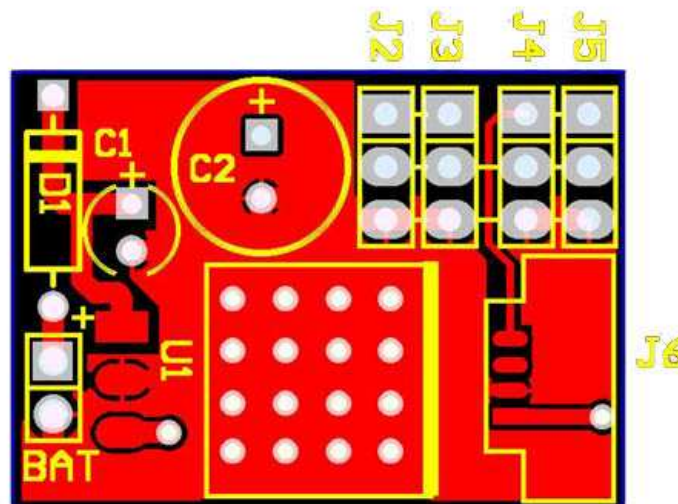


Figure 1, Component Layout

INSTALLATION NOTES

1. J1 is the battery input. Voltage range is 6.0VDC to 8.5VDC. Higher voltages are possible if the output current is low, otherwise the VReg will run too hot.
2. Use a dedicated battery for the Video Gear. Video noise or R/C glitches may be experienced if the video gear shares the model's motor battery. Be sure to observe the battery manufacturers cautions; NEVER violate a LiPO pack's low voltage limits or it will be harmed.

3. The current production 200mW Lawmate/BWAV video Tx's will plug directly into J6. But, before using the J6 connector it is VERY important that you verify that the Video Tx's color coded wiring is the same order as shown in the photo at the right. **Do not omit this inspection.** If the color order is different, then your Tx is NOT compatible and must not be plugged into J6.

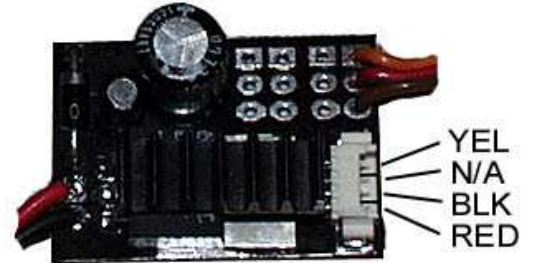


Figure 2, J6 Colors

4. The J5 connections are for the CMOS or CCD video camera. Wire it as follows:
 - J5-1: Camera Video Signal
 - J5-2: Camera +5 VDC (max 150mA)
 - J5-3: Camera Ground
5. Details to the spare J2/J3 and J4/J5 connector pairs are shown on the schematic. If needed, wire them to suit your application.

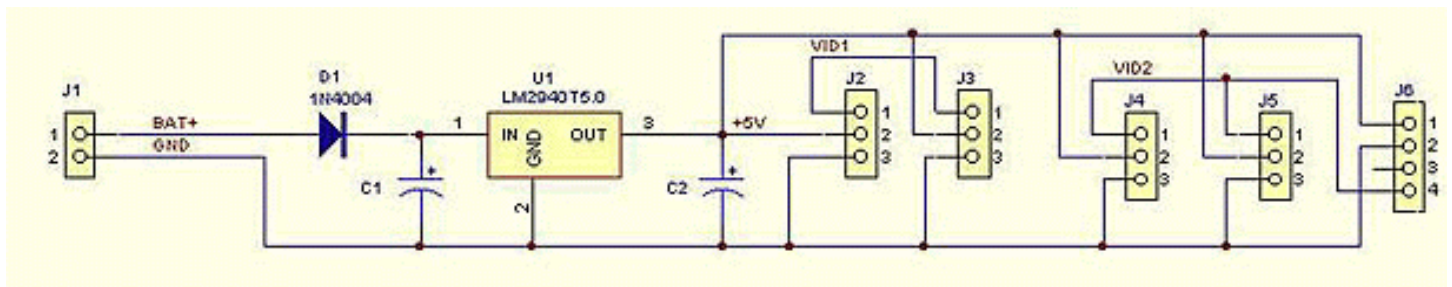


Figure 3, Schematic

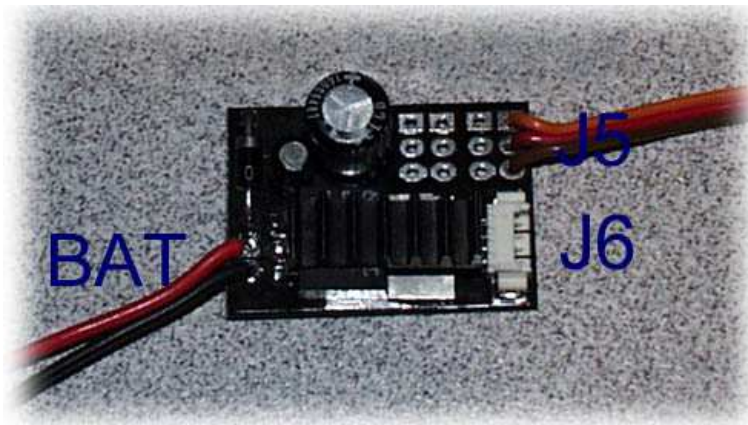


Figure 4, VREG Board