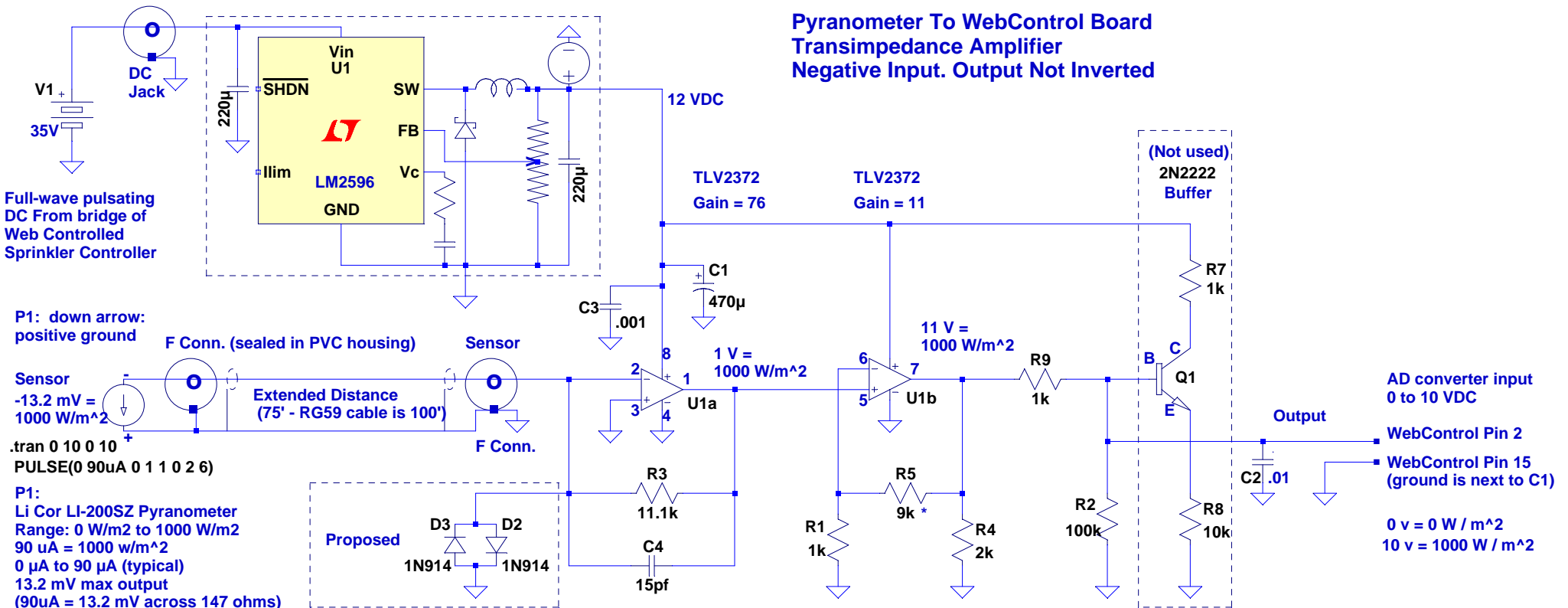


**Pyranometer To WebControl Board  
Transimpedance Amplifier  
Negative Input. Output Not Inverted**

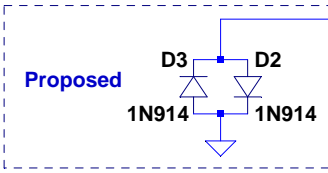


Full-wave pulsating DC From bridge of Web Controlled Sprinkler Controller

P1: down arrow: positive ground

Sensor  
-13.2 mV = 1000 W/m<sup>2</sup>  
PULSE(0 90uA 0 1 1 0 2 6)  
P1:  
Li Cor LI-200SZ Pyranometer  
Range: 0 W/m<sup>2</sup> to 1000 W/m<sup>2</sup>  
90 uA = 1000 w/m<sup>2</sup>  
0 uA to 90 uA (typical)  
13.2 mV max output  
(90uA = 13.2 mV across 147 ohms)  
Coaxial cable shield: positive  
Center conductor: negative.  
Calibrated tag states 11.2

Actual LT Spice OpAmp Models:  
TLV2471, TLV2471A, LT1074HV  
.include sloj018.txt



See:  
Amplifier: <http://www.kmitl.ac.th/~kswichit/pyrano/pyrano.htm>  
Schematic: <http://www.kmitl.ac.th/~kswichit/pyrano/schematic.pdf>  
Li Cor: [https://www.mesonet.org/files/instruments/CSI\\_LI-200S.pdf](https://www.mesonet.org/files/instruments/CSI_LI-200S.pdf)  
[http://www.fondriest.com/pdf/li-cor\\_190\\_200\\_manual.pdf](http://www.fondriest.com/pdf/li-cor_190_200_manual.pdf)  
LI-200SZ borchure: <http://www.licor.com/env/pdf/light/200.pdf>

Forum: [http://e2e.ti.com/support/amplifiers/precision\\_amplifiers/f/14/t/164998](http://e2e.ti.com/support/amplifiers/precision_amplifiers/f/14/t/164998)  
Schematic: <http://imgur.com/KDVTEZi>  
TLV2372: <http://www.ti.com/product/tlv2372>  
\* R5 is 9.6k If Q1 stage is used.

AD converter input  
0 to 10 VDC  
WebControl Pin 2  
WebControl Pin 15  
(ground is next to C1)  
0 v = 0 W / m<sup>2</sup>  
10 v = 1000 W / m<sup>2</sup>