

Keithley 2001 repair - Bug #275

K2 - Error 402.1 - Frequency switch

07/19/2012 12:24 PM - tin

Status: Closed	Start date: 07/19/2012
Priority: Normal	Due date:
Assignee: tin	% Done: 0%
Category:	Estimated time: 0.00 hour
Target version: Keithley 2001 #2	
Description	
Cannot measure 0.032V ±0.005V at A/D IN.	
OUT B of the DAC (U531) is set up to output 4.33V at PRECOMP+ (U528 pin 1). The operation of the frequency switch, U522 (FREQ pulled low), is verified by dividing the PRECOMP+ voltage by the voltage ratio across R560 and R558. The "on" resistance (approximately 25Ω) of the analog switch (U522) is added to the resistance of R558 since it is part of the ratio. Again, as in the 400 series tests, this voltage is routed to the A/D buffer (U322) which is configured for x1 gain. Measure 32mV at A/D IN.	
suspected components:	
U322 - x1 gain U531 U528 U522 R560 R558	

History

#1 - 04/07/2015 02:23 AM - tin

- Status changed from New to Resolved

#2 - 04/07/2015 12:11 PM - tin

- Status changed from Resolved to Closed