

Rev:D LINEAR AND LOG VARIANTS

LOG CONTROL:

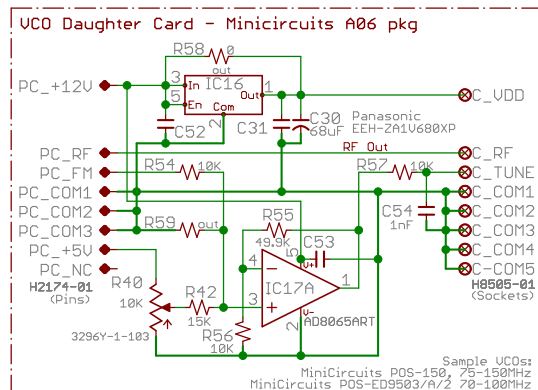
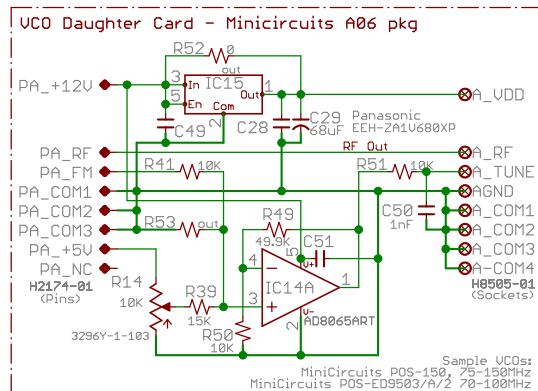
The control input corresponds logarithmically to optical power.
Use UCA821DGS RF amp and the log PD amplifier. The PD BNC is a monitor.
Use 10K for R12 (voltage gain scaling), R19 = 29.4K.

LINEAR CONTROL:

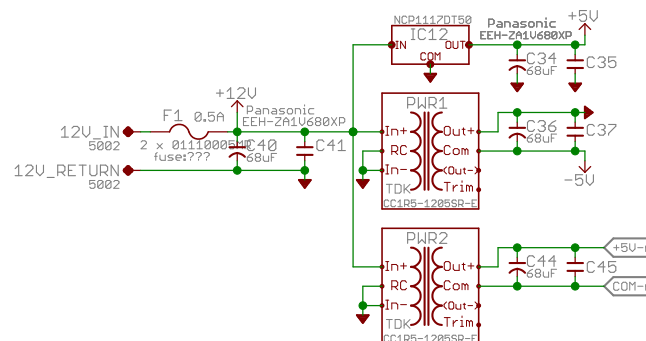
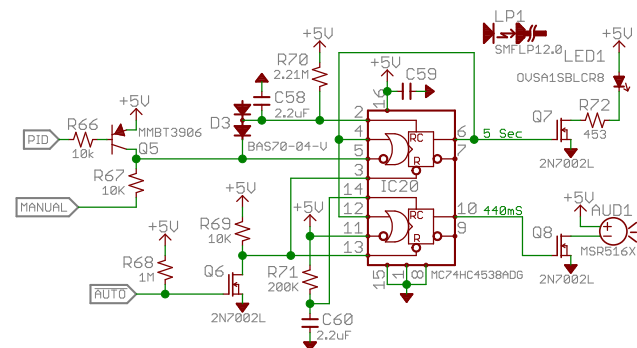
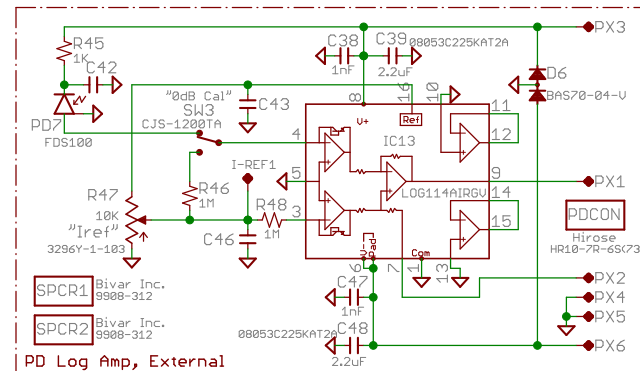
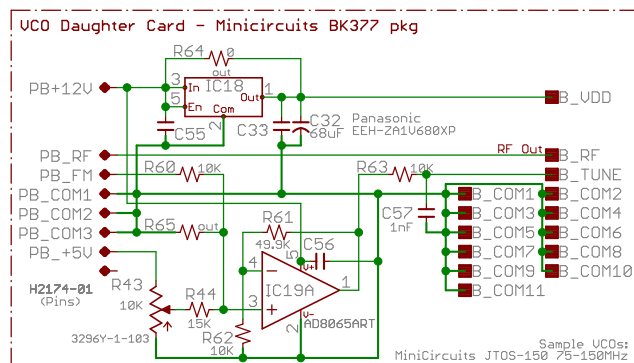
The control input corresponds linearly with optical power.
Use UCA824DGS RF amp and do not use the LOG PD amplifier. Use an external linear PD amp (such as Thorlab's PDA36A) connected to the PD BNC. Use 4.02K for R12 and add R73 10K to add -ve voltage control range.
R19 = 3.31K

D1	A.Stummer	Apr 2016	Changed R19, R5, C6.
D	A.Stummer	Nov 2014	Add lin ver, remove PD PCB, add ext AM, fixed Q5 B-E.
C	A.Stummer	Mar 2013	Many minor mods.
B1	A.Stummer	Jan 2013	Many assorted mods.
A2	A.Stummer	Sept 2012	As assembled and tested.
A1	A.Stummer	Sept 2012	Initial layout.

Ltr	Date	By	Initial Layout	REVISION DESCRIPTION
University of Toronto, Quantum Optics Group				
Design: Alan Stummer				ALPS3 - AOM Laser Power Stabilization J. Thywissen Labs
Date: 2014 nov				
Edited: 06-Apr-16 2:54 PM				
File: ALPS3				
Sheet: 1 of 5				REV: D



See NOTES on UCO A06 case isolation.



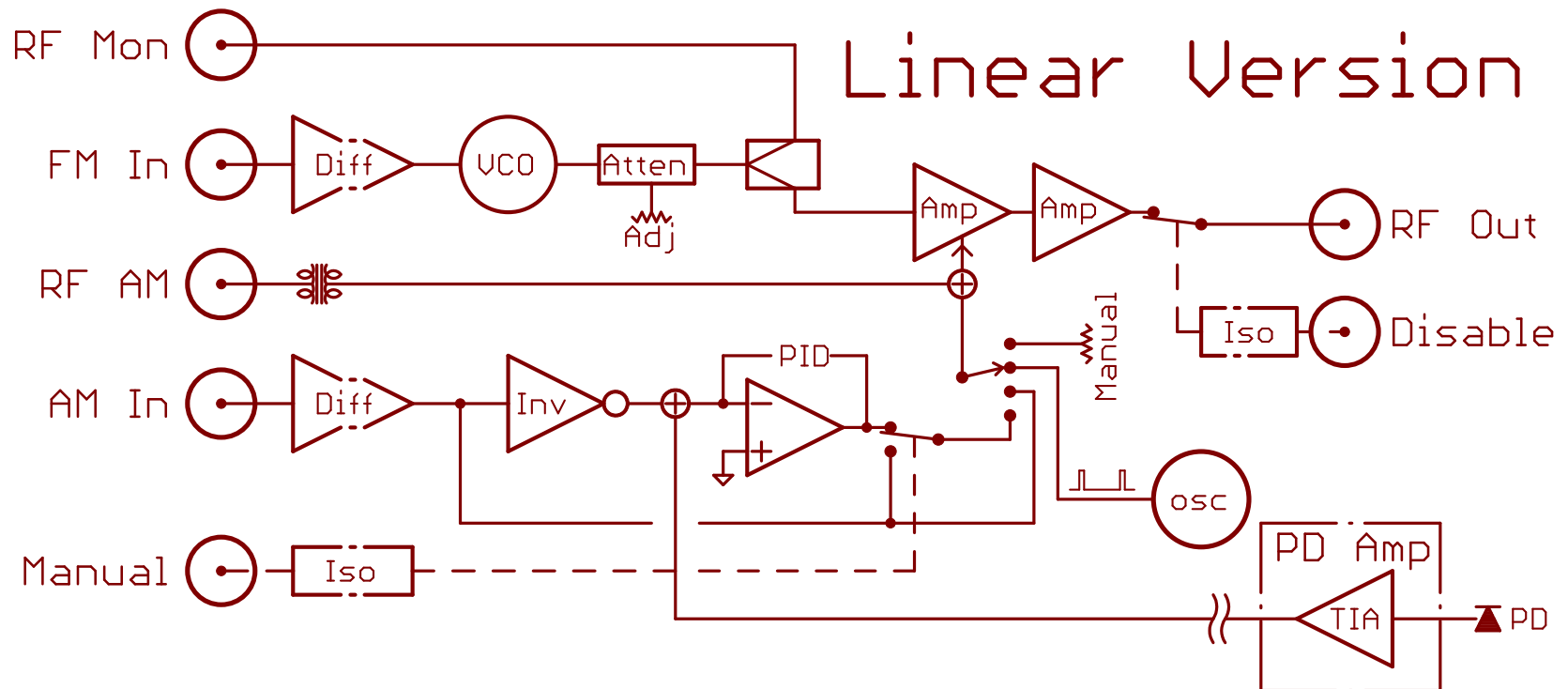
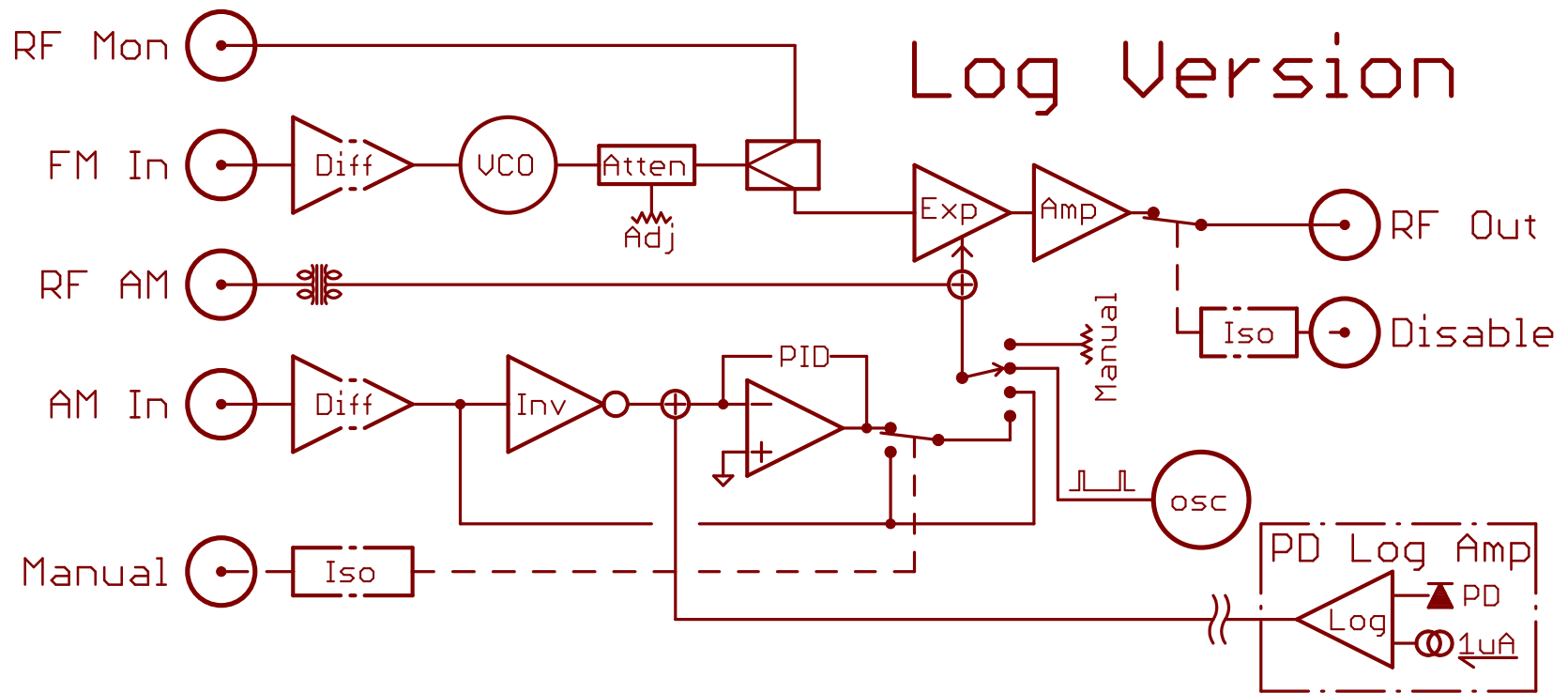
KN0B1	PKE60B1/4 Tyco
KN0B2	PKG50B1/8 Tyco
SW4	???
CASE	Hammond 1402DU
WART	CUI EPSA120100U-P6P-EJ

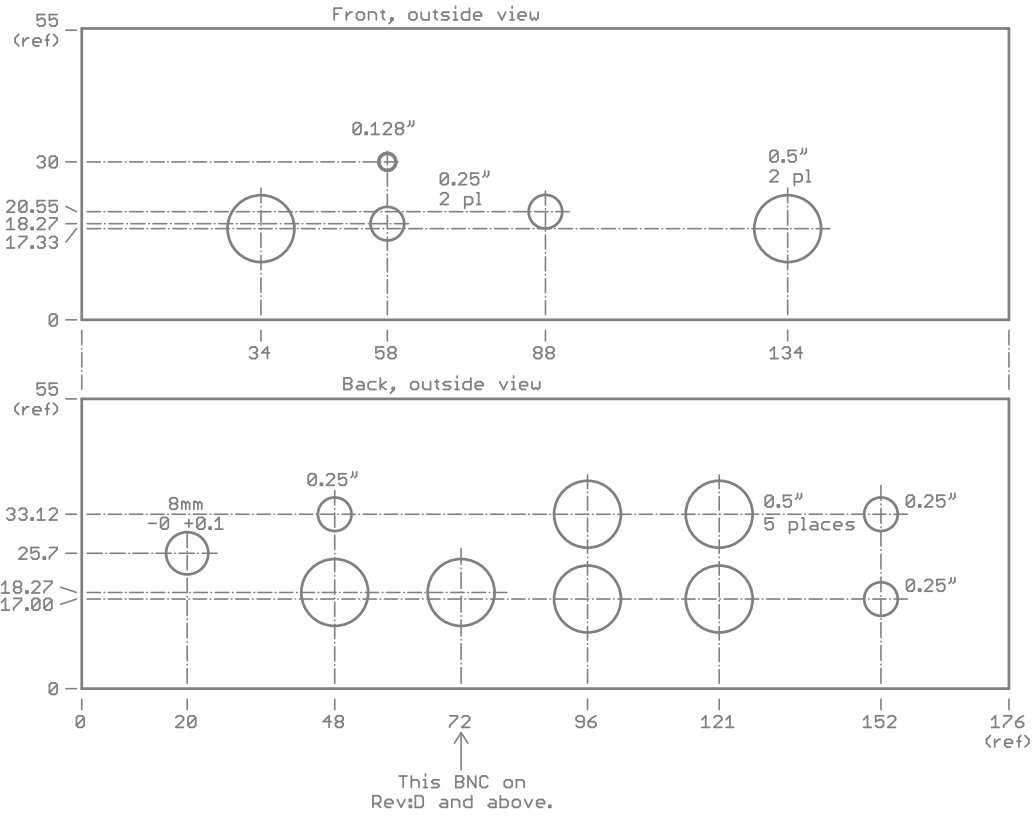
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Power Stabilization**
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ALPS3:File

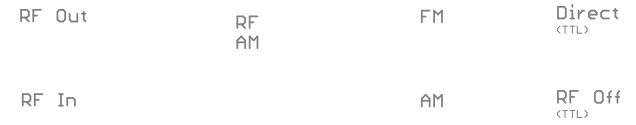
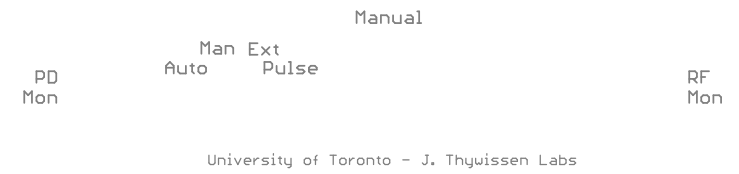
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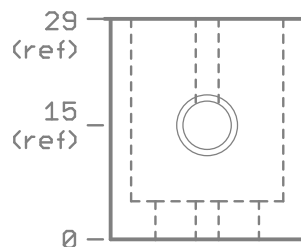
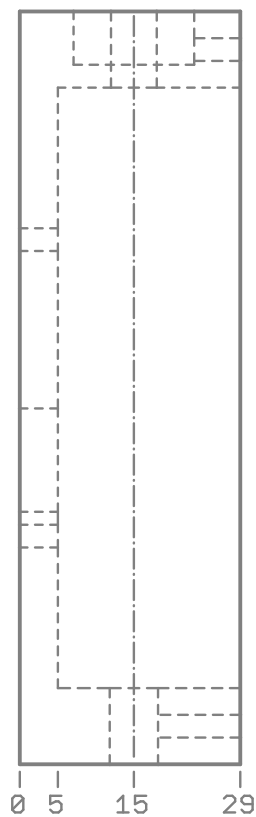
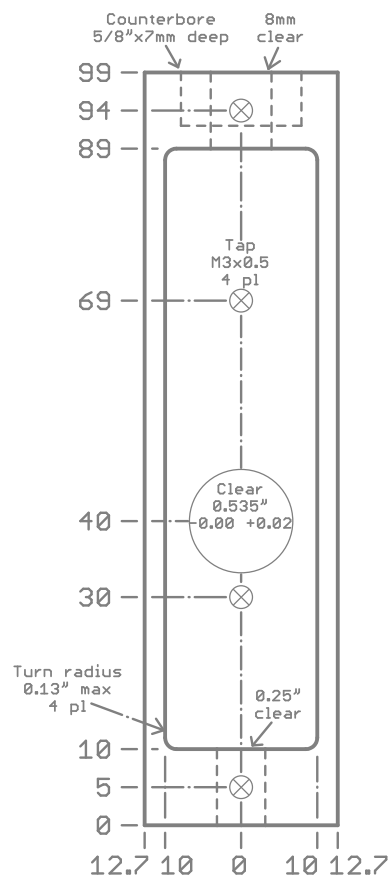
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ALPS3 - AOM Laser Power Stabilization





Log PD Box plus Lid

- Dimensions in mm unless otherwise mentioned, tolerances not critical
- Material: Aluminum
- Surface finish not important.
- Large hole fits Thorlabs SM05L03 or SM1A1 optical mount. Glue in place.

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