LIGO <u>Californ</u> Massachu Document Ch	<u>echnology</u> f Technology ice (DCN)		DCN No. E Sheet 1	050199-00-C of 2			
DOCUMENT No. (DOC-REV-GP.ID)	TITLE					NEW REV	
D020241	1 Intensity Stabilization Servo						
 CHANGE DESCRIPTION (FROM/TO): 1. Changed the following from tbd to omit: C62, R53, C11, R25, C177, C145, C168, R179, R149, C189, C186, R253, C175, C179, C198, R273, R8, R9, R19, C20, C30, L1, C54, R40, C58, R44, C231, C236, R51, C51, C6, R1, C1, R45, C170, R227, C148, C169, R182, C112, R39, C57, R140, C116, C115, R118, C86, C100, C118, C217, C210, R299, C207, C222, C215, R103, C113, C78, C85, C188, C205, C114, R104, R92, C92, C77, R70, R177, R84, C91, C73, R63, C70, R78, C97 2. R26 changed to 0 Ohm from "O ohm (499)" 3. C107 changed to 27pF 4. R74 changed to 1k 5. R182 changed from "not installed (or 0 ohm)" to omit 6. R128 changed from "not installed (or 0 ohm)" to omit 7. C202 changed from tbd to 27pF 8. C109 changed from tbd to 27pF 8. C109 changed from tbd to 27pF 9. C83 changed from tbd to 27pF 7. REASON FOR CHANGE: Remove the abiguity of "tbd" components listed on schematic. Component value changes implement op amp frequency compensation and provide a stable configuration. 							
ACTION: x Incorporate Change Attach DCN to Drawings Other Action (specify):							
DISPOSITION OF HARDWARE (IDENTIFY SERIAL NUMBERS) No hardware was affected (record change only): List S/Ns which comply already: List S/Ns to be reworked/scrapped: List S/N's to be built with this change: Any greater than S/N 115 List S/Ns to be retested per this change: 115				Do Barish Fritschel Weiss Raab Heefner	CN DISTRIBUTIO Zucker Wooley Whitcomb B. Abbott	N Coyne Abbott McCarthy Etzel	
SAFETY, COST, SCHEDULE, REQUIREMENTS IMPACT?							
APPROVALS	S: D	DATE OTHER APPR	OVALS (SP	ECIFY)		DATE	
ORIGINATOR: Todd Et	tzel 7/2	29/05					
TASK LEADER:							
GROUP LEADER: DCC RELEASE:							

LIGO <u>California Institute of Technology</u> Massachusetts institute of Technology	DCN No. E050911-00-C Sheet 2 of 2				
Document Change Notice (DCN)					
CHANGE DESCRIPTION (FROM/TO):					
10. R85 changed from tbd to 1k					
11. C82 changed from 1uF to omit					
12. C93 changed from tbd to 68pF					
13. R91 changed from tbd to 1k					
14. C89 changed from tbd to 68pF					
15. Change U6 from THS4151 to THS 4131 to reduce noise.					
16. Change C27 from 27 pF to 15 pF for higher slew rate and bandwidth					
17. Change C47 from 47 pF to 15 pF for higher slew rate and bandwidth					
18. Change C21 from 68 pF to 27 pF for higher slew rate and bandwidth					
19. Change R16 from 2K to 402 for increased servo gain					
20. Change R56 from 15K to 16.5K for accurate voltage division (10:1 is now the division ratio)					
21. Change R217 and R251 from 3.32K to 30.1 for DAQ gain increase					
22. Change R178 and R266 from 30.1K to 3.01K for DAQ gain increase					
23. Change C144 from "omit" to 1 nF for high frequency noise reduction associated with DAQ gain increase.					

This is an initial documentation release for this part. Revision D01, while built and used, does not have available documentation.