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Generic QPD Interface Functional Test

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Todd Etzel

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of the LIGO Project.

**California Institute of Technology**  
**LIGO Project – MS 18-34**  
**1200 E. California Blvd.**  
**Pasadena, CA 91125**  
Phone (626) 395-2129  
Fax (626) 304-9834  
E-mail: [info@ligo.caltech.edu](mailto:info@ligo.caltech.edu)

**Massachusetts Institute of Technology**  
**LIGO Project – NW17-161**  
**175 Albany St**  
**Cambridge, MA 02139**  
Phone (617) 253-4824  
Fax (617) 253-7014  
E-mail: [info@ligo.mit.edu](mailto:info@ligo.mit.edu)

**LIGO Hanford Observatory**  
**P.O. Box 1970**  
**Mail Stop S9-02**  
**Richland WA 99352**  
Phone 509-372-8106  
Fax 509-372-8137

**LIGO Livingston Observatory**  
**P.O. Box 940**  
**Livingston, LA 70754**  
Phone 225-686-3100  
Fax 225-686-7189

<http://www.ligo.caltech.edu/>

Date: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Tested by: \_\_\_\_\_

**Test procedure for the Generic Quad Photodiode Interface Module D990692**

## Amplifier check

For each input listed below, apply the listed input, and verify that the same voltage is present at the monitor points and output jacks. Record the monitor voltage in the table below.

Input	Location	Input	Mon #1 location	Mon #1 voltage	Mon #2 location	Mon #2 voltage	Daq out location	Daq volts
S1-1	J8-1	+2V	P1-1A		J1A		P2-1A	
S1-1	J8-1	-2V	P1-1A		J1A		P2-1A	
S2-1	J8-3	+2V	P1-2A		J2A		P2-2A	
S2-1	J8-3	-2V	P1-2A		J2A		P2-2A	
S3-1	J8-5	+2V	P1-3A		J3A		P2-3A	
S3-1	J8-5	-2V	P1-3A		J3A		P2-3A	
S4-1	J8-7	+2V	P1-4A		J4A		P2-4A	
S4-1	J8-7	-2V	P1-4A		J4A		P2-4A	
S1-2	J9-1	+2V	P1-8A		J1B		P2-8A	
S1-2	J9-1	-2V	P1-8A		J1B		P2-8A	
S2-2	J9-3	+2V	P1-9A		J2B		P2-9A	
S2-2	J9-3	-2V	P1-9A		J2B		P2-9A	
S3-2	J9-5	+2V	P1-10A		J3B		P2-10A	
S3-2	J9-5	-2V	P1-10A		J3B		P2-10A	
S4-2	J9-7	+2V	P1-11A		J4B		P2-11A	
S4-2	J9-7	-2V	P1-11A		J4B		P2-11A	

**Combined input check**

Apply voltage to all 4 inputs according to the table below. Record the output voltages.

## QPD #1

INPUTS (V)															
S1	S2	S3	S4	X required	X out	X daq	X mon	Y required	Y out	Y daq	Y mon	Sum required	Sum out	Sum daq	Sum mon
2	2	2	2	0				0				-8			
-2	-2	2	2	-8				0				0			
2	2	-2	-2	8				0				0			
-2	2	2	-2	0				-8				0			
2	-2	-2	2	0				8				0			
-2	-2	-2	-2	0				0				+8			

## QPD #2

INPUTS (V)															
S1	S2	S3	S4	X required	X out	X daq	X mon	Y required	Y out	Y daq	Y mon	Sum required	Sum out	Sum daq	Sum mon
2	2	2	2	0				0				-8			
-2	-2	2	2	-8				0				0			
2	2	-2	-2	8				0				0			
-2	2	2	-2	0				-8				0			
2	-2	-2	2	0				8				0			
-2	-2	-2	-2	0				0				+8			