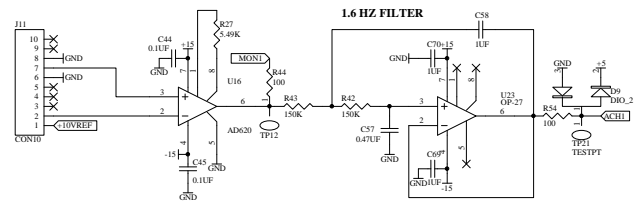
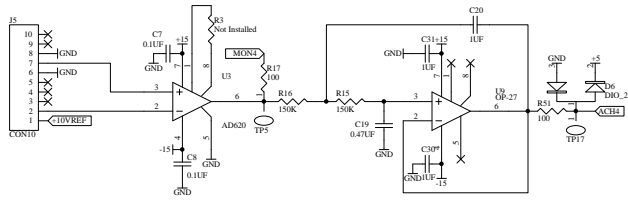


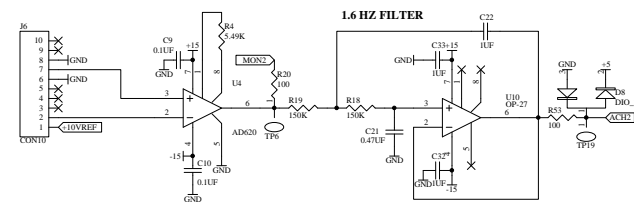
Pressure Sensor



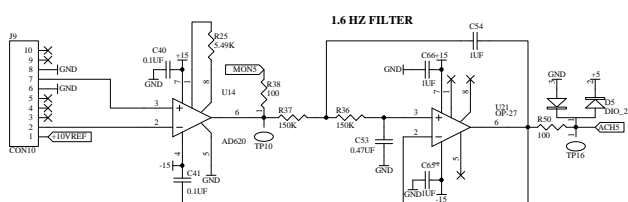
Level Sensor



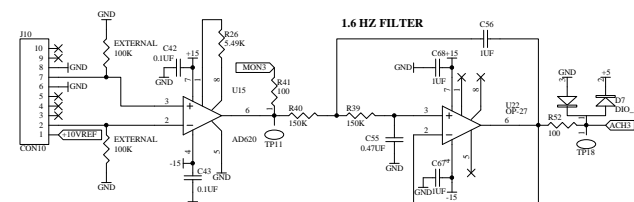
Pressure Sensor



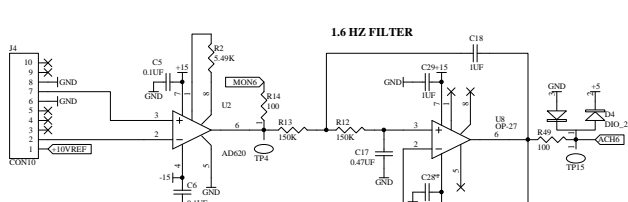
Temperature Sensor



Pressure Sensor



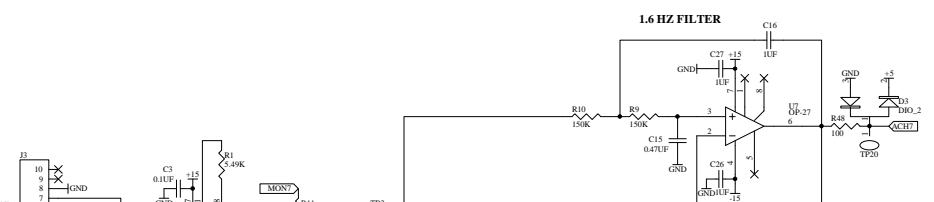
Temperature Sensor



**Pin Mapping for IDC to D Connector:**  
 IDC D Funct  
 1 --- +10 Volt Supply  
 2 --- AD620 Minus Pin  
 6 --- GND  
 7 --- AD620 Plus Pin  
 All other pins are unused.

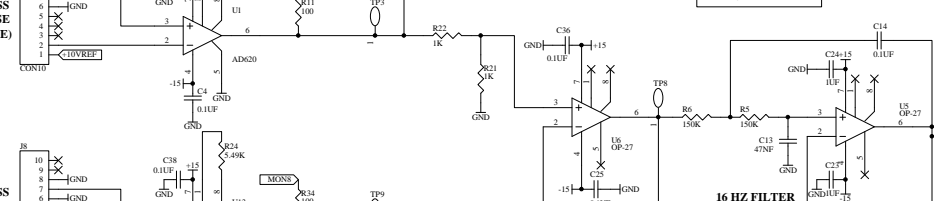
Pressure Sensor

HF PRESS SENSE (VALVE)

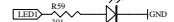


Pressure Sensor

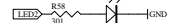
LF PRESS SENSE (LOAD)



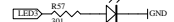
Regulation OK (Green)



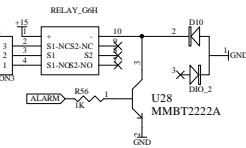
PID Watchdog (Green)



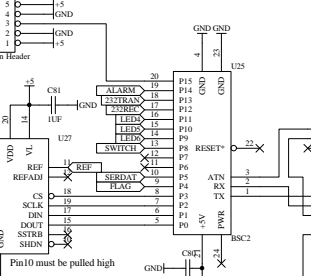
ALARM CONDITION (Red)



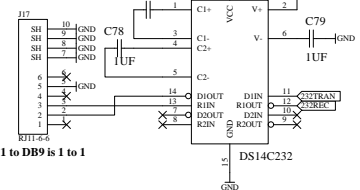
Alarm Contacts



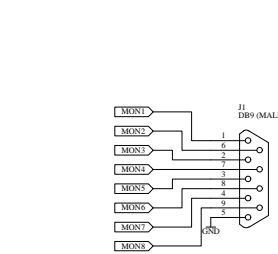
LCD Interface



Alarm Reset



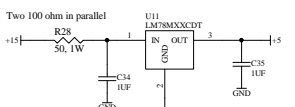
RJ11 to DB9 is 1 to 1

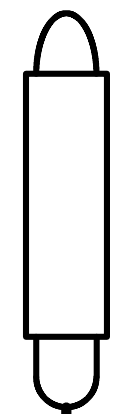


**Stamp Programming Interface RJ11 to DB9:**  
 1-7  
 2-2  
 3-3  
 4-4  
 5-5  
 6-6

**Errata:**  
 1. The wrong footprint was used on the dual diodes used as input protection to the 8 ADC. The result of which is that the diodes were not installed.  
 2. Subsequent revisions should include an input return path for the AD620s such that they don't float up in voltage on unused channels.  
 3. See pin mapping on this page for pin conversion between IDC10 and DB9 connectors  
 4. U27 (8 channel ADC) pin 10 must be pulled high to enable chip  
 5. +5 volt supply should be provided by the external power supply as it is available.  
 6. R3 (gain setting resistor) is not installed to allow interface to level sensor  
 7. R28 was formed with two 100 ohm resistors in parallel for the prototype due to available values and needed voltage drop  
 8. 100k pull down resistors were added to all inputs of the AD620s

Stamp Programming Interface RJ11 to DB9:





Pressure Sensor

4 pin cable

4 pin round conn FEMALE

4 pin round conn MALE

DB9 MALE

DB9

Pin mapping	
Pressure sensor cable	4 pin connector
Black	3
Drain	3
White	4
Red	1
Green	2

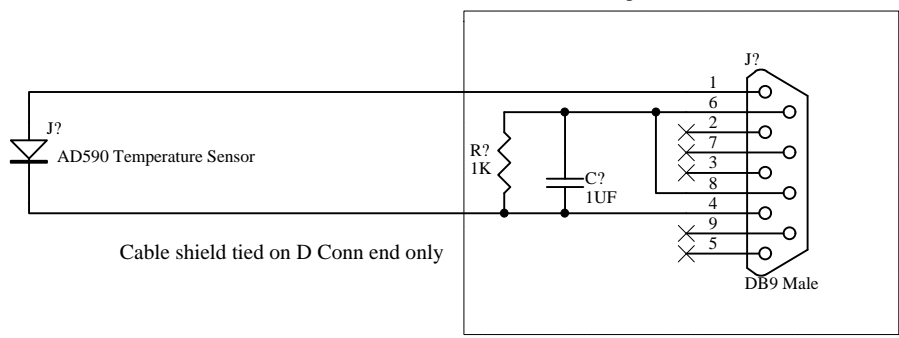
Pin mapping	
4 pin male conn	DB9 male conn
1	1
2	4
3	8
4	6

**Pin Mapping for IDC to D Connector:**

IDC	D	Funct
1	1	+10 Volt Supply
2	6	AD620 Minus Pin
6	8	GND
7	4	AD620 Plus Pin

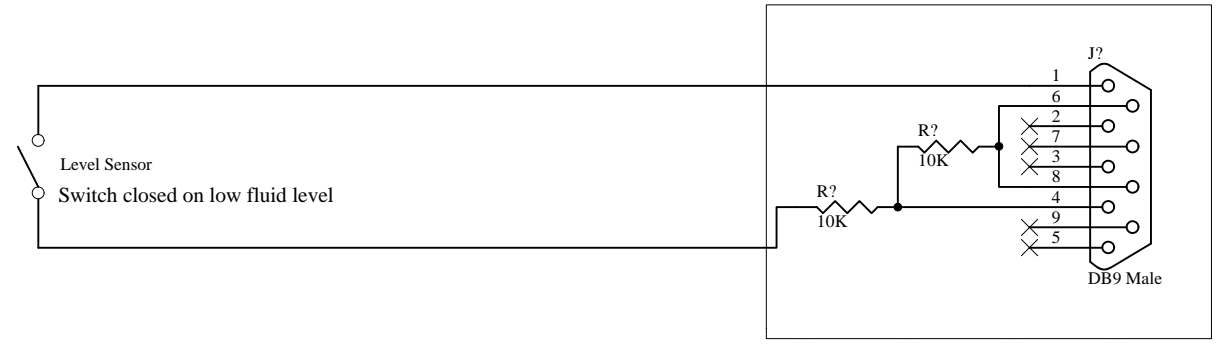
All other pins are unused.

Components in backshell



Cable shield tied on D Conn end only

Components in backshell



Date Last Modified: 4 Dec 2002

Title <b>Pump Servo Cables</b>		LIGO Laboratory California Institute of Technology Massachusetts Institute of Technology		Date: 4-Dec-2002 Time: 15:35:58 Sheet 2 of 2
Size: B	DCC Number: D020436	PCB / SCH Revision: A	Engineer: Abbott	
File: C:\Rich's Files\Mycadfiles\Sei_int\Pumpservo\pumpservo_cables.Sch				