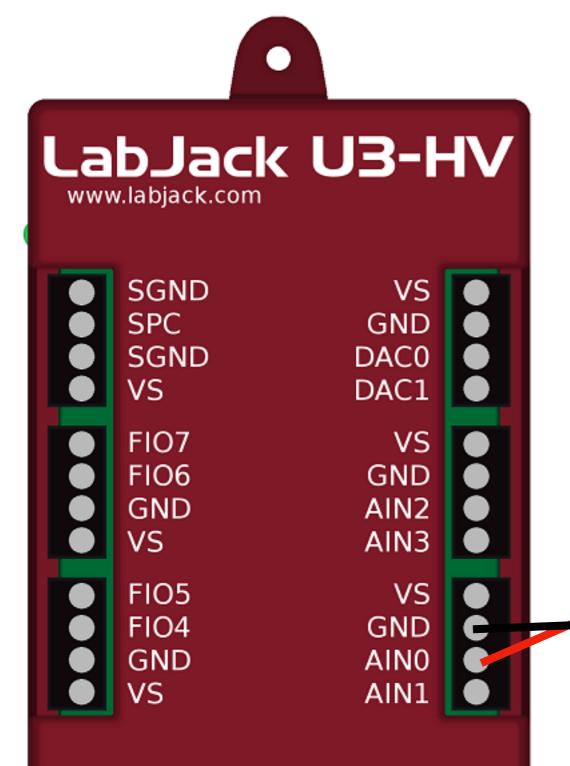
Using the LabJack to read and/or control the Aalborg MFC

https://github.com/Princeton-Penn-Vents/mfc_io



Read MFC



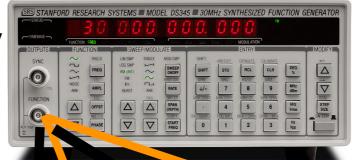


	PIN	FUNCTION		8		
	1	0 to 5 Vdc Flow Signal Common	7 15			
	2	0 to 5 Vdc Flow Signal Output	(\(\sigma \) \(\sigma \)			
	3 4	Common Open (Purge)	6. 1400 14			
	5	Common, Power Supply				
	6	(unassigned)	5 00 0			
	7	+12 Vdc (Optional +24 Vdc*) Power				
		8 Remote Setpoint Input				
	9 4 to 20 mA (-) Flow Signal Return (use with 14)					
10 Remote Setpoint Common (use with 8) 11 +5 Vdc Reference Output for Remote Setpoint 3				3 -11-0		
	12 Valve Off Control 13 Auxiliary +12 Vdc (Optional +24 vdc*)					
Power Output (For Loade 100 mA) 14 4 to 20 mA (+) Fless Signal Output						
				1		
	15 Chassis Grand					
	1 & 2	U-5 Vdc OUTPUT	5 & 7	+12 Vdc (Optional +24 Vdc*) POWER		
1	3 & 4	PURGE	5 & 7	SUPPLY		
	σ α 12	VALVE OFF CONTROL	8 & 10	0-5 Vdc OR 4-20 mA (FROM 3 WIRE LOOP		
	5 & 13	AUXILIARY +12 Vdc (Optional +24 Vdc*) POWER OUTPUT (FOR LOADS	0 & 10	SOURCING DEVICE) REMOTE SETPOINT		
			9 & 14	4-20 mA OUTPUT (SOURCING, ONLY		
		<100 mA)		FOR PASSIVE LOAD)		
			10 & 11	+5 Vdc CONTROL SOURCE		
	FIGURE 2.1 CEC 15 DIN "D" CONNECTOR CONFIGURATION					

*Do not connect +24 Vdc power supply unless your GFC controller was ordered and configured for 24 Vdc

Read MFC & Use. External Function Generator To Drive MFC

NOTE: SRS D5345 **Expects 50 OHM Impedance** Output Voltage will be DOUBLE display



1 & 2 U-5 Vdc OUTPUT

PURGE

A 12 VALVE OFF CONTROL



+12 Vdc (Optional +24 Vdc*) POWER

0-5 Vdc OR 4-20 mA (FROM 3 WIRE LOOP

LabJack U3-HV

www.labjack.com



GND DAC₀ DAC1 **VS GND** AIN2 AIN3 VS **GND** AIN0 AIN1

PIN	FUNCTION	8
1	0 to 5 Vdc Flow Sanal Common	15
2	0 to 5 Vdc Flow Signa. Output	$7 \times 11^{\circ} O \times X$
3	Common	14
4	Open (Purge)	6 11 0 0
5	Common, Power Supply	1 13
6	(unassigned)	5 _ 0 4 10
7	+12 Vdc (Optional +24 Vdc*) Power Supply	1100
8	Remote Setpoint Input	V
9	4 to 20 mA (-) Flow Signal Return (use with 14)	4 4120
10	Remote Setpoint Common (use with 8)	11
11	+5 Vdc Reference Output for Remote Setpoint	3 1 2 2 1
12	Valve Off Control	0 7 10
13	Auxiliary +12 Vdc (Optional +24 vuc*)	2/100
	Power Output (For Loade 100 mA)	
14	4 to 20 mA (+) Floor Signal Output	1
15	Chassis Greand	

SOURCING DEVICE) REMOTE SETPOINT AUXILIARY +12 Vdc (Optional +24 5 & 13 Vdc*) POWER OUTPUT (FOR LOADS 4-20 mA OUTPUT (SOURCING, ONLY 9 & 14 FOR PASSIVE LOAD) <100 mA) +5 Vdc CONTROL SOURCE 10 & 11 FIGURE 2-1 GFC 15-PIN "D" CONNECTOR CONFIGURATION

5 & 7

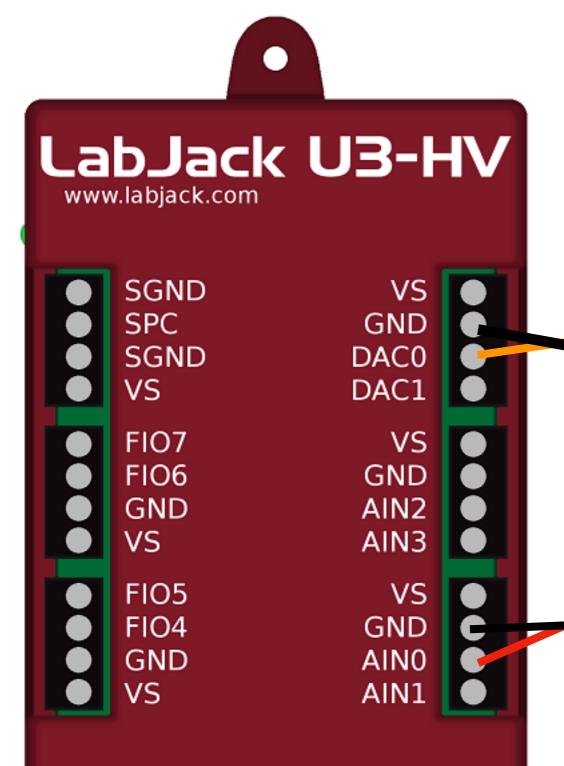
8 & 10

SUPPLY

*Do not connect +24 Vdc power supply unless your GFC controller was ordered and configured for 24 Vdc

Read MFC & Computer Control Of MFC





PIN	FUNCTION		8	
1	0 to 5 Vdc Flow Signal Common		7 15	
2	0 to 5 Vdc Flow Signal Output Common		0 14	
4 5	Open (Purge)			
6	(unassigned) 12 Vdc (Optional +24 Vdc*) Power	Supply	5 00 13	
8 Remote Supply				
9 10	4 to 20 mA (-) Flow Signa. Then (use with +5 Vdc Reference Output for Remote	Ŏ)	DO 0 11	
11 12	00			
Auxiliary +12 Vdc (Optional +24 Vdc*) Power Output (For Loads 100 mA)				
14 15	4 to 20 mA (+) Flow Signal Output Chassis Greand		1 9	
1 & 2	U-5 Vdc OUTPUT	5 & 7	+12 Vdc (Optional +24 Vdc*) POWER	
3 & 4	PURGE	307	SUPPLY	
σα 1 <i>i</i>	VALVE OFF CONTROL	8 & 10	0-5 Vdc OR 4-20 mA (FROM 3 WIRE LOOP	
	AUXILIARY +12 Vdc (Optional +24 Vdc*) POWER OUTPUT (FOR LOADS <100 mA)		SOURCING DEVICE) REMOTE SETPOINT	
5 & 13		9 & 14	4-20 mA OUTPUT (SOURCING, ONLY FOR PASSIVE LOAD)	

*Do not connect +24 Vdc power supply unless your GFC controller was ordered and configured for 24 Vdc

10 & 11 +5 Vdc CONTROL SOURCE