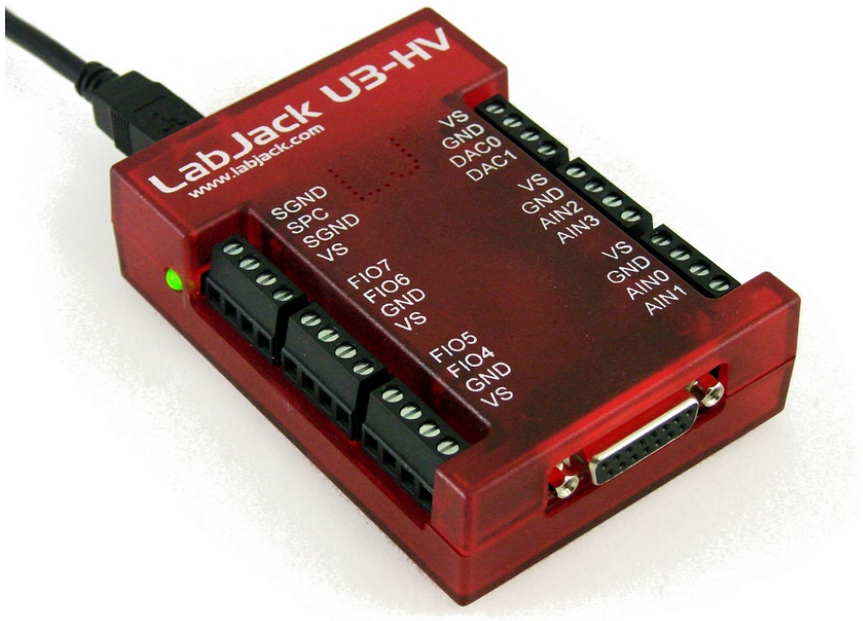
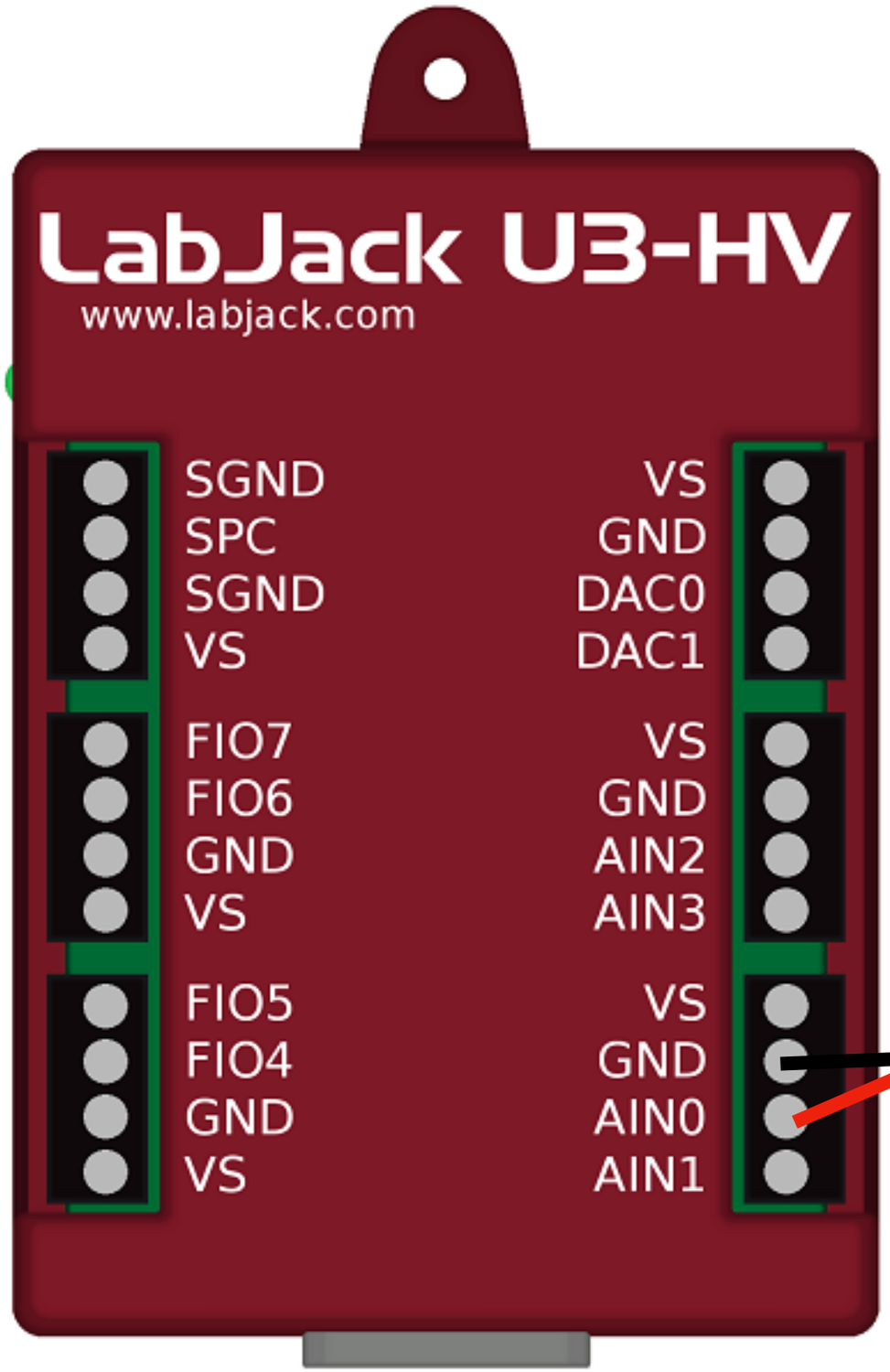
Using the LabJack to read and/or control the Aalborg MFC

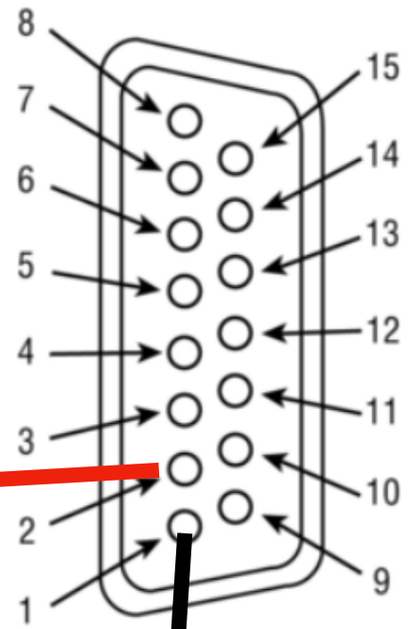
https://github.com/Princeton-Penn-Vents/mfc_io



Read MFC



PIN	FUNCTION
1	0 to 5 Vdc Flow Signal Common
2	0 to 5 Vdc Flow Signal Output
3	Common
4	Open (Purge)
5	Common, Power Supply
6	(unassigned)
7	+12 Vdc (Optional +24 Vdc*) Power Supply
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
12	Valve Off Control
13	Auxiliary +12 Vdc (Optional +24 Vdc*) Power Output (For Loads <100 mA)
14	4 to 20 mA (+) Flow Signal Output
15	Chassis Ground



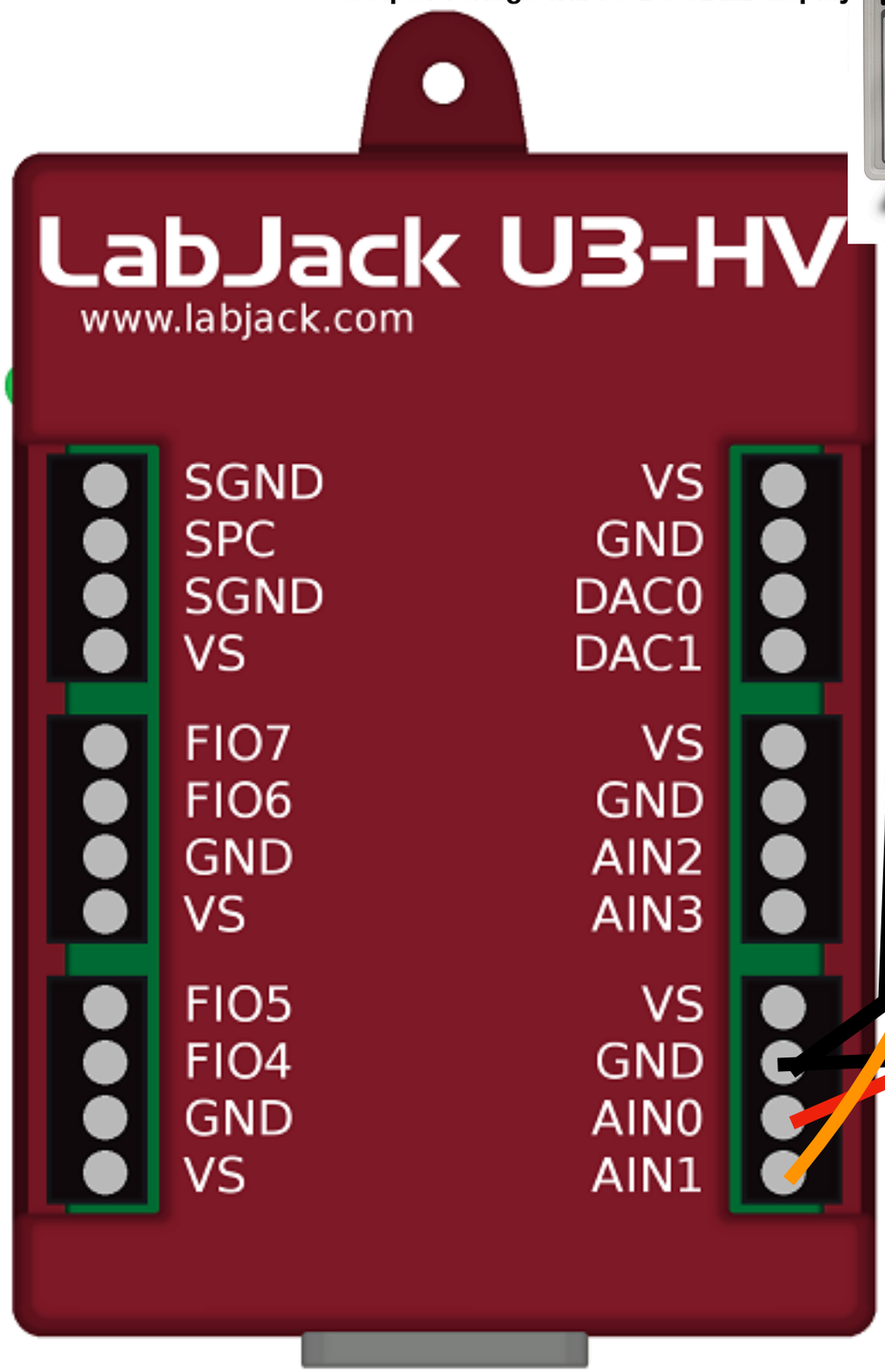
1 & 2	0-5 Vdc OUTPUT
3 & 4	PURGE
5 & 12	VALVE OFF CONTROL
5 & 13	AUXILIARY +12 Vdc (Optional +24 Vdc*) POWER OUTPUT (FOR LOADS <100 mA)

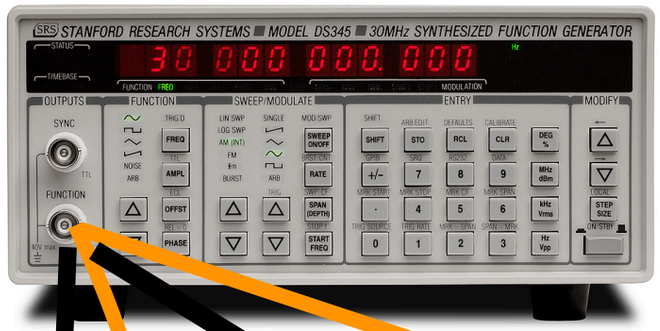
5 & 7	+12 Vdc (Optional +24 Vdc*) POWER SUPPLY
8 & 10	0-5 Vdc OR 4-20 mA (FROM 3 WIRE LOOP SOURCING DEVICE) REMOTE SETPOINT
9 & 14	4-20 mA OUTPUT (SOURCING, ONLY FOR PASSIVE LOAD)
10 & 11	+5 Vdc CONTROL SOURCE

FIGURE 2-1 GFC 15-PIN "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





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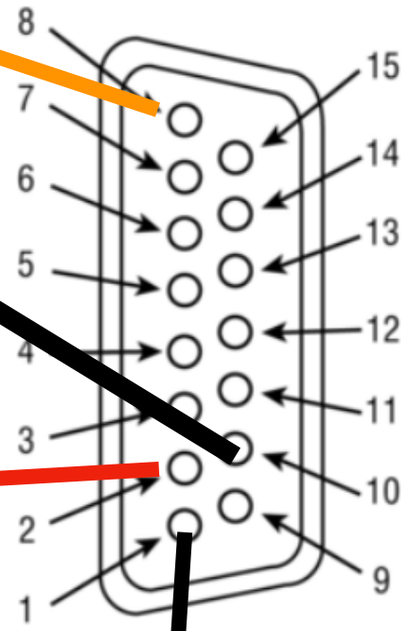
15	Chassis Ground



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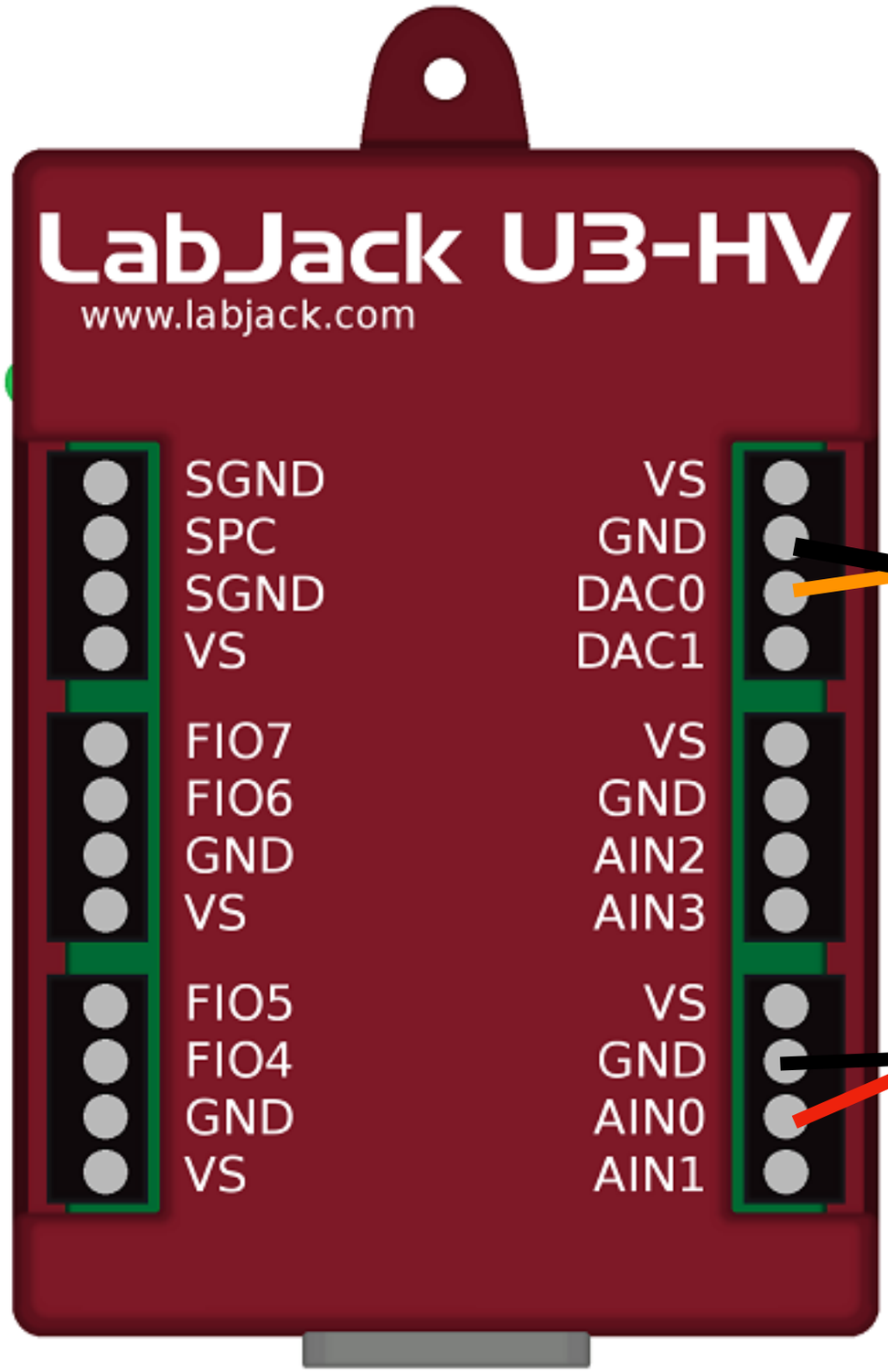
Read MFC & Computer Control Of MFC



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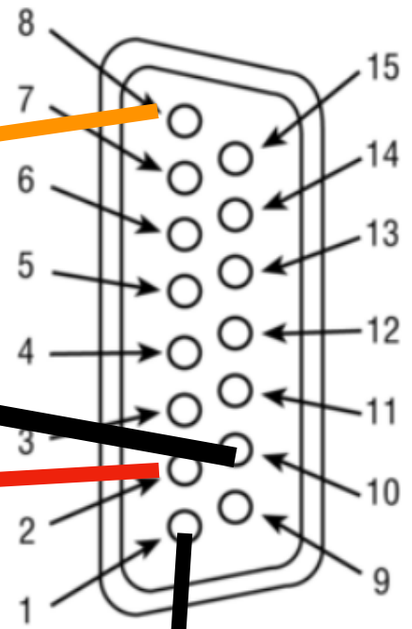

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