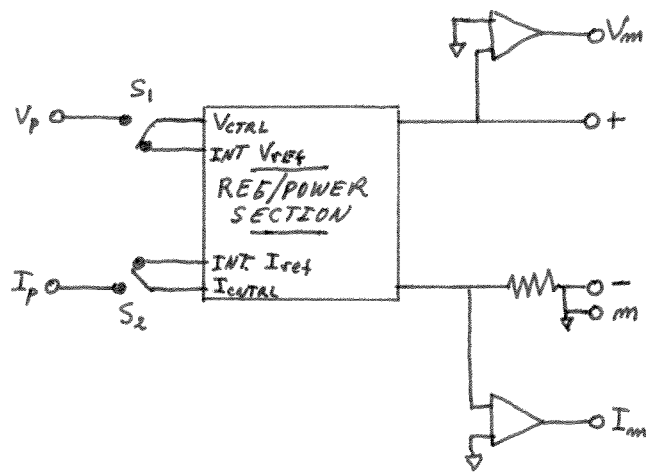
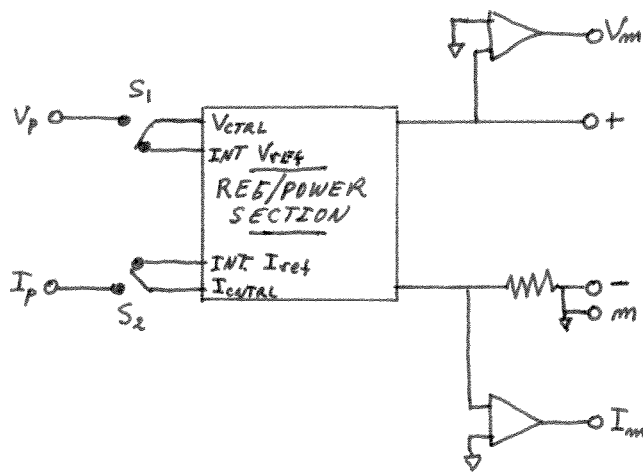




Notes:

- (1) V_p = external voltage control
- (2) S_1 = V EXT/INT switch - closed for INT regulation
- (3) I_p = external current control
- (4) S_2 = I EXT/INT switch - closed for INT regulation
- (5) V_m = Voltage output monitor point.
- (6) I_m = current output monitor point.
- (7) $\downarrow$ represents common (not ground!)

- From the above schematic, the LakeShore 622 power supply resembles a high power operational amplifier with the positive lead acting as the swinging output and the negative lead acting as the floating reference. Two LakeShore 622 power supplies can then be connected in a push-pull configuration to obtain the required voltage drop across the magnet (see schematic below). An external operational amplifier with gain -1 was used to feed the signal obtained from the voltage monitoring output of the master LakeShore into the external voltage control point of the slave unit. The external operational amplifier was made floating with respect to ground although in this case we could have grounded common point "m" since no other point in the circuit is grounded.



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