

Proto-0 Power Requirements for MB2 Run

With Caen

- Caen A1540 HV
 - A1540HD is in Napoli (This is fine)
 - SiPM bias
 - DB25 connector - 1 channel used
- Caen A2517 (Needs DB37 installed)
 - + 5 V - steering module
 - +- 2.5 V - FEBs
 - DB37 connector - 3 channels used
 - Will come from Caen
- Powered crate capable of hosting these boards (needed)
 - SY4527 is in building 182 now; we can not use this for the entire run
- Caen filter box w/ adaptor box
 - DB50 connector to vessel flange

Without Caen

- Keithley 2450 SMU (needed)
 - SiPM bias
- Switching matrix
 - Already at CERN
- Agilent 3646A or similar (needed)
 - LV for FEBs
- Could still install steering module so it's there for future use
 - Would need a 5V supply for this

Power Scheme for MB2 w/ Caen and Steering Module Cartoon

Serial com.
(computer)

Caen
A1540 - HV

A2517 - LV
for FEBs and
steering
module -
DB37 out

ethernet

DB25 - CH0

+2.5V

-2.5V

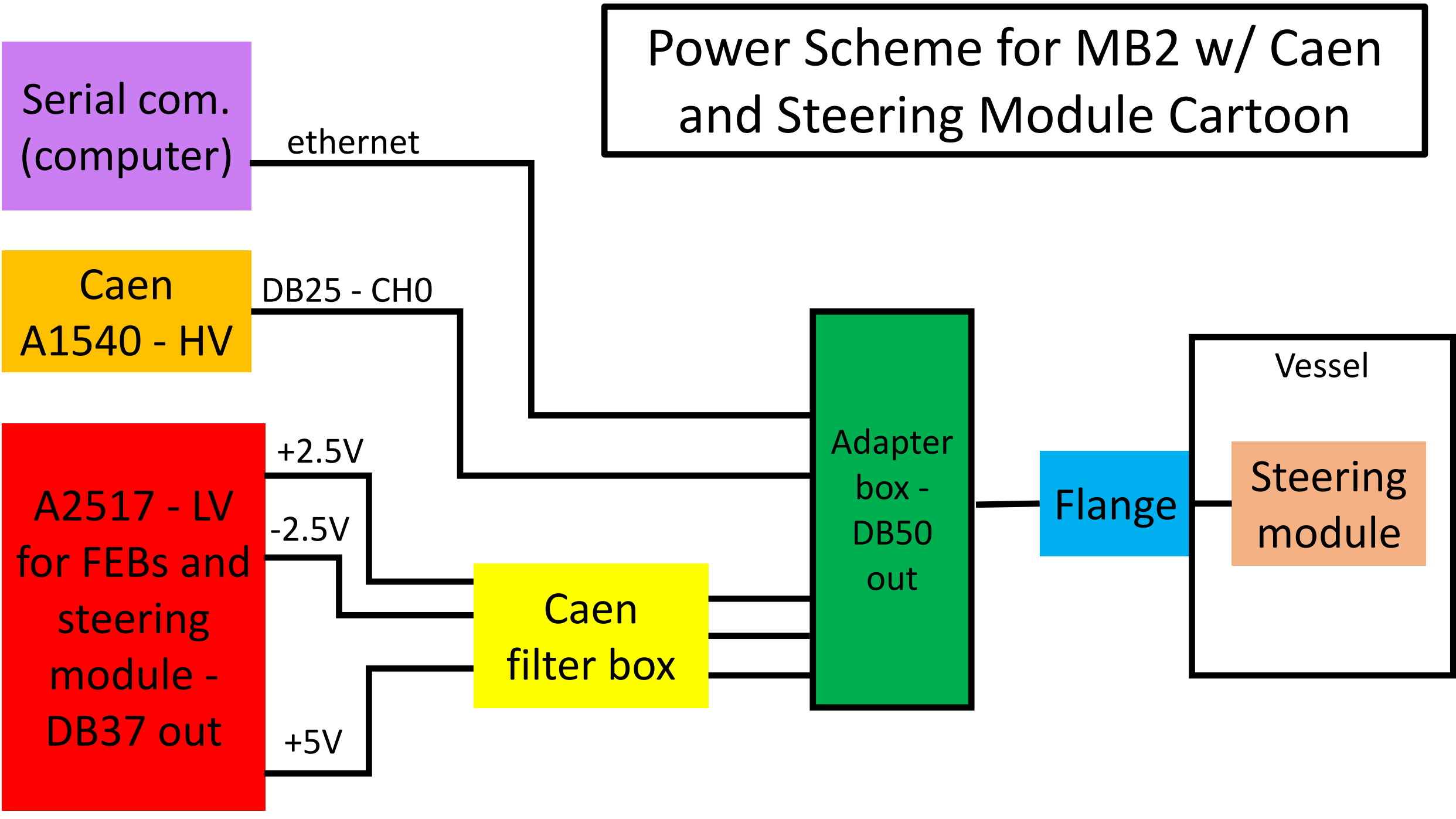
+5V

Caen
filter box

Adapter
box -
DB50
out

Flange

Vessel
Steering
module

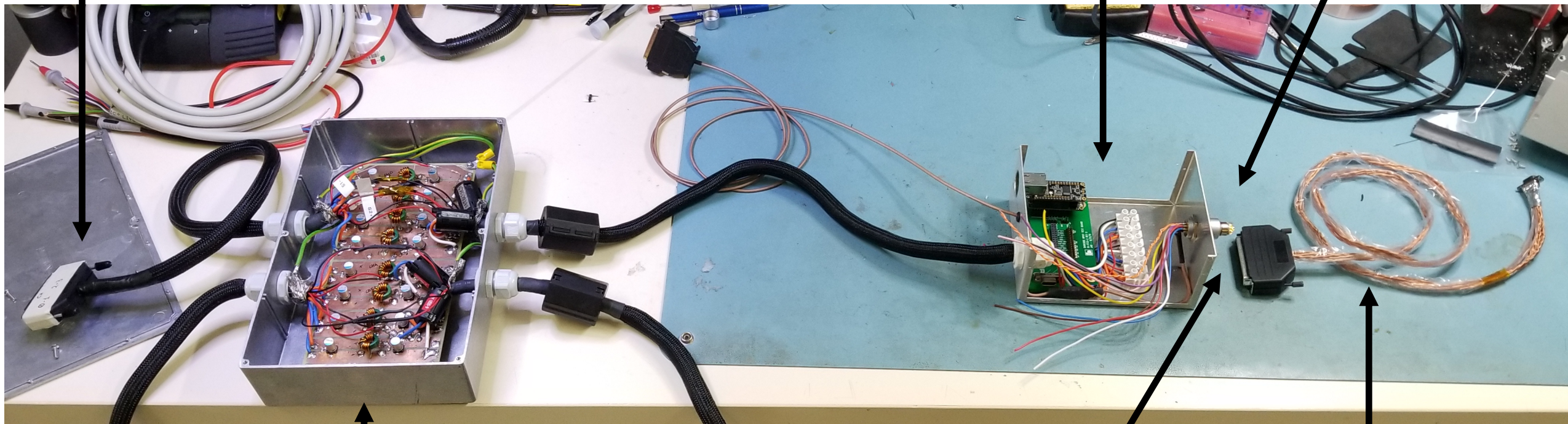


A2517 cable -
DB37

HV cable - DB25

Adapter box -
DB50 out

Flange

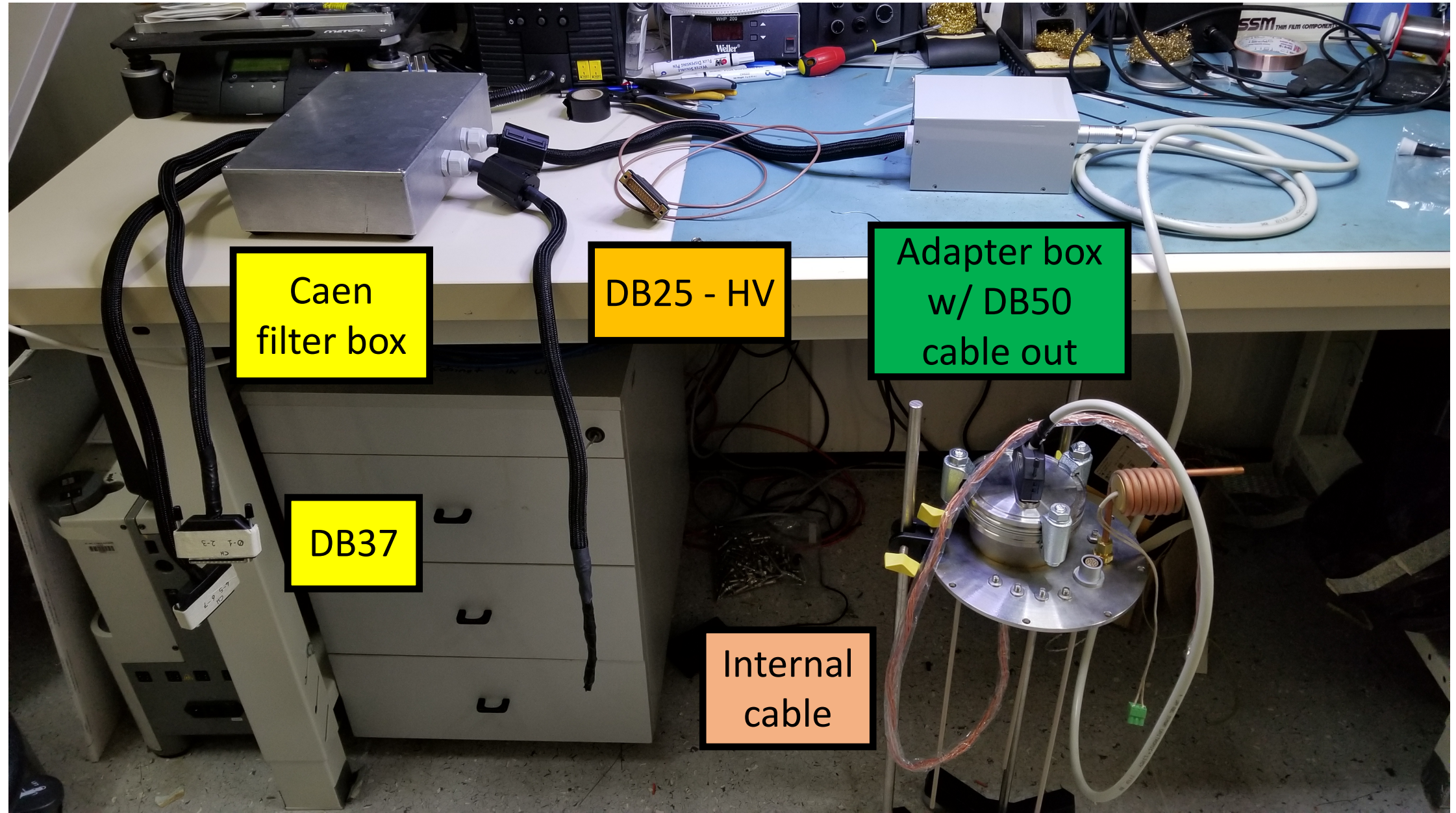


Caen
filter box

Another DB50 cable
goes here

Internal cable to
steering module

Power Routing for MB2 w/ Caen Filter Box



Caen
filter box

DB25 - HV

Adapter box
w/ DB50
cable out

DB37

Internal
cable

Caen Power Supply Issues/Status

- Caen A2517 (LV) sense is not working
 - Supply is unable to adjust the voltages correctly given current changes
 - Could be a simple wiring issue
 - Needs to be fixed before attaching MB
- Enable of FEBs is not working properly
 - All channels are always on
 - This is fine for now
- HV bias work properly
 - Individual channels can be turned on/off; all channels on/off
 - Below ~40V is not measurable with the steering module
- Bottom line - This is not ready yet; could likely be resolved next week
- Steering module itself is good to go