# Report on Bo ORC Items

Ben Jones

- 1) Rebuild rack according to airflow guidelines
- *2) Route monitor / keyboard / mouse cables through side of rack - needs extensions or devices with longer chords*
- 2a) Alternatively install rack mounted monitor. We talked to Eric about this and he is happy to provide from DAQ budget. We are moving this forward now.
- 3) Get Weiner power supply commissioned
- 4) Fill in empty slots in rack with spacers
- 5) Close top of track
- 6) Re-close HV mini-rack according to previous ORC
- 7) Mylar to close large cable window in rack
- 8) Velcro for any sharp corner with a cables running over
- 9) Move weiner to directly under readout
- 10) Replace any LEMO cables with sheathes showing
- 11) Supply power for ORC items with rack protected supply
- 12) Install 3 cable trays as agreed with Linda
- 13) Install hook on condenser tower for hanging cables over walkway
- 14) Build plastic cover for pulser board
- 15) Provide drawings and fusing information for pulser board
- 16) Provide drawings and fusing information for cosmic paddles
- 17) Panels over empty nim slots, or fill with extra nim modules
- 18) Panels over empty readout board slots
- 19) Fusing and details for level monitor readout
- 20) Implement level / HV interlock - I am working with Linda on this
- 21) Replace cosmic 12V supply adaptor piece
- 22) Lengthen some cables such that no rack crossing
- 23) Produce AC distribution + fusing diagram
- 24) Produce DC distribution + fusing diagram
- 25) Produce rack protection diagram

Cable trays

No rack crossing cables

Properly strain relieved

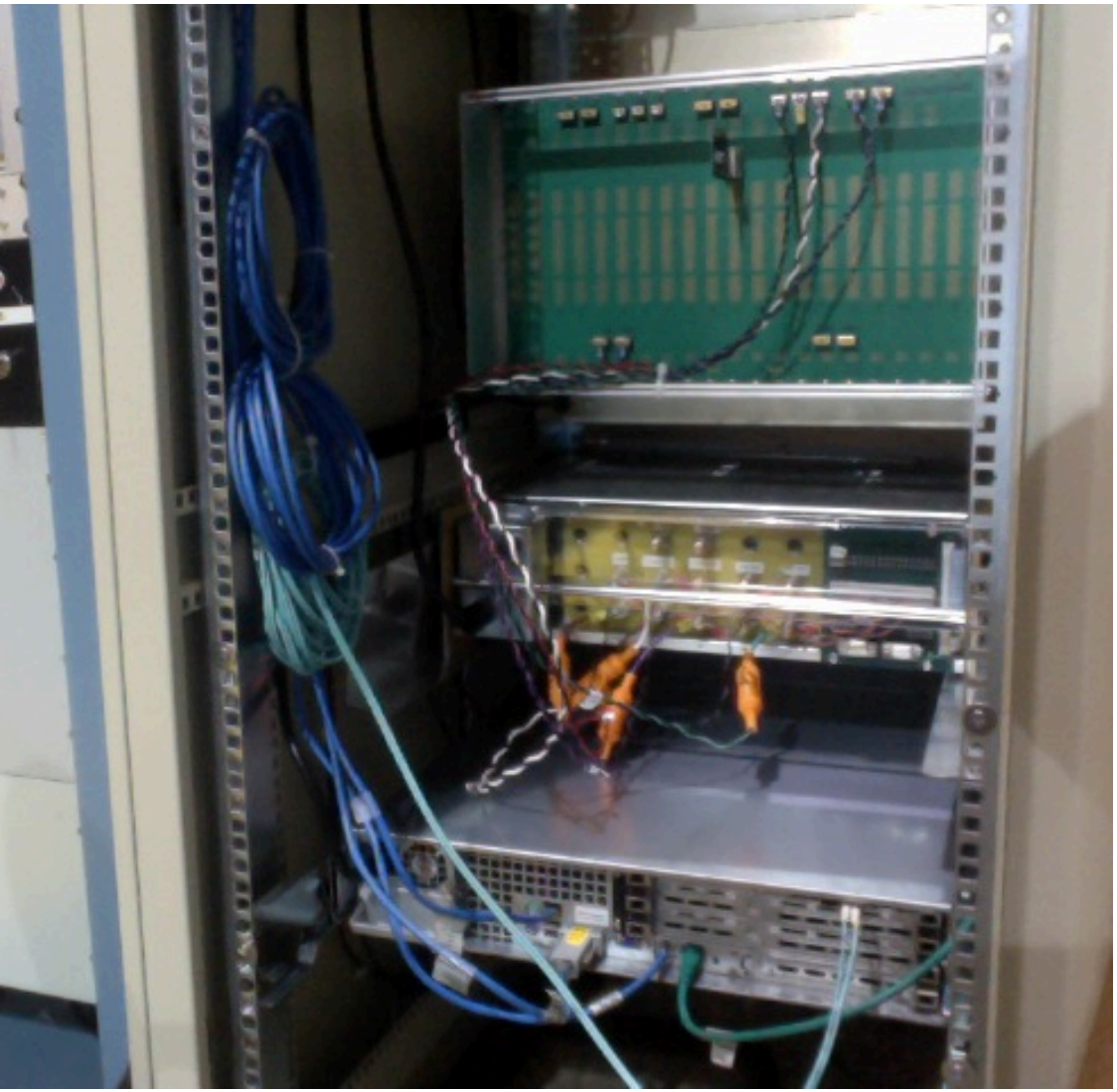
Sketchy lemo's replaced

Empty slots filled with spacers

No empty NIM bins
(now have scalars for every trigger type)

HV closed and restored to ORC design

Cosmic power supply attachment replaced



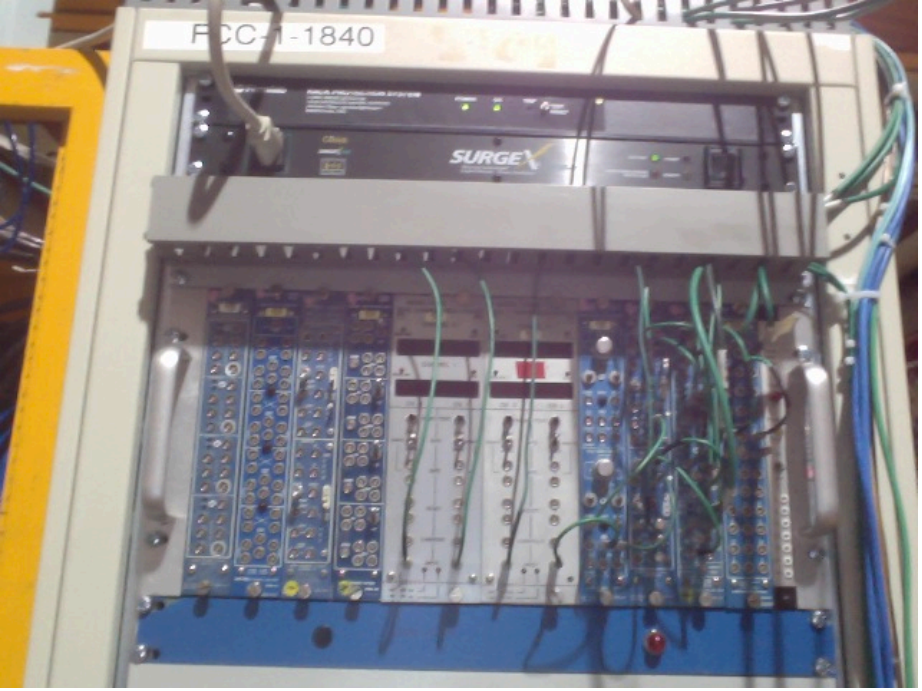
Weiner supply installed

Temporary power supplies removed

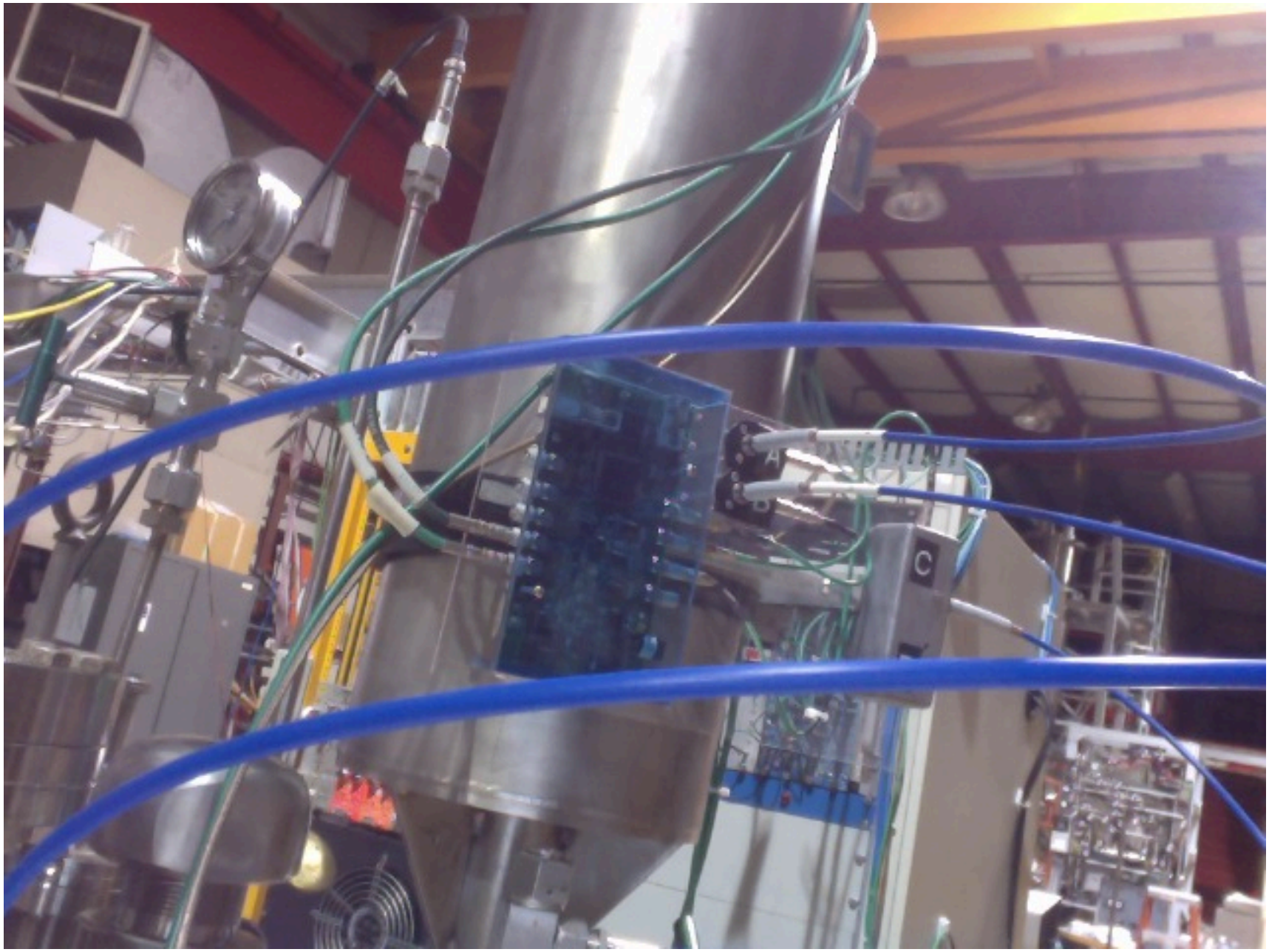
Fan installed to cool electronics crate

All cables routed tidily and up sides of rack

All cables exit through port in side of rack


RCC-I-1840
SURGEX

KALK MT MONITOR + KEYED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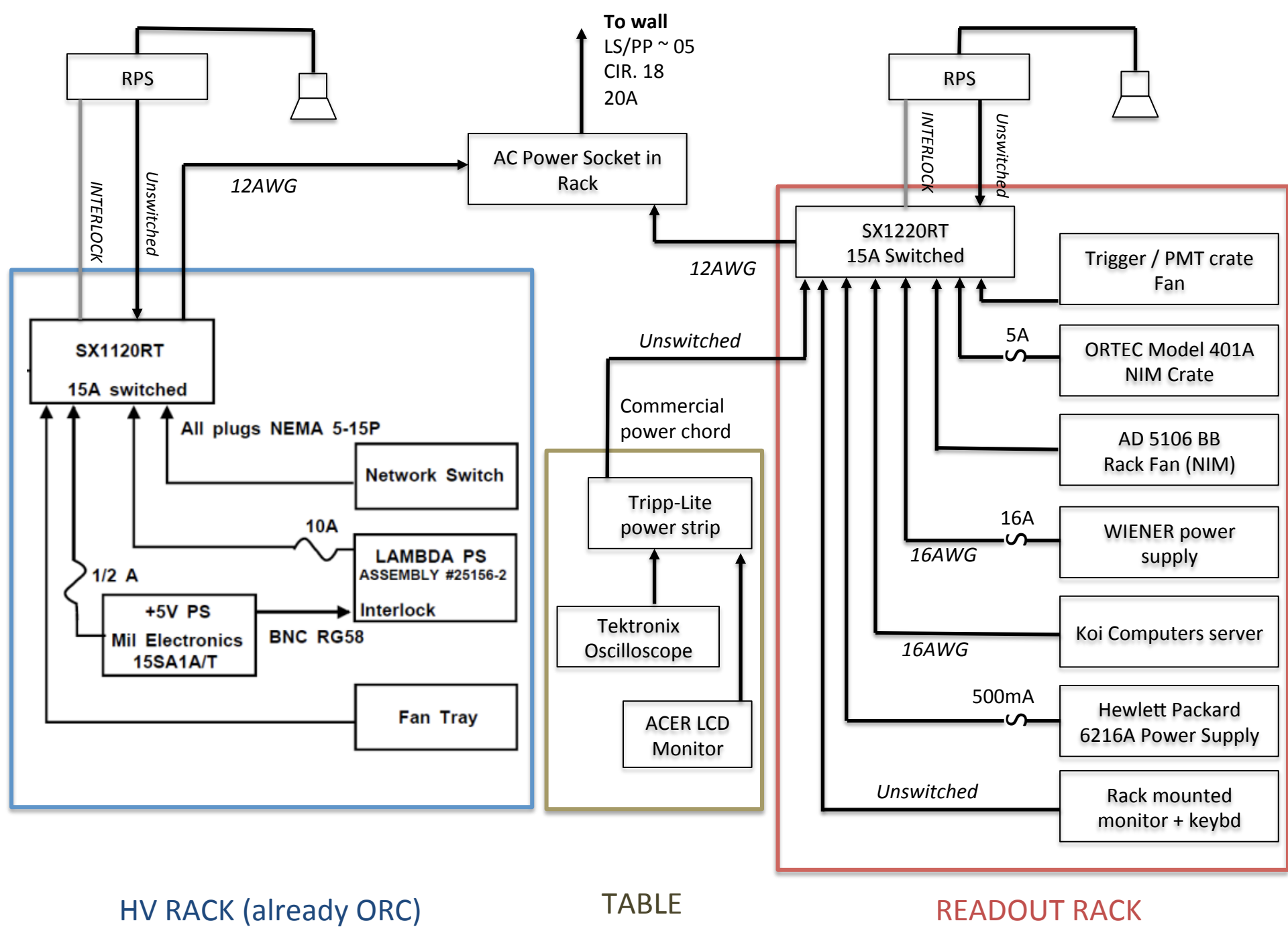
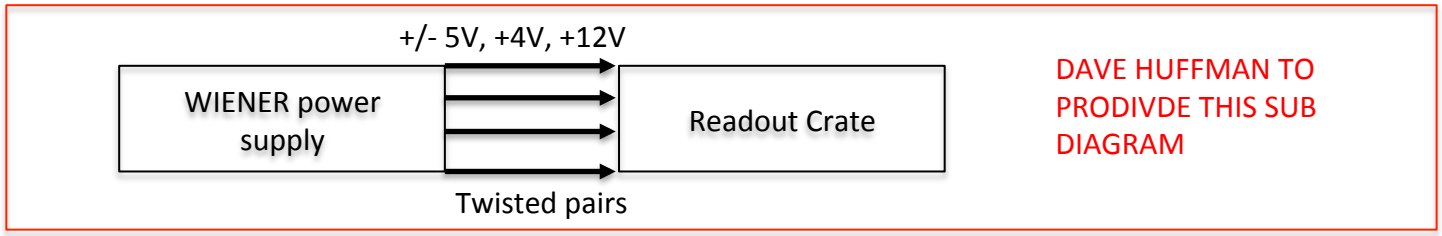
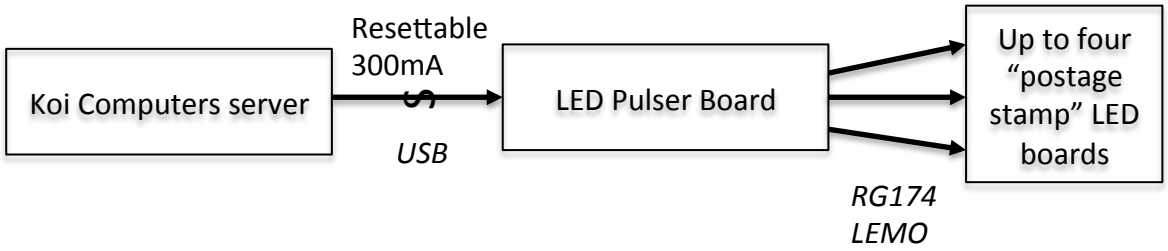
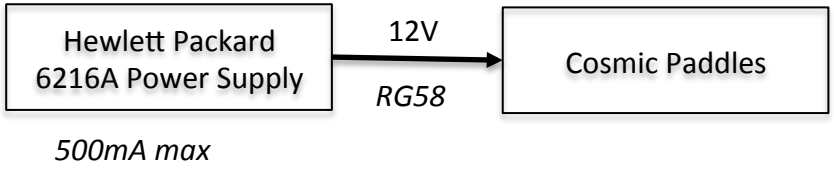
# Interlock

- If you were paying careful attention you may have noticed the HV unit had its motherboard missing and loose cables hanging in the photos
- Linda, Terry Tope and I have been working on implementing the level / HV interlock
- The default interlock scheme for the D0 HV crate is not failsafe – a +ve voltage shuts the system down
- Linda made an adjustment to the motherboard to change this, and Terry has supplied an interlock from the level monitoring equipment
- I hope to reinstall the board today, complete with interlock.


To wall
LS/PP ~ 05
CIR. 18
20A
RPS
INTERLOCK
Unswitched
12AWG
AC Power Socket in Rack
SX1120RT
15A switched
All plugs NEMA 5-15P
Network Switch
10A
LAMBDA PS
ASSEMBLY #25156-2
Interlock
1/2 A
+5V PS
Mil Electronics
15SA1A/T
BNC RG58
Fan Tray
HV RACK (already ORC)
Unswitched
Commercial power chord
Tripp-Lite power strip
Tektronix Oscilloscope
ACER LCD Monitor
TABLE
RPS
INTERLOCK
Unswitched
12AWG
SX1220RT
15A Switched
Trigger / PMT crate Fan
5A
ORTEC Model 401A NIM Crate
AD 5106 BB Rack Fan (NIM)
16A
WIENER power supply
16AWG
Koi Computers server
16AWG
500mA
Hewlett Packard 6216A Power Supply
Unswitched
Rack mounted monitor + keybd
READOUT RACK


+/- 5V, +4V, +12V
WIENER power supply
Readout Crate
Twisted pairs
DAVE HUFFMAN TO PRODIVDE THIS SUB DIAGRAM


Resettable 300mA
Koi Computers server
LED Pulser Board
Up to four "postage stamp" LED boards
USB
RG174
LEMO


Hewlett Packard 6216A Power Supply
12V
Cosmic Paddles
RG58
500mA max

# To Do

- Install UV LED D
- Install monitor + keybd
- PCIE fuse
- Crate cover pieces
- Cover 12V trace