

file - pcphos09:: ~/led/2006_cern

How to run LED-monitor program on computer pcphos09

Switch on the CAMAC crate with comand module MM of the MS-system.
Switch on the computer pcphos09, but beforehand check the connection
of the Ethernet cable to computer. Login as root and then do:

```
xset s 0                // switch out screen-saver
xset -dpms              // switch out Display Power Managment Syst.
```

The LED-monitor system can operate in 3 modes:

1. Maximum number of fireng channels per event =4*128= 512
and common setting of voltage applied to LED's in file led.conf.
This mode does not use the amplitude memory of LED MS.
2. Fireing 8 channels per event with individual tuning of
applied voltage to LED in file ledfire.conf. If chanel
is not included into this file the default applied
voltage is used from file led.conf. This mode does not use
the amplitude memory of LED MS.
3. Fireing 128 channels per event with individual tuning of
applied voltage to LED in file ledfire.conf. If chanel
is not included into this file the default applied
voltage is used from file led.conf. This mode uses
the amplitude memory of LED MS.

OPTION 1

cd led/2006_cern

```
loading led-configuring file: cp led_max.conf led.conf
// comment: you may not use this instruction if proper file
// led.conf which you need already exists
./daq // run program
0 96 -1 -1 // selection of controlled region on the detector plane
1 // (this is small letter "l") set "Led-monitor" mode of
// program operation
1 // set the 1st mode of fire of LED's
```

OPTION 2

cd led/2006_cern

```
loading of led-cofiguring file: cp led_indiv8.conf led.conf
// comment: you may not use this instruction if proper file
// led.conf which you need already exists.
loadig led-brightness-file: cp ledfire_equalcalib.conf ledfire.conf
// comment: you may not use this instruction if proper file
// ledfire.conf which you need already exists
./daq // run program
X1 X2 Z1 Z2 // selection of controlled region on the detector plane
// where X1,X2=0,1 ... 63 and X1,Z2=0,1 .. 63 are limits of
// the region which you want to fire on the PHOS
1 // (this is small letter "l") set "Led-monitor" mode of
// program operation
```

```

2          // set the 2nd mode of fire of LED's

OPTION 3
-----
cd led/2006_cern

loading led-configuring file: cp led_indiv.conf led.conf
      // comment: you may not use this instruction if proper file
      //          led.conf which you need already exists.
loadig led-brighness-file: cp ledfire_equalcalib.conf ledfire.conf
      // comment: you may not use this instruction if proper file
      //          ledfire.conf which you need already exists
./daq      // run program
X1 X2 Z1 Z2 // where X1,X2=0,1 ... 63 and X1,Z2=0,1 .. 63 are limits of
      //          the region which you want to fire on the PHOS
1          // (this is small letter "l") set "Led-monitor" mode of
      //          program operation
3          // set the 3rd mode of fire of LED's

```

Example of file ledfire.conf:

```

#####
#
# ledfire.conf - led fire configuration file
#               (control LED intensity)
#####
# set comment signe '#' in the 1st colum,
# allways begin "end" label of the end-file from the 1st column
# never begin data from the 1st column
#
#-----
# Initial amplitude and step, used only for meth. 2,3
#-----
# Number of data in every line are fixed 6.
# geoflag=0 - hardware MS-addressing
# geoflag=1 - geographycal MS addressing X,Y
# geoflag=2 - geographycal PHOS addressing X,Z
#
# format of file:
# geoflag=1,2  module=0,1..  x=0..(group=0..)  y/z=0..(diode=0-7)  A1  step
# -----
#
2 2 0 28 250 0 # -- line with negatibe geoflag to be ignored
2 2 14 2 252 0 # -- negative amplitude and step to be ignored
2 2 62 54 54 0
2 2 62 53 53 0
2 2 0 55 56 0
2 2 1 55 156 0
end of block - end label, don't comment this line, begin "end" from the 1st
col.
##### end of file ledfire.conf

```

Brightness of chanel's which are scipped in file ledfire.conf

For such chanel's default brighness is used from file led.conf

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