

Liquid Surface X-ray Scattering User Help

Software

SPEC Commands in Brief

General Help

prdef *command*- prints the command usage. Or, just type command without any arguments.

history or **!** allow you to look at past commands (eg. “!d” looks at all past commands starting with d)

onsim/offsim – In simulation mode: no motors move, no permanent changes made, calculations only.

ca (e.g. ca 0 0 1) Calculates all angles and heights for specified qx,qy,qz

wh Lists positions of the 10 real motors.

wm *motor* lists complete info for up to 6 motors. (Example: wm oh)

Scans

DET=monc - sets the detector to ion chamber, monc

plotselect - choose desired input (Example: plotselect monc)

setplot - Allows you to plot data in real time or after scan is completed.

ascan (*motor start* finish* intervals time*)

Task: Scans absolute position of specified motor. *mm or degrees.

Example: ascan oh -0.2 0.2 20 1

dscan (*motor start* finish* intervals time*)

Task: Scans relative position of specified motor. *mm or degrees.

Example: dscan oh -2 2 10 1

shscan (*halfwidth intervals time*)

Task: moves sample and detector heights together.

oscan (*halfwidth intervals time*)

Task: Moves detector in a “circle” around the sample.

Comments: Involves simultaneous motion of the or and oh motors

P CEN – prints the center position of a scan.

umv tth CEN - moves motor to center position of last scan

set tth 7.406 - resets tth motor so that current position reads 7.406

Other Useful Macros

ct (*time or monitor_counts*)

Task: Counts for a set period of time (positive) or to monitor counts (negative).

mv (*motor angle/position*)

Task: Moves motor to absolute position specified.

Example: mv tth 50

Comments: **mvr** moves motor by a relative amount from current position.

umv updates motor position to screen as motor moves.

umvr Moves motor by relative amount, updates motor position in real time.

umi (*alpha beta*) and **umk** (*qx, qy, qz*)

