tab-based scan type selection:
TXM; XANES;XFS;Tomo; etc.

mode dependent scan parameters
(1)   always X,Y,Z,angle
(2) DCM/ID energy scan when needed
(3)   list of detectors/triggers

START SCAN

ABORT/ALL STOP

Live
image

modal channel select (r)

min	auto	max

modal channel select (g)

min	auto	max

modal channel select (b)

min	auto	max

cursor
readback

zoom   reset

Live
image
or
called-back
data

modal channel select (r)

min	auto	max

modal channel select (g)

min	auto	max

modal channel select (b)

min	auto	max

cursor
readback

zoom   reset

live status

normalize to I_0	Save ROI coords	move to cursor

data location on disk

Spectrum/I_0
for live image

snapshot
(to logbook w/metadata?)
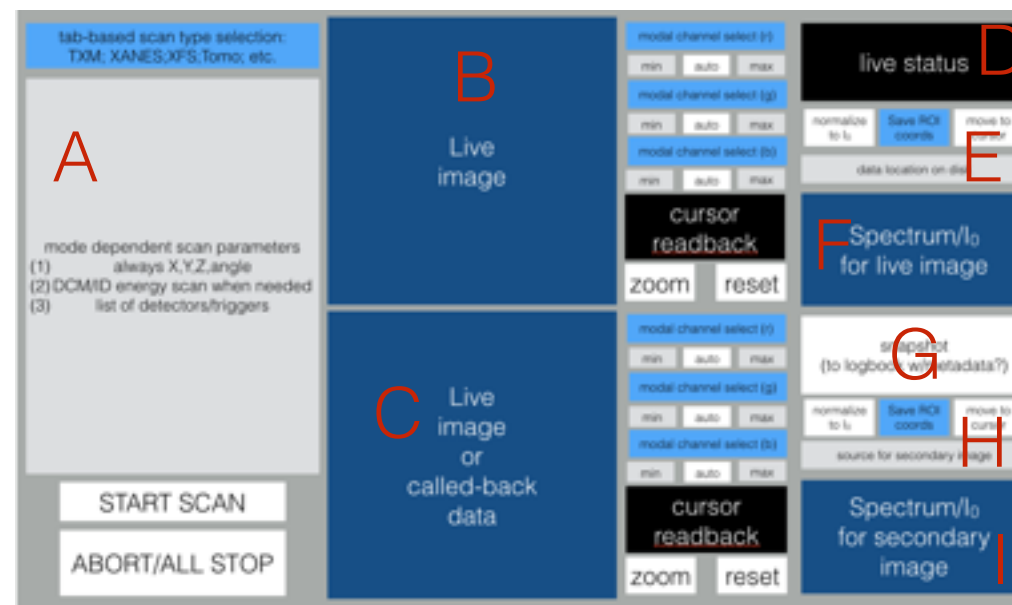
normalize to I_0	Save ROI coords	move to cursor

source for secondary image

Spectrum/I_0
for secondary image

- A: Control acquisition mode via tabs to indicate which mode is active. Tabs will be normal modes of operation for the SRX; e.g., live update for locating sample, STXM, XANES. Input for scan ranges (position, rotation, detectors and triggers) will be detailed here either with fixed options or in pop-up boxes. Start scan button will initiate the action described in the active tab. Abort/stop all will cancel motion and detector triggering.

- B: The live image is always displayed here. Channels on the right correspond to RGB additive color components, VLM will either give color image or intensity on different channels. Channels will correspond to detector read back at each point in the image. A "channel" could consist of the integrated signal over a specified energy range. Each channel will have user selectable minimum and maximum display values and an autoscale button. When the image is clicked or a box drawn, the read back values in the lab frame will be displayed. Clicking on "zoom" and then the image will increase the magnification by 2 and center on the click, clicking "zoom" and drawing a rectangle will scale the image to that ROI. "reset" will reset the image display.

- C: Functions as B, but channels may be either "live" or from a previous scan, loaded from H.

- D: Live status information is provided here, including scan progress and machine state.

- E: Options include normalizing the image to the I_0 measurement, saving the selected ROI to one of 8 presets held in memory, or moving the motors (XY at current Z/theta or E at current XYZ/theta).

- F&I: Show spectrum information related to the ROI in the image

- G: Quickly grab the images in B&C and some metadata. Hopefully post to on-line logbook or store as image in the data directory.

- H: Similar to E, but modified for the possibility of loading data from a previous scan.