**Real-time System Power Up**

**October 2016**

**(annular array version)**

1. Turn on PC.
2. Turn on Daxsonics pulser/receiver.
3. Turn on Quantel Aviso unit.
4. Load custom Aviso software Annular Probe Drive.exe.

**4**

1. Load Real Time.vi shortcut on PC.
2. Step on Aviso foot pedal or click button in Aviso software

**1**

**2**

1. Press “Scan” in Real Time.vi and images should start showing up.

When done scanning can deactivate scan button or close LabVIEW software.

If Annular Probe Drive.exe appears off screen, shift +right click to get option to maximize screen.

When not using system, stop the motion of the hand-held probe. Motor sometimes stops unexpectedly. Push software button or foot pedal until it starts again.

**(Quantel probe version)**

1. Turn on PXI chassis (only if NI digitizer in chassis is being used. Otherwise don’t need this step.)
2. Turn on PC (if using Alazar digitizer in PC).
3. Turn on Quantel Aviso unit.
4. Plug in pre-amp module.
5. Load standard Aviso software.

**4**

1. Load QuantelDataGrab.vi shortcut on PC.
2. Start probe with normal method.

**1**

**2**

1. Do not change settings in the Annular Probe Drive.exe window.
2. Screen image will start updating if all is well.
3. If red light indicating no data, this indicates missing triggers so motor is not moving or other problem.

Daxsonics

(when usb com not working)

1. If manual settings are needed for Daxsonics, rotate knob to select item, then push and rotate to select value. Push and rotate to select next parameter.
2. Enter values that appear in software interface: Freq = 20. Gain=18 and Amp =100.

Cabling

(annular array)

1. Quantel cable from hand-held probe goes to Aviso unit
2. 5 lines from hand-held go to pulse 1-5 on Daxsonics
3. Aviso HF trig line goes to Tring in on trigger box
4. Or Gate Out goes to Ext on Alazar card
5. Frame Out goes to X connector on Alazar card
6. Trig 1-5 on trigger box go to Trig1-5 on Daxsonics
7. Out 1-5 go to Channels A-D on Alazar card
8. Ribbon cable from 6602 card in PC goes to trigger box.

**1**

**2**

(Quantel probe acquisition)

1. Either the low or high frequency output on the Quantel needs to be connected to the input of the preamp/filter module.
2. The output of the pre-amp/filter module connects to Ch A or Ch 0 of whatever digitizer is used.
3. There are no trigger lines in this configuration.