



# SOLARIS

Inputs: AES, SPDIF, Optical, USB sample rates to 192K

Outputs: Main output has discrete output amplifiers with a stepped attenuator, the max output is +24dbu

The secondary output, also balanced has a max fixed output of +18dbu, balanced

The Headphone Amplifier has its own stepped attenuator

Mute: cuts off the main outputs and Solaris powers up muted.

The Function display is done with an LCD showing, the source, gains, and the sample rate. It also has level meters.

The Quantum DAC is the 5th generation design "QUANTUM series DAC" from Crane Song

The Quantum DAC uses 32 bit converter and ASRC for jitter reduction up sampling to 211KHz. The reference clock has less than 1pS and a proprietary reconstruction filter for accurate time domain response.

The clock's jitter measured from 10Hz to 20KHz is typically 0.045pS

Up date 20160329

# CONFIGURE

Built in Pad

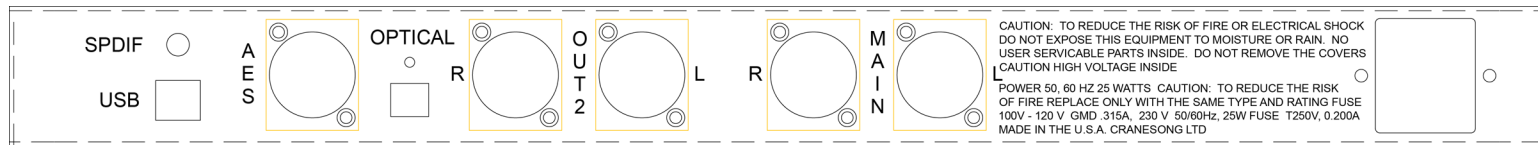
Scale type



If you press the MUTE button before Solaris is booted up this menu will appear. This SOURCE knob will enable a 6 db pad on the main output. This will make the maximum output +18dbu. With the Pad off the maximum output is +24dbu.

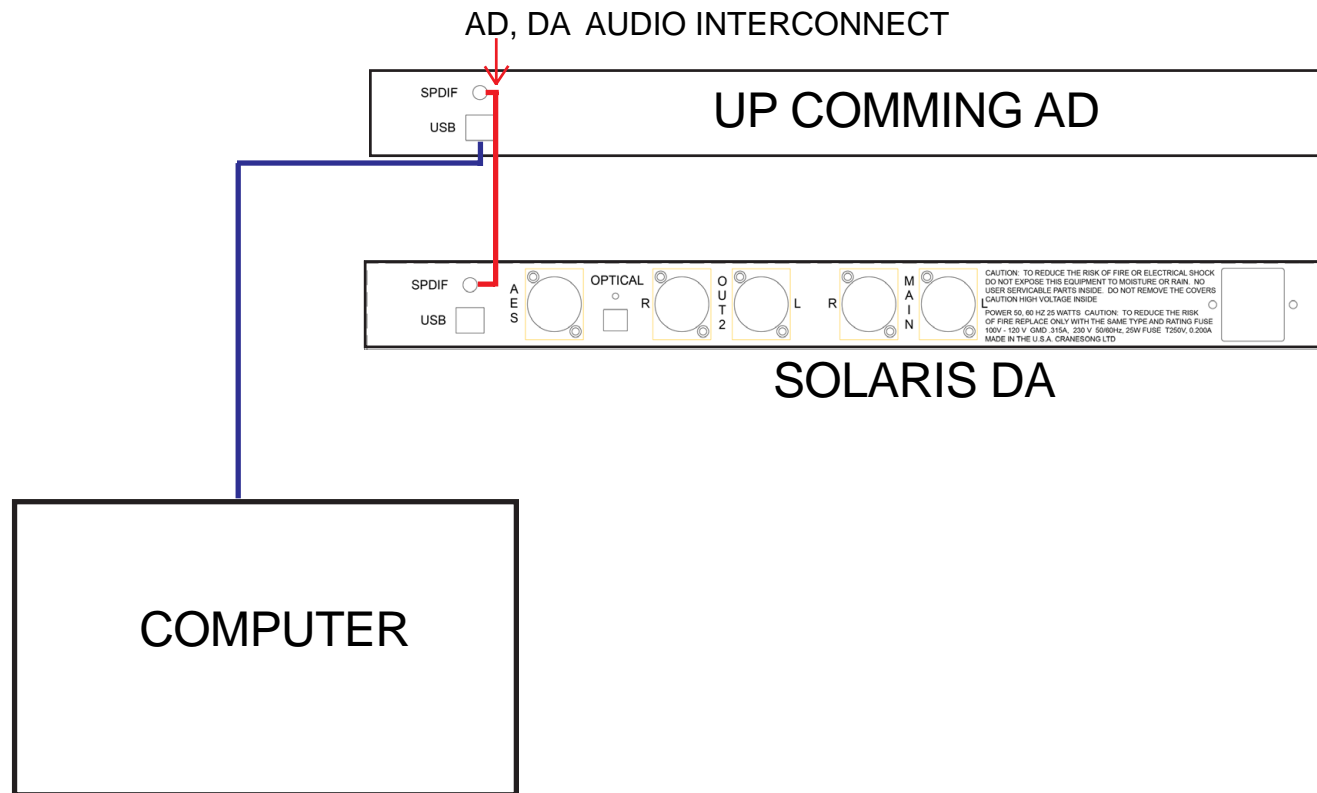
The gain knob will change the displayed scale numbers. PAD type the max output is when the scale shows 0DB  
AVO type the maximum output is when the scale displays +12 db

# BACK PANEL REFERENCE

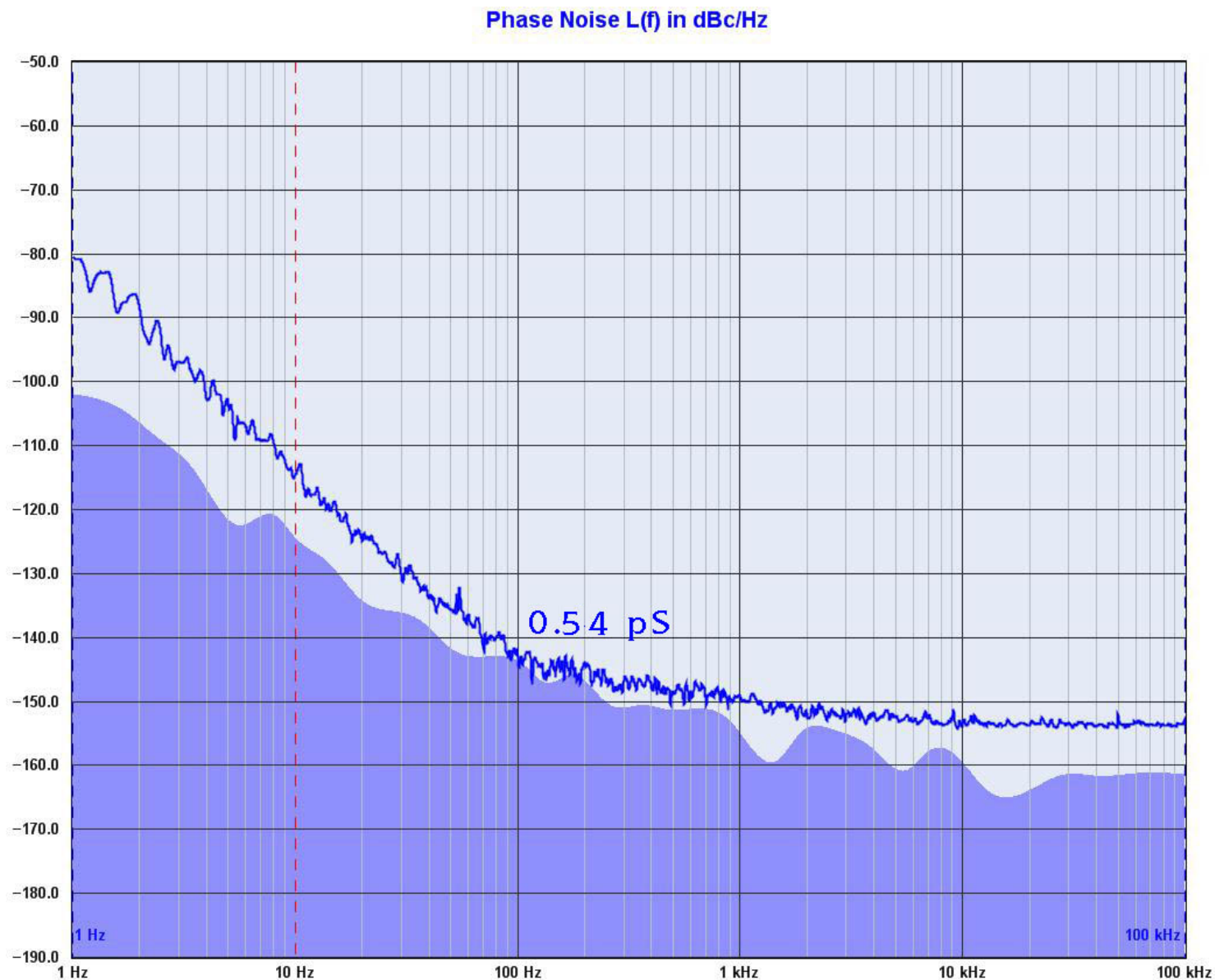


# SYSTEM REFERENCE for USB

For both AD and DA, a complete interface



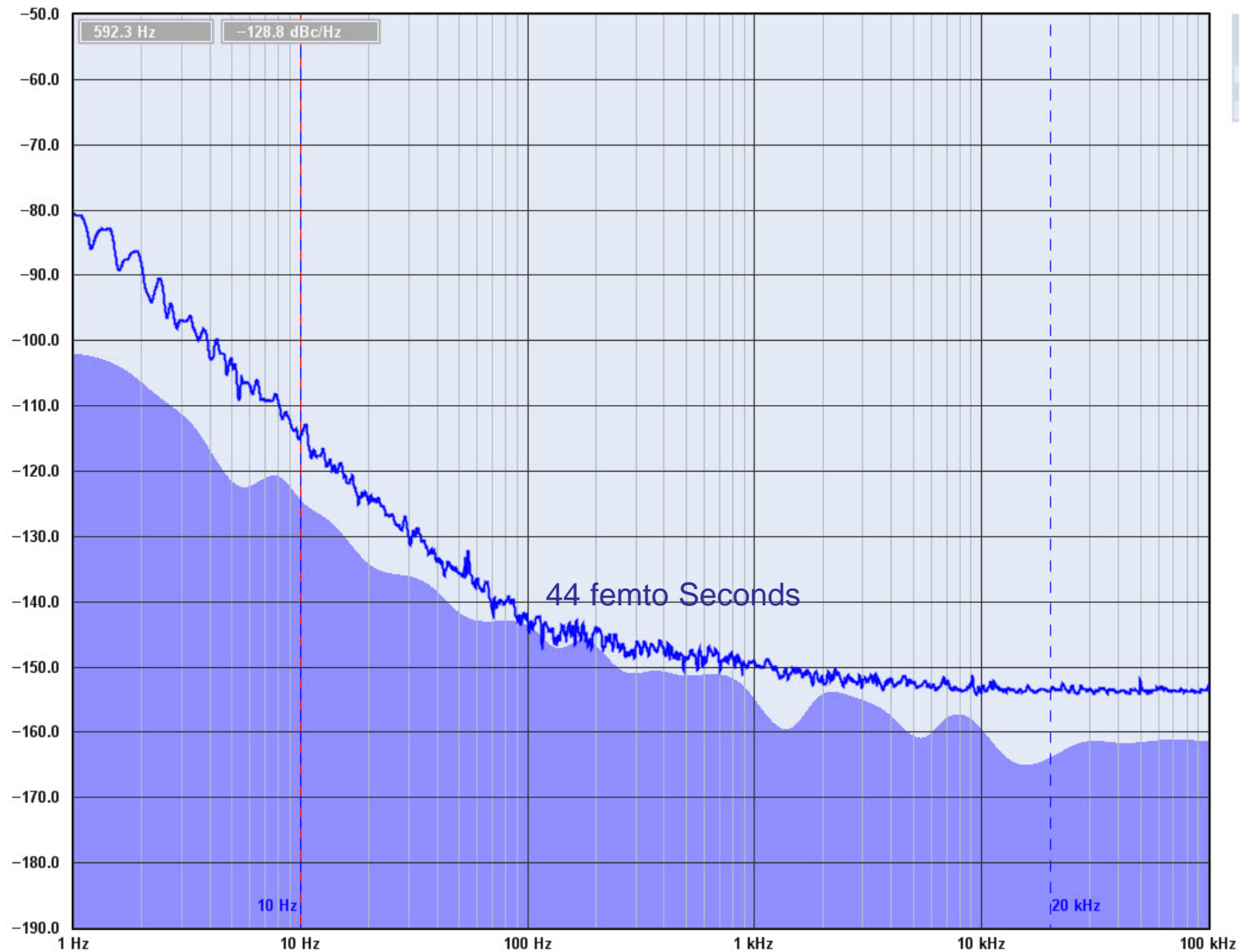
By using the AD as the master interface the clocking will be uncompromised  
For playback only SOLARIS can connect directly to the computer by USB



Notes	Input Freq	Sample Interval	dBc/Hz at 10 Hz	RMS Jitter	Duration	Acquired	Instrument	Op
Avocet -114dBcHz	27.000 MHz	0.010 s	-114.5	5.4E-13 s	3m 0s	18000 pts	Symmetrcom 3120A	St

Jitter measured from 1Hz to 100KHz is 0.54pS typical  
 measured with a Symmetrcom 3120A using a Stanford Research Systems  
 Rubidium Frequency Standard, PRS10  
 without info on the measurement bandwidth and test instrument used, the measurement is  
 impossible to know about

# Phase Noise L(f) in dBc/Hz



Notes	Input Freq	Sample Interval	dBc/Hz at 10 Hz	RMS Jitter	Duration	Acquired	Instrument
► -114dBcHz	27.000 MHz	0.010 s	-114.5	4.4E-14 s	3m 0s	18000 pts	Symmetricon 31

Jitter measured from 10Hz to 20KHz is 0.044pS or 44 fS typical  
 measured with a Symmetricon 3120A using a Stanford Research Systems  
 Rubidium Frequency Standard, PRS10  
 without info on the measurement bandwidth and test instrument used, the measurement is  
 impossible to know about