

## Luckydog's Baxandall slew rate/acceleration measurement method

1. Disable RIAA stage. i.e zero RIAA playback compensation

2. Measure reference output level @ 1kHz from test disc.

Result  $0.75V = 1.2\text{cm/S}$

3. From 2, equate unit velocity and acceleration with output voltage

Result velocity  $1\text{m/s} \equiv 62.5V$  acceleration  $1\text{m/s}^2 \equiv 62.5\text{ V/s}$

4. Ensure output impedance is low and freq response is flat

Result output impedance  $<50R$

5. Fit 1<sup>st</sup> order high pass filter to output,  $C=1000\text{pf}$ ,  $R = 1000$  ohms, so that  $CR = 1\mu\text{S}$ . Output is  $V_{\text{diff}}$

6. Play record under test, measure peak level of high pass filter output  $V_{\text{diff}}$

Result  $V_{\text{diff}} = 0.28V$

7. Calculate slew rate  $SR = V_{\text{diff}} / CR$  [V/s]

Result  $SR = 0.28V/1\mu\text{S} = 280,000\text{ V/s}$

8. Using 3, convert slew rate to acceleration

Result acceleration  $= 280,000 / 62.5 = 4480$  [m/s<sup>2</sup>]

9. Convert acceleration m/s<sup>2</sup> to G. Divide by 9.81.

Result acceleration  $= 4480 / 9.81 = 457\text{ G}$