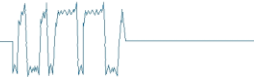
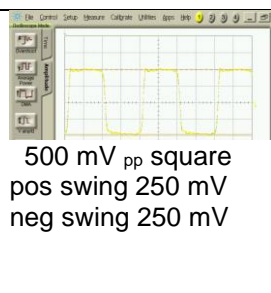
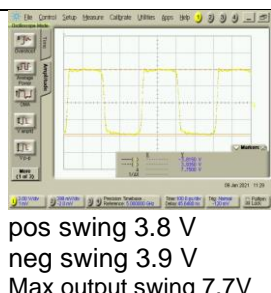
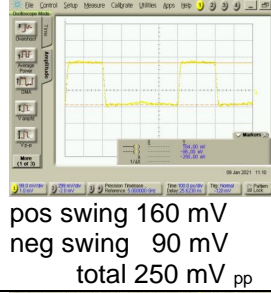
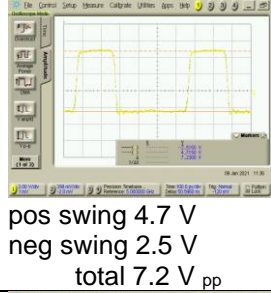
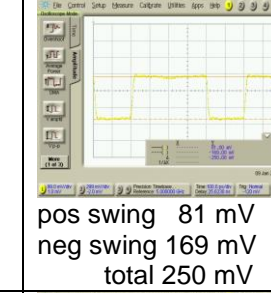
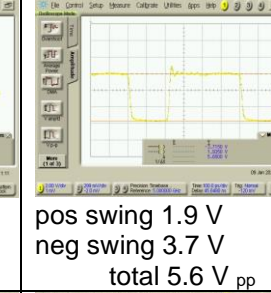
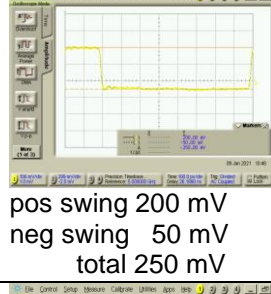
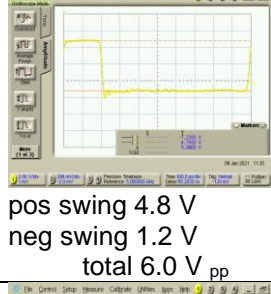
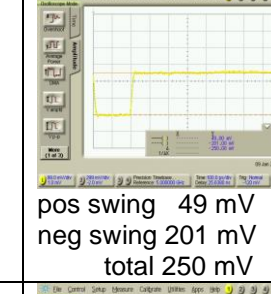
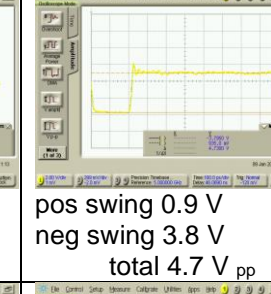
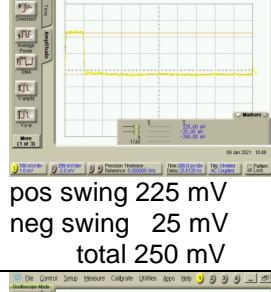
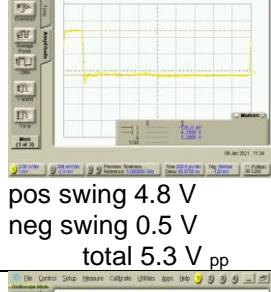
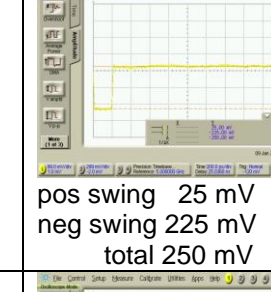
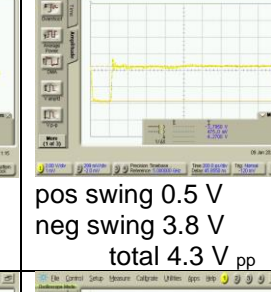
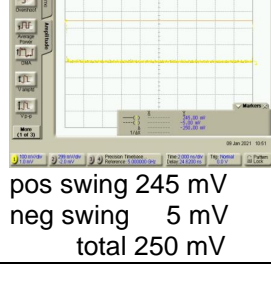
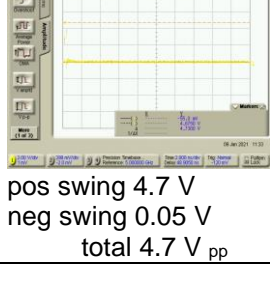
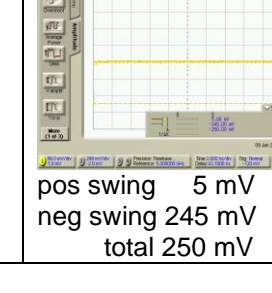
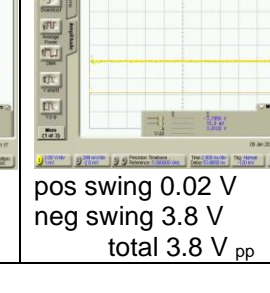


Vertical signal shift when working at different Mark-Space ratios

<p>1-to-2 Mark-Space ratio</p>		<p>GND</p>	<p>An AC-coupled signal with a 1-to-2 Mark-Space ratio has a pos-neg Amplitude ratio of 2-to-1</p>
<p>1-to-4 Mark-Space ratio</p>		<p>GND</p>	<p>1-to-4 Mark-Space ratio -> pos-neg Amplitude ratio of 4-to-1</p>
<p>1-to-9 Mark-Space ratio</p>		<p>GND</p>	<p>1-to-9 Mark-Space ratio -> pos-neg Amplitude ratio of 9-to-1</p>
<p>1-to-99 Mark-Space ratio</p>		<p>GND</p>	<p>1-to-99 Mark-Space ratio -> pos-neg Amplitude ratio of 99-to-1</p>



M-S ratio				
1-to-1	 <p>500 mV_{pp} square pos swing 250 mV neg swing 250 mV</p>	 <p>pos swing 3.8 V neg swing 3.9 V Max output swing 7.7V</p>		
1-to-2	 <p>pos swing 160 mV neg swing 90 mV total 250 mV_{pp}</p>	 <p>pos swing 4.7 V neg swing 2.5 V total 7.2 V_{pp}</p>	 <p>pos swing 81 mV neg swing 169 mV total 250 mV</p>	 <p>pos swing 1.9 V neg swing 3.7 V total 5.6 V_{pp}</p>
1-4	 <p>pos swing 200 mV neg swing 50 mV total 250 mV</p>	 <p>pos swing 4.8 V neg swing 1.2 V total 6.0 V_{pp}</p>	 <p>pos swing 49 mV neg swing 201 mV total 250 mV</p>	 <p>pos swing 0.9 V neg swing 3.8 V total 4.7 V_{pp}</p>
1-9	 <p>pos swing 225 mV neg swing 25 mV total 250 mV</p>	 <p>pos swing 4.8 V neg swing 0.5 V total 5.3 V_{pp}</p>	 <p>pos swing 25 mV neg swing 225 mV total 250 mV</p>	 <p>pos swing 0.5 V neg swing 3.8 V total 4.3 V_{pp}</p>
1-99	 <p>pos swing 245 mV neg swing 5 mV total 250 mV</p>	 <p>pos swing 4.7 V neg swing 0.05 V total 4.7 V_{pp}</p>	 <p>pos swing 5 mV neg swing 245 mV total 250 mV</p>	 <p>pos swing 0.02 V neg swing 3.8 V total 3.8 V_{pp}</p>

In this case, a maximum output swing of 7.7 V is achieved when driving with a square wave or a balanced PRBS signal of 500 mV_{pp}.

If the positive going pulses are getting shorter, the positive going output pulses clip at ~ 4.7 V

If the negative going pulses are getting shorter, the negative going output pulses clip at ~ -3.8 V