



RingBuffer-Size: 1000

Usable lower frequency for pitch-shifting  
 $\sim f_{\text{sample}} / \text{BufSize} = 96000/1000 = \sim 100 \text{ Hz}$

Write pointer is increased by 1 every 1/96kHz seconds

Read-pointer is a fractional value and is increased by the pitch-factor (e.g. 0.7) every 1/96kHz seconds.  
Afterwards, the 180° shifted read-pointer is calculated.

Depending on the pointer position, cross-fading is calculated and samples summed up.

If shift == 1.0 -> no shifting is applied  
If shift < 1.0 shift down  
If shift > 1.0 shift up

One octave down -> shift = 0.5  
One octave up -> shift = 2.0

Pitch-Shift x2

