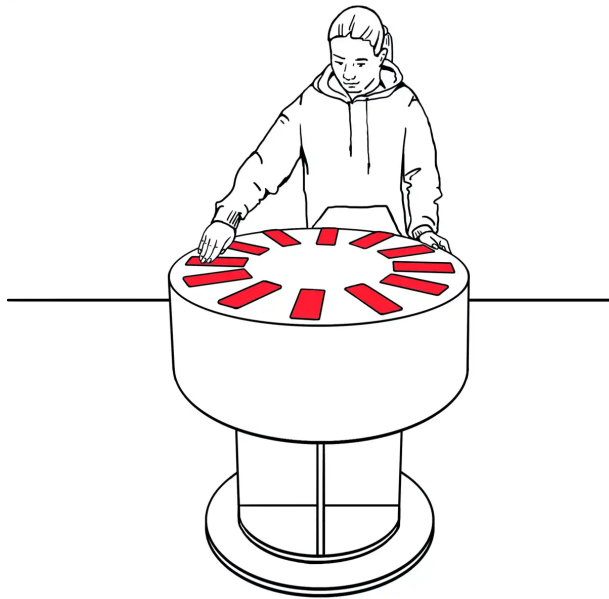


# Infinite scale

Where are the highest and the lowest notes?



Press the keys one after the other around the circle.

Now try going in the opposite direction.

Where is the highest note and where is the lowest note?

If you press the keys one after the other, the notes seem to get higher and higher or lower and lower depending on the direction you go round the circle. Strangely, you can keep going round the circle multiple times and still hear the notes continue to go higher or lower.

The notes on this special keyboard seem to get forever higher or lower even though that must be impossible, because you can perceive sound only in a certain frequency range.

When you press a key, you hear a combination of multiple notes that are an octave apart, for example a low C, middle C and high C. However, these tones do not have the same volume. The middle C is the loudest, while the lower and higher C notes, are not so loud. When you push the next key, the three C tones change to a quiet and low C sharp, a loud middle C sharp, and a quiet high C sharp. At the next key the C tones are replaced by D tones which have the same volume distribution. This continues from key to key and the set of notes that grew “higher” are also becoming quieter and are no longer perceptible at some step, but the next octaves set of “lower” tones has now replaced them and reached a perceptible volume.