Основной цикл тюнера

```swift
override func viewDidLoad() {
    super.viewDidLoad()

    microphone.start()

    Timer.scheduledTimer(timeInterval: updateInterval,
                         target: self,
                         selector: #selector(TunerController.listen),
                         userInfo: nil,
                         repeats: true)
    resetUI()
}
```

Инициализация массива частот

```swift
class var noteFrequencies: [Double] {
    // f[i] = f0 * 2^(i/12)
    // f0 is note A frequency (base note)
    var noteFrequenciesArray = [Double]()

    let firstNoteFromBase  = -57
    let lastNoteFromBase   = 62
    let notesInOctave      = 12.0

    for i in firstNoteFromBase ... lastNoteFromBase {
        noteFrequenciesArray.append( baseFrequency * pow(2, Double(i) / notesInOctave) )
    }

    return noteFrequenciesArray
}
```