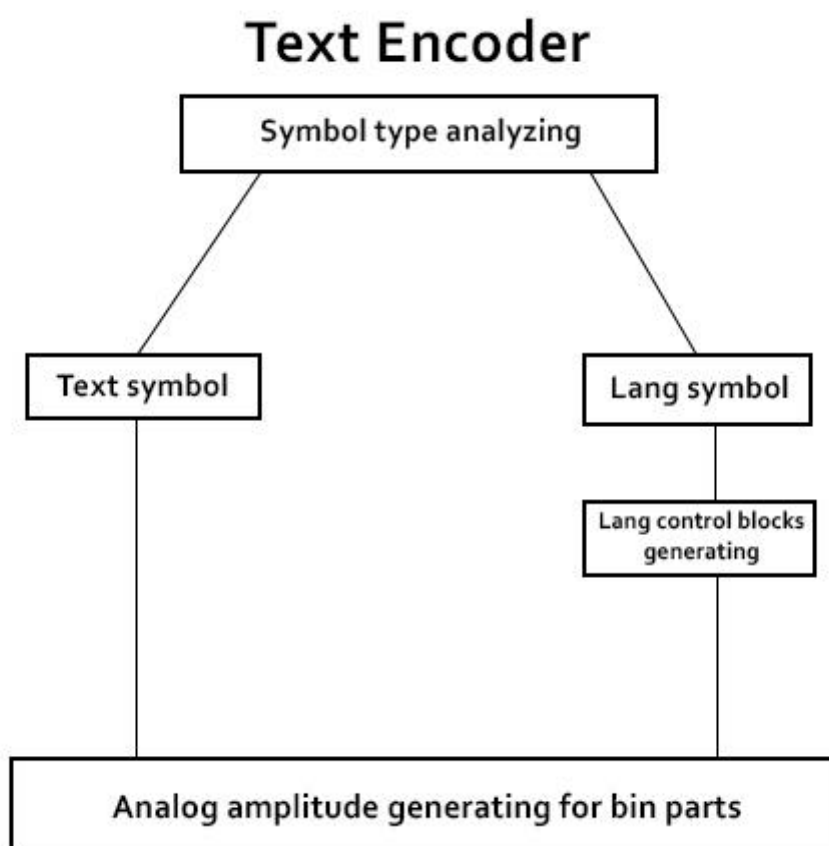


SoundCard Data Interface Manual

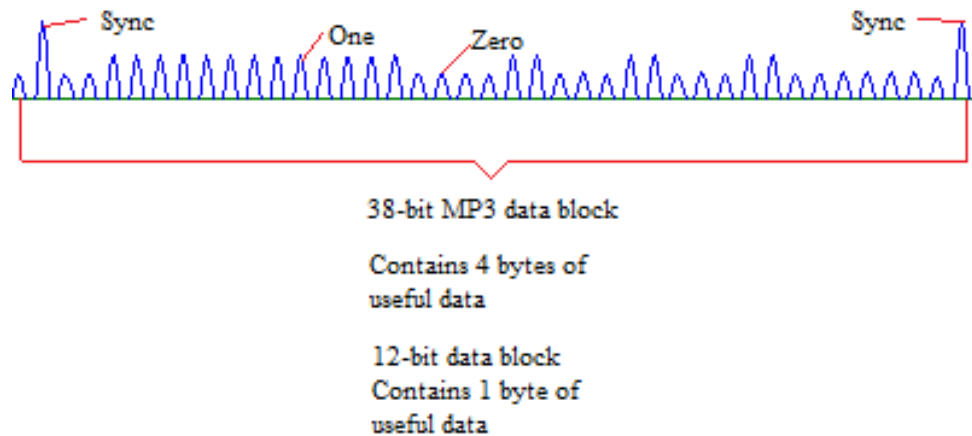
by Yurii Faraday

Encoded signal basics and adjustments

1. Text encoder algorithm scheme:

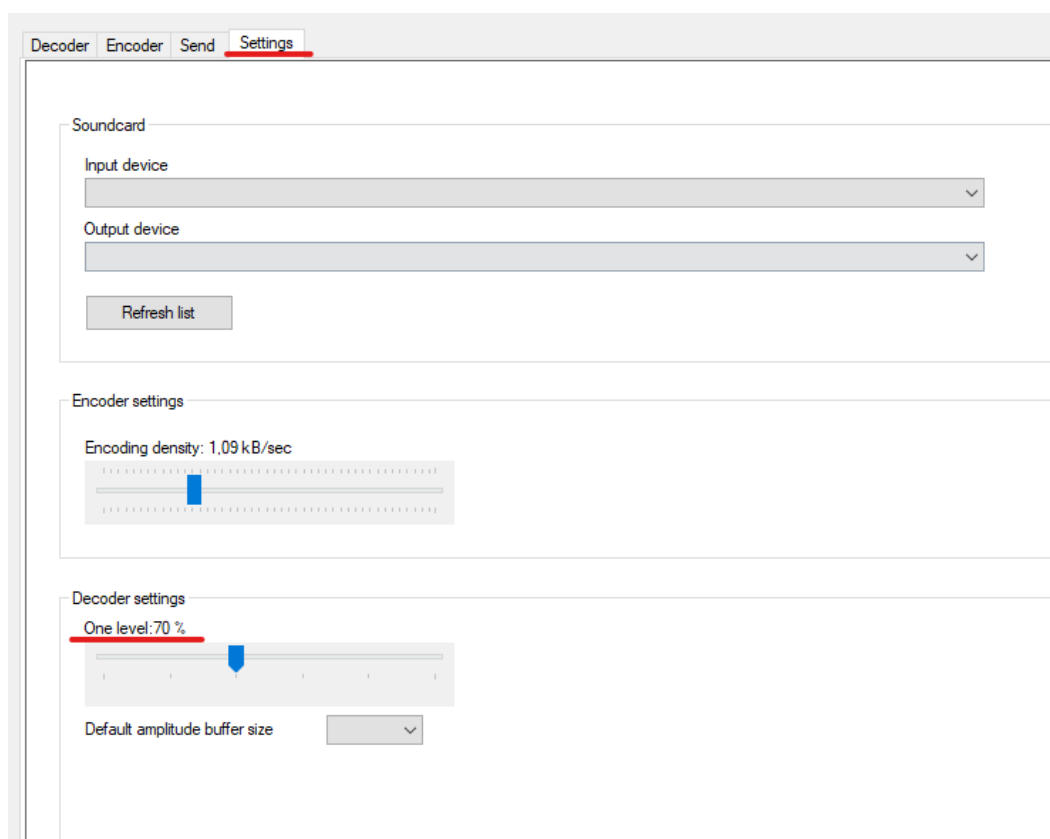
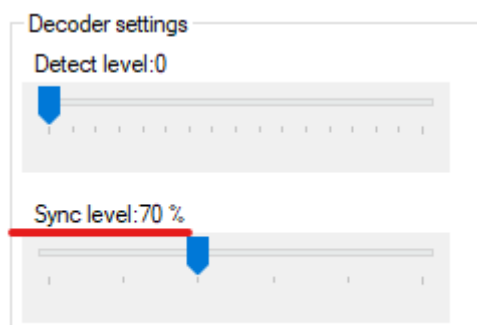


2. Signal structure basics:

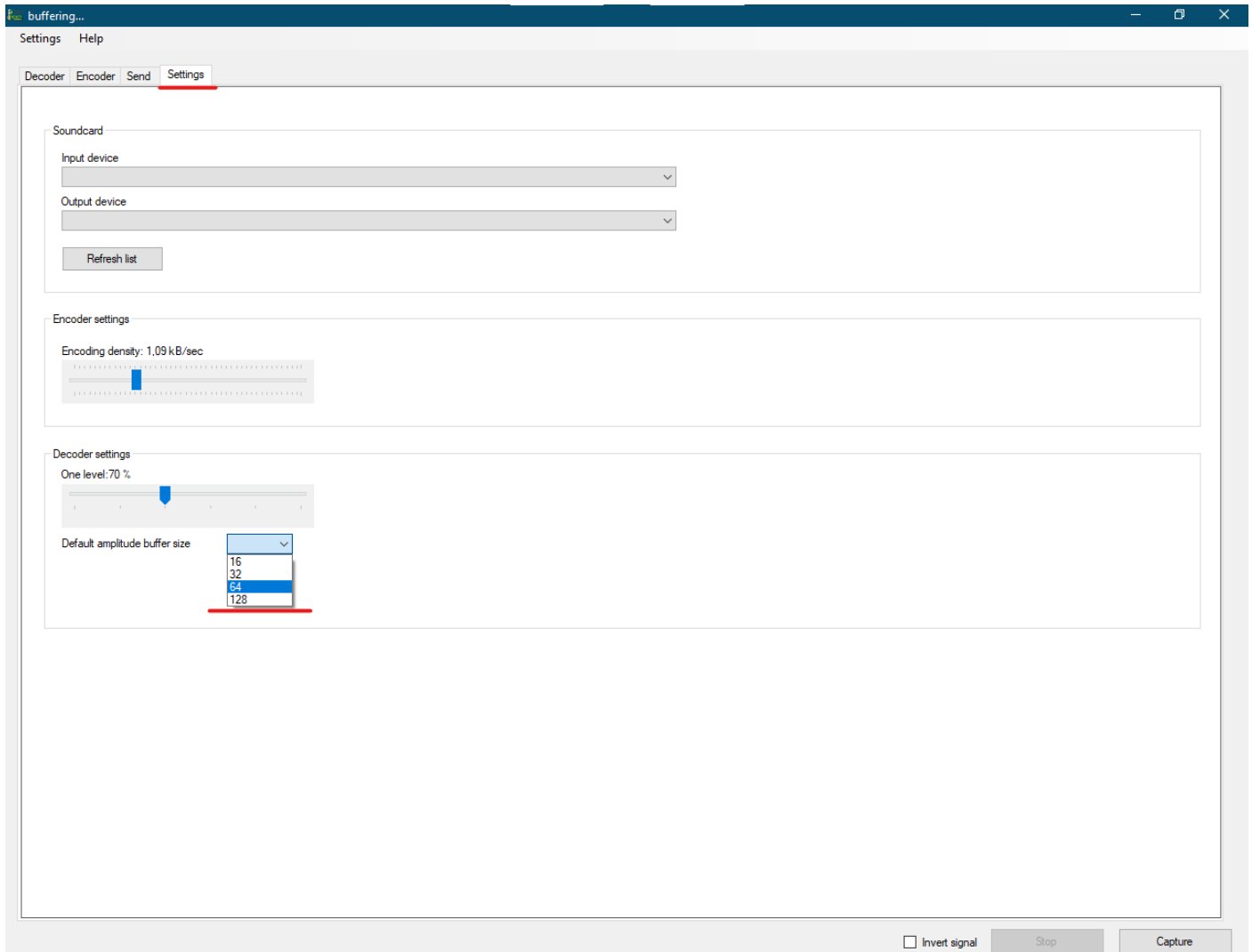


3. Amplitude detection:

- To detect sync pulses and one amplitude, SDI using amplitude level settings. You may change it to get more quality decoding



- **Amplitude buffer size**, is important setting, that lets improve decoding quality also. 64-bit set by default. To minimize text decoding delay (signal awaiting, when buffer is not full), you may set less high value (16 or 32-bit), but don't forget to change it back to 64 or 128-bit, if mp3 decoding needed:



- Any data encoded by SDI, uses **errors correction system**, that lets to fix invalid data blocks while decoding.

- You may change **encoding density**, if you want, using special track bar at settings:

The screenshot shows a software window with four tabs: "Decoder", "Encoder", "Send", and "Settings". The "Settings" tab is selected and highlighted with a red underline. The window is divided into two main sections: "Soundcard" and "Encoder settings".

Soundcard section:

- Input device: A text box with a light gray background.
- Output device: A text box with a light blue background.
- Refresh list: A button with a light gray background.

Encoder settings section:

- Encoding density: 1.09 kB/sec. This text is positioned above a slider control.
- Slider: A horizontal slider with a blue handle. The slider has a red line above it and a light gray background.