Far-Field Voice Session Sequence

The RVS supports optional characteristics to support transferring keyword and beamformer data to an RVS Client for more optimal processing of the audio stream and metrics.

Figure below shows a voice session for a far-field device supporting a keyword detector and end-of-speech detection.

RDK Voice Session - Far Field

User	Voice Server	Voice Client

Read(Audio Codecs)

Write(Audio Gain)

Write(Audio Control-Encoding)

Keyword Detection

Notify(HID Report(Speech Detected))

> RVS Client should decide whether or not to accept the command.

Write(Audio Control-Enable)

loop
[Transmit Keyword Data]

Notify(Keyword Data)

loop
[Transmit Beamformer Data]

Notify(Beamformer Data)

> Every 5th block will contain audio header data

loop
[Speech Detected]

Notify(Voice Data w/Header)

loop
[Transmit Voice Block - 4X]

Notify(Voice Data)

opt
[End-of-Speech Detected]

Release Mic Key

Notify(HID Report(EoS Detected))

Write(Audio Control-Disable)

User	Voice Server	Voice Client