



**ReconVox** is our high performance **Speaker Independent Continuous Speech Recognition** product. Thanks to its ability to work both in **Word-Spotting** or continuous speech mode for any speaker without needing specific training, it fits into a wide range of applications, from controlling electronic devices with your voice to accessing through the telephone line automatic services driven by full and complex sentences or getting the full transcription of a radio broadcast.

**ReconVox** is designed to be easily integrated in almost any operating environment because it's available as a **SDK (Software Development Kit)** which delivers all its functionality via a complete **API (Application Programming Interface)**.

Thanks to its efficiency and flexibility, a wide range of **applications** can be delivered:

- **IVR (Interactive Voice Response):** conversations close to natural language in automatic call centers.
- **Automatic search by content:** spotting of **keywords** or sentences in audio/video recordings or streaming audio.
- **Automatic transcription** services from radio broadcasts, trials...
- **Alarms and domotics:** electronic devices controlled by voice commands, (de)activation of alarms...
- **Voice commands in cars:** GPS, hands-free phone calls...



- **Media clipping** and **automatic tagging of contents.**
- **Education:** scoring of **pronunciation** for every single word in language learning or in some speech pathologies like dyslexia or aphasia.

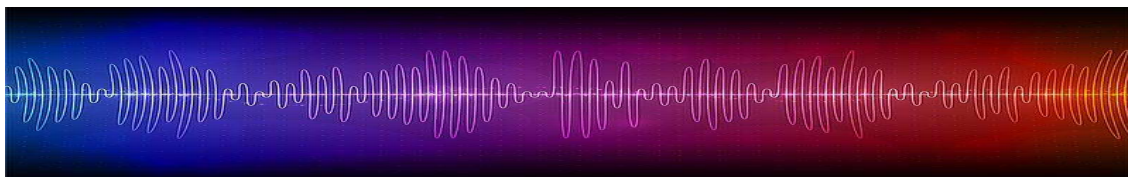
In addition, if security is a factor for the application, a **ReconVox** based Speech Recognition system can work together with our Voice Biometrics technology, **BioVox**. This way, it's possible to perform a continuous speaker verification along all the interaction of the user with the system, in the background and transparent for him or her, for example for secure transactions in financial call centres.

## PRODUCT

- Speaker Independent Continuous Speech Recognition system.

## KEY FEATURES

- Recognition task can be fine tuned: **isolated words** or **continuous speech**.
- **Speaker independent**: doesn't need to be retrained for every speaker.
- **AutoLearn**: automatic adaptation for a specific speaker, dialectic region or noisy environment.
- **WordSpotting**: detection of keywords or special sentences among out of vocabulary words.
- **Vocabulary can be customized**: from a few commands to thousands of words.
- **Grammar and language model can be customized**: two different types of language models, **fixed syntax** or **flexible (statistic) grammar**.
- Available in **spanish** and **UK english**. New languages can be incorporated upon request.
- Acoustic models available in **8 KHz** (telephone) and **16 KHz** (radio, domotics, apps).
- **Efficient** recognition engine: can be integrated into embedded systems.



## TECHNICAL SPECIFICATIONS

- Speech signal preprocessing: automatic activity detection and signal filtering.
- Recognition speed in continuous speech mode<sup>1</sup>: 2x – 4x faster than real time (typical, depends of vocabulary size).
- Recognition speed in Word-Spotting mode<sup>1</sup>: 7x faster than real time.
- Supported audio formats: PCM linear 16 bits 8/16 KHz, A-Law,  $\mu$ -Law, MP3.
- Memory requirements: 3 MB fixed + 9 MB language models + 20 MB *AutoLearn* (optional, can be increased).
- Disk space: 5 MB / language.
- Minimum recommended CPU: Pentium IV 2'5 GHz.

## SUPPORTED PLATFORMS

- Windows® XP, Vista, 7, 8, 10.
- Linux, several distributions.

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<sup>1</sup> With minimum recommended CPU.