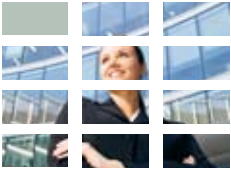




SVOX  
Mobile  
Speech  
Solutions



# SVOX Mobile Speech Solutions

## Designed for embedded applications

SVOX Mobile is a complete set of speech products and solutions for embedded mobile applications. Mobile software platform providers, OEMs, system integrators, service providers and application developers use SVOX Mobile to enable rich and flexible speech user interfaces in various mobile devices such as mobile phones, smartphones and portable navigation systems.

SVOX Mobile solutions offer a unique combination of high quality and suitability for embedded mobile environments. SVOX success is the result of deep insight into customers' needs gained through successful cooperation with mobile platform providers and OEMs. Customers choose SVOX because it is more than a speech solutions supplier – it is an innovation partner focused on the customer's success.

## SPEECH RECOGNITION

### Polyglot, Accurate

SVOX Mobile ASR allows customers to enable reliable and accurate Automatic Speech Recognition in their mobile products. Specifically tailored for embedded mobile use and with a rich choice of languages covering all important markets, the solution is distinguished by a unique polyglot capability – recognition of words and phrases originating from several languages. Superior recognition rates in high-noise environments are achieved through the use of advanced noise reduction techniques.

### Portable, Scalable

Available in a wide variety of footprints and configurations, SVOX Mobile ASR can scale from basic handsets to powerful smartphones – all using the same, uniform base technology. Porting to various embedded environments is straightforward thanks to platform-independent, modular architecture.

### Technical specifications

All values in the table are approximate, exact values differ depending on the platform.

	SVOX Mobile ASR Lite	SVOX Mobile ASR Standard	SVOX Mobile ASR Advanced
Code size, ROM (ASR engine)	200 KB	700 KB	800 KB
Generalist HMM, ROM (per language)	200 KB (80 KB compressed), 7,500 prototypes	200 KB (80 KB compressed), 7,500 prototypes	500 KB (200 KB compressed), 20,000 prototypes
Digits HMM/spelling HMM, ROM (per language)	140 KB/140 KB (60 KB/60 KB compressed)		
Vocabulary and grammar, ROM (per language)	15–200 KB (control of menu system in simple mobile phones)		2 MB (complex dialogues in high-end smartphones or PNDs)
Vocabulary and grammar, RAM (per language)	150 KB (control of menu system in simple mobile phones)	150 KB (control of menu system in simple mobile phones)	5 MB (complex dialogues in high-end smartphones or PNDs)
Recognition with database of 70,000 city names, RAM	N/A	10 MB	
Supported APIs	C/C++ SVOX API*	C/C++ SVOX API, MS SAPI v5.0 (Win32 and WinCE)*	
Chipsets supported	X86, SH4, X-Scale, Strong ARM, ARM7-9-11, OMAP, TI Jacinto, MIPS*		
OS supported	MS WinCE, MS Windows, Linux, Symbian*		
Languages	Canadian French, Czech, Danish, Dutch, Finnish, French, German, Greek, Italian, Japanese, Korean (2010), Mandarin Chinese, North American Spanish, Portuguese, Russian (2010), Spanish, Swedish (2010), UK English, US English		

\*Others available on request

## SPEECH OUTPUT

### Polyglot, Natural

SVOX Mobile TTS solutions have been successfully deployed by a number of prominent companies in the mobile industry. SVOX TTS technology is characterized by natural and clear sound as well as unique polyglot capability – the same voice can speak multiple languages like a native speaker.

### Portable, Scalable

Mobile customers use SVOX embedded TTS to enable speech UI in a variety of mobile devices. Excellent portability and scalability are ensured due to a special design that takes into account specific requirements of restricted embedded environments.

### Technical specifications

All values in the table are approximate, exact values differ depending on the platform.

	SVOX Pico	SVOX Mobile TTS Standard	SVOX Mobile TTS Pro
Memory requirements, ROM (per language)	1 MB	5 MB	14 MB
Memory requirements, RAM	Less than 1 MB	5 MB or less	
CPU requirements	60 MIPS	50–80 MIPS (very scalable)	
Supported APIs	C/C++ SVOX API*	C/C++ SVOX API, MS SAPI v4.0 and v5.0 (Win32 and WinCE), Microsoft .net*	
Sampling rates	16kHz*	PCM (linear) mono PCM mono/stereo; any sample rate up to 44 KHz	
OS supported	Android, Symbian, MS WinCE, MS Windows, Linux, Mac OS-X*	Android, Symbian, MS Phone, MS WinCE, MS Windows, Linux, Macintosh, REX OS, BREW*	
Chipsets supported	X86, ARM9–11*	X86, SH3/4, X-Scale, Strong ARM, ARM7–9–11, OMAP, TI Jacinto, MIPS, Atlas, Jupiter*	
SDK features	Text preprocessing, lexicon management, documentation	SVOX TTS SDK includes API for backwards compatibility, viseme-API for talking faces, demo program, text preprocessing, lexicon management, documentation, etc	
Languages	Canadian French, Dutch, French, German, Italian, Spanish, UK-English, US-English  Rapid development of new languages or voices is possible	Arabic, Brazilian Portuguese, Canadian French, Cantonese Chinese, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian (Q210), Italian, Japanese, Korean, Mandarin Chinese, North American Spanish, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, Turkish, UK English, US English	

\* Others available on request

## SVOX DIALOG

SVOX Dialog offers developers and providers of speech dialog systems a robust and versatile dialog control solution for creating applications that interact with the user in a natural and

“human” way. An interpreting algorithm handles the dialog flow according to a predefined specification, which enables developers to concentrate on the content of each user interaction.



## SVOX Mobile Speech Solutions

### DEDICATED TO CUSTOMER SUCCESS

#### Experience with high-profile projects

SVOX Professional Services offer mobile customers undivided attention. The team has amassed unique experience and understanding of the industry needs by running numerous successful and "industry-first" projects for SVOX customers.

#### Complete, industrial-grade tool chain

The value that customers can get from using SVOX Mobile is greatly enhanced by the availability of a complete, industrial-grade tool chain that makes it possible to execute big and complex speech projects efficiently. Such tools as SpeechCreate allow customers to achieve the desired speech quality level, while keeping costs down.

### ABOUT SVOX

#### Profile

SVOX, a leading supplier of embedded speech solutions, has a reputation for quality and customer focus. SVOX drives adoption of speech user interfaces in automotive and mobile device industries. The company offers Speech Recognition (ASR), Speech Output (TTS) as well as complete Speech Dialog solutions.

#### History

Founded in 2000 as a university spin-off, SVOX is a fast-growing privately held company headquartered in Switzerland and with offices in

Germany and the USA. As of beginning 2010, SVOX had about 100 permanent employees and more than 100 language experts employed on a project basis.

#### References

SVOX is proud to be a partner and supplier of leading companies including Android, Asahi Kasei, Audi, BMW, Continental, Elektrobit, Ferrari, HarmanBecker, Hyundai, Mercedes-Benz, Nissan, Nokia, Panasonic, Peugeot, Porsche, Renault, Volkswagen and Xanavi.



**SVOX AG**  
Baslerstrasse 30  
CH-8048 Zürich  
Switzerland

Phone +41 43 544 06 00  
Fax +41 43 544 06 01  
info@svox.com  
www.svox.com