



DoubleTalk LT

Portable Voice Synthesizer

DoubleTalk LT is the portable member of the DoubleTalk voice synthesizer family. Because it relies only on a simple external connection to your computer, DoubleTalk LT can go wherever you go. It works with virtually any PC or laptop equipped with an RS-232 serial port*. DoubleTalk LT operates from a 9 volt alkaline battery, or the included AC wall adapter.

Built on the RC Systems RC8650 chipset, DoubleTalk LT is a totally self-contained voice synthesizer. Speaker, headphone jack, volume control, and serial interface are all built into the unit. No special software or drivers of any kind are required; simply plug the unit into any standard RS-232 serial port and send it the text you would like read, just like it was a printer. With its superior responsiveness and intelligibility, and wide screen reader software support, it's no wonder why DoubleTalk LT has become the synthesizer of choice among thousands of visually-impaired PC users.

For applications that require special sound effects or music, up to two minutes of recorded Windows WAV and MP3 recordings can be downloaded to DoubleTalk LT for on-demand playback. Recordings are stored in internal flash memory, providing zero-power storage. Additionally, DoubleTalk LT can play sound files in real time, such as messages and/or sound effects stored in an external memory or file system. Three-voice musical, dual sinusoidal, and Touch-Tone tone generators round out DoubleTalk LT's capabilities.

Key Features:

- **Unlimited vocabulary text-to-speech requires no resources of host PC**
- **Fully programmable voice parameters, including voice, reading speed, volume, etc.**
- **Built in exception dictionary allows the pronunciation of any text to be changed; even convert cryptic data into meaningful messages**
- **Sinusoidal, musical, and Touch-Tone tone generators**
- **Store and play back up to two minutes of recorded sound files**
- **No special software or drivers required**
- **AC or battery operation**

* The DoubleTalk LT can be used with computers that do not have a 9 pin serial connector by purchasing an inexpensive USB to serial adapter, which are widely available online and from most retail computer stores.

Technical Specifications

Internal Processor

- RC Systems RC8650F1C chipset

Supported voice/sound technologies

- Text-to-speech
- Pulse code modulation (PCM)
- Adaptive delta pulse code modulation (ADPCM)

Text-to-speech synthesizer

- Unlimited vocabulary
- User exception dictionary support
- 2 KB input buffer
- 3 programmable translation modes
- 8 programmable voices
- 100 programmable pitches
- 10 programmable volumes
- 10 programmable expression levels
- 10 programmable speeds
- 10 programmable formant frequencies
- 10 programmable reverb levels
- 10 programmable articulation levels
- 3 programmable tone levels
- 16 programmable interword/character delays
- 16 programmable timeout delays
- 16 programmable punctuation levels
- 100 programmable index markers

PCM/ADPCM playback

- 8 bit monaural
- 2 KB data buffer for real-time playback
- 512 KB flash-based memory for recorded file playback
- 100 programmable sampling rates, 4–11 kHz
- 10 programmable volume levels
- Windows WAV and MP3 files supported

Tone generators

- 3 voice musical with 4 octave range
- Dual-tone sinusoidal
- Touch-Tone

Electrical/mechanical

- Interface: RS-232 serial (9600,N,8,1)
- Serial cable: 4 ft molded w/DB9F connector
- Audio output power: 0.5 W (internal speaker)
- Headphone jack: 1/8" (3.5 mm) stereo, 75 ohms
- Current drain: 100 mA active, 30 mA idle, 0.2 mA sleep
- Size/weight: 5.3" x 4.0" x 1.5" / 11 oz (w/o battery)
- DC input jack power requirement: 8–15 VDC @ 100 mA