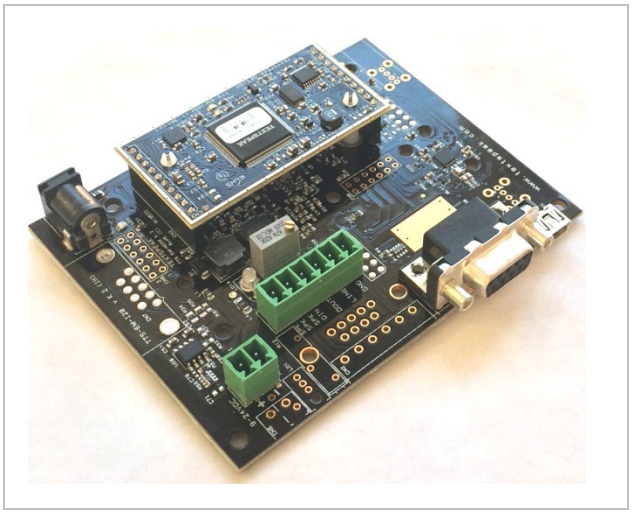

TTS EM-HD3

High definition, world–language best-in-class Text to Speech module

Human sounding speech synthesis in a modular, scalable interface. Seamless integration, simple operation.

Real-time voice announcements generated directly to speakers from text in RS-232 serial data

- **Convert existing deployments of dynamic visual display data directly to voice.**
- **Ready to interface to single endpoint speakers or large paging systems.**
- **Over 20 international languages and voices supported.**

The TTS-EM-HD3 offers a complete Text to Speech platform with an integrated high definition 25 W audio paging amplifier. Sophisticated ambient noise detection optionally controls up to 20 db of volume automatically, meeting customer demands for clarity in environments with dynamic noise activity. Typical deployments include transportation centers, public places and industrial installations. RS-232 connectivity offers simple setup, management and control using TX/RX serial streams. Text to Speech generation includes support for dictionary management, in-line control codes and dynamic language and voice changes.

- Text to Speech supports up to 9 concurrent TTS languages or gender voices. Choose from over 24 voices.
- High Definition amplifier offers unparalleled intelligibility and direct drive for paging system speakers
- Highly integrated OS provides superior flexibility and support for remote upgrade and file transfers
- Seamless switching from TTS to/from user stored pre-recorded audio files using inline control codes
- Integrated command and control language provides complete user control from remote locations
- Flexible power options permits powering from a wide voltage range of 9 to 24 volts
- Ambient noise sensing uses speakers to simplify installs. LEDs and terminal report real-time noise levels and volume.
- User definable power regulation permits 8 and 25 watt operation to protect downstream speakers from overload
- Flash based, with upgradeable file transfer support and dictionary management
- Simple integration into EXISTING products. No special programming required.

Arabic Chinese Czech Danish Dutch English (UK) English (US) Finnish French (F) (B) (C)
German Greek Japanese Korean Italian Norwegian Polish Turkish Portuguese Russian Spanish (NA) (C) Swedish

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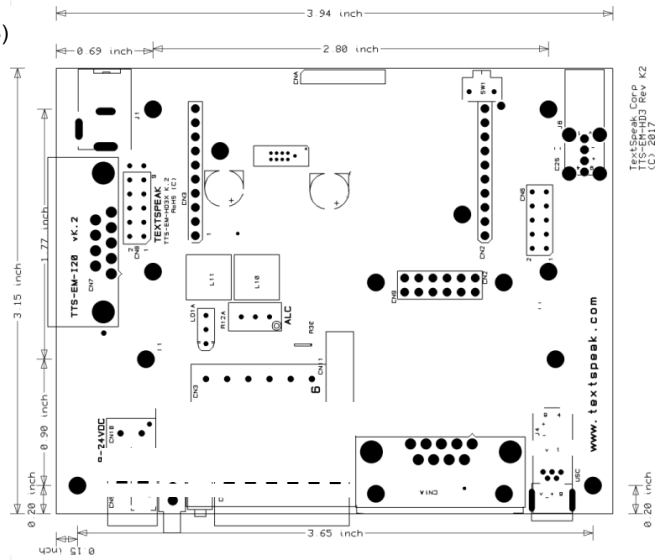
• Alarm & Security • Health Care • Signage to Audio • Machine Interfaces • Mass Notification • Industrial Status
• Transit Systems • Assistive Speech • ADA Compliance

TextSpeak

SPECIFICATIONS

Core Technology earBridge® and TextSpeak 3rd Generation TTS
Languages supported: Arabic Chinese Czech Danish Dutch English (UK) English (US) Finnish French (F) (B) (C) German Greek Japanese Korean Italian Norwegian Polish Turkish Portuguese Russian Spanish (NA) (C) Swedish (*Contact us for latest list)*
Control Interface RS-232 (9 pin DB9)
Serial Baud rates 115.2K – 9600 bps
IP Address Assignment Static, DHCP
Prerecorded file support Protocol 16bit PCM/uLaw
Speaker Out Selectable 3.5.25 watt outputs 8ohms or Bal 600ohm in 3 watt mode
Line Out 0dbm **Typical** 1v p/p
Manual Volume Adjustment 10 steps 4db/step
Ambient Noise Detection 60-90db SPL
Automatic Level Control 12db/20 db selectable over 30db of Ambient noise
Expansion Bus USB for Flash Memory transfers
Power (Nominal) 12V (for 8 watt audio power out) 24 (25w audio power out)
Remote Diagnostics Reporting via Serial link
Remote Programming Flash programmable via USB, Serial
Fault Management Short circuit speaker recovery fault detection
Connector I/O 3.81 MM DIN Plugables, DB9, USB-B, 2.1MM power
Temperature -30~70 C (Operating), -40 C~85 C (Storage)
Size 81 mm x62mm x 19mm **Weight** 56 g (2 oz) **Model** TTS-EM-HD3

DIMENSIONS



Command and Control

Operation and Sample Control Code

Basic TTS generation is SIMPLE.... Just send ASCII data and terminate with ENTER <CR> to generate speech. Additional inline control codes manage advanced operation (such as mixing TTS with pre-recorded wav or mp3) as well as buffer management. For basic operation, send text and add "Enter" <CR> to talk.

Hello I can talk! <CR> and change volume, and languages on the fly! <CR>

This sample text demonstrates both spoken and non-spoken data with pre-recorded audio files. (tone1.wav and tone2.wav are factory recorded files).

ESC p"\tone1.wav" Express 32, arriving in 2 minutes on track 12, for all points South. DLE EM This text is in-line data that is not spoken by the TTS processor DLE RS Please expect delays ESC p"\tone2.wav". End of test. CR

Refer to the HD3 User Guide for a comprehensives list of inline codes to switch voices dynamically, control modes and modify dictionary for pronunciation changes.

```
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24 Voices available Select a voice
Currently Selected:  "Antoine" French

HELP:

 A        Adaptive Level Set Adaptive Level Control (ALC),
 B"text"  Boot TTS      Enter the text to be spoken at power-up
 D        Display Files Show listing of files and memory in folder
 E        ignore ESC    Ignore ESC commands in the TTS stream
 F        Flash Drive   Enable USB access to manage Flash memory
 I        Information   Get current settings information
 P#       Play Audio    Generate test tones (1=1khz,2=sweep,3=noise)
 Q#       Quiet Mode    'Q?' for options
 S        Change Serial 115200,n,8,1
 T        TTS Mode      Go from CMD mode to TTS mode
 U        Update        Update Firmware
 V#       Select Voice  Select a voice (24 available)
 ?        Review        Review current settings and information
```

TEXTSPEAK ® EULA Text to Speech End User License Restrictions

The end user is licensed to use the TTS-EM for speech generation for real-time Text to Speech conversation and playback in a public place. The end user may not use the TTS-EM to record and/or save audio in stored files to be used to playback or broadcast in any public place.

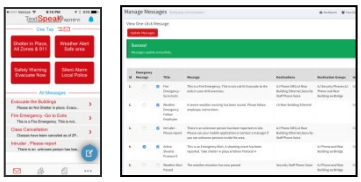
TEXTSPEAK ® PRODUCT FAMILY

Ethernet. WiFi ,Cellular, Serial

Modules for OEM

Flexible Add-Ins

Mobile and Cloud Applications



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