The Federal Signal UltraVoice® controller combines micro-processor based system control with highly efficient amplifiers to deliver optimized tones and voice capability for electronic sirens. The UltraVoice controller can generate and amplify single or dual frequency warning tones and comes with seven pre-set warning signals. In addition, the controller has been designed specifically to reproduce high quality live or pre-recorded-voice capability.

The controller includes a NEMA 4X aluminum cabinet housing the control module, up to eight 400 watt amplifiers, and a NEMA 3R aluminum battery cabinet. The unit may be equipped with a plug-in programmable receiver module, utilizing DTMF or two-tone sequential activation protocols. A digital voice option can be added by plugging in a single mini SD card which can store up to 250 messages.

The UltraVoice Controller is a two-way communication system. A transceiver allows the unit to report status back to a central control point utilizing DTMF or the Federal Commander Digital System protocol. Two transceiver ports are available for radio repeating or when using multiple frequencies.

The two-way option provides information on the following conditions:

- AC power
- Battery voltage
- Charger operation
- Activation current
- Mode of operation
- Amplifier voltage and current
- Signal A
- Signal B
- Quiet test (Speakers & Amps)
- Intrusion
- Local activation
- SD card status

Features

- Control for Giant Voice type mass notification systems
- High quality voice notification
- Highly efficient amplifiers
- Military, industrial, urban voice and tone notifications
- 7 built-in warning signals
- Up to 250 stored messages, 17 hours of available audio
- Decodes single-tone, two-tone, DTMF and AFSK digital
- Easily managed by Federal Signal Commander Software
# UltraVoice® Electronic Siren Controller

## Specifications

### Power
- **Input Voltage**: 120 or 240VAC ±10% 50-60 Hz (Single-phase (two separate models))
- **Input Current**: 7 A Max.
- **Battery Input Voltage**: 24 Volts (nom.)
- **Operating Voltage**: 24VDC
- **Standby Time**: Greater than 7 days
- **Continuous Signaling Time**: 30 minutes (max.)

### Control Module
- **Signal duration (auto reset)**: 3 minute standard
- **Microphone Input Impedance**: 10K Ohms
- **Audio Distortion**: ±1 dB (no voice mode)
- **Maximum Load**: 1000 Ohms
- **Audio In**: 0.5 to 2.0 Volts P-P 600 Ohms
- **Contact Closure**: (min) 500ms < 2k Ohms
- **Relay Output**: 30 VDC, 15 A

### Signaling Format
- **AFSK**: 1200 baud, MSK (Minimum Shift Key) modem type
- **DTMF**: 3-12 standard digits

### Two-Tone Sequential
- **Frequency Range**: 282 Hz-3000 Hz (non-CTCSS)
- **Tone Timing**: .5 sec - .5 sec min., .8 sec max
- **Intertone Gap**: 400 ms (maximum)
- **Tone Accuracy**: ±1.5%
- **Tone Spacing**: 5% preferred, 3% minimum

### Single Tone
- **Frequency Range**: 282 Hz-3000 Hz
- **Tone Timing**: .5 sec - 8 sec. maximum
- **Tone Accuracy**: ±1.5%
- **Tone Spacing**: 5.0% preferred, 3% minimum
- **Remote Activation Inputs**: Eight
- **Sensor Inputs**: Four

### Signal Activation Information

<table>
<thead>
<tr>
<th>Signal</th>
<th>A/B Tone Frequency Range</th>
<th>Sweep Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wail</td>
<td>400/480-850/1020</td>
<td>13 sec.</td>
</tr>
<tr>
<td>Pulsed Wail</td>
<td>400/480-850/1020</td>
<td>1.5 sec./13 sec.</td>
</tr>
<tr>
<td>Steady</td>
<td>850/1020</td>
<td>N.A.</td>
</tr>
<tr>
<td>Pulsed Steady</td>
<td>850/1020</td>
<td>1.5 sec.</td>
</tr>
<tr>
<td>Alternate Steady</td>
<td>850/1020</td>
<td>1.5 sec.</td>
</tr>
</tbody>
</table>

### UVTR: AC Primary Operation
- **Operating Voltage**: 210-264 VAC single phase
  - 50/60Hz, 5.5 KVA
- **Dimensions**: 27.0" x 11.5" x 13.6" (686 mm x 292 mm x 345 mm)
- **Weight**: 230 lbs (103.5 kg)

### Amplifier Module
- **Frequency Response**: +/- 3 dB(C) (ref. 1kHz)
- **Output Voltage**: 70 Vrms (nominal)
- **Input Impedance** (per amplifier): 100k Ohms

### Environmental
- **Operating Temperature**: -30°C to 65°C

### Dimensions
- **Control Cabinet**: 19" x 23.5" x 11.2" (483 mm x 597 mm x 284 mm)
- **Battery Cabinet**: 28" x 18" x 15.2" (711 mm x 457 mm x 386 mm)

### Weight
- **Net Weight UVTD (No Amps)**: 170 lbs (77.13 kg)
- **Net Weight UV400**: 4.12 lbs each (1.9 kg)

### Battery Requirements (Customer Supplied)
- 2 batteries are required when ordering an Ultravoice Controller with a MOD1004B, MOD2008B, MOD3012B, or MOD4016B
- 4 batteries are required when ordering an Ultravoice Controller with a MOD5020B, MOD6024B, or MOD8032B

### Order Information
- **UVTD**: Siren control, two-way digital, no radio
- **UVTDH, UVTDU**: Siren control, two-way digital, VHF (136-174), UHF (403-470)
- **UVTD-IP**: IP-enabled, two-way electronic controller (broadband radio and SmartMsg software sold separately)
- **UVTD-LL**: Siren control, two-way, landline
  - Motorola Vertex VX-4500 transceiver
  - Standard models are 120 VAC, add “240” to model for 240 VAC versions
  - Contact factory for low-band two-way models
  - Batteries and antenna not included
  - Stainless steel (S) control cabinets are also available

### Options
- **DVSD**: Digital voice mini SD card, 250 messages, 1000 minutes
- **FSPWARE**: Windows® programming software (Two-tone & DTMF)
- **FS-PL1**: Tone coded and digital coded squelch decoder
- **SINAD**: Signal-to-noise radio monitor (See Federal Commander Digital System for two-way digital software models.)
- **UV400**: 400 watt amplifier, required with UV controllers
- **TB-LL**: Telco Base, Landline
- **ES-PROG-DTMF**: Two-way DTMF programming

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