



# ULTRAVOICE® ELECTRONIC SIREN CONTROLLER

## > Features

- 7 built-in warning signals
- Two-tone, DMF and digital encoders - standard
- Quiet test standard
- Eight zones possible for controller
- Stackable siren functions
- Distinct dual tone capacity
- Highly efficient pulse width modulated amplifiers
- Windows-based programming software (optional)



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. UltraVoice can generate and amplify single or dual frequency warning tones and comes with seven pre-set signals. In addition, the controller has been designed specifically with high quality live or recorded-voice reproduction capability.

The controller includes a NEMA4 cabinet housing the control module, up to eight 400-watt amplifiers, and a 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 simply by plugging in a single eight (8) minute IC chip.

### Two Way Status System

The UltraVoice Controller can also be a two-way communication system with the addition of a sensor package, and a transceiver to allow the unit to report status back to a central control point utilizing DTMF or the Federal Commander Digital System protocol.

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

## > Specifications

<b>Power</b>		
Input Voltage	120 or 240 VAC +/- 10% 50-60 Hz Single-phase (two separate models)	
Input Current	7A, Max.	
Battery Input Voltage	21.5-30 Vdc. 24 Volts (nom.)	
Operating Voltage	24 VDC	
Standby Time	Greater than 7 days	
Continuous Signaling Time	30 minutes (min.)	
<b>Control Module</b>		
Signal duration (auto reset)	3 minute standard	
Microphone Input Impedance	10 K Ohms	
Audio Distortion	1% THD max, <10% voice mode-below clipping	
Maximum Load	600 Ohms	
Audio Out	.25 to 2.0 Volts P-P 600 Ohms	
Audio In	.10 to 2.0 Volts P-P 600 Ohms	
Contact Closure	(min) 500ms < 1.0 K Ohms	
Relay Output	30 Vdc, 15 A	
<b>Signaling Format</b>		
FSK	1200 baud, MSK modem type Usable decode sensitivity: 12 dB(C) SINAD (min)	
DTMF	3-12 standard digits	
<b>Two-Tone Sequential</b>		
Frequency Range	282 Hz-3000 Hz (non-CTCSS) 400 Hz-3000 Hz (CTCSS)	
Tone Timing	.5 sec-25 sec min., 8 sec max	
Intertone Gap	400 ms (maximum)	
Tone Accuracy	+/- 1.5%	
Tone Spacing	5% preferred, 3% minimum	
<b>Single Tone</b>		
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 (8)	
Sensor Inputs	Four (4)	
<b>Signal Activation Information</b>		
Signal	A/B Tone Frequency Range	Sweep Range
Wail	400/480-850/1020	13 sec.
Pulsed Wail	400/480-850/1020	1.5 sec./13 sec.
Steady	850/1020	N.A.
Pulsed Steady	850/1020	1.5 sec.
Alternate Steady	850/1020	1.5 sec.
<b>UVTR: AC Primary Operation</b>		
Operating Voltage	210-264 VAC single phase 50/60Hz, 5.5 KVA	
Dimensions	27.0 in X 11.5 in X 13.6 in	
Weight	230 lbs (103.5 kg)	

<b>Amplifier Module</b>	
Frequency Response (300 to 3Hz)	+/- 3 dB(C) (ref. 1kHz)
Output Voltage (to speaker drivers)	70 Vrms (nominal)
Input Impedance (per amplifier)	100 K Ohms
<b>General</b>	
Operating Temperature	-30°C to 65°C
<b>Dimensions</b>	
Control Cabinet	19 in X 23.5 in X 11.2 in
Battery Cabinet	28 in X 18 in X 15.2 in
<b>Weight</b>	
Net Weight UVT(D) (No Amps)	170 lbs (77.13 kg)
Net Weight UV400	4.12 lbs each (1.9 kg)

### BATTERY REQUIREMENTS (CUSTOMER SUPPLIED)

- When ordering a UV or UVT(D) with a MOD1004, MOD2008, or MOD3012, (2) batteries are required.
- When ordering a UV or UVT(D) with a MOD5020 or MOD6024, (4) batteries are required.
- When ordering a UV or UVT(D) with a MOD6048, (8) batteries are required.
- Delco 2000 recommended.
- When ordering a UV or UVT(D) with a MOD4016, (2) batteries are required.

### ORDER INFORMATION

UV	Siren control, one-way, no radio
UVL, UVH, UVU	Siren control, one-way, VHF low or high, UHF brands
UVT	Siren control, two-way DTMF, no radio
UVTH or UVTU	Siren control, two-way DTMF, VHF (150-174), UHF 450-474)
UVTD	Siren control, two-way digital, no radio
UVTDH, UVTDU	Siren control, two-way digital, VHF (150-174), UHF (450-474)
UVTD-IP	IP-enabled, 2-way electronic controller (broadband radio and Codespear software sold separately)
UVTD-LL	Siren control, two-way, landline

- Standard receiver is Motorola, CDM750
- Standard models are 120 VAC, add "240" to model for 240VAC versions
- Contact factory for low-band two-way models
- Batteries and antenna not included
- Stainless steel (S) control cabinets are also available

### OPTIONS

DV480	Digital voice chip, 8 mins.
FSPWARE	Windows programming software (Two-Tone & DTMF)
SINAD	Signal-to-noise radio monitor (See Federal Commander Digital System for two-way digital software models.)
UV400	400W amplifier, required with UV controllers
TB-LL	Telco Base, Landline



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