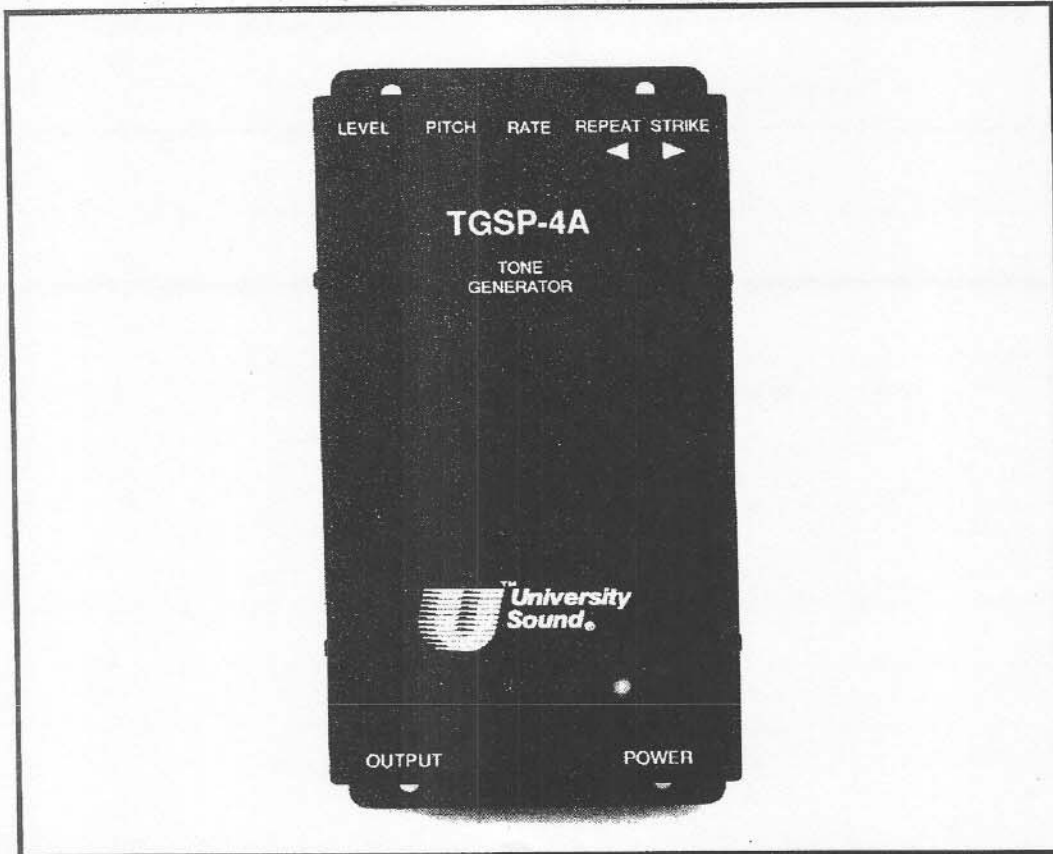




# TGSP-4A

Tone Generator



## Product Data

- **Multi-purpose tone generator for page alert, security, or warning systems**
- **Produces four types of tones: strike chime, repeat chime, steady tone, and siren.**
- **Aux level output**
- **Contact closure triggering**
- **Wall-mountable steel enclosure**
- **24 VDC powered from 120 VAC adaptor (included)**

## Specifications:

Output Power: 0V to 3V RMS (Aux level)

Output Connection: RCA phono jack

Pitch Range: 850 Hz to 1400 Hz

Activation: Contact closure

Power Supply: 24 VDC, 15 mA

Unit Size: 1.25"x3"x6.125" (3.18x7.62x15.56cm)

Weight: 10 oz. (0.28 kg)

## Description

The Model TGSP-4 is a tone generator that produces either a single strike chime or one of three repeating tones suitable for most announcement or signaling purposes. The three repeating tones consist of a repeat chime, a steady tone, and a siren. A switch determines whether the TGSP-4A is in single-strike or repeat tone mode. When in repeat mode, all three of the repeating tones are available, though some tones take precedence over others in the event of simultaneous triggering. The steady tone takes precedence over the chime, and the siren takes precedence over both the chime and the steady tone.

The unit has three controls that alter the character of the output: a pitch control, a level control, and a repetition rate control. The pitch control sets the center frequency of the signal output, having a range of 850 Hz to 1400 Hz. The level control varies the amplitude of the unit's output from 0 Volts RMS to a maximum of 3 Volts RMS, more than enough to drive the standard Auxiliary input to an amplifier or receiver. The output of the unit appears on a standard RCA phono jack. When the TGSP-4A is in repeat tone mode, the rate control

will alter the rate of repetition of the tone. There is also an internal jumper that, when cut, changes the sound of the siren tone from a police-type siren to more of a "whooping" sound.

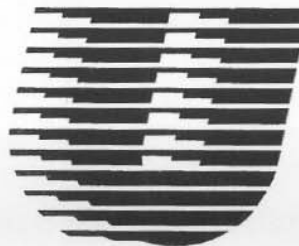
The unit is triggered by simple contact closure. Each tone has a separate terminal for activation. Since the single-strike chime trigger is a simple short to ground, it can be connected in parallel with the manual mute terminals of University Sound amplifiers, mixers, and receivers so that each page is initiated by an alert tone. However, the TGSP-4A's activation circuits should **not** be connected in parallel to electrical circuits carrying current, as damage to the unit can result. Connections to the triggering circuits are made by means of a screw clamp terminal block, located inside of the enclosure to prevent tampering once installed.

The unit can be powered from any 24 VDC source that supplies 15 mA or more, or from the 120 VAC to 24 VDC plug-in adaptor included with the unit. The enclosure is a sturdy steel box with flanges on two sides for convenient wall mounting.

## Architect's and Engineer's Specifications

The tone generator shall be the University Sound Model TGSP-4A, and shall be a contact closure activated tone generator capable of producing four different tones. The unit shall have two distinct modes of operation determined by the position of a "SELECT" switch, namely, a single-strike chime mode and a repeat chime mode. Each of the four tones shall have a separate activation circuit. When in the repeat strike mode, the three circuits for repeat chime, steady tone, and siren shall all be operative. There shall be three controls for altering the character of the tone produced: pitch, level, and rate. Pitch will vary the pitch of the sound from 850 Hz to 1400 Hz, while the level

control will vary the output level of the unit from 0V to 3V RMS. When in repeat strike mode, the rate control will affect the rate of repetition of the tone. There shall be an internal jumper that, when cut, alters the siren sound from a low-high-low sweep to a low-high sweep. Connections to the activation circuits shall be made by means of a screw clamp barrier strip internal to the unit, while the output of the unit shall appear on an external RCA phono jack. The enclosure shall be a steel, wall-mountable box. The unit shall be powered by a 24 VDC 15 mA supply, which can be the 120 VAC to 24 VDC adaptor included with the unit. The University Sound Model TGSP-4A has been specified.



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