

# **BOGEN®**

**COMMUNICATIONS, INC.**

**VAR-1**

**Voice Activated Relay**

## **Description**

The VAR Voice Activated Relay is a DPDT relay device which is activated when an audio signal is detected at the microphone preamp or at 70V, 25V, or 600-ohm line level inputs. It has a number of useful application, such as muting a sound system in response to a microphone or telephone page, activation of accessory (security) equipment, or activation of a zone page module.

A slide switch is included to select the preamp or line inputs. The VOX detect circuit also includes a volume control, sensitivity control and delay control. The audio output is an isolated 600-ohm transformer. The unit operates from a DC power source (not included).

## **Installation**

Set input source switch on the top side of the unit to LINE if using one of the line inputs or to MIC if using a microphone.

Connect a power supply to the 12-24VDC jack on the top of the unit or to the + and - screw terminals. The Bogen model PRSASAC power supply is recommended.

## **Wiring**

Refer to the block diagram below and the sample wiring diagrams on the next page to wire the VAR-1 for your application.

## **Operation**

Sensitivity can be adjusted according to the needs of the application. Clockwise rotation of the control increases sensitivity. Do not over rotate the control or you may damage the trim-pot.

The delay control is also adjustable in the field. The maximum delay time is 25 seconds. Clockwise rotation of the control increases delay time.

## **Specifications**

### **Line Input**

Impedance: 600 ohms

Frequency Response: 100Hz to 10KHz

70V Input Impedance: 200K ohms

Output Level: 400mV rms

25V Input Impedance: 75K ohms

Output Level: 420mV rms

### **MIC Preamp**

Gain: 62db

Sensitivity: 750 microvolts, rms for 1V rms out

Distortion: < 2%

Frequency Response: 200Hz to 10KHz

Output Signal-to-Noise Ratio: 55db

VOX Sensitivity: 20mV - 150mV rms

@ 600-ohms Line Input

Time Delay Range (approx.): 0.25 to 25 sec.

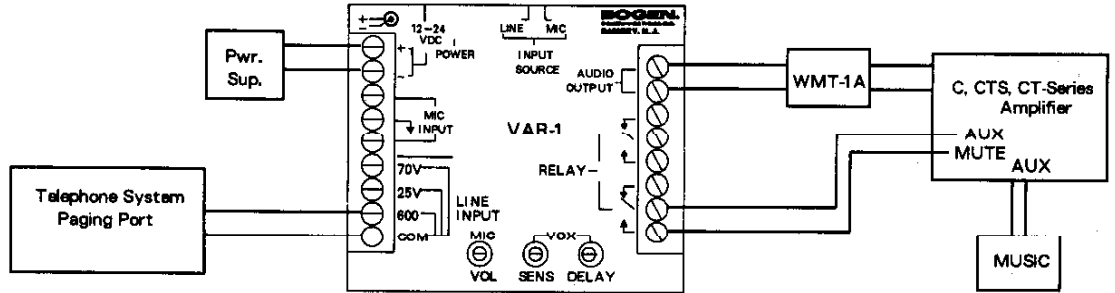
Relay Contact Rating: 2 amps/30V DC, 0.5 amp./120V AC

## **Service**

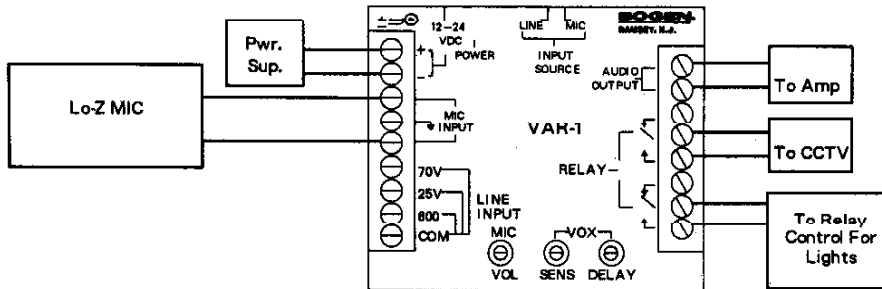
There are no user serviceable components within the VAR-1. The warranty may become void if the unit is serviced by other than an authorized Bogen service agency.

Contact the Bogen Applications Engineering Department if you have questions concerning VAR-1 applications.

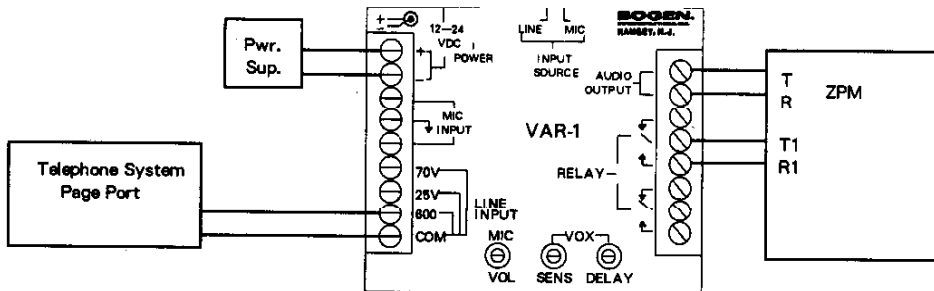
VAR-1 used with C, CT, or CTS Series amplifiers to mute music during a telephone page (page port without contact closure).



VAR-1 used in a security system to activate an amplifier, CCTV and light relay control.



VAR-1 used with zone page module.



VAR-1 Block Diagram

