MODEL TG4C
MULTIPLE TONE GENERATOR

Model TG4C Multiple Tone Generator is capable of generating four distinct signals: pulsed tone, slow whoop, repeating chime, and steady tone. Each of these four signals may be applied continuously or limited to a double burst (single burst only of the steady tone) for alarm signaling or pre-announcement. Signals are triggered by an external device that provides a contact closure. Both tone level and pitch are adjustable.

The TG4C will accept a high-level (max. 1.5V RMS) input from a program source, such as a tuner or tape deck. Tone signal precedence over program input is built-in. When used in conjunction with a telephone or microphone, the unit provides pre-announcement signaling for voice messages.

The unit operates from a 12-48V DC source, with either positive or negative ground. All connections are made at screw terminals.

INSTALLATION

**CAUTION:** To reduce the risk of fire or electric shock, do not expose this unit to rain or excessive moisture.

POWER SUPPLY

The TG4C requires a power source of between 12 to 48V DC, either positive or negative ground:

1. Connect the grounding lead from the TG4C chassis to the positive (+) terminal if a positive grounding system is used. Be certain that the TG4C chassis does not come into contact with any other equipment with a negative ground.
2. If a negative-ground system is used, connect the grounding lead to the negative (-) terminal.

Bogen accessory Model PRS40C Power Supply is available for operation from 120V AC, 60Hz. If used, connect the BLACK/WHITE lead from the PRS40C to the negative (-) terminal of the TG4C; connect the BLACK lead to the positive (+) terminal.

**TONE LEVEL CONTROL**

Tone level can be regulated by using the screwdriver-adjustable TONE LEVEL control on the front panel. Clockwise rotation increases the level of the tone signal.

**PITCH CONTROL**

A recessed, screwdriver-adjustable PITCH control is located on the side panel and is used to adjust the frequency of the tone signal. The signal can be varied to suit the individual application requirement.

**WIRING**

The TG4C can be installed in a variety of configurations, depending upon specific application criteria.

Figure 1 illustrates a common method of generating a tone signal over program (e.g., tape player or tuner) input. When the contacts of an external switching device are closed, program input is interrupted by a burst of one of the tone signals. For longer signal duration, connect the CONTINUOUS and TRIGGER terminals (dashed line). The tone signal will be continuously generated until the external switch contacts (ALARM CLOSURE) are reopened.

Note: TBA is used to mute TBA15 amplifier.

**FIGURE 1 - Tone Signaling Over a Program Source**

For other applications, such as pre-announcement signaling or continuous tone signaling, contact the Bogen Applications Engineering Department.
Notice
Every effort was made to ensure that the information in this guide was complete and accurate at the time of printing. However, information is subject to change.

Important Safety Information
Always follow these basic safety precautions when installing and using the unit:

1. Read all instructions.
2. Follow all warnings and instructions marked on the product.
3. DO NOT place the product in a separate enclosure or cabinet, unless proper ventilation is provided.
4. Never spill liquid on the product.
5. Repair or service must be performed by a factory authorized repair facility.
6. DO NOT staple or otherwise attach the AC power supply cord to building surfaces.
7. DO NOT use the product near water or in a wet or damp place (such as a wet basement).
8. DO NOT use extension cords. The product must be installed within 6 feet of a grounded outlet receptacle.
9. DO NOT install telephone wiring during a lightning storm.
10. DO NOT install telephone jacks in a wet location unless the jack is specifically designed for wet locations.
11. Never touch uninsulated wires or terminals, unless the line has been disconnected at the paging or controller interface.
12. Use caution when installing or modifying paging or control lines.

Applications Assistance
Our Applications Engineering Department is available to assist you from 8:30 A.M. to 6:00 P.M., and on call until 8:00 P.M., Eastern Daylight Time, Monday through Friday. Call 1-800-999-2809, Option 2.

Domestic and International Listings
The TG4C is a UL, CSA listed product if used with the PRS40C (UL, CSA listed power supply) or equivalent UL, CSA listed power supply.