TGM5 Tone Generator Module
Installation

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General Information

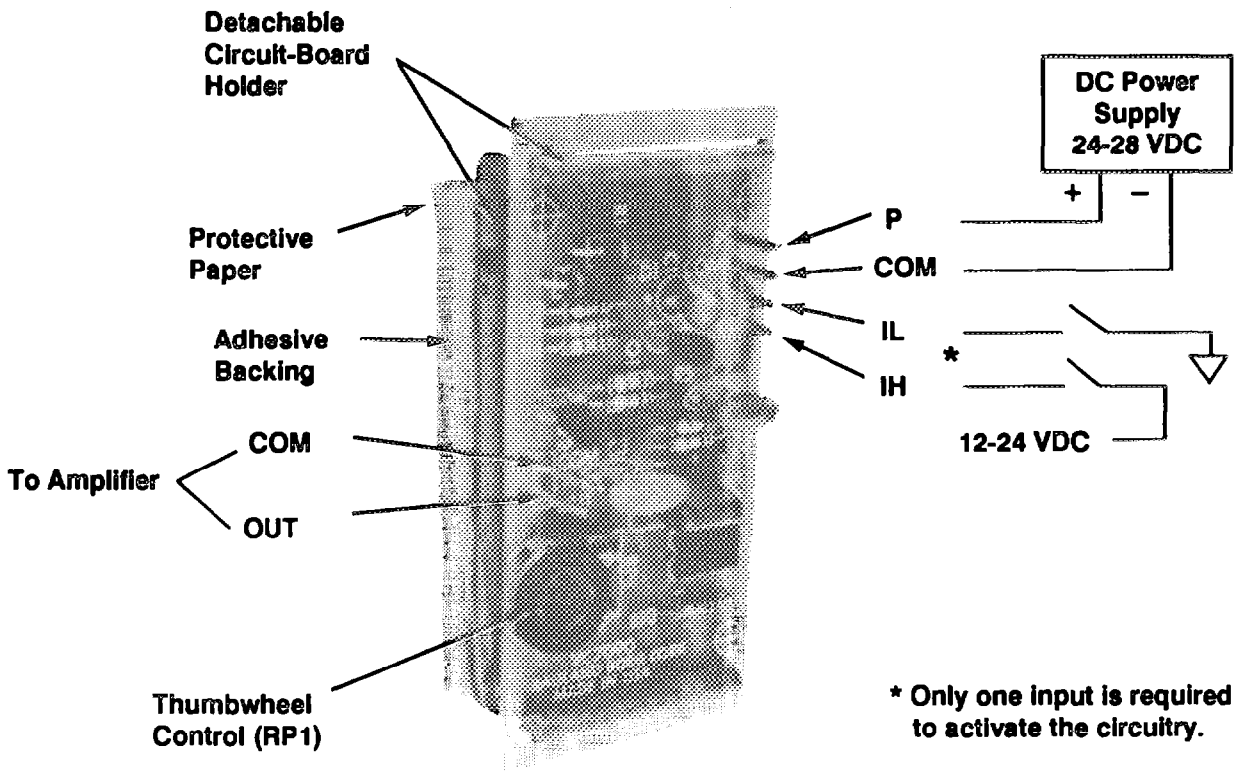


Figure 1. Model TGM5 Tone Generator Module

Description

The Rauland TGM5 Tone Generator (Figure 1) is a solid-state printed-circuit module capable of generating a tone signal at a frequency between 550 and 660 Hz. It is used with the Rauland DAX Series Amplifiers for audibly signaling time or emergency alerts.

The assembly consists of a printed circuit board, a detachable circuit-board holder, and double-sided adhesive backing. It is 1½" (3.8 cm) wide, 3⅝" (9.2 cm) high, and 1½" (3.8 cm) deep. Its wire-wrap terminals are used for connecting the circuit board to the amplifier, activating devices, and a power supply. The interconnecting wires must be supplied by the customer. The module's two inputs can be externally activated by a clock device, a switch mounted in a convenient location, etc.

The output level (.3V RMS, min.) can be adjusted by a thumbwheel (*RP1*) control on the circuit board. This module is activated by connecting either **(a)** Input High (IH) to 12-24V DC or **(b)** Input Low (IL) to the common from an activating device. Terminals "OUT" and "COM" of the printed circuit module are connected to the *Input Terminals* of the DAX amplifiers.

Orig. 10/83. Rev. 5/84, 6/89

Installation

Step 1. Select a mounting location within the enclosure (rack) with the amplifier. This location should be accessible by service personnel and clear of obstruction. Since the module is mounted with adhesive backing tape, do not mount it where it could block the removal or replacement of other equipment. The module may be mounted on the amplifier chassis provided that it does not block or restrict the convection cooling of the amplifier's heat sinks or power transformer. Do not mount it on any surface dissipating heat. Finally, make sure that the circuit board wire-wrap terminals do not touch adjacent equipment.

Step 2. Peel away the protective paper from the adhesive backing and press the assembly into position on a clean, dry surface.

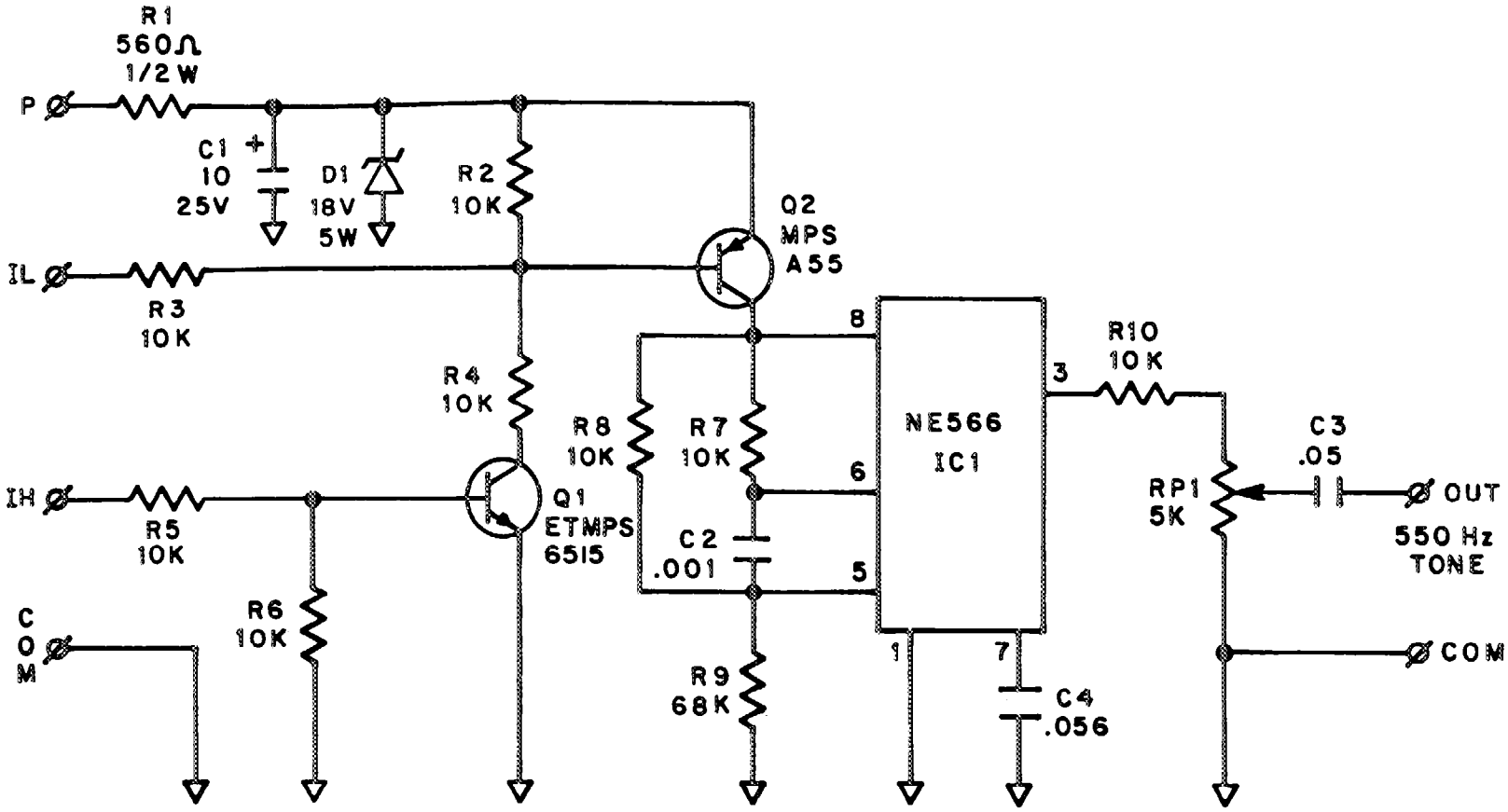
Step 3. Make sure that all power to the equipment is turned off. Observe polarity when making the interrelated electrical connections:

a) Connect the 24-28 VDC from the required power supply to terminals "P" and "COM."
b) Connect input "IH" to an activating device and a source of 12-24 VDC.
   Note: Only one input ("IH" or "IL") is required to activate the tone.
c) Connect input "IL" to an activating device and common.
d) Connect output "OUT" and "COM" to the ***Input Terminals*** of the amplifier.

Step 4. Turn on the equipment's power, activate the Tone Generator Module, and adjust thumbwheel control *RP1* for the desired level. Adjust the ***Input Level*** control on the amplifier for the desired tone loudness.

Parts List

Qty.	Description	Rauland Part No.	Qty.	Description	Rauland Part No.
–	3" Wide Double-Sided Adhesive Scotchfoam.	JQ0321	1	Transistor.	ETMPSA55
			1	Transistor.	ETMPS6515
1	PCB Holder.	QP0803	1	Diode.	JR0091-23
1	P.C. Board Assembly.	AC2711	8	Resistor, 10KΩ, 5%, ¼ W.	RE0-103
1	Capacitor, 1,000 pF, 500V.	CCP102	1	Resistor, 68KΩ, 5%, ¼ W.	RE0-683
1	Capacitor, .05 μF, 25V.	CCP5030B	1	Resistor, 560Ω, 5%, ½ W.	RE2-561
1	Capacitor, .056 μF.	CPR2-563K	1	Control, 5KΩ.	RP502M
1	Tantalum Capacitor, 10 μF, 25V.	CT106	6	.045" Square Pin.	T0452-2
1	I.C. Voltage-Controlled Oscillator.	EC0056			



DWG.NO. KC1449	C
5-10-83	
ISS	CHANGE
A	Q1 WAS ETS 014A. 8-30-83
B	C1 WAS 22 µF, 15 V. MODEL WAS TGM5. 4-28-84
C	RP1 WAS 100K. 4-19-85 4-19-85

NOTES:

1. UNLESS OTHERWISE SPECIFIED, ALL RESISTORS ARE RATED IN OHMS ±5%. K=1,000 RESISTORS ARE 1/4 W. CAPACITANCE RATED IN MICROFARADS.
2. ▽ DENOTES CONNECTION TO CIRCUIT COMMON.
3. APPLY 24 V DC SUPPLY ACROSS "P" AND "COM."
4. TO ACTIVATE, EITHER CONNECT "IH" TO "P" OR CONNECT "IL" TO "COM."

MODEL TGM5-A
TONE GENERATOR MODULE
RAULAND-BORG CORP.
SKOKIE, ILL.
MADE IN U.S.A
KC1449 C