



## TRANSISTOR CODE OSCILLATOR MODEL 25-109

### GENERAL

The MIDLAND Code Oscillator has been especially designed for the use of **boy scouts**, novice radio amateurs and various groups interested in radio communications. It will develop your skill in sending Morse code messages, as well as receiving coded messages for camp, home or field use.

It consists of a battery-operated transistor audio oscillator which can be tuned from 500 to 2,000 cycles. A built-in, high quality loudspeaker assures a clear crisp tone. When headphones are used, this speaker is automatically cut off.

The panel has a flashing light which enables visual control of all messages. This light can be used in field for night signalling.

A panel switch is provided which selects a) tone alone, b) light alone, or c) both tone and light.

This code oscillator features a variable pitch control, 3" PM speaker, phone jack and deep-etched aluminum panel. Rugged construction provides many years of trouble-free service.

### SPECIFICATIONS

CONTROLS:	3 way switch (pitch, tone light) variable pitch control
TONE FREQUENCY RANGE:	500 to 2000 cps
CURRENT DRAIN (LIGHT):	300 ma at 3 Vdc
CURRENT DRAIN (TONE):	40 ma at 3 Vdc
BATTERY:	2-1-1/2 Volt "C" cells
TERMINALS:	Key
CASE:	Mold case
SIZE:	2" x 3-5/8" x 6-1/8" high
SPEAKER:	2-1/4"
SHIPPING WEIGHT:	2 lbs.

### THE USE OF MORSE CODE

The Morse Code may be used with either sound or light. Every letter of the alphabet is designated by a certain combination of dots and dashes. To read the code characters, say "dit" for a dot, and "dah" for a dash. A dot-dash sequence is read "didah", dropping the "t". By studying a few at a time, you will get used to the "didah" language. Constant practice will increase your code proficiency.

The International Morse Code is given below in "didah" designations.

## THE INTERNATIONAL MORSE CODE

A	didah	P	didahdahdit	5	didididit
B	dahdididit	Q	dahdahdidah	6	dahdididit
C	dahdidahdit	R	didahdit	7	dahdahdididit
D	dahdidit	S	dididit	8	dahdahdahdidit
E	dit	T	dah	9	dahdahdahdahdit
F	dididahdit	U	dididah	Ø	dahdahdahdahdah*
G	dahdahdit	V	didididah	Period	didahdidahdidah
H	didididit	W	didahdah	Comma	dahdahdididahdah
I	didit	X	dahdididah	Question Mark	dididahdahdit
J	didahdahdah	Y	dahdidahdah	Error	dididididididit
K	dahdidah	Z	dahdahdidit	Double dash (BT)	dahdidididah
L	didahdidit	1	didahdahdahdah	Wait (AS)	didahdididit
M	dahdah	2	dididahdahdah	End of message	didahdidahdit
N	dahdit	3	didididahdah	Invitation to transmit	dahdidah
O	dahdahdah	4	dididididah	End of work (SK)	didididahdidah

\* The numeral zero is usually written Ø to distinguish it from the capital O.

## MAINTENANCE

Your MIDLAND Code Oscillator requires very little maintenance. Replace batteries when the panel lamp becomes dim or the sound tone disappears. Do not leave dead batteries in the unit as they may leak and damage electrical components.

When lamp burns out, replace with a No. 14 bulb.

If tone works, but there is no light, check the slide switch or bulb.

If bulb works, but there is no tone, check the polarity of the batteries.

PRINTED IN JAPAN