### PRINT OR TYPE THE LETTERS AS YOU HEAR THE SOUND

#### ETI'S EXCITING NEW METHOD OF TEACHING CODE MAKES LEARNING EASY! FAST!

#### CHECK THESE FEATURES

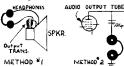
- V You learn only by sound.
- No memorizing of code tables. From the art you learn each letter as it would sound at normal speed.
- √ 72 complete sides.
- V Alphabet through 20 W.P.M.
- / Designed particularly to help you pass F.C.C. amateur and radiotelegraph code examinations, (Letters and punctuations used by F.C.C. given in this course.)

- You can learn to type as you learn the code.
- v Practice records for copying through static and interference.
- For ease of checking, all records have answers at the end. Sending technique explained by Photosound.
- V Tests graded by ETI free of charge.
- V Code proficiency certificate issued upon satisfactory completion of 13 W.P.M. and 16 W.P.M. tests.
- √ Extra-long playing time.
- √ Records unbreakable under normal usaae.
- Instructions on constructing code oscillator and use of headphones.

# CONNECTING EARPHONES IN RADIO CIRCUITS

Two methods are suggested here.

1. Remove speaker's voice coil wire and insert earphones in series, 2. Put a .01 MFD condenser rated at 600 volts on the plate of the audio output tube and connect one side of the earphones to ground, the other to the condenser.



## INDEX TO RADIO CODE ALBUM 1

#### ALPHABET, NUMBERS, AND PUNCTUATION

#### SIDES 1 THROUGH 24

1-INTRODUCTION, ALPHABET T M O AND ZERO

2-ALPHABET E I S H 5

3-ALPHABET PRACTICE, 9 CHARACTERS

4-ALPHABET A R D C

5-ALPHABET PRACTICE, 13 CHARACTERS

6-ALPHABET N U P

7-ALPHABET PRACTICE, 16 CHARACTERS

8-ALPHABET W F 1

9-ALPHABET PRACTICE, 19 CHARACTERS

10-ALPHABET G L /

11-ALPHABET PRACTICE, 22 CHARACTERS

12-ALPHABET B 2 9

13-ALPHABET PRACTICE, 25 CHARACTERS

14-ALPHABET J 3 8

15-ALPHABET PRACTICE, 28 CHARACTERS

16-ALPHABET K V 6

17-ALPHABET PRACTICE, 31 CHARACTERS

18-ALPHABET Q 7

19-ALPHABET PRACTICE, 33 CHARACTERS

20-ALPHABET X Z

21-ALPHABET PRACTICE, 35 CHARACTERS

22-ALPHABET Y4

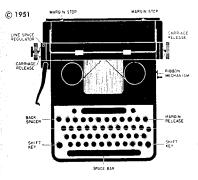
23-PERIOD, COMMA, QUESTION MARK

24-ALPHABET TEST

In the pronunciation guide for the sounds of the letters given below, the sounds are written out as phonetically as possible, in the middle of a group the short sound "dit" actually takes on the sound of "di," the i being very short. The phonetic alphabet that you will use in radiotelephonic procedure is included in parentheses after the letters.

#### Letter Pronunciation di-DAH A (Able) DAH-di-di-dit DAH-di-DAH-dit C (Charlie) .DAH-di-dit (Dog). (Easy) di-di-DAH-dit G (George DAH-DAH-dit H (How di-di-di-dit (Item) di-DAH-DAH-DAH J (Jig). K (King) DAH-di-DAH di-DAH-di-dit DAH-DAH M. (Mike) N (Nan) DAH-dit O (Oboe) DAH-DAH-DAH (Peter) Q (Queen) .DAH-DAH-di-DAH di-DAH-dit R (Roger) (Sugar) di-di-dit (Tore) DAH (Uncle) di-di-DAH (Victor) di-di-di-DAH di-DAH-DAH W (William) DAH-di-di-DAH DAH-di-DAH (X-ray) (Yoke) DAH-DAH-di-dit

#### 



Typewriter diagram

#### TYPEWRITER INSTRUCTIONS

- 1. Strike keys with quick, sharp strokes.
- 2. Use the thumb of right hand to operate space bar.
- 3. Use the left hand to return carriage. The motion of the lever will automatically turn the roller to place the paper into position for the next line.
- 4. Do not look at the keyboard while typing.

HOME POSITION

OOOOOOOO

OOOOOOO

SPACE BAR

THIRD FINGERS OF CONTROL OF CONTR

ABCDEF GHIJKLM NOPQRST UVWXYZ 12345 67890

Suggested method of printing

ELECTRONIC TECHNICAL INSTITUTE

830 VENICE BIVD.

LOS ANGELES 15, CALIFORNIA

#### RADIO PARTS LIST

- .005 microfarad 400 V.
- .1 microfarad 400 V. 20 x 20 microfarad 150 V. C
- 2,000 ohm 1 W.
- 200 ohm variable (Volume) 20,000 ohm variable.
  - (with SW.) (Tone.)
- Phone Jack
- J47 Key
- Phone Plug SPKR Speaker 3" or 31/2" P.M.
- Universal Transformer
- Terminal Strip #1
- Terminal Strip #2 Socket, octal (breadboard) SO
- 117L7GT Tube A.C. cord and plug
- ¼" volume control knobs
- 10 ft. Push-back hookup wire

#### MISCELLANEOUS PARTS

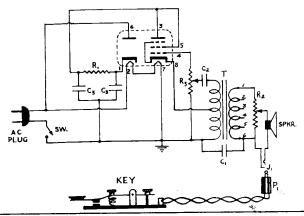
Wooden Base 5" x 41/2" x 1/4" Front Panel 41/2" x 6" 1/4" Plywood or 1/8" Masonite

- 6 6/32 1/2" machine screws round head
- 6 6/32 nuts
- 7 %" round head wood screws

#### CODE PRACTICE OSCILLATOR

When learning to send code it is desirable to have a code oscillator that will give a range of audio frequencies, variable loudness, and can be used with either headphones or speaker This inexpensive oscillator can be built readily at home.

#### **ELECTRICAL SCHEMAT!C DIAGRAM**



#### CODE OSCILLATOR CONSTRUCTION INSTRUCTION I

- 1. Attach front panel to the base with screws.
- 2. By means of the hardware mount the jack, two variable resistors and the speaker on the front panel. (The universal transformer should be attached to the speaker before the speaker is mounted.) Mount the tube socket, two terminal posts and large condenser on the base. Space parts as shown on me-
- 3. Start with the large condenser and A.C. leads first, then other leads. Solder all connections with a well tinned iron.
- 4. Connect key, wire and plug.
- 5. If the speaker does not respond with a loud tone, it may be due to a poor impedance match between the universal output transformer and the speaker. Try using other taps on the output transformer other than 1 and 6.

#### **EARPHONE CONNECTION**

To attach earphones to this oscillator simply disconnect either lead from the key or the plug and insert earphones in series with the key circuit. Arrangement is shown in the diagram.



Speaker volume will be cut off with the earphones in.

### CONSTRUCTION DETAILS FOR CODE OSCILLATOR

