

# **Introduction to Morse Code** **Lesson - 3**

by

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# What we covered in Lesson - 1

- Part - I : Morse Code in the Syllabus of ASOC Exam
- Part - II : A brief history of Morse Code
- Part - III : Introduction to Morse Code
- Part - IV : Learning Morse Code



# Lesson -1

E - Dit

T - Dah

K - Dah-Di-Dah

5 - Di-di-di-di-dit



# Technique of Learning

We'll start learning characters at a higher speed e.g., 12 Words Per Minute (WPM) so that you get used to recognising characters at a higher speed

We'll give more time between characters so that your brain can process the sound and associate it with the character. It will be easier to increase speed later on.

Illustration - learning a language is always done at the same speed that you'll finally speak in and not slower.



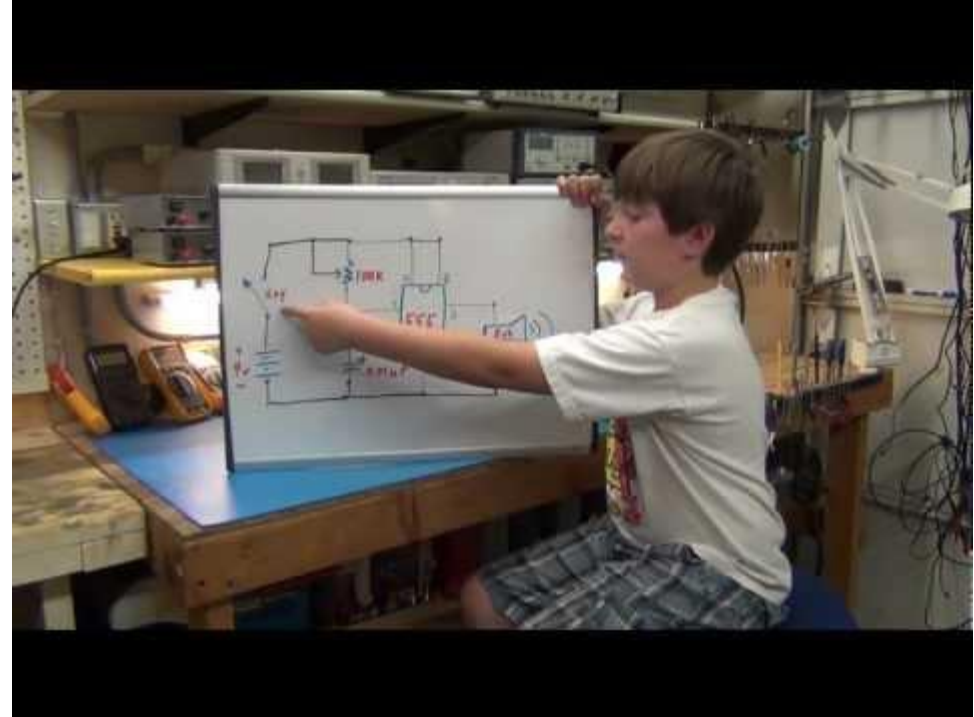
# Learning Morse Code : Lesson - 2

- Revision of Lesson - 1 (Completed above)
- Construction of a Morse Key
- CPO - Code Practice Oscillator
- Desktop / Mobile Softwares and Apps



# Code Practice Oscillator

- VU2LN OM Sinosh will be guiding you all through practical 'home-brewing' a CPO
- I will introduce you all to the final product and hear the sounds





8:41 / 18:28



# Method of Correcting Your Code : Lesson - 2

- Revision of previous lesson
- I will send for a few minutes : E, T, K, 5 in a pre-defined sequence
- You all and receive write it down in a note-pad (physical or on your laptop / desktop)
- Send the sequence you wrote down to me on Whatsapp Group called 'SIARS Know Code'





# Method of Correcting Your Code : Lesson - 2

## (...continued)

- Then, I will correct and send the result back to you
- After you score 90% or more, we will add a character or two
- Repeat the cycle in the next class with some fun in between
- Try out Just Learn Morse before tomorrow's lesson



# Receiving Morse Exercise - 1

T555EK5 5E55 KE ETT5 K55 EKE KEK5 KT KK



# Introduction to Morse Code

## Lesson - 3

What we will cover today:-

1. Report on yesterdays results of receiving Lesson - 1
2. Words and spacing between them
3. Video clip of an actual CW QSO : just for fun
4. Software - Just Learn Morse
5. New sound patterns for the day
6. Receiving Lesson -2 practicals



# Sample CW QSO Clip of 19 July 2020

## Lessons

1. Noise and tone can vary but intelligence goes through
2. Narrow bandwidth as single frequency is adequate for Morse Code Tx
3. Low power - maximum range possible
4. Simplicity



Report on Yesterday's Results  
of  
Receiving Lesson - 1

15 out of 23 scored 30/30 - 65% students

03 out of 23 scored 29/30 - 13%

03 out of 23 scored 27-28/30 - 13%

02 out of 23 scored < 27/30 - 08%



# Word Spacing & Audio Pattern of the Gap in Between Dits/Dahs, Letters and Words

## Theory

- Unit of space = time-length of dot (time for which we press the key)
- This is the reference time interval
- Length of Dah = 3 Dits
- Within a letter - space = 1 Dit
- Between two letters of a word, space = 3 Dits
- Between two words, space = 7 Dits
- Practical Demo with different speeds of Dit, Dah, Letters and Words

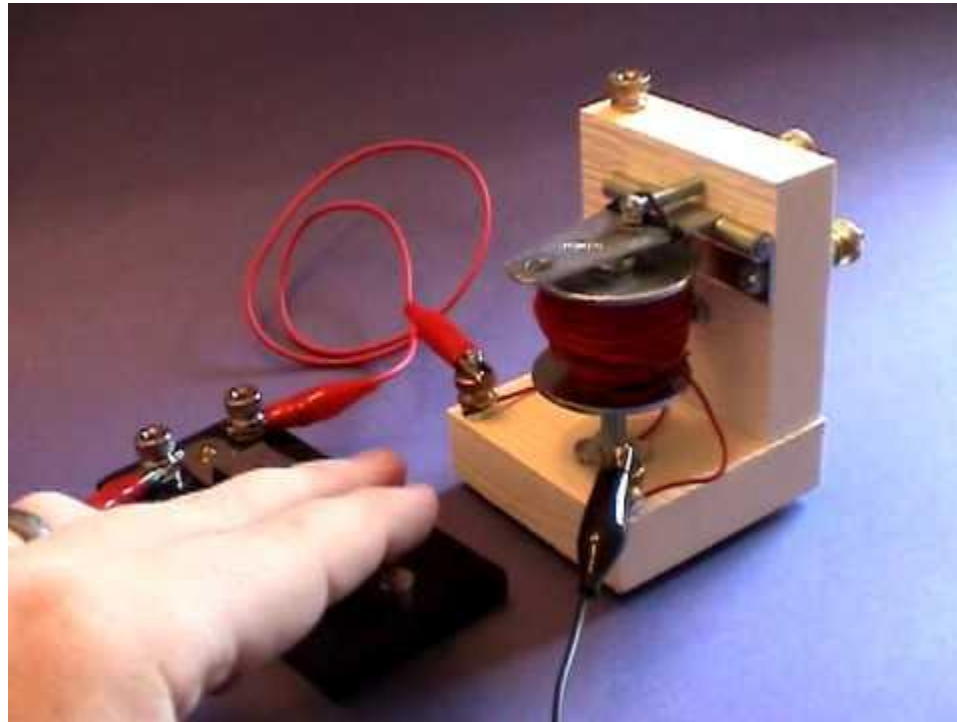


# Rythm of Dits and Dahs at Various Speeds

- Straight Key - human timings : demo
- Iambic Paddle Key with Electronic Keyer timed by an ATtiny Microcontroller - better for learning the mind patterns of code, letter and word spacing : demo
- High and low speed Dits and Dahs



# Olden Days Telegraph System Sounds





# Just Learn Morse

Desktop / Laptop Software



# CPO : A Code Practice Oscillator Kit



# Practicals

Part - 1 : Sending via Paddles using HF Radio Oscillator

Format - writing down received code with space between each word :  
eke tek5 ekekek tek5 t e5 ket5

Part - 2 : Sending and receiving via 'Just Learn Morse' Software



# Questions

Please type your Questions in the Chat Box

