Morse Code Communication

Learn to send and decode messages with Morse code using a telegraph key.

Introduction

This presentation focuses on the fun and interactive way to communicate using Morse code. You'll discover the basics of Morse code, how to use a telegraph key, and what you need to start sending messages.

01

Basics

Introduction to Morse Code

- Morse code is a method of encoding text characters into sequences of short and long signals, known as dots and dashes. Each letter and numeral is represented by a unique combination of these signals. Morse code has been widely used for communication, especially in telegraphy, due to its simplicity and effectiveness.

How the Telegraph Key Works

The telegraph key is a simple switch used to generate the signals for Morse code. When you press the key down, it completes a circuit, sending an electrical signal that can represent a dot or dash depending on the duration of the press. Releasing the key stops the signal, creating a space between letters and words. Understanding its operation is crucial for effective communication.

Common Signals and Their Meanings

Letter	Morse
A	.-
B	-...
C	-.-.
D	-..
E	.
F	..-.
G	--.
H	....
I	..
J	.---
K	-.-
L	.-..
M	--

Letter	Morse
N	-.
O	---
P	.--.
Q	--.-
R	.-.
S	...
T	-
U	..-
V	...-
W	.--
X	-..-
Y	-.--
Z	--..

Digit	Morse
0	-----
1	.----
2	..---
3	...--
4	....-
5	.....
6	-....
7	--...
8	---..
9	----.

Each letter in Morse code has a specific combination of dots and dashes. For instance, 'A' is represented by a dot followed by a dash (.–), 'B' by a dash followed by three dots (–...), and 'C' by a dash, a dot, a dash, and a dot (–.–.). Familiarizing yourself with these signals allows for effective communication and fun exchanges.

Real time Encoding / Decoding

- In this interactive learning program, the user chooses to either encode or decode.

- In encode mode, the system provides a text phrase; the user must enter the correct Morse code.

- In decode mode, the system provides a Morse code phrase; the user must enter the correct text.

- The system checks the answer and tells the user if it's correct or wrong, showing the correct answer if needed.

- This makes it an engaging way to practice Morse code translation.

Encode Mode (Text -> Morse Code)

- The system shows a random text message (eg: "SOS")

- The user must enter the correct Morse Cose translation (eg: "… --- …")

- The program compares the user's input with the correct Morse Code

- It output's :
  - Correct – if the input matches
  - Incorrect – if the input is wrong

```
System: Encode this text into Morse code: HELLO
User: .... . .-.. .-.. ---
System: Correct!
```

Decode Mode (Morse Code-> Text)

- The system shows a random Morse code message (eg: "… --- …")

- The user must enter the correct decoded text (eg: "SOS")

- The program compares the user's input with the correct text

- It output's :
    - Correct – if the input matches
    - Incorrect – if the input is wrong

```
System: Decode this Morse code: .... . .-.. .-.. ---
User: HELLO
System: Correct!
```

Thank you!

Do you have any questions?