

Samuel F.B. Morse co-developed and patented an early telegraph system in 1837. This telegraph needed a way to communicate through bursts of electricity, so Morse developed a code we now know as the Morse Code

MORSE CODE

activity sheet

The Morse system was first based on the English alphabet, but did not work for other languages. In 1848, Fredrich Clemens Gerke refined the Morse Code into the Hamburg Alphabet, and it's this alphabet that we now know as the International Morse Code. The Morse Code is a language that people use to communicate with each other through telegraph, radio, satellite, or with light. The language is a series of short and long bursts that are heard or seen. The short bursts of sound or light are called "dit", and the long bursts are called "dah".

Recognizing Basic Elements and Key Symbols

Distinguishing Dots and Dashes: Morse code has two main symbols: dots and dashes. Think of a dot as a quick "beep" and a dash as a longer "beeeeep". These symbols form the foundation of Morse code messages.

THIS IS THE INTERNATIONAL SOS CALL FOR HELP: . . . - - - . . .

S = . . . dit dit dit O = - - - dah dah dah S = . . . dit dit dit

Importance of Spaces:

Spaces play a crucial role in Morse code. A short pause separates each letter, and a longer one divides words. It's like breathing spaces in a spoken sentence; they help you understand the message clearly.

It's worth noting that there are variations of Morse code, like international Morse code and American Morse code. Before the digital age, these codes were the backbone of telegraph lines across continents.

Morse Code Spacing Rules With Light:

In addition to dots and dashes, there are also 3 spacing rules or "pauses" that help the receiver distinguish characters. Without these timing rules, Morse code transmissions would be one big blur of dots and dashes with no way to recognize the beginning of one letter and the end of another.

The three Morse code spacing rules:

The time gap between dots and dashes is 1 unit of time—or the same length as one dot.

The time gap between full letters is 3 units of time—or the same length as one dash.

The pause between complete words is 7 units of time. Simple enough, right?

With our basics covered, let's look at how to translate your desired message into Morse code.

Sending Your Morse Code Message With a Flashlight

Alright, so let's discover how to transmit some Morse code using a flashlight; however, you can use whatever light source you wish. The first step in sending our Morse code message is transposing it to code. Here's a Morse code message:

Zombies at the tower --.. --- -- -.../ .- - / -/ - ---- .-- ..-

Now that we have our messages let's get out our flashlights and start blinking.

Using the Morse code alphabet chart over translate your name into Morse code. The forward slashes between complete words to help quickly distinguish them from each other.

SEE OVER...



INTERNATIONAL MORSE CODE

A ALPHA	.-	dit dah	0	-----	dah dah dah dah dah
B BRAVO	-...	dah dit-dit-dit	1	.----	dit dah dah dah dah
C CHARLIE	-.-.	dah dit dah dit	2	..---	dit dit dah dah dah
D DELTA	-..	dah dit-dit	3	...---	dit dit dit dah dah dah
E ECHO	.	dit	4	...-	dit dit dit dah
F FOXTROT	..-.	dit-dit dah dit	5	dit dit dit dit dit
G GOLF	--.	dah dah dit	6	-....	dah dit dit dit dit
H HOTEL	dit dit dit dit	7	--...	dah dah dit dit dit
I INDIA	..	dit dit	8	---..	dah dah dah dit dit
J JULIET	.---	dit dah dah dah	9	----.	dah dah dah dah dit
K KILO	.-.	dah dit dah	S SIERRA	...	dit dit dit
L LIMA	.-..	dit dah dit dit	T TANGO	-	dah
M MIKE	--	dah dah	U UNIFORM	..-	dit dit dah
N NOVEMBER	-..	dah dit	V VICTOR	...-	dit dit dit dah
O OSCAR	---	dah dah dah	W WHISKEY	.--	dit dah dah
P PAPA	.-.-.	dit dah dah dit	X X-RAY	-..-	dah dit dit dah
Q QUEBEC	---.-	dah dah dit dah	Y YANKEE	-.--	dah dit dah dah
R ROMEO	.-.	dit dah dit	Z ZULU	--..	dah dah dit dit

WRITE YOUR NAME IN MORSE CODE HERE:

- Starting Signal - - - - -
- End of Message - - - - -
- Closing Down - - - - -
- Interval (Wait) - - - - -
- Message Received - - - - -
- Ready to Receive - - - - -