

ABSTRACT

Until very recently (And even then only in the USA where they abolished the Morse code as a requirement), learning the Morse code has been the obstacle that aspiring amateur radio operators (Hams) have to beat in order to obtain their radio operator's license. Even after they have obtained the license, many new operators find it difficult to converse over the airwaves using Morse code, leading to interpretation mistakes which, as anyone would admit are rather embarrassing. This problem is what the Morse Code Transceiver seeks to solve. It consists of a transmitter and a receiver component that work independently of each other. The transmitter portion accepts ASCII inputs from a PS/2 keyboard and transmits the Morse code equivalent whereas the receiver receives Morse code and displays the ASCII equivalent. Do take note however that for the purposes of this project, this project will not be seeking to actually communicate with other radio operators for that would make the aforementioned license necessary. What it concentrates on, however, would be the algorithms involved in the transmitting and receiving end once the modulation has been stripped and are left with only the basic DC pulses that make up the Morse code. Both components were assembled and while only the receiver component is fully functional, all that remains to be done to make the transmitter functional as well is a protocol to interface with a PS/2 keyboard. What this means is that both the transmitter and receiver's key logical functions are operational.