

# Morse Code Buzzer Controller

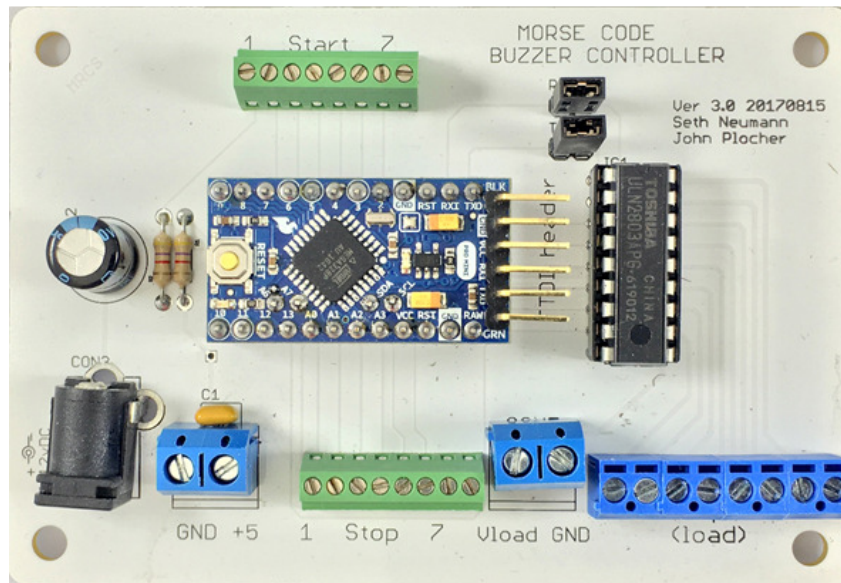


Figure 1 – Morse Code Buzzer Controller

Many model railroad telephone systems depend on a matrix of push buttons and buzzers for the Dispatcher, Yardmasters, Towers and Staging Operators to “ring” one another. This often leads to confusion and unanswered calls as buzzers sound alike and more than one can be ringing at the same time. Model Railroad Control Systems offers the “Morse Code Buzzer Controller” which rings each station with its telegraph code (typically one or two characters) in Railroad (“American”) Morse Code and only one station is buzzed at a time. Each Morse Code Buzzer Controller can control as many as 7 stations plus an extra output which can randomly play a message to provide a railroady ambience.

## Features:

- Serves up to seven stations plus an “ambience output”
- Each buzzer output can drive a load of up to 50V at .5A which is enough to drive most vintage telegraph sounders, but inexpensive DC buzzers can also be used.
- An additional output can be designated an “ambience” buzzer that will randomly play one of several canned messages. These could be train orders, news reports, or “inside jokes”
- Sequences through all active stations tapping out its code in turn
- The board accepts a push button input, stops when the phone goes off-hook (phone must have a suitable contact to provide an isolated ground) and may be set to time out if not answered after a programmable interval

- Each station is individually programmed for logic high or low inputs, momentary or constant start and each telegraph code can be programmed
- Requires a 6-12V power supply rated at 0.5A. (not included.)
- Specify telegraph codes and parameters with order and we program it for you
- Size is 2.75" x 3.75" (7x10 cm) and snaps into our standard DinRail
- Note we use 3<sup>rd</sup> party Arduino equivalents (contact us for a quote if you want a certified Arduino)

The on-board Arduino Pro-Mini runs the "[station buzzers](#)" sketch by Steve Williams. Please indicate the telegraph codes for your stations, unless you intend to load the sketch yourself.