

Technical Note #11

Using SoundTraxx Tsunami® Decoders with an Undertable Speaker

The audio output of a SoundTraxx TSU-1000 Tsunami sound module is sufficient to drive a typical 8 ohm speaker up to 6" in diameter and still generate reasonable volume. We do not recommend using other Tsunami models for this type of application. To drive large speakers, or produce more volume, you will need to use an external amplifier. The Tsunami's audio signal will overload most amplifier inputs, however, and a simple attenuator circuit must be built to lower the signal level.

The following diagram shows such a circuit and can be built with parts readily available at Radio Shack. The 100 ohm resistor across the Tsunami's motor leads is optional and is necessary only if you need to read CVs from a programming track. Once the circuit is built, it can be plugged into a dedicated amplifier or an auxiliary input of a stereo system.

