

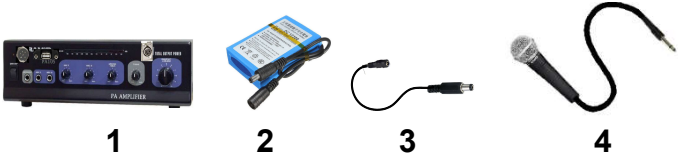


Train PA system for the announcer:



Items needed:

- 1- PA amplifier
- 2- 12 volt Li-Ion battery
- 3- 12 volt right angle extension cable
- 4- Microphone



Description

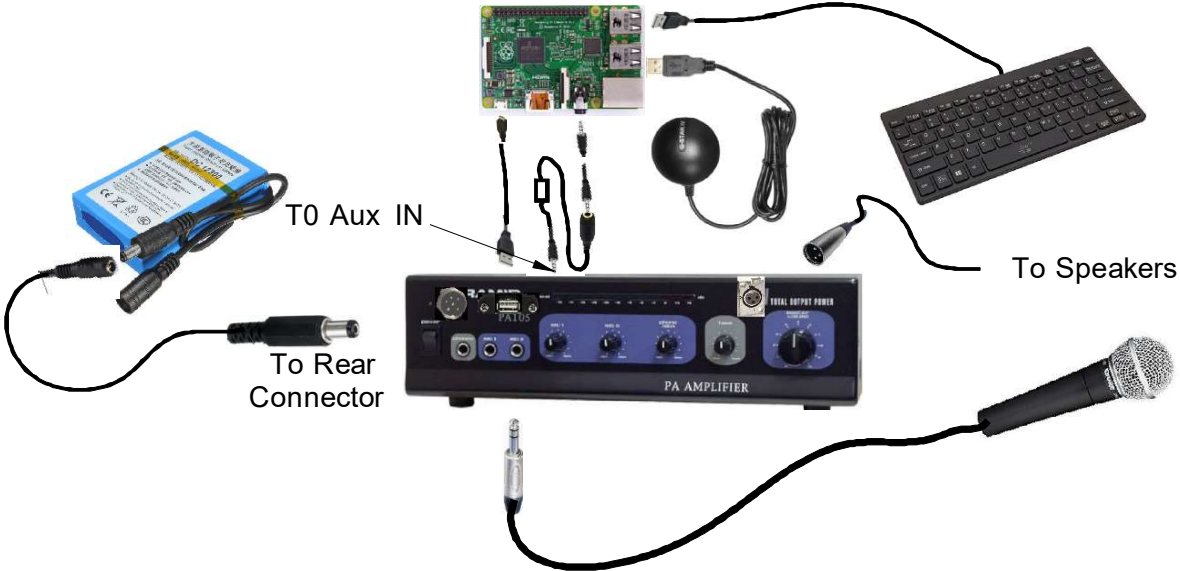
The announcer can be either the north west corner of Car 101, or in the caboose. There are audio cables at both of these locations.

The amplifier distributes the audio at 70 volts. There are transformers at each speaker to match the audio to the speaker. The audio is daisy chained to each car with 1/4 inch audio connectors. The male 1/4" phone plug is on the north side of the car. The female 1/4" phone jack is on the south side of each car.

If the Li-Ion battery is not available, a lead-acid lawn mower battery may be used. See Appendix I

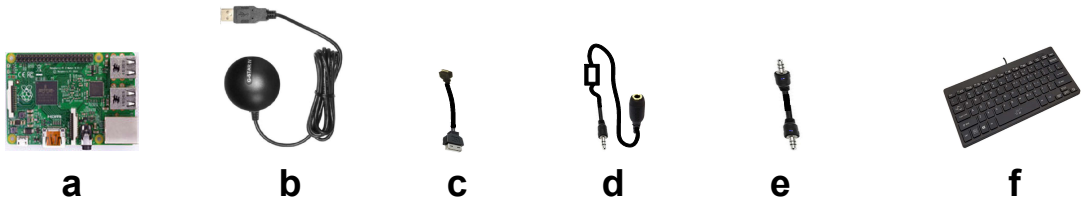


Train PA system when the GPS system is installed



When using the GPS system these additional items are needed:

- a) Raspberry Pi computer
- b) GPS receiver
- c) USB cable
- d) Custom transformer cable
- e) 3.5 mm male to male audio cable
- f) Keyboard





To adjust the volume of the background music and the sound effects, use the keyboard 9 and 0 and the + and – keys:

Background Music		Sound Effects	
Volume Up	Volume Down	Volume Up	Volume down

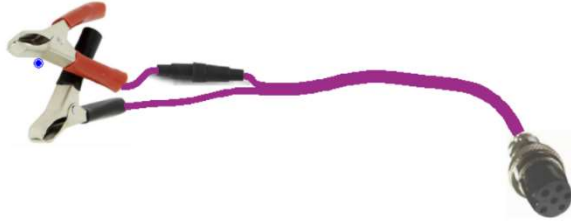


Additionally, the GPS system needs the proper software installed. See the following link: http://wedcrew.yolasite.com/resources/GPS_Rasp_Pi/gps1%20description%2004-28-20.pdf



Appendix 1 Replacing the Li-Ion battery with a Lead-Acid battery

- 1- **Power Cable** Note that the polarity connections are **NOT** important.



- 2- 12 Volt Battery



The first three items are stored in the yard office. The battery is stored in the battery room, behind the kitchen.