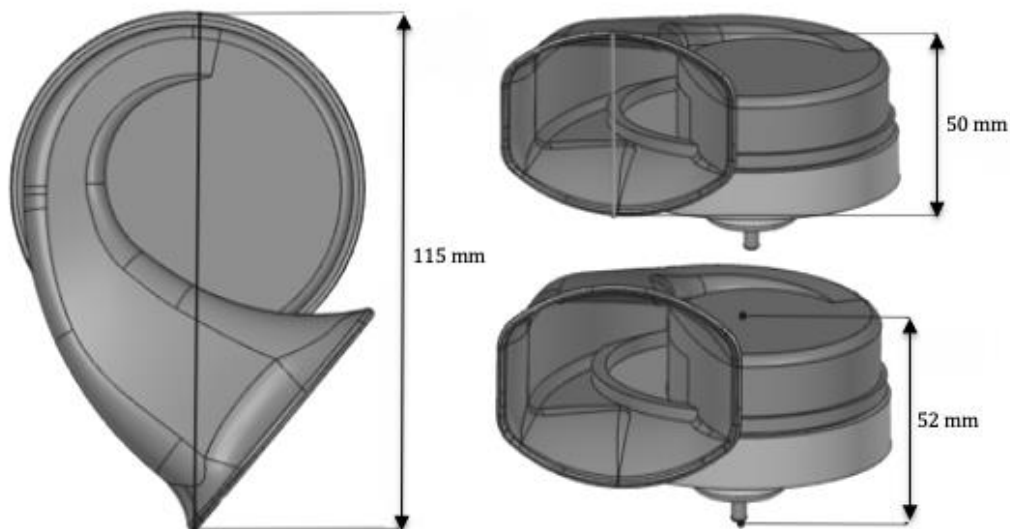




## Main Specifications:

Nominal Voltage	12, 18, 24	VDC
Voltage Range	11 - 28	VDC
Current Consumption	3.5 - 4 (Horn Pair)	A
Max Sound Pressure Level	112-115 (2 meters)	dB(A)
Frequency "L" Range for Max SPL	400-435	Hz
Frequency "H" Range for Max SPL	495-515	Hz
Frequency "L" Range ( $\leq 95$ dB(A) - 2 meters)	800 - 870	Hz
Frequency "H" Range ( $\leq 95$ dB(A) - 2 meters)	990 - 1,030	Hz
Operating Temperature	-40 to +85	Celsius
Storage Temperature	-40 to +85	Celsius
Weight	350 (Horn Pair)	Grams
Durability (1 Sec On and 4 Sec Off)	>100,000	Cycles
Continuous Blowing	Programmed to timeout after 1 min	
Main Material	ABS, Steel and PCB Components	
Programming Language Used	C (Utilizes PWM)	
Main Applications	4-Wheel and 2-Wheel Vehicles	

## Dimensions:





## Platforms and Features:

### 1. Plug and Play (Stand Alone)

- a. Volume and tone are self-adjusting
  - i. at lower speeds, volume and tone will be lower
    - 1. customizable sounds: quick double beep, fade low fade high, shifting frequencies, etc.
  - ii. at high speeds, volume and tone will default to max SPL
    - 1. sound will be similar to current vehicle horns
  - iii. at low speed, driver or vehicle can abort low/soft volume to max SPL by operating horn twice within 1 second interval
- b. Lock confirmation and alarm will adjust accordingly.
  - i. lock confirmation will be soft when driver presses button once, but will default to loud setting if driver presses lock button twice quickly
  - ii. alarm will work at the max SPL after first operation
- c. Self-shifting input settings based on voltage input

### 2. Integrated Model (CAN)

- a. This model is adaptive to work with existing vehicle sensors
  - i. will work with, but not limited to, speed, brake pressure, collision warning, automatic braking and ADAS features
    - 1. adjust the tone and volume of the horn as well as sounds automatically
      - a. customizable sounds for various scenarios: quick double beep, fade low fade high, shifting frequencies, etc.
- b. Lock confirmation and alarm can be customizable or standard
  - i. lock confirmation can utilize unique tones or sounds to distinguish differences
  - ii. alarm can have more drastic tones if danger is present
- c. Self-shifting input settings based on voltage input
  - i. horn relay is not required with this model