

# TimberWolf Siren

Unsurpassed Quality And Proven Technology Able To Penetrate Today's Cars.

*This Is The First New  
Mechanical Siren  
Developed Specifically  
For Police Car Application  
In 30 Years!*



## The Industry's Only 28 Amp Mechanical Siren

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123 db of piercing warning engineered to fit anywhere

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909.881.5241  
[www.timberwolvesirens.com](http://www.timberwolvesirens.com)

TimberWolf Siren

# POLICE SIREN BASICS

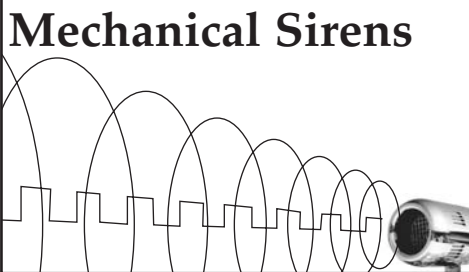
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CREATING NEW INDUSTRY STANDARDS  
THROUGH SOLID ENGINEERING

## Electronic vs. Mechanical ?

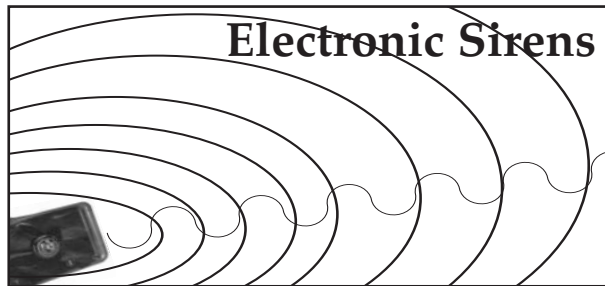
### Why the controversy?

Is it just the modern vs. the old fashioned diehard? Well, it is true electronic sirens made their entrance to the emergency warning business in the 1960's coinciding with the industry wide increase in electrical demand brought on by more lights, radios, computers, and new EMS equipment. Typical mechanical sirens of the era drew 200 to 300 amps compared to only 12 to 17 amps for the new electronic style. Switching sirens was an easy trade off, as many cars were not air conditioned and sound insulation was only minimal. Electronic tones from alarms, buzzers, games, and computers were not common. Thus the new sirens enjoyed an acceptance for a season. However, today it's a different story.



*A mechanical siren produces a spiraling square wave, thus offering a very strong and focused pattern*

*Electronic sirens are notorious for having dead spots and creating noise pollution without direct sound penetration making them less effective.*



### But why do they say the mechanical siren is more effective?

Don't they both make Whoo Whoo sounds ?

### One must look at the physics of the air movement!

Electronic Sirens translate a transistor generated signal to an electro magnetic driver which pulses a 3/4 inch diameter diaphragm back and forth rigorously 1/32 inch to move the air in a sine wave form, creating the familiar Whoo Whoo sound projected from the speaker horn.

The electronic siren works like an ice cream truck speaker, creating sine waves like ripples on the lake which go and go in all directions.

Mechanical Sirens pump air, compressing and accelerating it to more than 130,000 inches per minute (or 124 miles per hour) where a rotor pulses it, off on, off on in a square wave form which spirals at 9,000 revolutions per minute as it expands from the 2 3/4 inch diameter guiding throat.

The Mechanical Siren's spiraling wave is like an ocean's wave curl projected from a short guiding throat, on off on off, making the Whoo sound. The **operator controls** the volume and the pattern with the foot switch.

### The waves are different, but how do they affect me?

The electronic siren wave pattern is spotty and tends to have dead spots. The electronic siren waves roll and can pass over a vehicle. Did you ever hear someone say, "I didn't even hear the siren." and there was the Fire Truck, or the Ambulance, or the Police Car, next to me!! ??

The Mechanical Siren's waves are projected in an expanding spiral line to encompass entire vehicles, and to penetrate thru them, causing the air within the car to vibrate, so one can't ignore the siren, alerting the driver and passengers to the possible approaching danger.

### How does a mechanical siren affect the community?

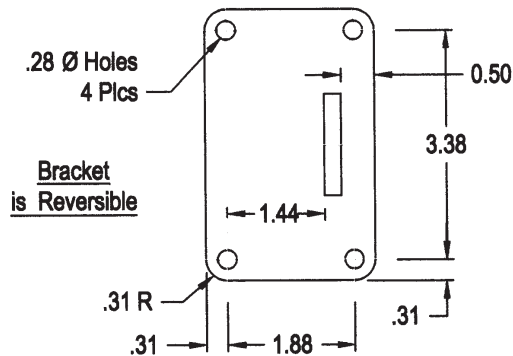
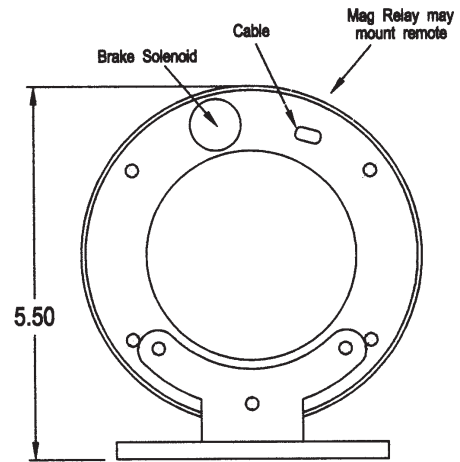
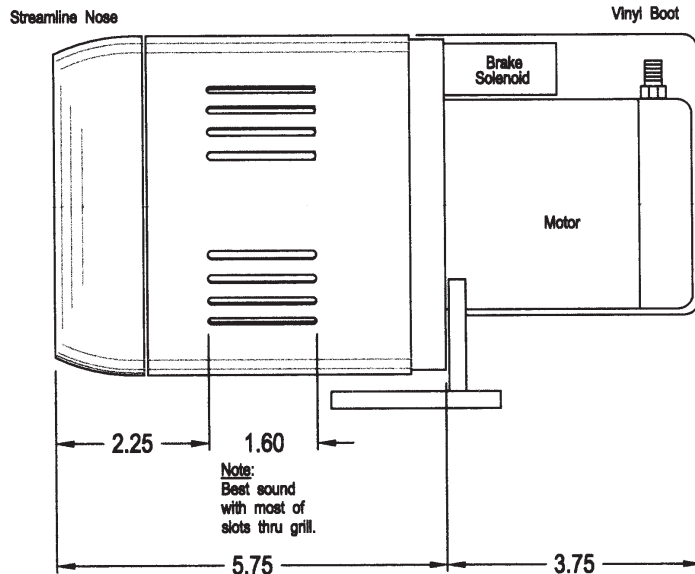
Because the mechanical siren produces a spiraling square wave, directed by the tuned throat to expand in a narrow pattern, one can not only hear the approaching siren, but can also discern the direction it is traveling. Another advantage is that the waves deaden out, as their spiraling components strike the ground and other porous surfaces. For this reason, one does not hear emergency vehicles with mechanical sirens thru the night from all over the town.

### Does an electronic siren contribute to noise pollution?

**Absolutely!** The wave of the electronic siren, being essentially two dimensional, widens its path as it travels, further and further, broader and broader. This simple wave expands to create sound over a large expanse, able to penetrate and annoy neighboring homes, this is unnecessary noise pollution.



## Push Bumper Mount - M3



Picture shows the behind the grill mount of a Crown Victoria

## Concealed Mount - M5 (For Crown Victoria)



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