

QVS

Quiet Vehicle Sounder

The problem with silence

Sound is an important contributor to road safety for pedestrians, and not only for the blind or visually impaired. Electric and hybrid vehicles are almost silent; they are only audible once they have built up some speed (approximately 20mph) when wind and road noise generate enough sound that they can be heard. Studies have concluded that electric vehicles pose a danger to vulnerable road users (VRU) and increase the risk of incidents with pedestrians by up to 80%.

In order to protect VRU's, standards in both the US and EU have been introduced to ensure minimum sound requirements for electric vehicles. Sound generators will need to be fitted to make the engines "sound similar" to vehicles with combustion engines when travelling at low speed.

Since 2010, Brigade has been involved in the QRTV (Quiet Road Transport Vehicles) working group to establish requirements for the standard. We have developed a multi-frequency Quiet Vehicle Sounder, integrating our patented bbs-tek® technology. This gives greater directional information to the ear allowing the VRU to instantly locate where the sound is coming from and to take evasive action.

- **Warns pedestrians and other VRU's that a quiet vehicle is approaching**
- **bbs-tek® patented technology**
 - Multi-frequency sound
 - Directional and locatable - The sound is only heard in the hazard zone.
- **Designed for the electric CV & PSV market**



About us:

Brigade Electronics is a market leader of safety devices, with solutions to suit all commercial vehicles and mobile plant. Our complementary range of safety devices help prevent collisions by assisting the driver whilst protecting workers, pedestrians and cyclists

QVS

Quiet Vehicle Sounder

- Warns pedestrians and other VRU's that a quiet vehicle is approaching
- bbs-tek® patented technology
 - Multi-frequency sound
 - Directional and locatable - The sound is only heard in the hazard zone.
- Front speaker with optional rear speaker option
- Pitch and volume increase with vehicle speed to mimic an internal combustion engine
- Sound cuts out above a given speed threshold
- Designed for the electric CV & PSV market



QUIET VEHICLE SOUNDER

P1002-QVS - Quiet Vehicle Sounder

5385

- 12-24Vdc
- IP68 Speaker
- IP30 ECU
- Size Speaker (WxHxD)
120 x 115 x 130mm
- Size ECU (WxHxD)
110 x 80 x 35mm
- 2 year warranty



Features

- Front and rear speaker system
- Combined multi-frequency bbs-tek® technology and tonal sounds
- Sound and pitch increase with vehicle speed
- Operational below speeds of 20MPH
- Front sounder operational when ignition activated (silenced when parking brake applied)
- Rear sounder operational in reverse gear
- Instantly locatable
- Sounder unit: Speaker

Power

- Current: Max 0.3 Amps

Durability & standards

- Mechanical vibration: 10G
- Operating temperature: -40 to +85°C
- CE marked
- EMC approved: E
- FCC approved
- IC Marked
- UNECE 138 compliant
- 49 CFR Part 571 and 585 Federal Motor Vehicle Safety Standards compliant

Please visit our website for more information, individual specifications and to view our full range of safety solutions.

brigade-electronics.com

