
SED sound detectors are capable of identifying a wide range of acoustic incidents. In general, we refer to these incidents as events, which are further categorized into **Alerts** and **Events**.

The difference between alerts and events lies in their nature: alerts indicate sounds associated with dangerous or undesirable situations, while events refer to sounds that are common in most environments and, in most cases, do not signify anything unusual. However, in certain scenarios, these events can still be useful — for example, detecting people in areas where no one is supposed to be.

Alerts

The recordings of examples for each alert type can be downloaded [here](#). The set of alerts differs based on the SW version - full or basic.

The **basic** SW version includes:

Gunshot: The sound of gunfire from pistols, rifles, and other common types of weapons.

Glass break: The sound of breaking glass. SED focuses on detecting the sound of a broken window or glass storefront, but it can also detect the sound of a broken bottle in public spaces.

Glass Tester: The sound of a glass tester (GBT-212 tester, Resideo FG-701) is added to simplify device testing and is turned off by default.

Scream: Panic-screaming of women. Sound detection may indicate (sexual) assault, kidnapping, etc.

Male Scream: Panic-stricken male scream. Detection of this sound may indicate an attack. May overlap with aggression detection.

Child Scream: Children screaming in panic. Sound detection may indicate an assault, attempted kidnapping, etc.

Aggression: Aggressive shouting, sounds of fighting or assault, aggressive patients in the central or emergency department and waiting rooms, etc.

The following warnings are only present in the **full** version:

Spray: The sound of preparing and mixing the spray before actual painting starts.

Grinder: The sound of a grinder cutting, e.g. a boundary fence or cutting a lock when stealing a bicycle.

Vehicle: The sound of a passing motor vehicle engine. Protection against unauthorised entry into a remote protected area, e.g. a national park.

Traffic: The sound of the rolling resistance of the tires of a passing vehicle. The purpose is the same as the vehicle warning.

Tire Squeal: Sounds of tires squealing, drifting. Detection enables e.g. identification of illegal street racing or dangerous driver behaviour.

Drone: The sound of a flying drone - the purpose of the detection is to prevent smuggling contraband into prisons, invasion of privacy, etc.

Fireworks: The sound of fireworks and firecrackers. Detection can be enabled even in areas where its use is prohibited.

Siren: This class includes the sound of an ambulance, police, or fire department siren, or the detection of a city or mine alarm siren. It also includes the sound of a car alarm.

Events

This feature is only available in the full SW version. Example records for each alert type can be downloaded [here](#).

Animal: Sounds of animals such as dogs, cats, goats and more.

Bird: Sounds of all kinds of birds.

Children: Sounds of children playing, crying, etc.

People: Sounds of people - speech, laughing, sneezing, coughing, whistling, etc.

Door Slam: The sound of slamming doors e.g. in public toilets, warehouses, underground garages etc. The sound may indicate unauthorised entry or other undesirable activity.

Music: Sounds of musical instruments or singing.

Attention: Vehicle bells, beeps, city bells and all similar sounds that should attract attention.

Horn: The sound of a car or train horn.

Transport: Specific sounds for tram, train, bus, etc.

Construction: The sound of construction work, including work with tools such as drilling, welding, circular saw, etc.

Children Cry: The sound of a baby crying. It helps to identify situations where a child is distressed, lost or unsupervised, for example.

Creak: Squeaking, creaking and squealing tires.

Others: All sounds not included in any of the above categories.