

Securing the Exhibition Areas with Capacitive Floor Sensors



Historic buildings - such as castles, mansions and stately homes - are nowadays often made open to the public. These demonstrate their usage in the past eras for example. For this purpose, original furniture or similar items are exhibited in the property.

Various alarm systems can be used to secure individual objects in these buildings. The protection of a single object, however, can be complex and costly. Guided tours of the buildings provide visitors a glimpse whilst moving in defined areas. If the areas are not clearly identifiable, they are additionally marked by floor markings or barriers.

In these exhibitions furniture is often placed on carpets and the areas cannot therefore be entered. They are supposed to act as a separation between furniture and visitors.

It is therefore desirable to detect when someone walks onto the carpet surfaces. The alarm should sound acoustically and prompt the visitor to leave the secured area immediately. In addition to high operational reliability cost-effectiveness is a major consideration when purchasing safety technology.



The Solution with Human Detector

One of the many features of the **Human Detector** system is the detection of changes in the electric field. In comparison with systems of other manufacturers the special functionality here is the ground-free operation of the alarm sensors. Together with battery operation and wireless messaging via radio communication, a cost-effective, simple and retrofitting installation is possible at any time.

With the capacitive sensors of the **Human Detector** technology it is possible to protect the border area of a carpet. An alarm is raised if a visitor enters this area. As the carpet encloses the objects to be protected, such as furniture, table decorations etc., these are automatically secured as well. The alarm signal of the sensors can be connected to external alarm systems. Depending on the location, it is also recommended to connect a video surveillance system. This allows the immediate assessment of the situation and preservation of evidence. **Human Detector** automatically controls PTZ cameras.

Due to the continuous further development, there may be differences in functionality between the different versions of the **Human Detector** modules. More detailed information can be obtained from us or our trained partners on request.

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Securing the Exhibition Areas with Capacitive Floor Sensors

What Material is Needed?

The listed material is required for the protection of exhibits on carpets and similar flooring.

Basic Equipment:



Optional Accessories:

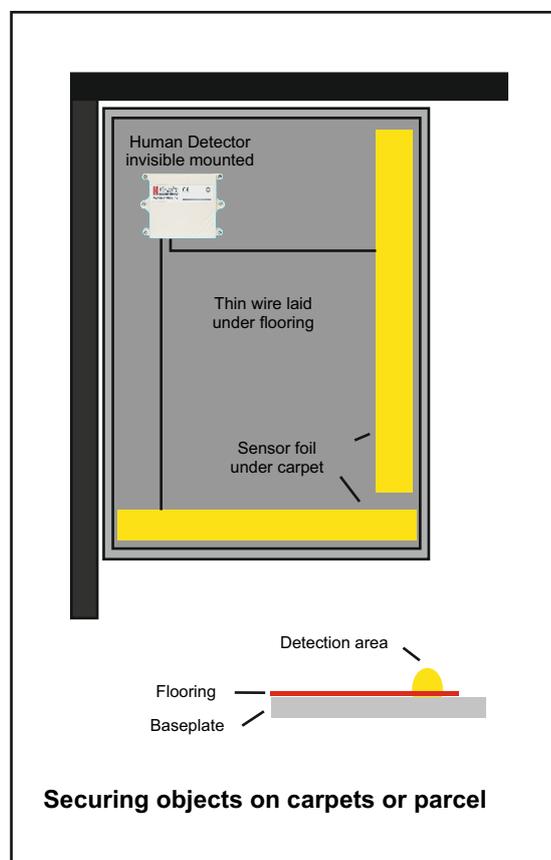


Installation - This is How it is Done

Please read the operating instructions carefully before commencing any work.

The installation work of the safety technology described below is rather simple. Moving the antique furniture and floor coverings should be coordinated with the responsible restorers.

First, the carpet needs to be cleared along the edges. A sensor foil can now be laid on the floor. A width of approx. 50 cm is proven to be sufficient. The access areas of the carpet surface are "blocked" with such a strip. The entire sensor surface area should be divided into two areas of approximately the same size. If the individual surfaces are formed from smaller partial areas, it is important that they are electrically conductive. The maximum possible length of the sensor strips cannot be easily determined. It depends mainly on the capacitive properties of the floor. However, lengths of 4-5 meters per sensor surface are quite realistic. Connect the two sensor surfaces to the sensor and reference input of the **Human Detector** alarm module by laying thin cables underneath the carpet. For example, the alarm module can be placed behind a cabinet out of view of visitors. Return the carpet to its original position and cover the sensor surfaces with the carpet.



Select a low sensitivity setting in the alarm module. Then switch on the module. Test the alarm activation by stepping onto the carpet. You can change the sensitivity in the **Human Detector** Module and repeat the process until you have found the ideal setting. Check the sensitivity also with people wearing shoes with thick soles.

Connecting to the **Human Detector** alarm centre or to an alarm loop of a burglar alarm system can be carried out subsequently. This work should only be carried out by trained personnel.

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