

# Protection of Technical Machinery in Museums



**We protect your values!**

Today technical machinery is on display in museums. In comparison for example, they are relatively cheap compared to automobiles and works of art. Nevertheless, protection against physical contact is desirable in many cases.

The protection of these exhibits can prove to be quite complex. Technical machinery often has small link attachments. Sometimes there is also a risk of injury to visitors from the old equipment. Due to the size and cost, however large, machinery cannot simply be protected in glass display cabinets.

The required protection needs to be inexpensive, invisible and quickly installed. If necessary, it should be possible for the safety mechanism (surveillance) to be switched off quickly. Structural changes to the technical exhibit are to be avoided in general.



## The Solution with Human Detector

Available Systems - such as laser scanners - are not suitable for the protection of large machinery. They are expensive and lead to an increase in false alarms, as it is difficult for visitors to notice the cordoned off area. Structure-borne noise sensors only report an "attack" when the exhibit is hit. PIR motion sensors are not accurate enough.

The **Human Detector** alarm sensor is positioned on the machine in a concealed manner. Machines largely consist of metal. The capacitive field change sensor is connected to a conductive point of the exhibit. If the machine's metallic surface is touched, an alarm is immediately triggered. If desired, the sensitivity of the safety mechanism can be set so that the alarm is triggered even before the actual contact is made.

The protection set-up described above works on metallic parts and surfaces. There is no electrical grounding of the machine for this. Ideally, it should be mounted on hardwood blocks, for instance. Structure-borne sound sensors are additionally installed in the **Human Detector** alarm module. These detect the exhibit being hit.

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.

---

**heddiel electronic GmbH**  
Raiffeisenstraße 24  
48734 Reken, Germany

[www.human-detector.com](http://www.human-detector.com)  
[info@human-detector.com](mailto:info@human-detector.com)  
Tel. +49 (2864) 95 178 - 0

# Protection of Technical Machinery in Museums

## What Material is Needed?

The listed material is required for the protection of technical machinery in museums. Depending on the installation, up to two machines can be secured with a **Human Detector** alarm module.

### Basic Equipment:



### Optional Accessories:



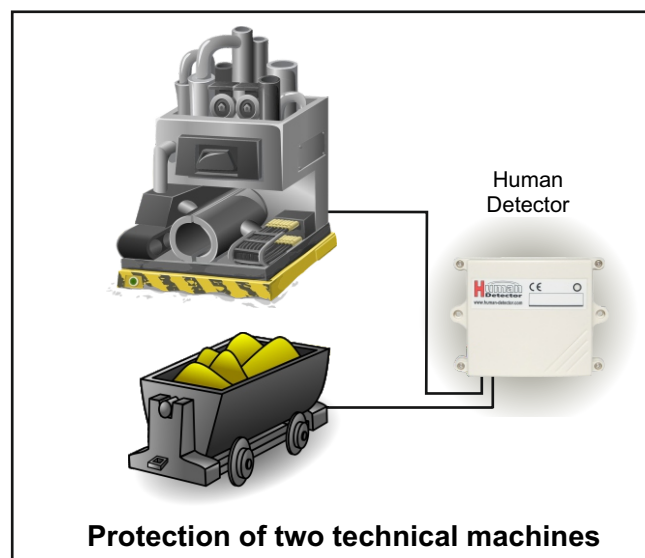
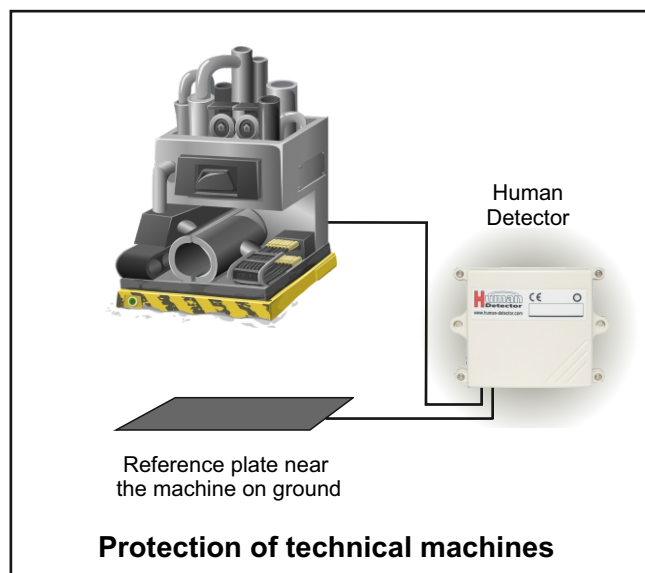
## Installation - This is How it is Done

Please read the operating instructions carefully before commencing any work.

Place the **Human Detector** module in the immediate vicinity of the machine. Connect the capacitive sensor input to a conductive point on the exhibit. A bare screw would be ideal for this purpose. The reference input is connected to a separate metal plate. It can be placed underneath the machine in an unobtrusive manner. It is important that it is on the ground and has no contact with the actual machine. Select a low sensitivity setting in the alarm module. Then switch on the module. Test the alarm activation by trying to touch the machine. You can change the sensitivity in the **Human Detector** module and repeat the process until you have found the ideal setting.

A second exhibit can also be connected to the reference input instead of the metal plate. This secures both exhibits. The two exhibits must not touch each other and must be as well isolated as possible against the floor. We recommend the use of e. g. hardwood boards under the base of the machines.

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.



**heddierr electronic GmbH**  
Raiffeisenstraße 24  
48734 Reken, Germany

[www.human-detector.com](http://www.human-detector.com)  
[info@human-detector.com](mailto:info@human-detector.com)  
Tel. +49 (2864) 95 178 - 0