



ATS AntiTouch detector is a new and patented technology designed for protecting and securing paintings, busts, sculptures, table displays etc. The ATS system is an ideal and effective security system that operates invisibly.

It consists of two components: The ATS SensorPlate and the ATS Electronic Module. The ATS SensorPlate is mounted on the back of the painting or picture or underneath the vase, sculpture or table or even inside a display case. It cannot be seen by the viewer. The SensorPlate connects with the art. Its protection can be adjusted and matched to the size of the exhibit (generally between 10 to 50cm).

The Electronics Module evaluates any movement very close to the art so that an alarm or buzzer is set off as soon as a person (or hand for example) gets too close within the area of protection or attempts to remove the object or cut it out of the canvas. Optionally ATS can be linked to wire free surveillance systems see later..

- [Typical applications](#)
- [Product specification & Price](#)
- [User Instructions](#)
- [Hints and tips](#)
- [Related Article - Touching](#)

#### Typical Applications of ATS

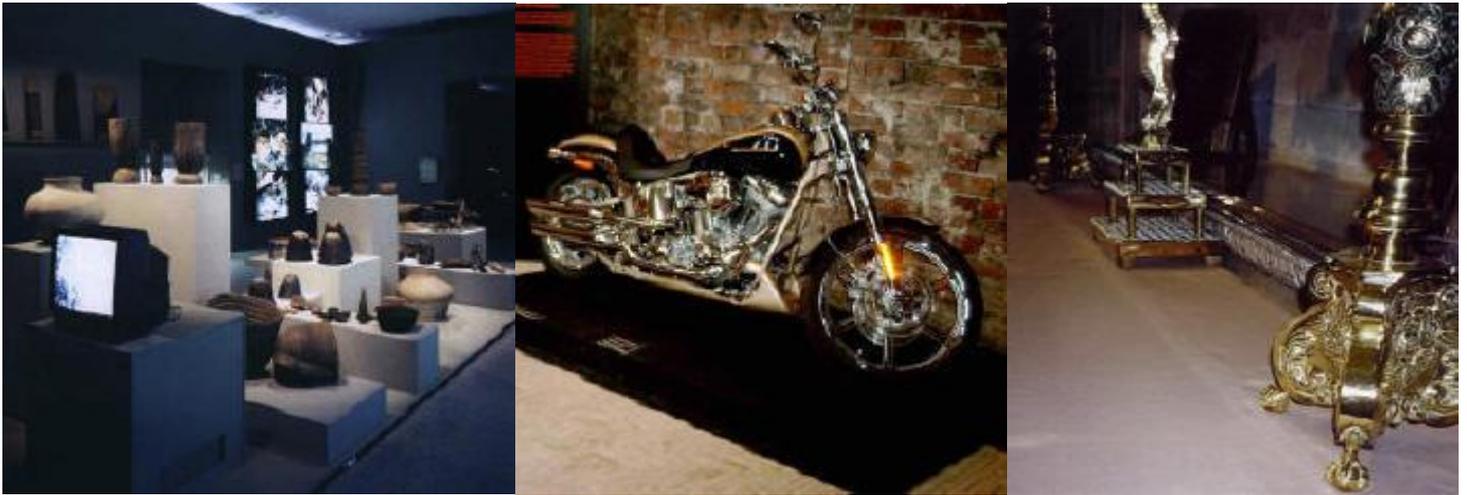
- Protection of a painting that is not (or too large to be) protected by glass
- Hidden protection of a bronze statue resting on a plinth (pedestal)
- Invisible protection of an entire display of silverware on a table
- The creation of open plan displays when, in the past, the exhibits were locked in display cases
- Protection of soft marbles where too much touching would cause irreparable damage
- Protection of a gown while mounted on a mannequin
- Surveillance of classic motor vehicles
- Protection of a commode or desk

#### Product Specification

The AntiTouch surveillance can be adjusted from 0cm to approx. 60 cm. (In fact, often the protection follows the contours of the exhibit).

The ATS SensorPlate consists of a specially designed aluminium foil which is attached to an isolating backer. The thickness of the ATS SensorPlate comes as 3.5mm standard and can easily be cut to size and shape. (Standard panels are 1m by 0.625m) 3 panels can be joined together to provide coverage of a large area. The SensorPlate is a sandwich with both outer sheets being conducting material and the filling (matrix) is very light and stable. All the ATS SensorPlate constituents have been specially selected to be pH neutral, absorb no moisture and have no off-gassing even at elevated temperatures. It is also very light (1 sheet is just 1kg). Due to these properties, ATS SensorPlate is very suitable for if specially controlled microclimates are necessary (e.g. for the minimisation of exhibit ageing) and ensures proper air passage behind paintings and objects. It has no negative impact with no chemical effects on the painting or artefact.





ATS is used on paintings, other objects protected (left to right) Neolithic artefacts, classic motorbikes and a high altar.

The electronics element of the ATS AntiTouch system is available in two options dependant on the requirement. Either:

1. The wire-connected version with operate from a 10-30 V DC supply. It also links to an earth. It is suitable for connecting the system to any standard intrusion detection system.

Or:

2. The ATS battery version is specially designed with a low current consumption. The battery is a 3.6 V lithium battery with an operating life of approx. 2 years. The ATS battery version enables local acoustic alarms. For areas of less than 0.5sqm one can set up a virtual earth and not rely on the mains earth. This for example would enable a completely wire free system to be built into a plinth (pedestal) to go in the centre of a room.

The electronics is digital working at 100kHz and so is suitable for use throughout the world. Both ATS versions can be linked to wireless transmission to GalleryMaster or GalleryMonitor alarm receiver stations.

### **ATS system prices depend on specification**

#### **User Instructions**

The ATS SensorPlate should be mounted directly on the wall, behind the picture, on a table or even underneath a table and does not need to be in direct contact with the work or art. The surface area of the ATS SensorPlate should be cut to approx. 5% smaller than the artwork to be secured. The protection is always above the SensorPlate and builds up slightly towards the centre. For large areas there are techniques to flatten this out. The protection can be adjusted depending on the sqm of SensorPlate and also controlled from the ATS electronics.

1. In the case of sculptures made of metal, marble, granite, or similar material (metal oxides), the protection matches the size and shape of the sculpture and generates a smooth security area right around the object. The security range for showcases is limited to the interior of the showcase so that the alarm cannot be triggered off from the outside. Non-conductive objects, such as wooden figures, can be easily prepared to ensure proper functioning of the ATS system without any damage to the piece of art.
2. ATS AntiTouch detectors are suitable for any size of painting and most sculptures, as well as antique furniture, clothing, fabrics etc. Paintings can either be hung directly on the wall in front of the SensorPlate or at any inclination from the wall. The ATS detector differs from conventional systems in that it allows for variations of positioning as well as airflow behind the painting and does not require a special and costly type of attachment. Traditional securing methods involving rope suspensions can be retrofitted, easily and at low cost, with the ATS security system. The assembly is very simple and does not require any costly installation of accessories (additional contacts, etc.).

A full set of instructions are available on request. Euronova usually advises on the first ATS installation on a site to ensure that museum technicians are comfortable with setting up future systems.



## Hints and Tips

- The quality of the earth is very important on large installations
- The system should not be positioned against a wall that is effectively earthed (e.g. reinforced concrete) in which case about 3cm of plastic packing between the SensorPlate and wall improves the situation
- To improve protection of a metal object a direct wire connecting it electrically to the top part of the SensorPlate will improve the situation
- Previous proximity detection systems often suffered false alarms caused by changing environmental conditions. The unique way Euronova's ATS works minimises such effects.