

Protection of Artwork with the Wireless Painting Sensor Cx-5

Against: Approach / Touching / Removal

Information for the User

The proximity or painting sensor Cx-5 generates an invisible surveillance field around an art object. Should a person approach the monitored object unacceptably closely then this will be signaled instantaneously by a sequence of tones. If the approach is still closer or upon touching of the object a continuous tone is generated and an additional message is sent.

This can be explained in more detail by taking the example of a painting:

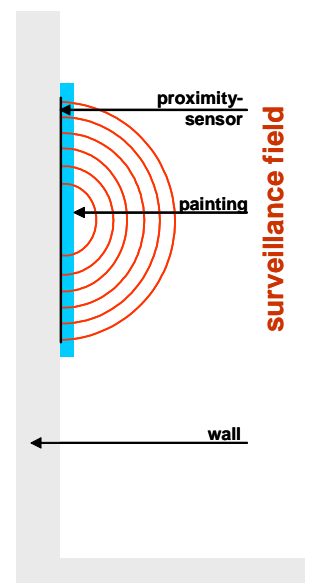
The sensor for the painting is located as a "sheet" behind the painting. The sensor is fed by a battery and communicates wirelessly. Thus there are no cables or wires to be connected. [The messages are transmitted wirelessly.] There is no need for special preparations in the building i.e. at the wall or stand. The sensor sheet will be suspended from the painting hooks or eyelets behind the painting, which conceals the sheet.

The surveillance field of the painting sensor covers the area from the surface of the painting up to a distance of 35cm. The trigger threshold of the signal is adjustable.

The painting sensor Cx-5 consists of a capacitive sensor area, an evaluation circuit, a vibration / shock sensor, an acoustic signal generator, a battery or rechargeable battery power supply and a wireless radio message transmitter.

In continuous operation exchangeable batteries have a life expectancy of more than a year. Alternatively, rechargeable batteries may be used. A low battery status will be signaled wirelessly. Rechargeable batteries may be charged without taking down the painting.

The maximal size of the sensor area is 50cm x 100cm in portrait or landscape format. Cutting is done individually for each painting. In case of very large paintings several sensor areas may be applied side by side. The painting sensor has a thickness of 15.5mm at the top edge and of 12mm at the lower edge. Because of the tapered side edges the sensor area behind the painting is practically not observable.



Features of the Painting Security:

- Surveillance of individual objects. Tone sequence when object is approached, continuous tone and message when object is touched.
- Active support of the supervisory staff via the local warning signal, optional transfer of the signal to other locations.
- Invisible arrangement of the installation behind the painting, surveillance covering the entire artwork.
- A choice of battery or rechargeable battery operation. No external electrical connections required.
- Wireless connection for local and distant signal transfer and processing (different signals / criteria for approach, touching, shock / vibrations, low battery status, radio surveillance).
- Shock / vibration sensor: false reports (e.g. generated via background noises / interferences) are excluded by checking its measurements against the ones of the proximity sensor (measuring the permittivity).
- Cable connections may be added to upgrade the system to "VdS" / Class C (Reg.-Nr.: G 110 086).