

Wireless Smoke Detector

(Type 3)

Operating Instructions Version 1.0



For Marmitek alarm installations of the types:

**Homeguard MS8000,
Security System MS9470,
Security System MS9770, Protector28
Security System Base Station SC2700, SC2800**

Please read these instructions fully and completely before initial commissioning; they contain information for the correct installation of this innovative radio smoke alarm.

© 2003 Convia GmbH, Germany

All rights reserved. This handbook must not be reproduced in any form, even in excerpts, or duplicated or processed using electronic, mechanical or chemical procedures without written permission of the publisher. This handbook may contain mistakes and printing errors. The information in this handbook is regularly checked and corrections made in the next issue. We accept no liability for technical mistakes or printing errors, or their consequences. All trademarks and patents are acknowledged.

Modifications due to technical improvements may be made without prior notification

Table of contents:

Chapter:	Page:
1. General and function	4
2. Intended use	4
3. Safety- and maintenance- references	5
4. Installation places.....	5
5. Installation.....	8
6. Registering the smoke detector with the base stations of the types „MS9470“, „MS9770“, „SC2700“, „SC2800“	10
7. Registering the smoke detector with the base station of the type „Homeguard MS8000“	11
8. Final assembly	12
9. Convia smoke detector - technical data.....	12

1. General and function

The optical smoke alarm is available as an optional extra for the Marmitek security systems of the types: Homeguard MS8000, security system MS9470, security system MS9770, Marmitek security system base station SC2700 and SC2800.

It can detect incipient low temperature fires and open fires with smoke development and should be installed in every room. The smoke detector operates according to the dispersed light principle. For this a light transmitter and receiver are arranged in a measuring chamber in such a way that the transmitter light does not fall directly on the receiver. The development of smoke causes the light to be dispersed by smoke particles and picked up by the receiver. In contrast to many products on the market no radioactive substance is necessary for the optical smoke detection.

The smoke detector will impress you owing to the following features:

- Monitoring of rooms for the development of smoke
- Integrated signal transmitter
- Alarm transmission even for non-activated alarm unit

2. Intended use

The radio smoke detector is intended for signaling of smoke in interiors with optical and acoustic warning as well as signaling by radio over distances up to 30 meters (free field range).

It does not sense gas, heat or flame!

The equipment may not be modified under any circumstances (otherwise all warranty claims have been void!).

3. Safety- and maintenance- references

- Never open the equipment. It contains no parts to be waited. In the event of an error please give the smoke detector to your dealer.
- Operate the equipment only in interiors and avoid the influence of dust, strong draft of air and direct sun light.
- Clean the equipment with a dry linen cloth, which can be easily dampened.
- Never use any kind of cleaning agents.
- The system may not be kept / operated within the access range by children. It is not a toy!

4. Installation places

Smoke detectors should be installed in accordance with the NFPA Standard 74 (National Fire Protection Association, Batterymarch Park, Quincy, MA 02169).

In principle it is advisable to install several smoke detectors in the building and/or in the dwelling.

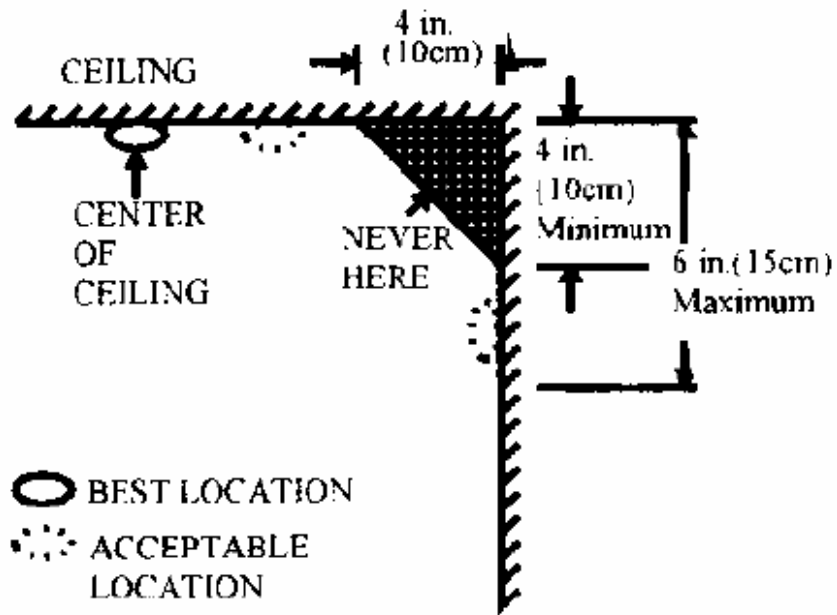
In any case at least one smoke detector should be installed in each floor of buildings with more than one floor.

Only like that a punctual and thus effective warning is possible when a fire begins.

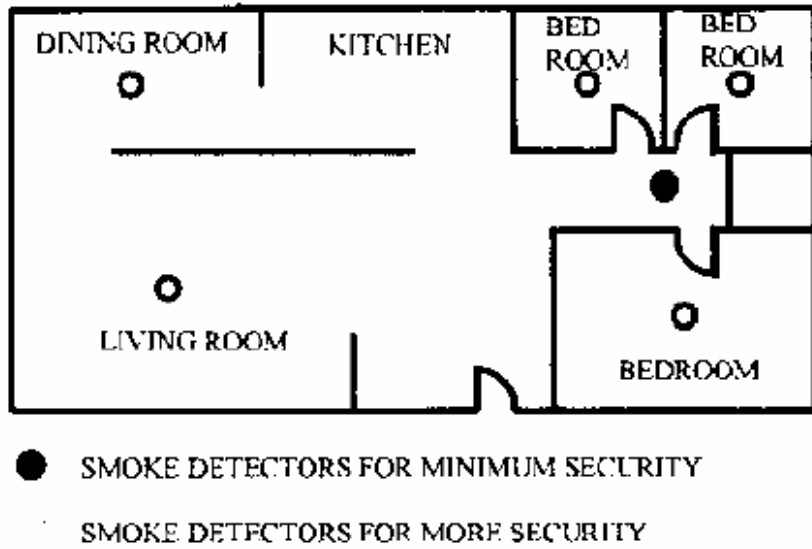
In any case one smoke detector must be installed in the way from the sleeping area to the exit (corridor and/or staircase).

Also take care that the smoke detector can be loudly heard through a closed door from the sleeping room! (Otherwise you will not be waked up during a fire alarm!).

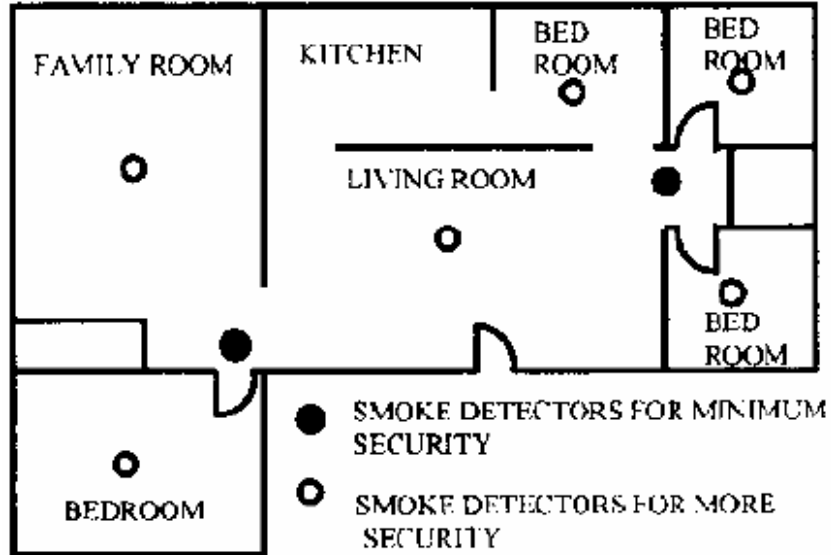
Recommended best and acceptable locations to mount smoke detectors:



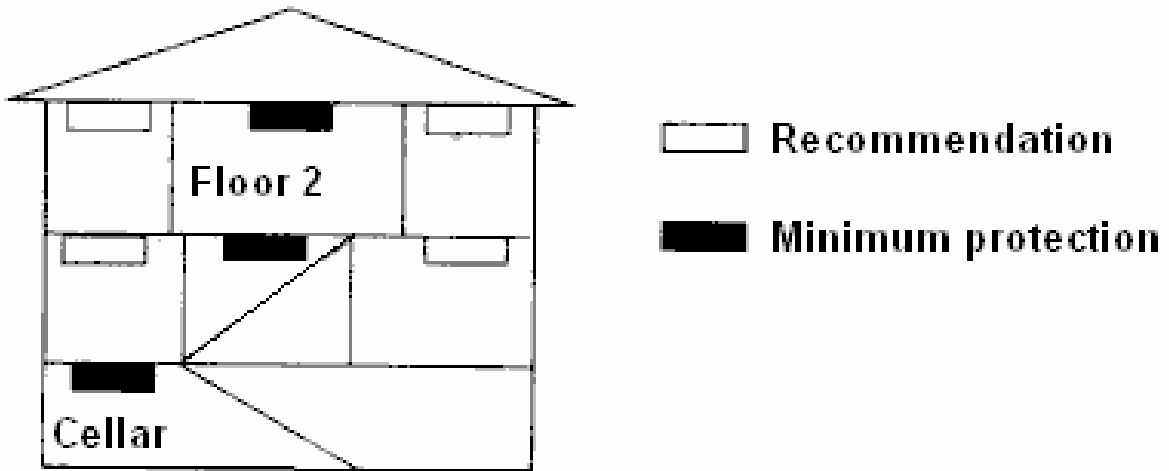
Locations for placing smoke detectors for single residence with only one sleeping area:

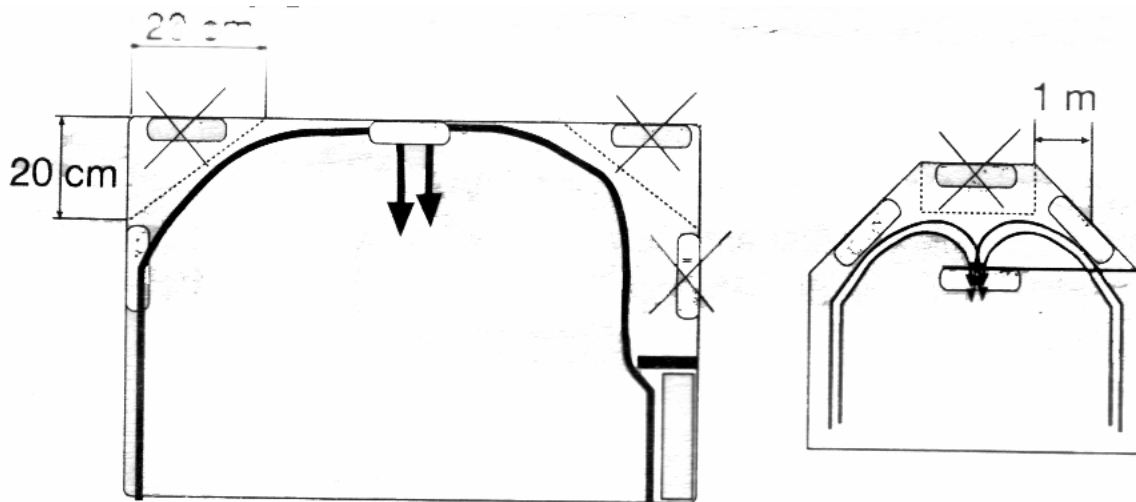


Locations for placing smoke detectors for single floor residence with more than one sleeping area:



Arrangement in a building with many floors :





The smoke detector should be installed in the centre of the room, on the ceiling, or for a sloping roof at the highest point, as smoke rises and gathers in this area. This guarantees the earliest possible alarm warning.

Smoke alarms should be installed in all rooms, but not directly above the cooking area in the kitchen or the bath, where dust concentrates.

Ensure that the smoke detector is not installed directly on or in the vicinity of large metal objects as they can affect the radio range.

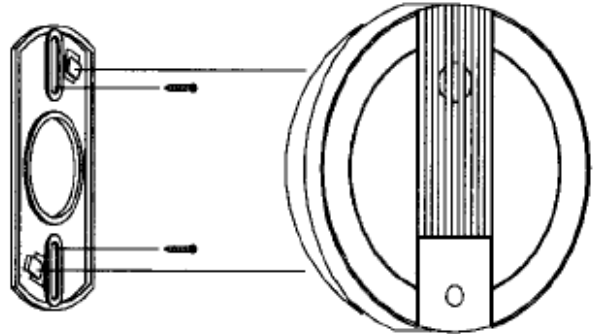
5. Installation

Please follow these steps to install the Convia smoke detector:

- At the place where you are going to install the detector, draw a horizontal line six inches long.
- Remove the mounting bracket from your unit by rotating it counterclockwise.
- Place the bracket so that the two longest hole slots are aligned on the line. In each of keyhole slots, draw a mark to locate a mounting plug and screw.
- Remove the bracket.
- Using a 3/16-inch (5mm) drill bit, drills two holes at the marks and insert plastic wall plugs. Put the detector away from getting plaster dust on it when you drill holes for mounting.

- Using the two screws and plastic wall plugs (all supplied), attach the bracket to the wall.

- Line up the slot of the bracket and the detector. Push the detector onto the mounting bracket and turn it clockwise to fix it into place. Pull outward on the detector to make sure it is securely attached to the mounting bracket.



- **Do not** insert the battery at this stage (9V). Please follow the steps of the next chapter before you insert the battery.
- How to install the battery:
 - The smoke detector requires an alkaline battery
 - Match terminals on the end(s) of the battery with opposite terminal connectors on the detector. Be sure to insert the alkaline battery in the position shown on the detector.
 - When terminals are properly matched, push battery firmly in until it snaps and cannot be shaken loose.

The smoke detector will not work until you insert the battery properly!

6. Registering the smoke detector with the base stations of the types „MS9470“, „MS9770“, „SC2700“, „SC2800“

Carry out the following steps:

(Every time you press a key you hear a short confirmation beep)

1. Open the lid on the right side of the base station.
2. Set the mode switch to the INSTALL position. All indicators of occupied zones come on.
3. Place the battery (9V) in the correct polarity in the battery holder of the smoke detector. The smoke alarm sends a radio signal to the base station: The LED on the sensor illuminates briefly, the base station emits a short signal tone as confirmation of reception.
4. (If you are using more than one smoke detector you have to follow these steps only once.)
5. Reset the mode switch to the RUN1 or RUN2 position. Zone indicators go out.

Now the smoke detector is registered and ready to be used.

In the case of a fire emergency the smoke detector sends the alarm signal to the Marmitek alarm installation (it does not matter whether the base station is set to arm or disarm. The alarm will be triggered in both cases!)

7. Registering the smoke detector with the base station of the type „Homeguard MS8000“

Carry out the following steps:

(Every time you press a key you hear a short confirmation beep)

1. Open the lid of the Homeguard.
2. Key in your PIN-code (factory default: 0000). If the code is correct you will hear a longer confirmation beep. The green LED should start to flash. (Otherwise you did not key in the correct PIN-code.)
3. Press the 1 key to set the Homeguard to learning-mode.
4. Place the battery (9V) in the correct polarity in the battery holder of the smoke detector. The smoke alarm sends a radio signal to the base station: The LED on the sensor illuminates briefly, the base station emits a short signal tone as confirmation of reception.
5. (If you are using more than one smoke detector you have to follow these steps only once.)
6. Press the 1 key again to leave the learning-mode.

Now the smoke detector is registered and ready to be used.

In the case of a fire emergency the smoke detector sends the alarm signal to the Marmitek alarm installation (it does not matter whether the base station is set to arm or disarm. The alarm will be triggered in both cases!)

8. Final assembly

The lower section of the smoke detector is attached to the bracket already mounted on the ceiling and turned clockwise to the stop.

9. Convia smoke detector - technical data

Frequency:	433,92 MHz
Modulation:	AM
Range:	30 to 50 meters (free field)
Alarm:	85 dB
Power supply:	9V-Blockbattery, Alkaline-Type
Operating temperature:	10 to 45 degrees (Celsius)
Air moisture:	< 95% rel. air moisture