

Installation- and user manual

FITO PROFI-LINE 230V AC CONNECTABLE
SMOKE ALARM, INCL. BATTERY BACK-UP

Model: FIT-230RF & FIT-230RFL



<div>CE₂₃</div> <div>2797</div>	EN14604:2005/AC: 2008	
	Essential characteristics:	Performance:
Fito Products BV De Langkamp 12a 3961 MS Wijk bij Duurstede The Netherlands 23 2797-CPR-796170 Optical smoke alarm, alerts you in the event of fire or smoke, and is suitable for residential buildings.	Nominal activation conditions/sensitivity, response delay (response time) and performance under fire conditions:	Passed
	Operational reliability:	Passed
	Tolerance to supply voltage:	Passed
	Durability of operational reliability and response delay, temperature resistance:	Passed
	Durability of operational reliability, vibration resistance:	Passed
	Durability of operational reliability, humidity resistance:	Passed
	Durability of operational reliability, corrosion resistance:	Passed
	Durability of operational reliability, electrical stability:	Passed

RETAIN THIS MANUAL FOR FUTURE USE!

This manual contains important information for correct installation and use of your smoke alarm. Please read this information carefully and retain these instructions for future reference.

IMPORTANT INFORMATION

- Correct usage will ensure you have valuable extra time to escape. Every correctly installed smoke alarm will increase your potential escape time.
- This smoke alarm warns you in case of fire and smoke. For the specifications of the smoke alarm, read carefully "Function and meaning of the light and sound signals"
 - Retain this manual in a safe and easily accessible place, for example in the meter cupboard.
 - A smoke alarm is not a fire-prevention measure.
 - Install the smoke alarm in the correct place, if possible in the middle of the ceiling.
- WARNING:** Read carefully chapter "Never install a smoke alarm"
- Keep the smoke alarm out of the reach of children.
 - Test the smoke alarm on a monthly basis and after a period of absence.
- CAUTION: Never test with fire!**

- Clean the smoke alarm regularly (once a month) using the soft brush from a vacuum cleaner. In addition the smoke alarm can also be cleaned using a moist cloth.
- If the smoke alarm emits a beeping sound every 40 seconds, this means that the back-up battery is nearly flat and needs to be replaced. Press the test button to hush the signal for 10 hours.
- The lifespan of smoke alarms is 10 years.
- A false alarm can be silenced by briefly pressing the test and silence button.
- You can make your smoke alarm less sensitive for 10 minutes by briefly pressing the test button. The smoke alarm will nevertheless sound the alarm if the quantity of smoke is too significant.

IMPORTANT INFORMATION IN CASE OF ALARM IN THE EVENT OF A FIRE:

- Plan **TWO** escape routes and practice these with all members of the family.
 - Agree upon a location, where everyone goes to in case of a fire.
- In the event of a fire:**
- Leave the building immediately and go to the agreed location.
 - Make sure everyone has left the building.
 - Close the doors behind you and never open a warm door. In case of a warm door, choose a different escape route.
 - In the event of considerable build-up of smoke, crawl out of the building keeping as close to the floor as possible.
 - Wherever possible, breathe through a cloth (preferably moist), or else hold your breath as much as you can. The majority of deaths and injuries are caused by smoke inhalation rather than fire itself.
 - Call the fire brigade outside or at the neighbours.
 - NEVER** go back into a burning building.
 - Additional information can be obtained at the local fire department and on our website www.fito.eu

SPECIFICATIONS:

Power:	220 - 240V AC - 50-60Hz with 9V back-up battery
Battery back-up: FIT-230RF:	9V DC Alkaline (Gold Peak 1604A, Energizer 522, Duracell MN1604)
FIT-230RFL:	9V DC Lithium 10 years battery. Type: U9VLJP
Battery life in the event of a power failure:	1 month under normal conditions
Usage:	< 40 mA in alarm
AC supply voltage indicator:	green LED light visible on the smoke alarm
Battery supply voltage indicator:	red LED flashes 1 time per minute
Transmit and receive frequency	868.52 Mhz
Digital modulation method:	GFSK
Receiver/transmitter distance:	More than 80 m in open space
Data transmission speed:	50Kbps
Code combinations:	more than 1.000 combinations
Wirelessly connectable:	up to 40 pieces
Operating temperature:	between 0°C and 40°C
Humidity Level:	10% - 90%
Sensitivity:	According to EN14604
Alarm value:	>85dB at 3 meters
Silence button:	Alarm signal suppression available
Certification:	BS EN14604: 2005/AC: 2008

POSITIONING THE SMOKE ALARM

Recommended locations:

- Minimum protection:**
 - In all rooms, such as bedrooms, living room, study and suchlike, as well as along escape routes such as corridor or hallway.
- Maximum protection:**
 - Smoke alarm in all rooms (with the exception of bathrooms, kitchen, garages, etc.)
 - Heat alarms can be installed in bathrooms, kitchens, airing cupboards, utility rooms, etc. within 5 metres of a potential source of fire.

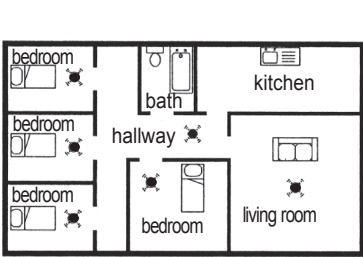


figure 1



figure 2

- The smoke alarm should preferably be installed in the middle of the ceiling, at least 50 cm from the wall.
- In the case of pitched roofs, install the smoke alarm on the sloping wall, at least 90 cm (measured vertically) from the ridge of the roof.
- See figure 1 & 2 for minimum and maximum protection.
- Ensure that the smoke alarm can always be reached for testing and cleaning.

Never install a smoke alarm:

- In bathrooms, kitchens, shower rooms, garages, etc. Places where a smoke alarm may go off needlessly due to condensation, normal smoke or gases. A smoke alarm should be fitted at least 5 metres from such sources of smoke.
- Places where the temperature may exceed 40°C or fall below 0°C, for example in attics, just above a fireplace, etc.
- In the vicinity of (or adjacent to) decorative objects, doors, sockets, lights, fittings, windows, wall ventilators, etc. which could mean that smoke does not reach the smoke alarm. Minimum 50cm away.
- Surfaces that are usually warmer or colder than the rest of the room. Differences in temperature can prevent smoke from reaching the smoke alarm.
- Adjacent to or directly above stoves or heaters.
- In very high or difficult to reach places. This makes it hard to reach the smoke alarm to test or clean it.
- In very dusty or dirty places. Accumulation of dust will prevent smoke from reaching the smoke chamber and in time will lead to a false alarm.
- Within 1 metre of dimmer switches and wiring. Some dimmer switches can trigger a fault in the smoke alarm.
- Within 1.5 metres of fluorescent lights. Electrical impulses can adversely affect the functioning of the smoke alarm.
- Outdoors and in spaces where a large number of insects are found. Small insects in the unit's detection chamber can disrupt the functioning of the smoke alarm.

This smoke alarm is designed for permanent mounting with power connection via the built-in terminal block. The bottom (mounting) plate can be screwed directly to a single standard flush mount box against the ceiling. The smoke alarm requires a power supply of 50mA. The smoke alarm must not be exposed to moisture or leakage.

Important information is located on the bottom of the smoke alarm.

RECOMMENDATION: it is possible to mount the base plate and power connection of the FIT-230RF and FIT-230RFL already during construction. At a later stage, when dust and dirt have been cleared away, the smoke alarm can be slid onto the base plate. The smoke alarm should not be connected to the electrical wiring when it is tested with high voltages.

CAUTION: During renovations or remodelling work, temporarily remove the smoke alarm. After completion of the work, vacuum the smoke alarm with the soft brush of the vacuum cleaner, place it back on the bottom plate and test it with the test button.

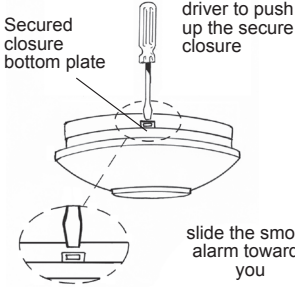
INSTALLATION

ATTENTION: The 230 volt smoke alarm should be installed by a licensed installer according to the Building Code guidelines. Improperly installed, it may electrify anyone who touches it or not function properly in the event of a fire.

ATTENTION: The smoke alarm must be continuously connected to 230 volts. Also, no on/off switch may be connected to the circuit that could disable the smoke alarm.

1. Insert the battery into the smoke alarm
 2. Slide the smoke alarm onto the bottom plate
 3. Press the button on the side of one of the smoke alarms until the red LED lights up. This smoke alarm has generated a unique connection code.
 4. Briefly press the button on the side of the bottom plate of all the other smoke alarms twice. The red LED will flash to indicate that the connection code selected by the first detector has been installed.
 5. Press the button on the side of the bottom plate of the first smoke alarm to end the pairing procedure.
 6. Test the connection by pressing the test button on one of the connected smoke alarms until all smoke alarms go into alarm.
- See the instructional video on our website: www.fito.eu**
7. Choose a location that meets all of the above conditions.
 8. Disconnect power from the group to which you want to connect the smoke alarm.
 9. Remove the bottom plate of the smoke alarm (see Figure 3).
 10. Remove the cover.

figure 3



11. Screw the bottom plate to the ceiling. Ensure that the bottom plate is fixed tight to the ceiling so that there is no air circulation above the smoke alarm that could prevent smoke detection. If the opening is too large it should be sealed with sealant.
12. The wiring should be connected to the bottom plate as follows:

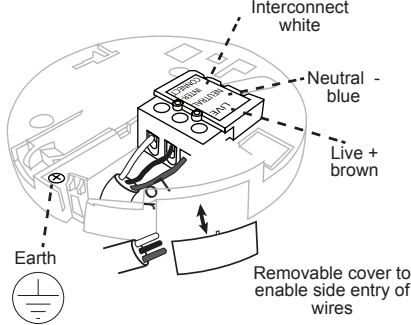
L(Live): connect to brown or red or marked with “L” wire

N(Neutral):connect to blue or black or marked with “N” wire

IC (Interconnect): Separate connection wire (use solid mounting wire min. 1.5 mm2)

If you do not connect the smoke alarms by wire, do not connect anything to the IC. Swapping the phase and neutral wire will damage the smoke alarm! Do not use the earth connection to interconnect smoke alarms. Note: It is not necessary to ground the smoke alarms.

13. When you have connected the wiring, close the cover of the terminal block.
14. Verify that the back-up battery is connected by pressing the test button, then carefully slide the smoke alarm onto the bottom plate.



ATTENTION: Do not attempt to remove the smoke alarm without opening the secure closure (figure 3).

LINKING THE SMOKE ALARMS

- For the procedure, see “THE INSTALLATION” and the instructional video on www.fito.nl
- A maximum of 40 smoke alarms and/or heat alarms, model FITH-230RF can be connected wirelessly, with a maximum distance of 80 meters in open space.
- All smoke alarms must have the same connection code:
- Systems with interconnected smoke alarms must be planned very carefully to ensure that no false alarms occur from, for example, cooking.
- In the event of a false alarm, someone must be available to briefly press the test button on the smoke alarm where the red light is flashing, to make it less sensitive for 10 minutes, as all smoke alarms otherwise will go into alarm.
- To remove the unique connection code, briefly press the button on the side 5 times.

WARNING: Do not connect any of these smoke alarms to a model from another manufacturer. If you do, you run the risk of an electric shock or fire hazard due to incorrect detection.

The (interconnect) through-wire (solid mounting wire) must be insulated and at least 1.5 mm2. Do not use a ground wire or a wire that can later be confused with the existing wiring for interconnection.

The smoke alarms that are interconnected must be located in the same home. When they are connected between different buildings, not everyone may be aware when they are being tested or when false alarms (e.g. cooking, etc.) occur.

CHECKING THE FUNCTIONING:

- After installation, each month and after a longer period of absence check all your smoke alarms:
- Check whether the green light is burning as an indication that the AC power is functioning correctly. If it does not burn, check whether there is power, the cabling is connected properly, etc.)
 - Check that the red light flashes approximately once every minute. If not, replace the battery.
 - Press the test button for ± 3 seconds on a single smoke alarm to test the smoke chamber, electronic parts and siren and up to 20 seconds to test the interconnect. A loud pulsating alarm will now sound (the level is at least 85 dB at 3 meters). A red light will flash rapidly when the alarm is sounding during this test. By pressing the test button you simulate the effect of smoke. This is the best way to test if your smoke alarm is working properly.

ATTENTION: The red LED will only flash on the smoke alarm you are testing. All other connected smoke alarms will only sound the alarm. Repeat the test on each smoke alarm.

REPLACING THE BATTERY

- Turn the power off.
- Remove the smoke alarm from the bottom plate (figure 3).
- Remove the battery.
- Clean the smoke alarm with a soft brush from the vacuum cleaner.
- Place new battery in the smoke alarm, (NOTE THE PLUS AND THE MINUS)
- Test the smoke alarm, see “Checking the functioning procedure”.
- Place the smoke alarm back on the bottom plate.

FUNCTION AND MEANING OF THE LIGHT AND SOUND SIGNALS:

Normal situation: The green light is burning to indicate that the alarm is correctly connected to mains power. The red LED light flashes once every 1 minute to indicate the correct functioning of the back-up battery.

Alarm: When the smoke alarm detects smoke, a loud pulsating alarm will sound and the red LED will flash continuously until the smoke has cleared. The interconnected smoke alarms will sound a loud pulsating alarm, however, the red LED light will not flash.

Battery empty signal: A beep signal every minute means that the battery is almost empty and needs to be replaced. This signal will sound for 30 days. Shortly press the test button to stop this signal for 10 hours.

TROUBLESHOOTING

The smoke alarm can be activated by steam, condensation, dust, smoke and small insects. Avoid these situations as much as possible, see chapter: Never install a smoke alarm. If a smoke alarm regularly gives false alarms, it may be necessary to

mount the smoke alarm in a different location. Additional information can be found on www.fito.eu, tab FAQ. If the smoke alarm does not function properly, please contact your supplier or Fito Products BV at www.fito.eu, tab Contact.

FALSE ALARM

Press the test button to stop the alarm. (See Test and Pause button)

TEST EN PAUSE BUTTON

Your smoke alarm is equipped with a pause button. This is the same button as the test button. Press the pause/test button firmly in the middle for 3 seconds. Your smoke alarm will then go into a so-called less sensitive mode for 10 minutes. The red LED will flash every 10 seconds to indicate that the silence button has been activated. In the event of heavy or increasing smoke development, the smoke alarm will nevertheless go into alarm.

MAINTENANCE

- The smoke alarm must never come into contact with liquid substances.
 - Clean the smoke alarm regularly (once a month) with the soft brush of the vacuum cleaner. In addition, you can clean the smoke alarm with a slightly damp cloth.
 - Repairs must be carried out by the manufacturer.
 - Always switch off the mains power when the you remove the smoke alarm from the base.
- WARNING:** Never paint or tape the smoke alarm.

LIMITATIONS OF SMOKE ALARMS

Independent organisations have established that approximately 45% of the smoke alarms installed in homes do not function in the following situations:

- Where the battery had been removed or was not working. For that reason, you should test the smoke alarm regularly.
- Where smoke is not able to reach the smoke alarm in the event of a fire, meaning the unit cannot be set off. Examples include a fire on another floor where there is no smoke alarm, a fire behind closed doors, a fire in a chimney or smoke being blown away from the smoke alarm. For that reason, smoke alarms are recommended in all rooms, or at any rate on every floor.
- Where the alarm is not heard. A person may not be woken by the alarm if that person had consumed excess alcohol and/or drugs.
- A few fires are not always detected on time, e.g. smoking in bed, if there is no smoke alarm in the bedroom. In the case of escaping from gas or violent explosions, improperly storing explosive products and flammable liquids (petrol, paint, methylated spirit, etc.), electrical faults, acids, children playing with matches (fire).
- The lifespan of smoke alarms is 10 years.

PRODUCT WARRANTY

If used and maintained properly, the manufacturer guarantees this product, excluded battery against material and/or manufacturing faults for a period of 5 years from the original date of purchase by the consumer. Exceptions include damage arising from accidents or misuse. If the product becomes defective within the stated period, then it will be repaired or replaced free of charge. Please do not attempt to repair the product yourself or tinker with it, which will invalidate the warranty.

DoP (Declaration of Performance)

The DoP can be downloaded on our website www.fito.eu

INSTRUCTIONS FOR REMOVAL

The smoke alarm must be replaced after the date stated on the smoke alarm by the manufacturer. Do not dispose of your old smoke alarm in the bin, but rather hand it in to a local collection point for small, domestic waste.



Importer:

Fito Products B.V.
De Langkamp 12a
3961 MS Wijk bij Duurstede
Nederland. www.fito.eu