FireVibes WD100

GENERAL DESCRIPTION

The WD100 FireVibes series detector samples the air in the protected area; when the smoke quantity level exceeds a certain degree, a fire alarm message is sent to the control panel

WD100 is battery powered and doesn't need any system cabling installation.

WD100B is a black version of WD100. All pictures here below showing the white version are also valid for the black version.



DEPLOYMENT PROCEDURE

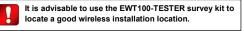
- Select a location for the detector. See LOCATION SELECTION.
- 2Ì Unbox the detector from its packaging.
- Detach the detector from its base. See INSTALLING / REMOVING THE DETECTOR. 3)
- Detach the battery cover from the detector. See BATTERY COVER.
- 5.1) a) Link the detector to the system (insulating tab extraction). See LINKING WAKE-UP WITH INSULATING TAB. See LINKING - ONE-BY-ONE - WITH INSULATING TAB.
- -- or --5.2) a) Power up the detector. See POWERING UP - FIRST TIME USE - WITHOUT INSULATING TAB. See POWERING UP - RECOVERY.
- b) Link the detector to the system (moving the link program switch). See LINKING WAKE-UP WITHOUT INSULATING TAB. See LINKING - ONE-BY-ONE - WITHOUT INSULATING TAB.
- 6) Reinstall the battery cover on the detector. See BATTERY COVER.
- Detach the identification tag from the base adapter. See IDENTIFYING THE DETECTOR. 7)
- Install the base adapter. See FIXING THE ADAPTOR BASE.
- 9ì Install the detector on the base adapter. See INSTALLING / REMOVING THE DETECTOR.
- Install the identification tag to the base adapter, with all relevant information written / labelled on it. See IDENTIFYING THE DETECTOR 10)
- Secure the detector to its base with its safety anti-tamper screw. See INSTALLING THE SAFETY SCREW. 11)
- 12) Test the detector. See TESTING.

LOCATION SELECTION

Select a location for the detector that conforms to your local applicable safety standards and that is in a good position for sending / receiving wireless signals to / from the father EWT100, IWT100 or XWT100 network device.

Mount the detector as far as possible from metal objects, metal doors, metal window openings, etc, as well as cable conductors, cables (especially from computers), otherwise the operating distance may greatly drop.

The WD100 must NOT be installed near electronic devices and computer equipment that can interfere with its wireless communication quality.







Evolving Security

BATTERY COVER

Detach the battery cover by pulling and lifting the closing latch. To reinstall the battery cover, insert its two hooks into their corresponding detector's recesses; then block it by pressing down the opposite side, until you hear the click of the closing latch.

INSTALLING / REMOVING THE DETECTOR

Rotate the detector clockwise on its adaptor base to install it. Rotate the detector anti-clockwise from its adaptor base to remove it

IDENTIFYING THE DETECTOR

The detector can be visually identified by the detachable tag imprinted with the adaptor base.

- 1) Detach the tag from the base.
- Write / label the relevant identification information on the tag. 2) -3Ì Insert the tag into its lodgement on the side of the adaptor base.

FIXING THE ADAPTOR BASE

Fix the base to the wall with suitable screws

INSTALLING THE SAFETY SCREW

Always install the safety blocking screw

LED INDICATORS STATUS MESSAGES

The two LED indicators communicate to the final user the status of the WD100.

Device status	LEDs indication
Power up (DIP on "ON")	Blinks red 4 times
Power up (DIP opposite "ON")	Blinks green 4 times
Entering wake-up mode	Blinks alternatively green / red 4 times
Link success (one-by-one)	Blinks green 4 times, then the same pattern again
Link failure (one-by-one)	Enters wake-up mode and signals "Entering wake-up mode" following this failure
Link success (wake-up)	Blinks green 4 times, then same pattern again
Link failure (wake-up)	Blinks green 4 times, then blinks red on once, then blinks alternatively green / red 4 times
Normal condition	LED off (can be programmed so as to blink green every wireless communication)
Alarm activation	Blinks red every 2 seconds
Battery fault	LED off (can be programmed so as to blink amber every 5 seconds)
Tamper fault	LED off
Replaced	Blinks amber 2 times
Test mode active	Blinks green
	Table

POWERING UP AND LINKING - PRELIMINARY NOTES

WD100 needs to be powered up with the supplied batteries. Linking is the operation through which WD100 is "wirelessly connected" to a EWT100, IWT100 or XWT100 FireVibes network device.

LINKING - WAKE-UP - WITH INSULATING TAB

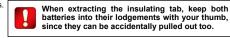
"Wake-up" linking consists in associating one or more child devices to the FireVibes system altogether in a single operation. Wake-up is performed either through the FireVibes Studio software or the EWT100 / IWT100 keyboard-screen interface; it CANNOT be done through XWT100 devices.

- 1) Create the "virtual model" of the WD100 either on FireVibes Studio or on the EWT100 / IWT100.
- 2) Pull out the insulating tab.
- 3) Trigger the wake-up procedure either from FireVibes Studio or from the EWT100 / IWT100.
- 4) Wait the end of the "wake-up" linking procedure.
- 5) Check on FireVibes Studio or from EWT100 / IWT100 for linking success. Consult their user manual.

LINKING - ONE-BY-ONE - WITH INSULATING TAB

"One-by-one" linking consists in associating one child device at a time to the FireVibes system. This operation is performed either through the FireVibes Studio software or the EWT100 / IWT100 keyboard-screen interface; it CANNOT be done through XWT100 devices.

- 1) Create the "virtual model" of the WD100 either on FireVibes Studio or on the EWT100 / IWT100.
- 2) Trigger the linking procedure either from FireVibes Studio or from the EWT100 / IWT100.
- 3) Pull out the insulating tab.
- 4) Wait the end of the "one-by-one" linking procedure.
- 5) Check on FireVibes Studio or from EWT100 / IWT100 for linking success. Consult their user manual



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marks on the detector and on the base.



Always install the safety blocking screw.

Please mind that LED signalling burns out battery power, therefore reducing batteries lifespan.

completely into its battery cover's lodgement. Check. more than once, that the cover's external tamper switch clicks when pressed.

Check the alignment of the raised reference

Always install the battery cover, since it is a vital

part of the tamper detection feature. Make sure

the battery cover is safely fixed, blocked and

closed. Make sure that the internal tamper spring fits



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Dust covers DO NOT provide

detectors

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Dust covers MUST be removed before the system can be made operational.

contamination:

producing work is started.

complete protection against

should be removed before construc-

tion. major re-decoration or other dust

POWERING UP - FIRST TIME USE - WITHOUT INSULATING TAB

Use this procedure the first time you power up a WD100; the detector has not been supplied with the insulating tab. 1) Make sure the Link / program switch is set on "ON". 2) Insert the two supplied batteries into their device's lodgments.

POWERING UP - DEVICE LINKED TO THE SYSTEM

Use this procedure when a WD100 is successfully linked to its FireVibes system and you have to extract one or both batteries (e.g. batteries substitution)

Reinsert the battery or both batteries into their lodgments.

If performing a batteries substitution, use two brand new batteries and substitute both of them. Do not touch the Link / program switch.

POWERING UP - RECOVERY

Use this procedure when you fail to link successfully a WD100 or you want to link it again.

1) Move alternatively the Link / program switch 5 times.

LINKING - WAKE-UP - WITHOUT INSULATING TAB

2) Set the Link / program switch on "ON".

3) Insert the two supplied batteries into their device's lodgments.



"Wake-up" linking consists in associating one or more child devices to the FireVibes system altogether in a single operation. Wake-up is performed either through the FireVibes Studio software or the EWT100 / IWT100 keyboard-screen interface; it CANNOT be done through XWT100 devices.

1) Create the "virtual model" of the WD100 either on FireVibes Studio or on the EWT100 / IWT100.

Power-up the detector (either "first time use" or "recovery").

- 3) Set the Link / program switch OPPOSITE to "ON".
- 4) Trigger the wake-up procedure either from FireVibes Studio or from the EWT100 / IWT100.
- 5) Wait the end of the "wake-up" linking procedure.

6) Check on FireVibes Studio or from EWT100 / IWT100 for linking success. Consult their user manual.

LINKING - ONE-BY-ONE - WITHOUT INSULATING TAB

"One-by-one" linking consists in associating one child device at a time to the FireVibes system.

This operation is performed either through the FireVibes Studio software or the EWT100 / IWT100 keyboard-screen interface; it CANNOT be done through XWT100 devices.

- 1) Create the "virtual model" of the child device either on FireVibes Studio or on the EWT100 / IWT100.
- 2) Trigger the linking procedure either from FireVibes Studio or from the EWT100 / IWT100.
- 3) Power-up the child device (either "first time use" or "recovery").
- Set the child device's Link / program switch OPPOSITE to "ON".
- 5) Wait the end of the "one-by-one" linking procedure.

6) Check on FireVibes Studio or from EWT100 / IWT100 for linking success. Consult their user manual.

TESTING

Magnet test

- 1) Activate test mode
- 2) Apply again the magnet in correspondence of the "magnet test activation area". LED indicators signal "Alarm activation".

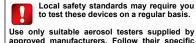


- 1) Activate test mode.
- 2) Apply the aerosol test device to the detector. 3) Wait a few seconds.
- 4) LED indicators signal "Alarm activation".

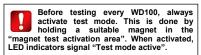
BATTERY FAULTS AND BATTERY SUBSTITUTION PROCEDURE

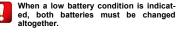
When one or both batteries are low in charge, a specific fault message is routed to the

- control panel. If such event occurs:
- 1) Remove the safety screw.
- 2) Remove the detector from its base. 3) Remove the batteries cover
- Extract both batteries.
- 5) Insert both new batteries into their holders, oriented as per polarity marks. See POWERING UP - DEVICE LINKED TO THE SYSTEM
- 6) Reinstall the batteries cover.
- 7) Reinstall the detector.
- 8) Reinstall the safety screw



Use only suitable aerosol testers supplied by approved manufacturers. Follow their specific use instructions.





Batteries must be brand new.

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Do not touch the Link / program switch.

Ensure that the batteries are installed properly, with their polarities matching the indications on the device.

MAINTENANCE - CLEANING

- 1) Remove the safety screw.
- 2) Remove the detector from its base.
- 3) Smoke entry areas: use a small, soft bristle brush to dislodge any obvious contaminants such as insects, spider webs, hairs, etc.
- 4) Smoke entry areas: use a small vacuum tube or dry, clean, compressed air to suck up or blow any remaining small particles away.
- 5) Wipe the exterior housing of the detector with a clean, damp, lint-free cloth to remove any surface film that can later attract airborne contaminants.
- 6) Install the detector onto its base again.
- 7) Test the detector.
- Reinstall the safety screw.

TECHNICAL SPECIFICATIONS *

Specification	Value
Communication range with EWT100, IWT100 or XWT100 network devices	200 m (in open space)
Wireless frequency band(s) of operation	868-868.6 MHz, 868.7-869.2 MHz, 869.4-869.65 MHz, 869.7-870.0 MHz
Number of wireless channels	66
RF output power (max)	14 dBm (25 mW) e.r.p.
Operating temperature range	-10 °C to 55 °C
Maximum humidity (non condensing)	95% RH
IP rating	40

* See TDS-TWDOX technical specification document for further technical data.

Table 2

Table 3

BATTERIES SPECIFICATIONS

Specification	Value
Batteries type	CR123A (3 V, 1.25 Ah)
Batteries lifespan *	10 years
Low battery threshold value (nominal)	2.850 V

* Batteries lifespan depends by environmental conditions, default monitor settings and link quality.

SMOKE SENSITIVITY SPECIFICATIONS

Detector's sensitivity setting *	Obscuration threshold value for alarm activation
High sensitivity	0.12 dB/m
Medium sensitivity (default setting)	0.15 dB/m
Low sensitivity	0.18 dB/m
* Detectorie emplo consitiuity can be act through Fire/libes Studie	Table 4

* Detector's smoke sensitivity can be set through FireVibes Studio

WARNINGS AND LIMITATIONS

Our devices use high quality electronic components and plastic materials that are highly resistant to environmental deterioration. However, after 10 years of continuous operation, it is advisable to replace the devices in order to minimize the risk of reduced performance caused by external factors. Ensure that this device is only used with compatible control panels. Detection systems must be checked. serviced and maintained on a regular basis to confirm correct operation. Smoke detectors may respond differently to various kinds of smoke particles, thus application advice should be sought for special risks. Detectors cannot respond correctly if barriers exist between them and the fire location and may be affected by special environmental conditions. Refer to and follow national codes of practice and other internationally recognized fire engineering standards. Appropriate risk assessment should be carried out initially to determine correct design criteria and updated periodically.

Use only in FireVibes fire detection and alarm systems.

WARRANTY

All devices are supplied with the benefit of a limited 5 years warranty relating to faulty materials or manufacturing defects, effective from the production date indicated on each product. This warranty is invalidated by mechanical or electrical damage caused in the field by incorrect handling or usage. Product must be returned via your authorized supplier for repair or replacement together with full information on any problem identified. Full details on our warranty and product's returns policy can be obtained upon request.

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WD100 WD100B Level or class of the performance per each essential characteristic can be found in the Declaration of Performance





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