Installation and operating instructions

Gira wireless diagnosis tool 2333 00



Gira

Õ

Ô

Gira Giersiepen GmbH & Co KG Electrical installation systems P.O. Box 1220 42461 Radevormwald Phone: +49 (0) 2195 602 - 0 Fax: +49 (0) 2195 602 - 191 info@gira.de www.gira.de

General information

Wireless diagnostic tool and duty to maintain

The use of wireless diagnostic tools does not replace the prescribed maintenance intervals that apply to smoke detector system components (see Dual& nbsp;Q smoke alarm device operating manual, Dual/VdS, wireless modules and the system description). The maintenance intervals must be carried out independently of the use of the wireless diagnostic tools.

Interruption of alarm forwarding

The wireless diagnostic tool enables the diagnostic functions of the smoke detectors. Through this activation, in rare cases, the alarm forwarding between your wireless networked smoke alarm device could be interrupted for a maximum of four minutes. After the four minutes are up, any active alarms will be received and routed through the wireless network.

The function of each smoke detector is ensured at all times.

• Influence of wireless diagnostic tools on the battery life

Note the following:

- Diagnostic tool + SAD (smoke alarm device) Dual Q: the life of the battery installed in the smoke detector (not replaceable) and the battery used in the wireless module (replaceable) are adversely affected.
- Diagnostic tool + SAD Dual/VdS: only the life of the battery installed in the smoke detector (replaceable) is adversely affected.
- Particularly the use of the function "Cyclic recording" with short recording cycles will shorten the battery life significantly.

Product features

The wireless diagnostic tool is used to check the smoke alarm device Dual Q with wireless module or Dual/VdS with wireless module. The wireless diagnostic tool consists of the wireless diagnosis USB box and the wireless diagnosis software.

- Installation control and status overview of smoke detectors.
- Connection of the wireless diagnosis USB box to the USB interface of a PC.
- Reading of the contamination level, serial number, battery voltage of the smoke detector, temperature and the last 20 events in the event memory via wireless.
- LED control of the wireless diagnosis USB box indicates the applied voltage supply.

Scope of supply

ñ

Π

GIRA

- Operating instructions
- Quick Start Guide
- Mini-CD (includes wireless diagnostic software and driver software for wireless diagnosis USB box).

System pre-conditions

- PC with Windows XP, Windows Vista or Windows 7 and installed Microsoft NET Framework 3.5 (available for free from Microsoft).
- Mini CD compatible CD/DVD drive.
- USB port with 500mA to power the wireless diagnosis USB box.

Install the driver software

- Install the drivers for the wireless diagnosis USB box from the mini-CD. Follow the instructions with the driver and install the software.
- 2. Connect the wireless diagnosis USB box via the included USB cable to a USB port on the PC.
- 3. The PC searches and automatically installs the driver for the wireless diagnostic tool.

Make sure to comply with the installation order

The sequence described above must be observed to avoid malfunctioning.

Check diagnosis software for updates and download them

Gira makes updates available in its download area (www.gira.de/service/download/software) for the diagnostic software. After installation, check how current the diagnostic software is.

Software settings

COM port

After installing the USB driver and connecting the wireless diagnosis USB box to the PC, a "virtual" COM port is established. This COM port is used only for communication between the wireless diagnostic software and wireless diagnosis USB box. Once the diagnosis software has located and connected to the wireless diagnosis USB box via the corresponding port, the information "Connected to [COMx]" appears in the status line of the diagnostic software.

Π

Wireless diagnosis USB box is not found

If the wireless diagnosis USB box can not be found automatically, the search can be repeated in [Settings] -> [Connect].

One reason for not being able to locate the wireless diagnosis USB box could be that the wireless diagnosis software was started before the wireless diagnosis USB box was connected, or before the drivers were installed.

Language

In [Menu] -> [Settings] -> [Language] the user can choose between German and English for the menu language.

Ô

Setting up the project

The following applies when setting up a project:

- All smoke alarm devices in a building or a housing unit can be summarised in a project.
- Any number of smoke alarm devices can be added to a project.
- The smoke alarm device assigned to a project does not necessarily have to belong to a group.
- Ensure that all smoke alarm devices associated with the project are in wireless range of the wireless diagnosis USB box.

In [File] -> [New Project] a new project is created.

In [Edit] -> [Project Setup] the editing mask for setup can be called up at a later time.

Add a smoke alarm device to your project

Searching for smoke alarm devices is done in two steps.

1. The group address of a smoke alarm device is read.

2. Search for all the smoke alarm devices associated with the group. A newly-detected smoke alarm device will be automatically added to the project and the search for further smoke alarm devices will continue.

Locate a smoke alarm device

Smoke alarm device Dual Q

1. Loosen the smoke alarm device from the mounting plate and start the programming mode on the wireless module (Hold down the Prog button for 4 sec.).



- 2. Lock the smoke alarm device onto the mounting plate.
- 3. Press the function key.



- 4. Once the smoke alarm device has sent its group ID, loosen the smoke alarm from the mounting plate again and exit the programming mode on the wireless module.
- 5. Lock the smoke alarm device onto the mounting plate.

Smoke alarm device Dual/VdS

 Press the [Locate Smoke Alarm Device] button and activate the transmission of the group information on any smoke alarm: activate the programming mode on the smoke alarm Dual/VdS (press the function key on the smoke alarm).



- 2. Once the smoke alarm device has transmitted its group ID, exit the programming mode.
- 3. After confirming the group address the group is searched for associated smoke alarm devices.

The search can be repeated any time. Only smoke alarm devices that are not yet known are added to the project.

Naming the smoke alarm devices

Smoke alarm devices are given names for convenience purposes only, as it facilitates assignment within the building. The naming convention (e.g. Kitchen) will be displayed along with the smoke alarm ID and the group address and reproduced in the measurement data.

The designation is limited to 20 characters.

Switching the ringing tone on and off

Activate a signal tone on the smoke alarm device via the wireless diagnosis software. After approx. 30 sec., the smoke alarm device gives visual and audible feedback. This makes it possible to locate any smoke alarm device, even in complex installations.

The [Signal On] button activates the signal tone. To switch off, follow the same procedure.

During the ringing of the tone, the tone can also be deactivated by pressing the function button on the smoke alarm device itself.

Search all smoke alarm devices in a group

Newly-assembled and an existing group of associated smoke alarm devices can be located in the relevant group using the [Find] button. Any new smoke alarms that are detected are automatically added to the list.

Clear smoke alarm devices from the list

Smoke alarms that no longer exist or are no longer found are not automatically deleted from the list.

Use the [Delete] button to remove a smoke alarm device from the list. In [Edit] ->[Delete Smoke Alarm List] all smoke alarm devices can be permanently removed from the list.

Manage project

You can manage various projects with subordinate groups and individual smoke alarm devices.

All managed project data can be used at any time for a quick and reproducible diagnosis. For smoke alarm groups to which no changes were made, it is not necessary to reprogram the smoke alarm devices. When creating a project, a project folder with the project name for the measurement data is created. In addition, a project file (*.rwm) with the relevant project data will be stored on the same level as the file.

New project

In [File] -> [New Project] a new project is created. Existing data (project data and measured values) are automatically stored and the list of smoke alarm devices and the measurement table are emptied. There is no data yet to be stored in the file system at this point. This step takes place only when the project is saved

Save project

Under [File]->[Save Project] the current project is saved. If no name has been assigned for the project, a prompt appears. The same applies to the measurement data. If a name has yet to be assigned, the user will be prompted to enter a name before storing the measurement data.

Open project

Under [File]-> [Open Project] all project data already saved are loaded. Existing data (project data and measured values) are automatically stored and the list of smoke alarm devices and the measurement table are emptied.

Save project as

Under [File]-> [Save Project As] an opened project can be saved under a new name. Example old file name: RWM_Musterhaus_010120016 New file name: RWM_Musterhaus_01062016

Measured values

Once the data is read from a smoke alarm device, they are appended to the measurement table. Measurement tables are stored in XML format in the file system. Alternatively, the data contained in a measurement table can also be exported in CSV format.

Open measured values

Under [File]->[Open Measured Values] the stored values are loaded. The wireless diagnosis software does not perform any checks on whether the measured values match the project data.

Save measures values as

Under [File]->[Save Measured Values As] the measured values are stored.

CSV export

The measured values are stored as a CSV file through the CSV export. The CVS export enables the processing of the measured values with CSV-format compatible applications (for example, Microsoft Excel).

Print measurements

Under [File]->[Print] the measured values shown are printed. Here, a print preview is displayed where, for example, the page settings can be adjusted and the printer can be selected. A data export in other formats (e.g. PDF) is possible if the appropriate drivers are installed on the computer.

Diagnosis

The wireless diagnosis tool can read various forms of status information for a smoke alarm device.

Status information such as temperature, pollution level and battery voltage are included with colours (traffic light function) in addition to the measured value.

Colour	Recommendation
Green	No maintenance required
Yellow	Maintenance recommended (still functioning)
Red	Maintenance required (function limited)

The event log is displayed separately for each smoke alarm device and lists the last 20 events, such as alarms and error information (for example, a power failure or low battery).

Column	Description	Information
Time stamp	Time and date when the diagnostic data was received from the SAD	
Surname	Designation of the SADs in the project	Common name, e.g. "Kitchen"
Serial number	Serial number of the SAD	Required for service requests
Temperature	Current temperature internally measured by the SAD. This is contin- uously updated by the SAD	For temperatures above 50 °C SAD can trigger a heat alarm. If the temperature measured by the SAD distin- guishes itself significantly from the room temperature, the installation site should be checked.
Pollution level	This percentage value indicates how diry the space chamber is (e.g. with dust). < 80% = green ≥ 80% = yellow = 100% = red	Starting with a contamina- tion level of 100%, the SAD signals an error. The internal control can no longer com- pensate for certain contami- nation. If, after a short time, a high contamination level is meas- ured on any of the SADs installed, the installation site must be the checked.
Battery- Voltage	Display of the current residual voltage found in the battery of the smoke alarm device, in Volt [V]. New batteries have a voltage of about DC 9 V. > 7 V = green ≤ 7 V = yellow ≤ 6,8 V = red	According to the provisions, the SAD must monitor the battery voltage. The warning "Low Battery" allows for timely replacement of the battery (dual/VdS SAD only). Through the wireless diagno- sis, the battery of the SADs receives an extra load and the battery service life is shortened (Low battery already at about 6.8V).
Group	Internal Wireless ID of the SAD group.	
Alarm device	Internal Wireless ID of the individual SADs.	

*SAD = Smoke alarm device

Read the smoke alarm device

In the operating mode "Read device" a wireless diagnosis software can perform a targeted reading of an individual smoke alarm device. The smoke alarm devices can be selected from the list of smoke alarm devices. The selected smoke alarm device is listed next to the Start button. By clicking on [Start] the wireless diagnosis software starts to read the corresponding smoke alarm device. The reading of a smoke alarm is finished after about 1 minute. The data obtained will be added to the measurement table. The process can be interrupted at any time using the [Stop] button.

Diagnosis

In the "Diagnostics" operating mode, all selected smoke alarm devices in the list are read out sequentially. A selected smoke alarm device has a checked box before the name of the smoke alarm. The data obtained will be added to the measurement table as soon as the smoke alarm device has been read. The diagnosis is complete when all of the smoke alarm devices have been read. The process can be interrupted at any time using the [Stop] button.

During diagnosis, a query time of about 1 minute per alarm device should be expected.

Cyclic recording

In the operating mode "Cyclic recording" a diagnosis is carried out at the selected interval. The wireless diagnosis software checks whether all of the smoke alarm devices can be read out at the predetermined interval. If necessary, select a longer interval.

Depending on the smoke alarm device, approx. 1 minute is needed for the data to become available and read into the software. The maximum duration of the diagnostic data recording should not exceed 14 days so that the battery of the smoke alarm device does not become overburdened.

Show event memory (only dual/VdS smoke alarm devices)

A smoke alarm device should be capable of internally storing the last 20 events (for example, smoke alarm, test alarm or low battery condition).

- During each reading of a dual/VdS smoke alarm device, the event memory of the smoke alarm is also read.
- After selecting a dual/VdS smoke alarm device, the event memory of the corresponding smoke alarm device is displayed. The data can be updated by reading a dual/VdS smoke alarm device.
- All data are presented in chronological sequence, with the most recent event at the top.
- Within the smoke alarm, the event log information is updated in the active events shown in the table.
- In addition, the most recent events are updated in the cycle of 20 days or 20 days after the last event if there is no other event.
- The passive events described are logged with each event memory update, but do not trigger an update of the event log.

Event memory recording	Meaning			
Active smoke alarm device events				
Smoke alarm	This SAD triggered an alarm based on the measured atmospheric opacity (smoke). This alarm was transmitted to the other (wireless) networked SADs.			
Temperature alarm	This RWM triggered an alarm based on the measured temperature or tempera- ture change. This alarm was transmitted to the other (wireless) networked SADs.			
Wireless alarm	This RWM reported an alarm that was transferred via wireless from another SAD.			
Alarm wire	This RWM reported an alarm that was transferred via wire from another SAD.			
Weak battery	This RWM issued the warning "Low Battery".			
SC error	Smoke chamber code			
TS error	Temperature sensor code			
Passive smoke alarm device events				
230 V failure	Indicates whether the 230 V SAD was supplied at the time of the recording. If the 230V SAD was not supplied, this entry is always set.			
Wireless test alarm	This RWM reported a test alarm that was transferred via wireless from another SAD.			
Wire test alarm	This RWM reported a test alarm that was transferred via wire from another SAD.			
Status	Smoke alarm status code			

*SAD = Smoke alarm device

Signal

In the "Signal" operating mode, the signaling of a smoke alarm is switched on or off in order to find the smoke alarm.

Uninstall the USB driver software

- In [Windows] -> [System Control] -> [Programme] -> [Uninstall Programme] pull up the list of installed programs and drivers.
- 2. Select the diagnostic software and in [right mouse-click] -> [Uninstall], delete it.
- Select the driver software and in [right mouse-click] -> [Uninstall], delete it.

Technical data

Power supply:	via USB cable
USB port	
Туре:	1.1
Amperage:	500 mA
Wireless bus	
Transmission frequency:	433.42 MHz, ASK
Transmission range:	100 m (free field)
Ambient temperature:	-5 °C to +50 °C
Dimensions (H x B x T):	110 x 38 x 100 mm

Products and solutions

Problem	Solution
The diagnostic software or its installation will not start	The diagnostic software requires the Microsoft .Net Framework 3.5.
	The software requires Windows XP, Windows Vista or Windows 7.
The wireless diagnosis soft- ware can not connect to the wireless diagnosis USB box	The wireless diagnosis USB box is not adequately supplied with power from the USB port. => Use another USB port (USB Power) or => Use a USB hub with an external power supply.
	The necessary USB driver is not installed or is not properly installed. => Reinstall the USB driver from the included CD or from the download section of Gira.
	The USB cable is defective or not properly connected. => Check the USB cable connection. => Use a commercially available A/B USB cable as a replacement. Recom- mendation: only use shielded cables < 3m.
	=> Restart the PC to complete the driver installation
	=> Restart the diagnostic software or => Choose "Connect" in the menu to begin a new search for the wireless diagnosis USB box
One or more SADs were not found during diagnosis or no diagnosis data were received	The transmission was disturbed by an interfering transmitter. => Repeat transmission, search for and disable the interfering transmitter
	The SADs are out of wireless range of the wireless diagnosis USB box. => Reduce distance to the SAD.
	SAD is not ready for operation. Programming mode activated? => activate. Sufficient power supplied over bat- tery? => Change the battery.
The desired time can not be set during cyclic diagnosis	During diagnosis, approximately one minute is needed per alarm device to query the diagnostic data. Shorter query times as the total count SAD x 1 min are therefore not possible.
The software stops respond- ing after the USB connec- tion has been disabled	The USB connection is disabled dur- ing communication between the diag- nostic software and the wireless diagnosis USB box. => End and restart the diagnostic software. Previously-recorded data are kept and can be restored by restarting the diagnostic software.

Warranty

The warranty is provided in accordance with statutory requirements via the retailer.

Please submit or send faulty devices postage paid and with an error description to your sales representative (retailer/installation company).

The salesperson will forward the devices to the Gira Service Center.