

# **WirelessControl**

## ***Maintenance Plan***





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### 1 Introduction

EN 50172 requires that regular maintenance should be carried out on emergency luminaire systems. Maintenance on WirelessControl systems must take place at least once a year.

**Important:** The tasks should be carried out in the order listed in this maintenance plan.

### 2 Maintenance Procedure

#### 2.1 Checking the system for unregistered devices

Check if there are any unregistered devices in the system. If so, the status message **1 device not associated / x devices not associated** is displayed in the **General** tab (Fig. 1). In order to register devices, please follow the sequence plan in Fig. 2.

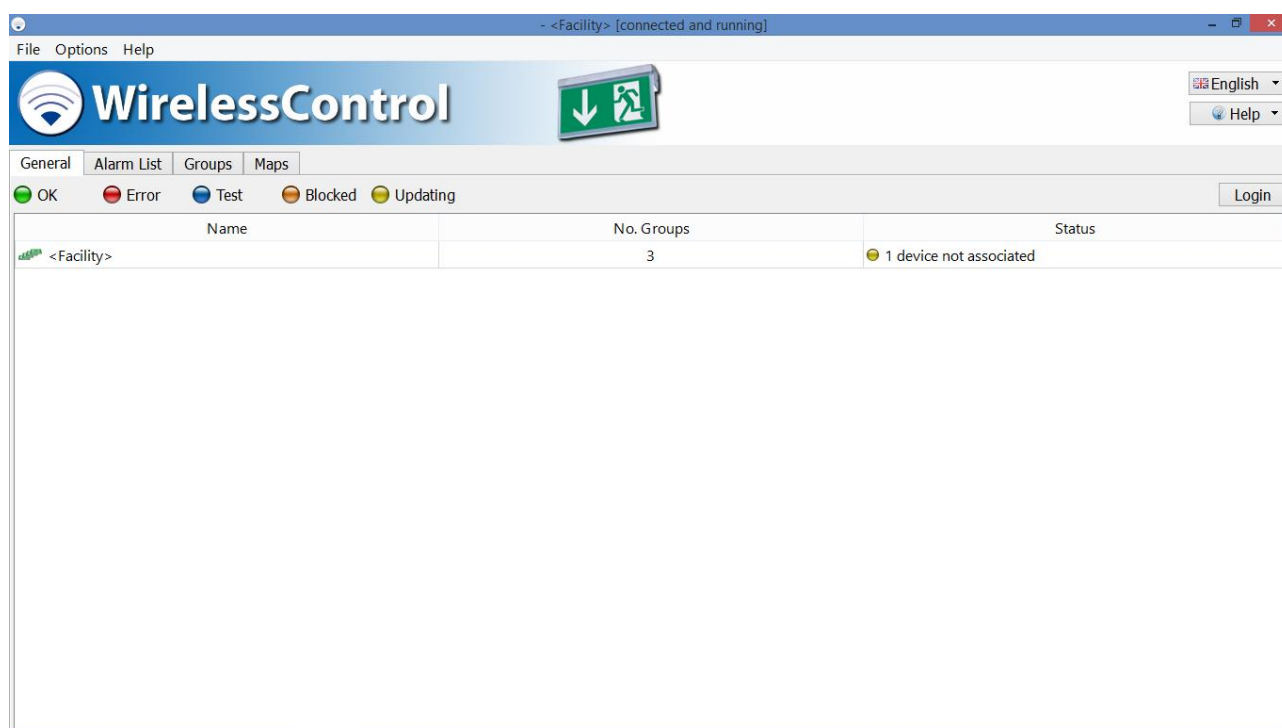


Figure 1: General tab – 1 device not associated

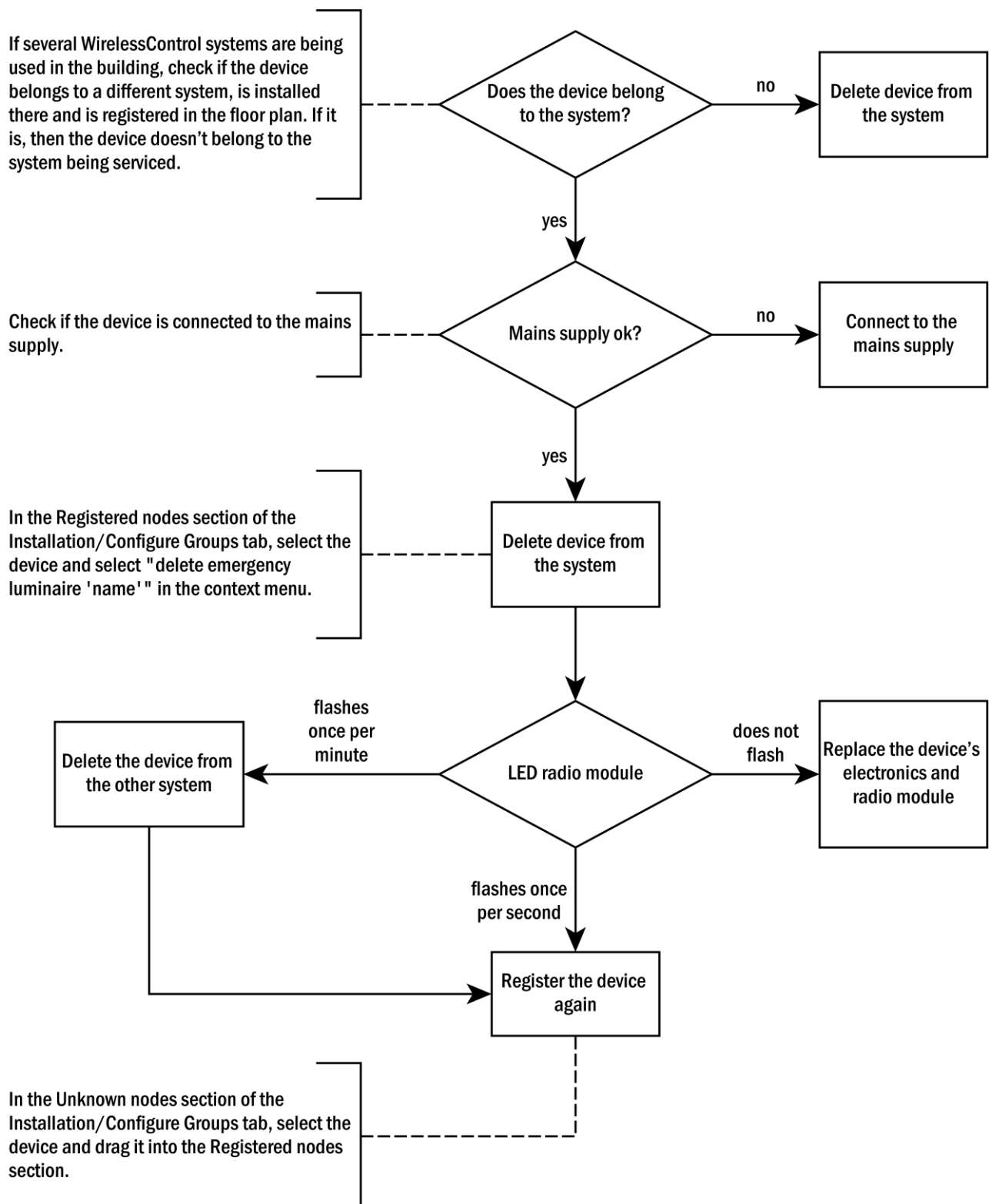


Figure 2: sequence plan to register unregistered devices

### 2.2 Removing battery errors

Check if there are any battery errors in the system. A battery error occurs if a device's battery is not charged.

If there are any errors in the system, the status message **errors on x devices** is displayed in the **General** tab. If there are errors present, switch to the **Alarm List** tab (Fig. 3). Clarify if there are any devices with the error message **Battery error**. Devices with the error message **Last test failed: Battery error** are not addressed in this part of the maintenance plan.

If there are any devices with the error message **battery error**, follow the sequence plan for error elimination in Fig. 4.

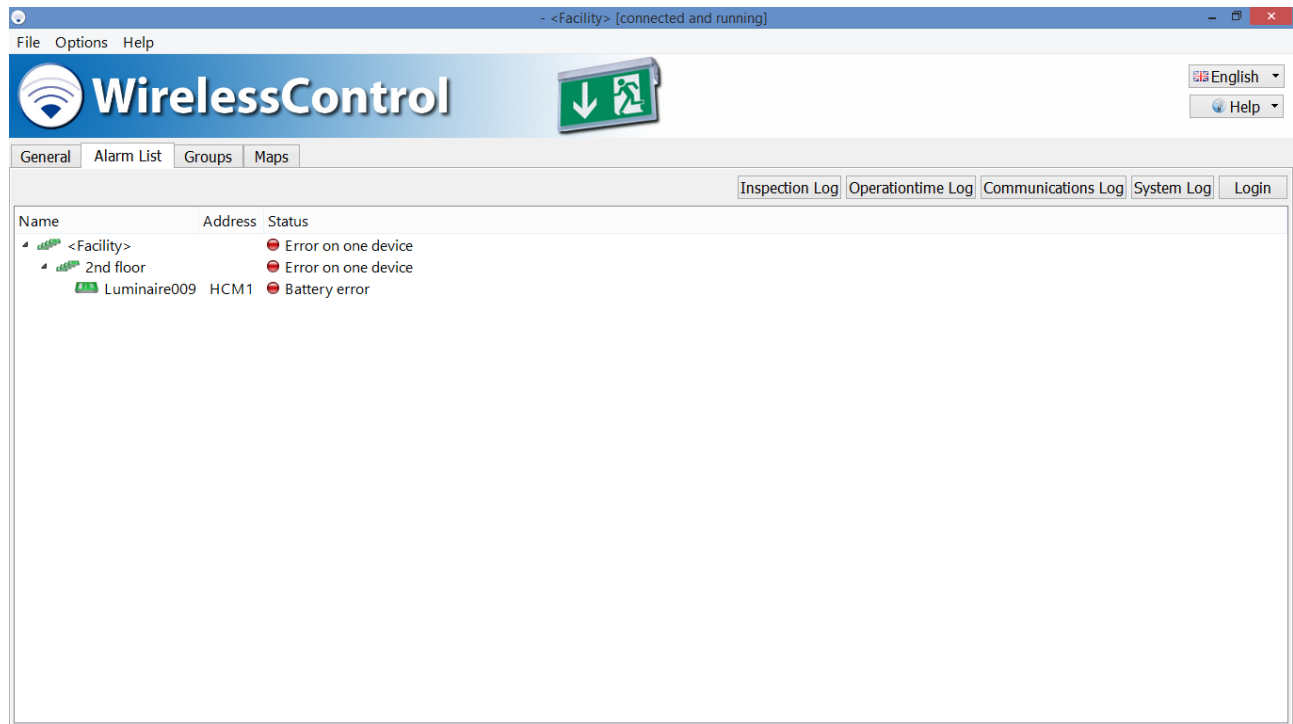


Figure 3: Alarm List tab – battery error

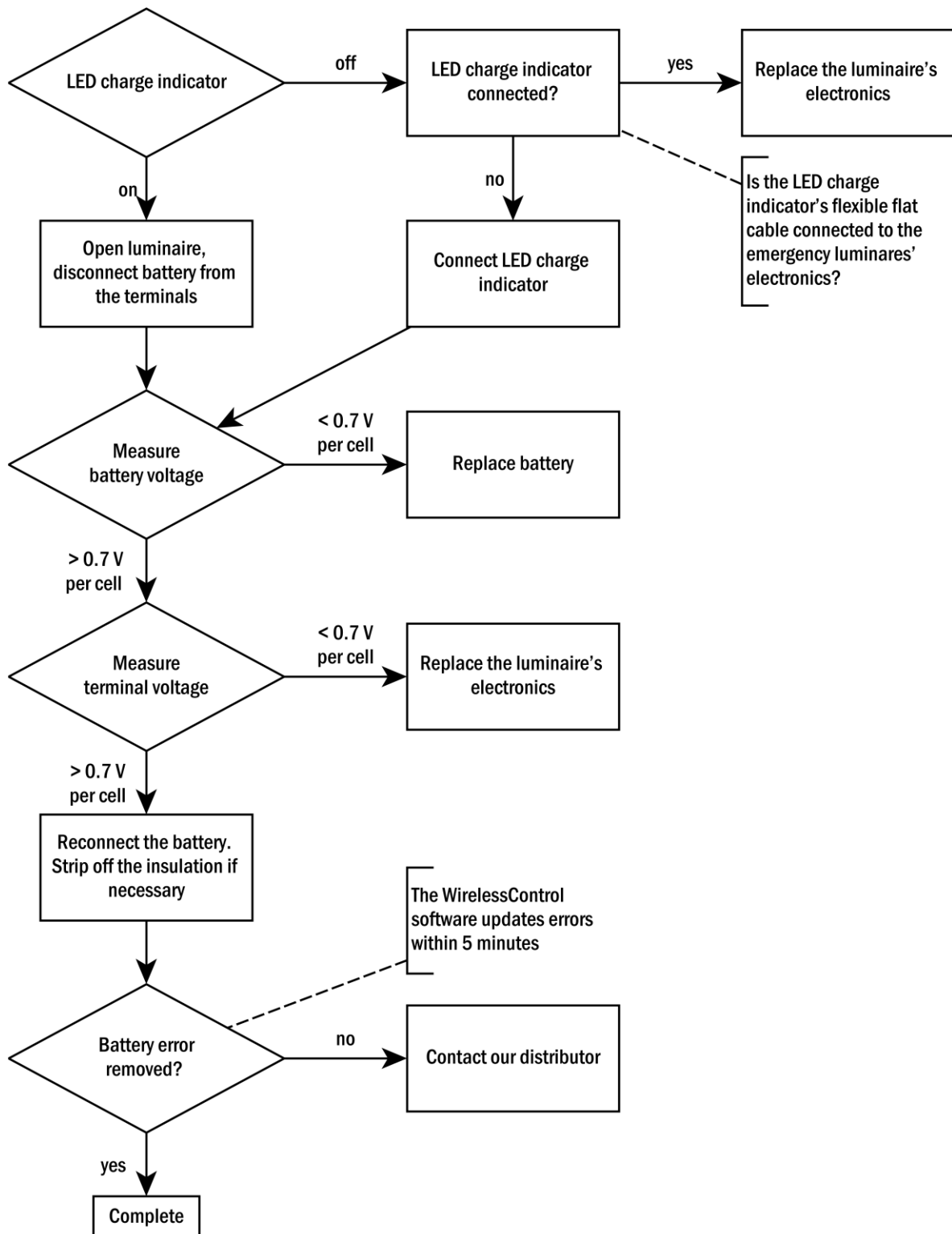


Figure 4: sequence plan to eliminate battery errors



### 2.3 Checking the IO Box

If there are IO Boxes in the WirelessControl system, their functionality needs to be checked. All the IO Boxes present in the system are displayed in the lower section of the **Maintenance** tab. If the **Maintenance** tab isn't displayed, open it by selecting the option **Perform maintenance** in the **Help** menu.

#### 2.3.1 Checking the 24V DC voltage

Use a multimeter to check if the voltage at the 24 V DC output of the IO Box is 24 V DC.

If the voltage measured at the output is not 24 V DC: remove the conductors from the output terminals and remeasure the voltage at the terminals.

If the newly measured voltage is now 24 V DC at the output: check the conductors at the 24 V DC output for short circuits and eliminate them.

If the newly measured voltage is not 24 V DC at the output: replace the IO Box.

#### 2.3.2 Checking the relays

Check the function of the IO Box relays K1 – K3. In the **Maintenance** tab, click or touch twice on an IO Box entry in order to open the device details window. Select the **Configuration** tab in the device details window (Fig. 5). Touch or click on an output's **T**-button in order to switch its relays. A sound should be heard when switching the relays. Using a continuity tester or a voltmeter, check if the relay contact switches correctly at the corresponding output. If this does not occur, the IO Box should be replaced.

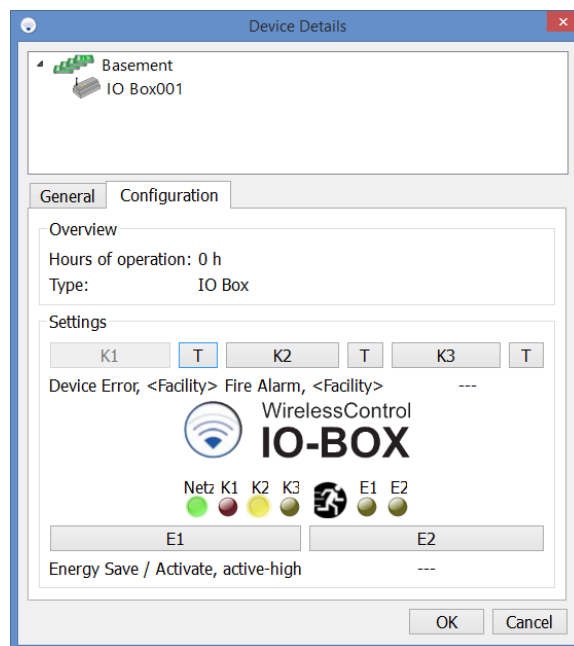


Figure 5: IO box device details window, configuration tab

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## 2.4 Checking the date of the last duration test

EN 62034 requires a maximum time interval of one year between two duration tests. Check if a duration test has been carried out in the last 12 months by opening the inspection log in the **Alarm List** tab and observing if the entry "A automatic/manual capacity test was started" has been recorded at least once in the last 12 months.

If such a duration test has not been recorded in the inspection log in the last 12 months, then it must be carried out. Arrange an appropriate time with the building operator. The relevant regulations, building shutdown periods and battery recharging times should be taken into consideration here. The duration test can be started using the **Start Capacity Test** button in the **General** tab.

Once the duration test has been completed, eliminate any errors that may have occurred.

**Please note:** It is possible to set an automatic duration test in the WirelessControl system (refer to section 3.9 of the user manual **WirelessControl Setup and Operation**). The relevant regulations, building shutdown periods and battery recharging times should be taken into consideration. The building operator should also be consulted.

## 2.5 Checking the parameters of the wireless network

The measurement parameters in the **Network Information** tab show any errors in the WirelessControl system's wireless network. Start a 10 minute measurement in the **Network Information** tab to observe if all measurement results display a green colour symbol once the measurement has been completed (Fig. 6).

If one or more of the measurement results display a red colour symbol, you should contact our distributor.

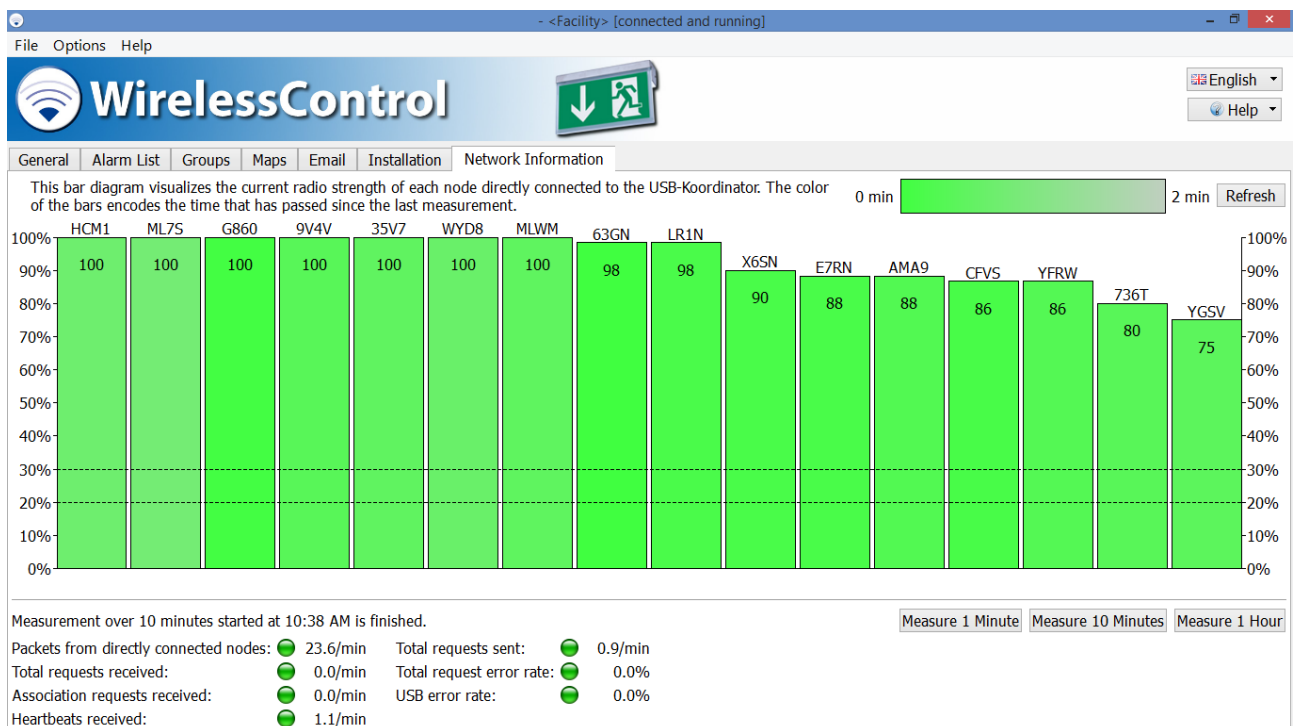


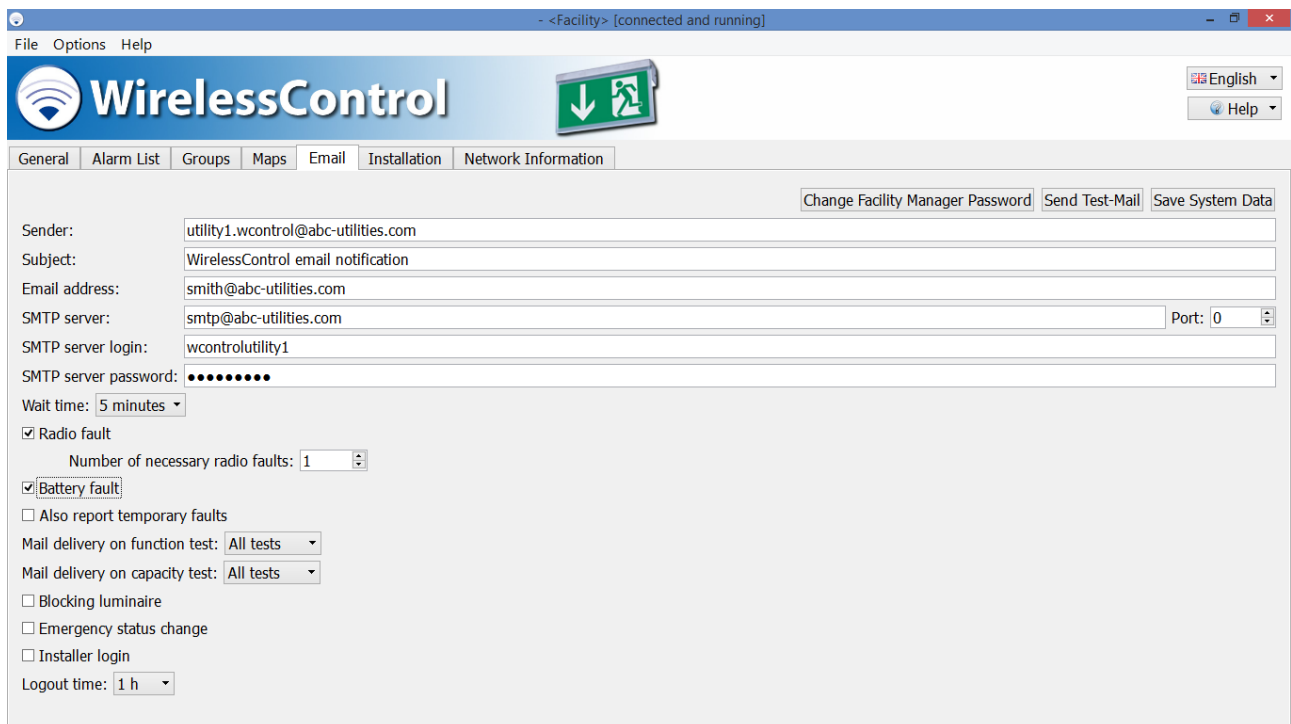
Figure 6: Network Information tab – installer user level

### 2.6 Email delivery test

If the automatic email delivery function is set in the WirelessControl system, this must be checked during maintenance. Click on or touch the button **Send Test-Mail** in the **Email** tab and confirm if the sent email is received by the recipient.

If the test email is not received by the recipient, check,

- if the computer is connected to the mail server (e.g. via a local network). If the computer is connected with a network cable, check if the cable is properly connected and intact. If the computer is connected via Wi-Fi, check if the connection is functional.
- if the recipient's email account is functional, by sending an email from a different email account to the recipient's email account.
- if the connection port to the SMTP server (selected in the **Email** tab) is blocked by the network's firewall. Ask the network administrator if the port is blocked by the firewall.



The screenshot shows the WirelessControl software interface. The title bar indicates the status as "<Facility> [connected and running]". The menu bar includes "File", "Options", and "Help". The main header features the WirelessControl logo, a green exit sign icon, and language/help options set to "English" and "Help". The "Email" tab is selected in the navigation bar, which also includes "General", "Alarm List", "Groups", "Maps", "Installation", and "Network Information".

At the top right of the Email tab, there are three buttons: "Change Facility Manager Password", "Send Test-Mail", and "Save System Data". The configuration fields are as follows:

- Sender: utility1.wcontrol@abc-utilities.com
- Subject: WirelessControl email notification
- Email address: smith@abc-utilities.com
- SMTP server: smtp@abc-utilities.com
- Port: 0
- SMTP server login: wcontrolutility1
- SMTP server password: (masked with dots)
- Wait time: 5 minutes
- ☒ Radio fault
  - Number of necessary radio faults: 1
- ☒ Battery fault
- ☐ Also report temporary faults
- Mail delivery on function test: All tests
- Mail delivery on capacity test: All tests
- ☐ Blocking luminaire
- ☐ Emergency status change
- ☐ Installer login
- Logout time: 1 h

Figure 7: Email tab

## 2.7 PC status check

### 2.7.1 Optical check

Check the PC for visible external damage. If necessary, remove the PC from its wall mount.

- Is the screen damaged (e.g. crack/fissure in the screen)?
- Is the PC housing damaged (e.g. cracks or deformations)?
- Are the PC's vent openings exposed?
- Are there any water marks on the PC housing?

### 2.7.2 Checking the hard drive

Check the status of the PC's hard drive using the **CrystalDiskInfo** software. This software is pre-installed on the WirelessControl system PC. Start the **CrystalDiskInfo** software by accessing the relevant entry under the PC's start menu.

If the **CrystalDiskInfo** software describes the hard drive status with **Caution** or **Bad** (see Fig. 8), please contact our distributor.

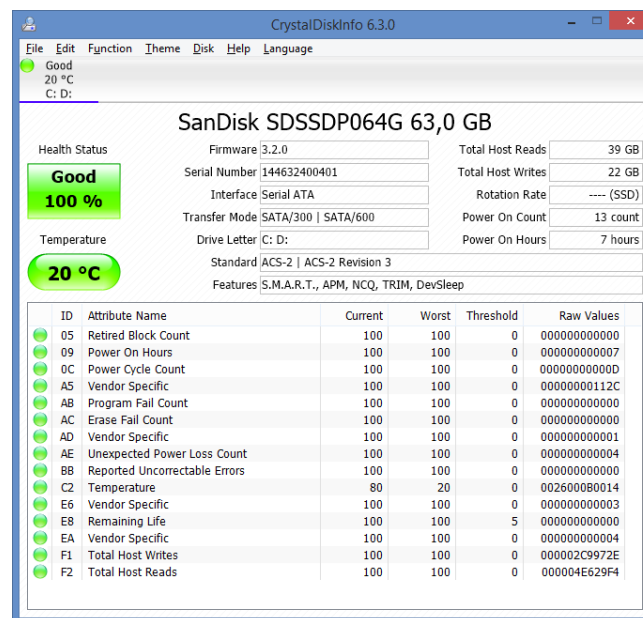


Figure 8: **CrystalDiskInfo**, harddrive with status **Good**

### 2.7.3 Checking the computer's battery

Disconnect the computer from the mains power supply and run the computer on the built-in battery for 30 minutes. If the computer automatically switches itself off within the 30 minute test time, replace the battery.

## 2.8 Carrying out a data backup

Save the folder C:\WirelessControl on an external data storage device (USB stick, external hard drive).

## 3 Revision History

WirelessControl – Maintenance Manual		
Date	Software Version / Revision	Comment / important changes
09.11.2015	1.0.0	Creation

### 4 Contact Information

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