IronConnect Pro

USER MANUAL

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User manual

BIOSERVO
Strength for Life

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1. Getting started

IronConnect Pro is available for iOS and Android devices. Please make sure that you always have the latest version installed.

Follow the steps bellow to get started.

1. Download the IronConnect Pro app from the App Store or Google Play.


Scan to download for iOS

Scan to download for Android

2. Request access to IronConnect Pro from your distributor. An account is required to take advantage of all features in IronConnet Pro.

3. Request access to Bioservo Academy for video training material and relevant documents, eg. Sizing guides and Screening documents for a successful implementation.

4. The first time you start IronConnect Pro, the Glove Configuration menu is displayed. Click on the menu icon in the top left corner, and select Log in.
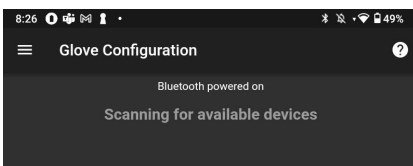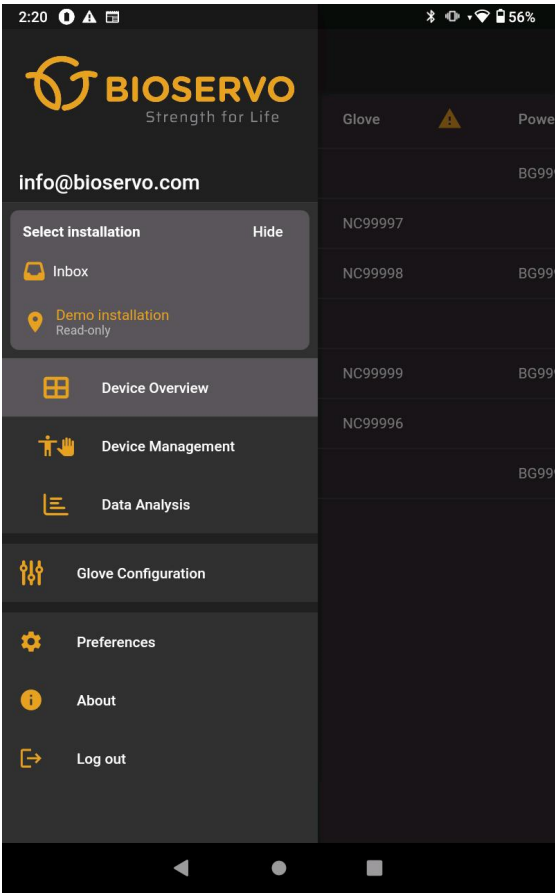
2.   Overview

Click on the menu icon to go to the main menu. The IronConnect app is easy to navigate and all relevant information and settings can be found in the main menu.
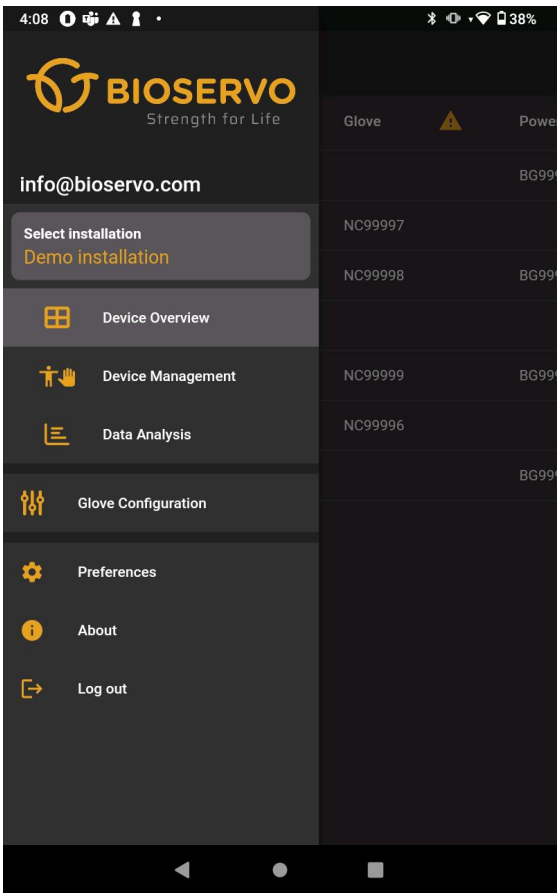
3.   Select installation

In this view you select the installation to work with in the Device Overview, Device Management, and Data Analysis views. Installations are normally created for a company's plants, work sites, or other geographical areas. The Inbox is where equipment is placed when delivered from the distributor.

4.   Device overview

In device overview the user is presented with an overview of all equipment and operators within an Installation. By clicking on the heading in each column the user can sort the information.

5.   Device managment

Under device management, the user can create Operators, assign Gloves and manage Power Packs.

The global search function allow the user to quickly find the information that he or she has access to. By clicking on the icon with the two arrows the user can sort trough different filters.
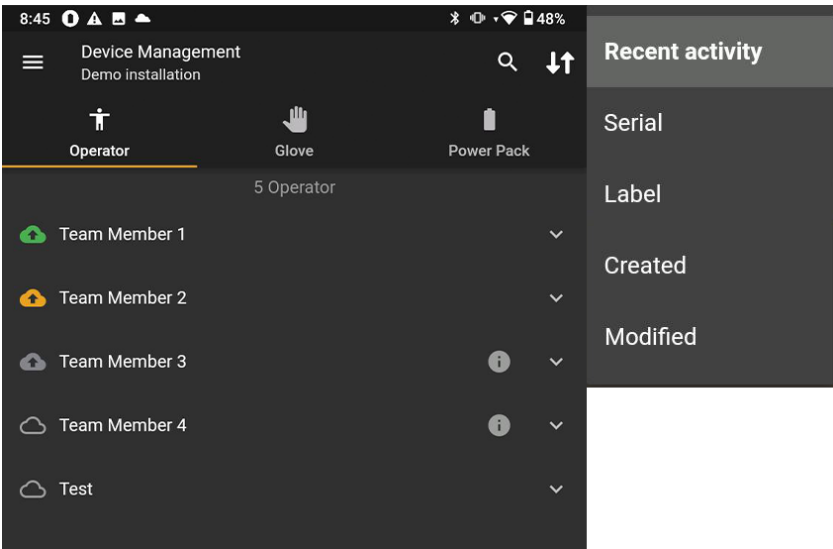
Status indicators:

	Has been active and data uploaded within the hour
	Has been active and data uploaded within 24 hours
	Has been active and data uploaded at some point in time
	Never uploaded any data

Note: The status indicators will be reset if the Glove or Power Pack is moved to another installation.

5.1 Operator

In the Operator tab, the user can see an overview of all Operators that has been added to the installation. In the overview, an information icon is shown if the Glove assigned to an Operator hasn't been calibrated. To create digital assessment reports the user needs to assign a glove to an operator.

By clicking on the arrow to the right of an Operator, a detailed view is expanded. In that view you can see how long ago the user did an upload, the last Glove and Power Pack used, and have access to the log. By clicking on the two arrows in the upper right-hand corner, you can sort by different filters.
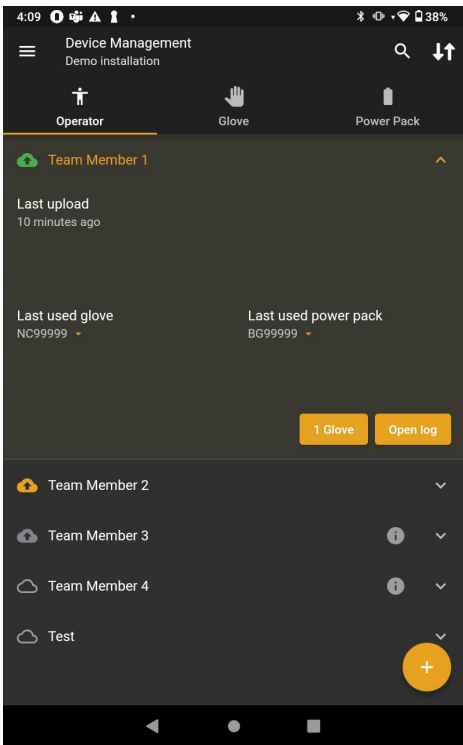
5.2   Glove

In the Glove tab, the user can see an overview of all Gloves that have been added to the installation. In the overview an warning icon is shown if there are any problems with the Gloves. By clicking on the arrow to the right of a Glove, a detailed view is expanded. In that view you can see the size of the Glove, the last upload, the Operator that uses the Glove, and the label. The label is a text field you can use to identify different Gloves. You can also see what date the glove was first used.

By clicking the diagnostics button you can see potential warnings and errors. By clicking on the two arrows in the upper right-hand corner, you can sort by different filters.
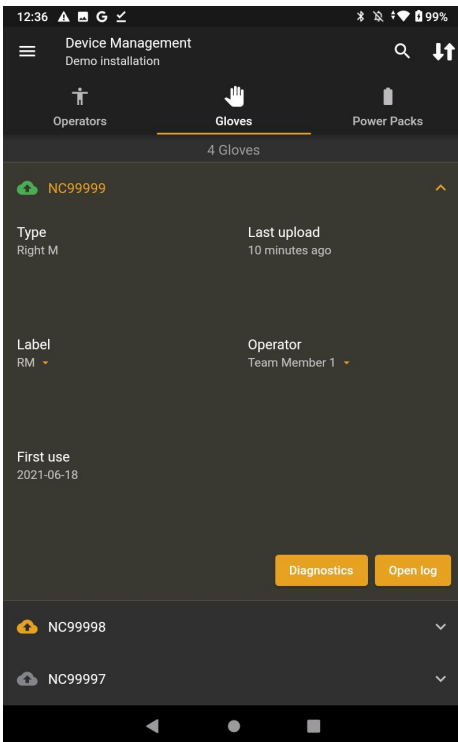
5.3   Power Pack

In the Power Pack tab, you can see an overview of all Power Packs that have been added to the installation. In the overview an warning icon is shown if there are any problems with the Power Packs. By clicking on the arrow to the right of a Power Pack, a detailed view is expanded. In that view you can see the firmware version, the last upload, and the label. The label is a text field you can use to identify different Power Packs. You can also see which glove was last used, who used the the Power Pack last and when it was first used. You can also see the MAC address for the Power Pack.
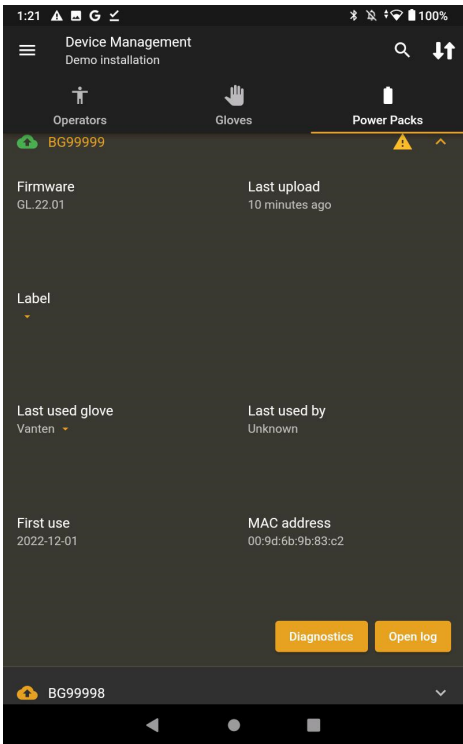
By clicking the diagnostics button you can see potential warnings and errors. By clicking on the two arrows in the upper right-hand corner, you can sort by different filters.

6.   Data analysis

Under data analysis the user can create new and find existing digital ergonomic risk assessment reports.

6.1   Existing reports

By clicking on the arrow icon next to a report the user can find more relevant information.
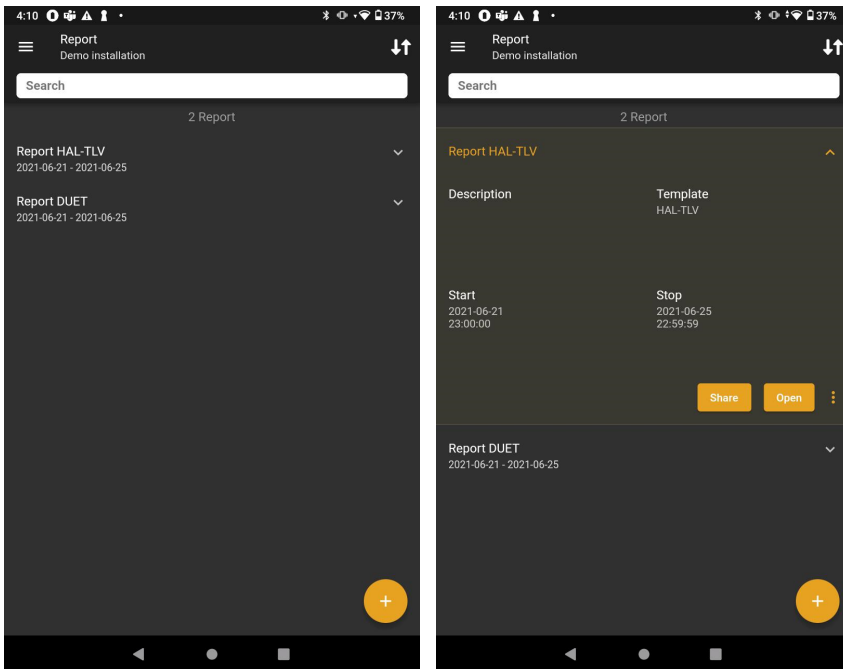
By clicking "open", a separate browser window is opened containing the report. The user can easily share the report with his or her contacts. IronConnect supports a number of different ways to share reports.

By clicking on the "three dots" icon the user can edit, delete or export the report to an comma separated file (CSV).

Note: When the end date has passed, the report is locked and cannot be edited.

6.2   Creating a new report

Fill out a title and a brief description, select one of the Hal-TLV or DUET templates. For more information regarding Hal-TLV and DUET see chapter "Device management and Data analysis" in the Ironhand academy.

Select a start and stop date, the collection of data is rendered live which means that the user can select an end date in the future and data will be collected up to that date. Select which Operators should be included in the report.
Note: Data is still being collected even if a report does not exists.

The user can add a subscriber to the report, the subscriber will receive a notification to that email-address when the report has reached the end date.

7. Glove configurations

7.1 How to connect

The first step is to press twice on the power button on the Ironhand remote control to enable the connection to Ironhand. Now the Ironhand unit will be displayed in the Glove Configuration window. Click on connect.
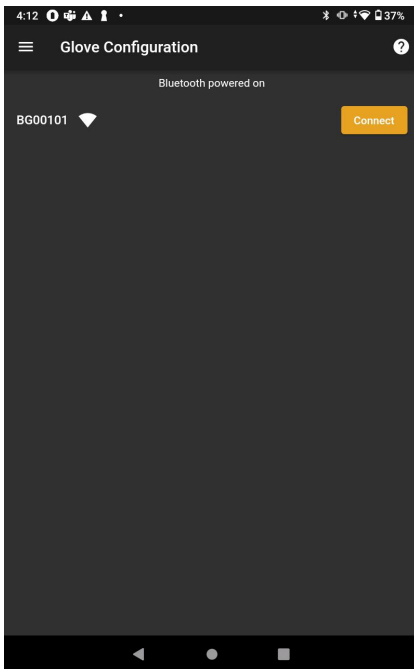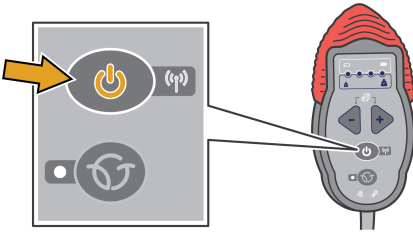
7.2   How to add and edit profiles
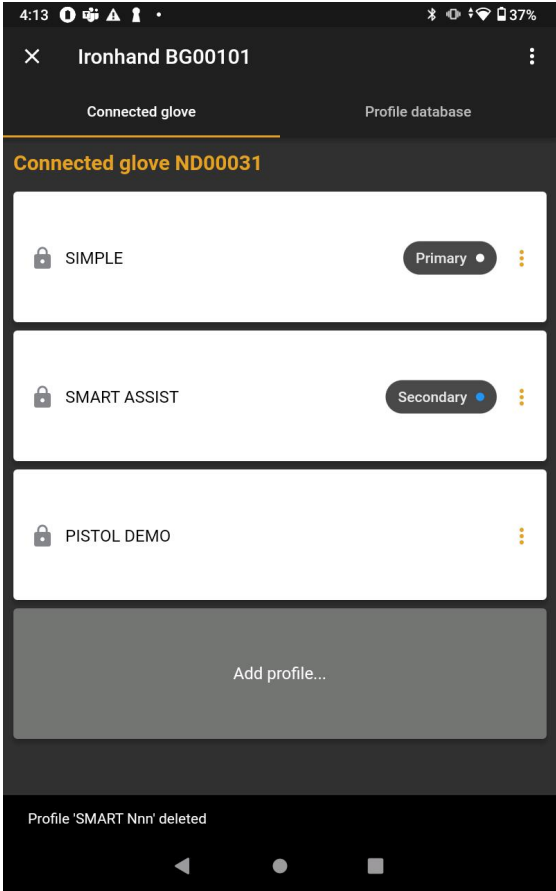
IronConnect pro has three default profiles. Two manual profiles and one smart assist profile. To make changes to an existing default profile, tap on the profile to open the profile editor choose the option "Save as a copy".


To add a new profile, click on "add profile", enter a suitable name and click on save.

Note: The default smart assist profile is automatically adjusted and cannot be edited. For more information about smart assist visit Ironhand academy chapter " Glove Configuration"

To create a customizable smart assist profile, where the user can disable locking tendency and/or palms sensor click on the three dots on the smart assist profile and click on "copy as", enter a name and save.

The user can switch between a primary and a secondary profile by using the remote control on the Ironhand. In the app the user can define which profiles should be primary and secondary on the remote control.
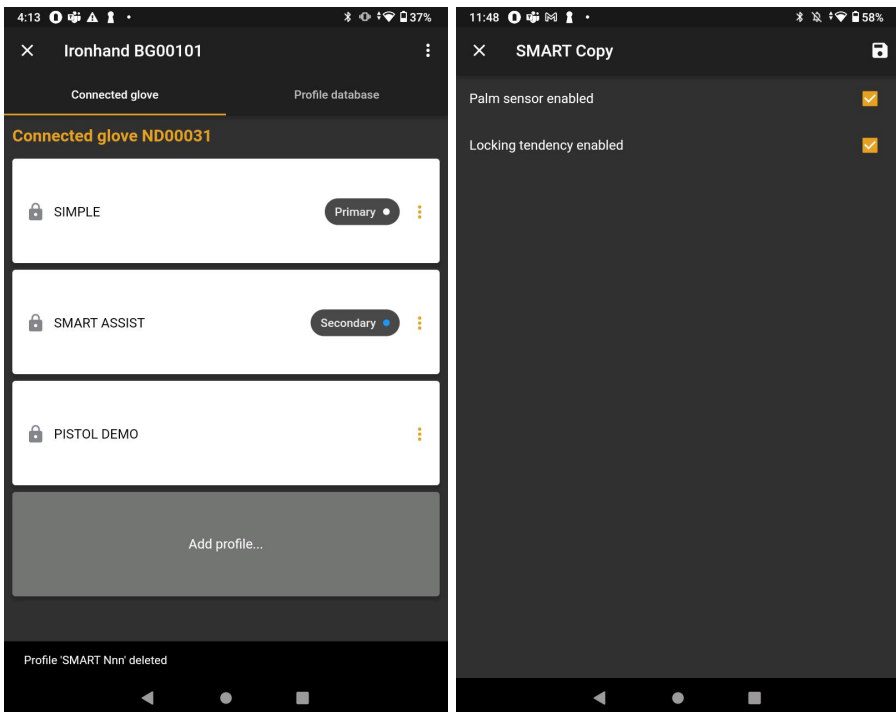
7.3   Profile database

Here the user can load existing profiles from previously connected Gloves to the connected Glove. This can be useful if there is a need to copy existing profiles to a new Glove.
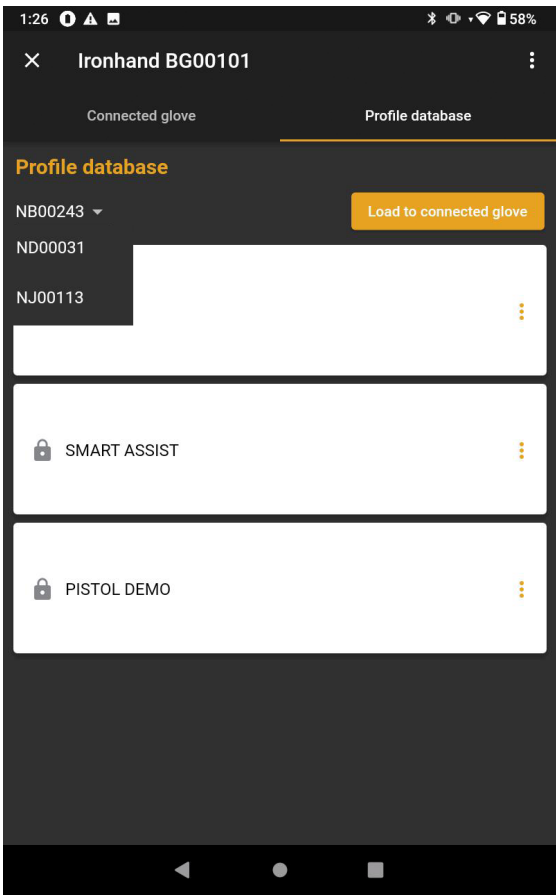
7.4   Profile customization

IronConnect allows the user to make adjustments to the Glove in real time. By clicking and holding on any of the sensors symbols the user can link individual fingers to each other by dragging and dropping.
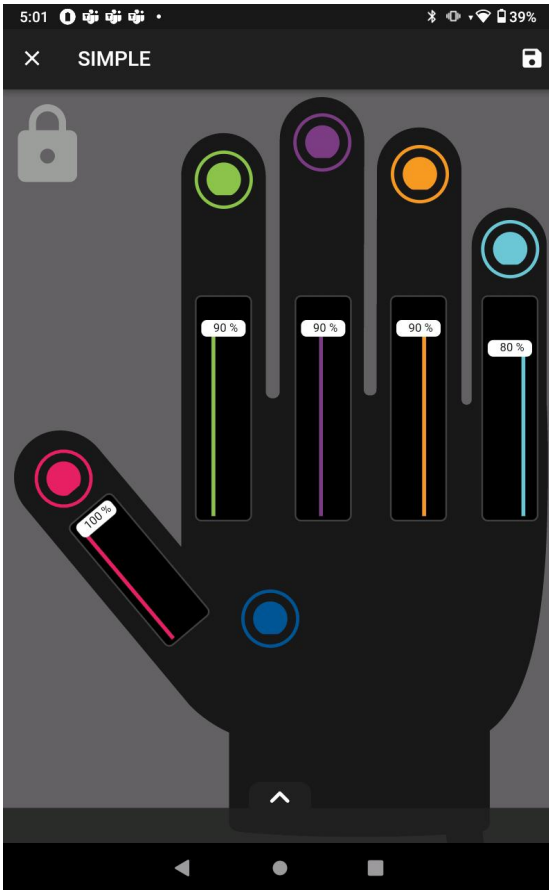
7.4.1   Profile settings

Drag the slider to either increase or decrease the value of each setting. To learn more about the different settings visit the Ironhand academy chapter "Glove Configuration"
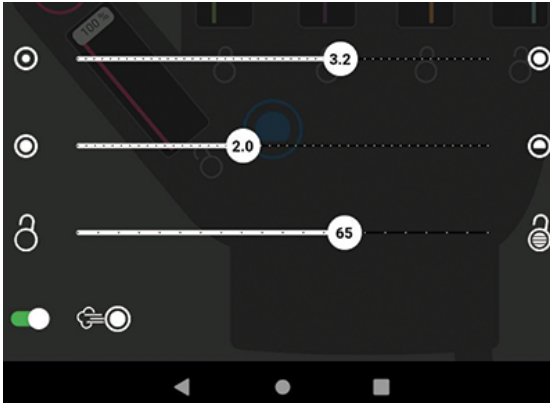
Sensitivity controls the responsiveness of the sensors in relation to the force applied.

Threshold detriments how much force the Operator must apply to the sensors before the system activates.

Locking tendency allows the Glove to maintain it's force even if the Operator relaxes the grasp. The user can deactivate locking tendency for individual fingers by clicking on the "padlock" icons under each finger in the app.

Quick grasp makes the system react faster. It makes a prediction of the Operators next grasp and adjust the tendon of the Glove accordingly. This can be useful if the work task includes quick, repetitive grasps. Quick grasp is turned on or off by clicking the switch next to the icon.
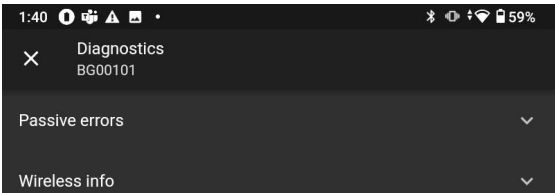
7.5   Settings and information

To access the settings and information window click on the three dots icon in the top right corner.
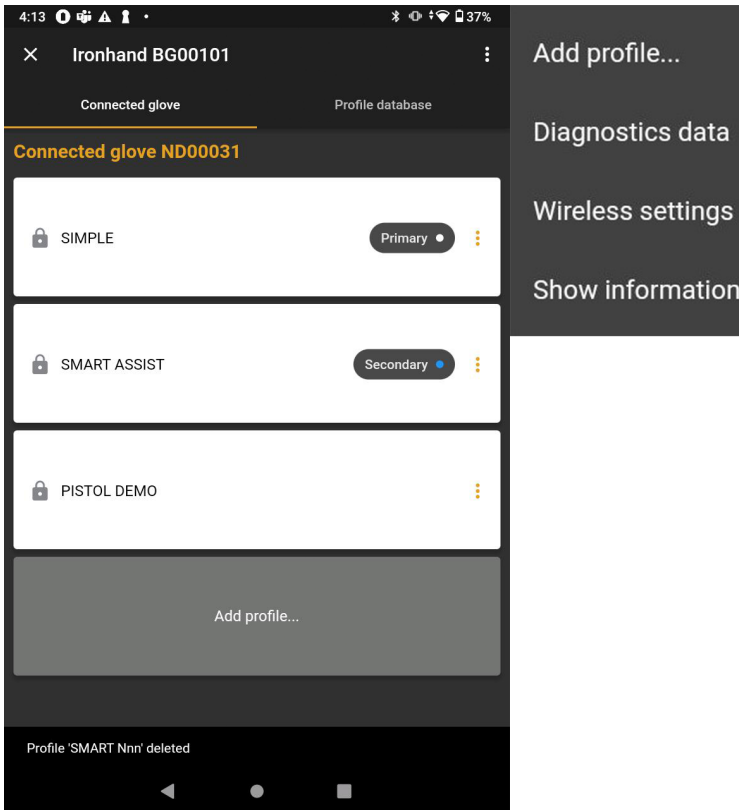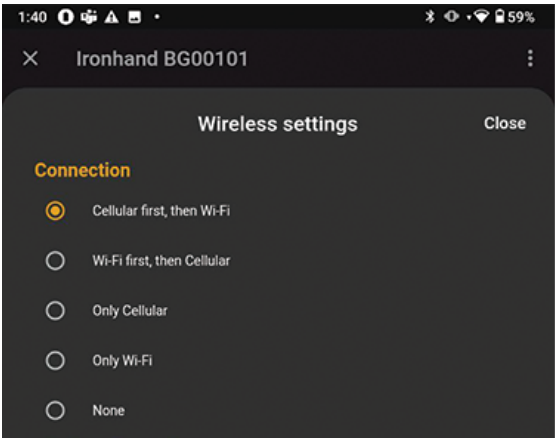
## 7.5.1   Diagnostics data and Wireless settings

Under Diagnostics the user can find information on previous intermittent(passive) errors and wireless diagnostics information.

Wireless settings: There are five different types of connection options to choose from.

Cellular first, then Wi-Fi	IronConncect will connect to the cellular network in the area. If a cellular network is not found, IronConnect will connect to Wi-Fi.
Wi-Fi first, then cellular	IronConnect will connect to a Wi-Fi. If no wi-fi is found, IronConnect will search for a cellular network.
Only Cellular	IronConnect will only connect to a cellular network.
Only Wi-Fi	will only connected to a Wi-Fi network.
None	IronConnect is not connected.
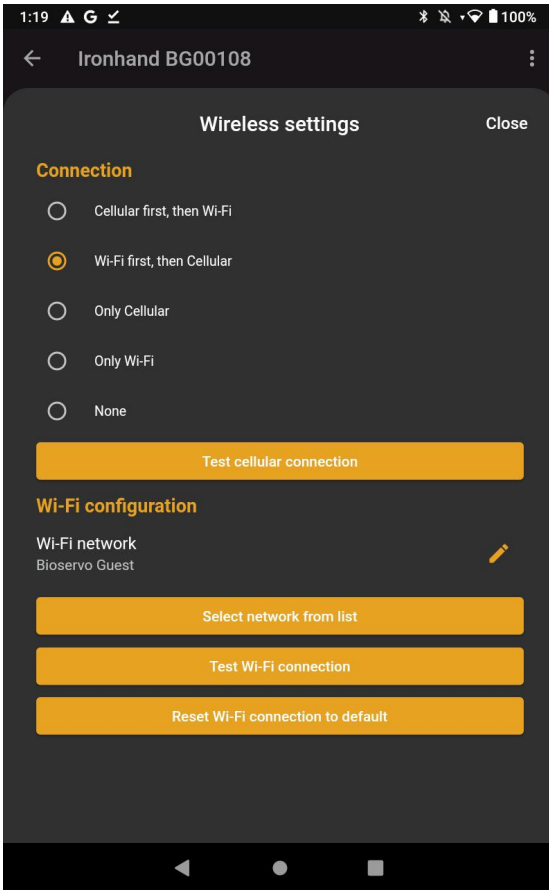
Ironhand supports Wi-Fi networks using the 802.11n standard running on 2,4Ghz frequency.

Supported encryption methods are WPA2 or no encryption.
By default ironhand will search and connect to a Bioservo network. To connect Ironhand to your Wi-Fi, click on the "pen icon" and enter the SSID and password or click on "Select network from list". Note: only logged-in users may edit the wireless settings.
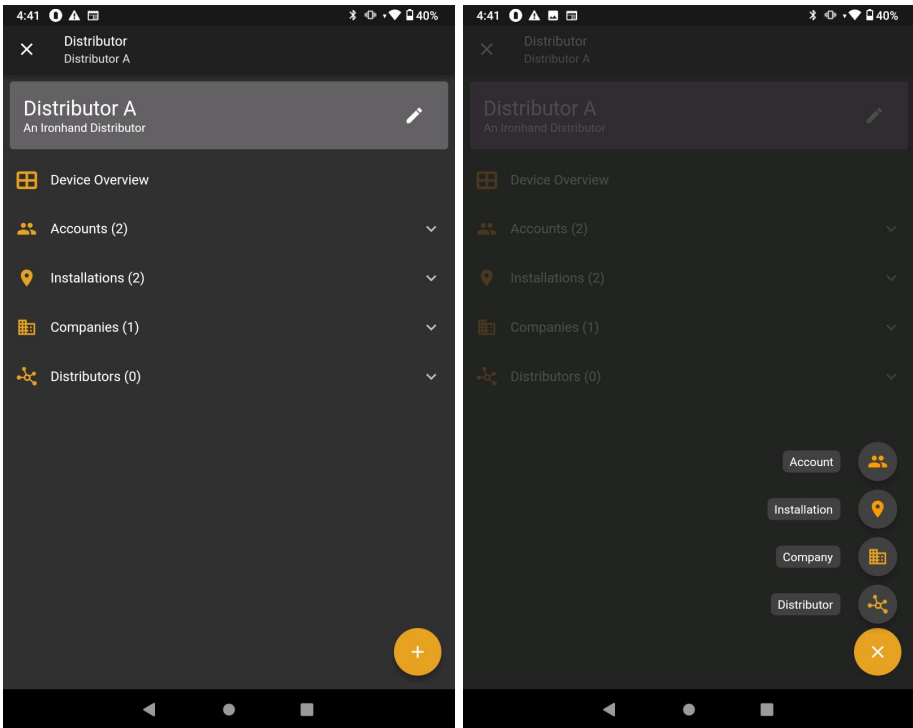
8.　　Company

Note: The company tab is only available for distributor accounts.

In the company section, distributor users are able to manage own distributors, customer companies, installations and accounts.
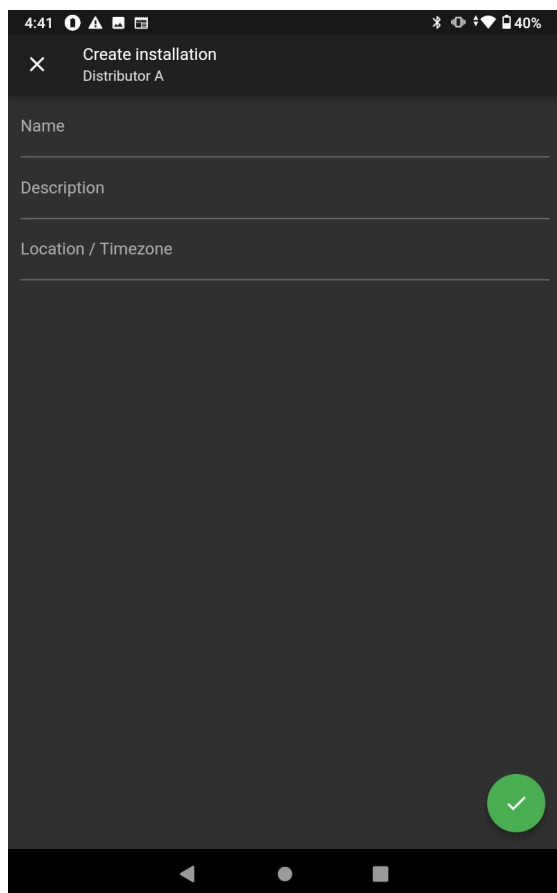To add a new company click on the "+" icon, enter the name of the company and a description.

Click on the created company to see installations and accounts for that company, the inbox is automatically created.

For more information about adding a company see "How to add a company in IronConnect" in the Ironhand academy.

8.1   Create installations

Click on the "+" icon, enter a name, description and a timezone for that location.

8.2 Create accounts

Start by enter the email-address for the account, then select the account type, either a super user or a distributor user. Check the different boxes to determine what type a access this specific user should have when using the IronConnect app.
Click on the "green check mark" to continue.

When the account is created, click on "Installations" to choose which installations and access type the user will have access to.
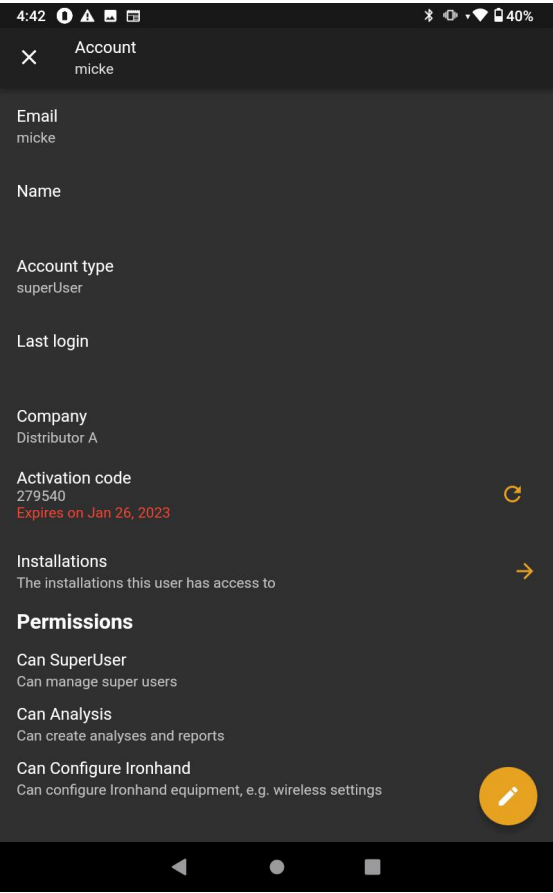
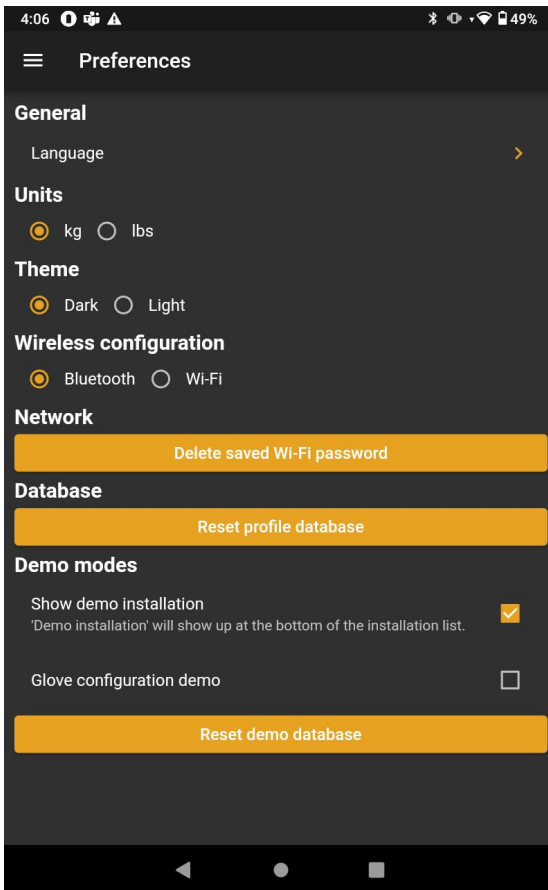For example super user access for "site A" and normal access for the inbox.
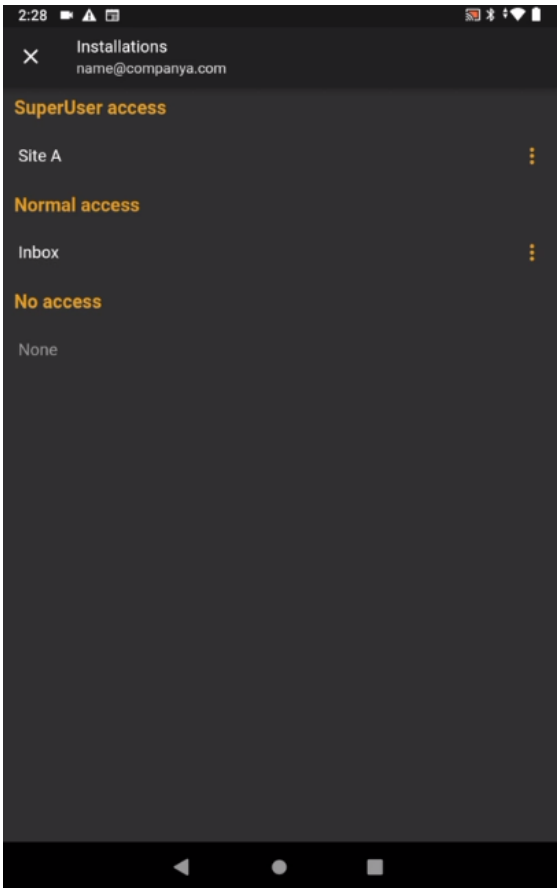
An activation code will be sent to the email-address that was provided when creating the account. The activation code is needed when the user log in for the first time.

# 9.	Preferences

This view allows to user to customize the app to his or her preferences as well as delete saved Wi-fi passwords, reset profile databases and show demo installations.

By checking the "Glove Configuration demo" box, users can demonstrate Glove Configuration without being connected to an Ironhand Glove.

Distributor: