ottobock.



CE

connectgrip. 560X27-1=*

EN Instructions for use (qualified personnel) 3

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1 General

INFORMATION

Date of last update: 2026-10-08

- ► Please read this document carefully before using the product and observe the safety notices.
- ► Instruct the user in the safe use of the product.
- ► Please contact the manufacturer if you have questions about the product or in case of problems.
- ► Report each serious incident related to the product to the manufacturer and to the relevant authority in your country. This is particularly important when there is a decline in the health state.
- ► Please keep this document for your records.

These instructions for use are available online in additional languages or can be ordered as a printed copy free of charge at the e-mail address order-ifu@ottobock.com.

Document: 647G1854 **Version**: 03

Download: https://product-documents.ottobock.com/IFU/INT/560X27/647G1854/03/O/S/F

2 Safety-related information

CAUTION!

Risk of injury due to product malfunction

- ► Do not touch the demo prosthesis while it is being controlled.
- ► Observe the instructions for calibration.

3 Product description

3.1 Function



The connectgrip app provides a user-friendly interface for users and qualified personnel to control and personalise myoelectric arm and hand prostheses. It facilitates simple adjustments, the visualisation of signals in real time and the recording of individual movements to compensate for unwanted behaviours. Users gain improved control, while qualified personnel benefit from optimised adjustment options, improving both functionality and comfort.
Agreeing to the terms of use is a prerequisite for using the app.
Qualified personnel require an Ottobock ID and certification.

3.2 Information on the adjustment app

INFORMATION

The menu items listed in these instructions for use may deviate from the actual menu items due to the products and the app version.

Download on the App Store

GET IT ON Google Play

- The app can be downloaded free of charge from the respective app store (Apple App Store, Google Play Store). Enter the following search terms: “connectgrip’”, “Ottobock” or scan the QR codes.
- Large font sizes in combination with small screens can cause text on the screen to be cut off or illegible. Information about the functions of the controls and adjustment parameters in the adjustment app is provided in these instructions for use.
- Always keep the mobile adjustment app up to date.

- If you suspect a cybersecurity issue, please contact Ottobock.

4 Intended use

4.1 Indications for use

The product is to be used exclusively for exoprosthetic fittings of the upper limbs.

4.2 Qualification

The user must be instructed about the use of the product by authorised, qualified personnel.

4.3 Product combinations

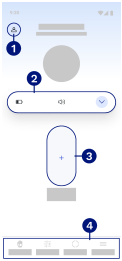
The combination of the control unit and adjustment app only supports Ottobock terminal devices and analogue signal processing. Please see the respective instructions for use for information on adjusting other products.

5 System Requirements

For information on compatibility with mobile devices and versions, refer to the information in the Apple App Store or Google Play Store.

6 Operating elements for the adjustment app

This is an overview of the app's navigation points and adjustment options.



1. User account (see page 9) – for qualified personnel only
2. Status bar (see page 9)
3. Control switch (see page 10)
4. Tab bar (see page 11)

6.1 User account

To set up the connected product and configure advanced settings, you need to log in using your Ottobock ID. This is only possible after certification for technicians/therapists (expert/therapy expert) has been completed.
The user account icon displays the login status of the user.

User is logged out

User is logged in

Depending on your login status, tapping the user account icon allows you to view a submenu containing the following options:

- **Login / Log out** (see page 13)
- **Manage / delete account** (see page 13)
- **Certification** (see page 13)

6.2 Status bar

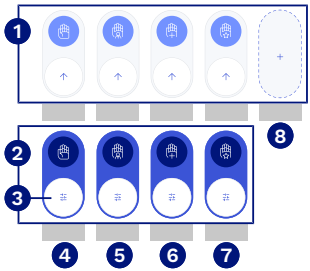
The status bar provides a quick overview of the most important system states of the connected product. Tap on the drop-down button 1 to expand the status bar. Additional information and submenus may be displayed depending on the product and status.



- The battery indicator ❷ shows the charge level in 25 % increments.
- Tapping **Product status** (see page 15) ❸ takes you to the Product status page.
- Tapping **Connections** (see page 12) ❹ takes you to the **Connect product** page.

6.3 Control switches

- The control switches are located on the **Control** tab (see page 22).
- They enable users to quickly switch between different prosthesis controls.
- The illustration shows inactive ❶ and active ❷ variants of the switches.
- To activate a prosthesis control, swipe the arrow button upwards and hold briefly (see page 23).
- Once a prosthesis control is active, the control settings can be adjusted using the round button ❸.



- **Test control ❹**
  A test environment where new movements can be tested.
- **Basic control ❺**
  This control mode is configured together with the qualified personnel.
- **Extended control ❻**
  This control mode supplements and refines the basic control with additional movement recordings.

- **Individual control ❼**
  A control mode that completely replaces the basic control and can be individually adjusted without qualified personnel. However, this function must be enabled by the qualified personnel. It is recommended for experienced users only.
- **Control switch placeholder ❽**
  This button can be used to add one of the control switches mentioned above, provided they have not already been added.

6.4 Tab bar

The tab bar is the main navigation area in the adjustment app.



❶ **Control** (see page 10)
The **Control** tab provides access to the control switches, the information bar and other functions.

❷ **Configuration** (see page 29)
The **Configuration** tab provides access to all product-specific and general product settings.

❸ **Signals** (see page 37)
The **Signals** tab displays the current muscle signals and the detected movements.

❹ **Menu** (see page 15)
The **Menu** tab opens the adjustment app menu.

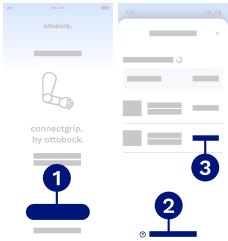
7 General settings

7.1 Starting the adjustment app



1) Tap the icon for the **connectgrip** app.
   → The terms of use and privacy policy are displayed.
2) Accept the terms of use by ticking the checkbox.
   → If the terms of use are not accepted, the app cannot be used.
   → This step is only necessary when you start the app for the first time.

7.2 Establishing the Bluetooth connection to the product



1) Tapping the **Connect** ❶ button starts the search for available products.
   → Bluetooth needs to be activated on the product to establish a connection between the app and the product. Please refer to the respective instructions for use for your product on how to activate Bluetooth. Please use the **Product not found** ❷ option for further assistance.
   → In addition to the available products, **Demo mode** is also shown here.
   In **Demo mode**, the app can be used with limited functions, even if no product is connected. However, the full functionality of the app is only available after connecting to a product.
2) From the products that are shown, select the desired product and tap the **Connect** ❸ button.
3) Follow the subsequent instructions on the screen.
   → The animated icon is displayed while the connection is being established.



4) To connect a product ❹: Switch on your product until an acoustic signal is emitted.
5) To connect a bebionic hand ❺: Press and hold the program switch on the back of the hand for four seconds until two feedback signals are emitted. This activates the Bluetooth module. After activation, the module is in pairing mode for two minutes.

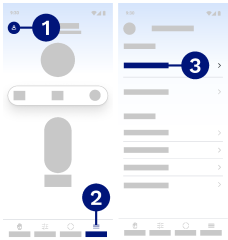
→ After the connection has been successfully established, you will be redirected within the adjustment app.

7.3 Ottobock ID account

INFORMATION

To enable Ottobock ID users to access their MyLearning certificates, both accounts must use the same e-mail address!

To configure a product in the adjustment app, create an Ottobock ID account and log in.



Not yet logged in with an Ottobock ID account

1) Tap the user account icon ❶ or **Menu** ❷ on the tab bar to go to the next page.
2) Log into your Ottobock ID account or register using the **Ottobock ID** ❸ menu item.

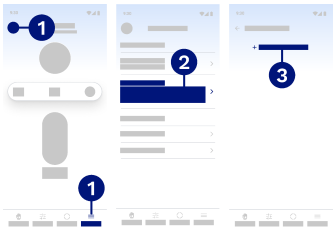
Logged in with an Ottobock ID account

> Tapping the user account icon provides the following options:

1) **Log out**: Log out of your Ottobock ID account.
2) **Manage / delete account**: Manage Ottobock ID account settings, change password or delete account.
3) **Certification**: Add or manage product certification.

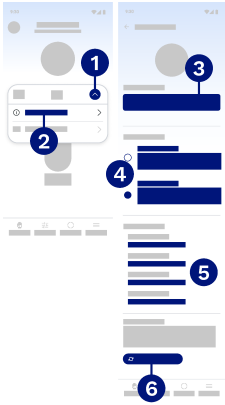
7.4 Certification

A product can only be adjusted after certification (expert/therapy expert) for the corresponding product has been completed. The certificate requirement can be initiated via the menu or the user account.



1) Tap the **Menu** ❶ tab on the tab bar or tap the user account icon.
2) Tap **Certification** ❷.
   → The certifications for the respective components are displayed.
3) Certificates and roles can be added by tapping **+ Add certification** ❸.

7.5 Product status



> The following steps are required to view the **Product status**.

1) On the status bar, open the submenu by tapping the ❶ drop-down button.
2) Tap the **Product status** ❷ menu item.

Menu items and information on the product status page:

- Edit Bluetooth connection names ❸
- Switch the product's Bluetooth from **Permanently active** to **Active for only two minutes** ❹
- The following menu items can be found under ❺:
  - **Product reference number**
  - **Bluetooth ID myosmart**
  - **Firmware version myosmart**
  - **Firmware version terminal device**
- **INFORMATION: This is only possible when logged into qualified personnel mode.**
  Reset the connected product to the factory settings by tapping the **Factory settings** ❻ button

7.6 Menu

Depending on the login status and product connection, different subitems can be found in the menu. Here is a list of all possible subitems.



❶ **Ottobock ID** (see page 13) – for qualified personnel only
This redirects the user to the Ottobock ID website.

❷ **Certification** (see page 14)
Here, certified qualified personnel can obtain product authorization; all products they are authorized to fit are displayed.

❸ **Documentation** (see page 17)
Here you can take screenshots of the prosthesis movements and export them so that they can be used as documentation for the paying party.

❹ **Prosthesis configuration** (see page 21)
Here you will find an overview of the configuration for the product that is currently connected and a way to reset the configuration.

❺ **Software update**
Here you can check whether a software update is available for the adjustment app.

❻ **Demo prosthesis** (see page 17)
Here, a demo prosthesis can be connected and tested.

❼ **New features**
Here you can find current information about new features that have been added to the adjustment app.

❽ **Instructions for use**
This redirects the user to the instructions for use for the adjustment app.

❾ **Video tutorials**
This redirects the user to the training and practice videos.

❿ **App language**
Here the language in the adjustment app can be changed.

⓫ **Legal notice**
Here the legal notice for the adjustment app is available.

⓬ **Terms of Use**
Here the general terms of use for the adjustment app can be found.

⓭ **Data privacy notice**
Here the privacy policy for the adjustment app can be found.

⓮ **Open-source software**
Here information on the open-source software used in the adjustment app can be found.

7.6.1 Demo prosthesis

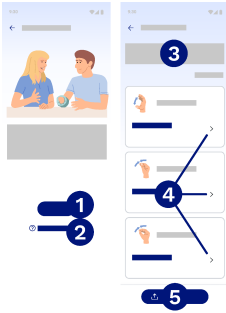
To connect a **Demo prosthesis**, there must be an active connection to a myosmart.cuff.



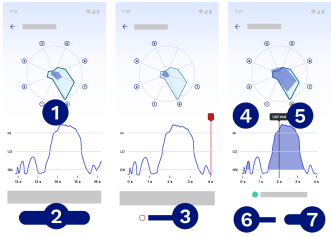
1) Tap the **Menu** tab ❶ to access the menu.
2) The **Demo prosthesis** ❷ menu item takes you to the subpage.
3) To connect the **Demo prosthesis**, tap **Connect** ❸. You will receive in-app instructions on how to connect the **Demo prosthesis**.
4) For detailed help and support, tap **Assembly instructions** ❹. A wizard will guide you through the individual steps.

7.6.2 Documentation

You can individually document prosthetic movements and switching actions for your own documentation or for documentation required by the paying party. The documentation can then be exported and used as a clearly structured PDF with annotations.

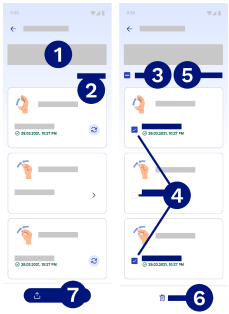


- The assistant-guided documentation can be started via the button **Start** ❶ on the documentation start page.
- Further information about the documentation is available via the option **Displaying instructions** ❷.
- On the recording overview page ❸, the available movements and switching actions are displayed depending on the product configuration. You can select which recording should be created for the documentation.
- Use the corresponding arrow icon ❹ to navigate to the recording screen.
- Previous recordings can be exported using the button **Export PDF** ❺.

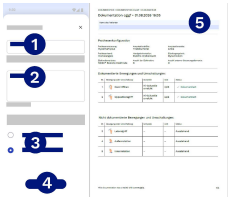


- On the preparation screen, the user has the opportunity to try out the selected movement or switching action before starting the documentation. For myosmart, the MyoControl display is displayed at the top; for myosmart.plus, the radar chart with the colour-coded movement pattern is displayed at the top ❶. The strength of the signal is visualised at the bottom.
- Use the button **Start documentation** ❷ to start recording the selected movement or switching action. During the recording, the user should perform the selected movement or switching action.
- Once the recording has been started, this is indicated on the page ❸. Pausing or stopping is then no longer possible.
  - However, it is possible to cancel the recording by navigating away from the page.
  - The recording stops automatically after 6 seconds.
- After the recording, the recorded movement or switching action is displayed ❹.

- The Volt Picker ❺ is automatically positioned at the point corresponding to the strongest valid movement or switching action. Additionally, an informational text indicates which threshold has been reached:
  The Volt Picker can subsequently be moved by dragging it with a finger.
  Only valid movements and switching actions can be added to the documentation.
  If the Picker is positioned at a point where no valid movement or switching action has been detected or where the detected movement or switching action is too weak, an informational message is displayed and saving is not possible. In this case, select a different point or repeat the recording.
  - **On threshold reached**
  - **Lo threshold reached**
  - **Hi threshold reached**
- Use the **Repeat** ❻ or **Save** ❼ button to repeat or save the recording, respectively.



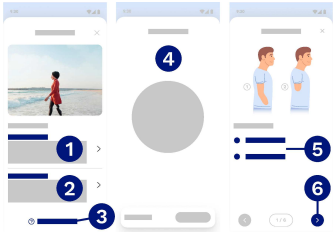
- After saving the recording, you are returned to the recording overview page ❶.
- Here, additional recordings of movements or switching actions that have not yet been documented can be created or selected recordings can be deleted.
- Press the button **Select** ❷ to delete one or more recordings.
- Select the recordings to be deleted:
  - This can be done with the button **Select all** ❸,
  - or by selecting an individual recording ❹.
  - The process can be cancelled with the button **Cancel** ❺.
- The previously selected recordings are permanently deleted using the button **Delete** ❻.
- Use the button **Export PDF** ❼ to access the export view.



- In the export view, the PDF export can be further adjusted.
- A suitable name can also be assigned to the export ❶.
- Optional additional information can be added to the documentation via the input field **Notes** ❷.
- Either documented entries only or all entries can be exported ❸.
- Using the button **Export** or the **Share/Save locally** ❹ option on Android, generates the final PDF file and transfers it to the mobile device's operating system.
- The result of an export might look like this, for example ❺.

8 myosmart/myosmart Plus settings

8.1 Prosthesis configuration



> To access the prosthesis configuration, you must first establish a Bluetooth connection to an unconfigured product (see page 12) or delete the configuration of an existing product.

1) If a myosmart.cuff is used, the user can choose whether to control the prosthesis via myosmart ❶ or via myosmart.plus ❷.
2) Click on **Understanding the control** ❸ to find out more about the differences between myosmart and myosmart.plus.
3) Following successful connection to the product ❹, you will be automatically redirected to the prosthesis configuration.
4) You are guided step by step through the individual adjustment points in the prosthesis configuration ❺.
5) Follow the subsequent adjustment steps within the prosthesis configuration ❻ to complete the process.

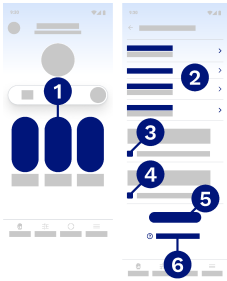
→ Following successful completion of the configuration, you will be automatically redirected to the start page.

8.2 Prosthesis control

INFORMATION

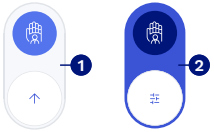
Activate prosthesis control for use

The prosthesis control can only be used once it has been activated (see page 23 section: Activating/Switching on prosthesis control).



1) The basic control can be activated and adjusted via a control switch ❶ (see page 23). The settings page opens once the prosthesis control has been activated.
2) Different submenus ❷ are displayed depending on the connected product:
   → **Adjusting control** (see page 23)
   → **Basic recordings** (see page 24)
   → **Additional recordings** (see page 26)
   → **Grip switch** (see page 27)
   → **Joint switching** (see page 27)
3) Tapping **Save basic control?** ❸ opens a dialogue window. In the window, the user must confirm that the basic control should be saved without all basic recordings being fully completed.
4) Tapping **Enable individual control** ❸ opens a dialogue window. In the window, the user must confirm that activating individual control will delete the extended control.
5) The button **Delete control** ❹ deletes all added movements, grip changes and joint changes.
6) **Understanding control** ❺ provides detailed information on the control mode that has been selected.

8.2.1 Activating/Switching on prosthesis control



Before a control can be used and adjusted, it must be switched from inactive ❶ to active ❷. Complete the following steps to do this.

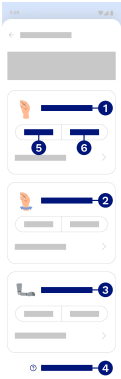


1) Press the arrow button ❶ and slide it upwards.
2) Press and hold the button ❷ briefly after sliding it.
3) Release the button.

→ After releasing the button, it may take a few seconds before the control can be activated and used.

8.2.2 Determining control

Before recording the basic recordings, the control of the prosthetic joints must be determined. Based on the prosthesis configuration, you must select whether the joint will be controlled directly using individual movement patterns or by switching.



- The hand control mode is specified in the **Hand Control** ❶ menu.
  - When the **Pattern** ❺ option is selected, the recordings required are moved to the basic recordings.
  - When **Switch** ❻ is selected, the respective menu items “Grip change” or “Joint change” are displayed.
  - These entries are only enabled once all basic recordings have been completed or when qualified personnel mark the basic recordings as complete in advance using the checkbox.
- The hand rotation control mode is specified in the **Rotation Control** ❷ menu.
- The elbow joint control mode is specified in the **Elbow Control** ❸ menu.
- **Understanding Control** ❹ provides detailed information about the available control modes.

8.2.3 Basic recordings

INFORMATION

Activate prosthesis control for use

The prosthesis control can only be used once it has been activated (see page 23 section: Activating/Switching on prosthesis control).

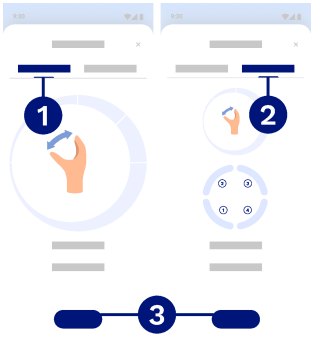
The basic recordings are a prerequisite for everyday use of the prosthesis. All basic recordings are made by a guided wizard. Different adjustable options are shown depending on the product. The basic recordings are made by qualified personnel and cannot be changed by the user after completion.



- This area ❶ allows pre-filtering of the desired basic recordings. Depending on the product, the options are:
  - **All**
  - **Hand**
  - **Rotation**
  - **Elbow**
  - **Unintentional**
- The individual pause time between the recordings can be set under option ❷.
- This option ❸ enables multiple selection. Checkboxes are then displayed so that several or all recordings can be selected.
- This checkbox ❹ is used to select or deselect all recordings.
- The button ❺ cancels the selection of recordings for deletion.
- In this area ❻, individual recordings can be selected.
- The button ❼ deletes all selected recordings.
- In this area ❽, recordings are made in different positions depending on the product configuration and control configuration.
- The button **Basic recordings explained** ❾ opens a window containing detailed descriptions of the basic recordings.

Recording movements

A wizard assists you when recording movements. You can select 2 different views before starting recording. The functions and views during the recording process are explained here.



1) In **Easy** mode ❶ , only the type of movement to be performed is displayed visually.
2) In **Advanced** mode ❷ , the controlled signals are also displayed visually.
3) Select **Start** ❸ to start the recording process.
4) **Pause time**: When the hourglass is shown, relax the muscles until the time in the bar ❹ is up.



5) **Recording relaxation**: When the coffee cup is displayed, muscle signals are recorded while the muscles are relaxed ❺. A basic value for the ON threshold is determined during this process. This can be easily adjusted under control optimisation. **TIP:** Make very gentle circular movements or hold a lightweight object in your hand.

6) **Record movements**: Gradually and progressively tense the muscles associated with the specified movement. Once the 3rd bar ❻ is reached, the muscles should be tensed to approximately 70 % of what you would consider a strong effort. Do not increase muscle tension any further and maintain it until completion.
7) Steps 4 – 6 are repeated 3 times; it is essential that the selected phantom movement/muscle tension be repeated consistently.

8.2.4 Additional recordings

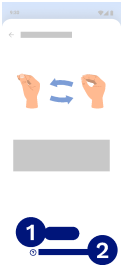


To enhance the reliability of the control during everyday use or specific activities and to minimize unintended movements as much as possible, muscle signals for the respective movement can also be added or deleted independently. The illustration and the points below are provided as examples only and may vary depending on the product and its available functions.

All additional recordings are made by a guided wizard.

- You can filter the view under option ❶.
- The individual pause time between recordings can be set in section ❷.
- Additional recordings for opening the hand can be made in section **Open hand** ❸.
- Additional recordings for closing the hand can be made in section **Close hand** ❹.
- Additional recordings for unwanted movements can be made in section **Unintentional movement** ❺.
- The button **Understanding movements** ❻ opens a window containing detailed descriptions of the additional recordings.

8.2.5 Grip change

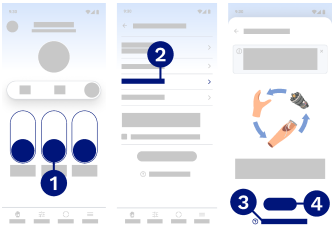


Users of the Michelangelo hand can switch between the lateral and opposing positions with the help of an individual muscle signal.

- Selecting the **Start** ❶ option launches a wizard that guides you through all the subsequent steps within the app and explains how to use the individual muscle signals.
- **Understanding grip changes** ❷ shows the most important information on grip changes.

8.2.6 Joint change

The myosmart/myosmart.plus control enables switching between the prosthetic joints using muscle signals. However, a couple of settings must first be made and muscle signals recorded in order to carry out this **Joint switching**.



- The joint change can be accessed via the prosthesis controls ❶.
- Select the **Joint switching** ❷ menu item to access the wizard-controlled submenu.
- The **Understanding joint change** ❸ menu item provides detailed information on the two types of joint changes.
- The **Start** ❹ button initiates the wizard-controlled joint change function.

Recording impulses/fast access

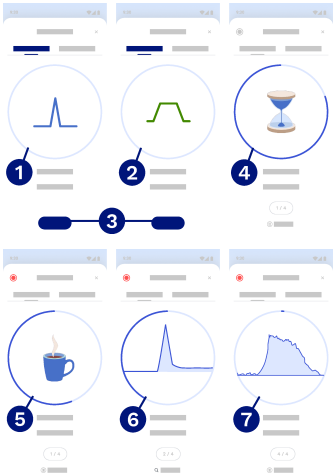
Impulse:

An impulse is a brief, rapid muscle tensing followed by immediate relaxation (e.g. a co-contraction, opening signal or closing signal).

Fast access:

With slow muscle tension during the opening and closing movements, the hand function is accessed directly. With rapid, normal muscle tension during the opening and closing movements, the rotation or the elbow joint is

accessed directly. The strength of the tension determines the speed of movement. Movements remain active until the muscles are relaxed.
The joint change recordings are made by a guided wizard. The recording pages are explained in detail below.



1) The joint can be switched using either an **Impulse** ❶ or **Fast access** ❷, depending on the selection.
2) Select **Start** ❸ to start the recording process.
3) **Pause time**: When the hourglass is displayed, relax the muscles until the time bar ❹ has elapsed.
4) **Recording relaxation**: When the coffee cup is displayed, muscle signals are recorded while the muscles are relaxed ❺. A basic value for the ON threshold is determined during this process. This can be easily adjusted under control optimisation. **TIP:** Make very gentle circular movements or hold a lightweight object in your hand.
5) **Impulse**: Generate your personal impulse by rapidly tensing and immediately relaxing the muscles. In the graph, the recorded signal can be identified by a sharp peak ❻.

6) **Fast access**: Use the same muscle tension as for opening or closing the hand. This tension must be generated quickly and then maintained or slightly relaxed. In the graph, the recorded signal can be identified by a steep rise followed by a sustained plateau ❼.
7) Steps 3 – 5/6 are repeated 3 times; it is essential that the selected muscle tension be repeated consistently.

8.3 Configuration



In this area ❶, you will find all the settings for the prosthesis control:

- **Control optimisation** (see page 30)
- **Optimising grip switch impulse** (see page 31)
- **Optimising fast access** (see page 32)
- **Optimising long opening** (see page 32)
- **Feedback for system events** (see page 33)
- **Optimising joint switch impulse** (see page 31)

In this area ❷, you will find additional settings:

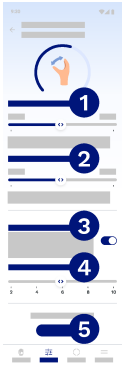
- **Deactivate joints via impulse** (see page 33)
- **Terminal device settings** (see page 33)
- **Movement activation** (see page 35)
- **Manual control** (see page 36)

8.3.1 Control optimisation



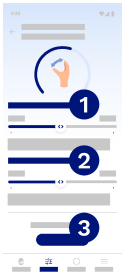
- The **Switch-on threshold (%)** ❶ option determines the threshold level above which prosthesis movements are executed.
- The relationship between muscle tension and speed of movement can be adjusted using the **Speed adjustment** ❷ menu. As the level increases, movements become less proportional, making precise or slow control more difficult.
- Under the **Control response time** ❸ drop-down menu, you will find 3 types of control behaviour for the prosthesis:
  - **Standard**
    The control of the prosthesis is more reliable and robust in this setting but it will be slower when performing movements.
  - **Fast**
    This setting provides a good balance between reliability and dynamic control and is intended for users who have already been using the prosthesis in everyday life for some time.
  - **Very fast**
    The control reacts sensitively and quickly to muscle signals, allowing the full dynamic range of control to be utilized. In this setting, the user's muscle signals have to be very precise and reliable in order to avoid unintended movements.
- When activated, the option **Interference filter** ❹ filters unintended signals from the 13E40* remote electrode using the slider, improving prosthesis control.
- Tapping the option **Reset** ❺ resets all control optimisations to their default values.
- **Understand settings** ❻ provides a summary of the most important information for all control optimisations.

8.3.2 Optimising joint change impulse



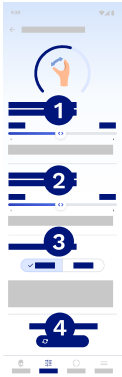
- The **Threshold for impulse** ❶ option sets the threshold at which an impulse is detected.
- The **Time for impulse** ❷ option defines the time period in which the impulse must take place.
- With the **Automatic switch-back to the hand** ❸ option, the prosthetic control automatically switches back to hand mode after the set time has elapsed.
- The **Time for switch-back (s):** ❹ option allows you to set the time after which the prosthetic control switches back to hand mode.
- Tapping the **Reset** ❺ option resets all control optimisations to the default value.

8.3.3 Optimising grip change impulse



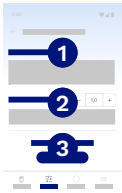
- The **Threshold for grip switch impulse** ❶ option sets the threshold at which the grip-change impulse is detected.
- The **Time for grip switch impulse** ❷ option defines the time period during which the grip-change impulse must occur.
- Tapping the **Reset** ❸ option resets the value to the default value.

8.3.4 Optimising fast access



- The **Threshold for fast hand opening access** ❶ option uses the slider to set the threshold above which direct access ("fast access") for hand opening is detected.
- The **Threshold for fast access hand closing** ❷ option uses the slider to set the threshold above which direct access ("fast access") for hand closing is detected.
- With the **Behaviour for fast access** ❸ option, the hand can be triggered by a rapid signal:
  Standard: If the hand is active and a rapid signal is generated, the hand function remains active.
  Advanced: If the hand is active and a rapid signal is generated, a switch-back to rotation or elbow joint takes place.
- Tapping the **Reset** ❹ option resets the direct access ("fast access") to the default value.

8.3.5 Optimising long opening



- The **Threshold for long opening (%)** ❶ option uses the slider to set the threshold above which the open signal must be maintained.
- The **Time for long opening [s]** ❷ option determines how long the open signal must be maintained.
- Tapping the **Reset** ❸ option resets the value to the default value.

8.3.6 Deactivating the joint via impulse



Prosthetic control allows prosthetic joints to be temporarily deactivated using a muscle impulse.

- Selecting the **Start** ❶ option launches a wizard that guides you through all the subsequent steps within the app and explains how joints are deactivated via an impulse.
- **Understanding deactivation** ❷ provides the most important information on how to deactivate joints via an impulse.

8.3.7 Feedback for system events

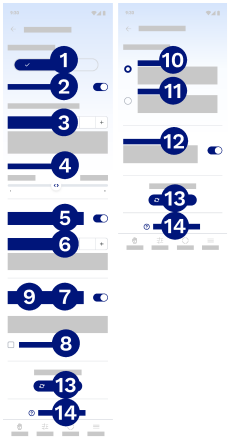


In this section, beeps can be set depending on the product and configuration.

- Selecting the **Audio feedback** ❶ option activates/deactivates audio feedback and other adjustment options.
- Selecting the **Volume (%)** ❷ option adjusts the volume of the audio feedback.
- The **Sound duration (s)** ❸ option determines the duration of a single beep.
- The **Pause time** ❹ option determines the pause time between beeps.
- In this section ❺, up to 4 different beeps can be set depending on the product.
- **Understand audio feedback** ❻ shows the most important information on feedback for system events.

8.3.8 Terminal device settings

Depending on the terminal device connected, additional settings can be configured for that terminal device.



- Use menu item ❶ to switch the standard grip to either the lateral or opposing position.
- The neutral position can be activated or deactivated via the switch **Neutral position ❷**.
- The menu item **Time for neutral position (s): ❸** determines how long the hand remains open before automatically returning to the neutral position.
- The slider for the **Hand position ❹** option can be used to set the hand opening to the neutral position.
- The function can be activated or deactivated via the **Automatic switch-back to the standard grip ❺** switch.
- The menu item **Time for switch-back to the standard grip (s) ❻** allows you to set the amount of time before automatically switching to the standard grip once the neutral position has been fully reached.
- The function can be activated or deactivated via the **Automatic opening of the hand when switching on ❼** switch.
  - If the **Automatic opening of the hand when switching on** function is activated, you can also specify ❽ whether the user may independently adjust automatic opening during switch-on.
- The switch **Adaptive Gripping Function ❾** dynamically adjusts the grip width to the movements of a held object.
- The **Reset ⓭** button resets all values to the default values.
- **Understand settings ⓮** shows the most important information on Terminal device settings.

The following settings are available only for controlling the bebionic hand:

- Use the **Movement patterns** ⑩ menu item to activate the control of the bebionic grips using dedicated movement patterns.
- Use the **Classic control** ⑪ menu item to activate the control of the bebionic grips via the open/open signal.
- The function can be activated or deactivated via the **Donning mode** ⑫ switch.

8.3.9 Movement activation

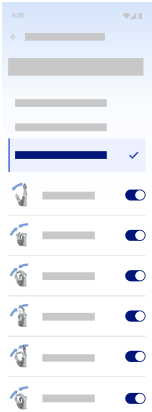


A wide range of movements can be activated/deactivated, depending on the product being used.

1) All movements can be activated using the **Performing all movements** ❶ menu item.
2) All movements can be deactivated using the **Performing no movements** ❷ menu item.
3) Only selected movements can be activated/deactivated using the **Performing selected movements** ❸ menu item.
4) The **Understand Activation** ❹ menu item provides additional information on movement activations.

Here is a list of all possible options:

Open hand
Close hand
External rotation
Internal rotation
Extending the elbow
Flexing the elbow
Elbow lock
Power grip/key grip
Tripod grip/column grip
Active index grip/finger point
Precision open grip/mouse grip
Precision closed grip/neutral position



8.3.10 Manual control

A wide range of movements can be controlled manually, depending on the product being used.

Use the slider **Speed (%)** ❶ to individually adjust the movement speed of the selected movements.

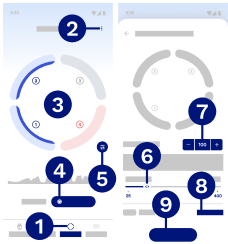


For the options below, the set speed can be tested by pressing and holding the Play button:

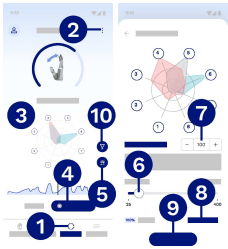
❷ **Open hand**
❸ **Close hand**
❹ **Internal rotation**
❺ **External rotation**
❻ **Extending the elbow**
❼ **Flexing the elbow**
❽ **Elbow lock**
❾ **Open hand**
❿ **Power grip/key grip**
⓫ **Tripod grip/column grip**
⓬ **Active index grip/finger point**
⓭ **Precision open grip/mouse grip**
⓮ **Precision closed grip/neutral position**
⓯ **External rotation**
⓰ **Internal rotation**

8.4 Signals

The **Signals** ❶ tab takes you to the display of the current muscle signals. There you will find various options and information, which are briefly explained here.



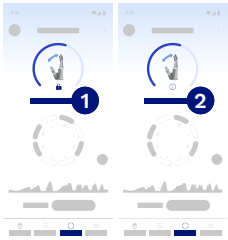
- The three dots in the upper right corner ❷ take you to the **Understanding signals** and **Phantom movements** view. All important functions of the signal view and phantom hand movements are explained in detail there.
- The signal display ❸ shows a different number of signal elements depending on the connected product. The status of a signal is displayed in colour:



- 1 – 2: Provides real-time feedback and is displayed in dark blue.
- 3: Is currently inactive and is displayed in grey.
- 4: The signal is displayed in red because the slot or component is defective or is not connected correctly or the electrode itself is defective.

- You can use the **Record** ❹ button to record signals and then analyse them.
- Use the button ❺ (configuration) to access the **overview page for the signal display:**
  - The slider ❻ ensures that the signal display is reduced or enlarged according to the selected setting.
  - The value set using the slider is displayed at this point ❼.
  - The **Reset** ❽ button restores the default value of the display size.
  - The **Apply** ❾ button closes the signal display window and displays the signals with their newly configured values.
- The button ❿ (filtering) can be used to show or hide the coloured movement patterns.

Information in the Signals menu



- If a joint is locked and the user tries to activate it, a lock icon along with a message is displayed ❶.
- If a movement is deactivated and the user attempts to control the deactivated movement, an information icon with an accompanying message is displayed ❷.

9 bebionic settings

INFORMATION

Once the app has successfully connected to the bebionic hand, hand-specific settings and functions are available. See section **Establishing the Bluetooth connection to the product** (see page 12) for further information.

The specific settings and functions of the bebionic hand include:

- **Start page** (see page 39)
- **Configuration** (see page 40)
- **Grip switch** (see page 40)
- **Hand speed** (see page 41)

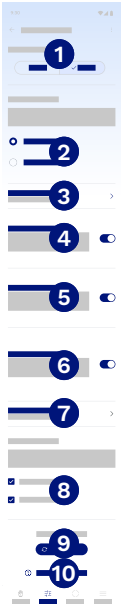
9.1 bebionic start page

The start page for the bebionic hand can be accessed via the tab bar under the **Control** ❻ menu item or after connecting to the bebionic hand. The start page provides convenient access to the most important settings.



- In this area ❶, you can select which type of grip you wish to change or adjust. These include **Primary grips** and **Secondary grips**.
- The **Thumb position: opposition** ❷ option allows you to configure the primary or secondary grips that are executed when the thumb is in the opposing position.
- The **Thumb position: lateral** ❸ option allows you to configure the primary or secondary grips that are executed when the thumb is in the lateral position.
- The **Reset** ❹ button resets all values to the default values.
- The **Understanding grip changes** ❺ button opens a window containing detailed descriptions of the respective grip control modes.

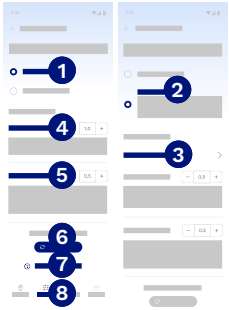
9.2 bebionic configuration



- In the **Amputation side** ❶ area, you can specify which side the treatment is performed on. The options here are **Left** and **Right**.
- In the **Control version** area, you can choose between the two options **Proportional** and **Digital** ❷.
- The **Grip switch** ❸ section opens another submenu, which can be used to configure the **Grip switch** (see page 40).
- The **Switching input signals** ❹ switch activates or deactivates software-based switching of the input signals without changing the electrode cables.
- The **Manual initialisation** ❺ switch activates or deactivates automatic initialisation of the hand each time it is switched on.
- The **Grip stabilisation when object is lost** ❻ switch activates or deactivates automatic grip stabilisation when an object begins to slip.
- The **Hand speed** ❼ section opens another submenu, which can be used to configure the hand speed (see page 41).
- The **Feedback for system events** ❽ area is used to set whether the hand is permitted to provide feedback. The options are **Beep** and **Vibration**.
- Tapping the **Reset** ❾ option resets all configurations to their default values.
- The **Understand settings** ❿ button opens a window containing detailed descriptions of the bebionic hand configuration.

9.3 bebionic grip changes

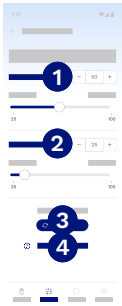
The bebionic grip change settings can be accessed via the tab bar and the tab **Configuration** ❽.



- The upper area of the bebionic grip change settings defines how to switch between the standard and alternative grips. The following modes are available:
  - **Open/open** ❶
  - **Co-contraction** ❷
- If **Co-contraction** is selected, the **Adjust the CoCo threshold** ❸ option also appears, which takes you to a further subpage where you can set the CoCo threshold.
- The individual time period within which an open impulse must be executed after fully opening the hand can be set under option ❹.
- The individual time period after which the standard grip is automatically restored can be set under option ❺.
- Tapping the **Reset** ❻ option resets all configurations to their default values.
- The **Understand settings** ❼ button opens a window containing detailed descriptions of the grip change settings.

9.4 bebionic hand speed

On the **Hand speed** settings page, you can adjust how quickly the hand opens and closes.



- In the **Open hand** ❶ area, you can set how quickly the hand should open. You can adjust the speed using the slider, the +/- buttons or by entering a number in the number field.
- In the **Close hand** ❷ area, you can set how quickly the hand should close. You can adjust the speed using the slider, the +/- buttons or by entering a number in the number field.
- Tapping the **Reset** ❸ option resets all settings to the default values.
- The **Understand settings** ❹ button opens a window containing detailed descriptions of the bebionic hand configuration.

9.5 bebionic signals

The bebionic hand signals or the CoCo threshold can be accessed via the tab bar and the tab **Signals** 5.



- The upper area of the bebionic hand signal settings 1 defines which signals are to be adjusted. The following modes are available:
  - **Opening**
  - **Close**
- In the section 2, the signal threshold settings can be adjusted either using the sliders on the right and left or via the number fields below. The muscle signal diagram can display two signals in one diagram.
- All settings on the Signals page will be reset to their default values with the **Discard** 3 option.
- The **Send to hand** 4 button transmits the configured signal settings to the connected bebionic hand.
- The button with the 3 dots 6 opens a window with detailed information about the signals.

10 Legal information

10.1 Trademarks

All product names mentioned in this document are subject without restriction to the respective applicable trademark laws and are the property of the respective owners.
All brands, trade names or company names may be registered trademarks and are the property of the respective owners.
Should trademarks used in this document fail to be explicitly identified as such, this does not justify the conclusion that the denotation in question is free of third-party rights.

10.2 CE conformity

The product meets the requirements of Regulation (EU) 2017/745 on medical devices.
The EU declaration of conformity is available at the following internet address: http://www.ottobock.com

10.3 Local Legal Information

Legal information that applies **exclusively** to specific countries is written in the official language of the respective country of use after this chapter.

11 Symbols Used



Manufacturer



Declaration of conformity according to the applicable European directives



Medical device



UDI number (Unique Device Identifier)



Article number



Please note the instructions for use



Date of manufacture



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