



Navii®

Fitting Guidelines

Navii is intended to improve functional outcome and increase the safety and performance of lower limb amputees. Navii is a default swing knee which means that the knee feels “free” when there is no load going through the knee. Enhancements to the design have helped deliver increased resistance in stance and improvements in balance. Navii has additional functionality such as, automatic cycling and stair ascent capabilities.

Getting started

- Set goals with the user for the day of fitting and beyond.
- Explain that Navii may feel very different to their previous prosthetic knee, and that this is okay. Explaining how Navii works and how to master control over Navii in both stance and swing phases, as well as in extended and flexed positions can be really useful for building confidence in the knee.
- It is common to see users with established gait habits try to overwork Navii and fight against it. As the user gets used to Navii, it will also adapt to how the user changes their walking.
- Try not to move too quickly through the training protocol. It's okay to move back to a previous training point.
- Let them go at their own pace. If they are not getting something right away, sometimes it's better to move on and come back to it.
- There are lots of training resources to support the user with their rehabilitation whilst outside of the prosthetic clinic/physiotherapy.

Preparation

Before Fitting (see Navii Fitting Video on page 4)	Check if done
Confirm optimal socket fit	
Ensure battery is charged	
Download or update Össur Logic app	
Establish Bluetooth connection	
Reset device settings	
Reset activity settings (if necessary)	
Run initial set up: - calibration (without socket attached to the knee) - bench and static alignment (with socket attached to knee)	

Training Checklist



Begin in a safe environment, such as the parallel bars, and think about using a therapy plinth at different heights to assist with initial standing up and sitting down training.

First Steps

- Start your fitting by asking the user to simply stand with equal weight in the parallel bars.
 - Then progress to basic walking, so that the user can begin to feel the different behaviour of a default swing knee.
 - Begin by demonstrating how the Navii works when loaded and then unloaded.
 - Use the training exercises in the Össur Logic app
- to help the user to acclimatise to the Navii and build trust in the knee before progressing through the different stages.
- **In Run Initial set up** - complete **dynamic alignment** followed by **auto adjustment** in Össur Logic.
 - As you go through the fitting, refine the advanced settings as needed.

Initial training exercises* in Össur Logic app	Able to perform
Standing equal weight bearing (Left-right shift)*	
Split stance with prosthetic limb behind, pelvic movement and foot roll over (forwards-backwards shift)*	
Split stance with sound limb behind, stability moving weight forward on to prosthetic limb	
Split stance with stepping with prosthetic limb forwards from behind	
Split stance with stepping with sound limb forwards from behind	
Bouncing* on prosthetic foot	

Sitting down*	Able to perform
Equal weight bearing, bending at the hips, keeping knees on top of feet, loading through heels, reaching back and down toward chair with backside	
Different types/heights of chairs, with/without using their arms	

Standing up*	Able to perform
Equal weight bearing with feet flat on ground, forward bend at the hips, keep loading through middle of feet as rise up. Can use hands on lower thigh/knees to encourage weight shift forward	
Different types/heights of chairs, with/without using their arms	

Consider whether additional support required:

1. Enhanced Stability settings (from Dynamic to Stable):

- | | | |
|--------------------|-----|----|
| • Loading response | Yes | No |
| • Swing initiation | Yes | No |

2. Utilising mechanical lock when:

- | | | |
|-------------------------|-----|----|
| • Donning the limb | Yes | No |
| • Initial gait training | Yes | No |

Level ground walking	Able to perform
Swing initiation practice	
Walk straight	
Walk straight outside of the parallel bars (with support if necessary)	
Walk straight, normal walking speed and step-length	
Initiation of walking with prosthetic side, then with sound side	
Walk straight, stop – start and repeat	
Walk straight, variable speed and step-length	
Figure of 8 walking	
Outside, uneven terrain	
Walk then quick stop, sound side and prosthetic side	
Navigating confined spaces	
Walking/stepping backwards	

Next steps

Stair ascent and descent	Able to perform
Stair ascent - step by step	
Stair descent - step by step	
Stair descent - step over step - Start on single step, vary foot positioning*	
Progress up the stairs, to the top, and descend step over step*	
Transition from stair descent to walking on level ground	
Transition from walking on level ground to stair descent	

Ramp ascent and descent	Able to perform
Ramp ascent from stationary with small steps	
Descending utilising the foot movement only (shallow ramp)	
Descending utilising the yielding stance (steep ramp)	
Transition from ramp descent to walking	
Transition from walking to ramp ascent	
Transition from ramp ascent to walking	
Ascending + descending with variable speed/step length	

Extra features to consider alongside patient goals	Able to perform
Mechanical lock - lock in full extension: activate in sitting/standing, unlock in standing	
Mechanical lock - lock in 20° or 10°	
Activating extension hold. This needs to be toggled on first in Össur Logic	
Picking up an object from the floor	
Kneeling (using prosthesis, using sound side)	
Getting up from the ground	
Stepping over varying height obstacles - using extension hold/continuous movement	
Triggering automatic cycling recognition	
Triggering automatic speed recognition	
Transfer practice in/out of car	
Sitting down using Navii only, then sound side only (in parallel bars)	

(*Using the exercises in the Össur Logic app)

Advanced steps

Stair ascent - step over step	Able to perform
Practice on a single step - prosthetic side first*	
Practice on a single step - sound side first*	
Trigger initiation	
Progression and foot positioning	
Walking up stairs step-over-step	
Exiting stair ascent transition to walking	
Varied stair heights/lengths if available	
Walking up to stairs and triggering stair ascent	

Finishing up

Post-fitting - User briefing	
Powering ON/OFF (on the knee)	
Checking the battery (on the app/ on the knee)	
Charging the battery	
Removing and reapplying protective cover	
Review warning signals	
Advice about walking without power (level ground)	
Proper care and maintenance e.g. cleaning after exposure to sand, salt/ chlorinated water	
Review Össur Logic and Training exercises	
Inform of mandatory service at 40 months	

Comments



Össur Logic App
(App store)



Navii
Fitting video



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