

Computerised feet



Description

The latest innovation in prosthetic feet is computerised ankles.

These units house a tiny computer which automatically senses and adapts to how the foot is being used.

The result is a more efficient, natural gait with increased stability, improved mobility and easier navigation of uneven surfaces.

Computerised ankles adjust to walking speed and terrain automatically. They may provide easy to use apps with which the user can further modify the performance.

Advantages

- Walking up and down slopes, stairs, and ramps is easier.
- Improved ground clearance during swing.
- Improved ground compliance.
- Enhances stability.
- Automatic adjustment of heel height.
- Adapts to walking speed of user.

- Improves symmetrical limb loading by mimicking normal ankle movement.

Disadvantages

- Very complex.
- Heavier than other models of foot.
- Very high cost.
- Not intended for high levels of activity.
- Requires regular charging.
- Sensitive to environmental conditions (dust, vibration, salt or fresh water, chemicals, excess heat or cold, strong magnetic fields).