

# Maximum Control in Every Situation

## The Automatic Knee Joint Systems

**NEURO  
TRONIC**

A stylized blue and white graphic element resembling a wave or a stylized 'S' shape, positioned to the right of the Neuro Tronic text.

**NEURO  
MATIC**

A stylized blue and white graphic element resembling a wave or a stylized 'S' shape, positioned to the right of the Neuro Matic text.





EASY TO HANDLE



SUITABLE FOR ANY SITUATION



MAXIMUM CONTROL FOR ALL AGES



# NEURO TRONIC – Maximum Control in Every Situation

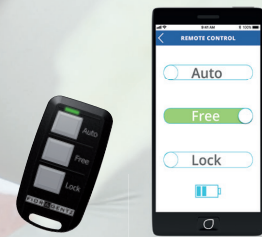
Electromechanical, Automatic Stance Phase Control

## 3 Modes

- Auto – automatically free moving/locked, electromechanical
- Free – permanently free moving, electromagnetic
- Lock – permanently locked, mechanical

## Easy Handling

with remote control and/or smartphone app



## Lever

mechanically permanently free moving in each mode (e.g. riding a bike)

## Intelligent Motion Sensors

automatic gait phase control, step recognition and stance phase control

## Combination

with all system ankle joints – NEURO SWING H<sub>2</sub>O as well

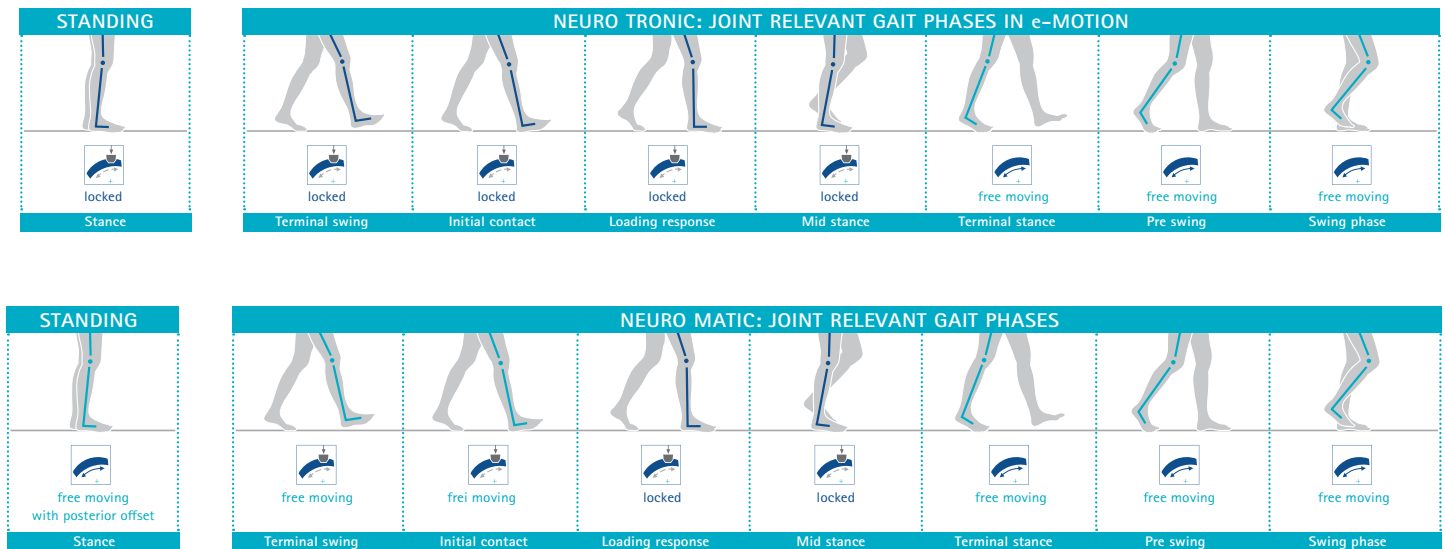


## Control Mechanism

The controller of the orthosis has **motion sensors** that detect the lower leg's movements and can tell if the user is standing or walking.

The motion sensors lock the system knee joint, regardless of the step length or step frequency, in every knee flexion angle right before initial contact, whether the foot touches the floor with the toes or the heel first. During gait, the system joint unlocks in terminal stance.

This ensures a **natural gait with maximum control**, even at minimum muscle strength.



*Diseases and disabilities: spinal cord injury, poliomyelitis, multiple sclerosis and others*

## Easy and Safe for Patients

When treated with a NEURO TRONIC system knee joint for the first time, patients quickly get used to the orthosis. Experience shows that with **competent support** and some training, users at **all ages** handle the functions and control of the NEURO TRONIC system knee joint very well.

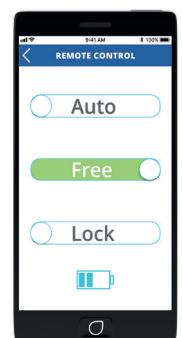
For patients, the most important criteria is the provided safety of the system joint – **in all everyday situations**. Small side or backward steps as well as getting up from a kneeling position can all easily be done with the NEURO TRONIC. In case of stumbling, the joint locks immediately and stance phase control is in effect.

## Now also as App

The patient decides which mode is currently appropriate and switches the mode as needed with the remote control. The patient can also use the free **app** that is available for smartphones, tablets and Apple Watch.



*"My entire body posture has improved. And so has the quality of life."*





## Easy and Efficient for Technicians

The production of an orthosis with an automatic knee joint system is easier than you might think. In the **online tutorials** on the FIOR & GENTZ website, technicians find instructions for the **ideal alignment** and the **production** of an orthosis, such as the joint assemblies of NEURO TRONIC and NEURO MATIC.

Furthermore, in the course of a **production technique workshop**, you have the possibility to produce a KAFO with automatic knee joint system under the expert instructions provided by our technical support.

### Adjust and Adapt

Patient-specific, individual adjustments on the NEURO TRONIC knee joint system are made with the multi-purpose device.



Now also available as an **app** for smartphones.



### Perfect Fit for Everyone

Both the NEURO TRONIC and NEURO MATIC system knee joints are available in two different system widths as well as three different joint shapes.



16mm



20mm



straight



bent inwards



bent outwards

## NEURO MATIC

Mechanical, Automatic Stance Phase Control

### Safe and Reliable

stance phase control through integrated posterior offset

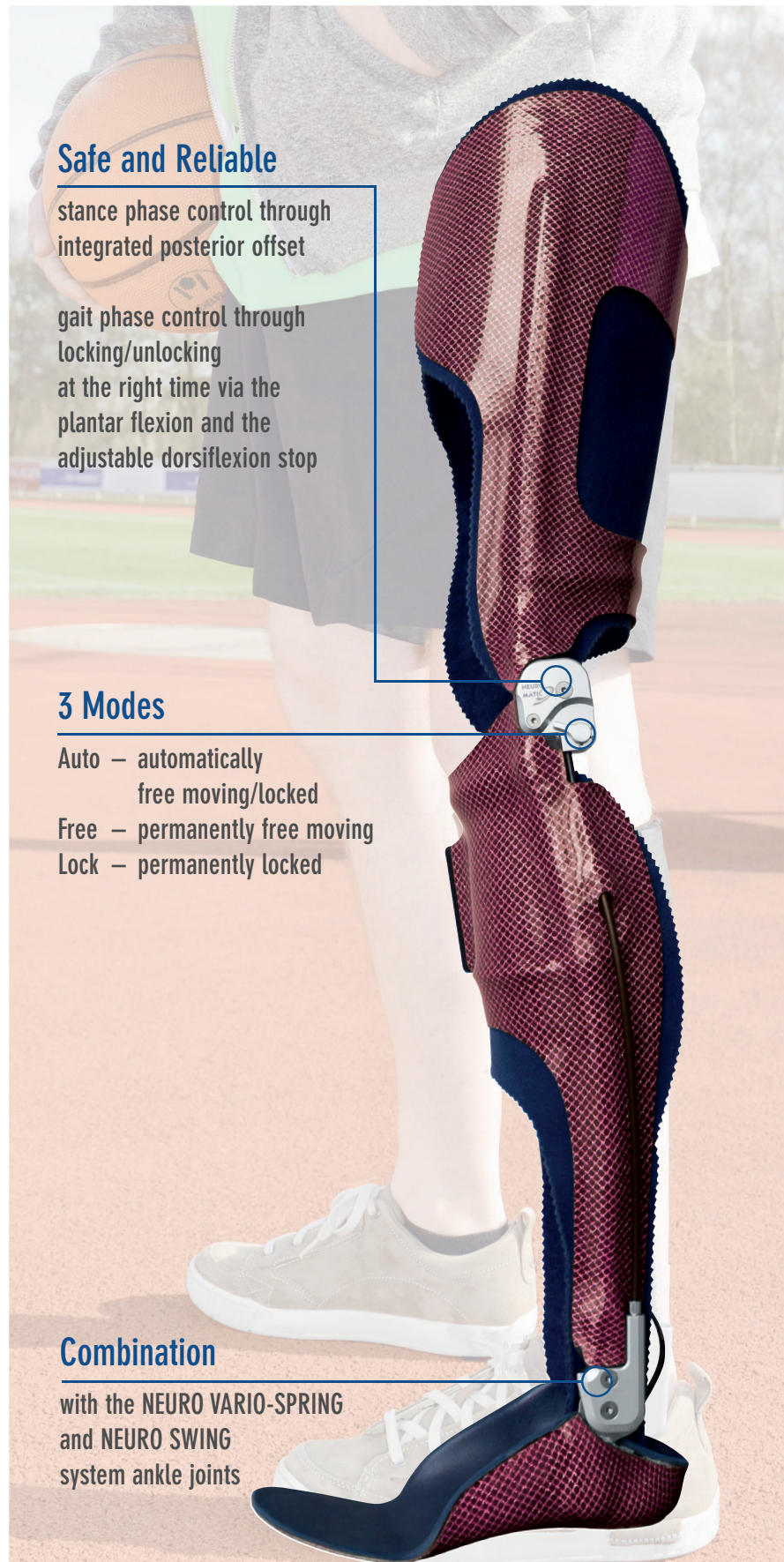
gait phase control through locking/unlocking at the right time via the plantar flexion and the adjustable dorsiflexion stop

### 3 Modes

- Auto – automatically free moving/locked
- Free – permanently free moving
- Lock – permanently locked

### Combination

with the NEURO VARIO-SPRING and NEURO SWING system ankle joints







## CROSSROADS – Suitable for Orthoses

The orthosis shoe CROSSROADS was developed specifically for people wearing orthoses. A shoe for everyday life which can be perfectly combined with an orthosis. For more information visit [www.fior-gentz.com](http://www.fior-gentz.com).

### FIOR & GENTZ

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